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No. 1

1915

THE
PRESIDENCY COLLEGE
MAGAZINE.

CONTENTS.

	PAGE
<i>Frontispiece</i>	
Editorial Notes	I
War and Finance (II)	8
June 18th, 1915	18
Sir Rash Behary Ghose, C.S.I.	19
The University Institute	27
The "Lusitania"	33
A Pioneer of Science Teaching in Bengal	34
An Economic Study Society for Calcutta	42
London	45
Shakespeare on Football	46
Aviation	47
College Items	55
Library Notes	59
University Notes	64
A Peep into other Colleges	67
War Notes	69
Correspondence	73
Reviews	77

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MOHIT KUMAR SENGUPTA

Editor

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CONTENTS.

	PAGE
Editorial Notes	81
“The Empire’s Immortal Dead”	85
Captain David Lester Richardson	94
The Call	104
Libraries and their Uses	105
A Fiasco	114
Napoleon or Louis Quatorze?	116
Dr. Jagadis Chandra Bose in America	119
The Eden Hindu Hostel	126
War and Finance (III)	134
Seminar Notes	141
Athletic Notes	147
University News	150
The Presidency College Flood Relief Committee ..	152
School Notes	156
Library Bulletin	158
Correspondence	163
Reviews	168
Presidency College Magazine Committee (1915-16) ..	170

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CONTENTS.

	PAGE
Editorial Notes	173
Aims and Methods of Post-Graduate Study in Calcutta University	177
Hindu Festivals	182
The Saviour of Europe	186
Baby	191
The Philosophy of Grumbling	192
Dr. Bose Round the World	195
War and Finance (IV)	200
From Somewhere at the Seat of War	206
"Pennis non homini datis"	209
Vitamine	209
The Eden Hindu Hostel Notes	212
Seminar Reports	214
Library Bulletin	219
School Notes	220
Athletic Notes	221
University Notes	222
About Other Colleges	224
Reviews	225
Correspondence	226

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CONTENTS.

	PAGE
Editorial Notes	231
The Pleasure and Peace of the Hills	236
The Farm-Way	238
The Kaiser's Dream	238
The British Commonwealth to the Prussian War-lords	243
Haridas, the Saint	250
The Appreciation of Scientific Education in Bengal	250
Dante Meets Beatrice in the Terrestrial Paradise ..	254
The Limits of the Scientific Method	255
Dead Roses	258
Fulia	258
Library Bulletin	260
Eden Hindu Hostel Notes	264
School Notes	265
Seminar Reports	266
The P.C. Flood and Famine Relief Committee ..	271
University Notes	274
About Other Colleges	276
Review	277
Correspondence	278

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CONTENTS.

	PAGE
Editorial Notes	281
Serbia and the Serbians	286
A Night-Piece	297
Science and Philosophy	297
A Sonnet	300
Sir Rames Chunder Mitra	300
An Historical Excursion	305
A Protestation	307
The Origin of Numerals	307
Responsibility and Irresponsibility	309
The P. & O. S.S. "Persia"	314
Message from a Student of Science	314
A Trip to a Temple City	318
"Early English Voyages to the East Indies"	320
To Dr. Jagadish Chandra Bose	325
Story of King Bharat	326
Social Gathering	335
Library Notes	341
Report of the Dr. Bose Reception Committee	345
Students' Relief Fund Committee	347
Seminar Reports	347
Hostel Notes	353
Athletic Notes	356
School Notes	357
University Notes	367
About Other Colleges	370
Correspondence	372
Review	376

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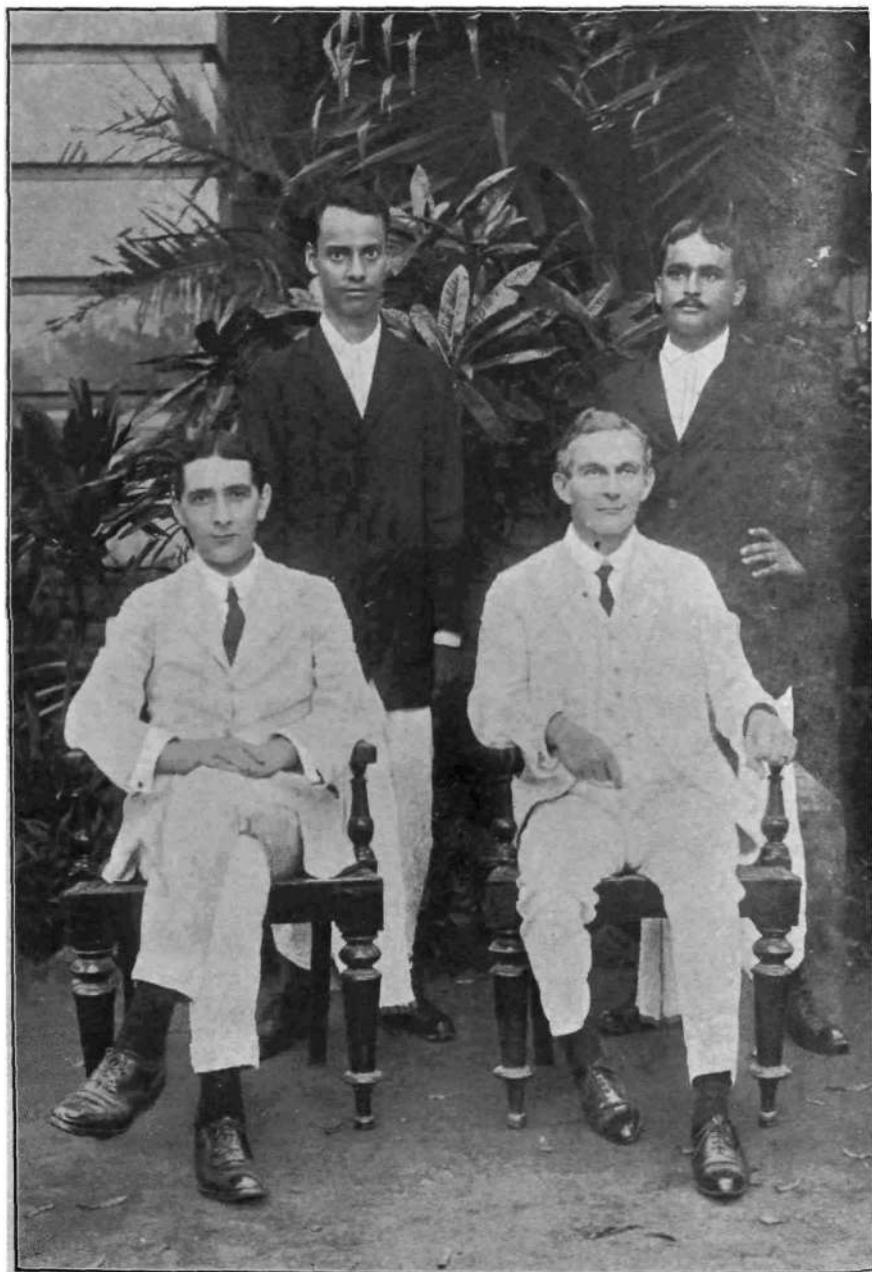
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P. N. Banerjee, (Editor.)

R. N. Gilchrist (Vice-President.)

J. C. Chakravarty, (Secy. & Asst. Ed.)

H. R. James, (President.)

Presidency College Magazine (1914-15.)

The Editor and Secretary regret that it has not been found possible to bring out the first number of the session in July as intended. They now propose that there should be issues for August, September and October instead of for July, August and September.

THE PRESIDENCY COLLEGE MAGAZINE

VOL. II.

AUGUST, 1915.

No. 1

EDITORIAL NOTES.

THE magazine enters on its second year. It is encouraging to recall that the first year's issues were very favourably received by many friends of the College, including several of the Calcutta dailies. The standard set by last year's Committee in our first three numbers is a high one. It will be a difficult matter to keep it up. That is, however, the task of this year's Committee. They have the satisfaction of knowing that they have the support of the whole College. For the excellent start last year we have to thank the Committee and in particular the retiring Editor and Secretary. The last two, like so many of our senior students, have just passed through a different, but very critical, ordeal. They have the best wishes of all connected with this magazine for their success.



The Intermediate, B.A., and B.Sc. results were published in the *Calcutta Gazette* between June the 2nd and June the 26th. A good deal of dissatisfaction has been expressed about our part in them and especially in B.A. and B.Sc. Honours. On mature consideration it appears that, while we have certainly not done better than in recent years, we have not, on the whole, done particularly worse. The percentages of passing compared with last year's are B.A. 54.63, B.Sc. 61.68, I.A. 73.33 and I.Sc. 69 as against B.A. 63.41, B.Sc. 65.93, I.A. 63.63 and I.Sc. 83.33 in 1914. It is thus seen that in the I.A. results there has been substantial improvement, but in all the other examinations a more or less serious falling-off.

The redeeming features of the honours lists for us are the results shown for Mathematics and Political Economy. In Mathematics with 9 Firsts and 10 Seconds B.Sc., 1 First and 4 Seconds B.A., the success achieved may fairly be called brilliant. In Politics and Economics we have 2 Firsts, being the only two awarded, and 3 Seconds including the 4th place on the list. We have also the first place in History, though it is only a Second Class. Philosophy does very well with 6 Seconds. There are 8 Second Classes in English and 1 in Sanskrit. On the Science side besides the Mathematical Honours, we have 1 First Class in Geology, 7 Seconds in Physics and 2 in Physiology. A single Second Class is certainly a disappointing result in Chemistry. But when we take the sum of this year's Honours compared with last year's, we find that whereas last year with 49 candidates there were 3 First Classes and 21 Seconds, this year with 45 candidates there are 13 First Classes and 32 Seconds.



The satisfactory feature of our Intermediate results is the relatively high position in the list of the candidates passed from Presidency College. In Intermediate Science, out of the first 10 passed 3 are from this College, out of the first 50, 17 are from this College, and out of the first 100, 27. In the I.A. list the proportion is naturally less, but we have two places out of the first 10, seven out of the first 50 and fifteen places out of the first 100. Our best congratulations are offered to Satis Chandra Sen, who heads the Arts list, and to Ajit Kumar Ray, who is third on the list of Science.



The supreme interest of the vacation has been still the progress of the war. The chief features of the last three months have been the entrance of Italy into the arena on the side of the Allies and the careful advance of the Italian armies into the Trentino and towards Trieste: the successes of the French north of Arras and in various other parts of the line and specially in Alsace: the desperate conflicts in the Dardanelles; and lastly the advance of the Germans in Galicia involving the recovery of Przemysl and Lemberg. Other events have been the air-raids on London and the English coast with, on the whole, little material (and no military) effect, but with considerable loss of life among non-combatants: the formation of a National Ministry and the concentration of effort on the supply of munitions of war. This last is perhaps the most important development of all. It is fairly plain that

the great advance of the Allies which was looked for in the Spring (there are now over a million of men trained and ready in England, possibly more nearly two millions) has been postponed for want of sufficient provision of the right kind of artillery ammunition. In England there is now a steady determination to make good this deficiency. That it existed is not wonderful considering the unprecedented and immense expenditure of explosives in this war (for instance, seven hundred thousand shells were expended by the Germans in the course of a day's attack in Galicia). The great point is that the need of the vast output of munitions is now recognized throughout the Empire. In addition to the whole of the resources of Government, a large amount of voluntary effort is now being concentrated on the production of what is necessary. Calcutta also is bearing a share in this.



Other events have been the sinking of the "Lusitania" with the loss of 1,500 lives: and the use of poisonous gases by the Germans. These things need no comment from us.



In Bengal the vacation has seen the equipment and despatch of the Ambulance Corps. We all deplore greatly the disaster which ended in the total loss of the hospital flat "*Bengalee*" in the Bay not far from Madras. This is a cruel disappointment after the efforts that have been devoted to her equipment and the high hopes and good wishes with which she was speeded from the Hughli on her way. We can only accept the blow with resignation and do our part to make good the loss. The Corps is on its way and carries with it our warm wishes for its work of mercy. We are confident that those who have gone from us to represent Bengal will add to the honour already richly won by India in the war. Theirs is, we may claim, the nobler, at any rate the happier part in war. Their work is not without peril; but it is to save life, not to kill; to relieve suffering, not to hurt.



The staff re-assemble as usual after wanderings more or less distant. Of those who went outside Hindustan, only the Principal risked the voyage to England; but with a son, a lieutenant in the Somerset Light Infantry, then recently posted to the Royal Flying Corps and now in France, he had sufficiently compelling reasons for going. Mrs. James returns with him, and we offer her a very hearty welcome. Mr.

Sterling and Mr. Gilchrist sailed eastward as far as Australia and back. Of those who remained in India, Dr. Mallik undertook an interesting tour of inspection to the Astronomical Observatories at Kodaikanal and other places ; Mr. Coyajee was lecturing in Bombay for the sister university ; Mr. Oaten and Mr. Holme were at Darjeeling and Kurseong.



All the staff have now returned except two, Dr. Harrison and Dr. P. D. Shastri. Dr. Shastri has gone to take up an appointment as Private Secretary to the Maharaja of Alwar. His absence is a severe loss to our Philosophy teaching, but we congratulate him on his new appointment, which, while it brings him down from the higher sphere of abstract thought, is, we understand, an excellent one from a worldly point of view. Dr. Harrison's deputation for six months to Simla on Meteorological work was already settled when he applied for a commission in the Indian Army Reserve of Officers. He will shortly receive a commission in the Engineers, if indeed he has not done so already. He is greatly missed in the Physical Department.



We were expecting Dr. J. C. Bose's return to India and he has now come back after lecturing with great success in Europe, America and Japan. Last summer, it will be remembered, he was in Europe and narrowly escaped being caught in Germany by the war. He subsequently crossed the Atlantic ; and thence to Japan. We have most of us been following with interest and pleasure the accounts of his triumphant progress which have from time to time appeared. Unfortunately Dr. Bose was prevented by ill-health from completing his plans. After lecturing at the Imperial University of Tokio, he had still several engagements to fulfil in the Far East. His exertions in the United States had proved too great a strain and he was forced to return home. Dr. Bose is assured of an enthusiastic welcome here. He belongs to us in an intimate sense. He has made our College known and respected in many lands.



Those who are seeking a fuller and more connected account of Dr. Bose's work in America should read an article on the subject in May number of the *Modern Review*. We may add that *Harper's Magazine* for March contains a simple account of Dr. Bose's discoveries from his own pen. The *Scientific American* and *Nature* also have published series of articles on his discoveries.

The competition for admission to the new First and Third Year Classes has been very much as in previous years, rather more applications in some cases and fewer in others. Considerably over the full number of admissions has been made. The numbers stand at present: 1st Year I.A. 84; 1st Year I.Sc. 83; 3rd Year B.A. 84; 3rd Year B.Sc. 87. This is as against the limits of 65 for the Intermediate classes and 75 and 80 for the B.A. and B.Sc., as fixed in the Calendar.



The entertainment of the 10th Battalion of the Middlesex Regiment, just before the vacation, was a unique event in the history of our College. We thank the Principal for the opportunity afforded us of meeting the soldiers. It was an experience which Calcutta students never get and it has been a memorable one. Before we came into touch with these Territorials, the word "military" suggested a sense of roughness, and rudeness. But the amiability and friendliness of these gentlemen of Fort William have made us change our views. We have been told that on their side also the Territorials were surprised and gratified to find that there were students in Calcutta—not to speak of Indian Professors—who could more than hold their own in discussions, scientific and literary. Within three hours we became quite friends to each other, and we remain so. We hope there may be further opportunities of meeting before the Battalion leaves Calcutta. Football should, at all events, offer some.



Another event which deserves special notice was the social conver-sazione held by the 6th Year students of English literature before breaking up for their "Mastership" examinations. It was a pleasant and a graceful little function. We hope that there may be many such. In this friendly gathering, professors mixed freely with their students as did the students with their professors. The meeting had interest also as a testimony to the success of the English Seminar and appreciation of its value.



A notable success has been achieved by three old Presidency College men at English Universities. Mr. Prasanta C. Mahalanobis of King's College, Cambridge, has obtained a First Class in the 2nd Part of the Tripos examination in Physics. He is well remembered as a nephew of Professor S. C. Mahalanobis. Mr. Biman Bihari De has obtained the D.Sc. Degree of London University. Mr. Surendra Nath Maitra

has passed the A.R.C.S. (Association of the Royal College of Science) examination of the London University.



In the Honours list of public life also, Presidency College men are once more seen to be prominent. Our warmest congratulations go to Sir Rash Behary Ghosh, the greatest lawyer and jurist that our college, or even India, has produced. We can now take some pride to ourselves as belonging to the "College of Knights"; for, almost all the Knights of Bengal have undergone their preparation for Knighthood within the walls of Presidency College. To mention some other names, Sir Gurudas, Sir Asutosh, Sir Pratul Chandra, Sir Pramada Charan, Sir Tarak Nath, Sir Chandra Madhav, Maharaja Sir Jotindra Mohun Tagore, Sir Rojesh Chunder Mitter. We also wish to offer our hearty congratulations to Babu Ram Charan Mitter, the Senior Government Pleader of the High Court, for his C.I.E.



It is with great sorrow that we refer to the deaths of three distinguished men, two of them old students of the College and third one of the most distinguished alumni of the Calcutta University. The Rev. Mr. E. M. Wheeler, Principal of the Berhampur College, a Premchand Roychand student (1891) and a scholar of no ordinary calibre: the books he has left are a sufficient testimony to this. The success with which he administered the Krishnath College during the nine years of his Principalship, the rapid expansion of the college and the reputation he made for it are further proofs of his remarkable strength of character and abilities. Mr. R. D. Chatterji, the late 4th Presidency Magistrate of this city, distinguished himself in this capacity as few men had done before him. Babu Monmotha Nath Banerji, the late acting editor of the *Amrita Bazar Patrika*, was a man who in the words of the *Patrika* itself "was held in esteem by a large circle of our leading men for his many eminent qualities of head and heart The *Patrika* has lost a devoted and valuable friend of the country and an ardent and unostentatious patriot." The late Mr. Banerji was one of Mr. Percival's favourite students.



A memorial meeting was held in the University Institute Hall on the 12th of April last, the anniversary of the death of Professor Benoyendra Nath Sen. Mr. Satyendra Nath Tagore (I.C.S. retired), occupied

the chair, and there was a great gathering of students and distinguished citizens of Calcutta. This was a fitting recognition of the lofty and amiable character of our late revered *Guru*, whose memory we also have done what we could to perpetuate here.



We are delighted to see the progress made with the new building of the University Institute. This College has been very closely connected with the Institute since its birth. We yield to none in the pleasure with which we shall see the Institute endowed with buildings of its own, and, entering upon a completer fulfilment of the hopes with which it was founded.



It may interest our readers to know what one of the donors of our College, H. H. Maharaja Scindhia of Gwalior, is doing by way of helping to bear the burdens of the Empire at the present time. Besides his gift of a fleet of ambulance cars, the Maharaja has given £15,000 for motor transport, £10,000 to the Prince of Wales' Fund, £6,000 to the Belgian Refugee Fund, £6,000 for munitions, £5,000 for Officers' motor cars, £1,000 to Queen Mary's Needlework Guild, £1,500 for binoculars and telescopes and £100 to Princess Mary's Christmas Gift Fund. This is without taking into account this great Prince's ample contribution to the Imperial War Relief Fund or his gift of a thousand ten-bed hospital units for British troops of the estimated value of two lacs of rupees. In addition to all this, a contingent of His Highness's troops are serving in France along with their Indian and British brothers-in-arms.



The staff is again strongly represented in the April number of the *Calcutta Review*. Professor Holme contributes an article of very special interest showing the extraordinary appositeness of certain passages in Book V of *Spenser's Fairie Queene* to the present relations between Belgium and England and the closeness of the parallel between the allegory and our own times. Professor Coyajee has a striking and powerfully reasoned paper on "What Germany has lost by the War." Professor Gilchrist follows up his article on Students' Residence in general, which appeared in the January number, by a second article dealing very fully with residence in Indian Universities and specially under the Calcutta University Regulations. The survey, which is very thorough and comprehensive, includes much shrewd and

sympathetic observations and more than one practical suggestion which deserves careful consideration by the University, the College and all for whom the subject of students' residence has importance. The subject is a large one and we shall return to it.

War and Finance (II).

BEFORE proceeding to study the "financial mobilization" of Germany, it is desirable to notice some criticisms of the English emergency measures. In the *Quarterly Review* of April last, Prof. Nicholson launches an attack against these measures under the heading "Abandonment of the Gold Standard." In the *Bankers' Magazine* of the same month Sir H. Inglis Palgrave adds more criticism.

Prof. Nicholson admits that the "short period" effects of the emergency measure are most satisfactory. He notices that from August to December, 1914, insolvencies have decreased and are below the normal. Unemployment has even decreased since the war and except in Lancashire no great industry seems to be afflicted. Imports have reached the normal, and shortly after the beginning of the war, the Bank rate was lowered to 5 per cent.

These are most valuable admissions. Emergency measures are surely successful if they tide over the emergency which they were designed to meet. No higher praise can be accorded to them. But Palgrave is of opinion that the emergency issue should have been put forth by the Bank and not by the Government. Prof. Nicholson is afraid lest the issue of the emergency currency to an undue amount may raise prices and so turn the exchanges against England.

To the former contention we oppose the pronouncements of Ricardo: "I have already observed, that if there were perfect security that the power of issuing paper money would be abused, it would be of no importance with respect to the riches of the country collectively, by whom it was issued; and I have now shown that the public would have a direct interest that the issuers should be the State, and not a company of merchants or bankers." He gives the reason of preferring the issue to be in the hands of the State as follows: "If the State issued a million of paper and displaced a million of coin, the expedition would be fitted out without any charge to the public; but if a Bank issued a million of paper, and lent it to Government at 7 per cent, thereby displacing a million of coin, the country would be charged with a continuous tax of £70,000 per annum." Thus, pro-

vided there is adequate provision for the convertibility of the issue, the highest authority in economics considers it immaterial whether paper money is issued by Government or by the Bank. We have therefore to consider whether in the present case there is adequate provision for conversion. We know that gold has been ear-marked at the Bank of England for the currency-notes account. On September 9th the gold was £3 millions in amount and grew from that time steadily till by 13th January it amounted to £20½ millions. "At first only 11·1 per cent of the outstanding notes, it was at the time of the last statement 55·1 per cent.... At present the amount of gold held in this account is a much larger percentage of the outstanding notes than our \$150,000,000 gold reserve is of our issue of greenbacks, the latter being 43 per cent.... The situation is very encouraging. Although the note issues have grown and is still growing, the gold held behind them has increased until it is now held in an amount sufficient to justify confidence in the ability of the Government to redeem the notes as presented." These observations are quoted from an article on the subject by Mr. E. M. Patterson, an American Economist.

Many arguments may be urged for the wisdom of the new issue being a Government managed one. For one thing, if the Bank of England had been entrusted with the issue, the Bank Act would have had to be either amended or suspended; and either procedure would have been accompanied by a great shock to the national credit. It might be remembered that in the year 1857 the Bank Act had to be actually suspended, and this injured the financial standing of England abroad. Another consideration is that in such a great armageddon, as we have on our hands, note issue is required on so immense a scale that the credit even of the Bank of England might have proved unequal to the task. At such a moment the Government has come forward to issue notes which are based *directly* on the credit and national dividend of England, or rather of the whole British Empire. To finance the war, to finance our allies, to finance the bill market, the Stock Exchange, the foreign trade and the vast Government undertakings, a supply of notes is wanted for which only a national or imperial credit could supply the necessary basis.

Prof. Nicholson's contention that the note issue will lead to rise of prices and to unfavourable exchanges has now to be noticed. Of course all paper money carries with it a possibility of inflation: but we have in the present case kept very far from the danger zone.

Thus such a stern critic as Mr. Keynes says : " Let me add emphatically that no visible harm has been done yet. No harm would have been done by the issue of £100,000,000 notes beyond the ordinary, so long as the Banks hoarded them." Again he says: " So far this has done no harm. The Banks have not been tempted to abuse the excessive ease of the position in which they find themselves. They have been criticised, rather, for making insufficient use of it and for hoarding what has been placed at their disposal." Of course, it is true that the Banks are in possession of vast resources in paper money—they have received even more support from the Government than was their due. " While it was right for the Government to take steps to secure the free marketability of the pre-moratorium bills, it was totally unnecessary that the bills should actually have been marketed at the Bank of England, thereby producing the great plethora of credits which we have since experienced." But the banks while possessing all this plethora of paper have been so strongly restrained from free lending by their instinct of self-preservation that even the threats of the Chancellor of the Exchequer were powerless to drive them on to free lending. Meantime the plethora of credits very much assisted the floatation of the Government Treasury Bills. It is this dogged British spirit which keeps the Banks from lending freely and so bringing on inflation ; it is that which has been the sheet anchor of finance. Incidentally it may do some damage. For on account of British refusal to lend and to finance the great mass of foreign requirements, New York has been to some extent usurping the place of London. " It is not merely a question of New York making occasional loans in this and that direction, which under ordinary circumstances would be applying to the London money market, but in the matter of daily bill transactions there is already a growing tendency for bills, formerly drawn on London, to be now drawn upon bankers in New York, and a habit formed in that direction will not be so easily disturbed even when the war has come to an end."

To those who are alarmed by the idea of an inflation, we may put it, that there are various weapons in the armoury of English finance against such a contingency. In the first place the Banks' policy of borrowing from the market may be continued ; secondly, concerted action of the Banks may harden the discount rates ; and finally, British credits in the U.S.A. may be increased by refraining from investing any capital in America and by bringing home what English capital is already there. We need not also forget that by the agreement with France and Russia these countries have agreed to ship gold if

there is a great drain of gold from England. The solidarity of Imperial finance and allied finance should not be lost sight of.

As the economic evolution of the world goes on credit attains powers which were undreamed of before. As Mr. Keynes says, "The old 'metallish' view and the theories of regulation of note issue based on it do greatly stand in the way of currency reform, whether we are thinking of economy and elasticity or of a change in the standard." Sir H. Palgrave has quoted Conant in his own favour, but in that Economist's recent article in the October number of the *Journal of Political Economy* a more reassuring message may be found: "There is little reason, in view of the progress of monetary science in recent times, to fear that Governments now involved in the war will abuse the power to issue paper currency, as was the case with some of them two or three generations ago, nor is it necessary that the suspension of gold payments should in itself cause a great depreciation in the medium of domestic exchange in the country where it is issued."

We now come to deal with what is called the "financial mobilization" of Germany. In the first place the Germans have boasted that while England had had to proclaim a moratorium, Germany could do without one. Two considerations, however, enable us to discount all the credit which the Germans have been taking to themselves. In the first place the Germans could not afford to have a moratorium; for some time before war they had imposed extraordinary and heavy taxation, and any moratorium would have rendered impossible the realizing of these taxes. Secondly, a financial crisis in London is far more difficult to meet than one in Berlin; London is the great monetary centre of the world; its accepting houses had accepted foreign bills while the foreign debtors had no means of remittance with which to pay their debts. Nothing but a moratorium could have saved these acceptors from bankruptcy. Germany, not having such wide foreign transactions, was able to do without a moratorium.

Finally, it may be alleged that, in spite of all its vaunts Germany has in a sense adopted the moratorium. The *Bankers' Magazine* of November 1914 quotes a proclamation of the Bundesrat which announces that "the maturity of all drafts which were made out in foreign countries before July 31st, 1914, and which are payable in the interior, shall be extended for three months, in case they are not due on July 31st, 1914."

Germany has adopted the ruinous expedient of making loans in paper money on any sort of security whatsoever. The Government

and municipalities have established banks—war banks and credit banks—to make advances against securities and goods. "Government securities, other securities and produce are pledged with the war banks, advances to the extent of 75 per cent being made on the first named class of security, and on the other classes to the extent of 45 per cent. These advances are made in war bank notes, which are legal tender and perform all the functions of money. The mortgage banks are under the control of chambers of commerce and municipalities, and they make advances on the mortgage of properties by an issue of notes which are also legal tender and perform all the functions of money."

Why, it may be asked, did Germany not extend the Reichsbank issue further, instead of setting up these auxiliary banks? It is noteworthy that the Germans have suspended specie payment and have also "removed the principal restrictions under which the Reichsbank normally works, namely, the limitation of the untaxed fiduciary issue, and the rule that in no circumstances may the note issue rise to more than three times the 'cash.'" Still there is a desire in Germany to keep down, as far as possible, the issue of Reichsbank notes; for if there was a large issue of Reichsbank notes they would be depreciated and the fall of the credit of the Reichsbank would be held up by foreign critics as a failure of the credit of Germany.

This policy of free lending, says Mr. Keynes, "may prove in the long run a far more dangerous policy than that of moratorium." As Mr. H. J. Jennings says in the *Quarterly Review* for April: "The whole fabric of the economic policy is based upon the view held by high officials, from the Kaiser downwards, that Germany would enjoy a speedy triumph and exact an enormous indemnity. She is therefore in the position of a man who has borrowed heavily in all directions on the expectation of a highly problematical windfall." Sir E. Holden may well observe that "the proper time to test the soundness of the schemes comprised in the financial mobilization will arrive when all those securities which have been pledged are to be redeemed. It is easily conceivable that enormous losses will then occur to all those people who have been unfortunate enough to have become indebted to the war banks, the mortgage-banks, or any other of those Societies which have taken securities and goods in pledge."

But, strange to say, the strongest condemnation of the present German finance has come from a German savant who wrote before the war. Last year Prof. Dr. Johann Plenge published a book "*Von der Diskont Politik.*" In it he discusses the German programme for

financing the war and makes a strong "protest against the proposal to issue special war notes on the ground that paper money which differs in design and name from ordinary bank notes, and which has been issued to meet a special emergency, is much more likely to come under suspicion and to fall to a discount relatively to ordinary bank notes than if the issue of the latter had simply been extended." Dr. Plenge also considered the moratorium as an indispensable part of the financial equipment of a country in the event of a long war.

The inevitable result of such a faulty system of finance is the depreciation in German exchange. "The exchanges with Stockholm, Christiania and Copenhagen have all fallen, showing in each case that the merchants in Germany have not been getting par value for their goods." Indeed German finance is on the horns of a dilemma. If to remedy foreign exchanges Germany consents to export gold, her gold reserve will soon melt away; if she does not export gold but "hugs her sterile favourite" she sees her merchants trade at a disadvantage, and her national dividend suffers. As Sir E. Holden says: "Take New York The par of exchange between New York and Berlin is 95·28 cents for 4 marks. There are more sellers of exchange in respect to goods shipped to Germany from America, than buyers of exchange for goods shipped from Germany to America, and 4 marks have been worth as little as 86 cents in New York, which means a loss of about 9½ per cent. If there be rise in price for any other reason, then it will cost a still larger loss on the whole. These are the results of refusing to pay out gold, but the designer of these schemes knew that whatever happened they must economise their gold. Nevertheless, as we have already seen they have been compelled to send gold to Holland and the Scandinavian countries to the extent of about 5 millions. For this and other reasons we cannot agree with the Director of the Deutsche Bank that Germany has got through the crisis better than we have done." The Swiss Bank Verein expressed its view as early as in November, that there was "a notable depreciation (almost 10 per cent) in the German Exchange." Messrs. Samuel Montagu's trade circular said recently "This accumulation of gold is not being released for ordinary foreign banking purposes, but is being held presumably for war finance alone. As a consequence, Holland for many weeks past has refused to accept German currency except at a discount of between 7 and 8 per cent."

The comparative study of exchanges can at present be best made from Amsterdam which is the great monetary centre in Europe. Here we find that the trend of the German rate is downwards, but for

short periods it goes up whenever Germany exports gold to Holland. This depreciation of German Exchange must be due to two causes—first, there must be a considerable amount of imports from Holland into Germany in spite of restrictions ; secondly, there must be expectations of further depreciation of the Reichsmark. Let us now see what have been the fortunes of the English Exchange. In early days of war it rose very high and was very favourable to England. Later on it fell heavily; but about March it reached the par. Since New York Exchange has regained its steadiness, the London rate cannot fluctuate much, through the force of arbitrage. (London being the creditor of America). As the Amsterdam correspondent of the *Economist* explains, the sterling exchange is bound to show the largest fluctuation, since London is the centre of the world's Exchange. "Whilst London, Paris and Scandinavia have steadied remarkably, the fluctuations in the case of Italy, Berlin and Vienna have proportionately, and in the case of Italy, absolutely been bigger in the last two months; this shows that the effects of an economic decline are cumulative." (*Economist*, 13th March, 1915.)

Of the depreciation of German currency excellent examples are given in the *Economist* of 19th December, 1914. At the beginning of December the Swiss rate had risen from 80 to 90·50 against Germany; the Dutch from 170 to 190·25; Scandinavian from 112·50 to 118; the Italian from 80 to 87·28; the New York from 4·20 to 4·70. On the receipt of some nine millions of gold from the Reichsbank in Holland, the German Exchange in Holland rose by leaps and bounds, improving by 4 per cent. Remittances had also been received against sales on German accounts of Armenian, Russian and Japanese Securities. This, however, was only a temporary feature.

The same paper gives an ingenious attempt to forecast the depreciation of German currency a year later. If the war goes on another year the expense will be M. 20,000 millions. Of this some M. 1,500 millions can be got by Germany by sale of foreign Securities (for Germany sold about M. 5 millions worth daily). Consequently M. 18,500 million worth of new notes will have to be issued. Of this amount M. 3,000 millions will be covered by gold, i.e., 87·5 per cent of the notes will be uncovered. At present the uncovered percentage of notes is 53 per cent and the depreciation is 20 per cent. Hence when 87·5 per cent of the notes are uncovered the depreciation will be 33 per cent. But this is not all. The debt of the German Government will become double or triple a year later. At present 100 marks of Government

credit are worth 80 marks. Consequently with a doubled or tripled debt they will be worth 60 marks only. Hence the depreciation will be 43·5 per cent and not 33 per cent.

Professor Helfferich, the German Finance Minister, has affected indifference as to the depreciation of the Reichsmark so long as he has a large gold reserve. But this is a most dangerous frame of mind in a financier. Indeed the whole financial organization of Germany is at present "a gambling in speedy victory." No additional taxes are levied and resources are recklessly drawn alternately from the Reichsbank and the loans. For about the first six weeks of the war the Reichsbank bore the expenses of mobilization. "By the end of August as a result, total discounts and loans of the Reichsbank amounted to about 243 millions sterling and the total notes issued to about 212 millions. By this time the pressure on the bank was becoming too great, and the war loan was raised." By December the Bank was again helping the Government to an enormous extent, and soon after the second loan was issued. "The question arises, how often can this operation be repeated? We know the cost of war to Germany is somewhere about two millions per day, so that by the end of twelve months there will have been a drain on the people either of liquid resources or securities, properties or produce, amounting to over 700 millions sterling."

The constant growth of the stock of gold in the vaults of the Reichsbank is remarkable and has been greatly vaunted. It consists of the original reserve of the Reichsbank, the war treasure of the Julian tower, the reserve of the bank of Vienna and of the gold drained from circulation by the issue of large quantities of notes of small denomination. It is inferred from the fact that the bank of Vienna is not publishing any further returns, that it has sent on most of its gold to the Reichsbank. The reserve of the latter is now said to contain even gold ornaments and articles. Patriotic appeals and church collections by pastors have added to it, and even travellers leaving Germany have been stopped at the frontier and relieved of the gold in their pockets. All this would not have availed so much but for the fact that both German banks and the German public had been for some time hoarding gold. It is well known that the year before the Agadir crisis the Reichsbank possessed only 30 millions sterling of gold. But that crisis taught a needed lesson to Germany: In 1911 the stock had risen to 36 millions, by 1912 to 40 millions, by 1913 to 45 millions, by 1914 to 60 millions. That stock was 68 millions at the time of the war and by January last it had risen to 106 millions. But besides that there had

been hoarding by the public. Professor Foxwell informs us that even in February, 1913, the German bankers put the amount still hoarded in consequence of the Balkan war crises at £25 millions. Thus the Reichsbank had good prospects of success when it began its task of pumping gold out of circulation.

But huge as the growth of the reserve was, it has failed to offset the growth of liabilities. The Amsterdam correspondent of the *Economist* remarks that the growth of the gold is now failing to affect the proportion against notes issued and is now powerless to prevent the gradual deterioration in the proportion of metal against liabilities. The Reichsbank return of the 6th March showed that the percentage of metal cover against current liabilities had further declined from 35.2 to 34.7 per cent; and the advances by the loan banks had increased by 108 million marks. The very next week the same correspondent showed that the process was cumulative. In spite of further increase in metal-holdings the Reichsbank return showed reduced liquidity—its liability at call being covered by metal to the extent of 33.9 per cent as against 34.7 the week before, which left out of consideration the loan-bank notes in circulation which increased further that week by another M. 127 millions to M. 583 millions. The Germans have been trying to show that the German financial position is better than the British. But they are thus answered in the *Banker's Magazine* for March last: “We find a statement from a German banker to the effect that while the gold held by the Bank of England had increased from 40.8 millions sterling on June 30th, 1914, to 71.4 millions on November 30th of that year, the holding of the Reichsbank rose from 65.3 to 99.5 millions in the same time. The German banker omitted, however, to state that in the same period the Bank of England's note circulation increased from 28.7 to 35.9 millions only, while that of the Reichsbank rose from 120.3 to 210.2 millions.” Mr. H. J. Jennings also observes: “In the year 1914, during which the Reichsbank's gold stock rose by £44,387,000, the note circulation increased by £119,463,000, and the loans and discounts by a sum of £132,590,000, so that the addition to liabilities proceeds on a much greater scale than the addition to the stock of gold.”

The student is invited to study the remarks of Mr. Keynes on this growth of giant gold reserves. In the *Economic Journal* of December 1914, that great financier lays down that there can be only two possible uses of a gold reserve. The first is to keep up a State's currency at par and to maintain the stability of the value of its monetary standard. This purpose has been deliberately abandoned not only

by Germany, but by Austria and Russia, for they have all allowed their currencies to fall to a discount of not less than ten per cent. The other purpose is to provide funds wherewith to make urgent purchases abroad when nothing but gold is acceptable in payment. So in this way or in the way of indemnities these enormous hoards will be disgorged and will be thrown on a market surfeited with gold—an event which will lead to a very heavy rise of prices.

Germany has already managed to raise two war loans. Even the first loan was not raised without considerable help from the banks. But the second loan could have been reached by the extensive mortgaging of other unrealisable assets, only a small proportion of which can be available in a liquid form. Within the short time that elapsed between the first and second loan genuine savings could not have been large, especially when war has upset the nation's economic fabric. The floating of the first loan was assisted by the sale of American bonds by their German owners. But latterly this resource has been failing, because even with the prevalence of good prices, not many American bonds have been brought forward. People have been borrowing from the German war banks to purchase the loan which is then pledged to the banks. But these pledgings are making the capital of the banks immobile. Nor can the banks denude themselves entirely of cash reserves. The financial proceedings of Germany are going round in a vicious circle. By pledging the war stock with the Reichsbank, people get notes; with these notes they buy more war stock; this they again pledge with the banks to get more notes; and to this process there seems to be no end. The Swiss Bank Verein says: "The issues of the Imperial Government having evidently absorbed all the means which the public has had available or is able to mobilise by pledging securities, the Prussian Government is now said to have issued £75 million sterling, which loan will be handed over *in toto* to the Reichsbank; the Bank can pledge the issue to the war loan society and will receive there against notes issued by this Society which the Reichsbank is authorized to regard as gold cover for the issue of an equal amount of its own bank notes. This procedure amounts in reality to an issue of Reichsbank notes against the Prussian loan, and seems to be adopted with the object of disguising the enormous growth in the fiduciary note issue of the Reichsbank." Thus Germany is going downhill rapidly towards inflation. A great catastrophe is inevitable. People borrow war loan notes from war banks and buy war stock with them; meanwhile these notes go into the hands of the Reichsbank, which can issue against

them its own notes, just as if against gold. To quote Sir E. Holden once again: "Their connection with the Reichsbank was most important inasmuch as the notes could be paid into that institution to take up the war loan, or for credits for other purposes. These notes have greater power than Reichsbank notes because when they are paid into the Reichsbank they form a part of its cash balance or reserve upon which Reichsbank notes can be issued, thus giving the war bank notes practically the same qualities as gold. The object of issuing Reichsbank notes on the basis of war bank notes was to enable them to increase the issue of Reichsbank note in case of necessity, and further because the latter had a better status among the people than the former."

June 18th, 1915.

Thunder of guns in Flanders! Clatter of Hell, proclaim!
 What is the message ye spit us in letters of shell and flame?
 Thunder of guns in Flanders, that answered at Waterloo,
 As ye answered our sires will ye answer? Will ye give us their
 answer too?

Thunder of guns in Flanders, that mutter across the years!
 Maxim, howitzer, machine-gun, lords of the flash that tears!
 Crash of the seventeen-incher, whizz of the seventy-five!
 What are the dooms ye utter, what is the law ye give?

Thunder of guns in Flanders! Boom of the bursting shell!
 Have ye no awful message of hope from the midst of Hell?
 As ye once answered our fathers, will ye answer their sons again?
 Here we abide your judgment once more in this Flanders plain.

Hark to the voice of the maxim, hear the howitzer shriek!
 Ye that have ears of hearing, mark ye the words they speak!

*"Seek not to know our answer, O ye of this younger age;
 Seek not to read the writing ere the ink be dry on the page.*

*Make we or mar men's freedom: serve we both Satan and God.
 Will ye buy what we sold your fathers? Tread where your fathers
 trod!
 As ye have ready for purchase the price which your fathers gave,
 So shall the guns give answer; ye shall be free or slave!*



HOPSON & CO

Sir Rashbehary Ghosh

*Little we reck of the tyrant ; little we reck of the free :
And the one give us more than the other, so shall our answer be :
Die in your millions in Flanders, give us the price we love.
So shall ye buy your freedom, so shall our answer prove !*

*Tyrants are giving us millions ? Well, give us your millions more !
So shall ye buy your freedom, as your fathers bought before.
Death is our price to the tyrant ; death is our hire to the free.
Give ye us more than the tyrant : so shall our answer be !”*

Thunder of guns in Flanders ! Clatter of Hell, proclaim !
This is the message we spit ye in letters of shell and flame.
While there be freemen living, while we can strike again,
Guns ! we will feed ye and glut ye, here in this Flanders plain !

E. F. OATEN.

“ Old Presidency College Men ” Series.

(IV) Sir Rash Behary Ghose, C.S.I.

By RAMA PRASAD MUKHOPADHYAYA.

BENGAL has been the nursery of great men—men great in learning, great in religious enthusiasm, great in charity have been nurtured in the soil of Bengal. In one of them, in Sir Rash Behary Ghose, we have an alumnus of the University, a truly patriotic friend of the country, of whom any nation or any country in the world may feel proud. His is a character composed of many sterling qualities.

Sir Rash Behary Ghose, the son of the late Babu Jagat Bandhu Ghose, was born on the 23rd of December, 1845, of a middle class family in the village of Torekona, in the District of Burdwan, in Bengal. He received his first education in the District School of Bankura. There are several anecdotes of his boyhood, mainly concerned with instances of boyish wickedness; the following is of some interest and may be taken as an illustration. In village schools, when any teacher is absent, a student of the higher class is sent to teach the boys of the lower classes. During young Rash Behary’s school days, his class-fellows were often sent to do such work, but it was never offered to him, though he was the best boy in the class. The reason was that he was

very young, and his teachers feared that he would not be able to manage the class. This was his great grievance. But once the task fell upon him. He went to teach a lower class. In the book he had to teach there was a sentence—"The bear has a *short* and *small* tail"; he had to explain it to the students, but he was at a loss to find the Bengali equivalents of the two words *short* and *small*. He somehow managed to escape from the difficulty. Here his wish to teach was at an end; thenceforth he never went to teach nor had he a grievance.

He appeared at the Entrance Examination under very peculiar circumstances. In 1860, Rash Behary, who was then in the second class, had made such an impression on his teachers that he was selected to represent his school one year earlier along with the other students of the first class. For this reason his achievement at the examination was not so brilliant as those who knew him would have expected. In the beginning of 1861, Rash Behary came down to Calcutta and was admitted into the Presidency College, then, as now, the Premier College of the University. In the period during which Rash Behary was in the College, there were several persons who were known as great educationists and teachers. The Principal, Mr. Sutcliffe, himself was the foremost among them. In him the pupils found a conscientious teacher, as also a sympathetic friend. Rash Behary assiduously applied himself to his studies; in 1862 he appeared in the First Examination in Arts and occupied the first place. At the B.A. Examination in 1865, though not the very first, he secured the second place. Rash Behary appeared in the M.A. Examination in 1866 with English as his subject, and was an easy first in the first class. He was the first M.A. in English in our University. The next year he appeared in the B.L. examination, headed the list and carried off the University Gold Medal.

It will not be here out of place to dwell for a moment on his great width of reading and command over the English language. From the very beginning of his college career, he was a voracious reader. English literature was his great favourite. Milton, Shakespeare, Macaulay, Burke, Froude and a few others were and still are his favourite authors. One can find copies of the works of some at least of these great writers strewed on his table, great literary masterpieces buried in the heap of paper books and legal documents. A careful reader of the speeches and writings of Sir Rash Behary will at once see how completely he has mastered his favourite authors; he has made their language his own. It is by no means an uncommon incident to find him quoting from the works of masterminds even in his

unprepared and extempore speeches. His diction, whether in a book or in a speech, is saturated with Shakespeare, Miltonic, and Biblical idioms and expressions. Sir Rash Behary Ghose fully realized from the very beginning that to have free command over a foreign tongue one has to drown one-self deep in the literature of that language and think one-self transported to the land of the language. Sir Rash Behary has implicitly followed this rule and is now accepted as one of the best amongst Indian speakers. His speeches, delivered in Council Chambers or from political platforms, are couched in the finest language and can fittingly be compared with the utterances of the best English scholars. His legal arguments in the High Court are remarkable for chastity of diction and for the force and fluency with which they are delivered; the masterly style of the luminous legal expositions of the great doctor are instructive, not only to the juniors but also to a large section of the senior members of the Bar, the Vakils as well as the Barristers.

He was enrolled as a vakil of the High Court at Calcutta on the 5th February, 1867. However great his merits and learning might be, he too had to struggle hard in the early years of his professional career. He had to wait patiently for cases, which were slow to come, but his spirit was undaunted. From the first he had a noble and influential friend in Mr. Justice Dwarka Nath Mitter, then at the Bar, but soon afterwards elevated to the Bench. Mr. Justice Mitter died a premature death and his untimely death made India poor and Rash Behary poorer still. During these years, when cases were not plentiful, he assiduously cultivated the study of law, and in 1871 passed the Honours Examination in Law. He was many years later, in 1884, admitted to the much coveted and honoured degree of Doctor of Law. Here I may quote, from the conclusion of his Tagore Lectures, some very wholesome advice given by him to the young members of the Bar. "It may not be given to every one of us to attain high forensic skill, but depend upon it, the time given to a scientific study of law is never wholly thrown away; for legal practice is not a thing apart from legal science; laborious days are not always crowned with riches or honour. But a higher guerdon awaits those who pursue learning for its own sake. Learn therefore to labour and wait." Young lawyers, whose spirits sink under early failures, should bear in mind these words of a lawyer, who has risen to the highest rank in the profession, though he had tasted the bitterness of early struggles.

Sir Rash Behary Ghose was selected Tagore Professor of Law for

1875-76, and was the first amongst the graduates of our University and the first amongst the Vakils to fill that chair. The lectures he delivered were on the abstruse subject of the Law of Mortgages in India—the task was the harder for him as the Law of Mortgages had not then been codified. He raised his voice against the state of things resulting from the chaotic state of such an important branch of the law. “Apart from the inherent defects of all judge-made law in every country, there is special danger in India of our being gradually anglicised Some of our judges seem to think that the rules of justice and good conscience, which are to be their guide, can only be found in the English Chancery Reports, the well of equity undefiled. Large masses of English law have consequently found their way into our system, a process of filtration which is still going on and which can only be arrested by codification.” Some years later, when the law was codified, Dr. Whitly Stokes, the member in charge of the Transfer of Property Bill, publicly acknowledged the great help he had derived from Sir Rash Behary’s book. The book has run through four editions. In the fourth edition, which has just been published, the work has been expanded into two volumes; it has deservedly become a classic on the subject of mortgages in India and is held in great respect both by the Bench and the Bar.

“Good cometh out of evil” is a very well tried adage. Sir Rash Behary is surely fit—more than fit—for a seat in the High Court Bench. It is fortunate from some points of view that he was not made a judge. He would have then been transformed into a Government official—he would have to resign his seat in the Council and would have been debarred from making out-spoken and independent criticisms on the actions of the Government. There has been also another advantage. Had he been a judge, his income would have been narrowed—he could not have amassed the princely fortune, of which he has made such good use in recent times—there would have been no donation of his of a lac to the proposed Hindu University, or the princely endowment to the University College of Science or the donation of fifty thousand rupees to the Belgachia Medical College.

This short sketch will be hopelessly incomplete if we do not allude to Sir Rash Behary Ghose’s wide and deep knowledge of the law. He is now at the head of the Vakils, and there is hardly any big suit in which he does not represent one of the parties. So great is his fame that his services are requisitioned from people thousands of miles away from him. Cases are referred to him for opinion from such far-off States as

Cochin and Travancore. He was justly considered to be fully able to hold his own against such renowned leaders of the Calcutta Bar as Sir Charles Paul, Sir Griffith Evans, Mr. Woodroffe or Mr. W. C. Bonnerjee, and every client thinks himself safe in the hands of Sir Rash Behary against any of the Vakils or Barristers. He is a very strenuous Advocate when he is convinced in his own mind that he is right, but he is always eminently fair to his adversary and is always candid in his relations with the Bench. He likes to argue more on points of law than on fact. While arguing a case, he has precedents at his fingers' end for his use. He is equally at home with cases—Indian, English, Irish, Scotch, and what not. His delivery and gestures are by no means perfect, but the substance of what he says is probably superior to what any of his countrymen in the same profession is able to say on the same question. He has for some years past been attacked with gout, and he is now sometimes seen carried upstairs in a chair and argues cases while seated. It is a pity that a lawyer of the learning, standing and reputation of Sir Rash Behary Ghose is placed junior to a Barrister, who may be of the age of his grandson and may not have practised for a single week. The newly fledged Barrister has precedence over the oldest Vakils—and the only reason for that seems to us to be that he has been to England. In Bombay and Madras, we have precedents to the contrary, and we may rightly expect Calcutta to follow them and to admit at least some of the best Vakils to the privileges of a Barrister.

In 1879 on the recommendation of Sir William Markby, the then Vice-Chancellor, Lord Lytton, the Chancellor, chose three of the most distinguished graduates of the University as Fellows. The names selected were Dr. Troilokya Nath Mitra, Dr. Gooroodas Banerjee and Dr. Rash Behary Ghose. The first of these was too early lost to us, the other two have been fortunately spared to benefit the country by their great ability. During the last thirty-six years, Sir Rash Behary Ghose has maintained a fairly close connection with the University. In 1893 he was elected President of the Faculty of Law and continued to hold that distinguished position till 1895. From 1887 to 1889 he was a member of the Syndicate, the executive body of the University. Nowadays, though he is not regularly present at the Senate meetings, he is rarely absent from an important one. He is ever ready to place all his knowledge and ripe experience at the disposal of the University.

In 1913 the University of Calcutta conferred upon Sir Rash Behary Ghose the Degree of Doctor of Philosophy *honoris causa*. When he

was presented by the Vice-Chancellor, Sir Asutosh Mookerjee, to the Chancellor, Lord Hardinge, for admission to the Degree, he was aptly characterized as being "pre-eminently qualified for the leadership of his educated countrymen, by reason of the massiveness of his intellect, the sturdy independence of his character, the moderation of his views and the sobriety and soundness of his judgment." The Vice-Chancellor fittingly added: "To crown a splendid career of beneficent labour for the advancement of his countrymen, he has now, with a nobility of soul, equalled only by the greatness of his intellectual powers, made a princely gift to the University College of Science—an act of liberality sufficient by itself to make his name remembered with reverence and gratitude by future generations of our students."

Sir Rash Behary Ghose takes much interest in the progress of Female Education, as is evident from his endowment of 1888. From the Padmavati endowment, so called in memory of his revered mother, a gold medal is annually awarded to the lady candidate, who being a native of Bengal is admitted to the Degree of Bachelor of Arts and obtains the highest number of marks among lady candidates.

When the promoters of the proposed Hindu University Scheme went to Calcutta to collect funds he was approached, and he promised, and has afterwards paid, a donation of a lac of rupees to the fund. He is one of the Vice-Presidents of the proposed Hindu University. He was an ardent supporter of the Bengal Technical Institute founded by Sir Tarak Nath Palit, to which he gave a donation of Rs. 5,000. Sir Rash Behary has founded a High English School in his native village of Torekona where many of the students are taught free.

Sir Rash Behary Ghose has always been a man of literary tastes. He never specialised in any branch of the practical sciences; but he clearly realised the unsatisfactory condition of scientific education in our country. In 1912 Sir Tarak Nath Palit, of revered memory, had given to the University the princely amount of fifteen lacs, in land and money; and it was in August 1913 that Sir Rash Behary Ghose wrote to Sir Asutosh Mookerjee, the then Vice-Chancellor, signifying his desire to give, on certain conditions, ten lacs of rupees for the promotion of scientific research in the University. From the income of the Fund four Professorships—in Physics, Chemistry, Applied Mathematics and Agricultural Botany—were to be maintained. Moreover, eight advanced students, two under each professor, are to carry on researches in their respective branches and each is to receive a scholarship of Rs. 75 per month. There was one condition annexed to his gift, and that was

that the professors must always be Indians. The College of Science is expected to be opened next month and the splendid building is fast approaching completion. Dr. Ganesh Prasad, M.A. (*Cantab*), Sir Rash Behary Ghose's Professor of Applied Mathematics, who has already commenced his Lectures in the Senate House, will transfer his activities to the new building; his research-students have prepared important original papers and have made a very hopeful beginning. Dr. Prafulla Chandra Mitra, Ph.D. (*Berlin*), as Professor of Chemistry, will start M.Sc. classes in that subject, and will also take advanced students. The two other professors under Dr. Ghose's endowment, Mr. Debendra Mohon Bose, M.Sc., B.A. (*Cantab*), and Mr. S. P. Agarkar, are both engaged in study and research in Germany, the former in Physics and the latter in Botany; it is unlikely that either of them will be in a position to return to their work here before the conclusion of the great war. It must be a matter of some satisfaction to Sir Rash Behary to find that the great work for which he has so generously devoted the fortune of a lifetime is about to be initiated in so satisfactory a manner. The only difficulty is that on account of the European conflict, it has now become an arduous, if not an impossible, task to equip the laboratory in a befitting manner.

Sir Rash Behary Ghose had not actively joined in Congress-politics before 1904. The occasion that called him out of his seclusion was the announcement of the Partition of Bengal by the Government of Lord Curzon. A monster public meeting was held in the Town Hall, and the speech Sir Rash Behary Ghose delivered, as the Chairman of the meeting, clearly set forth the effects of the action. Time has amply shown the truth of the assertion of Sir Rash Behary. The Congressmen then found in him one of their strongest champions, but he was never a blind supporter of either the Congress party or the Government—none were safe from his scathing criticism, if it were only due. He was the Chairman of the Reception Committee of the Calcutta Congress of 1906, and the address he delivered on that occasion vividly described the condition of his countrymen, the way by which it can be improved, and the supreme importance of the steady growth of Industrial India. He was elected President of the unfortunate Surat Congress, and in the address, which could be delivered only in part, he foresaw the imminent danger of the split in the Congress Camp. Sir Rash Behary Ghose was also President of the Madras Congress of 1909. He is very unlike many other so-called Congress patriots. He not only makes speeches, but works and knows how to work. He clearly saw that no country can improve by

holding meetings and delivering speeches only. The principal way to regenerate a country, and specially India, he saw, was to improve indigenous industry and scientific education. He started a match factory in the southern suburbs of Calcutta and spent Thirty Thousand Rupees on it; but the factory got little support from his countrymen and he had to stop his contribution. When the Bengal Chemical and Pharmaceutical work was started, he subscribed liberally and has been ever since an ardent supporter of the Company.

There is one other sphere of work of Sir Rash Behary Ghose that we have not yet touched—his activities in the Councils of Government. On the death of Sir Romesh Chandra Mitra, Sir Rash Behary became an Additional Member of the Viceroy's Legislative Council. When the Indian Tariff Bill was introduced, it excluded from the tariff the import of cotton fabrics, yarns and thread. Sir Rash Behary Ghose took exception in strong terms to the exclusion of cotton goods from the operation of the Act, by which, in the words of Sir Patrick Playfair, the representative of the mercantile community, “India's interests were being sacrificed to Lombard Street on the one hand and Manchester on the other.” Another contentious legislation that came up before the Council was the Age of Consent Bill. Sir Rash Behary Ghose was at variance with Sir Romesh Chandra Mitra and supported the Bill. Sir Rash Behary himself introduced two Bills in the Imperial Legislative Council. The first was the Partition Bill, which was passed into law. His next Bill was to aid unfortunate judgment-debtors. This too was passed into law. He rendered valuable services to the Government when the Civil Procedure Code Bill was passed. His budget speech for 1907-08 was marked by a thoroughness that seldom fails him. He served on the Bengal Council from 1888-91 and 1891-93 and on the Viceroy's Council from 1891-94 and 1906-1909.

He was made a C.I.E. in 1896 and a C.S.I. in 1909, and knighted this year. No honour in the last list has been better deserved.



The University Institute.

(Concluded.)

AFTER Dr. Wilson's retirement came two equally zealous men to labour for the good of the students, both of whom were connected with our College. Mr. Gilliland (officiating Principal) and Professor H. R. James. It speaks much for the keen interest which Mr. Gilliland used to take in everything affecting the welfare of the students of Calcutta. The duties of his office were onerous enough; but his devotion to his cause led him to do more. Mr. James's efforts to better the Institute magazine will not be easily forgotten, as has been shown by the recent references to his contributions in the same magazine. I have been further informed by Patna College men who were members of the Institute and others that Mr. James (in his athletic dress) was often seen walking arm in arm with his students to the field with as much zest and glee as the students themselves, while others testify to having seen him pulling hard with his students in the boat. These little things, trivial though they may seem, speak for themselves and need no comment. The Institute still remember with gratitude the debt it owes to Mr. James. It was he who first encouraged the cultivation of the histrionic art among the members of this University. It was under his coaching and supervision that 'Macbeth' was put on the stage successfully by the members of the Institute some time in 1900, and which extracted unstinted praise from the late Sir John Woodburn, a friend of Calcutta students.

Along with Mr. James came Mr. J. N. Das Gupta, fresh from Balliol, and a little later Mr. S. C. Mahalanobis, fresh from Edinburgh. With their ample experience of English University life these two gentlemen carried on successfully the work of the Institute. But unfortunately owing to some adverse circumstances the Institute about this time experienced a set-back in its steady progress. Things looked dark for it and in fact it was ordered to vacate its present quarters by the Director of Public Instruction. But the Institute was further strengthened by the timely appearance of yet another man connected with our College who will never be forgotten by those who came in contact with him. Here was a man who was a true leader of students and whom to see was to revere. Professor Benoyendra Nath Sen threw himself heart and soul into its work and continued to guide its affairs till

his sad and untimely death, except for a short interval during his European and American tours.

Professor Sen with his characteristic zeal and devotion threw himself into its work and "with the help of Mr. W. C. Macpherson, Sir Andrew Fraser was prevailed upon to call back the Director's mandate. It was arranged that the Institute would not have to leave its present quarters till better or at least as good accommodation could be found for it. The Library Hall was paved and the walls were made as far as possible damp-proof. The broken or decayed furniture were removed and through the kindness of Sir Charles Allen the Hall and the Reading Room were furnished with bright little Lucas lamps and the ugly old glaring lights were done away with. With the help of Sir Charles again the Marcus Square rights were partially recovered and the Institute was allowed the privileges of an ordinary club in the ground which it had once substantially helped to make."

The work of reconstruction was thus begun through the strenuous efforts of Professor Sen. Our rights to quarters had been vindicated, the cricket and tennis clubs had been restored. The Hall and the Reading Room were made to look more attractive, and the junior members too had been brought under some sort of co-operative existence. Members had begun to take a greater and livelier interest in its affairs and gradually began to increase in numbers. In 1908 the Boating Club of the days of Dr. Sarvadhicary was revived through the kindness of Sir R. N. Mookerjee, always a genuine friend of the Institute. Courts had been opened for badminton through the kindness of Maharanee Swarnamoyee some time earlier. The activities of the Institute were thus displayed in various forms. Social gatherings, dramatic performances, and Literary Evenings were organized. The debate meetings began to be more frequent and well-attended. In this way the Institute went a great way towards fulfilling its function which, as Dr. Wilson defined it, was "to bring about some of the advantages of English University life, which are sadly wanted by the numbers of students congregated in Calcutta for the most part under no discipline whatsoever." But here the work of Professor Sen did not end. Last, but not least, the Students' Poor Fund, which has lately received a splendid donation of Rs. 4,000 from H.E. the Viceroy and his departed noble consort, was started by Professor Sen in 1908, with the help of the late Professor Hari Nath De, the famous linguist, and Dr. Aghore Nath Ghose, both men of our College. It is conducted and controlled entirely by the students with the honorary secretary

as its *ex officio* president. Its purse is maintained by voluntary subscriptions from the members of the Institute and by occasional donations from kind-hearted gentlemen. Since 1909 a charity performance is annually held under the auspices of the Institute to further the objects of the Fund, and this performance is very generously patronized by the public every year. Professor Sen helped the Fund all along with donations, subscriptions, time and labour. Even on his last sick bed he did not forget it. In November, 1912, a few months before his sad demise, he sent a donation of Rs. 20 for himself and his family to the Fund. In the first year of its existence the Fund had an income of Rs. 35 and in 1912 it showed an income of about Rs. 1,345. This steady growth speaks for itself. But all these were subsidiary to Professor Sen's crowning achievement which lay in the healthy vigour and life which he introduced into the Institute and the moral atmosphere which he created in it. No one can better testify to this fact than one who has worked with him for several years. Says he that "he gave a new life into undergraduate existence—into the student-members of the Institute. He had brought about a sense of corporate existence amongst the members, a realization of a sense of responsibility as members of a common institution, a sense of unity in the bonds of service and fellowship." But above all this success lay in his magnetic personality. His was a personality at once fascinating and dominating. "What a *man* was there! Alike masterful and loving, a strict disciplinarian, withal a friend, with infinite sympathy for all the failings of human nature, prepared to pardon every fault, every shortcoming, a visionary, an idealist yet a perfect business man, courteous but firm, and ever keeping an open mind, he was to us at once our guide and inspiration." Such was the man whose loss we were to mourn in April 1913 all on a sudden. But never shall we forget the genial presence and stirring notes of that dear old friend, philosopher and guide of the students of this city, the revered and beloved teacher—that "broad-minded apostle of culture and morality." The mantle of Professor Sen has fallen upon the worthy shoulders of Professor Mitter,* who is still in harness working as hard as ever. Under the presidency of Mr. Cumming and the secretaryship of Mr. Mitter the Institute has advanced by great strides. It has increased both in popularity and usefulness. But the time has not yet come to

* The news of Mr. Mitter's resignation came after the present article had gone to the press. His resignation is a great loss to the Institute.

say here anything about their work. Suffice it to say, that the Institute is the premier student-club of to-day in Bengal and it has been addressed by no less a personage than the present Viceroy, as standing "for all that is best in University life." The Institute as it stands to-day is, if I may be permitted to call it so, the University Union Society, the University Dramatic Club, and the University Boating Club put together into one. With the prospect of its new building it may well hope to contribute more to the growth of that spirit of University life which is one of its aims to further. But to fulfil that task better it has still a tremendous amount of work to do, as was pointed out by the Rev. Mr. Holmes the year before last. Firstly, it has got to improve its present constituent parts, and secondly new features must be introduced into it.

In the first head, the Union (if I may call the Debate Section and the Reading Room by that convenient name) requires a good deal of improvement. As things stand at present, meetings are not very regular. Weekly Friday or Saturday meetings—the method followed by our illustrious model the Oxford Union—should be organized. As regards the subjects for discussion, a little more discriminating spirit should be exercised. Subjects of a practical nature dealing with our daily life, University affairs and other such subjects concerning student life should be encouraged. As to presiding over meetings, senior students of the University ought to be given the opportunity of learning how to fulfil the duties of a Chairman.

As regards the University Dramatic Club, attention should be drawn to the recent action taken by the University about theatricals in Colleges. The University Dramatic Club should be the place where all the histrionic talents of the University should congregate and cultivate their art, in place of College Dramatic Clubs. The Institute is going to have a permanent stage of its own in its new building. Let there be, say, two plays every year, one just before the Summer Vacation and another just after the Pujah Term, by this club, besides small pieces from celebrated authors at occasional social gatherings. It is an art which requires careful cultivation, and let it be studied in that light here in the University Dramatic Club by the members in their recreation hours. The Institute has its own orchestra. Let the Institute be the place where the musically inclined men of the University gather and improve their talents in their leisure hours. I do not know why the musical classes started by Dr Wilson in its earlier days have been allowed to die away. Why not revive them and give better opportunities

to the members of the University to cultivate that useful science in healthy surroundings ? Then comes the University Boating Club (if that name be not resented). It should form a subsidiary part of a bigger whole, a University Athletic Club. The formation of such a club as this is one of the immediate duties of the University Institute, as has been repeatedly pointed out by Rev. Mr. Holmes and Mr. Oaten. A committee, with the captains of all the Colleges as its members, with a responsible man (with athletic leanings and University connexion) as its president, should be immediately formed and select teams from all the colleges to represent the University in all games and conduct its affairs. Think of the glowing picture of the University team returning triumphant from Bombay or Allahabad, Dacca or Patna. Their triumph will be the triumph of every member of the University, and then shall we feel as members of one corporate body—the University. The whole expense of the University Athletic Club should be borne by the University Institute—let it raise an additional subscription for that purpose if it cannot afford it, from its 2500 members ; and is it hoping against hope to think that the members will not grudge an additional 8 annas over and above the *annual* subscription of *one* rupee ? In this connexion, another thing very naturally suggests itself. In the great Universities of Europe as well as in America, there are University Champions of each department of the sporting world besides their inter-varsity competitions. The University Institute should at once take upon itself the function of organizing Inter-Collegiate Championship meetings every year, so that we may boast of Mr. So-and-So, of such-and-such College, Champion of sprinting ; Mr. So-and-So, of such-and-such College, Champion of boating, bowling, swimming, walking, cycling and so on. Last year, thanks to the efforts of Mr. Oaten and a Medical College gentleman whose name it is very difficult to remember (I beg his pardon), we had a meeting of this sort. But it really falls within the sphere of the duties of the Institute.

In this connection, we are reminded of the only two inter-collegiate competitions which the Institute at present hold, viz. Recitation and Essay competitions. The Hardinge Birthday Shield presented to the Institution by Mr. Ranendra Mohan Tagore will inaugurate another inter-collegiate competition, viz. in Football, in addition to the Elliot Shield competition. Why should not the Institute extend its activities to a wider variety of subjects ? It may, if it only desires to do, hold many more inter-collegiate competitions. Why not hold competitions in extempore speaking (the best speech within the shortest time),

verse writing, humorous compositions, and other similar intellectual activities?

Last, but not the least, there is the University Magazine, which has at least a very ambitious title. We admit that it could lay claim to this title in its former days, but it should be a far better thing than what it is now. Of course, we are not disparaging its contents. They are very good in their own way; but much more is expected from a *University* magazine. We should like to see its connexion with the name of the University more emphasized in its contents. Let a senior student of the University with a committee consisting of representatives with literary taste from each college in Calcutta be in charge of it. We want to have from it every month a conspectus of University life in all its aspects. Educational and athletic interests should be properly looked after. We should like to see its functions properly defined by some one worthy to pronounce upon them, and it should follow these out to the letter. Let it be a power with the 2500 members at its back. Let it enable those students who have gone to prosecute their studies in European, American and Japanese Universities to keep up their connexion with their mother University. Further it should satisfy the intellectual seeker with short, succinct accounts of the various intellectual and progressive movements in the University (which, be it remembered, consists of a large number of affiliated colleges) as well as outside it. Let it be the mouthpiece of what the University students think and feel.

In winding up, I would urge some change in the hours and days during which the Institute is kept open. The students of the city feel its want the more on holidays than on working days.

Perhaps it is not too much to hope that the Institute will fulfil all its duties by itself, without their being pointed out, in the near future, when it gets its new building. When it performs its duties, some of which we have ventured to emphasize, it will, it is hoped, do much to foster that *esprit de corps* which is the crying want of our present University life. The student community of Calcutta is grateful to the Institute for making their dry University life a little more bright and pleasant than what it was 25 years back. If these, our humble suggestions, receive a favourable consideration from the authorities of the Institute, it is hoped student life in Calcutta will be far more pleasant and covetable than what it is now. With the University Institute to look after us outside the walls of the College, and that kindly spirit which makes the relations between students and professors in the great English

Universities so agreeable and beneficial pervading our Colleges here in Calcutta, student life here will be a thing for which the devout and loyal student may sigh in after times when he tastes the rigours of the battle of life, and say as a distinguished Indian once said of his University life in Oxford: "I would rather have a week of that life again than all these years full of dull, humdrum existence." Oh, for the time when our University life will be of that sort !

"SIBOO."

The "Lusitania."

Sunk May the 7th, 1915.

Shed thou no tear ; let not a cry escape thee,
While loud-voiced horror stalks from land to land ;
But let a grief and wrath exceeding utterance
Steel thy suffering heart and nerve thy armed hand.

Rise, England, rise, in passion of avengement,
Only more resolved one purpose to pursue ;
From the minds that planned it, from the hands that wrought it,
Stern to exact all the retribution due.

Not against armed men in battleship or cruiser,
Men who go forth prepared to deal the hurts they brave,
But 'gainst ocean-travellers, defenceless, unresisting,
Sped the coward death-bolt underneath the wave.

Rich and poor they perished there, in the quick engulfing waters,
Unarmed folk, guiltless, faring across the sea ;
Men who died to save ; fair women gently nurtured ;
Children clasped together in their death-agony.

Yet weep not, England, but fix more grim thy purpose,
We, thy sons, haste to speak for thee, where battle is arrayed,
In bayonet thrust and cannons' roar, and by the thundering
Dreadnought :
Nor slack till judgment shall be done and all the price be paid.



A Pioneer of Science Teaching in Bengal.

NO one can doubt to-day, no one at least who knows the facts, that efficient science-teaching in Bengal is an accomplished fact. In a large measure, science has come to her own in education. In his Convocation address Lord Hardinge, when speaking of the great advance made in the teaching of science subjects under the University, referred to laboratories attached to its colleges, which "can now compare favourably with any in the world." His Excellency did not name Presidency College, but we at Presidency College may be pardoned if we take the reference to belong mainly, if not entirely, to the Baker Laboratories and the now extended and improved Chemical Department of the College. But the University College of Science is also in course of construction and the College of Science has been planned with noble amplitude and completeness. In a score of affiliated colleges there are well-planned laboratories efficiently organized for the work they have to do. Yet it is, after all, not in laboratories that the greatest advance has been made. The greatest achievement of science in Bengal is in her men of science. The work done by men of science in Bengal has now won full recognition in the world of science. Two names stand out pre-eminent. But as was ably shown in Mr. Fernandes' article in the March number of this magazine, there is a host of younger well-trained and devoted workers and the School of Indian Chemistry is already a reality. Scientific research in Bengal has passed beyond the stage of aspiration and is already an achieved success. All the greater interest, therefore, attaches to the first tentative efforts. It is easy to believe in the future of science of India now, but there were those who believed when nothing had been done at all; and it was through their faith and inspiration that the efforts were made which are now coming to fruition. This article has to do with one such believer.

In the year 1852 a paper was read before the Bethune Society on Thursday, November the 11th, on "The Relative and Absolute Advantages of Science and Literature in a Collegiate Education", which shows a remarkable perception of the importance of Physical Science as part of education, and a yet more remarkable prescience as to its possibilities of achievement in Bengal.

At the outset the writer states with clear insight and comprehen-

sive fulness the ends of collegiate education: and it is to be remembered that this was written five years before the foundation of the Calcutta University, two years before the Hindoo College was transformed into the Presidency College.

"The education which is to be received in a college should be of the highest possible order. Its nature should be such as to enable its recipients when they enter life to take the lead of the nation to which they belong and to make that nation inferior to none in the world. The educated youth should receive that degree of mental culture, when within college walls, as will enable them to put their shoulders to the advancement of their national prosperity, to be active agents in the assimilation of their uneducated countrymen to their own body, to develop the resources of their country, to ward off thereby all sorts of misery from their native land, to create within themselves a resource which will make them happy independently of all external circumstances, and to appreciate, if not to share, the conquests of mind over matter."

An eloquent disquisition followed on the value of education on the literary side—Literature, History, Biography; and then the writer turns to Science.

"It has been stated above that a collegiate education should be of the highest possible order. Whatever studies have a disciplinary effect on the mind, whatever pursuits have in their rear national prosperity and national advancement, whatever studies enoble human nature, in short whatever studies have a tendency to make us happy, should have a place within the range of such an education. Scientific studies have all these characteristics in a pre-eminently distinguished form."

He first vindicates the importance of the place of Mathematics.

"Of all the sciences mathematics should have the first place in a college education. It sharpens the intellectual powers and impresses on them a precision, which they can derive from no other source except, perhaps, from Logic. The closeness of reasoning with which we become familiar in the course of our mathematical studies gives a peculiar mould to our reasoning powers, and cultivates within us a principle which forms the safeguard against the intrusions of fallacy in all our researches. Mathematical reasoning, being perfection itself, a familiarity with its nature enables us to adapt all other reasoning to it as nearly as possible. Physical truths, especially those of the dynamical and optical sciences, are not understood and appreciated

to their full extent and worth without a knowledge of mathematics. It seems to be the corner-stone of all those sciences which deal with matter as occupying space and having its phenomena occurring in time. Its application to so many departments of physical science being of so intimate a nature, a writer of first-rate ability has, in full fervour of admiration for mathematics, stated that it seems to be the instrument by which we can share the counsels of the Almighty.”

A tribute to Logic follows:—

“In a collegiate scheme of education logic, as it has come from the pen of John Stuart Mill, or as it might come from the pen of Sir John Herschel, should be included, the more so as those that have an inaptitude for mathematics may find in Logic a worthy substitute. If testimony from high quarters on a subject so clear as the present were required that would not be wanting. Liebig, standing high among the philosophers of the present age, is an enthusiastic admirer of logic. What Bacon, Locke, or Reid has said in disparagement of this science is quite unworthy of their names. Their sarcasms were directed against this noble study from their observing, perhaps, to what an extent it had been abused by the scholastic writers. They might as well have proscribed iron from man’s use because from it daggers and other offensive weapons are prepared. Our distance from the scholastic age has kept us clear of all such prejudices. We feel the paramount importance of ratiocinative and inductive logic, we feel its necessity, disguised under whatever name it may be, to the advancement of science.”

It may again be remembered that in 1852 Mill’s Logic was comparatively a new book. Then comes this prescient and eloquent plea for a recognition of the importance of science which it is the special purpose of this paper to illustrate:—

“The universe in which our lot has been cast and in which we are no unconcerned beings, is governed by a system of laws unvarying and open to the inspection of all who come with a devout heart and with the necessary preparations to know them. The explanation and expounding of these laws constitute natural science. As nature is subdued by submission, if we would keep our place as lords of the creation, we must cultivate a familiar acquaintance with the physical sciences. The lofty position to which civilized man has been raised has been through the mighty work of science. The loftier station, which his present position promises to raise him to, shall be through the aid of science. It is science that enabled the powerful genius of

Archimedes to defend his country against the overwhelming force of the Romans. It is through the aid of physical science, that we are enabled to travel hundreds of miles in a day and to perforate the Alps, the crossing of which required the mighty genius of a Hannibal or of a Napoleon to accomplish in bygone days. It is physical science that enables us, with a small quantity of water, to have works done which would have required the labours at least of a hundred Hercules of the fabulous ages. Science has enabled the sailor to guide his vessel across the wide expanse of the ocean with that degree of exactitude and certainty with which he would have been moving from one room to another in his own apartments. By science have we been able to catch hold of the fleeting shade and to give it a permanent existence. By science have we been able to convert the most noxious wood and vegetable to the most nutritious food, and to transform the most worthless objects into the most useful. By science have we been able to make water and wind subserve many of our purposes and be obedient to our will. Science has made provision for our walking with light in perfect safety while we are in the midst of the most inflammable and explosive atmosphere of the subterranean regions. It is science that has provided us with a medium to waft a sigh from Indus to the pole with a velocity surprisingly great. If we look with an observing eye at the social condition of the civilized nations we shall see how much physical science has done for its bettering. We shall then feel the truth of the statement that by the aid of science the condition of a European prince is now as far superior in the command of real comforts and conveniences to that of one in the Middle Ages, as that to the condition of one of his own dependents. All our arts are either derived from or perfected by science. Anything that is detrimental to the interests of the latter is also detrimental to the interests of the former. But even putting aside all interested motives, what an amount of enjoyment in the study of the sciences! When we are told by the scientific enquirer that the fall of the apple and the motion of the planet, as well of the wandering comet and of the seemingly irregularly falling aerolite, is guided by the same laws; when we are told by him that the law of gravitation holds true in the most distant stellar system; when he describes Saturn's rings with a minute accuracy, as if it was one shining with brilliant lustre on his own little finger; when he is giving us a chart of the moon as if it was one of his own native districts; when he informs us that there is an ebb and flow in the aerial ocean as in the aqueous; when he tells us

what the state of the world was before the family of man was in existence; when he tells us that linen rags being immersed in sulphuric acid produce a greater quantity of sugar than their original weight, that a gnat's wing in its ordinary flight beats many hundred times in a second; that in acquiring the sensation of redness our eyes are affected four hundred and eighty two millions of times, do we not feel ourselves lost in wonder? Do we not feel the importance of those branches of learning which teach us these miraculous truths? What an exquisite pleasure then is the study of the natural sciences! Look again at their subserviency to Natural Theology. The sublime truths of that sublime science are but imperfectly understood without a familiarity with Natural Philosophy. The stability of the Solar system, the nature of the resisting medium, the beautiful provision of the harvest moon, the relationship between the eye and the light, the equilibrium of effects between the animal and the vegetable creations, the provision for the sustenance and production of the human frame and the sixfold utility of the atmosphere, are a few of the many truths which we cannot understand, and therefore cannot appreciate, unless we have made ourselves familiar with physical science. Many of us may think that we may take them for granted and have thus the obstacles to the study of Natural Theology at once overcome; but we should then bear in mind that traditional prejudice is far different from rational conviction. From these considerations we feel not the least doubt that physical science should occupy the most prominent place in collegiate education."

If we can imaginatively realize the general state of knowledge and opinion in these matters sixty years ago in Bengal we shall find these sayings not a little remarkable. Some of them appear common places now, but they were pregnant truths in 1852.

So was much which the writer has to say about Social Science and Political Economy, anticipating by half a century the movement which has produced the new school of Economics in Calcutta still in its infancy. He writes:—

" To know the details of the structure of society, how its operations are going on, how its affairs are to be improved, how governments are to be conducted with the least inconvenience to the governed, is certainly very interesting. The wonderful machinery by which we perceive, remember, associate, reason, or love, so far as it is open to our observation, cannot but be observed with an intensity of interest. The laws of social relations are of too great an importance for us to

neglect their study with impunity. Hence the necessity of the study of Moral and Mental Philosophy and of Political Philosophy, especially one of its departments—Political Economy. But how far they should be included in a college education is still a matter of doubt. Many departments of moral inquiry have still the inductive method to be applied to them to raise them on a solid basis. Till they may properly be classed amongst the inductive sciences, they are not fit subjects of study for unripe intellects. They may form subjects of discussion among philosophers and of observation to scientific inquirers. But those portions of moral science which have assumed a demonstrative appearance and which have received the approbation of all philosophical inquiries, Political Economy for instance, should be included in the course of a college education."

He goes on, "From the highest statesman to the every-day labourer, from the princely duke to the humblest tenant on other's lands, from Her Gracious Majesty Queen Victoria down to her poorest ragged subject starving in an obscure nook of the 24-Parganas or the Hooghly District, every one has an interest, whether he is wise enough to know it or not, in the science of Political Economy. In the true appreciation of this science endowed as we are by our benevolent Creator with natural powers to carry into effect its doctrines, depends the welfare of individuals as well of nations. In this complex state of society in its present advanced condition, many a time mere common sense is not sufficient to make us understand what our interests are. Many a time we see a distorted picture and many a time a false one altogether. Political Economy being the science of society, if we would not resign our place there we must make ourselves familiar with its truths. On social matters if we are wise without it, our wisdom is based on empirical knowledge. And it remains to determine whether science or empiricism is to be preferred. Certainly no one in his senses can recommend the latter. Political Economy then should form a portion and an important portion of college studies."

In all these extracts, perhaps, what is most remarkable and admirable is the writer's comprehensive conception of the scope of education, not unworthy of comparison with Milton's famous definition. One writer of 1852 says:—

"The substratum of everything that is to be learnt in after-life should be laid during our collegiate existence, as any department of knowledge then neglected is most likely in the majority of cases to be neglected all the while."

He sums up the balance of science versus literature as follows: and the lesson is one we need to take to heart in this later date of Science and Arts courses, because both here and also in Great Britain the lesson has, to some extent, been forgotten or is, at all events, ignored.

"After all that has been said before it appears that science and literature are the two necessary ingredients in a liberal education. Neglect either one of them and the education is incomplete. Your so-called educated youths would then receive but half their education. We connect ourselves in feelings and thoughts with the remotest antiquity by the study of literature. We establish our supremacy in this sublunar world by the study of science. Literature, besides its direct uses, has an important share in enabling us to prosecute scientific studies. In neglecting it then, we neglect all our dearest concerns. We are at one and the same time deprived of the treasures and delights kept in store by the sweetest bard and by the most profound philosopher. So in a College course of education the study of literature in itself and in its relation to scientific studies and pursuits is highly advantageous. But to pay exclusive attention to literary studies is resigning more than half of our privileges and rights. The power and happiness that science confers are together lost. We reduce ourselves to a state very near to that of mere sentimental beings. To confine ourselves all the while to literature, because it is preparatory to our being able to study science is the same kind of policy which would make us learn the alphabet all our boyhood because without them it is impossible to read. In fact, that training which would give us no scientific education, which would provide us with no instrument to claim our birthright to the lordship of this universe, is but a very poor training. In this age of social reforms, in this age of brilliant discoveries, when new sciences are starting into existence, when the whole field of nature is ransacked for the increase of our scientific knowledge, when steam navigation is an ordinary occurrence, when railroads are traversing almost every region of the habitable globe, when a network of electric telegraphs is spreading over the whole of the civilized world tendering forth its services to carry our thoughts from one extremity to the other in the course of a few hours, when attempts are being made to bind wandering winds in the magic of numbers and the still more fluctuating oscillations of the deep are about to be brought under the pale of the self-same charm, a person without a scientific education is far behind the age."

He grasps also very clearly India's need of science: of science in general and of political science in particular.

"In an age like the present to remain uninitiated in science and to be not allowed to enter the precincts of the 'sanctuary of scientific truth' is a singular misfortune. Certainly he who comes out of his college without a stock of scientific acquirements, and purposes to take a share in the world in the middle of the nineteenth century, comes very ill-provided. If the youths who are educated in colleges be designed to take the lead of the nation to which they belong, they must receive a high scientific education. Without that they can be almost nothing, for in their country, since in the words of Sir David Brewster, science in these days constitutes the power and wealth of nations."

"The condition of India is to be improved by the aid of science and by no other means. The starving population of more than hundred millions has to look up to no other resource but the mighty agency of science. Scientific methods of agriculture will have to be introduced before we can hope to be out of the grasp of penury and famine. Botany, Chemistry and Geology when called to the farmers' assistance shall spread plenty all round and infuse a new vigour into Indian soil. They have transformed arid tracts and marshy bogs into smiling corn-fields. What prospect, then, is not there of the enriching of India when along with mechanics and engineering they shall operate on the already fertile plains of Bengal, of the Doab and of the Dekhan? What task again remains for physiology to do? Sanatory reforms on any large scale cannot take place until the people, or at least those that move in the higher circles of society, have made themselves conversant with the truths of physiological science."

The writer of the paper from which these extracts have been made was Babu Prasanna Kumar Sarvadhicary, with whom Presidency College has many links of connection. He was a Hindu College student, a pupil of Capt. D. L. Richardson. He was for a time Professor of History in Presidency College. Education was the profession he deliberately chose in preference to other careers which opened invitingly before him on leaving college. He held strong views on education, as the paper from which these quotations are drawn abundantly shows. In his educational career he was first appointed to Dacca College and this paper was read before the Society on his return to Calcutta from Dacca. He was subsequently in succession Professor and Principal of the Sanskrit College, the latter a unique distinction for one not pre-ordained by birth to the study of Sanskrit. His other services to education were

various and seem to demand a separate memoir under one or other of the series in progress in this magazine. He was for many years Fellow of Calcutta University, and in 1887 Sir William Hunter thus referred to his death in his Convocation address :

* * * " But chiefly we lament the loss of Babu Prasanna Kumar Sarvadhicary—the erudite Principal of the Sanskrit College, the conscientious custodian and spirited defender of its precious manuscripts, the ingenious mathematician who transplanted the Arithmetic and Algebra of Europe into the vernacular of Bengal * * * "

All these make interesting bonds of association with Presidency College which, added to the interest of the subject, justify, I hope, the space taken up by this paper. But the most interesting of all is that Babu Prasanna Kumar Sarvadhicary was uncle to Dr. Devaprasad Sarvadhicary, our present Vice-Chancellor and the most devoted of all old Presidency College men, to whose kindness indeed my knowledge of this paper and of the biographical details is due.

An Economic Study Society for Calcutta.

THERE is evidence to show that even as early as the fourth century B.C. the study of economics was recognized as one of the indispensable branches of liberal education; and the classical work of Chanakya, Chandragupta's famous minister, reminds us of many of the doctrines of the great Florentine of the fifteenth century. Manu's Code and Sukrácharya's System of Morals also enunciate many political and economic theories which must have been based on careful observation of contemporary facts. It is not my purpose here to tabulate the results of antiquarian researches, nor to trace the development of economic studies in India from the time of Chandragupta to the present day. But I desire to point out that the growth of interest in economic studies which is such a remarkable feature of modern India, is not a wholly new or unheard-of phenomenon in this country, or one that ought to be regarded as in any sense alien to the natural tendencies of the Indian mind.

It is indeed gratifying to find the prominent place which economics occupies in the New Educational Scheme of our Universities, for signs are not wanting to show that our educated men of to-day have begun to see the paramount importance and need of furthering

the economic interests of the country. In Council debates, Conference speeches, and newspaper articles we find many an ardent advocate of economic reform.

But in order that this advocacy may lead to fruitful results and in order that we may avoid the pitfalls of unsound economic plans and speculation, it is necessary that the young men of to-day should be equipped with a sound knowledge of economic facts and principles. Such knowledge is necessary to disillusion ourselves about many economic fallacies which unfortunately possess the minds of many of us, such as the belief that a greater influx of metallic money into the country would make her wealthy and prosperous ; that a *thorough-going* protective tariff would bring economic salvation ; that the best use to which wealth may be put is to hoard it up Silas-like underneath the earth ; that Capital is wealth which is set aside with the object of not being spent ; that we can increase the prosperity of the country by spending our wealth on luxuries ; that a productive soil is the same thing as a fertile soil ; that food will become cheaper if all land is made rent-free ; that imports into the country are paid for by sending abroad ship-loads of specie money ; that notes are issued in order that coins may be taken away from the people ;—and so on and so forth.

The need for a more thorough and widespread study of economics is all the greater in these days of researches and original investigations ; for the field of Indian economic investigation—vast and unlimited as it is—is almost untrodden : the work is great, but the workers are few. An economic history of India is yet to be written ; statistics and descriptive studies of local economic facts and conditions are yet due from our young economists. It would be of great value if we could have an economist in different representative villages to make—

(1) Typical family budgets giving an accurate account of the annual income and expenditure of representative families ;

(2) An enquiry into the extent of migration into and out of the village over a year ;

(3) An enquiry into the movement of wages of men, women and children in different industries ;

(4) An account of local trading, e.g. the methods by which the cultivators get their necessities of life and the prices paid, whether cash or credit ;

(5) A description of the manner in which the cultivators dispose of their produce, whether in central markets in the presence of competitive buyers or to virtually monopolist dealers ;

(6) A comparison of the standard of life of the owning cultivator, the wage cultivator and the village artisan;

(7) An account of the economic effects of the local Co-operative Society on rural life;

(8) A description of the local cottage industries: their past history, present condition and future prospects.

Investigations on the above lines are being fruitfully carried on by the Madras Economic Association and the Patna College Chanakya Society. We cannot help admiring the noble aim and praiseworthy activities of the latter Society. Its aim is "to infuse into its members a love for making enquiries in the conditions of local industries, collecting village statistics and family budgets, and compare them year after year in order to ascertain the correct economic position of their fellow-countrymen in this part of India." There are two most noticeable features of the activities of this Society. The first is the reading of interesting original papers on such subjects as the Siwan Pottery Works, the Nawadah Co-operative Credit Societies, the Aurangabad Salt-petre Industry, the Deoghur Agricultural Farms, etc. All these papers are apparently based on personal investigation of facts on the spot.

The other most noticeable feature of the Chanakya Society's activities is the occasional trip by its members to centres of industrial and agricultural activities. For example, last year they took trips to the local Agricultural Experimental Farm, to the Dumraon Raj Agricultural Farm, to Patna City (to see the works of the glass manufactures), to Jahanabad (to see the Co-operative Central Bank), and to Giridih (to visit the collieries there). Such visits impart living interest to the study of abstract principles of economics and afford the students an opportunity of gaining first-hand knowledge of local economic conditions and of testing the validity of the abstract economic principles in their application to Indian economic conditions.

Our College may easily convert her well-equipped and well-managed Economics Seminar into an Economic Study Society, membership of which will be extended to present and old members of the College. Such a Society may carry out the programme outlined above, promote research among advanced students and organize occasional trips to such centres of industrial and agricultural activities in and near Calcutta as the Calcutta Pottery Works, the Howrah Jute and Flour Mills, the Lilooah Railway Workshop, the Tittaghur Paper Mills, the Pusa Agricultural Research Institute, the Midnapore Central Co-operative Bank, etc.

"A touch, a touch, I do confess."—*Hamlet*.

"I do commend you to their backs."—*Macbeth*.

"More rushes, more rushes."—*Henry IV*.

"Pell-mell, down with them."—*Love's Labour Lost*.

(This is very unsportsmanlike—J. K. U.).

"This shouldering of each other."—*Henry VI*.

"Being down, I have the placing."—*Cymbeline*.

(He is referring to 'fouls' probably.—J. K. U.).

"Let him not pass, but kill him rather."—*Othello*.

(Nowadays policemen are always seen on the field.—J. K. U.)

"'Tis short to maul a runner."—*Antony and Cleopatra*.

(But there's the referee.—J. K. U.)

"I'll catch it ere it come to the ground."—*Macbeth*.

"We must have bloody noses and cracked crowns."—*Henry IV*.

(What a lover of rough games!—J. K. U.)

"Worthy Sir, thou bleedest, thy exercise hath been too violent."
—*Carolanus*.

(Mr. W. S. was a very polite referee, it seems.—J. K. U.)

"It is the first time that ever I heard breaking of ribs was sport."—*As you Like It*.

(Mr. Shakespeare had apparently to deal with very, very rough players.—J. K. U.)

Aviation.

ALMOST from time immemorial man has watched birds fly, has wondered how they accomplished the feat, how they remain motionless, how they move against the wind. But he has not simply wondered, he has aspired to conquer air like the bird. And the conquest may be said to be in a fair way of being accomplished.

It has been attempted in two ways: by two distinct classes of machines, known as "Heavier than Air" machines and the "Lighter than Air" apparatus.

We should leave aside the attempts made at the dawn of authentic history, for their accounts are very meagre and untrustworthy.

The first successful attempt, of which we have ample records, was made by MM. Allard and Besnier in France with a "Heavier than Air" machine in 1660-78. After them very little was attempted for a long time. In 1783, attempts were made by the brothers Montgolfier and the brothers Robert with "Lighter than Air" apparatus. They

were successful. The Montgolfier balloons were filled with hot-air, hence called Fire-balloons. The brothers Robert used hydrogen under the direction of the eminent physicist Charles. Several ascents were made in 1783 from Paris. Charles made many important improvements, which are still useful. Nothing of consequence was done till 1836, when a balloon from London crossed the English Channel and landed in Nassau. Numerous ascents have been made since that time. Glashier reached the record height of 36,000 feet in 1862.

The first "dirigible" was constructed by Giffard in 1850. It was cigar-shaped, 114 ft. long and driven by steam. Various inventors have attacked the problem from time to time. Count Zeppelin improved it very much and made it easily controllable.

In the "Heavier than Air" machine problem, many minds have been at work from 1867 onwards. Langley, Hiram Maxim and others made many useful experiments, but the work which proved really successful was that of the brothers Lilienthal and the brothers Wright of America. They turned their attention to the boy's kite, modified it considerably, giving it the form now known as the box-kite and made experiments in gliding. Then they worked out the "Glider"—a very big box-kite with various minor improvements. It was taken to the top of a hill, the pilot took his place and the apparatus was pushed over into the air. It descended very gently and flew over a long distance before it touched the ground. From gliding by gravity to gliding by motive power is but a short step. The first practical flight was made by the Wright brothers in 1905 on a biplane. They flew to a height of 48 ft. In 1906, H. Farman flew over half a mile. In 1908, Wright flew over 60 miles. The monoplane came to the front in 1909. Bleriot crossed the Channel on his monoplane. Since then progress has been very rapid. Aviation meetings, aviation races have been held all over Europe. In 1912, Garros rose to a height of 19,000 ft., Fournier made a continuous flight of 627 miles, and it was found possible to remain in the air for 16 hours. Speed has increased from a few miles per hour to over 80 miles per hour. It may be interesting to know that P. Setti, an Indian, of Avroe works, has developed a new form of aeroplane.

"LIGHTER THAN AIR" APPARATUS.—THE BALLOON AND THE DIRIGIBLE.

Why they float in Air.—The balloon floats in the air for the same reason as a piece of cork floats in water. The volume of air displaced

by the balloon is much heavier than the same volume of hydrogen that balloons are usually charged with. The weight of the balloon and its equipment tends to draw it downwards. The pressure of the surrounding air pushes it up. When these two forces are equal, the balloon remains at the same level. If the weight of the *balloon* is decreased, the pressure of the air lifts it; and if the gas is allowed to escape, so that the difference between its weight and that of a similar volume of air is decreased, the balloon descends.

The Drifting Balloon.—This consists of a globe in which the gas is enclosed. The gas receptacle is covered with a net, and from the net the basket or car is supported. It is most important that the weight of the basket and whatever it may contain shall be carried as far as possible by the *whole* of the gas-bag. The gas-bag is usually of silk, but other substances, if rendered non-porous to hydrogen, will answer the purpose. It is important to have the smallest possible leakage of gas through the containing envelope.

The gas-bag, the car and its support comprise then the whole of the drifting balloon. The aeronaut is supported by the basket. A certain quantity of sand is carried to lighten the balloon, if it is wished to rise to a higher altitude. The drifting balloon, though it did a great deal of bold and useful work, was literally at the mercy of the winds. It drifted before the wind at the altitude at which it happened to be at the moment. A great deal of skill was required in manipulating a balloon. Many lives were lost by ardent balloonists taking too great risks.

The Dirigible Balloon is merely a drifting balloon with its gas-bag more or less cigar-shaped, the car being also elongated, and the whole being provided with power to drive it through the air, and with arrangements for steering it as a ship is steered, and for varying its altitude, just as the depth of a submarine is varied. The forms of the gas-bag vary from a cylinder with spherical ends to *more nearly that of a fish in section*. The size of a dirigible varies from one that will carry one passenger and which has a volume of 4500 c. ft. up to one capable of carrying 30 or 40 men and whose volume is more than 350,000 c. ft. The power employed to drive the dirigible through the air is ~~in~~ all cases a petrol-engine. They range in power from about 35 h.p. up to 400 h.p. In the larger dirigibles, there are two or more engines working two or more propellers.

The dirigible is steered, i.e. caused to turn to the right or the left, just as a boat or a ship is, by the rudder. Its "vertical" rudder is

large compared to that of a ship of the size, but is composed of stretched canvas. It causes the head of the balloon to turn to the right, when the rudder is turned to the right, by the pressure of the air passing along the side of the balloon against the rudder.

The dirigible is made to ascend or descend in two ways—by altering the angle at which the propeller revolves, and by the aid of a “horizontal” rudder. The engine drives the balloon by causing one or more propellers to revolve rapidly in the air. The propeller is very much like the electric fan, though the blades are larger, longer and stronger. It is very much like the screw-propeller of a ship. By altering the angle that the axis of the propeller makes with the horizontal, it can be made to go up or down. The horizontal rudder is similar to that of a submarine. It consists of one or more planes of ‘treated’ canvas stretched upon a frame, held in such a position at either end of the dirigible that the air will meet it when it is moved up or down. Turning it up or down will cause the head of the machine to turn up or down.

It will be seen, therefore, that with the petrol engine, the propellers, the vertical rudder for steering to right and left, the horizontal rudder for elevating or lowering, the pilot in charge of the machine should have complete control of it.

But the dirigible can hardly be said to be a thoroughly practical apparatus yet. It is not so reliable as its younger rival, the aeroplane. The great difficulty with which it has to contend is the force of the wind acting upon its huge bulk. In the dirigibles constructed by Zeppelin, Parseval, the British War Office and others, balloon after balloon has been wrecked immediately it encountered a high wind, a wind that an aeroplanist will easily face. To meet this difficulty various types have been devised. They are known as flexible, semi-rigid and rigid. In the flexible, the gas-bag is made of flexible cloth. In the semi-rigid, the cloth is stretched over a wooden frame. In the rigid, the gas-bag is put inside a thin rigid casing. A very great deal remains to be done before the dirigible can be of any real service.

“Heavier than Air” machines.—Now, we come to the “Heavier than Air” machines—the aeroplanes.

These machines float in the air for the same reason as the boy’s kite and a bird do, when “soaring” and “sailing.” They float by reason of the upward pressure of the current of air passing under them. That an air current presses up is seen when trimmed hats are blown off by a strong wind. If an aeroplane can be taken to a certain height, where

a wind of sufficient strength is blowing, the passage of wind under its planes will keep it floating in the air, just as it does a boy's kite or a soaring bird. Obviously it makes no difference whether the wind passing under the supporting planes of the apparatus is natural, blowing from natural causes or due to the apparatus itself being driven through the air by mechanical means. And this is the method adopted in all aeroplanes.

In all aeroplanes there are a certain number of planes arranged to be driven through air at a considerable speed. But the planes, to use a Hibernianism, are not planes. They are concave towards the earth, and they are formed of flexible material. Further, the planes are inclined to the horizontal, at an angle of about 8° , called "angle of incidence." This slight inclination, added to its concavity, allows the air through which it is passing to enter the concave space, and in doing so it exerts a certain upward pressure. This is the reason why an aeroplane floats. The amount of pressure depends directly on the *total* surface of the planes; it also depends directly on the square of the speed at which the machine is driven. The weight which any machine will carry depends on this lifting pressure.

Forms.—Virtually, there are two forms of aeroplane—monoplane and biplane. A third, triplane, was also introduced, but has been generally abandoned in favour of the other two.

Biplanes.—Biplanes are described first, because they first appeared on the scene. The biplane consists of two planes arranged vertically one above the other, together with an "elevating" plane in front of them, a tail plane and the steering arrangements, the engine, propeller and accessories.

In the biplane, the lower plane is virtually a platform upon which the engine, the seat for the pilot and all accessories are carried. The upper plane is supported from the lower by "struts" or thin pillars. From the middle of the lower plane, an openwork structure, called the fuselage, stretches to the rear. Its office is to carry the tail plane and the rudder. The "elevating" plane projects in front of two main planes. It is supported from the central lower plane by outriggers and is controlled by wires.

The propeller is usually fixed at rear of the lower plane. In addition to the above, the biplane has usually some arrangement, such as flaps at the ends of the upper plane, to assist in balancing the machine against aircous or sudden rolling due to gusts of wind.

Monoplane.—The monoplane is a much prettier apparatus and

very much like a bird in form. In a monoplane, the supporting planes—there must necessarily be two—are approximately in the same horizontal. They nearly always slope a little out of the horizontal as they recede from the central fuselage. In a monoplane, the fuselage bears nearly the same relation to the rest of the machine as the body of a bird does to its head, wings and tail. In the latest forms, the main fuselage closely approaches the outlines of a bird's body. The propeller is fixed in front of the machine, where the bird's head would be, and immediately behind it is the engine and in rear of it the seat for the pilot with levers, wires and other controls. At the other end of the fuselage is the combined tail forming both the rudder and the elevator. Balancing is done either by warping parts of the wings up or down or by flaps, as in biplanes.

Triplanes.—In the triplane there are two sets of three planes, each connected by a fuselage. Each of the three is suspended vertically one above the other. The lower plane supports the engine and other accessories. The pilot sails in the fuselage, midway between the front triplanes and the rear triplanes.

Hydroplanes.—The hydroplane is merely an aeroplane—a biplane generally fixed with floats that it may enable it to rest upon the water.

How the Aeroplane rises and falls.—The aeroplane is made to climb into the sky or to dive down to the earth by the aid of the "elevator." The elevator consists of a cambered surface, the fabric being stretched over a frame, carried in biplanes in front and in monoplanes in rear. Its inner ends are hinged, so that its outer can be raised or lowered. When the elevator is tilted upwards the pressure of the air on the under side when it is carried in front, or on upper side when carried in rear, turns the head of the machine upwards or what amounts to the same thing, the tail downwards; and the machine flies up. When the elevator is lowered, the machine dives down.

How it is turned Right and Left.—The aeroplane is steered right or left by the aid of the vertical rudder, which in all forms of machine is carried on the tail. The rudder consists of a frame over which fabric, similar to that used on main planes, is stretched. It is controlled by wires from the pilot. Turning the rudder to the right or left causes the head of the machine to turn to the right or the left. It is the pressure of the wind upon the rudder which pushes the tail in a direction opposite to that in which the rudder goes.

There are various forms of the tail. In some forms, there is a kind

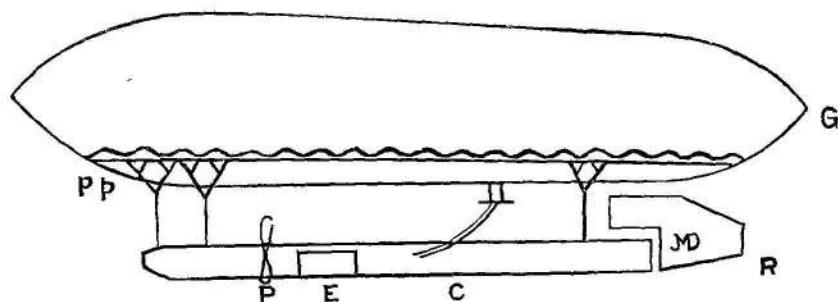
of box inside which the rudders are fixed, the idea being that the draught from the propellers (which in the biplanes are in the rear) will be more effective if guided over the rudder by the box-like structure.

How the Aeroplane is driven through the Air.—The whole structure, whether it be a monoplane or a biplane, is driven through the air by one or more propellers or tractors (as they are called when placed in front of the machine). The propeller is precisely similar to that of a dirigible, only smaller. It consists of two or four blades of a screw and is revolved very rapidly at a rate of 1000 revolutions per minute and over; its revolutions causing the whole machine to move forwards. The propellers are driven by specially constructed light high-power petrol engines.

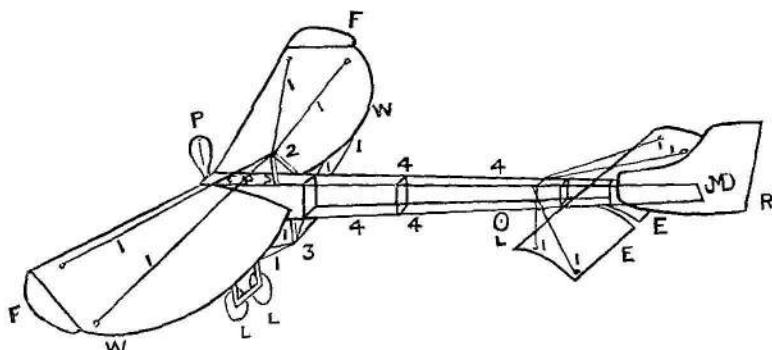
The Action of the Propeller.—Consider a big screw being rotated in a groove (made by it previously) in a block of wood. The screw will move into it, if the block be kept fixed. Now, suppose the groove to be worn out, i.e. there is a "slip" between the screw and the wood, the screw will then enter the wood, but now a larger number of turns will be necessary. If we replace wood by water or air and the screw by a propeller, the "slip" will be larger and the number of necessary turns larger, but the main action will be the same—the propeller will screw through the air.

The Stability of an Aeroplane.—The aeroplane, like a boat in water, will 'pitch' and 'roll.' In sudden gusts of wind or when it enters an "Air-pocket", it will tend to turn upside down. 'To maintain it on an even keel' is the most important problem for an aviator. The longitudinal pitching is corrected by trimming the elevator slightly, while the lateral rolling is stopped by warping the wings and by the use of flaps at the end. Various attempts are made to make it automatically stable.

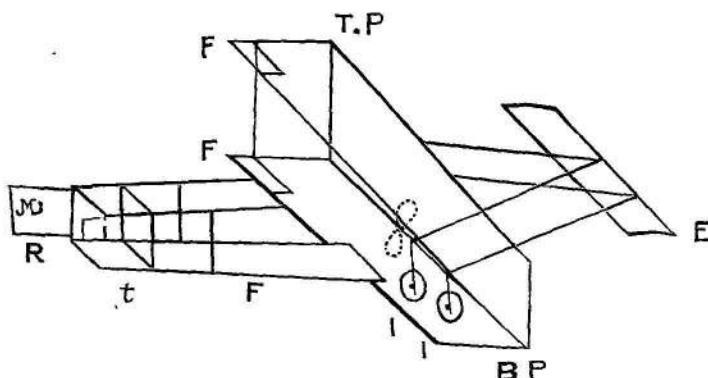
Now, a word as to its use in war. Soon after the discovery of the balloon, it received a military status, an aeronautic school being established in France during the Revolutionary wars. In June, 1794, the French victory at Fleures was due chiefly to air-reconnaissances. But the practice was gradually given up. Its use was revived in 1830 in African wars, and in 1849 before Venice. It was used by the French before Solferino (1859). In the American Civil War it was much used (1861). The balloon proved very valuable during the seige of Paris in 1870-71. It was the only means of communication, between the besieged city and the outside world. Gambetta escaped from Paris in "Armand Barbés"—an event which led to the prolongation of the



Typical Dirigible.—Longitudinal view of typical dirigible, showing the Gas-bag G. Car C, Propeller P, Petrol Engine E and Rudder R. pp=Points of support. Many more details are omitted for clearness.



Typical Monoplane.—Many minor details are omitted for clearness. 111=Controlling wires. R=Rudder. 2=Top pylon. 3=Bottom pylon. EE=Elevators. WW=Wings FF=Flaps. P=Propeller. 444=Fuselage. LLL=Landing wheels.



Typical Biplane with elevator E in front, and propeller (dotted in the figure) behind the main planes.—T.P. =Top Plane and B.P.=Bottom Plane. t=Tail Plane. R=Rudder. 11=Two Landing Wheels. FF=Flaps as ailerons. Many minor details are omitted for clearness.

war. Since then it has been used in almost every war, but on a minor scale. Ballooning was recognized as a definite military science in 1883-84. In this, the French were the leading nation. In 1912, aviation was definitely introduced as a new arm into the establishment of all great armies. In the same year, the aeroplane was first actually employed in war by the Italians in Tripoli. It was also used during the Balkan wars. But the results were inconclusive, due to the absence of opposition in the first case and to the lack of organization in the second. But the aeroplane has proved its merit and has won its laurels in the present Great War.

JATINDRAMOHAN DATTA,
Sixth Year Physics Class.

College Items.

I. The Entertainment of the Territorials in the College.

IT is not very often that a student of this University gets any opportunity of cultivating acquaintance with the inhabitants of the historic Fort William. But to our agreeable surprise one afternoon we found groups of Territorials entering into our College from various directions. But the sudden sight of khaki-clad individuals was not a very pleasant surprise to our bookworm friends, who spend considerable time in the study of war-literature. Their position seemed to be somewhat like the genial old gentleman in *Punch*, who being awakened from his nap in Hyde Park by the noise of running feet and finding just before him the glistening bayonets of Kitchener's men in drill, speedily came to the conclusion that the Germans had invaded London. However their misgivings were soon allayed at the sight of Principal James greeting and receiving these gentlemen in khaki. It was then that we came to know that our Principal was going to entertain the Training College Corps of the 10th Battalion of the Middlesex Regiment stationed in Fort William. We at once set to make the best of the opportunity thus offered to us of making acquaintance with these guests of our Principal.

Proceeding to the Baker Laboratories (a region more or less un frequented by the devotees of the Muses) we realized the whole business at a glance. The corridors of the spacious building were crowded with our military guests; some were smoking the cigars and cigarettes provided by the *khilmulgur* near the stair-case; some were talking with the students and members of the staff assembled, while

some were inspecting the various laboratories and research-rooms of the splendid building. We immediately started to act as guides to these amiable guests of ours all round the College buildings. Many and varied were the remarks which our guests made at the sight of lecture-rooms, laboratories and the gymnasium. Some talked with us about happy days passed at London, Dublin or Aberdeen, while others set about gathering information about our College and the University.

Inspection over, our guests partook of refreshments provided at the expense of Principal James and the staff in one of the big halls of the Science Building. All of them were unanimous in expressing surprise at the existence of such fine and splendid laboratories in Calcutta. They evinced the greatest possible interest in the scientific experiments provided by the science students for their entertainment. Some of us Arts students experienced some difficulty in explaining the various questions put to us about Dr. J. C. Bose's discoveries. But we were extricated from our difficulty by the generous and timely aid of our scientific brethren.

When the various experiments, including ascertainment of muscle-power and lung-power by the aid of instruments, were finished, our guests made for the Astronomical Observatory for sky observations. The big telescope was experimented upon; the inside of the tower-clock was viewed with no small degree of interest. These over, the soldiers indulged in a little rest on the spacious roof of the main College Building. The panoramic view of the city which can be obtained from this place afforded much enjoyment. After nightfall, we came downstairs and rejoined the other parties. Some of the soldiers seemed deeply absorbed in conversation with Mr. Oaten and Mr. P. N. Bannerjee—perhaps getting some mysteries of the war explained by them.

Before bidding goodnight, a visit to the Hostel was thought desirable. The inhabitants of the Hostel seem to have been quite unprepared for a visit of this sort. Serene alumni taking their ease with the upper part of the body bare, suddenly took to making themselves decent hosts. Refreshments (*surbat* and *sandeshas*) were again offered hospitably and accepted by the guests, who had, by this time, become quite friends with us. Addresses were exchanged and mutual good wishes expressed. After this was over, we accompanied our guests up to the tramway line and bade a hearty goodnight. The visit came to a close at 9-30 P.M.

2. Social Conversazione.

The Sixth Year English students organized a social meeting to bid good-bye to their professors and their College, last session. This graceful little function, which is a happy departure from old ways, was in every way successful. In a meeting held at the English Seminar the students bade good-bye to their professors. Some students had some interesting things to say about their impression of each individual professor; even the Principal did not escape this process of characterization. When the meeting had come to a close, students and professors partook of refreshments provided in the Professors' Tiffin Room at the students' expense. The professors mixed as freely with the students as the students did with the professors.

3. P.C.A.C.—Hockey Season.

Hockey is played during March, April and May, during the latter part of which all the colleges remain closed for the Summer Vacation; and it is very difficult for a College Club to get up a hockey team. This is the reason why for the last few years our College has had no hockey team of its own. However it is very lucky for the athletic club that our Principal, this year, took much interest in hockey, for which game, he said, he had a great liking. Such an assertion on the part of the head of the College highly encouraged the majority of the players to show their Principal that his College was not very backward in this, his favourite game, too. With new enthusiasm, vigour and energy, the College team tried its best to enter in the 2nd division of the B.H.A. league competition; but in vain, owing to applying too late for admission. It then decided to take part in the Bengal Gymkhana Hockey League Tournament. At first the players began to play in earnest; but after a few games had been played they gave distinct indications that they did not care for the trophy, and one failed to see the reason why. It is true that they were mortified by their inability to compete in the B.H.A. league; but that is no reason why they should not strive hard for other trophies. It can safely be said that they would have been able to secure the Bengal Gymkhana Cup, had they played earnestly throughout. This is proved by the fact that they beat the Sporting Union (the team which subsequently won the trophy) by three goals to two. They lost but once and drew a couple of times and eventually stood third in the list. May the hopes given by the players this year be better realized next year. Lastly, it

is a very notable fact that our honorary treasurer Mr. Oaten, who frankly admitted that he did not really claim to be a hockey-player, assisted the team in several of the matches—such was his desire to encourage the players by his own example. He was always ready to fill a gap, when his presence was necessary to complete a full team, but was prepared to stand down if the team could be completed without his help. Mr. D. K. Das, the Captain, showed energetic keenness, and was largely responsible for what measure of success the College Hockey team was able to obtain.

4. Famine Meeting.

At a meeting held at the Physics Theatre of the College and presided over by the Principal it was resolved to raise funds for alleviating the distress caused by the floods and famine in E. Bengal. The following appeal has been issued to old students of the College.

AN APPEAL TO OLD STUDENTS.

It is known that distress prevails over an extensive part of Eastern Bengal, specially in Noakhali, Comilla and Hill Tipperah Districts and also, in parts of Sylhet and Cachar. We believe the need for help to be immediate and acute. A fund has been started at the Presidency College with a view to doing something towards alleviating this distress. This fund will be managed by a College Committee, consisting of members of the staff and past and present students. It is hoped that many old Presidency College men may be willing to support this College fund, and we venture to issue an appeal to them. Subscriptions may be sent to Dr. P. C. Ray, Treasurer, Chemical Laboratory, Presidency College.

H. R. JAMES	..	President.
D. N. MALLIK	..	Vice-President.
P. C. RAY	..	Treasurer.
HARISH CH. SINHA	}	Secretaries.
SUBHAS CH. BASU		



Library Notes.

The following volumes have been added to the College Library since March, 1915 :—

Agate, L. D. .. Luther and the Reformation. [People's Books Series.]

Aitken, G. A. .. The Life and Works of John Arbuthnot.

Alexander, S. .. Locke.

Ameer Ali, Syed .. Islam.

Amory, T. .. The Life and Opinions of John Bunle, Esq

Aristotelian Society, Proceedings of the New Series, Vol. 13 (1912-13).

Aristotle .. Works of Aristotle. Translated into English under the Editorship of J. A. Smith and W. D. Ross. Vols. 4 to 6 and 8.

Austen, Jane .. Novels. Edited by R. B. Johnson. Vols. 1 to 6 and 9 to 10.

Baldwin, J. M. .. History of Psychology : a sketch and an interpretation. 2 vols.

Baxter, Rev. R. .. The Saints' Everlasting Rest: or a Treatise of the blessed state of the saints in their enjoyment of God in Heaven.

[Beaumont] .. Francis Beaumont: Dramatist. By C. M. Gayley.

Becker, C. H. .. Christianity and Islam.

Beer, M. .. Schopenhauer. [People's Books Series.]

Belloc, H. .. Robespierre : a study.

Do. The Path to Rome.

Do. Danton: a study.

Benn, A. W. .. Early Greek Philosophy.

Benson, A. C. .. From a College Window.

Bergson, H. .. Matter and Memory. Translated by N. Margaret Paul and W. S. Palmer.

Do. .. Time and Free Will ; an Essay on the immediate data of Consciousness. Translated by F. L. Pogson.

Bernhardi, General F. .. Cavalry. Translated by Major G. T. M. Bridges, with a preface by Field-Marshal Sir J. D. P. French.

Beyschlag, F., Vogt, J. H. L., and Krusch, P. } The Deposits of the useful Minerals and Rocks: their origin, form and content. Vol. I.

Birdwood, A. R. .. An Arabic Reading Book.

Boas, F. S. .. University Drama in the Tudor Age.

Boutroux, E. .. Education and Ethics.

Bradley, F. H. .. Essays on Truth and Reality.

Brooke, C. F. T. .. The Tudor Drama: a History of English national drama to the retirement of Shakespeare.

Brown, W. J. .. The Prevention and Control of Monopolies.

Burney, Frances Do. .. Cecilia, or Memoirs of an Heiress. 3 vols.

Do. .. Evelina, or the History of a Young Lady's Entrance into the World.

Carr, H. W. .. The Problem of Truth. [People's Books Series.]

Cassell's New French-English, English-French Dictionary.

Chesterton, G. K. .. Thackeray.

Colson, C. .. Railway Rates and Traffic. Translated by L. R. Christie and others.

Cook, S. A. .. The Foundations of Religion. [People's Books Series.]

Cust, S. .. Queen Elizabeth's Gentlewoman and other Sketches.

Davids, T. W. R. .. Early Buddhism.

Eddington, A. S. .. Stellar Movements and the Structure of the Universe.

Eucken, R. .. The Truth of Religion.

Faguet, E. .. Initiation into Philosophy.

Firdusi .. The Shahnama, compiled by Irani Amuzanda Shirmard Nauzar.

Fitzgerald, P. .. Shakespearean Representation,—its Laws and Limits.

Forbes, J. T. .. Socrates.

Fraser, A. C. .. Berkeley and Spiritual Realism.

Frobenius, H. .. Des Deutschen Reiches Echichtsalstunde.

The German War Book: being "The Usages of War on Land", issued by the great General Staff of the German Army. Translated with a critical introduction by J. H. Morgan.

Gray, W. F. .. The Poets Laureate of England: their History and their Odes.

Hart, A. B. .. Actual Government as applied under American conditions.

Hazell's Annual for 1915.

Herford, C. H. .. Goethe. [People's Books Series.]

The Historical Record of the Imperial Visit to India, 1911.

Howell, A. G. F. .. Dante: his Life and Works. [People's Books Series.]

Hudson, W. H. .. Herbert Spencer.

Do .. Rousseau and Naturalism in Logic and Thought.

Iverach, J. .. Descartes, Spinoza and the new Philosophy.

Jacks, L. P. .. The Alchemy of Thought.

Do. .. Among the Idolmakers.

Do. .. All Men are Ghosts.

James, H. .. Notes on Novelists, with some other notes.

Johnson, R. B. .. Famous Reviews, selected and edited by R. B. Johnson.

Leuba, J. H. .. The Psychological Origin and the Nature of Religion.

Levine, E. .. Judaism. [People's Books Series.]

Lindsay, A. D. .. The Philosophy of Bergson.

Do. .. The Philosophy of Immanuel Kant. [People's Books Series.]

Lindsay, J. .. The Fundamental Problems of Metaphysics.

The Literary Year Book for 1915.

Loeb, J. .. The Dynamics of Living Matter.

Lucas, E. V. .. Charles Lamb and the Lloyds.

Do. .. A Wanderer in London.

Do. .. Over Bemerton's: an easy-going Chronicle.

Do. .. One Day and Another.

Macay, J. M. .. A New University.

Macdonagh, M. .. The Speaker of the House.

Mackintosh, R. .. Hegel and Hegelianism.

Mellor, J. W. .. Modern Inorganic Chemistry.

A Miscellany presented to John Macdonald Macay, July, 1914.

Modern Language Review, Vols. 5 and 6.

Moulton, J. H. .. Early Zoroastrianism.

Munro, W. B. .. The Government of European Cities.

Murray, Major S. L. .. The Reality of War: A Companion to Clausewitz. Popular Edition.

Nafhatu 'L-Yaman: "Breezes from Yemen." Part I. Translated into English by Lt.-Col. D. C. Phillott.

Noyes, A. .. Drake: an English Epic. 2 vols.
Do. Collected Poems. 2 vols.

Olcott, C. S. .. George Eliot: Scenes and People in her novels.

Orr, J. .. David Hume and his influence on Philosophy and Theology.

Our Just Cause: Facts about the war for ready reference.
Oxford Pamphlets, Nos. 2, 16 and 18.

Picton, J. A. .. Pantheism: its Story and Significance.

Price, P. M. (Ed). .. The Diplomatic History of the War.

Pringle-Pattison, A. S. Scottish Philosophy: a comparison of the Scottish and German Answers to Hume.
Do. Philosophical Radicals, and other essays, with chapters reprinted on the Philosophy of Religion in Kant and Hegel.

Raleigh, W. .. Samuel Johnson. [Leslie Stephen Lecture, 1907].
Do. The Meaning of a University.

Rashdall, Rev. H. .. Ethics. [People's Books Series.]

Reid, T. J. .. John and Sarah, Duke and Duchess of Marlborough, 1660—1744.

Richardson, S. .. Clarissa Harlowe. Edited by Mrs. H. Ward.
Do. Pamela. Edited by T. Archer.
Do. Sir Charles Grandison. Edited by T. Archer.

Ritchie, D. G. .. Philosophical Studies.
Do. Plato.

Russell, B. .. Our Knowledge of the External World as a field for Scientific Method in Philosophy.

Sarolea, C. .. Cardinal Newman and his Influence on Religious Thought and Life.

Schelling, F. E. .. The English Lyric.

Seeberg, Dr. R. .. Revelation and Inspiration.

Sen, Benoyendranath, Lectures and Essays, Vol. I. 2 copies.

Sidgwick, A. .. Elementary Logic.

Smollett, T. .. The Adventures of Ferdinand Count Fathom.
Do. The Adventures of Peregrine Pickle. 2 vols.
Do. The Adventures of Roderick Random.
Do. The Adventures of Sir Launcelot Greaves and the Adventures of an Atom.

Smollett, T. . . The Expeditions of Humphry Clinker.

Solomon, J. . . Bergson.

Spinoza, B. De . . The Principles of Descartes' Philosophy. Translated by H. H. Britan.

Stevenson, R. L. . . The Black Arrow: a tale of the two Roses.

Do. . . Travels with a Donkey in the Cevennes.

Do. . . Weir of Hermiston: an unfinished Romance.

Stirling, W. . . Outlines of Practical Histology.

Stock, St. G. . . English Thought for English Thinkers.

Stopes, Mrs. C. C. . . Shakespeare's Environment.

Strype, J. . . Memorials of the Most Reverend Father in God, Thomas Cranmer, some time Lord Archbishop of Canterbury. 2 vols.

Suzuki, T. . . Acvaghosha's Discourse on the Awakening of Faith in the Mahayana.

Taylor, A. E. . . Aristotle. [People's Books Series.]

Thackeray, W. M. . . Works. (Centenary Edition). 20 vols.

Thatcher, Rev. G. W. . . Key to the Arabic Grammar of the written language.

Thornton, F. Du Pre . . Elementary Arabic Grammar. Edited by R. A. Nicholson.

Thornton, F. Du Pre,
and Nicholson, R.A. . . Elementary Arabic First Reading Book.

Throp, F. H. . . Outlines of Industrial Chemistry. Second Edition.

The *Times* History of the War. Parts 21 to 40.

Tolhausen, A. . . Technological Dictionary in French, German and English. 3 parts.

Tolstoy, Leo . . The Teaching of Jesus. Translated by L. H. Maude.

Tout, T. F. . . The Place of the Reign of Edward II in English History.

Trevelyan, Sir G. O. . . George the Third and Charles Fox. 2 vols.

University of Calcutta Convocation Addresses, 1858-1914 4 vols.

University of Cambridge, Calendar for 1914-15.

University of London, Calendar for 1914-15.

University of London: Regulations for External Students, September 1914.

Do. . . Regulations and Courses for Internal Students, 1914-15.

University of Oxford Calendar for 1915.

Villa, G. Contemporary Psychology. Translated by H Manacorda.

Vinogradoff, P. The Russian Problem.

Ward, W. The Oxford Movement. [People's Books Series.]

Watt, H. J. Psychology. [People's Books Series.]

Webb, S. and B. English Local Government: the Story of the King's Highway.

Weir, T. H. Arabic Prose Composition.

Weiss, J. Paul and Jesus. Translated by Rev. J. H. Chaytor.

Wenley, R. M. Kant and his Philosophical Revolution.

Wesley, J. The Journal of the Rev. John Wesley. 4 vols. 5th Edition.

Whittaker's Almanac for 1915.

Who's Who, 1915.

Williams, S. Principles of Logic. [People's Books Series.]

University Notes.

THE Annual Convocation was held last March in the historic Town Hall instead of in the Senate Hall. In this connection it may be remembered that the first Convocation after the establishment of the University was held in this Hall. The only man who attended both these ceremonies is Sir Gooroodas Banerjee. The Town Hall is fitter for an academic gathering of such a nature than the Senate Hall, the former Hall being situated in a far more favourable site.



This year's Convocation is not only remarkable for its being held in the Town Hall but for other reasons also. This was probably the last Convocation that Lord Hardinge addressed as Chancellor. Lord Hardinge's Chancellorship will undoubtedly mark an epoch in the history of the Calcutta University. The University is no longer a mere examining body. Higher education is gradually being imparted through the establishment of a teaching University. The extension and development of the University have been many-sided and important. The personal interest which the Chancellor evinced for the welfare of students has led to the improvement of the lot of students. The

establishment of attached hostels in Colleges and the improvement of the University Institute will go a great way towards making the lot of Calcutta students brighter and pleasanter.



The addresses, too, delivered at the Convocation this year were remarkable. The Chancellor's address was full of inspiration for the student. The Chancellor made his words more effective by introducing the personal element into his address. His parting advice to the students is that of a practical man who knows the shortcomings of student-life in this country. We are delighted to find Lord Hardinge requesting the University authorities to "consolidate its work by some concentration of energy on the residential system." This side of University life has long been neglected and it is with intense delight that we find some amount of attention is now being given to this aspect of University life.



The Chancellor's concluding words are really inspiring. The Vice-roy looks, as did our King-Emperor four years ago, to the Universities of India for its future leaders and exhorts us to make ourselves fit for the arduous duties of leadership. These words can never go without a ready response from the awakening heart of Young India.



No less inspiring were the words addressed to us by the Vice-Chancellor in the latter part of his speech. These are words which stir our hearts and impel us to try to realize those ideals of manhood in our own lives. Dr. Sarvadhicary most fittingly emphasized the importance of the "Obligation of the day." The latter part of Dr. Sarvadhicary's address was a vigorous and emphatic exhortation to the members of the University to be better, nobler and worthier MEN.



At a Syndicate meeting held on the 17th April last, Hon. Dr. Nilratan Sarcar, M.A., M.D., was re-elected as a member of the Syndicate, and later at a Senate meeting the Ripon College was declared to be affiliated in Physics and Chemistry to the B.A. and B.Sc. Pass standards with effect from the session 1915-16.



From the results of the B.T. and L.T. examinations, it will be seen that 19 students have passed in the first division and 29 are placed in

the Pass List in B.T., while 9 have passed with distinction and 21 in Pass List in L.T.



The Government of India have awarded the three State Scholarships available in 1915, for the scientific study of Sanskrit and Arabic in Europe, to the undermentioned candidates: Sanskrit—Mr. Vinayak Sakharam Ghate of Bombay; Pandit Hari Ram Chandradivakar of United Provinces. Arabic—Maulavi Muhammad Shafi of the Punjab. Further, the State Scholarship for Anglo-Indians has been awarded to Mr. Herbert Sutherland Stark, the son of the distinguished educationist Mr. H. A. Stark. It may be mentioned here that Mr. Stark was the second best Reciter of the University last year.



The results of the Inter-Science Examination this year are very satisfactory. Hooghly, Chittagong, Gauhati and Cooch Behar Colleges have come out as the best lot, there being no second class and third class men in their lists of successful candidates: while in Inter-Arts Loreto, Hetampur, Bethune and Diocesan Colleges have not a single third class student in their list of successful candidates.

In order of merit, our own College heads the list in I.A., while in I.Sc. Metropolitan and Ravenshaw have wrested the first two places from us. Our congratulations to them.



Research scholarships of Rs. 100 *per mensem* have been again awarded to the following gentlemen: To Mr. Sailendro Nath Mitra, of the Sanskrit College, for a Philological Dictionary in Pali; to Mr. Kshitish Ch. Mukerjee, of Dacca College, for Chemistry; to Mr. Kumud Behary Sen, of Dacca College, for Chemistry; to Mr. Tarini Charan Chowdhury, of Rajshahi College, for Chemistry; and to Mr. Sujit Kumar Chakrabarty, of our College, for Physics.



The undermentioned have been awarded Post-graduate Research scholarships of Rs. 100 *per mensem* (tenable until 30th June, 1916, with effect from 1st July, 1915): Mr. Dinesh Ch. Bhattacharjee, M.A., of the Sanskrit College for Sanskrit (Origin and Development of Indian Drama); Mr. Balaram Sen, M.A., of our College, for Geology (Indian Minerals); and to Mr. Rajendralal Dey, M.Sc. of our College, for Chemistry.

The foundation-stone of the new University Institute building was laid on the 5th July by H. E. the Rector. This is an epoch-making event in the history of the Institute. We are naturally reminded of the great and strenuous efforts which our Professors have made to make the Institute deserve this new building. The toils of Wilson, James, Das-Gupta, Gilliland, Mahalanobis, Sen and Mitter are now bearing fruit. We hope the new building will open up new fields of activity for this Society which has done and is doing so much to ameliorate the condition of student-life in Calcutta.



The bust of the late Nawab Abdul Latif, C.I.E., was unveiled on the 5th of July by H.E. the Rector in the Senate Hall. The late Nawab Bahadur was an active member of the Senate and an unostentatious worker in the cause of education.



The University has lost a devoted worker in the retirement of Mr. Girish Chunder Mookerjee, the Assistant Registrar. He acted for a time as Registrar of the University. His business capacity and independent character made him respected by his subordinates and esteemed by his friends. The officers of the Registrar's office presented the retiring official with an address which bore eloquent testimony to his capabilities.

A Peep into Other Colleges.

By C. SPY.

SOME Colleges, notably *St. Paul's* and *Patna*, have of late made some attempts to make games and exercises compulsory among students. The motive is no doubt very good and the students seem to take it favourably.



Sibpur College held its annual meeting and sports and Re-union some time last month. Considering the situation and efficiency of the College, Sibpur College may claim to be one of the best colleges in the vicinity of Calcutta, and as such the celebration of its Re-union Day was very successful.

Calcutta welcomes a new college with the advent of the *South Suburban College*. We hope under its distinguished patron it will soon rise to be one of the best colleges in the University. The advent of the South Suburban College coincides with the disappearance of the old L.M.S. College from Bhowanipur.



The students of *Cotton College, Gauhati*, have recently begun to hold meetings in the Parliamentary fashion, the members voting "Ayes" "Noes," under the able guidance of Professor Arthur Brown. Professor Brown's lectures on the war are still fresh in our memory.



The Scottish Churches College has been decidedly rendered poorer, for a time, by the leave-taking of two of its most distinguished members of the staff—Professors Urquhart and Davies. These two gentlemen have so identified themselves with the students of the College as to make themselves intensely loved and respected by them.



Patna College students have had several lectures on the war from their Professors under the auspices of the Common Room. Mr. Owston-Smith has already made himself extremely popular with the students by his various activities and unreserved mixing with the students. The College Debating Society and Chanakya Society too are active.

The Archaeological Society recently undertook an expedition to the site of the old University of Nalanda near Bargaon under the guidance of Professors Jackson and Samaddar.

The new Science Laboratories were opened the other day.



The University College of Science will be opened this month. Its splendid building is almost complete. Mr. D. M. Bose, M.A. (*Cantab*), and Mr. S. P. Agharkar, Ghosh Professors of Physics and Botany respectively, are now in Germany where they have gone for advanced research work before the outbreak of the present European War. Only Post-graduate studies will be carried on in this College.



Professor Henderson of the *Madras Christian College* has, in response to the call of his country, joined the colours.

War Notes.

SINCE our last issue there have been, among hundreds of great events, five features of outstanding interest and importance in the great war. These are the sinking of the "Lusitania", the great struggle in the West, marked by the use by the Germans of asphyxiating gases, the entry of Italy into the war on the side of the Allies, the practical expulsion of Russia from Austrian soil, and the invasion of the Gallipoli peninsula by British soldiers.

The sinking of the "Lusitania", with its human freight of women, children and neutrals, including forty babies, is an act that staggers humanity, as its devilish authoriser intended. But it will go further than he realized, for it is one of those acts that, like the sack of Magdeburg, the massacre of St. Bartholemew or the tragedy of Cawnpore, stagger humanity to the world's end, bring discredit upon the race which perpetrates them, and take years of good conduct to live down. The outcome of Satanic envy, it had no military significance whatever, but if proof were needed of the utter moral decadence of the German people, we have it in the fact that the act was greeted in Germany with delirious applause and without protest. The Bryce report on the Belgian atrocities and the drowning of 1500 non-combatant men, women and children, are fit complements of one another. From the date of the sinking of the "Lusitania" Prussia is openly an outlaw from civilization. It becomes more and more obvious that she was never more than half-civilized and Christianized. For the future one thing is clear. If Prussia and Germany be not utterly crushed, and the laws of land-warfare and the law of the sea solemnly re-established and re-affirmed, the nations of Europe must for the future stand eternally watchful, armed and feverishly arming, against the awful menace to all that they hold valuable in their civilization. But such a position would only lead to a speedy renewal of the war, so there can be no doubt that, great though the cost will be, the Allies will, as Mr. Asquith constantly reiterates, go on till complete reparation is obtained and punishment awarded for all the wickednesses of modern Germany. There must be no peace of Amiens. Not without reason, perhaps, is it that no "iron cross" has been bestowed on the "hero" who torpedoed the "Lusitania." Is the concealment of his name by the German authorities due to a desire to save him from the wrath to come? For assuredly the fact that he acted under orders will not be taken as an excuse, but

only as a slight palliation of the decadent criminality which could under any circumstances consent to perform such an act.

The mighty struggle in the West, renewed with increased force, but in vain, by the Germans, gave the Canadians their chance of inscribing their name on the roll of the great fighting races of the world, and the Germans their chance of adding yet one more page of dirty dishonour to the history of their conduct in the war. Death by asphyxiation is possibly no more horrible than bleeding to death as a result of a shell-torn body, but the employment of gases holds out such awful possibilities of wholesale destruction of life that the instinct of civilization has recoiled from their use as a normal weapon of war. Germany has violated this instinct in the most horrible possible way, by employing a gas that not only kills, but kills with excruciating torture, and even maims its surviving victims for life. The Hague Conference agreements attempted to restrain the use of gases in warfare, but unfortunately the provisions are not as clear as they might be, and Germany might possibly be able to make out a lawyer's case for her actions.* "Cultured" Germany has added one new horror of her own to civilized warfare. Of course the Allies, if they find it desirable, will follow suit. The outcry against such retaliation seems to us inexplicable. If the Allies were under any moral or legal obligation not to use gases, they are released from it by Germany's action. Mainly by the use of these gases, the Germans snatched an advantage in the West, but their dash to Calais and Paris was completely checked, and they seem very unlikely ever to get much nearer.

The best news of the vacation was the entry of Italy into the war. Not that Italy's forces are large enough to decide the issue in favour of one side or the other; it increases however the forces arrayed against the Germanic powers, and adds moral weight to the Allied cause. Moral weight has also been added by the vigorous protest of America against the "Lusitania" murders, though war between America and Germany seems unlikely. As a matter of fact a neutral America is of more immediate use to the Allies than she would be if she went to war, and some theorisers have surmised that Germany wishes to provoke the United States into war. This seem unlikely, but we shall know the

* Declaration II, 1899: "The Contracting Powers agree to abstain from the use of projectiles, the sole object of which is the diffusion of asphyxiating or deleterious gases. The Present Declaration . . . shall cease to be binding from the time when, in a war between the Contracting Powers, one of the belligerents shall be joined by a non-contracting Power."

truth soon. The accession of Italy, however, is a real embarrassment to Germany and Austria. Some of us, as month after month went by, and Italy sat on the fence watching the struggle, as we thought, in careless detachment, almost despaired of her. Rome, the mother of law, has, however, at last come to the aid of the upholders of law, and England, the friend of Italy, and France her comrade in arms at Magenta and Solferino, are justified in their faith in this, the youngest of the great nations of Europe. Most eloquent of all tributes to our new Ally was the ovation of M. Deschanel, President of the French Chamber :

“Italy (he said) is with us as she was fifty-six years ago. All the powers of life are ranging themselves against the power of death. How could Rome, the mother of law, have served the scorers of treaties and of plighted faith? How could the dexterous and practical policy of the House of Savoy, which had only entered the Triple Alliance in order to protect itself against the stroke of the traditional enemy, have lent a hand in absorption of Servia and of the Aegean Sea by the advance guard of Germany? How could those who had checked the Ottoman conquest and who had delivered Lombardy and Venice, aid the masters of Bosnia, Herzegovina, Croatia, Transylvania, and Poland, the oppressors of Trieste and of the Trentino, the conquerors of the Danish duchies and of Alsace-Lorraine? How could the proud nation which claims Manin, Victor Emmanuel, Cavour, Mazzini, and Garibaldi, and which found its principal force in the Latin tradition, follow the school of the Nietzsches, the Treitschkes and the Bernhardis, and by what impiety could Italian Catholics have worked in collusion with fanatical spoilers of Louvain and Rheims?

“While from the depth of the ocean the plaints of innocent victims, the cries of infants and of mothers hurled into the water by an atrocious crime fill with grief and anger the whole thinking world, France, whose indomitable heroism broke the rush of barbarism and who bears with unequalled glory the heaviest burden of the war, France, who sheds her blood not only for her own liberty but for the liberty of others and for honour—France salutes fraternally as a presage of triumphant right the flight of the Roman Eagles.”

The most disappointing news during the vacation was the recapture by the Germanic forces of Przemysl and Lemberg. So far from threatening the autumn harvest of the Hungarian plain, and triumphantly advancing through the Carpathians on Buda-Pesth, the Russians have been driven back in Galicia, though their line has not been broken. The

Russians, owing probably to lack of munitions, seem unable to resist a vigorous German offensive, though they are able to inflict huge losses upon it, which perhaps serves the Allied cause sufficiently well. It seems difficult to believe that a huge country like Russia, stretching over half Europe and Asia, has only one port, or at the most two, Vladivostock and Archangel, by which she can receive imports from the rest of the world. So fatally great a stroke of policy was the German success in involving Turkey in the war. The opening of the Dardanelles will, however, be for that very reason a tenfold greater stroke on the part of the Allies. Even without this, however, we need have no fear for Russia. Russia would fight on, even were she driven back to the Urals! Galicia and Poland may yet provide the Borodino and Moscow of the German Napoleon. The Russians have a little habit of retreating "*pour mieux sauter.*"

Deeds of great daring and amphibious skill have been done in the Gallipoli peninsula. The losses of the British there have been great; Australia and New Zealand have joined their Indian and Canadian brothers-in-arms by raising even higher the military glory of the British colonies and dependencies. The Germans believed a landing in Gallipoli to be impossible; the British have taught them otherwise. As a result, though there is still much work to be done, we are within a few miles of a victory such as the world has seldom seen and whose consequences may well be incalculable. Pity for the Turks is one of a very great complex of emotions which these events conjure up. Their casualties are enormous, and yet they cannot make peace even though they would. The German heel is on their neck, and having once consented to be the cat's paw of Germany, they must go on to the bitter end. Germany is supreme from Hamburg to Bagdad, and the great central empire of which she dreamed is in being, and will remain in being till the Allies smash it. From Hamburg to Bagdad there is one supreme war-lord—Kaiser Wilhelm II, pirate, promise-breaker and murderer. It's a long, long way to Tipperary, but slowly, and steadily, the Allies are pressing to the goal.



Correspondence.

LORD HALDANE'S INTEREST IN INDIAN STUDENTS.

To

THE EDITOR, *Presidency College Magazine.*

DEAR SIR,

I hope the following speech which Lord Haldane, the present Lord Chancellor of England,* delivered to his Indian student guests in an "At Home" in London, will be appreciated by your readers, specially the portion referring to Dr. P. K. Ray, D.Sc. (London and Edinburgh) who was some time Principal and Professor in our College, as has been referred to by the noble Lord.

Lord Haldane said :—

"To be among you is a pleasure. For the traditions of your country and its modes of thought have been of deep interest to me for long. I think this interest originated with a personal friendship. When I was a student of Philosophy at the University of Edinburgh, nearly forty years ago, my great rival was a countryman of yours, Prasanna Kumar Ray, who fought me hard for the Gold Medal in Logic and Metaphysics, and we were, I am glad to say, bracketed as equals. We became fast friends and have remained so. As many of you know, *he became a Professor of Philosophy at Calcutta*, and afterwards for a time did work here which was very valuable. Then I have had a good many acquaintances among some of your distinguished scholars, from whom I have learned something of the significance of the great Oriental systems of thought. I have listened, too, to Rabindranath Tagore, and I know his poetry. You have immanent in your race great gifts of imagination and delicate distinction. We Britons in these islands have also great gifts of another kind.

"Well, what ought to be our joint ambition ? I think it ought to be to live together as citizens of a very great Empire, all of us bringing our especial talents to bear co-operatively for the common good of humanity. We may well be proud of being citizens of such an Empire. It includes in its range great countries and great races in whose union is strength. It ought to be our privilege as well as our duty to use the heritage that is ours for the advance.

* This letter was written before the present Coalition Cabinet was formed.—*Ed.*

ment of the civilisation of the whole world. You in India have a great part that you can play. Your qualities and ours are complementary, and I believe firmly that as time goes on this will be seen more and more to be the case. To me it seems that your course and our own are both clear. You in India should have faith and go on in the consciousness that the future must open to you more, and that it is opening. You have qualities which, if used aright, ensure this. Our course is to take care that we are equally conscious of your quality, and title to place, in our Empire which is not yours or ours alone, but a common and splendid heritage. It can only remain a splendid heritage, and develop what it is capable of, if we both are forbearing and mutually appreciative, and above all insist on the maintenance of high ideals of humanity.

" You whom I see before me are mostly young. The future lies before you. All of you may exercise great influence for good and evil. Therefore I would say to you, remember that just here and now, in this your period of training, you are making yourself what you will be hereafter. It is the most fertile and decisive period of your lives, and I beseech you never to forget that this is so. For we have, all of us, a common and deep interest in what you make of your lives.

" That is why I was keen to come and meet you, and that is what I wished to say. I need add very little, only enough to convey to you the assurance that it is a real pleasure to us to welcome you here to-day, and to feel that we have the chance of establishing relations of friendship with you."

Lord Haldane referred to Dr. Ray's work as Adviser of Indian students in London when he said that Dr. Ray " for a time did work here which was very valuable."

These words were addressed to Indian students in England, but full of wisdom as they are, they apply equally to students here in India.

I am, Dear Sir,
Yours faithfully,
COMMON ROOM.

A QUERY.

To

THE EDITOR, *Presidency College Magazine*.

SIR,

Would any of your readers kindly let me know through the columns of your magazine what is being done by the Percival Memorial Committee to perpetuate the memory of that illustrious professor? Is it not high time that something should be done so that our old professor in his retirement may come to know that he is still remembered with affection and respect by his numerous pupils and will be remembered with the same feelings for years to come?

I am, etc.,

AN ADMIRER.

A UNIVERSITY GYMNASIUM.

To

THE EDITOR, *Presidency College Magazine*.

SIR,

We are extremely disappointed to find that no provision has been made in the plans of the new building of the University Institute for a gymnasium worthy of the name. Calcutta students are proverbially weak in physique. We learn with intense satisfaction that games have been made compulsory in some of our colleges here and that gymnasiums are being provided by some of the colleges. Our King-Emperor has wished us to be "loyal and manly citizens," but we regret to see the extremely inadequate provision made by the University Institute, the premier student-club of Bengal, for making healthy citizens, sound in body as well as in mind.

May we ask the authorities to give their favourable consideration to this primary need of Calcutta students?

I am, etc.,

P. C. A. C.

SOME FAMOUS WAR PHRASES.

To

THE EDITOR, *Presidency College Magazine*.

SIR,

The war that is now raging so fiercely in Europe has evidently changed the usual order of the world. Its influence has been felt in almost every department of our activities; and it has given birth to many things which would not have been produced otherwise. Among other things the war has brought into use several curious phrases and

bits of songs previously unknown. This war is not the first case when such phrases have been brought into existence, for several war phrases may be traced back to wars waged long ago. Perhaps it may be interesting to make a brief survey of some of these war-phrases so that I may come to know of other similar phrases from interested readers.

The first and most striking war-song which appeals to the ear is perhaps "*It's a long, long way to Tipperary.*" Picture in your mind Mr. Thomas Atkins singing this curious but inspiring song on his way to the trench in muddy Flanders. I don't know whether this bit of a song was ever in use before the present war. I would be much gratified if any of your numerous readers could enlighten me on this point.

The next phrase in order of popularity is perhaps "*a scrap of paper*," set in use most probably by von Bethmann Hollweg, the German Imperial Chancellor. This phrase will perhaps for many years to come be used in connection with any breach of contract.

Another pertinent phrase which has come into use is "*Hell of fire.*" The tremendous outpourings of Krupp's big guns hurled on the Allies is perhaps responsible for this phrase. Similar in sense is "*blizzard of fire.*" "*Baptism of fire*" is another phrase which, it is said, owes its origin to Emperor Napoleon during the Franco-German War of 1870.

"*The thin red line*" is another immortal phrase which would not be easily forgotten. It is said to have originated at the time of the Battle of Inkermann when the red-uniformed Highlanders made a heroic stand against a superior force of Russians.

William III was responsible for another saying which has outlived its originator when he stated "*Every bullet has its billet.*"

"*Up Guards, and at 'em*" is as famous as the great man who said it. It is only superfluous to remind the readers that it was spoken by the Iron Duke on the gory field of Waterloo just a hundred years ago. "*Kaiser, Krupp, Kultur*" is another assortment of terms which I have found to be frequently used to signify militarism—"Prussianism or Kaiserism"—both of these latter terms being innovations of this war.

These are some of the terms and phrases which readily suggest themselves to an ordinary man when he sits down to think of phrases which owe their origin to wars. It would undoubtedly be very interesting to know of more such phrases and terms from interested readers.

I am, etc.,
SIBOO.

THE COLLEGE CALENDAR.

To

THE EDITOR, *Presidency College Magazine*.

SIR,

May I suggest some improvements, through the columns of the Magazine, for the College Calendar which, as you know, is the main source from which outsiders draw their information about our College. On opening the Calendar, one finds no mention at all of the Governing Body.* The names of the Governors of the College would not occupy much space.

Secondly, in future issues of the Calendar, the College Magazine should find some mention in it. The Magazine Committee should be duly recognized. The same applies to the College Gymnasium and the new Tennis Court. Some information regarding the facilities provided at the gymnasium for physical improvement would not be out of place in the Calendar.

Next, one would like to see the names of the student office-bearers of the various Seminars in the pages of the College Calendar. This insertion of names in the Calendar would invest the posts with a greater dignity and also would serve as a record for future reference.

Last but not the least, it would be a very welcome addition to the College Calendar if the names of the most distinguished alumni of each year be placed in it permanently, as is the custom with College Calendars in England. This would, among other things, serve as an encouragement to the students; and further it would bind the old students of the College more firmly to it than would have been done otherwise. It would then be a source of pride to its distinguished students to find their names permanently in the Calendar of their old College.

I am, etc.,

S. M.

[* This defect has been remedied in the new issue of the Calendar.—*Ed. P.C.M.*].

Reviews.

Masters of English Journalism: A Study of Personal Forces.—By T. H. S. ESCOTT.
Fisher Unwin, 1911. Price 16s.

The main conclusion resulting from these studies of the rise and progress of English journalism is summed up in two sentences in which the last chapter ends. “The change, however, as has been shown in the foregoing pages, is one, not of revolution, but of development. Between the spirit in which, whether capitalist or writer, he first

addressed himself to his work and that in which he accomplishes it to-day, the continuity, moral and intellectual, has been, on the whole, without solution." (Page 357.)

The method followed is clearly indicated in the Preface (page 7). "Primarily, and as far as possible, exclusively, true at all points to its title, the present work deals with the personal agencies, of which those newspapers are the result."

The whole forms a history of British journalism as vivid as it is informing. The author combines high scholarly and literary competence with the necessary qualification of journalistic experience. In an interesting introductory chapter, he traces back the newspaper to the *Acta Diurna* instituted by Julius Cæsar; and finds forerunners of the newspaper, or anticipation of its essential function to influence public opinion, in the Homeric "Tis," the Tragic chorus, the Orators and the Sophists, and in the Greek Oracles. He sees the first newspaper men in Xenophon and Isocrates. He says that in England the journal goes back to the 15th century, but he regards Daniel Defoe as the real creator of the English newspaper.

From Defoe with his "Review of the Affairs of State" he follows his subject through the essayists Steele and Addison, Swift, Smollett, John Wilkes and Dr. Johnson, to Woodfall and the Letters of Junius. Cobbett follows with a chapter to himself. Then come Leigh Hunt, and his brother John of *The Examiner*, and James Perry of *The Morning Chronicle*; Peter and James Stuart of *The Morning Post*. The greatness of *The Times* is traced to the family of Walter in the last quarter of the 18th century and to notable editors in the early part of the 19th, Thomas Barnes, Captain Edward Sterling and J. T. Delane. The rise of the Penny press—the *Standard*, the *Daily Telegraph*, the *Daily News*—is traced in chapter viii, an interesting point being Charles Dickens' connection with the last. Another chapter is given to the work and influence of papers like the *Saturday Review* and the *Spectator* which aim more definitely at informing public opinion. The later chapters follow out more modern developments; the evening papers (the *Globe*, the *Pall Mall Gazette*, *St. James'*); the half-penny papers, evening and morning in succession; always through the men who have been instrumental in bringing the change about. Finally an account is given of the great newspaper organisers and capitalists, Sir George Newnes, the Harmsworths, Edward Lloyd, Cyril Arthur Pearson. There are other chapters dealing with the Provincial and Irish press (chapters XII and XIII). Perhaps the most interesting chapters

of all are the two last, dealing respectively with social changes as they have affected journalists and with the enhanced importance of rôle now played by the Sub-Editor.

H. R. J.

"The Permanent Settlement in Bengal."—By PROF. S. C. RAY.
"Agricultural Indebtedness and its Remedies."—By PROF. S. C. RAY.

To the student who wishes to master the highly controversial subject of the Permanent Settlement, the little work of Prof. Ray on the subject may be strongly recommended. The author is an experienced teacher, and as such, he has succeeded in making his book very lucid and comprehensive. Within the scope of forty pages he has reviewed every important aspect of a many-sided subject. Eighty more pages are devoted to the most valuable and interesting documents on the subject.

A larger and more valuable work by the same author is "*Agricultural Indebtedness*." It is a very judicious selection out of the vast material existing on the subject. Students of Indian Economics owe a debt to Prof. Ray for the laborious and careful selection and arrangement of such excellent material.

J. C. COVAJEE.

Bernier's Travels in the Moghul Empire.—Edited by MR VINCENT A. SMITH.
(Oxford University Press).

It need hardly be said that in our more advanced courses of Indian history, provision should be made for the first-hand study of the great original sources of the subject. Bernier's travels would form an excellent and instructive addition to any curriculum of Indian history. It contains besides political history, deep yet pleasing studies of the social and economic condition of India under the Moghuls. In particular the letter to Colbert is a small encyclopædia with pithy articles on every phase of the political organizations of India, and on economic affairs from the finances of the Moghuls to the eternal problem of Indian hoards. Many of our so-called students of Indian History carry away a false idea of the course of evolution of Indian politics owing to their neglect of such works as Bernier's. The value of the work is much enhanced by the learned notes added by Mr. Vincent A. Smith, who has supported fully in this new line of work, the high reputation which he has already earned by earlier work in other fields of Indian history.

It may be permitted to refer to a very small detail. Bernier was a better master of the Persian language than even his editors would allow. At p. 264 the Editors propose an amendment in a Persian quotation from Sadi, as given by Bernier. As a matter of fact the latter's reading is the better one. The "old pedagogue" with whom Bernier read Persian poets knew his business well.

J. C. COVAJEE.

THE
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No. 2

EDITORIAL NOTES.

THE notable College event of last month was the Principal's address to the students and the staff on August 4th, the anniversary of the declaration of war between England and Germany. The theme was "The Empire's Immortal Dead, August 1914—August 1915." The meeting was held in the Overtoun Hall, by the courtesy of the Y.M.C.A. Almost the entire body of students and staff attended and the hall, large as it is, was packed to its utmost capacity. Our genial Vice-Chancellor, The Hon'ble Dr. Sarbadhikary, and Mr. Wordsworth also graced the occasion by their presence. Elsewhere a resumé of the address will be found. Suffice it to say here that it was a noble tribute nobly expressed. It has been thought fit to offer it to a wider circle of readers than this magazine can claim, and it is now in the hands of Messrs. Longmans. We are sure that it will be largely welcomed by the public.

* * *

Coming to the actual progress of the war we note with pride the triumph of General Botha in German South-West Africa. The whole of that territory has been transferred to the Union of South Africa and the occasion was celebrated by much rejoicing throughout the Empire. For his fine exploit General Botha has been the recipient of congratulatory telegrams from all parts of the Empire, including one from the Government of India. No better testimony of the solidarity of the Empire can be given than the fact that the greatest success so far achieved by British arms should have been won under a Boer General by an army composed largely of Boer soldiers.

But the advantage in Europe lies on the whole on the side of the Central Powers. Following their dramatic success in Galicia the Austro-German armies have pressed forward into Poland both from the North and the South, like the horns of a crescent, compelling the Russians to evacuate Warsaw, Novo-Georgievsk, Ossowiecs, Kovno, and Brest-Litovsk. The German fleet simultaneously tried to penetrate the Gulf of Riga to facilitate supplies for their army but their efforts resulted in a heavy defeat by the Russian navy, helped by British submarines. Elated by their land successes the Kaiser's legions now seem to be intent upon marching on Petrograd expecting to obtain a decision there. Though overwhelmed by sheer weight of metal, the Russian army has everywhere made a heroic stand and the fighting has been of the most sanguinary character. To take an instance, the German losses before Kovno alone are said to amount to 120,000.



In the Western theatre of war the German Crown Prince made one more costly and fruitless attempt to take Verdun. On other parts of the front a state of stalemate continues.



The Turks have been adept pupils and their defensive preparations have been so thoroughly organized that progress against them in the Dardanelles continues to be slow. Another landing in force has been effected in Suvla Bay and it is to be hoped that this may result in hastening the issue. The satisfactory feature so far has been the fine exploits of British submarine commanders in the Sea of Marmora, notably the sinking of the *Barbarossa*.



The Italians continue to press forward, though owing to the tremendous natural difficulties of which the enemy has taken the fullest advantage, no important results have so far been achieved. The Austrians attempted counter-attacks on a large scale, but they ended in failure. They have also resumed the offensive against the Serbians, evidently with a view to overawing the neutral Balkan states.



The Bengal Ambulance Corps has distinguished itself by hard work and exemplary conduct in Mesopotamia. The corps is running a base hospital at Amara containing about 500 patients besides sending

detachments for field ambulance work. There is plenty of work to be done and a private in the corps writes to say that a second corps should be raised and despatched. We are sure that Dr. S. P. Sarbadhikary, the Hon. Secretary of the organisation, will do whatever is possible in the matter.



Distress prevails in portions of Noakhali, Comilla and Tipperah districts in Eastern Bengal. The position is made delicate by the fact that the population is overwhelmingly Mohamedan and *purda* is strictly observed. Women would much rather suffer the utmost privation in the seclusion of their homes than go out to receive public charity. Labour on relief works on the part of women and children—the test of the existence of famine conditions laid down in the Famine Code—is, therefore, unthinkable. Gratuitous relief by the state on any large scale is likely to be abused and moreover it cannot be relied upon to reach those purdanashin women who are the worst sufferers. Thus everything points to this being an eminently suitable field for the exercise of well-thought-out private charity. We are glad to note that a number of organizations are already at work. We also are doing our bit, the Presidency College Relief Fund now amounting to Rs. 1,500. A full list of ex-students who have subscribed to the Fund is published elsewhere.



By the way, in the August issue while enumerating the names of illustrious ex-students who have attained to the high distinction of knighthood and put us in the pleasing position of being, *par excellance*, the "College of Knights," we forgot to mention Sir Bipinkrishna Bose of Nagpur. We discovered the omission when promptly on the receipt of the appeal issued by the Relief Fund he sent a donation of Rs. 50. We gratefully thank him and hope he will take the same interest in his old College that he has, on this occasion, exhibited in this striking way.



In the last number we noticed with great pleasure the notable success achieved by Mr. Prasanta Chandra Mahalanobis at Cambridge. We have now the further pleasure of welcoming him to the College as an acting Professor of Physics in the I.E.S. Already he has made a name for himself for sound scholarship, rare power of exposition and, above all, unfailing courtesy and good humour. He is indeed a great acquisition.

We have also great pleasure in noting the appointment in the Provincial Educational Service of Messrs. Satish Chandra Mukherjee and Rasiklal Datta as demonstrators in the Chemical Department. Mr. Mukherjee is well known as a prominent member of the Calcutta Chemical Society. Mr. Datta's reputation extends far beyond the borders of India. In fact he has published over forty papers in the leading scientific journals of Europe and the U.S.A. embodying his own researches. Both are pupils of Dr. P. C. Ray.



MacLure's Magazine publishes a very appreciative and readable article on the far-reaching researches of Dr. J. C. Bose. The writer is Dr. Waldemar Kaempffert, the Editor of the *Scientific American*, and his view certainly carries the very highest authority. We shall quote a few sentences just to give an idea of the eloquent tribute that he pays. "His experiments promise not only to revolutionise plant physiology but to open great new fields of experimentation in applied sciences such as medicine and scientific agriculture. He belongs to the dynasty of scientists who have discovered great natural laws. He subjected all nature to questioning shocks and discovered that there was no difference in the reply. At last he reached a new conception, which included in one magnificent sweep, the dust beneath our feet, the protoplasmic ooze floating on a stagnant pool and man himself."



We are glad to note that the state scholarship this year has been awarded to Mr. Nilratan Dhar, M.Sc., a brilliant student of Dr. P. C. Ray. Mr. Dhar has published a number of papers on Physical Chemistry that have been highly appreciated in the scientific circles of Europe. We also offer our congratulations to Mr. Shamchandra Tripathi, B.Sc., of our College, who has been awarded a Bihar and Orissa Government scholarship for proceeding to England for advanced studies. Two of Dr. Mullick's sons are also going for a similar purpose. They all sail on the 5th of September. We wish them every success in their new sphere.



The several seminars and scientific societies have started into life again and some really good work is being done. The Magazine offers ready facilities for giving it the necessary publicity. It is a pity that they are not adequately taken advantage of. We invite the respective secretaries to send rather fuller reports, doing justice to the learned dissertations of their members.

In the region of sports we can claim a fair share of success. We lost the semi-final game in the Elliot Shield to the Ripon College after a couple of draws. But that was early in the season and practice improved the College Eleven appreciably. This was apparent in the friendly game with the A. Co., 10th Middlesex, kindly arranged by the Principal. Though the result was a draw we had evidently the superior side. And when we met the Ripon College again in the Hardinge Birthday Shield we defeated them by three goals to one. In the final we met the Metropolitan College, but had to accept defeat by a margin of two goals. They fully earned the victory, and we have pleasure in offering them hearty congratulations. To our own team we say, better luck next time.

* * *

The elections for the Students’ Consultative Committee are not yet complete. Altogether eleven representatives have been elected up to date. We congratulate them on their success.

* * *

Various criticisms and suggestions have reached the editor bearing on the proper lines along which the magazine should be conducted. He is obliged to all those who have taken the trouble to enlighten him. One of the suggestions appears to be entirely reasonable and worthy of consideration: it is that some more attention should be paid in selecting subjects which have a special interest for Indian readers. The difficulty is that such articles do not come in sufficient numbers. The editor invites contributions of this character. He takes the opportunity of reminding his readers of the words of the Principal in the Introductory note to the first number, that “Success is not attainable without the solid support of the College at large.”

“The Empire’s Immortal Dead.”

THE 4th of August is a date which will always carry with it great, grave and terrible associations. There are other dates which live in history—the 18th of June and the 2nd of December as the blackest and the brightest days in Napoleonic history; the 9th of Thermidor as the close of the “Terror”; the 3rd of September as the day of Cromwell’s victories and of his death.

“The third of that same moon whose former course
Had all but crowned him, on the self-same day
Deposed him gently from his throne of force
And laid him with the earth’s preceding clay.”

But none of these days can vie with the tragic or historic significance of the 4th of August. For what event could challenge comparison with the titanic conflict in which we are involved ?

It was only proper that the day should be observed throughout the Empire as a day on which to review and meditate on the Empire's achievement in a war which has had no parallel in history. The whole Empire had to record a deliberate resolution to carry on the war with the same unanimity, devotion and energy as in its first year. It had also to pay its tribute of homage to its departed heroes who had so recently fallen on the field of honour. Every institution, whether political, religious or educational, took steps to show its sentiments of zeal and loyalty to the great cause and to display publicly its respect for those who had died to uphold it.

The past and present members of the Presidency College gathered in Overtoun Hall, for this purpose, and were addressed by Principal James in an eloquent and stirring speech. The discourse was distinguished by earnest and calm patriotism, by the clear and comprehensive view taken of the political situation, and by a vivid portraiture of the spirit animating the Empire or of, what we may better call, the genius of the Imperial Anglo-Saxon race. The charm of style was also a conspicuous feature of the address.

The national tempers and politics of the British and the Germans were described and contrasted. The achievements of the British Navy and Army were passed under review, and along with them the noble deeds by which the warrior races of India and the colonial contingents had sealed their eternal loyalty to the only Empire which has known how to reconcile authority and liberty. Lastly the moral of the lesson of the year's war was placed before the hearers—the message which the dead heroes would fain communicate to the living patriots.

A few quotations from the address are necessary to enable the reader to appreciate its tone and to catch its lofty spirit.

The causes of the war were touched upon in the first place ; and it was shown how war had become inevitable. It was the clash not of individuals but of adverse national spirits and civilizations. It was not the individual ambition of the Kaiser or the policy of his War Council which caused the war—they might have been its occasions. Deeper causes were at work. The German nation had evolved fixed ideas and soaring ambitions which were incompatible with the existence of the British power ; and German aggression at last wore out the firm resolve

of Britain to maintain peace, at any price but that of honour. Of this phase of affairs Mr. James said :—

" We did not want war with Germany. We did all that could be done consistently with honour and the obligations of our past history to avoid war. But when the choice clearly lay between war and the betrayal of a small nation nurtured in freedom like ourselves, a small nation that trusted us; between war and abandonment of our great place in the world; between war and dishonour: we chose war. Moreover, behind the ambitions of the Kaiser, behind the policy of his War Council in provoking a conflict with Russia and France lay deeper and more far-reaching designs against the safety of the British Empire, against the liberty of individual Englishmen; deep laid, long-cherished schemes to establish a German world-power, founded on the shattering of British naval supremacy. No one who studied history courageously with unclouded eyesight could doubt what was the ultimate scope of the 'Politik.' The truculent prophets of Prussian militarism left no uncertainty about the matter. Those who knew Prussian ambitions best and were most intimately acquainted with life and thought in Germany, were, long ago, assured of this. Many warnings had been uttered in our ears. They were disregarded because the British people desired peace and bore no ill-will to the German Empire. German rivalry in commerce was formidable, but we accepted it and merely strove to hold our own in lawful competition. The growth of the German fleet was plainly a menace we could not wholly disregard: but we first sought frankly to persuade Germany to agree to a limitation of armaments; and when that failed, we answered the menace by building ship against ship. But we have inherited our Empire out of a past marked little by deliberate aggression and made illustrious by a succession of warlike achievements not inferior to those of the greatest conquering nations of any age. Our forefathers built up the Empire, based as no previous imperial system had been, on ideas of equal justice, of personal liberty, of respect for the peculiarities and preferences of the races that composed it. We could not surrender our great inheritance and its responsibilities at the bidding of the Prussian War-Lord, or to gratify the heady ambitions of the German peoples. Since German writers and thinkers openly proclaimed their hostility to British ideals, to British institutions, to the very existence of the British Empire; since the scarcely-veiled purpose of the German Kaiser in building up the German fleet, his darling project, was to overthrow and cripple British naval power, which the whole world knows to be the warrant of the

freedom of the seas, at once on the declaration of the war, the subjects of the British Empire, in every quarter of the globe, rallied to its defence."

Whence this resolution of the colonies and dependencies to fight devotedly in the cause of England? What magic influence united in loyalty an Ireland which had only recently been distracted by an incipient civil war? Whence the zeal shown for the Empire by all the martial races occupying the broad continent stretching between the Himalayas and Cape Comorin? In answer to such questions, Mr. James furnishes us with a description of the British polity—an eulogy of British political character, system and methods. As an eloquent and adequate account of the genius and temper of the British Empire it deserves to be quoted *in extenso*:

"Never was Empire widespread and diversified as this, so united in singleness of purpose. It was a response self-generated, spontaneous, wholly uncoerced: it was beyond calculation and could not have been predicted. But there are reasons why it was so. The people of Great Britain and Ireland have inherited institutions and conceptions of Government which were won on British soil at the price of fierce contests through centuries of bloodshed and sorrow: and these have passed in equal or even fuller measure to the self-governing dependencies of the British Crown. We enjoy a maximum of freedom along with a steady regard for law. Religious liberty has no limits among us, except the restriction of liberties to obstruct or injure other men in their worship or beliefs. Liberty of speech is universal and all but limitless; yet is kept from excess by laws which do not permit men to traduce their neighbour or to transgress the decencies of word and thought. Above all personal liberty is complete, so long as men and women do not interfere with the liberties of others, or endanger the general well-being. Nowhere in the world is there so much genuine freedom, tempered with self-restraint and respect for the rights of others, as in lands under the British flag. For though we British value our own institutions and take a high pride in our Empire, we yet respect the customs and the claims upon us of other peoples. In our commerce with all the world we have learnt to live and let live. Therefore also we respect the rights of the weaker nations. We have even waged wars to help the weak against the strong.

* * * * *

"In our civil administration, representative institutions and self-government and all sorts of voluntary contribution for the public good, have

among us been fostered to the utmost. Effect is given to the considered judgment of the majority in accordance with constitutional forms. Parties strive under their leaders to make their views prevail, but have learnt to accept the peaceful arbitrament of the ballot. The law tolerates no individual oppressor. All men are free to shape their lives and to dispose of their labour as they have ability and opportunity. Even for national defence we trust to voluntary service, and so far we have not trusted in vain.

“These institutions and ideals we do not force on other peoples, but to the peoples incorporated with us in the Empire, we offer them for participation in such measure as is practicable. With an acknowledged genius for ruling, and called by destiny to maintain order and uphold justice among millions of men differing widely from us in race, language, and religion, we show such impartial firmness in the administration of justice, and such a willingness to impart the self-governing institutions which are the birthright of our race to other races, that our government, though alien, is acceptable to them. We hold the balance level between race and race and between creed and creed. Where the flag of Great Britain flies, there is religious liberty, impartial justice, full personal liberty and free press. It is seen that subject only to the defects inseparable from the imperfection of all human organization, the British Empire stands for peace, justice, liberty and righteousness. The flag is everywhere the protection of the defenceless, and the guardian of the prosperity of all who live under it. The British Empire has come to be the vastest organization the world has ever known for the security and happiness of human beings.”

The above masterly sketch of the political spirit of the British Empire reminds one irresistibly of the description of the Athenian political spirit given in the great funeral oration which was delivered by Perikles at the end of the first year of the Peloponnesian war. Perikles undertook to explain by what mode of government and owing to what social and political tradition and institutions Athens had become so great. “We enjoy a form of government which does not copy the laws of our neighbours; but we are ourselves rather a pattern to others than imitators of them. In name, from its being administered for the benefit of the few, it is called a democracy; but with regard to its laws, all enjoy equality, as concerns their private differences; while with regard to public rank, according as each man has reputation for anything, he is preferred for public honours, not so much from consideration of party, as of merit; nor, again, on the ground of poverty

while he is able to do the state any good service, is he prevented by the obscurity of his position. We are liberal then in our public administration ; and with regard to mutual jealousy of our daily pursuits, we are not angry with our neighbour, if he does anything to please himself ; nor wear on our countenance offensive looks, which though harmless, are yet unpleasant. While, however, in private matters we live together agreeably, in public matters, under the influence of fear, we most carefully abstain from transgression, through our obedience to those who are from time to time in office ; especially to such laws as are enacted for the benefit of the injured, and such as, though un-written, bring acknowledged disgrace on those who break them. * * * * In short, I say that both the whole city is a school for Greece, and that, in my opinion, the same individual amongst us proves himself qualified for the most varied kinds of action, and with the most graceful versatility."

We shall now follow Mr. James in his contrast of the spirit of Prussian militarism with the genius of British Empire :—

" But the Prussian military system is autocracy. In an evil hour an autocrat succeeded to the throne of the Hohenzollerns, whose egotism knows no bounds of moderation or law, whose moods accord with the unsound ambitions, which victory in war after war have infused into the minds alike of the Prussian military chiefs and of German thinkers. 'Welt-Politik' was invented. Germany must lead throughout the world. If France was rich and a hindrance in the way, she must be crushed into utter vassalage. Since the British Empire was in possession of so much which German greed coveted, it must be broken in pieces. The ends were great and inspiring : a certain heroic mood seeks outlet in high adventure. Then came one last fatal turn of thought, the final depravation of Kultur. Its apostles taught that for high ends all means are justifiable : there is no God but force. If before the war some few more discerning saw the menace to civilization lurking in this same Kultur allied with Prussian militarism, we all know it now. We know that Kultur means defiance of all laws, human and divine."

A "contemptible little army" has dared to face and withstand the armed forces of this great "Kultur." It is not too much to say that, but for the British force the Germans would have occupied Paris within the first fortnight of the war. Mr. James gives us a description of the British Army and notices its ancient glories, its special characteristics and its recent achievements : " The British army has been nursed in glorious tradition from Cressy to Waterloo. The British

army is numerically of little account compared with the vast conscript armies of the continent : it is numbered by the hundred thousand, while they count many millions. But it is composed of men who have made their country's defence their special calling, and these men are trained on a system which, along with admirable discipline, seeks to endow every individual soldier with the utmost faculty of personal initiative. The British army is not merely a drilled organic whole, formidable in the mass, but an aggregate of trained and disciplined units, each of whom is a skilled fighting man, when left to his own resources. Yet how superb a fighting instrument the British army had become was not known till this supreme test revealed it. Like perfectly hammered steel beneath the hammer, it was seen to spring back unbent, unbroken from each smashing blow. From Mons to the Oise, fighting, retreating, reforming, fighting again, 'French's contemptible little army' sustained the shock of the great German onslaught through Belgium, an avalanche of men the like of which has not been seen since Chengiz Khan marched across Asia, more formidable than the hordes of Attila or Timur, because, joined with numbers and ferocity, were the resources of modern science raised to their highest efficiency. The world wondered to see this little army, again and again seemingly overwhelmed by numbers and weight of metal, face about and fight again, till at last the momentum of the attack was spent, the mass swerved aside, and turning suddenly from defence to attack, French and English together swept the invading hosts back in disorder across the Marne."

This roused the martial spirit of the British nation. A wave of military enthusiasm swept over the face of peaceful England. A description of the great movement which has transformed millions of Englishmen from peace-loving citizens to patriotic warriors has to be noticed: "A year ago no dreams of military prowess were theirs. Mostly they followed peaceable avocations and planned a life in which the roar of battle, the horrors of trench-warfare, the terror of howitzers and shrapnel and poisoned air had no part. From the villages and towns, from uplands and lowlands, from cottage and hall, from the desk and the counter, from workshops and trades, from factories and mines, high-born and simple, they have come; they have left their homes and callings, their amusements, soft living and great possessions did not keep them back : nor the hopes of a career ; nor the need of a livelihood. One thought alone possessed them, their country's danger : the cruelty, rapacity and brutal violence of the foe with whom

we were at grips. For the honour and safety of home and country, no sacrifice was too great, no suffering. Many are now numbered with our glorious dead. They have offered up all they were and hoped to be. They have given their lives. They will not return to the places they left. But they have sealed their love of their land with their life blood."

Yet another sacrifice calls for eloquent exposition. What called up the Rajput from the plains of India, the clansmen from the Punjab frontier, or the Gurkha from his hills to fight and die on the Marne or by the Dardanelles? "The warrior races of India have vindicated their right to stand as comrades with the British, not only in Asia and Africa and among the islands of the South, but upon the battle-fields of Europe. Our age has seen a sign and a portent of fairest augury: Indian troops marching through France, not under the banners of an Asiatic conqueror, but in defence of the French Republic, for the honour of the Empire, and to save the liberties of Christian Europe. Europe and England are far away. The cry of the Motherland does not ring so shrill and clear in Indian ears. Yet these men know for what they are fighting. They judge the Sircar's cause worthy—the Sircar whose salt they have eaten. They value the strength and peace the Empire secures, and gladly with warrior pride, Sikh, Rajput, Punjabi, Pathan, Gurkha, living and dying, keep their place in the line. They have won an immortality of glory."

The speech should be studied in full to be duly appreciated. But no apology need be made for introducing such large quotations here from the address of Mr. James. Several causes have combined to make it a remarkable performance—the greatness of the subject, the lofty character and keen intellect of the speaker and the elegance and eloquence of the model which he has kept before himself. The greatness of the events discussed contributes no doubt to the merits of the performance, but it also renders more difficult the task of the speaker. The length of the war has so accustomed us to regard it as an every-day phenomenon that it requires great skill to lift it up to its true height, and to delineate it in its true grandeur. As to the model chosen—the funeral oration of Perikles—it is one of the noblest speeches transmitted to us from antiquity; and we can best express our admiration of the Principal's speech by saying that it is a powerful echo of the great original.

The curious student of history will, however, notice a point of contrast between the speech of Perikles and the utterances of our orators

on the present war. Our speakers put great emphasis on the achievements and sacrifices of our army and navy, while Perikles devoted most of his attention to the picture of Athens in her social and political glory. The fact was (as Dionysius Halikarnassus has pointed out) that the number of the dead on whom Perikles pronounced his funeral oration was small and rather unworthy of so elaborate a harangue. On the other hand in our present war the graves of the dead may be counted from the Falkland Islands to the Dardanelles, and from Scarborough to South Africa.

At first sight how slow seems the evolution of the human spirit of the motives ruling humanity! Two thousand and five hundred years ago, the greatest events of human history (as Thucydides pronounced it) was the war between sea-loving and liberty-loving Athenians with the drill-loving and authority-ridden Spartans. In our days the greatest event is the clash between very similar forces. But a deeper study shows a difference for the better. The Athenians were only half-hearted champions of liberty ; had they treated their allies, their colonies and their dependencies in the spirit in which the English treat theirs, the outcome of the Peloponnesian war, we have no doubt, would have been different. For the same reasons, we have no doubt now of the ultimate victory of the English in this war ; we have also well-grounded hopes that the present is the final struggle between the forces of liberty and of reactionary militarism. But even, should this latter hope be vain, and should the issue be ever fought out again, in the future, we may be certain that the example of those heroes who have lately died in the cause of liberty will call out fresh champions of the same sacred cause, to fight the good fight again.

“ For these are deeds which should not pass away,
And names that must not wither, though the earth
Forgets her empires with a just decay,
The enslavers and the enslaved, their death and birth ;
The high, the mountain-majesty of worth
Should be, and shall, survivor of its woe,
And from its immortality look forth .
In the Sun’s face, like yonder Alpine snow
Imperishably pure beyond all things below.”

J. C. COVAJEE.



Captain David Lester Richardson.

TWO names stand out very prominently in the history of English education in Bengal—Henry Derozio and Captain Richardson—two great men who shaped the careers of the future reformers of society and literature in Bengal. Both of them devoted the best part of their lives to the developing of the intellectual powers of their pupils, although their modes of teaching were different. Derozio discussed with his students the merits and demerits of every form of religion and urged upon them the necessity of reforming social customs and prejudices. Unlike Derozio, Richardson wished to make good poets and high thinkers of his students, and, instead of passing his time in the discussion of social or religious problems, he would draw their attention to the sublimity and grandeur of nature. It was Captain Richardson who created a genuine taste in the Bengali youths for the literary treasures of the West. Himself an ardent admirer of English literature, endowed with poetical genius of high order, possessed of a critical power that extorted the admiration of Macaulay himself, he succeeded in breathing into the minds of his students some portion of the ardour that filled his own breast.

Captain David Lester Richardson, familiarly and most affectionately called “D.L.R.”, was the only son of Lieut.-Colonel Thomas Richardson of the East India Company’s Bengal Establishment, and was born in England in the year 1801. His father was a renowned linguist and translator of Eastern poetry. His frequent contributions to the Journal of the Bengal Asiatic Society have been carefully preserved in the Society’s Researches. He retired from the Company’s service on 9th September, 1808, and died on board on his way home. Richardson, then only a boy of seven, was left in the charge of his uncle, Colonel Sherwood of the Bengal Artillery, who in 1819 procured for his nephew a cadetship. On his arrival in Bengal Richardson was enrolled as an ensign in the 2nd Bengal Native Infantry, which was then stationed at Dum-Dum, a military cantonment. In 1820 he made his first appearance as a poet and a contributor to James Silk Buckingham’s Calcutta Journal; and in 1822 his first work, “Miscellaneous Poems”, was published, but it met with very little favour from the literary critics of Calcutta at that time. In June, 1823, he was promoted to the rank of a Lieutenant, but soon on account of ill-health he had to return home, though most reluctantly.



Prof. D. L. Richardson

Arriving in England he completely regained his health and commenced his literary pursuits. In 1825 he published in London "Sonnets and other Poems." This work was highly spoken of in the London periodicals and even the poet Wordsworth paid him high compliments in a letter which runs thus:—

KENWICK
20th September, 1825.

SIR,

I received your elegant volume (Sonnets and other Poems), the accompanying miscellanea and obliging letter, and agreeable to your wish I lose no time in assuring you of the arrival of the parcel.

I had no time to do more than cast my eye over your volume, which contains, I perceive, several excellent pieces upon India which I had previously read with much pleasure in the newspapers. Not doubting I shall find many others as interesting when I return to the volume,

I remain, Sir,
Your obliged servant,

WILLIAM WORDSWORTH.

D. L. RICHARDSON, Esq.,
Howrah Cottage, Camberwell, London.

As a proof of the popularity of this volume, it may also be mentioned that it was included in the well-known Diamond Edition of the British poets, Richardson being the only living bard whose works were inserted in the collection of 1827. We shall give here a few specimens of the poems in this work and leave it to the readers to form their own opinions about them.

Sonnet.

With life and mystery all nature teems:—
A solitary leaf—a breath of air—
An inch of common earth their burdens bear
Of tiny nations. The sun's glory beams
On scenes minute, more strange than strangest dreams
And never shines unfelt. No spot is bare,
No moment silent. Life is everywhere;
And this vast world is busier than it seems.
Oh! what a proud magnificent abode
Hath man, the noblest living thing he sees!
Yet science scans, by light that God bestowed,
A world of other worlds, and haply these
Have groves that ring with holier harmonies,
And beings with sublimer aims endowed.

This sonnet was highly spoken of by James Montgomery in the *Iris*, a London periodical.

THE FINAL TOAST.

(*A Masonic Song*).

I.

"Are your glasses charged in the West and South?" the Worshipful Master cries;

“They are charged in the West,”—“they are charged in the South,” are the Warden’s prompt replies;
 “Then to our final toast to-night full glasses fairly drain—
 “Happy To Meet—Sorry To Part—Happy To Meet Again !”

II.

The Mason’s social brotherhood around the festive board
 Reveal a wealth more precious far than selfish miser’s hoard ;
 They freely share the priceless stores that generous hearts contain—
 “Happy To Meet—Sorry To Part—Happy To Meet Again !”

III.

The Mason feels the noble truth the Scottish peasant told,
 That rank is but the guinea’s stamp, the man himself’s the gold ;
 With us the rich and poor unite and equal rights maintain—
 “Happy To Meet—Sorry To Part—Happy To Meet Again !”

IV.

Dear brethren of the mystic tie, the night is waning fast—
 Our duty’s done,—our feast is o’er—this song must be our last,
 Good-night—Good-night—once more repeat the farewell strain—
 “Happy To Meet—Sorry To Part—Happy To Meet Again !”

This song has been set to music by Messrs. Buckingyoung & Co. of Calcutta.

In the midst of these literary activities Richardson turned his attention to journalism, which even from his very boyhood exercised a strange fascination over the poet. In 1827, he started in London a new periodical, called the *Weekly Review*, among the contributors of which were such distinguished men of letters as Mr. St. John, author² of the *Anatomy of Society*; Mr. Hazlitt, the renowned essayist; Mr. Roscoe, Mr. Moir, Mr. Pringle. The journal, however, collapsed very soon, and Richardson being reduced to extreme poverty was obliged to sell the copy rights to Mr. Colburn for next to nothing. This unhappy circumstance forced him to return to his military service in Bengal. Before his departure from London he was honoured with a farewell-dinner at the Freemasons’ Tavern, presided over by the poet Thomas Campbell. In 1829 Richardson, returning to Bengal with fresh laurels from the English literary critics, was made a Captain in the Native Infantry at Dum-Dum. But he was soon invalidated once more and this time he was placed on the list of military pensioners. Freed from Army service, Richardson accepted the editorship of the *Calcutta Literary Gazette*, then issued from the Bengal Hurkura Office. Shortly afterwards he took charge of another periodical, *The Bengal Annual*, which he dedicated to Lady Bentinck. In recognition of his literary merit, Lord Bentinck in 1834 appointed him an Aide-de-camp. At this time Dr. Tytler, Princi-

pal-Professor of the Hindu College, who had been ailing for some time, applied for leave of absence, and applications were invited for his post. Captain Richardson offered himself as a candidate for the Principal-Professorship and on Macaulay's recommendation was given the post.

Shortly before this, Derozio had been lecturing to the students of the Hindu College; and though his youthful enthusiasm in impressing upon his pupils the sacred duty of thinking for themselves meant the severance of his connection with the college, his teaching had taken a firm grip of the young men of the time. The student community of Bengal was more taken up with social and religious problems than with literary topics; but Captain Richardson turned the tide into a different channel. He engaged the attention of his pupils in literature. A poet himself, he taught the lessons of poetry, that "it is the part of poetry to lift us above the reach of petty cares and sensual desires; and to make us feel that there is something nobler and sublimer than the ordinary pleasures of the world; it is a species of religion, poets are nature's priests; they lead us from nature up to nature's gods." In this way Richardson began his career as Professor of the Hindu College; his exertions and talents gave a new life and impetus to that College, the history of which under his principalship is the most brilliant period of that ancient institution.

Captain Richardson was appointed Professor of History, Mora Philosophy and English Literature; but his real *forte* lay in poetry. He was too much absorbed in Literature to teach History and Philosophy, strictly so-called. In his students' exercises (which he used to mark in the tiffin hour) he preferred the simple English which he practised. His mode of teaching was a strong contrast to the system of cramming that reigns at present. In his class every student in turn had to read out a short passage and explain its meaning. Though the student had often to struggle hard to get at the purport of what he read, he received a good mental exercise. On the perusal of a play or a poem he would call upon his pupils to pass their individual opinions on it—a process by which he meant to develop their thinking and critical powers.

Richardson was also a very elegant reader. His reading of poetry, specially the dramas of Shakespeare, was very impressive. It is said that Macaulay once visited the Hindu College when Richardson was reading out to his class some passages from Hamlet, and he was so

charmed with the reading that for some time he stood spell-bound. He afterwards said to Richardson, "I can forget everything of India, but not your reading of Shakespeare."

D. L. Richardson was not only a competent but also a sympathetic tutor. Making little of the political prejudices of race against race he earnestly desired the improvement of his pupils and spared no pains to impart to them a knowledge of English literature. Thus with a view to introduce them to a more intimate acquaintance with the writings of the British poets, he brought out in 1840 "Selections from the British Poets", a book which is a good proof of his fine taste in literary productions. The poetic pieces were preceded by a series of miniature memoirs, remarkable for their completeness.

His literary fame reached its highest pitch when he published the "Literary Leaves" in 1836. It attained fame and popularity in a very short time; even the London critics gave an unanimous verdict as to its excellence; and it will not be out of place to insert here one or two of the letters that were written on that occasion to the author by such eminent English writers as Thomas Carlyle, W. S. Landor and Mrs. Southey.

(FROM MRS SOUTHEY).

BUCKLAND,
Jan. 10, 1838.

SIR,

It may seem paradoxial to say that if the book (Literary Leaves) you have had the goodness to send me had pleased me less, I should have acknowledged it sooner; and yet, in truth, it is so; for on glancing through its pages, with the intention of returning my immediate thanks, I soon perceived it was not a work to be carelessly discussed. I found my attention irresistibly-arrested by the poetic portion (the true poetry), and that the prose essays, abounding in interesting matter, were too ably written to be run over with the eye only.

Now after a leisurely perusal of the whole, and a reperusal of very many of the beautiful poems, I can thank you, sir, with heartfelt sincerity for your very valuable present; one that will oftener lie by me (like a familiar friend) in summer-power and by the winter-hearth than be found with the things done with in the dusty repose of the bookshelf; I am, indeed, very thankful.

Your obedient servant,
CAROLINA BOWLES (SOUTHEY).

We quote here a part of the letter from Carlyle as it is highly interesting and faithfully portrays the beauty of Captain Richardson's work.

5, CHEYNE ROW, CHELSEA,
LONDON,
19th December, 1837.

MY DEAR SIR,

Your courteous gift (Literary Leaves) with the letter accompanying it reached me only about a week ago, though dated 20th June, almost at the oppo-

site point of the year. Whether there has been undue delay or not is unknown to me, but at any rate there ought to be no delay on my side. I have read your volume, what little of it was known to me before, and the much that was not known, I can say, with true pleasure. It is written as few volumes in these days are, with fidelity, with successful care, with insight, and conviction as to matter, with clearness and graceful precision as to manner; in a word it is the impress of a mind stored with elegant accomplishment, gifted with an eye to see, with a heart to understand;—a welcome, altogether recommendable, book. More than once I have said to myself and others, how many parlour firesides are there this winter in England, at which this volume, could one give credible announcement of its quality, would be right pleasant company! There are very many, could one give the announcement! but no such announcement can be given; therefore the parlour fireside must ever put up with——, or what chance shovels in their way, and read, though with malediction, all the time. A good book has no way of recommending it except slowly and as it were accidentally from hand to hand.

I send you my constant respect and good wishes: and remain

Yours very truly always,
T. CARLYLE.

CAPTAIN D. L. RICHARDSON,
Greenfield House, Jersey.

The “Literary Leaves” contains criticisms of many poets and prose-writers, and also some original essays and poems; among the essays those on ‘Literary Fame and Literary Pursuits’ and “The Art of Reading” are the most notable. The poem on ‘Memory’ is worth quoting in full:—

When o'er this glimmering land of dreams
Life's morning meteors brightly play,
And hope's and fancy's blending beams
With hues celestial light the way,
How rich the varied prospect seems!
How like enchantment's fair array!
Alas! full soon the glories fade,
Like rays that orient skies adorn,
As clouds on clouds in lurid shade
O'er all their azure depths are borne,
And leaves Life's traveller, spell-betrayed,
A darkened path—a heart forlorn!
Ah! yes! though brightly fancy glows,
And fair the light by young hope shed,
More true, though sad, the soul's repose
When o'er the past, by Memory led,
We greet each scene she fondly shows,
And see the faces of the dead!

The sonnet under the title “Evening Walk on the Banks of the Ganges” is also remarkable:—

I wandered thoughtfully by Ganga's shore
While the broad sun upon the slumbering wave
Its last faint flush of golden radiance gave,
And tinged with tenderest hues some ruins hoar.

Methinks this earth had never known before
 A calm so deep—'twas silent as the grave;
 The smallest bird its light wing could not lave
 In the smooth flood; nor from the greenwood soar,
 (If but the tiniest branch its pinions stirred
 Or shook the dew-drops from the leaves), unheard,
 Like pictured shadows 'gainst the western beam
 The dark boats slept, while each lone helmsman stood,
 Still as a statue! the strange quietude
 Entranced my soul like some mysterious dream.

We shall give here one more specimen from the poems of the
 "Literary Leaves"; the poem entitled "Separation" —

I.

I ne'er shall know one moment's mirth
 When thou art from my side,
 I then shall view the cheerless earth
 As one dark desert wide.
 My soul may feel full many a care
 Though none should sadden thee,
 But save what thy dear breast may share
 No joy can smile for me!

II.

Ah, sweet one, e'en when thou wert nigh—
 And fate had less of fear,
 Thy radiant feature in mine eye,
 Thy light laugh in my ear;
 'Tis strange how fitfully a crowd
 Of thoughts have crossed my brain,
 That made thy fairy form, a cloud
 Thy voice, a sound of pain.

III.

The dreary darkness of despair
 Like storms in autumn's sky,
 Then fell on every prospect fair,
 I knew not whence or why;—
 If thus the dire depression came
 Before thy gleaming brow,
 Alas what agonies will tame
 My wayward bosom now!

IV.

The vows so fondly interchanged
 Each happy hour we met,
 Thy soul, indeed, must be estranged
 Ere thou can'st all forget;—
 But yet if we may meet again
 No mortal voice can tell,—
 And oh! with what bewildering pain
 I bid thee now farewell!

The bringing out of these two books—*Literary Leaves* and *Selections from the British Poets*—told heavily on Richardson's health and in 1842 he took leave. He visited the straits of the Indian Archipelago where he wrote “An Account of the Island of Jersey” though it was not published till 1844. Reaping no benefit from this sojourn Richardson came back to Calcutta and thence proceeded to London where he brought out a new book called *The Anglo-Indian Passage*. This volume is very valuable as a guide-book, but unlike most guide-books, it is embellished by pretty poems.

On the expiry of his leave, Captain Richardson became Principal of Krishnagar College, and in 1846 he was transferred to Hugli College as Principal. After two years of service there, he was again made the Principal of the Hindu College. About this time rumours were afloat concerning Captain Richardson's mode of life and the irregularities of his attendance at work. Explanations were asked and the result was the resignation of Richardson.

After leaving the College Richardson took up his time with literary work, and in 1850 two of his best works, “Literary Recreations or Essays, Criticisms and Poems, chiefly written in India” and “Literary Chit-Chat and Miscellaneous Poems” were published.

Among the poems of the latter book one or two samples may be quoted:

STANZAS.

The skies may wear their brightest blue,
 The field their freshest green,
 And things of every form and hue
 But breathe of bliss serene ;
 Yet all that sights like these reveal
 This sad heart must disown,
 For oh ! I cannot choose but feel
 In loveliest scenes alone !
 If thus when light and glory bless
 This strangely varying sphere,
 I may not taste the loveliness
 Since no kind heart is near ;
 When o'er the landscape shadows steal
 And low winds deeply moan,
 Alas ! how sadder still to feel
 In that dark hour alone !
 Awhile I haunt the glittering halls
 Where youth and beauty shine,
 Where gorgeous mirrors on bright walls
 Reflect each form divine ;
 And yet my heart I coldly seal
 And only weep and groan ;

For oh ! 'tis terrible to feel
 In joyous crowds alone.
 If thus I bear amidst the gay
 Where soft eyes magic dart,
 Where night is made more bright than day,
 This solitude of heart;
 'Tis worse to home's still roof to steal,
 Where once was heard the tone
 Of love and joy—and then to feel
 E'en there—e'en there—alone !

LINES TO THE MEMORY OF DAVID HARE.

(Composed to be recited by a Hindu.)

O'er the vast waste of waters—from a land
 Small but renowned—a proud undaunted band,
 Stirred with the thirst of conquest and of gold,
 Came—traded—triumphed ! History never told
 Of monarch—merchants—heroes wandering far—
 A stranger tale of traffic or of war.
 But can the busy mart, the battle-field,
 The dearest wealth — the brightest triumph yield ?
 Ah no ! e'en now our generous rulers claim
 A prouder guerdon and a purer fame.
 Though gold was gained and martial glory won,
 They knew their noblest task was not begun.
 They held our lands, but could not hold our hearts,
 Till changing force for kindness, arms for arts—
 They proffered the rich wisdom of the West,
 And poorest minds with priceless treasures blest !
 In this divinest duty many a heart,
 With holy zeal, hath well sustained a part,—
 All these our guides—an honour to their land—
 To ours a blessing—grateful love command,
 But in the glorious list, beyond compare,
 In types of light, behold the name of Hare !
 Yet oh ! my countrymen, why weep in vain ?
 If aught may cause an earth-freed spirit pain,
 'Tis when it sees in fond hearts left below
 An unresigned and unavailing woe.
 Be sighs above the grave breathed forth no more,
 The gods are deaf when men the past deplore,
 But let a friend's merit best be proved
 By imitative zeal in acts he loved,
 His memory thus with loftiest lessons rife,
 May well complete the purpose of life.
 And while our Hindu youths Mind's blessing share
 They will learn to venerate the name of Hare.

In 1853 Richardson was offered the Principalship of the Metropolitan College. He remained there till 1857 when on his daughter's death he proceeded home on leave. Richardson came back to Calcutta

and was appointed a Professor in Presidency College by Sir Peter Grant, then Lieutenant-Governor of Bengal, but as his name was on the invalid pension list he was precluded from entering the service again. At this time his last work, "Flowers and Flower-gardens", was published. It contains many interesting notes about the utility and beauty of flowers and flower-gardens, interspersed here and there with some pretty poems. We quote here a fragment of the piece about the trees and flowers of Bengal:—

Beneath Bengal's azure skies,
No valleys sink, no green hills rise,
Like those the vast sea-billows make—
The land is level as a lake
But oh! what giants of the wood
Wave their wide arms, or calmly brood
Each o'er his own deep rounded shade :
When noon's fierce sun the breeze hath laid,
And all is still, on every plain
How green the sward, or rich the grain !

* * * * *

Where sleeps the favored lotus white,
On the still lake's bosom bright—
Where the *champak*'s bosom shine,—
Offerings meet for Brahma's shrine,
While the fragrance floateth wide
O'er velvet lawn and glassy tide—
Where the mango tope bestows
Night at noon day—cool repose,
'Neath burning heavens—a hush profound
Breathing o'er the shaded ground—
Where the small-leaved tamarind
Tremble at each whispering wind—
And the long-plumed cocoas stand
Like the prince of the land,
Near the betel's pillar slim,
With capitals richly wrought and trim—
And the neglected wild snail
Drops her yellow ringlets pale—
And light air summer odours throw
From the *bela*'s breast of snow

In 1861 Richardson left India for ever; his old pupils presented him an address and a purse of Rs. 4,000, to which he replied with warm appreciation. "The Hindus", he said, "surpass all other people in what Bacon called natural piety—'Honor thy father and mother that thy days may be long in the land which the Lord thy God giveth thee'" On his return to England he was engaged by Sir John William Kaye, the famous historian of the Sepoy Mutiny, to assist him in editing

Allen's *Overland Mail* and *Homeward Mail*. He had several other literary interests beyond these. He died on the 17th of November, 1865, at Clapham, Surrey.

Such is the life story of Captain David Lester Richardson whom death has not parted from us, for his noble work lives behind and urges us to pay this humble tribute to him whose life was devoted to one generous end—

“To bless the Hindu mind with British lore
And truth's and nature's faded lights restore.”

SUKUMARRANJAN DASGUPTA,
Fourth Year B.A. Class,
Presidency College.

The Call.

By G. S. DUTT, I.C.S.

It's come! The call of calls! It's come at last!
Across a hundred seas the peal resounds;
E'er wid'ner thou, of India's freedom's bounds—
Britain! we hear thy distant trumpet blast!

They've heard their Emperor's call! They gather fast—
From Ev'rest to Colombo's Island shore—
From Bengal's plains and Chitral's heights they pour,—
Their ancient feuds to th' winds for ever cast!

Does India send a hero, contempt'ble, weak,
To plant the Empire's flag on loftier heights?—
The heroes of a hundred glorious fights:
The foe shall know the stuff of which they're made!—
When Jāth, Pāthān, Mārāthā, Rājput, Sīkh
In th' Empire's cause shall draw th' avengeful blade.



Libraries and their Uses.

(With special reference to the present condition of India).

WITH the onward march of civilisation the shrinkage of the world has been effected, the art of printing is progressing with rapid strides, thought-production, thought-borrowing and thought-exchange are going on briskly in the intellectual mart of the world, and above all, money and author are begetting each other with a luxuriance of prolificacy which can give points to the vermin or the *Comma bacilli*. The result is that we have books—those tangible expressions of intangible thoughts—coming out of presses *galore*. It has been estimated by a person of more than ordinarily imaginative turn of mind that if all the books were reduced to liquid and the presses metamorphosed into a mountain-gorge, we would have books issuing from the presses in a volume and with a momentum that would well vie with the Niagara Falls. Of Free Public Libraries alone, the civilised world now counts over eighteen hundred, with nearly seven hundred millions of books and manuscripts. To this British India contributes the modest quatum of twenty-four with nearly seven hundred thousands of books and manuscripts. The new (C.U.P.) Edition of the *Encyclopaedia Britannica*, Vol. 16, p. 561, contains an interesting account of some of the most notable Public Libraries of India. Even as these lines are being penned, libraries are perhaps sprouting up like so many mushrooms all the world over. Well-equipped and well-conducted, their power for good is incalculable; ill-equipped and ill-conducted, they are potent for a lot of mischief. Repositories of ignorance and knowledge, grotesque medleys of folly and wisdom, strange blend of fun and philosophy, unconscious creators of epochs in history, mute teachers and seducers of mankind, stimulators of thought and action—beneficent as well as mischievous—libraries have exerted an influence, direct and indirect, on mankind, which no calculus can integrate, but which is none the less potent and far-reaching. How many an epoch-making theory and doctrine can be traced, through the brains of the propounder, to an obscure nook in a library! How many a bloody war or revolution has had its origin in the stimulus imparted to the hero or heroes of the hour by the contents of a library! How many a mighty conflagration—whether political or social—has been the outcome of the Promethean spark emitted from those intellectual and moral dynamos! How many a revolutionising invention or event has fructified as the result of the sap being ultimately drawn from

within a book-shelf! Such is a library and such the potency of its contents. Too much importance, therefore, cannot be laid on a consideration of its utility, its proper conduct, its use and abuse—and especially in the present condition of the country.

Libraries are ordinarily of four kinds —

- (1) The Public or Free Library ;
- (2) the Proprietary or Publishing Library ;
- (3) the Private Library ; and
- (4) the Circulating Library.

Of these, (1) the Public or Free Libraries are necessarily few in number here in India, and are almost all wholly maintained and conducted by the Government. Not until India grows prosperous and fortunate enough to give birth to one or two Carnegies (endowment of Free Libraries being one of the pet eleemosynary hobbies of the American multi-millionaire) can we expect a decent number of them in our country. It is one consolation, however, that the few that do exist are being made the most of by our scholars and students. This the goodly number of readers who may be daily seen in the Imperial Library poring over the volumes with unquenchable gusto will amply testify. To all classes of readers—from the butterfly reader of dilettante interest to the “library-vorous” *savant* or the ardent research scholar—it is a place of pilgrimage. For nowhere else in the metropolis is a larger or rarer collection of books and manuscripts to be found. (2) Then come the Proprietary or Publishing Libraries ; although these are started and conducted on purely mercenary principles, still they contribute to the growing taste for reading and the widening of the intellectual horizon of the reading public in their own way. In the perpetual flow of thoughts and sentiments that is going on throughout the civilised world through the medium of books, these are the necessary conduit pipes for completing the circuit. They not unnaturally view with envy the rapid multiplication of the Private and Circulating Libraries. but a little deeper consideration might convince them that their proximate loss is amply set off by prospective gain in the long run. For, the greater the number of Private and Circulating Libraries the more the demand for books and the more the orders for these Publishing Libraries. In our country the bulk of these—the lesser ones in particular—deal generally in school and college text-books only ; but it is to be hoped that with the growth of a taste for reading for its own sake that is already visible in our country, they will be stocked with sufficient materials for coping with the increasing intellectual appetite of their customers. (3) As to Private

Libraries, there is not much to be said. Their size and quality will no doubt vary with the intellectual capacity and tastes of their owner. Some of the most noticeable private libraries are those belonging to the late Pundit Ishwar Chandra Vidyasagar, Babu Pratab Chandra Ghosh, Sir Asutosh Mukherjee, the late Mr. Hari Nath De, the Law-libraries of the late Sir T. Palit, and of Sir Rash Behary Ghosh, the Khoda Baksh Library of Bankipore (recently dedicated to the public by the worthy son of its illustrious owner), etc. (4) Lastly, we come to the Circulating Libraries or Reading Clubs, as they are called in popular parlance, in our towns and cities. These come within the purview of the present essay in an especial degree and therefore deserve a much more detailed consideration. In the present state of our country, the bulk of the ordinary educated public are more likely to be benefited and influenced by these than by the others. The Public Libraries will, at least for some time to come, continue to be utilized by the *savant* and the scholar, whose number is yet very limited: the Publishing Libraries have mostly for their customers the College and School students who more often than not take to reading the books out of compulsion rather than a genuine taste; while the big Private Libraries, referred to above, will continue to be the possession of the fortunate few who are minions both of the Goddess of Wealth as well as of the Goddess of Learning. It is the Circulating Libraries, then, which, besides being the outcome of a real craving for reading for its own sake, are peculiarly calculated to mould the opinions, thoughts, and morals of the ordinary educated public.

To begin with, the utility of a Circulating Library is obvious enough. It is beyond all cavil or question. It is not merely a collection of books. It promises much more than the intellectual profits and pleasures which a perusal of good books connotes and denotes. It has an educative value all its own. To the community at large it affords a centre of light and culture, a healthy moral zone which does every one good to move in and breathe in. To the individual it affords, amongst other advantages, the companionship of books—which means the companionship of the great thinkers of all ages and climes, the access to the accumulated treasury of the best thought and sentiments of the world. For the moment it constitutes the “the sweet oblivion of daily toil” while for all time to come provides the yeast of uplift and progress, love and sympathy, with which to leaven life. It is, in a sense, a well-equipped armoury for fighting life’s battles. Above all, it has what has been felicitously described by Adams, its “therapeutic use” as “the

great neutraliser of the special evils and temptations of our callings, the original imperfections of our character, the tendencies of our age or of our own time of life." There is no end to the possible amount of good which this "Therapeutic use" could not be put, especially in the present state of our country. On the one hand, the life of an ordinary individual—of the educated middle class—with all its hard struggles, its humdrum, matter-of-fact, daily routine, its narrowing, cramping vocations, yearns for some silvery streaks with which to irradiate its sombre surroundings, some anodyne for its bruises and lacerations, some inspiration with which to enlarge and "lift itself on an ample pinion out from the poor circle of egoism." On the other hand, there is the no less unfortunate individual, suffering from a plethora of leisure and luxury, eager for some recreation wherewith "to ease the anguish of a torturing hour," some grease with which to accelerate the motion of the heavy and clogged wheels of his life, some stuffing with which to fill in the voids of his aimless and workless existence. For these two extremes, no less for the various grades and shades of life between them, a library, such as we are contemplating, is a veritable panacea. The busy, money-making, world-wise lawyer, whose mind is engaged day and night in picking holes in his adversary's case or indulging in the familiar forensic foible of hair-splitting, should spend some time, at least, in reading books of a large and imaginative nature, such as the *Ramayana*, some of Kali Dass's immortal epics, Emerson's or Ruskin's Essays, Bankim's 'Ananda Math', and so forth. These will remind him that there are better things in this world than deeds and documents, law reports and law courts, clients and current coin. For the doctor with a roaring practice, whose whole being is absorbed in treating bodies only and who lives in an atmosphere of death and disease, there is nothing like a dose or two every night of books like the *Bhagabat Gita*, Arnold's 'Light of Asia,' Sir Oliver Lodge's 'Survival of Man' and the like. These will furnish a potent antidote for his sordid materialism and turn his attention to the divine Spirit inside this perishable corporeal frame, which no illness can impair or death destroy,—to an immortal life beyond where there is no occasion for the pharmocopaeia and the pharmacy, the lancet and the stethoscope, the ice-bag and the feeding-cup. . The professor of mathematics, wearied by his abstruse mental calculation, will be at once reformed and refreshed by a drama of Shakespeare, Goethe, or Kalidas, or a poem of Shelley or Rabindra Nath. The self-centred, dry-as-dust *Mahajan*, whose days are spent in calculating profit and loss and his nights in

dreaming of them, should expiate by a course of the biographies of such selfless relievers of suffering humanity as a Howard or a Nightingale, a Lalla Babu or a Vidyasagar, that would remind him that the best way of using money is not by hoarding it up nor using it as an instrument for squeezing out interest and compound interest from those helpless sponges—their debtors. The stern and cynical officer, dealing constantly with crimes and criminals and prone to look upon the bulk of his kind as deserving of nothing but the cat-o'-nine and the gaol, should devote at least a part of his leisure to such writings as Shishir Ghose's 'Amiya Nemai Charit,' Hugo's 'Les Miserables' or Tolstoi's 'Resurrection' that would supply the necessary solvent to his petrified heart. The pampered, ease-loving heir, the creature of frivolity and gaiety, may be corrected by a course of 'Imitation of Christ' or 'Ram Krishna Kathamrita.' For the dull dyspeptic or morose hypochondriac, or the jaded, care-worn clerk, a few books like Holmes's 'Autocrat of the Breakfast Table,' Dickens's 'Pickwick Papers,' Mark Twain's 'Innocents Abroad,' or Bankim's 'Kamalakanta' will furnish the necessary alterative and tonic. Similarly, a tendency to vague generalisations or dreamy sentimentalism may be neutralised by the logical and reasoned writings of a Herbert Spencer or a Mill, or some well-written and interesting scientific work. The inert stay-at-home will find in some stirring book of travel a most effective stimulus for overcoming his inertia. Lastly, there are the readers of the fair sex whose number is, happily, steadily on the increase in our country. It is true that the bulk of them are devoted exclusively to the perusal of fiction and other light literature. But that is mainly because of the reckless and unhappy selection of the books in the libraries they use. This, it is needless to say, imparts a sordid taste to its male readers which through them affects the female readers. To this class, then, a healthy and judicious selection will furnish the necessary corrective and render their leisure hours sources of unalloyed felicity, not only to themselves but to their husbands and children, brothers and sisters. Thus every one resorting to it may find here materials firstly for giving some exercise to those faculties that are neither demanded by his (or her) daily avocations nor encouraged by his (or her) innate dispositions, and, secondly, for correcting any erratic tendencies or shortcomings that may have been either inherent in his (or her) nature or fostered by his (or her) occupation and environment. Lastly, the most direct and important advantage of such a Library is that it generates and propagates a taste and habit of reading. A Library which has effected this

has amply justified its *raison de être*. For this, if not for anything else, a Library is to be hailed as one of the supreme blessings of modern civilisation.

The next point in connection with a Circulating Library is its equipment, a task as responsible as difficult. In equipping it, the conductors must not merely look to the intrinsic worth of the books themselves but to the classes of readers as well as the special circumstances, if any, of the age and the country; otherwise it will hardly come up to the standard of utility indicated above. On the one hand, they must, as purveyors of the intellectual pabulum of the reading public, see that their store not only offers the latter no unhealthy condiments but contains materials for neutralizing the multifarious evils and dis tempers that their minds are specially exposed to, that it is not stuffed with the flotsam and jetsam of other Libraries, or the prurient productions of base sensation-mongers calculated to increase the number of moral rakes or visionary ne'er-do-wells who are by no means few or far between in our country. On the other hand, they must not ply the sieve too rigorously. They must remember that the primary object of such a Library is not to provide a *sanctum* for the specialist or the *savant* or the research-scholar, but, as has already been observed, to create and foster a genuine taste for reading and to popularise healthy and pleasant literature: that our society is a complex texture in which persons of various tastes, various callings, various persuasions and various grades of intellect have been woven together: that, after all is said and done, the majority of the readers will, after a day's trial, or out of sheer inability to appreciate anything higher or better, take to what is called literature of the lighter vein. So that if you make the collection too rich or too jejune, you will but scare away the rank and file of the readers and the Institution will simply wither for want of support. An ordinary Circulating Library, therefore, has necessarily to be an *olla podrida* in which books of various sizes and subjects, and exponents of all shades of thought, opinion and sentiment, and authors of all ages and climes, have been dished up. It has not merely to satisfy the intellectual cravings of the advanced few but also, and perhaps in a greater degree, to titillate the palate of the ordinary educated and half-educated readers, among whom none are more worthy of mention in this connection than the women-folk of our country. The bulk of the intellectual output of such readers, as every one knows, is furnished by novels or the doctored articles of the popular magazine writers, and they more appreciate the

felicitous skirmisher with the pen who can say nice things in a crisp, neat way than the serious reasonings of the philosopher or the high-falutin of the rhetorician. Their predilection for this form of literature after all should by no means be discouraged, but, within reasonable limits, be encouraged ; firstly, because it affords them the much-needed mental recreation, and, secondly, because it may increase their appetite for reading up to a point where they will no longer be satisfied with merely the lighter side of literature. To subserve all these ends, therefore, our model Circulating Library must steer clear of the Scylla of a rigid over-puritanism on the one hand, and the Charybdis of a flaccid latitudinarianism on the other. The tough Philosophy of Plato and Kant, Herbert Spencer and Mill, the Upanishads and the Sankhya, must be soaked with the succulence of Shakespeare and Kalidass's dramas, or Shelley or Rabindra's poetry ; the rich and heavy writings of a Bacon or a Burke, Bhatti or an Akshay Datta must be seasoned with the saving salt of Hugo and Bankim's novels or Mark Twain's and Dinabandhu's wit and humour.

The importance of a careful selection of book receives additional emphasis from the present state of our country. It may fitly be compared to a surging sea out of which a number of abnormal products are being churned up by the transition we are passing through. There is, for example, the inflammable spirit, too ready to explode at contact with the tiniest spark from an incendiary author. There is also the plastic, impressionable nature who can be twisted and moulded into the most uncouth forms by the specious vapourings of an irresponsible writer. So that the responsibility of those that take upon themselves the task of providing the public with reading matter can scarcely be exaggerated. They are at least indirectly responsible for the safe piloting of the country through the eddies and whirlpools of a mighty transition. Any indiscretion in rigging or ballasting it might destroy its equilibrium and bring about consequences too disastrous to be contemplated with complacency. A careful selection then may have the effect not only of starving to death these abnormal spirits but also of counteracting the pernicious nostrums they may have swallowed elsewhere.

Next to the proper equipment of a Circulating Library, the problem that confronts its promotor is its efficient administration and the cataloguing of the books. No hard and fast rules as to administration can be laid down and each must make out rules suitable to its own peculiar circumstances. As to the cataloguing of the books, in

case of the bigger libraries, the system of Card or Sheaf Indicators which are fast supplanting the printed catalogues in Europe and America, can conveniently be introduced. For a complete catalogue of such a Library is out of date the moment it is printed and in many cases the cost is very great while only a small number is sold. A fairly complete description of these, as also of other cognate matters, is given in page 560, Vol. XVI of the new (C.U.P.) Edition of the Encyclopaedia Britannica. Where catalogues are printed they should, as far as possible, be of three different forms, viz., according to subjects, according to authors, and according to the titles of the books, all, of course, alphabetically arranged. Monthly or at least quarterly bulletins announcing all new acquisitions should be a feature of all libraries, even the modest ones. A very useful innovation to which some of the bigger Circulating Libraries can be put is to fit up and send out small and eclectic peripatetic branches periodically into some of the more important villages where there are a sufficient number of residents able and eager to appreciate good books, but no libraries to appease their intellectual appetite. The village schoolmaster, the village postmaster and several others in a village who are not ignorant of the stimulus of books but who cannot afford to have it, will be brought within the range of their beneficent operations. Besides, such libraries may also serve to stimulate them to combine and start libraries on their own account. The Circulating Libraries may thus be converted into so many foci of intellectual enlightenment, radiating their rays into far-off obscure corners, into so many effective disseminators of knowledge scattering its seed broadcast through the vast intellectual wastes and fallows of our country. As these lines are being written,* the daily papers publish a most interesting account of a Resolution of the Baroda State, containing Rules and Regulations for opening of Village Reading Rooms and Town Libraries on an extensive and liberal scale throughout the State which already boasts of over 241 Free Libraries. The following rough synopsis of these Rules and Regulations is taken from one of these dailies. "Thus, when the citizens of a town with a population of more than 4,000 souls raise any sum not exceeding Rs. 300 for the maintenance of a library, the rules render it incumbent on the local municipality or the Panchayat as well as the State Library Department, to contribute an equal amount annually for its upkeep. In the

* This article was written in June.

case of villages, should any hamlet furnish Rs. 50 annually for a free Reading Room, the Panchayat and Central Library Department shall contribute to it a like sum annually. Provision is also made to present vernacular books of the value of Rs. 100 to form the nucleus of village libraries whenever the inhabitants shall have raised Rs. 25 among themselves and paid the amount to the State Library Department and for the supply to such Libraries, by *Travelling Libraries*, of vernacular books sent out from the headquarters. A similar Rule provides for *regular Travelling Libraries* to be sent to town Libraries. All State Libraries shall be free, the village libraries shall be under the direct charge of the village schoolmasters and each town Library shall have the general control of all village Libraries in its neighbourhood. The State will not support more than one Library in any village or town; and will entertain proposals for raising funds for library purposes by local bodies by means of a special taxation. These comprehensive Rules will, it is to be hoped, go far towards creating a taste for reading among the Gaekwar's subjects and spreading enlightenment among them by means of books, newspapers and periodicals."

In the large cities and towns where the Circulating Libraries command a sufficiently wide circle of readers and subscribers, their popularity and usefulness may be further enhanced by holding Library Examinations as in Europe and America. In the United States there are regular Library Examinations and degrees are conferred and prizes and medals awarded on the results of such examinations. The establishment of Library Schools and conferment of degrees may be ideas too dreamy to be realized in the present state of our country, but the holding of examinations (especially of readers of the student class) may well be inaugurated by some of the more prosperous of these libraries.

We have seen how libraries generally and Circulating Libraries in particular can and do exert vast influence on the progress of mankind. They directly influence the tastes and opinions, thoughts and sentiments of their readers and through them and indirectly of those with whom they come in contact as well as of the authors who cater to their tastes, and, ultimately, through all these factors, the weal or woe of the country, especially a country like ours. They can do more to popularise books and create and transmit a genuine taste for reading than all the Universities, Colleges and Schools put together. Once this taste is induced, its filtration through the hitherto unaffected strata

becomes merely a question of time and its direction into healthy and useful channels is brought within the range of the feasible. They bring knowledge within the reach of everybody. Provided a man has the genius or the capacity or a genuine yearning for knowledge, no longer can "chill penury suppress his noble rage" or shut him out from the carefully garnered stock of the knowledge and wisdom of his race.

To conclude with an analogy. A Library that does come up to our ideal is, intellectually speaking, a restaurant-cum-sanatorium. As a restaurant, it has its diversified *menu*, to suit all palates, furnishing nutriment that is not merely rich and healthy but is also served up with plenty of sauce and spices to give it zest and piquancy, care being taken at the same time that the quality and quantity of the sauce and spices do not defeat their own object by producing moral toxin or arresting mental metabolism. As a sanatorium, the acutest moral distempers may yield to its salubrious atmosphere and therapeutic properties, that cheer without inebriating, that cure without producing any unhealthy reaction. That all this is not the language of hyperbole, may appear from one consideration. Eliminate all the libraries from the world, and imagine the result. Why, you will not merely be wiping off at least half the factors contributing to the world's progress, but giving it a set-back that will land us perilously near the Stone or the Iron Age.

M. N. B.

A Fiasco.

(*For Little Children.*)

EXCUSE me,' said the Camel, 'I really can't stand the smell of a Goat.' So saying, he moved to another part of the hall.

It was the fifth annual meeting of the All-Animal Fraternity League, and the Camel was moving the proposition : 'That this House deplores the existence of Mankind.' The Goat had been sent to him by the President to ask how much longer he intended to speak.

'Hear, hear,' said the Bullock. Far down the Hyena laughed. The Goat's message died on his lips, and he scratched his beard trying to look self-possessed.

The Kangaroo jumped to a point of order. 'Sir,' he said, addressing the Chair, 'it is evident that the Camel's breeding leaves much to be desired.'

'Sir,' cried the Camel, raising his rancorous voice, 'it is evident that the education of the Hon'ble Member has been sadly neglected. The breeding of animals is a matter which owes its inception entirely to human agency. I want to repudiate breeding with all the emphasis I can command.'

The Pig grunted assent. 'I was saying,' the Camel went on, 'that the Ape claims to have invented Man after his own image. Perhaps the Hon'ble Ape will explain—'

'I protest, Sir,' said the Ape, 'against such base calumny and sinister misrepresentations. What I have always said and still maintain—'

'Order!' growled the Tiger, disturbed in his sleep. '—Is that Man but an experiment, who, like the monster is *Frankenstein*—'

'The Hon'ble Ape, Sir,' said the Camel, 'seeks refuge in pedantry—the infallible badge of the humanised. He is no better than a spy from the enemy's camp.'

'Sir!' cried the Ape, in righteous indignation. There was a great commotion among the Ape's supporters. The Gorilla was heard to grind his teeth, the Mandrill swore in gibberish, and the Baboon hurled a mango branch at the Camel's hump. It hit the Rhinoceros on the horn.

The Goat clapped feebly in approval. The President shook his mane and roared, 'Order, order! Sir Humphry Camel is in possession of the House. Members are requested to reserve their acrimonious discussions for the meetings of the Mutual Recrimination Conference. Those wishing to take part in the Conference will kindly give their names at the end of the meeting.'

Rhino: 'Sir, I beg to move that a Select Committee be appointed to inquire about the damage done to my only horn.'

The motion was overruled.

Meanwhile the uproar had spread from the Ape's corner over the whole House, and had become general. The Jackal, for some reason or other, had been calling the Bulldog an ass, and the Bear had been pulling the Mule by the ear. The Goat was excitedly explaining to the Buffalo that the Camel was a swine. In the midst of the hubbub the Tiger was heard to exclaim, 'Is that idiot Camel jawing still? Isn't it time for lunch yet?' The remark caught the President's ear, and he asked his orderly Wolf if lunch was ready.

'It is ready, Sir.' said the Wolf, baring his teeth in a smile, and looking significantly on the audience. Then followed a terrific roar,

and a spring, and a leap, and shrieks of startled fear, and a general stampede and chase.

Far down the Hyena's laughter could be heard.

The proceedings came to a close at about 4.30 a.m.*

K. C. S.

Napoleon or Louis Quatorze ?

EARLY in the war a cartoon appeared in an English comic paper which attempted to emphasise the significance of the following collocation of men and dates : Napoleon, 1815—Kaiser Wilhelm, 1915. The similarity which exists between the aims of the two men—the challenge to all Europe which both flung out, and the obvious desire in both to re-establish the empire of Charlemagne—has made it the fashion to compare the Kaiser with the great Corsican. The French, with all their men at the front, have but little scope for journalism, comic or otherwise, in these days ; but one of their comic papers, which keeps alive by means of borrowing the cartoons of the English and American papers, reproduced the Napoleon—Kaiser cartoon referred to above. But it added a protest against any attempt to place the two men in the same category.

The protest was partly, though not wholly, justified. Napoleon and Kaiser *have* undoubtedly much in common. Napoleonic “frightfulness” fell short of Kaiserian “frightfulness,” it is true, but none the less Napoleonic methods of aweing a conquered population were not gentle. The Kaiser’s appeal to Islam is again Napoleonic. Hadji Mahomed Wilhelm, of whom Persian reports speak, irresistibly recalls the Corsican masquerading in Cairo. The impotent Berlin decree establishing the submarine “blockade” against England, followed by the British Orders in Council forbidding the exit or entry of goods to or from Germany, cannot but recall Napoleon’s Berlin Decrees and the subsequent Orders in Council of England. The parallels are numerous and striking. But—and here the French are right in their protest—the men—as men—are poles asunder. In diplomatic skill, in military genius, in knowledge of men, in short in greatness, the Kaiser is as a rushlight to the sun.

If we desire a real parallel to Kaiser Wilhelm, Louis the Fourteenth of France provides a far more exact one. Some have suggested

* Extract from the Minute-Book of the All-Animal Fraternity League, Fifth Annual Meeting.

the Corsican's nephew—but no! Kaiser Wilhelm is a better man than Louis Napoleon though he is like to come to a similar, or worse, end. Let us examine the suggested parallel with “le grand monarque.”

Wilhelm II and Louis Quatorze both came to a throne made illustrious by others Bismarck and Moltke have their counterpart in Richelieu and Mazarin. Wilhelm dismissed Bismarck; Louis XIV was about to drop his pilot, Mazarin, when the latter escaped that ignominy by death. The young Wilhelm flouted his father and his mother. It is a pleasant habit the Hohenzollerns have. So did Louis XIV. Each maintained one of the finest spy-systems ever known. Both employed the policy of “frightfulness” in war. The ravaged Palatinate finds its parallel in raped, unhappy, Belgium. The future traveller in Europe will view the wreck of Louvain and Rheims, and then pass to the wrecked castles of the Rhine, with a vivid sense of the parallel between the two Tamerlanes of Europe.

Both made the same glaring errors in statecraft. Both went to war with sea power and land power at the same time—surely an obvious “howler” if ever there was one. Both aimed at colonies and sea power, and built big fleets. Wilhelm kept his right eye on the lowlands and his left on the Atlantic. So did Louis. The one was pushed back by the Triple Entente, the other by the Triple Alliance.

But this is not all. Marvellously, miraculously exact, the parallel continues. Listen to Admiral Mahan:—

“When Louis XIV took the government into his own hands, in 1661, there began to be seen an astonishing manifestation of the work which can be done by absolute government ably and systematically wielded. That part of the administration which dealt with trade, manufactures, shipping and colonies was given to a man of great practical genius, Colbert. He pursued his aims in a spirit thoroughly French [thoroughly German we should say now]. Everything was to be organized, the spring of everything was to be in the Ministers' Cabinet. To organize produce: and merchants as a powerful army, subjected to an active and intelligent guidance, so as to secure an industrial victory for France by order and unity of efforts; to obtain the best products by imposing on all workmen the processes recognized as best by competent men; to organize seamen and distant commerce; and to give as a support to the commercial power of France a navy established on a firm basis, were Colbert's aims. Here then was seen power, absolute, uncontrolled power, gathering up into its hands all the reins

for the guidance of a nation's course, and proposing so to direct it as to make it, among other things, a *great Sea Power*."

Substituting Germany for France throughout, is not this an exact parallel to the work of the Kaiser during the last 25 years?

The result, both in France and in Germany, was a tremendous increase in agriculture, manufactures, shipping, internal and external trade, while colonies and monopolised markets rapidly increased. Louis XIV destroyed it all at a blow by ambitious wars of aggression. Wealth and power were coming of themselves; in an attempt to accelerate the process by aggressive war, Louis XIV ruined the very springs of French wealth and power. In the same way, as Professor Coyajee has shown in the *Calcutta Review*, wealth, power and influence were accruing to Germany by peaceful processes at an enormous rate, so that sooner or later she would probably have overhauled England and France. At a blow, by aggressive war, Kaiser Wilhelm has toppled over the whole structure. Hamburg is a dead port, Germany is bleeding to death, and when his millions of soldiers, at the conclusion of peace, return to their civil avocations, hundreds of thousands of them will find that their work has disappeared. Militarism and a manufacturing and trading economy are incompatible. What will they do then? Louis XIV's mismanagement of France left his dynasty doomed. Wilhelm seems likely to do the same.

"The agricultural class, manufacturers, commerce, and the colonies, all were smitten, and the order established in finances was overthrown." So wrote Mahan, and one might almost think he was writing of present-day Germany.

One or two more parallels and I have finished. Under Louis "the orders given to the squadron chiefs were to keep the sea as long as possible, *without engaging in actions* which might cause the loss of vessels difficult to replace." So says Mahan. "Too often our squadrons left port with the intention of *avoiding the enemy*," wrote a French naval historian "*as if to fall in with him would be a piece of bad luck*." And so it is to-day. The German cruisers on their way to Scarborough accounted it very bad luck—in fact perhaps rather unfair—that gallant Beatty with the "Lion" and the "Tiger" should have met him and demonstrated the fact that the "Lion" and "Tiger" possessed distinctly sharp claws.

Hear Mahan once again: "The small squadrons that got to sea were destroyed by vastly superior force; the merchant shipping was swept away, and the colonies fell into England's hands." So he wrote

of Louis XIV. Need he have changed a word, had he written of the war to-day?

Frenchmen then called Albion perfidious. Germans to-day sing hymns of hate about treacherous England. But England is not perfidious; she keeps her faith as perhaps no State in history has ever kept faith. But she is certainly fortunate, and in nothing more fortunate than in this, that at crises in her history, swelled-headed, short-sighted despots of the type of Louis XIV and Wilhelm II undermined their own power by their desperate folly and thereby became the unwilling architects of that mighty fabric, the British Empire.*

E. F. OATEN.

Dr. Jagadis Chandra Bose in America.

IT was when the crimson sun of January was sinking rapidly beneath the horizon that I first met, at the Hotel Del Prado in Chicago, Professor Jagadis Chandra Bose, the Indian scientific wizard, who makes plants record their own feelings. "Come," he said in a low tone in response to my second sharp rap at the door. "Well, well; how were you able to find me out here?" was his friendly greeting which was accompanied by a cordial smile.

While in America, Jagadis Chandra Bose has simply been swamped with letters and telegrams for lecture engagements from Maine to California. He has had so many calls for lectures from various learned scientific societies, colleges, and universities, that if he could speak twice a day and every day in the week, he could not hope to comply with all of these invitations in much less than a year. As it is, he will be in the United States only a few weeks.

Professor Bose has spoken before such learned bodies as the New York Academy of Sciences, the American Association for the Advancement of Science, the Brooklyn Institute of Arts and Science, the Philosophical Society of Philadelphia, and joint meetings of the Academy of Science, the Botanical Society, and the Bureau of Plant

* [I am indebted to the May number of *The Nineteenth Century and After* for the idea and part of the substance of the preceding remarks. Owing to it appearing during the vacation, many students may not have seen Sir J. H. Vossal's wonderfully suggestive and brilliant article, entitled "Louis Quatorze the Second," and I have therefore attempted to reproduce in the *Presidency College Magazine* the main points which he makes, adding some of my own.]

Dr. Jagadis Chandra Bose in America.

Industry at Washington. Among the larger universities, he has given addresses at Harvard, Columbia, Iowa, Illinois, Chicago, Michigan, and Wisconsin.

One of the largest and most appreciative audiences that have greeted him was at the Cosmos Club in Washington City. The meeting was to commence at eight in the evening; but long before the scheduled time the big lecture hall was literally packed: there was no standing room anywhere. Prominent men and women were seen perched upon the window sills or even seated on the floor. Dr. Graham Bell, the inventor of the telephone, came twenty minutes before time. But the crowd at the door was so large that he could not get within a half block of the hall. The enthusiasm of the indomitable inventor was not chilled, for on the following day he called together a group of the noted savants of Washington at his home in honour of the distinguished Hindu scientist.

Everywhere Dr. Bose has met with a very hearty welcome from the people of the American Republic. Even the Honorable Secretary of State, William Jennings Bryan, invited him to give a demonstration of his work at the State Department in Washington—an honour of unusual significance. Wherever he appears with his "cunningly simple instruments," wherever he gives a demonstration, he is immediately recognized as one of the really great men of science, whose labours promise to open a new era in anatomy, botany, biology, and perhaps also in psychology. Dr. Bose has been made the subject of many magazine articles, newspaper editorials, cartoons, and poems. It was his recent visit to New York that inspired the following *Song to Sensitive Plant* which appeared in the *New York Times*:

Be kind to the hypochondriacal plant!
Its nervous and ladylike qualms,
Its delicate frailty you surely must grant,
For it faints at all songs except psalms.

Speak low near a maiden fern! You will note
It trembles with fright if you shout,
It flourishes best when you've got a sore throat,
And is pleased by the very devout.

Be firm with a rubber plant! Put it away
When your friends come to make a call.
It is dreadful to find how a secret will stray
When you thought no one knew it at all.

Be gay near begonias! Their gorgeous array
Betokens a sensitive blush.

To secure best results, a story risque
Will bring the desirable flush.

Then be good to the plants! For a great botanist
Says their sensitiveness is intense.
They are shocked if a girl should chance to be kissed,
And will die at a moral offence.

As is well known in India, Professor Bose had been sent by the English Government to present to the countries of Europe the results of his scientific investigations: it is purely a scientific mission that has brought him to the West. On the Continent, he lectured at Vienna and Paris, and was on the point of going to Germany when the present world cataclysm burst forth. While in England he spoke, among other places, in London before the Royal Institute, at Oxford and Cambridge Universities, at the Imperial College of Science in London, and before the Royal Society of Medicine.

His discoveries evoked great enthusiasm in England, and while in London, his private laboratory was the Mecca of such leaders of English thought as Mr. Arthur Balfour, the former Prime Minister; Sir William Crooks, President of the Royal Society; the late Sir James A. H. Murray, editor of the noted "*Oxford New English Dictionary*"; Sir James Reid, the King's Physician; Bernard Shaw, the famous dramatist; and Lord Crewe.

The general topic of Professor Bose's lecture is plant autographs and their revelations. The lecture is illustrated with lantern slides and experiments. He tells in his discourse that the plants feel pain and exhilaration as do animals, that the stimulus to motion in plants is of the same nervous character as in animals. All plants, he avers, are sensitive, and in some of them there are tissues which beat spontaneously like the heart-beat of the animal. These heart-throbbings are affected by drugs in the same manner as are the pulsations of the animal heart. The experiments which he shows include the measurement of the perception time of the plant, the speed of its nervous impulse and the reactions to various anæsthetics and poisons. The records of these experiments prove the existence of throbbing, pulsating organs in plants.

Professor Bose is not an orator. Nor does he care to be one. He is simply a clear, forceful, and convincing speaker. He walks slowly to the edge of the platform, stands very still with left hand behind him, and looks at the audience for full half a minute. Everybody is perfectly quiet. One could hear a pin drop. Men and women

lean forward to catch his first words. "Ladies and Gentlemen," he says, and then plunges at once into his subject. In spite of the rather formal "Ladies and Gentlemen," he is very informal. He does not "orate": he talks. He has discovered some wonderful things, and he is very much in earnest when he tells his audience about these discoveries in his gentle, quiet tone of voice. Robert Burns made poetry out of his works and days. Jagadis Chandra Bose finds a poem, a drama, and an epic in his scientific researches. He is intoxicated with the fascination of his work. He speaks, therefore, out of the fulness of his heart. He has no time for the gaudy arts of the professional spell-binders. He talks to his hearers—just talks. At times they laugh a little, but for the most part they just listen, forgetting even to applaud. Mr. Bose may safely be pronounced a success on the platform. And his success is to be attributed largely to the earnestness and the magnetic presence of the man.

Professor Bose is the despair of American reporters. From the journalistic point of view, he is a difficult "subject" to handle. One would sooner "cover" a dozen diplomats from Tokio, Petrograd, or London than interview Mr. Bose. He does not like the lime-light. He has a dread of American publicity. If he can sense that a newspaper man is after him for a "story", he is sure to keep quiet. When asked questions of which he does not approve, Professor Bose withholds his answer laughingly. But he does it in such a pleasant way that no one can take offence. Of course Dr. Bose cannot be blamed, for he has reasons to be distrustful of some of the American journals. Not long ago a newspaper in the city of Detroit copied a chapter from one of his books in such a way as to make it appear as though the story were a special article on "Plant Response" written by the author himself for the exclusive use of that paper.

There is something peculiarly attractive about his personal appearance. His thick wavy hair, which is tinged with gray, has a tendency to project itself on either side of his massive forehead in poetic fashion. There is a bit of pride about his burning black eyes, that look life squarely in the face and challenge it. His face is the face of a man sure of himself, the face of a high-bred, intelligent, confident, successful, yet not altogether satisfied, man. It is a handsome face, full of expression. Professor Bose has a strong physique, and a slow and resolute stride. Even with some signs of middle age in his face and figure, he gives one the impression of a man of great physical energy. He has a deep chest and broad shoul-

ders. Yet he is not an athlete; everything about him suggests the student.

In describing the English statesmen, Charles Fox and William Pitt, Napoleon Bonaparte once remarked that "in Fox, the heart warmed the genius; in Pitt, the genius withered the heart." Professor Bose seems to be more like Fox than Pitt.

Dr. Bose is pre-eminently a scientist. He is not, however, a scientist of that type that possesses a brilliant but a gelid intellect incased in an insulated covering. Profoundly intellectual as he is, Mr. Bose is more than a thinking machine. He has a throbbing, feeling heart: he is human, very much so. He sees deeply and, like Lincoln, knows that the essential brotherhood of man is a glowing reality, not a mere lofty abstraction. A born democrat, Mr. Bose seems to be just as much at home with the go-ahead "plain people" of the United States as with those moss-grown European aristocrats who wear outlandish knee-breeches, powdered wigs, and lace ruffles. To be sure, he is absorbed in his own subject; but not so absorbed as not to have a smile for the lucky or a tear for the helpless.

His passion as a humanist is India—the people of our India. No matter where he is, a goodly share of his heart is always out there in the plains of Hindustan. It is probably for this reason that he is so popular among the Indian students in America. Wherever he goes he is entertained by the local Hindusthan Associations: wherever he visits he is sought out by the Indians for his friendly advice and suggestions. "Have one definite idea... one definite dream of your life," says Professor Bose with proper emphasis. "Work till you realize your vision. Make your dream come true. Nothing is impossible, if you have power to will. Nothing great is ever done without suffering; and you may have to suffer a great deal. But then it is your privilege to suffer, to win, to achieve. Every man is potentially great. Genius? Yes, yes; it is nothing but strong, hard, well-planned work. You can have genius if you will."

Dr. Bose talks quietly. He does not saw the air with his hands, or beat the desk by way of emphasis. In some mysterious way he succeeds in conveying an impression of sincerity.

"Keep yourself for some service in India," he says impressively. Be a man and help others become manly. Life is short. You should therefore make every minute count. Fill your life to the brim with sweetness and light and activity." This is characteristic of the man who has an air of doing something all the time.

Professor Bose, who has consistently refused to be a money-making man, denies that commercial success is any fair testimony to a man's true ability. He scoffs at the idea that monetary success is a true measure of a man's intrinsic worth. With Robert Louis Stevenson, Jagadis Chandra Bose holds that "salary" is not the most important thing under the sun. Mr. Bose cares little "just for a ribbon to stick in his coat." A tinsel medal, a title of knighthood, a Nobel prize is not particularly in his line of ambition. Indeed, it seems to be beyond the pale of his thoughts. "Science should be studied for the sake of science. Don't look for reward. When you have done something, don't expect that the world is going to set off fire-works about it immediately; don't fool yourself into thinking that there will be band-playing and banner-waving right away. Learn to work without looking for money."

One day a son of a wealthy Bikanir merchant came to his hotel for an autograph. Professor Bose intimated that he was not in the habit of giving autographs and that his price for it was high. "But," he asked the young Bikanir student with a slight wink, "how much will you give me?" "I will give my life to the service of India." All turned toward Mr. Bose. His dark eyes sparkled and snapped at the young man. "Good!" he exclaimed, "you can have my autograph."

None of the friends of this scientist would claim that he is a politician. Indeed, he adroitly avoids entering into any discussion of a political nature. "Politics is not my forte," he says, with an earnest smile.

We had a number of interesting conversations with Professor Bose. To be more exact, he talked and I questioned and listened. "What do you think of American education for Indian youths?" "No Indian student should come to this country who has not already obtained his B.Sc. degree in India. I doubt very much the wisdom of sending a shipload of our students to this country without any reference to their character or capacity. What we should bear in mind in encouraging our young men to come to America is quality, not quantity. American education for our brightest and most promising students is desirable."

"How do the American Universities compare with those of England?"

"I like both the English and American Universities. Both have their advantages and disadvantages. I think, however, that the American Universities are more richly endowed: their laboratories

are more splendidly equipped. In the United States there are many brilliant professors; but they seem to be overworked—at least they work harder than their students. America is a free country, and its educational facilities are more accessible to the common people than they are in England. But this new country lacks traditions!"

Mrs. Bose is a lady of picturesque and quiet personality. Unlike most of the Indian ladies who go abroad, Mrs. Bose has retained her Hindu costume. Her gold-embroidered soft *sari* draped over a pink silk waist is both appropriate and artistic. She has a broad and open brow crowned with beautiful thick hair; and her blackbrown eyes are filled with wonderful illumination. This lady, although born and bred in India, easily holds her place in Western society.

A charming conversationalist with a softly modulated voice is Mrs. Bose. She always has something interesting to say because she has seen the inside life of both Europe and America. Her friends take some pride in the fact that she is not blinded by the glamours of Western civilization. She seems to think that the round of Western life is made up of incessant toil and moil. People are preoccupied with the worship of Mammon, of titles, of brute force, and engaged in sordid social struggles. "The West, like the East, has its caste," she says with feeling. While the Western caste is based on dollars and the colour of the skin, the Eastern caste rests on birth. The whole Western social fabric is to-day being violently shaken by naked, volcanic, eruptive materialistic force. Such a state of things cannot last for ever. It is bound to burn itself out, sooner or later. The West will then come to the East once more."

Mrs. Bose suggests more than she talks. And her favorite topic of conversation is female education in India. There are rumours that she has been making a comparative study of American and European methods of education with a view to their application in Hindustan. Already she has engaged a young American lady of parts from the University of Wisconsin to help her in her school work in India.

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[*Extracts from an article printed in the "Modern Review," by the kind permission of the proprietor.]*

The Eden Hindu Hostel—Its Past and Present.

IN these days, a "Hostel" or a "Boarding-house" is not a rare thing; yet fifty years back, the mofussil students studying and residing in Calcutta had to meet with countless difficulties in the matter of good boarding arrangements. Such a deplorable state of things continued for some time till about the year 1862-63, when there

The Hindu Hostel—the first students' boarding house of the Metropolis.

was started "The Hindu Hostel", near Lalbazar Street, the old site of which may yet be pointed out. This was, as far as we know, the first students' boarding-house of the Metropolis, and owed its

origin mainly to the persistent efforts of Babu Peary Charan Sircar, the celebrated author of the valuable "Books of Reading" even now taught in the lower classes of Indian schools, and of the "Life of David Hare", who was then an Assistant Professor of English Literature at the Presidency College. Of this "Hindu Hostel" nothing particularly important is known, save that Sir Rash Behary Ghose was one of the first batch of boarders residing there. It is, further, rumoured, that it had a superintendent at its helm of the name of Babu Jajneswar Ghose and that one of the leading Bengali publishers of the day was somehow or other intimately connected with it.

But only one hostel like the "Hindu Hostel" was not at all sufficient to accommodate all students coming from outside, so, as early as the year 1879, Sir Ashley Eden, the then Lieutenant-Governor of Bengal, formed a scheme of building a hostel near the Presidency and the Medical Colleges.

But a few years elapsed before all the details could be properly settled and other preliminaries duly arranged. In the year 1887, the

The Eden Hindu Hostel founded in 1887. foundation-stone of the Eden Hindu Hostel (named after the originator of the scheme) was laid by Sir Steuart Bayley, one of Sir Ashley

Eden's distinguished successors. Sir Alfred Croft was then the Director of Public Instruction. As an initial step for the foundation of the Hostel the Government of Bengal acquired and gave the piece of land on which the hostel was to be built. On the site there was formerly a press of the name of Corinthian Press. At first, a one-storied building was erected which now forms the ground-floor of what is known as the "old buildings" and is officially called Ward No. I.

The building expenses were met entirely out of public donations made Public donations. not only by the rich and noble families of Bengal, but also by people from distant parts of India. His Highness the Maharaja of Travancore, the Ruler of one of the southernmost states of India, was one of the donors. The management of the hostel was then entrusted to a committee, of which Mahamahopadhyaya Mohesh Chandra Nyayaratna, then the Principal of the Sanskrit College, and Rai Radhikaprasanna Mukherjee Bahadur, C.I.E., then an Inspector of Schools, were Joint Secretaries. It was called and deemed a Government institution as is evident from an examination of the old seal of the hostel, on which were imprinted the words, "Govt. Eden Hindu Hostel, Calcutta, 1888."

Soon the number of students began to increase and the necessity for further accommodation was keenly felt. Accordingly, in the year 1891, the benevolent Raja of Maishadal added, Gift of the Raja of Maishadal. at his own cost, another storey to the building already existing. Thus, the first floor of the old buildings, now officially known as Ward No. II, is a gift of the Raja.

At that time the boarders of the hostel were not, as now, all students of the Presidency College. Admission was also given to students of other colleges What the hostel was in the past. as well as of schools. For the internal management of the hostel, there were, as now, a superintendent and an "assistant superintendent" in the place of the present "joint superintendent." Then the boundary of the hostel was also not so wide as at present. The piece of land on which are now erected the hospital, the kitchen and the dining halls was then outside its precincts. There was a grocer's shop where now stands the hospital and a brick-pounding machine where are now the kitchen and the two-storied dining halls. The kitchen and dining halls of those days stood just to the east of the present servants' quarters.

In the meantime a gradual increase in the number of students made it necessary to add to the accommodation. This time the Government of Bengal made a grant of nearly 3 lacs of rupees for building-purposes. In the year 1895 land was acquired, and the aforesaid grocer's shop and the brick-pounding machine were then removed to make room for the present dining halls, the hospital and the servants' quarters. Another three-storied building was constructed in the east, now known as the New buildings. The hostel then consisted of two blocks, one a two-storied building and another a three-storied one.

While all these improvements were taking place, Babu Kunjabehary

The first Superintendent of the hostel, Bose, M.A., of the office of the Director of Public Instruction, was in charge of the hostel, as appears from his signature on the front page of Danver's "Portuguese in India", dated the 28th October 1895*. In this connection we may as well remark here that it is quite probable that Babu Kunjabehary remained as superintendent ever since the creation of the hostel, i.e., the year 1887, for there is found another signature of his of the year 1889 on Forster's "Essays."¹¹ At any rate, it is quite certain that he remained in charge of the hostel for a long time till about the year 1898, when he was also serving as the Personal Assistant to the Director of Public Instruction. Then he gave up the superintendentship, as it was thought too much for one man to perform both the functions of the Personal Assistant and of the superintendent with the increased duties of the latter.

Up till 1897 the management of the hostel remained with the Committee mentioned above. But soon the Government thought it expedient to take direct charge of it, owing, as we hear, to some financial embarrassment. On April 1st, 1898, the Government took the

management of the hostel into its own hands.

and his successors. Babu Ambica Charan Mukherjee (a retired Headmaster of Birbhum Zillah School) became superintendent, and continued to be such for nearly three years. After him, for a short period of six or seven months came Babu Ambica Charan Bose (Personal Assistant to the Director of Public Instruction) to act as Superintendent. Babu Hara Nath Bhattacharyya (retired Headmaster of the Hindu School) succeeded him and remained here for some three years, after whom came Babu Kaliprasanna Bhattacharyya, M.A., then a Professor of the Presidency College, who was superintendent for nearly three years. During his term of office, an important change was made so far as the admission of students was concerned. In the

The hostel for the first time reserved for the Presidency College students (1905).

year 1905, the Eden Hindu Hostel was reserved exclusively for the students of our College. Babu Hriday Chandra Bauerjee, M.A., B.L., took charge of the hostel in September, 1906. He made many

improvements not only in the shape of supplementing the works done by his predecessors, but also by way of undertaking and fulfilling his

* The book is still to be found in the Hostel Library.

own original schemes (for example, the installation of electric lights in the hostel in 1912 in place of gas lights).

We have already seen that since the year 1898, the institution has been directly under the administration of the Government. The boarders have to pay a fixed sum every month, for which they receive "all found." There is a medical officer specially appointed to look after the health of the boarders—who visits the hostel twice a day. There is, again, a hospital within the hostel where students suffering from any contagious or infectious disease are removed and taken care of. The kitchen and dining halls are placed under the charge of a separate officer and the daily menu is prepared by the office in consultation with the boarders. There is also what is known as the Mess Committee to help the office in the better management of the daily diet.

To ensure security of property hawkers are not allowed inside the hostel. Every facility, in that line, is afforded to the boarders within the hostel so that they have not to go outside for their every-day requirements. The confectioner of the hostel has been supplied with a room within the hostel, which he has transformed to a pretty little confectionery where nothing stale or dirty is allowed to be kept. Similarly, the hostel has its special washermen, sweepers, barbers and cobblers.

At present, there is accommodation for 260 boarders in the five wards of the hostel, each ward being placed under the charge of a Prefect who calls the rolls twice a day. For every 24 boarders, generally, there is one servant to look to their personal needs and comforts.

This is in short an account of the facilities that are at present accorded to the boarders as regards residence and diet. But men do not live merely to eat, but eat to live. It will be no exaggeration to say that the Eden Hindu Hostel is, to some extent, a nursery of the future leaders in society and thought of Bengal. Here there are different

institutions for men of different tastes. For the Institutions attached to the hostel. training and encouragement of one having a

poetic instinct, there is the Eden Hindu Hostel

Kavi Sanmilani (Poet's Union). Similarly, to stimulate the mental and intellectual development of the boarders of the hostel there is the Eden Hindu Hostel Library with its Reading Room. Let us here pause for a while to see how these two institutions came into being and what is their present condition.

In the year 1898 (1305 B.S.) the Eden Hindu Hostel *Kavi Sammi-*

The Eden Hindu Hostel Kavi Sammi-lani—its Origin.

lani was started under the fostering care and guiding genius of Mahamahopadhyaya Haraprasad Sastri and the kind patronage of Sir Gurudas Banerjee.

The avowed object of the *Sanmilani* was to cultivate the elegant art of composing sonnets. Perhaps the restriction in favour of the sonnets was due to the paucity of that kind of poems in Bengali Literature. Whatever might be the object of the restriction, it has been removed. To confine oneself forcibly within the artificial limits of fourteen lines perhaps goes to check the free play of imagination and poetic afflatus. Anyhow, a change was made last year in favour of other kinds of poems not subject to the strict requirements of a sonnet. The *Sanmilani*, after it was started, continued to prosper for seven years, but soon a lamentable break came in owing to the unfortunate withdrawal from the field of work of some of the most enthusiastic boarders of the hostel who formed its very life and soul. The lull, however, lasted for two years only, after which the *Sanmilani* again looked up. It still continues in existence, though not in a very healthy state.

The Eden Hindu Hostel Library saw its inception on the 11th

The Eden Hindu Hostel Library—its Origin. January, 1911. Formerly there were nearly 200 books in the hostel, but there was nothing like a distinct organization such as at present. The books had been almost entirely collected from private gifts generously made sometimes by official visitors, sometimes by other kind personages of the town. To begin with, Sir Charles Elliot, Lieutenant-Governor of Bengal (1890-95), the donor of the Elliot Shield, presented a copy of "Hastings and the Rohilla War" on the 31st August, 1892; the book is still in the Library with the autograph of that kind patron. Among other liberal-minded benefactors of the hostel in this direction, the name of Sir Gurudas Banerjee stands foremost both in point of the quality and of the quantity of his gifts. Gifts of books also came from the Searsol Raj Estate and from Raja Mohendra Lal Khan of Narajole. There must have been many more patrons of the Library, whose names are unknown. The volumes collected in this way constituted the nucleus of the present Eden Hindu Hostel Library. A clerk was appointed to look after these books as early as the

As it was in the past.

year 1902. Books were then kept in the superintendent's quarters. Boarders used to take books with the superintendent's permission and re-

turned them to his room after they had done with them. Evidently both the boarders and the office had to encounter many difficulties and inconveniences in getting and in issuing the books. With a view to obviating these disadvantages, the present superintendent of the hostel embarked upon a scheme of enlarging the library and placing it under proper management; thus with the permission of the Principal of the College, the Eden Hindu Hostel Library, as it is, was founded, as we have seen, in the year 1911. Rooms Nos. 40 and 41 of Ward No. III were given over exclusively for the use of the Library and a reading table was attached to it. An annual subscription of 12 annas per head was also then made compulsory. The Library thus possessed a distinct fund of its own. But little could be done with this small sum, and the Library would not have been what it is, had it not been for the kind donation of Rs. 710 given in 1912, by Babu Gopal Das Chowdhury, Zemindar of Sherpur, for the purpose of

*Donation of Babu
G. D. Chowdhury.*

purchasing books. Babu Gopal Das Choudhury passed his B.A. Examination from Presidency College.

As a mark of recognition of his generous donation, the present Principal of the College himself proposed that a tablet should be placed in the Library—which has already been given effect to. In this connexion, we cannot help remembering the precious gift made by an ex-professor of the College, undoubtedly one of the best professors that the College has ever seen. Just when he was about to retire from service, Mr. H. M. Percival expressed a desire to

Mr. Percival's gift.

present the Hostel Library with a set of Encyclopaedia Britannica, 9th and 10th editions, in 35

Volumes. The offer was most thankfully accepted, and it will remain a source of enduring remembrance of the sympathetic and kind nature of the retired professor. The present Principal Mr. James, and Mr. Wordsworth, have also shown their deep interest in the Library by

A prospective view.

giving many valuable books. During the Principalship of Mr. James the College has witnessed

improvements in many directions, the most prominent of which is the New Laboratory of the College. As a part of the College Improvement Scheme, another hostel is soon going to be built for the students of the College, and the plan at present is that when the new hostel will have been complete, the Library will also be made sufficiently large so as to occupy the whole of the northern half of the Ward in one big hall.

But one cannot spend his entire time in the sequestered nook of his study. One must prepare for the work of everyday life, and to this

end, the boarders of the Eden Hindu Hostel have organized five debating societies in the five different wards which hold weekly or fortnightly meetings. For the holding of the meetings, they once enjoyed the highly prized advantage of possessing one Common Room for every ward. This was during the Principalship of Dr. P. K. Roy. Room No. 7 was the Common Room of Ward I; 27 of Ward II; 40 and 41 of Ward III, 57 of Ward IV, and 67 of Ward V. But an increased demand for further accommodation in the hostel made it necessary to take the rooms back for the residence of the boarders.

Besides the regular sittings of the debating societies, occasionally there is held what is known as the L'Allegro L'Allegro Meetings. Meeting, in which humorous essays are read, merry, witty dialogues are held, and in which occasionally songs are sung. These L'Allegro Meetings are like those gatherings at Cambridge —a sort of "Academic Saturnalia or merry-making" of which Milton used to be master. Each of these debating societies celebrates its anniversary, which furnishes a good opportunity for the boarders to spend a merry, jolly evening in company with their professors and ex-boarder friends.

Formerly the boarders had no common ground in which they could meet together and exchange their views, but this defect has been rectified by our sympathetic friend and teacher Dr. D. N. Mallik, who laid the

Dr. D. N. Mallik and the Hostel Union. foundation of the Hostel Union in the year 1911-12.

At first, the professors of the College were asked to speak to the students. But the students now use the Union for debates, which are conducted on Parliamentary models.

"Writing maketh the exact man," however. To cultivate themselves in this direction, the boarders of the hostel publish manuscript

Magazines of the hostel. magazines at regular intervals from their respective wards. The names of the magazines are different in different wards. Ward No. I calls its paper "Sense and Nonsense"; Ward II styles its "Fortnightly Magazine": Ward III calls its "The Rising Star"; Ward IV has its "Recreation"; Ward V names its "The Highland Review." Not only literary and scientific articles are embodied in these magazines but also paintings and illustrations are inserted therein.

So far we have dealt only with those advantages of the hostel which accrue from mere sedentary pursuits. We have not as yet given any account of the active side of the life of the boarders. Sports in some form or other have never been totally ignored. At present there

is an Athletic Club exclusively meant for boarders, besides the one of the College.

As a preliminary step to creating a club for the hostel, the Govern-

The Eden Hindu Hostel Athletic Club —Its Origin. ment of Bengal made, in 1906, a grant to make the quadrangle of the hostel fit for playing cricket.

After the field was ready, Mr. Little, then Principal of the College, levied a monthly subscription of one anna only per head. This was in the year 1907-08; lately, however, an annual subscription of Re. 1 per head has been made compulsory.

But even before the year 1906, when, as we have seen, the Government made a grant, the Eden Hindu Hostel was not at all inactive in this

Arrangements for same even before the creation of Eden Hindu Hostel Athletic Club. After the field was ready, Mr. Little, then Principal of the College, levied a monthly subscription of one anna only per head. This was in the year 1907-08; lately, however, an annual subscription of Re. 1 per head has been made compulsory.

hard and fast rules as regards subscription, still there was a regular Eden Hindu Hostel Football Club—far stronger than the College team of those days. In its palmy days, I understand, it was quite a formidable team. In the year 1904, the Eden Hindu Hostel F. C. won the East Challenge Shield, and on another occasion (1902) it won the Bhola Nath Paul Cup.

Football.

According to the wishes of the winners themselves, the medal that was presented to them has

been utilized in creating a league competition within the hostel, known as the Ward League Competition. Besides this, there was, and still is, another cup awarded also for football known as Sen's Cup. How old

Sen's Cup.

the Cup is and what is its true origin no one seems to know, but it appears that there was a

a Mr. Sen (his full name is unknown) who won this cup in a lottery, and presented it to the hostel with a view to initiate a spirit of competition among the boarders in football. At present a certain number of teams, often with high-sounding, queer names,¹ are made out of the intending competitors for the cup, all boarders of the hostel. The competition is then played out in rounds. Besides these trophies there is another cup known as the "Ward I Challenge Cup" awarded in 1912 by the boarders of Ward No. I to encourage six-a-side Football in the hostel.

In cricket, however, little was systematically done before the Cricket. Athletic Club came into being in 1907. The greater expense of cricket seems to have marred

¹ e.g., Flibbertigibbet, Loafers, Foochoo, Houdolkotkot, Bairagi.

its popularity. In the year 1899 Prince Ranjit Singhji, now the Jamsahib of Navanagar, then at the pinnacle of his fame, visited Cal-

cutta, and the boarders of the E. H. Hostel met Visit of Prince Ranji to Calcutta (1899). and offered him a bouquet in humble appreciation of his world-wide reputation. Such a meeting with so great a cricketeer might prove a strong incentive indeed! Then, again, in the year 1902, came to Calcutta the famous "Oxford

Arrival of "Oxford" Authentics in this town (1902). Authentics", a representative team of Oxford, which also created a great deal of interest at the time. Both these visits undoubtedly had some share in instilling a new zeal for cricket into the minds of the boarders. At present, the game attracts a fair amount of attention.

Lastly, ever since the creation of the hostel (1887) there have been either "Official Visitors" or "wardens" of the "Official Visitors" of the hostel.

Mr. C. H. Tawney and Surgeon-General Dr. Bomford of the Medical College were Official Visitors; others were Mr. Tipping, then of the Presidency College, and Mr. Chapman, at present in charge of the Imperial Library. The system of the "Official Visitors"

was replaced in 1908 by that of "Wardens". Replaced by "Wardens". There are, at present, five "wardens" for the five wards, who are all selected from the teaching staff of the College.

RADHARANJAN DHAR.

[Since this article was written, Prof. Hridaychandra Banerjee has resigned the superintendentship of the hostel and Prof. Nibaran Chandra Bhattacharya has been appointed in his place.—*Ed.*]

War and Finance (III).

By PROF. J. C. COYAJEE.

THE current literature on war finance is becoming at once more luminous and more voluminous. Hitherto we had to deal with and discuss magazine articles only; but the writings on the subject are now assuming the more permanent shape of volumes. It is true the volumes hitherto set forth are not bulky; they look more like Pharaoh's lean kine. But that defect, if it is one, will soon be repaired. Mean-

while we shall introduce students to two very good books just to hand. One of them, "Lombard Street and the War", is a masterpiece from the pen of Mr. Withers, on whom seems to have fallen the mantle of Walter Bagehot and who has just been given the post of the "Director of Financial Inquiries in the Treasury." His career has been remarkable. On leaving Oxford he joined the Stock Exchange and in time became the financial editor first of the *Times* and then of the *Morning Post*. Practical finance however had need of him and claimed him as her own. So that he joined the great firm of Siligman Brothers. Thus he is equally great at the practice and the theory of finance; and an account from his pen of the financial world during the present crisis is a rare treat for the student of Economics who should mark, read and inwardly digest the book. We shall assist him in the process by suggesting below the portions in which he imbedded the chief gems of the work. Mr. Jones' "Economies of War and Conquest" is also a very useful book and will amply repay a careful perusal. Mr. Lawson's 'War Finance' has not yet been received and so cannot be reviewed here. But we are happy to direct the attention of the student to a few admirable articles which he should study. One is an article on Foreign Exchanges in the January number of the *Journal of the Royal Statistical Society*. Another is an article on "Some Economic Effects of the War" by A. H. Gibson in the July number of the *Bankers' Magazine*. On Foreign Exchanges the student should keep constantly in touch with the letters of the Amsterdam correspondent of the *Economist*. In the Annals of American Academy for March, 1915, Mr. W. M. J. Williams gives us an analysis of the measures taken by England to provide the war revenue. The *Economic Journal* for March should also be studied for a valuable account of war and finance in Egypt. Sir R. Inglis Palgrave also continues his excellent articles on war in the *Bankers' Magazine* and Sir G. Paish in the *Statist*.

Little of this huge body of learning can be noticed here. We shall however as usual take up a few topics and deal with them briefly.

We shall first hark back to the suspension of the Bank Act, on which a good deal has been recently written.

We shall first see what Mr. Withers and Mr. Jones have to say on the subject. The suspension came on August 6th, 1914, on which date the Currency and Bank Notes Act declared "that the Governor and Company of the Bank of England may so far as temporarily authorized by the Treasury, and subject to any conditions laid down by that authority, issue notes in excess of any limit fixed by law." Mr. Withers

wants to show that the suspension of the Act was brought about too late, and when it did come, it was accompanied by other measures which made the suspension unnecessary. "This possibility, that the Bank Act might have to be suspended, had a most unfortunate effect. It was an indirect cause of the advance in the Bank rate, already referred to as one of the startling events that heralded the moratorium from 3 to 10 per cent in three days." He adds later: "What happened was that the Government suspended the Bank Act. . . . and then made this suspension unnecessary by issuing notes itself." As the Treasury notes were lavishly issued, the powers given to the Bank of England were not employed in the manner expected.

With all deference to such a high authority as Mr. Withers, we shall venture to suggest a few arguments on the other side. Any early and immediate suspension of the Bank Act would have given a fillip to the financial panic which was beginning in England in the early days of the war. The suspension of the Act stands in England as the symptom of a grave crisis, and would have heightened the panic then incubating. Secondly, suppose the Treasury notes had not become popular, the suspension of the Act would have proved valuable as a second string. There was no reason to think *a priori* that Treasury notes would be so well received by the public; for England has never had an experiment of Government paper money. In the third place, it was obviously the duty of the Government, when faced by such a crisis, to make as large a provision for an addition to the currency as possible; we must remember the enormous demands made for currency both by the public and by the banks. Fourthly, one never knows when public opinion may require the withdrawal of Government paper, the demand is already beginning and then the suspension of the Bank Act may be used to fill the void with bank notes.

Prof. Nicholson has also brought forward the same subject. He says: "It is true that the Bank Act of 1844 has not been suspended, but the enormous issues of the Treasury notes against every principle of the Act renders the technical abstention insignificant." To this Mr. Keynes replies: "If this passage is intended to apply beyond a few days of the first week of the war it is, of course, misleading; if the Treasury notes were now to be turned into Bank notes, the position of the Bank of England would be much strengthened."

Another point which Mr. Withers has brought up for discussion, whether the emergency currency should have been provided by the Government or by the Bank of England? Mr. Withers says: "It

seems to be a needless break with tradition, the reasons for which are obscure to the outer world, and, as will be shown later, Government note issues carry special dangers and temptations with them. It is probable that new Bank of England notes could have been more quickly produced—at least the time spent in designing the Treasury notes would have been saved: And time was all-important."

We have ere this discussed a similar view advanced by Sir R. Inglis Palgrave who denies that there is any real advantage to the country in the issue of Treasury notes. He also argued, "We cannot see where the profit of the Treasury notes is to come in."

On the other side it may be argued that in such a world-conflict as the present, even the credit of the Bank of England might have proved unequal to force the vast amount of notes necessary. The reserve of the Bank had already gone through a heavy drain—it amounted to £27 millions on July 29th and was reduced to £10 millions on August 7th. Moreover as the power of borrowing emergency currency by the joint stock banks was fixed at £200 millions, this in itself would have been a very heavy demand for the Bank of England to meet. Again, if the note issue had been by the Bank, it could have been made the arbiter of the fate of the joint-stock banks and could have lent them the currency on what terms it pleased. Finally, there were signs of a run on the joint-stock banks, i.e., the structure of English banking had been shaken. This was exactly the time for the Government to step forward and in the face of a crisis of such magnitude to place the currency of England on the broad foundations of national credit.

But the future of Government paper money is quite a different question. One can heartily agree with Mr. Withers when he says, "These unlimited powers were quite reasonable and right when they were first granted, but Parliament seems unlikely to leave them to the Treasury in their present beautiful simplicity. There is a check, and a very valuable one, in the provision that gives the holder of a note the right to demand gold for it at the Bank of England, but a great deal of evil inflation might easily be possible before this check comes into play."

This point has also been raised by correspondence in the *Economist*, and there seems to be a general agreement that at the end of the war at the latest the emergency currency should be withdrawn. Some, indeed, like Mr. D. M. Mason, would like to see it withdrawn immediately. But a note of caution has to be struck here. There are people who attribute the present ease of the money market to the issue of the

emergency currency. For them the reply given by the *Bankers' Magazine* must suffice: "It may be true that the portion of the issue which is uncovered by gold tends to accentuate the ease, but this tendency is surely neutralised by the very large increase in cash retained by bankers and the diminution in money at call and short notice. The cheapness of money seems to be due quite as much to a smaller supply of bills as to a plethora of money." We shall study in our next article how there has been more recently a rise in value of money in Lombard Street. Mr. Keynes was right in saying that "the present ease of the money market is artificial and ought not to be taken advantage of to any great extent. And above all it must be remembered that the effect of the joint-stock banks beginning to use their inflated balances at the Bank of England will mainly show itself, not in a diminution of those balances but in an increase of the joint-stock bankers' own deposits." But the joint-stock banks have acted with true British conservatism. Indeed, complaints have been frequent that the banks are too unenterprising. As Mr. Withers observes "A good deal of unmerited abuse was showered on the Banks at this time because they did not give enterprising gentlemen with schemes for capturing German trade handsome overdrafts for building factories and buying machinery. Factories and machinery ought not to be financed by means of overdrafts at the banks. All that the banks could be asked to do was to grant the usual banking facilities perhaps a little more freely than usual. This most of them did." English finance is safe even amid such a convulsion, on the broad back of English conservatism.

One word more before we part again with the topic of emergency currency. It is to be emphasized that among the belligerents the only true emergency currency is the one issued in England. It is only England that keeps a gold reserve against its Treasury notes growing with their growth and which uses such notes only for certain limited and well defined purposes. As for France, Russia or Germany, "it cannot be pretended that the notes are in nature of emergency currencies, but the Governments concerned are paying part of their liabilities of war with the product of the printing press." The remarks on this subject in the *Economist* of July 10th are well worth a study.

We now come more directly to study the question of the conduct of the joint-stock banks during the present crisis. Mr. Keynes' strictures on their conduct will be remembered by the reader: "Our system was endangered, not by the public running on the Banks, but by the Banks running on the Bank of England The Government had hoped

that in placing the public credit boldly, cheaply, and in huge amounts at the disposal of the Banks as the natural channel between them and the country at large, the greater part of this credit might percolate through to the industrial and financial world generally and serve to oil the wheels of the whole economic machine. On August 26th Mr. Lloyd George was moved to express his disappointment..... The right view must depend upon how intrinsically desperate the situation during August was really. I believed, and subsequent events are constantly strengthening this belief, that it was amenable to courageous action." On this, the *Bankers' Magazine* forthwith rushed to the rescue of the joint-stock banks. It argued thus: "A good deal has frequently been made of the accommodation granted to the Banks in the shape of Treasury notes, but so far as one can see it is the Government itself which has so far received chief assistance by this means, while the taxation to be paid by the Banks on the notes is out of all proportion to the value conferred. Not only so, but in this exporters' scheme and in other matters which have occurred during the crisis, a peremptory tone has been adopted by the Treasury which is entirely at variance with the enormous services which have been rendered throughout the crisis by the banks of the kingdom to the entire community."

So far the two sides have spoken for themselves, but in the person of Mr. Withers a Daniel has come to judgment. Both Mr. Withers and Mr. Jones say that the Banks weakened the position of the Bank of England in three ways at the beginning of the crisis. In the first place, "some of the banks were refusing to pay their customers in gold, and so causing a run on the Bank of England, by the public which took to it, to be turned into gold, the notes that the Banks handed out. In the second place "some of the banks are said to have dealt very ruthlessly with the bill brokers, pulling in money from them with a violent jerk, and driving them to the Bank of England to borrow much faster than was pleasant to the bill brokers or agreeable to the Bank of England." Thirdly these banks drew heavily upon their reserves in the Bank of England and so increased their individual holdings of gold and notes. As Mr. Jones remarks, "It is doubtful if there was a serious run on the joint-stock banks; but some of the joint-stock banks certainly acted towards the central institution as they expected their depositors would act towards themselves."

So far about the delinquencies of the joint-stock banks in the early days of the crisis. Their later conduct has been irreproachable. Through the banking moratorium the banks could exercise their

discretion as to meeting cheques drawn on them. "Most of them used their discretion wisely, and allowed customers to draw what they wanted for ordinary purposes." Mr. Withers adds, "The banks did not avail themselves of the subsequent extension of the moratorium for two more months."

Our attention may now be diverted to the question, how far the moratorium was necessary for England, and how far it has been adopted in Germany. Mr. Withers does not seem to have made up his mind on the question and his dicta seem to be contradictory. He remarks in one place: "For any other debtors, a moratorium under stress of war would have involved no loss of dignity. But the belief that whatever happened English banking must and would, on any day when it is open for business, hand out legal tender currency to any one who had a claim on it, was a thing worth cherishing, a flag that it was worth while to keep flying till the last possible moment." He thinks that a moratorium might have been avoided if the bank holiday had been extended while the new currency was being made ready, public impatience being restrained meanwhile by patriotic appeals. But let Mr. Withers answer himself: "Perhaps the objection to such a measure, as applied to our banks, is only a piece of sentimental pedantry. Certainly if there was an error it was in the right direction. It was better to make too sure than not to make sure enough." We have argued in our first article that a moratorium was necessary in London in war time, for it is the financial centre of the world and all monetary demands converge on it; *pro tanto* it was not indispensable to Germany. Mr. Jones puts the same idea in more vigorous language: "What made a moratorium necessary in Britain was the great extent to which London accepting houses were then financing the trade of the world, and to which they were creditors of foreign merchants who could not pay their debts. The argument that because Germany was able to dispense with a moratorium, she was stronger financially than Britain is as valid as the argument that because Timbuctoo has been less seriously affected by the war it is in a better economic condition than the United States." And *if* Germany has escaped a moratorium, at what a cost it has avoided it? The cost paid is the fatal policy of lavish loans in depreciated paper. Moreover as we argued in our second article, Germany has not been able to avoid a moratorium or analogous policy in certain directions. This view is confirmed by the state of things revealed by the *Economist* in its issue of the 29th May. It is well known that for some time there has been reckless land speculation in Germany. Attempts are being made to

save the victims of the speculation by a species of moratorium : " Whilst mortgage capitals falling due could under existing regulations, with permission of the court, be deferred for six months, they may under the new Act be further extended upon the expiry of the term, which practically comes to a postponement until after the war, possibly longer. This is in a country which boasts that there is no moratorium." In one way or other, explicitly or implicitly, when credit is in a pathological condition, the administering of morphia, in the shape of a moratorium, is necessary.

Seminar Notes.

FIFTH YEAR ENGLISH SEMINAR.

WE began our Seminar work on the 27th July with an article from Mr. J. Ghosh on the Poetry of Childhood in English Literature. The essayist touched upon all the important poets from Shakespeare down to Rabindra Nath Tagore. Our President then declared the subject open to debate; students were at first shy and things looked cold for a time; but after a thaw from the first critic, Mr. K. C. Sen, many students came up, and there was a lively discussion on the Child-poetry of Wordsworth. The meeting concluded with an excellent summing-up from the Chair and the President congratulated the essayist on his able essay, pointed out and refuted his wrong judgments and congratulated the students on the lively interest they had taken in the discussion.

We met next on August 3rd to hear an essay on the Theories of Poetry from Mr. D. P. Chowdhury. The essayist was somewhat hasty as he had to prepare his work on a short notice. His essay gave rise to a good deal of discussion and finally the President settled all the points of difference.

The Seminar did not meet on August 10th owing to the College football match with the 10th Middlesex, and we are expecting the next essay, " Rabindra Nath Tagore as an English Poet " on August 17th.

We meet every Tuesday from 2 to 4 P.M.

We publish below our programme of work till the Puja vacation.

PROGRAMME.

Date.	Subject.	Essayist.
1915. 27th July	.. The Poetry of Childhood in English Literature..	Mr. J. C. Ghosh.
3rd August	.. Theories of Poetry	Mr. D. P. Chowdhury.

Date. 1915.	Subject.	Essayist.
10th August	Rabindra Nath Tagore as an English Poet	Mr. N. R. Das Gupta.
17th ,,	Shakespeare's Later Romantic Plays	Mr. D. N. Mukherji.
24th ,,	Elizabethan Lyrics compared with those of the Romantic Revival ..	Mr. S. G. Mukherji.
31st ,,	Tragedy on the Greek Model (Merope) compared with Elizabethan Tragedy	Mr. B. K. Kakati.
7th September	Tennyson's Idylls of the King: the allegory	Mr. B. B. Banerji.
14th ,,	Tennyson's Idylls; how far is it an epic poem	Mr. A. C. Sen.
21st ,,	Wordsworth's position in 19th century poetry	Mr. A. N. Mukherji.
28th ,,	The Comic Genius of Ben Jonson and Sheridan: a contrast ..	Mr. K. C. Sen.

President—Professor M. Ghosh.

JYOTISH CHANDRA GHOSH,
Secretary.

CALCUTTA,
The 3rd August, 1915.

PHILOSOPHICAL SEMINAR.

A list of subjects of Essays to be read in the Seminar has been prepared, and we expect to hold our first meeting in a fortnight in which we hope the Principal will, as usual, preside. Our best thanks are also due to the Principal for having kindly consented to be our visitor. His occasional visits will, it is hoped, do a great deal towards encouraging vigorous study in the Seminar. The daily attendance is fair; our new professor Mr. Birendra Chandra Mukerjee, M.A., spends some three or four hours every day at the Seminar to assist the students in their work. We thus expect to make our Seminar quite a success this year, as in last year.

S. C. MITTER,
Secretary.

ECONOMICS SEMINAR.

The first meeting of the Economics Seminar of the session 1915-16 was held on the 30th July last, under the kind presidency of Prof. J. C. Coyajee, B.A. (Cantab), LL.B. (Bombay).

The Secretary himself read a paper on "The Mobility of the Factors of Production and its Economic Effects."

The paper started with the proposition that the equality of the marginal net products of a nation's resources increases the National Dividend and then entered into a discussion of the various influences which contribute towards this equality. Of these the one, the paper dealt with, is the mobility of the factors of production, which, accompanied by an enlightened self-interest and non-interference from any external force, is believed to tend to equalise the marginal net products by the popular economists who,—embracing under the conception "impediments to mobility," as separate and independent factors, both false judgments and various costs of movement,—hold that a diminution in the falsity of judgment tends to diminish the inequality of the marginal net products and that a reduction in the costs of movement, in like manner, stands for a further amount of diminution in the above inequality. After a critical examination of the above popular conceptions, the paper proved that though in the generality of cases, the popular economists are to be justified, yet there are possibilities of cases when the above diminutions both in the falsity of judgment and in the costs of movement may produce a contrary effect, i.e. increase the inequality of the marginal net products.

The paper also touched the relation of mobility to unemployment wherein after first considering the exceptional effect of the removal of impediments to mobility as increasing the amount of involuntary idleness among work people, it afterwards brought about a reconciliation between this anomaly and the general economic truth that the aggregate of involuntary idleness occurring in any assigned industrial field is smaller, the more perfect is the mobility within that field.

The number of gentlemen present was considerable, and they all took a lively interest in the masterly elucidation by the learned President, in the course of his summing-up, of all the complex and abstruse points that were involved in the paper.

JAMINI PRASANNA RAI,
Secretary.

BENGALI LITERARY SOCIETY.

A meeting of those interested in the study of Bengali literature was held on Friday, July 30th, 1915, under the presidency of Prof. K. N. Mitra, M.A., to discuss the working scheme for the proposed

Society. Prof. H. H. Banerjee, M.A., was kind enough to grace the meeting with his presence.

The President in a neat little speech explained the object of the Society as being to promote a scientific and critical study of Bengali among our students. The President then called upon Mr. Praphulla Kumar Sarkar, B.A., the chief organiser, to lay down definite plans.

Mr. Praphulla Kumar Sarkar read out his scheme. After amendments proposed by Mr. Susil Chandra Mitra, B.A., and Mr. Nirodranjan Das Gupta, B.A., and a motion made by Mr. Sivadas Mukerjee, the following scheme was adopted :—

(1) That the Society should be under the management of a duly appointed committee. (2) That regular monthly meetings, if possible fortnightly meetings, of the Society should be held in which papers will be read. (3) That the proceedings of each meeting should be read and adopted in the next meeting. (4) That the Society should have a decent collection of books, at first mainly borrowed from the Library, if possible. (5) That subscriptions should be raised from the members of the Society for periodical publication of its proceedings.

It was then resolved that a copy of the report of the meeting be submitted to the Principal for favourable consideration.

With a hearty vote of thanks to the chair proposed by Mr. Bhupal Chandra Choudhury the proceedings terminated.

THE HISTORICAL SEMINAR.

The Historical Seminar of the last year was a decided success. This to a very great extent was due to the energy of the Secretary, Srijut Promotha Nath Banerjea, B.A. Altogether there were nine seminar meetings in which eight papers were read. Of these papers, those on momentuous questions of the day like 'War', 'Imperial Federation', 'The Present Great European War', evoked great enthusiasm, and true historical spirit was shown in the papers themselves and in the discussions which followed the reading of the papers. As the classes were dissolved by the end of February on account of the small-pox epidemic, we had to drop much of the work that was to be done. With no such interruptions this year we hope to have a greater number of meetings.

There has been a little change in the constitution of the Seminar this year. Instead of having one vice-president only, as in previous years, we have the pleasure of having Mr. Hem Chandra Roy Chowdhury,

M.A., as Vice-president, in addition to Mr. J. N. Das Gupta, B.A. (Oxon), Bar-at-law. We had no election for the Secretaryship this year. Srijut Saroj Kumar Sen, B.A., has been nominated the Secretary by Mr. E. F. Oaten, M.A., LL.B., the president of the Seminar. Srijut Sibesh Chandra Pakrashi, B.A., of the 5th year, has been nominated the librarian to assist the Secretary in his work. Instead of having weekly meetings, which plan was introduced last year and found impracticable, fortnightly meetings have been arranged. With these arrangements, we hope to make the Seminar of this year an even greater success than it was in former years.

SAROJ KUMAR SEN,
Secretary.

GEOLOGICAL INSTITUTE, PRESIDENCY COLLEGE.

The annual general meeting of the Geological Institute for the election of office-bearers for the session 1915-16 was held on the 12th of August in the Geological Lecture Theatre at 3 P.M. Prof. H. C. Das Gupta, M.A., F.G.S., Vice-President, was in the chair. The meeting was fairly attended, most of the senior and junior members being present.

Before the commencement of the regular business of the day, the President Mr. Das Gupta in a short and touching speech referred to the premature death of Mr. H. S. Bion, B.Sc., F.G.S., who was one of the Presidents of the Institute for some time, and moved a resolution of condolence. The resolution was adopted unanimously, all the members present standing. It was also resolved to send a copy of the resolution to our patron, Dr. Hayden, for favour of transmission to the relatives of the late Prof. Bion.

After this the annual report of the session 1914-15 was presented by the retiring Secretary. It stated among other things that (i) five meetings were held and (ii) three excursions were arranged during the year under review.

After some discussions and criticisms, the report was finally adopted.

This was followed by election for the session 1915-16 with the following results:—

President.

Prof. G. de P. Cotter, B.A. (Dub.), F.G.S.

Vice-President.

Prof. H. C. Das Gupta, M.A., F.G.S.

Vice-President and Treasurer.

Mr. B. Maitra, M.Sc.

Hony. Secretary.

Mr. Bijoy G. Sen, B.Sc.

Hony. Asst. Secretary.

Mr. Sisir K. Mitra.

Class Representatives.

Mr. Sachi K. Mukerjee, B.Sc.,—6th year.

Mr. Srikumar Ray, B.Sc.—6th year.

Mr. A. C. Bose, B.Sc.—5th year.

Rai Jadunath Sahay —4th year.

Mr. Provas Ch. Doss—4th year.

Mr. Sajoni K. Mallick—3rd year.

Mr. Satis Chandra Gangooley then thanked the retiring office-bearers on behalf of the Institute.

After the proposal of a hearty vote of thanks to the chair by Rai Jadunath Sahai, the meeting came to a close.

B. G. SEN,

Hony. Secretary.

THE BIOLOGICAL SOCIETY.

The Biological Society began its work for the session 1914-1915 on the 25th November, 1914, and it will begin its new session from October next. It proposes to celebrate its anniversary in October next. Till now the Society had four meetings and the papers that had been read in these meetings were written in a masterly way and dealt on many important scientific problems of the day. All the meetings were largely attended and the discussions in these meetings were very interesting.

Among the papers that were read, the following deserve special mention :—

1. “Dyspepsia:—its Physiological Aspects.” By Mr. H. C. Das Gupta, B.Sc.
2. “The Workmanship of Nature in the Construction of the Heart-pump.” By Mr. N. M. Basu, M.Sc.
3. “The Food Problem and the place of Fruits in an Ideal Diet.” By Mr. P. Das Gupta, B.Sc.
4. “Water and its relation to Metabolism.” By Mr. D. Bera, B.Sc.

THE PHYSICAL SOCIETY.

The aim of the Physical Society is to create a spirit of research among students. In these meetings professors and students read papers on subjects of their own investigation, and after the reading is over a lively discussion follows in which all take part. But it was found on experience that many of the Physics students of the College, especially those of the Junior classes, did not take much interest in its proceedings. It was consequently proposed in the preliminary meeting of the Society to give popular lectures on scientific subjects of general interest and to give demonstrations of interesting experiments (such as X Rays, etc.) in addition to what we have generally. The following office-bearers and a committee to organise popular lectures were elected :—

President Prof. C. W. Peake, M.A.
Vice-President Babu Dwijendrakumar Majumdar, M.A.
Secretary and Treasurer .. Rabindra Nath Chaudhuri, B.Sc.

Ordinary Members :—

- (1) Prof. P. Mahalanobis, B.A. (Cantab), B.Sc. (Lond.).
- (2) Sailendra Nath Ghosh, B.Sc., Ex-Secretary.
- (3) Satyendra Nath Bose, B.Sc.
- (4) Meghnad Shaha, B.Sc.

Popular Lecture Committee :—

- (1) Prof. P. Mahalanobis, B.A., B.Sc.
- (2) „ D. K. Majumdar, M.A.
- (3) Mr. S. N. Ghosh, B.Sc.
- (4) „ B. K. Bysack, B.Sc.
- (5) „ Satis Dey, B.Sc.

Athletic Notes.

THE ELLIOT SHIELD MATCHES.

OUR first match in this Shield Competition was with the Bangabasi College, and here we came out victors by two goals to nil. The game was almost even, but our defence was superior to that of our opponents.

A very unfortunate event took place in this match, a few minutes after the first whistle had gone. Kshetra Nath Basu, our swift centre-forward, sustained a very severe fracture of the leg. The bone literally broke in two and he had to be immediately removed to the Medical College Hospital. However it is extremely gratifying to know that he is progressing satisfactorily.

Our fight in the semi-final against Ripon was a series of drawn games. We arrived at a conclusion, not very pleasant to us, after three days' hard fighting—the first day's game resulting in a draw of one all, and the rest of the games being all pointless. The last decisive game ended in favour of our opponents by a narrow margin of one goal. Our congratulations to Ripon. On the face of the game we ought to have won. Our forwards were pressing very hard indeed. But for the rather erratic shooting of Profulla Ray, and had not Hiren Sircar been in the injured list, we might have won by a substantial margin. Hiren Sircar's substitute was however a passenger and once missed an open net. Only once throughout the game could the Ripon forwards pierce through our defence, and they scored in a mêlée. On our side Suresh Chakrabarty, a new acquisition, who has already made a name in the I.F.A. Shield matches, was in a class by himself. He proved to be a tower of strength to the team, and though with an injured toe he was a terror to the opposing forwards. Our goal-keeper was also responsible for some brilliant saves, and Chatterjee, our left-half, worked like a Trojan.

Office-bearers for the Current Football Season.

Treasurer	..	..	..	Mr. E. F. Oaten.
Secretary	..	..	..	D. K. Das.
Captain	..	..	..	D. K. Das.

PRESIDENCY COLLEGE *vs.* THE TERRITORIALS.

This friendly game was witnessed by a large number of spectators, most of whom were students. A very good and well-contested game was witnessed and every bit of fine play was loudly applauded.

The game began punctually, and from the start the Presidency forwards were seen to advantage. The two wings played a fast game throughout, and had the centre-forward, who was a mere passenger in the field, played a bit better, the College might have won instead of merely drawing level. Before half-time the College XI were leading by a goal—the result of a beautiful shot from the left wing. The Territorials played a plucky game during the second half, but our centre-half, Chuckerburty, who was undoubtedly the best man in the field, saved many dangerous situations. The Presidency men were

then taking matters rather easily, and just before the close the Territorials equalized.

Our athletic friends have every reason to be proud of the result as the Territorials were assisted by three of their Shield players.

The refreshment that was served was befitting the premier College of Bengal, and altogether it was a very enjoyable evening.

HARDINGE BIRTHDAY CHALLENGE SHIELD.

Second Round.

We did not have to play the first round, and in the second round we met the Ripon College again. This time, the Presidency men were not to be denied and eventually won by three goals to one. When we played the Elliot Shield competition, we lacked practice, had to try some new players and no great success was to be expected.

From the very beginning the Presidency forwards were pressing, but twice or thrice lost the opportunity of scoring. The Ripon College left wing then got going and scored by a ripping shot which gave no chance to the Presidency custodian to save. However, just before half time, the Presidency College team equalized through their left line—Sircar.

In the second half the Presidency forwards again scored through their centre-forward, A. Mitter. Some up and down play was then witnessed, and the Presidency forwards added to the score through D. Dass, the captain of the team, from a beautiful pass from Sircar.

Semi-Final.

We met the Medicals in this round and won by the big margin of three goals to love. This is the more creditable as both the regular backs were in the injured list. Moreover the Medicals are the winners of the Elliot Shield this year and a very strong combination.

The game began rather late, and though the Medicals had their best forwards out, they could not do anything as they had practically no supply from their half-backs, whereas our half-back trio were playing a superb game from start to finish—S. Chuckerbury being the most conspicuous of the lot. His passes were all well-judged and the Medicals found it very difficult to get the ball past him. Before half-time we were leading by one goal—a shot by P. Roy. During the second half the Medicals were thoroughly out-classed and two more

goals were added by Sircar and Roy. The shot by Roy was a marvellous one—a cross shot from a very difficult angle. P. Roy, Sircar and Meerza of the forwards and Chuckerbury as half are worthy of special mention.

Final.

The final came off on Monday, the 23rd August. The hopes of our College were doomed as the Metropolitan College won by two goals to love.

From 5 o'clock, students of both the colleges were pouring in numbers to witness the game—the Metropolitan students being in a noticeable majority. This plainly shows that our fellow-students take very little interest in our sporting affairs.

The game began punctually. The Presidency forwards could not pierce the defence put up by the backs of the opposite party; while the weakness of our backs was undoubtedly the cause of our defeat. Our half-backs were playing a good game as usual, but their services were not taken advantage of. The Metropolitan scored two goals, one in each half. Shortly before close the Presidency men tried in vain to score.

We offer warm congratulations to the winners on the success they achieved.

L. K. Roy.

THE TENNIS CLUB.

Hridoyranjan Das Gupta has been nominated as Secretary of the College Tennis Club. The fee for using the courts has been fixed at rupee one per quarter. Members are required to provide themselves with their own racquets.

University News.

ON the 4th of August, the anniversary of the beginning of the war, the students of the post-graduate classes of the University assembled in the Senate Hall, where Dr. B. N. Seal addressed them. He delivered a lecture on the war, from the psychological standpoint.



At a meeting of the Senate on the 7th August the postponed debate on the resolution of Dr. E. R. Watson, with its amendment proposed by Dr. K. Dass, was resumed. Mr. J. R. Bannerji supported

neither the resolution nor the amendment. Mr. J. N. Das Gupta quoted facts from English Universities and from our University under different Vice-Chancellors against the resolution. Dr. Watson's motion for an enquiry into the cause of the rapid increase in the percentage of passes was however put off in favour of Sir Ashutosh's motion for an investigation as to the nature of the improvement in the teaching and the personnel of the colleges and schools.



At a meeting of the Senate on the 21st August the Annual Budget discussion of the University took place. It appears that for want of sufficient money work could not be begun in the University College of Science on the scale contemplated before. Mr. J. N. Das Gupta congratulated the University on the satisfactory budget.



On July 28th Mr. C. J. Hamilton, M.A., Minto Professor of Economics, delivered a lecture on "The recent Economic Development of Japan." His lecture was based mainly on facts collected by him during his stay in Japan in the last summer vacation. In his discussion of Japanese economic life he considered how far they were applicable to the case of our country. He set down the economic achievements of Japan to three things—State-aid, the enterprising nature of the people, and the environment.



On August 6th Mr. A. R. Maitra, B.L., as Reader to the University, delivered his introductory lecture on "The Fall of the Pala Kings of Bengal." The Vice-Chancellor congratulated himself on his happy choice of the Reader. As Mr. Maitra is an old student of our College, we are particularly interested in his lectures. In his first lecture he explained the methods he adopted in his investigation and the sources from which he gathered materials.



Dr. B. N. Seal, Regius Professor of Philosophy, is continuing his lectures on "Metaphysical Problems of Psychology" from the stand-points of different schools of Indian Philosophy on Fridays and Tuesdays. The lectures are open to the public.

We hear that the University College of Science will begin its work in the middle of this month with six advanced students of Chemistry under the guidance of Prof. P. C. Mitter, Ph.D.



The election of Under-Secretaries to the University Institute took place on the 25th of August. Our College has been well represented by Babus Nirode Behary Mallik, B.A., and Bepin Behary Dey, B.A., in the list of Under-Secretaries. Remembering the part which our College men have played in making the Institute what it is to-day, let us hope they will amply justify their election.



We record with deep regret the death of Babu Golap Chandra Sarkar Shastri, M.A., B.L., which sad event took place on the 24th August. A brilliant scholar and a veteran educationist, he leaves behind him a record of useful services to the University and to the country. We offer our sympathies to his family in its bereavement.



The University has arranged for a series of lectures by the following gentlemen during the next winter season, viz.—Sir Dr. Rabindra Nath Tagore, Dr. J. C. Bose, M. M. Haraprasad Sastri, Dr. P. C. Ray. The subjects of the lectures will be selected by the lecturers themselves.



Mr. P. K. Sen, M.A. (Cantab), LL.M., has been appointed Tagore Lecturer of Law.

The Presidency College Flood and Famine Relief Committee.

THE distress that now prevails in East Bengal, especially in the districts of Tipperah, Noakhali, Comilla and even Dacca, is well known. We have been receiving first-hand reports from our friends and workers in the actual scene of distress and all unanimously declare that the distress is growing acuter every day, and help, both immediate and sustained, is necessary.

The Presidency College has started an organization of its own for the alleviation of the present distress. The committee organized for

this purpose.

President, Dr.

Hossain as ex-

Subhas Chandra

as well as fr.

C. Ray as Treasurer, Pre-

Hidayatullah as ordinary members, Srijuts Harish Chandra Sinha and

Basu as Secretaries, and representatives from all classes

as well as fr. our ex-students.

We need not tender thanks formally to those of our student workers who have made the cause their own and have worked accordingly. Further we would here like to convey our sincere thanks to our Principal and those of our Professors and ex-students who have been kind enough to show active sympathy with our cause.

Our funds up to date reach a total of Rs. 1,500. Besides, we have every prospect of bringing the grand total up to Rs. 2,000. Two of our ex-students, Srijuts Harish Chandra Bose and Jogendra Kumar Chowdhury, who were primarily sent by us to obtain first-hand information of the actual state of affairs there, have after investigation opened a relief centre at Sasidal in Brahmanbaria Sub-division. They are, at present, working in coalition with the "Nursing Brotherhood" of Calcutta. They want to open, as soon as possible, a second centre. Consequently we are urgently in need of more funds which alone can enable us to continue relief operations for at least three or four months.

We beg to submit a list of subscriptions received from our friends and ex-students :—

LIST OF SUBSCRIPTIONS.

	Rs.	A.	P.	Rs.	A.	P.
Students, Hare School	100	0	0	Mr. Nirmal Chandra Chan-		
Students, Hindu School	100	0	0	dra	10	0 0
Sir Bepin Krishna Basu	50	0	0	,, Benimadhab Chakra-		
Mr. K. C. Sen ..	25	0	0	varty	10	0 0
,, B. C. Mitter	25	0	0	,, G. D. Chowdhury ..	10	0 0
,, Jadunath Sarkar	15	0	0	Brajalal Chakravarty ..	5	0 0
,, B. K. Basu	10	0	0	Umesh Chandra Ghose ..	5	0 0
,, B. B. Ray ..	10	0	0	Suresh Chandra Bha-		
,, Nalini Nath Sett	10	0	0	huri	5	0 0
,, Satyendranath Sen	10	0	0	,, Anutosh Chatterjee ..	5	0 0
,, Bhupendranath Basu ..	10	0	0	,, Dwarakanath Chakra-		
,, Pravash Chandra Mitter	10	0	0	var	5	0 0
,, Mahendranath Roy ..	10	0	0	,, Akhil Bandhu Gupta ..	5	0 0
,, Saratkumar Chaudhuri	10	0	0	Jagat Bandhu School Board-		
,, M. N. Mitter	10	0	0	ing House Charity Club ..	5	0 0
,, M. Sarkar ..	10	0	0	Mr. Kali Das Ray Chau-		
,, Kumar J. N. Roy	10	0	0	dhuri	5	0 0
Messrs. C. C. Bishwas and				,, Upendra Nath Banjer-		
K. C. Bishwas	10	0	0	jee	5	0 0
Sir Ashutosh Mukherjee	10	0	0	,, Nripendra Ghosh ..	5	0 0

Abin	o o	RS. A. P.
,, Mar	5 0 0	1 0 0
,, B. S. Sen ..	5 0 0	1 0 0
,, Brajendranath Dutt ..	4 0 0	1 0 0
Messrs. M. N. Roy and S. N.		
Roy ..	4 0 0	1 0 0
Mr. Somenath Maitra ..	4 0 0	1 0 0
,, Satish Chandra Basu ..	4 0 0	1 0 0
,, Sudhansu M. Karmakar ..	3 0 0	1 0 0
,, Naresh Chandra Sen ..	3 0 0	1 0 0
“Three Ladies” ..	3 0 0	1 0 0
Mr. Satindranath Dasgupta ..	3 0 0	1 0 0
,, Amarendra Basu ..	3 0 0	1 0 0
, Nripendranath De ..	2 0 0	1 0 0
, Rajendra Prasad ..	2 0 0	1 0 0
, Bankim Mukherjee ..	2 0 0	1 0 0
, Sarojendra Bose ..	2 0 0	1 0 0
, Girindranath Sen ..	2 0 0	1 0 0
, Rishindranath Sarkar ..	2 0 0	1 0 0
, Harendranath Mitra ..	2 0 0	1 0 0
, H C. Banerjee ..	2 0 0	1 0 0
, Bishadendu Gupta ..	2 0 0	1 0 0
, Panchkowri Mitra ..	2 0 0	1 0 0
, Pareshnath Majumdar ..	2 0 0	1 0 0
, Nripendranath Das ..	2 0 0	1 0 0
, Abinash Chandra Basu ..	2 0 0	1 0 0
, J. P. Sarbadhikari ..	2 0 0	1 0 0
, Devendranath Mullick ..	2 0 0	1 0 0
, J. C. Boral ..	2 0 0	1 0 0
, Arun Das Gupta ..	2 0 0	1 0 0
, S. Dutt ..	2 0 0	1 0 0
, Atul Chandra Basu ..	2 0 0	1 0 0
, H. D. Basu ..	2 0 0	1 0 0
, S. K. Mitra ..	2 0 0	1 0 0
, Jogis Chandra Sinha ..	2 0 0	1 0 0
, B. B. Banerjee ..	2 0 0	1 0 0
, S. N. Basu ..	2 0 0	1 0 0
, Harendra Ch. Banerjea ..		
Tulsi Mitra ..		
Upendranath Rai Chaudhury ..	3 0	1 0 0
Rajendranath Ghose ..	2 0 0	1 0 0
Satyananda Basu ..	2 0 0	1 0 0
A. C. Mukerjea ..	2 0 0	1 0 0
, B. C. Ghose ..	2 0 0	1 0 0
, L. M. Gupta ..	1 0 0	1 0 0
, N. M. Mukerjea ..	1 0 0	1 0 0
, A. N. Bhattachariyya ..	1 0 0	1 0 0
, N. M. Basu ..	1 0 0	1 0 0
, N. L. Banerjee ..	1 0 0	1 0 0
, D. N. Bhattachariyya ..	1 0 0	1 0 0
,, Sitaram Banerjee ..		
,, S. C. Basu ..		
,, D. N. Mitra ..		
,, S. C. Das ..		
,, S. C. Chaudhury ..		
,, Nilkanta Ghose ..		
,, S. B. Banerjee ..		
,, K. N. Banerjee ..		
,, D. N. Sen ..		
,, C. S. Sen ..		
,, D. K. Dutt ..		
,, B. B. Sen ..		
,, Gopeshwar Paul ..		
,, M. N. Basu ..		
,, B. N. Roy ..		
,, Sailendranath Mitra ..		
,, Sambhunatji Ojah ..		
,, S. C. Mukerjea ..		
,, Prothas Chandra Cherkart ..		
,, Indu Bhawan Banerjee ..		
,, B. N. Chatterjee ..		
,, C. T. Basu ..		
,, A. K. Chatterjee ..		
,, N. Mitra ..		
,, M. K. Sen ..		
,, T. Dutt ..		
,, S. N. Dutt ..		
,, H. N. Mukerjea ..		
,, G. C. Chaudhury ..		
,, L. C. Mitra ..		
,, R. N. Das Gupta ..		
,, A. N. Ghose ..		
,, N. Sen ..		
,, E. C. Sarkar ..		
,, N. C. Roy ..		
,, K. C. Mitra ..		
,, N. K. Sen ..		
,, S. N. Mitra ..		
,, J. Chaudhury ..		
,, Jagat Bhushan Ray ..		
,, Surendra Mullick ..		
,, H. Lahiri ..		
,, K. Sanyal ..		
,, Pramatha N. Banerjee ..		
,, J. C. Chakravarti ..		
,, Heralal Sanyal ..		
,, M. N. Gupta ..		
,, Sudhansu K. Ghose ..		
,, Narendranath Ghose ..		

	RS. A. P.		RS. A. P.
Mr. J. N. Basu ..	1 0 0	Mr. Sarat Chandra Basak ..	1 0 0
„ Suniti Chaterjea ..	1 0 0	„ J. S. Sen Gupta ..	0 8 0
„ K. Chaterjea ..	1 0 0	„ T. N. Mukerjea ..	0 8 0
„ Mukunda Chakervarti ..	1 0 0	„ B. B. Das ..	0 8 0
„ N. K. Ghose ..	1 0 0	„ Saraf Chakervarti ..	0 8 0
„ U. D. Chakervarti ..	1 0 0	„ Anil Mukerjea ..	0 8 0
„ Meghnath Saha ..	1 0 0	„ D. K. Banerjea ..	0 8 0
„ S. P. Bhattacharyya ..	1 0 0	„ B. B. Biswas ..	0 4 0
„ Sishir Kumar Banerjea ..	1 0 0	„ B. B. Basu ..	0 4 0
„ H. N. Sen ..	1 0 0	„ Subodh Basu ..	0 2 0
„ A. K. Dev ..	1 0 0	„ T. C. Dey ..	0 1 0
„ Subodh Maitra ..	1 0 0		

HARIS CHANDRA SINHA,
SUBHAS CHANDRA BASU,

The 21st August, 1915.

Secretaries.

STUDENTS' RELIEF FUND.

The fund was started towards the end of the year 1914 primarily to help poor students of our College who found difficulty in paying their examination fees. It was decided to set apart, if possible, one-twelfth of the collection for the relief of students of other colleges. The fund was placed under the control of a committee thus constituted:—

President ..	.. Prof. P. C. Ray, Ph.D., D.Sc., C.I.E., etc.
Treasurer ..	.. Prof. K. N. Mitra, M.A.
Secretary ..	.. Prof. P. C. Ghose, M.A., P.R.S.

Besides it was decided that three members, two Hindus and one Mahomedan, should represent the various sub-committees of the classes on the general committee.

	ACCTN	RS. A. P.	RS. A. P.
Total receipts	334 12 0
Disbursements —			
Loan	75 0 0
Donation	107 0 0
			182 0 0
Balance	152 12 0

The disbursements include Rs. 30 given away to students of other colleges

School Notes

HARE SCHOOL.

Babu Narayan Chandra Mukherjea, our popular and conscientious Assistant Headmaster, has retired from service recently. He was a teacher whom every student of the School loved and respected. When our Headmaster Rai Saheb Isan Chandra Ghosh officiated as Assistant Director of Public Instruction, for some time, Narayan Babu acted as the Headmaster and did the work remarkably well. His retirement, therefore, at the comparatively early age of 55 is a great, almost an irreparable, loss to the School. The students have recently started a fund to perpetuate his memory. This is just as it should be, though by a strange irony of fate, the most worthy of remembrance are sometimes suffered to be consigned to oblivion after their retirement. Thus it is that though the late Babu Pyari Charan Sircar was one of the ablest Headmasters the School ever had, nearly half a century has elapsed without any effective steps having been taken to preserve his memory. We are glad to learn that our Headmaster is now collecting subscriptions from the old pupils of Babu Pyari Charan Sircar for a portrait of this distinguished educationist in oil colours.

The result of our School at the last Matriculation Examination was on the whole satisfactory. Of the 55 students who passed, four got Junior Scholarships, Babu Brojendra Nath Bose winning the 9th place in the Presidency of Bengal. This student, we hear, scored very high marks in English, standing second in order of merit in that subject. While another student, Babu Tarak Nath Dutt, got cent per cent marks in Mathematics, both Optional and Compulsory.

The School has recently started a relief fund for the famine in East Bengal. Rupees 100 has already been made over to the Principal on this account.

The School is proud of its ex-student, Babu Sailendra Nath Bose, who has gone to the front as a member of the Bengal Ambulance Corps.

Regarding Athletic Section we have played but few matches this year. We entered into the Griffith Cup competition and lost the Semi-final game by one goal. This cup was annexed by us in the previous year. We are still playing for the Bangabasi Cup. In this competition, we have defeated the Homeopathic School in the first round by a goal. The game took place on the Presidency College

ground on Friday, the 13th August. Pratul Ghosh and Haren Ghosh played remarkably well for the School.

OFFICE-BEARERS FOR 1915-16.

<i>President</i>	..	..	Mr. S. N. Ganguly, B.A., B.T.
<i>Captain</i>	..	..	R. N. Mookerji.
<i>V. Captain</i>	..	..	Pratul Ghosh.
<i>Secretary</i>	..	..	S. N. Chatterji.
<i>Asst. Secretary</i>	..	..	B. N. Bose.

PRATUL GHOSH,
Correspondent.

HINDU SCHOOL.

(*Report for the Month of July*).

HINDU SCHOOL STUDENTS' ASSOCIATION.

The Hindu School Students' Association has three sections—

- (i) Debating Club,
- (ii) Sporting Section, and
- (iii) Poor Fund Section.

The Debating Club.—The usual number of meetings were not held in the course of the last month. Only two general meetings were held on the first two Saturdays and the subjects of discussion were :—

- (i) Science vs. Arts.
- (ii) Was Ram justified in banishing Sita ?

The former subject was discussed in Bengali, while the latter was discussed in English. Both meetings were well attended.

The Sporting Section.—We have a fairly successful football season this year. Ten matches have already been played, of which four were cup-matches. Two have been lost out of these four, and in the other two we have respectively reached the 3rd Round and the Final. Other friendly, cup and medal matches will be played in the course of this month.

The Poor Fund Section.—Three general meetings of the Poor Fund Section were held in the course of the last month. This Section of the Students' Association is doing very good work. The collection in the last month amounted to Rs. 25, which has been given away to the deserving poor. We have nearly Rs. 435 in our Fund, of which Rs. 425 is in the Post Office Savings Bank.

EAST BENGAL FAMINE RELIEF FUND.

A fund has been started lately to help our famine-stricken countrymen of East Bengal, with Babu Bramhakisor Mukerji, B.A., as President.

AMAL GANGULI,
Correspondent

16th August, 1915.

Library Bulletin.

- [Hegel] .. A Commentary on Hegel's Logic.
- Spinoza, B. De .. Short Treatise on God, Man, and his Well-being.
- The Times* History of the War, Parts 27 to 49.
- The Indian Year-Book and Authors' Who is Who, for 1915.
- White, J. W. .. America's Arraignment of Germany.
- Upanishads .. 10 vols. with Gaudapada's Karika.
- Carpenter, M. .. The Last days in England of Raja Ram Mohan Ray.
- Royce, J. .. The Problem of Christianity, 2 vols.
- Leuba, J. H. .. A Psychological Study of Religion.
- Whitney, G. T., and Fogel, P. H. .. Kant's Critical Philosophy.
- Driesch, H. .. The History and Theory of Vitalism.
- Hardy, T. .. Satires of Circumstance, Lyrics and Reveries, with miscellaneous pieces.
- Chesterton, G. K... Robert Browning.
- Hardy, T. .. The Dynasts.
- Do. .. Poems of the Past and Present.
- Roby Dutta .. Sakuntala and her Keep-sake.
- Hammond, B. E. .. Bodies Politic and their Governments.
- Huart, C. .. A History of Arabic Literature.
- Luciani, Prof. L. .. Human Physiology, 3 vols.
- MacBride, E. W. .. Text-Book of Embryology, Vol. I.
- Greenwood, M. .. Physiology of the Special Senses.
- Bryce, A. .. Modern Theories of Diet.
- Bayliss, W. M. .. The Nature of Enzyme Action.
- Plunmer, R. H. A. .. The Chemical Constitutions of the Proteins, 2 parts.
- Schryver, S. B. .. The General Characters of the Proteins.
- Leather, J. B. .. The Fats.
- Cathcart, E. P. .. The Physiology of Protein Metabolism.

Dakin, H. D. .. Oxidations and Reductions in the Animal Body.

King Albert's Book : A Tribute to the Belgian King and people from representative men and women throughout the world.

Saint Nihal Singh. India's Fighting Troops. [No. 1 of 'Our Fighting Forces.']

The Brahmasutra-Sankarabhasyam. Edited by Mahadeva Shastri Bakre.

Madhavacharyya .. Sarva Darsana Sangraha.

Kabir .. One Hundred Poems of Kabir.

Saint Nihal Singh .. India's Fighters: their mettle, history and services to Britain.

Smart, W. .. Economic Annals of the 19th Century (1801-1820).

Cox, H. .. The Economic Strength of Britain.

Willoughby, W. W. .. An Examination of the Nature of the State.

Jaques, A. .. Complex Ions in Aqueous Solutions.

Gayley, C. M. (Ed.) Representative English Comedies, 3 vols.

Figgis, J. N. .. Studies of Political Thought from Gerson to Grotius (1414-1625).

Hatch, F. H., and Corstorphine, G. S. The Geology of South Africa.

Scherger, G. L. .. The Evolution of Modern Liberty.

Holland, T. E. .. Letters to *The Times* upon War and Neutrality (1881 to 1909), with some comments.

Patterson, G. W. .. Revolving Vectors.

Rhys, E. .. Rabindra Nath Tagore; A Biographical study

Frazer, J. G. .. The Golden Bough, Vol. 12.

Poincaré, H. .. The Foundations of Science.

Addams, J. .. The Spirit of Youth and City Streets.

Do. .. Twenty Years at Hull House, with autobiographical notes

Parsons, J. H. .. An Introduction to the study of colour-vision.

Crawford, Lt.-Col. D. G. .. A History of the Indian Medical Service, 1600-1913, 2 vols.

Thatcher, Rev. G. W. Arabic Grammar of the Written Language.

Lajpat Rai. .. The Arya Samaj.

Brown, H. G. .. International Trade and Exchange.

Chapman, S. J. .. Work and Wages, Part III : Social Betterment.

Bose Pramathanath, .. Epochs of Civilization.

Do. .. The Root Cause of the Great War. [life.

Jerrold, W. .. Earl Kitchener of Khartoum : the story of his

Lucas, Sir C. P. .. The British Empire.
 Hearn, G. R. .. The Seven Cities of Delhi.
 Collet, Sophia D. .. Life and Letters of Raja Rammohan Ray
 Busteed, H. E. .. Echoes from Old Calcutta.
 Firminger, Rev.
 W. K. .. Thacker's Guide to Calcutta.
 Parker, Sir G. .. The World in the Crucible.
 Roosevelt, T. .. Through the Brazilian Wilderness.
 Calcutta University Calendar, 1914, Parts 2 and 3.
 Woods, R. A., and
 Kennedy, A. J. ... Handbook of Settlements.
 The Statesman's Year Book, 1915.
 Besant, Annie .. India and the Empire.
 Nivedita, Sister .. Foot-Falls of Indian History.
 Sarkar, J. N. .. Anecdotes of Aurangzeb.
 Mukerjee, Radha-
 kumud .. The Fundamental Unity of India.
 Sarkar, J. N. .. Economics of British India.
 Palit, R. .. Sketches of Indian Economics.
 Sarkar, B. K. .. Sukraniti.
 Do. .. The Positive Background of Hindu Sociology,
 Book I.
 Nernst, Prof. W. .. The Theory of the Solid State.
 Friend, J. N., and
 others .. A Text-book of Inorganic Chemistry, vol. I.
 Avebury, Lord .. Representation.
 Temperley, H. W. V. .. Senates and Upper Chambers.
 Porter, R. P. .. The Dangers of Municipal Trading.
 Shaw, B. .. The Common Sense of Municipal Trading.
 Masefield, J. .. Philip the King and other Poems.
 Stratton, M. .. Bruges: a record and an impression.
 Thomas, W. B., and
 Collet, A. K. .. The English Year: Autumn and Winter.
 Do. .. Do. Spring.
 Do. .. Do. Summer.
 Burckhardt, J. .. The Civilization of the Renaissance in Italy.
 Galsworthy, J. .. Plays, Vols. 1 and 2.
 Maugham, W. S. .. A Man of Honour.
 Pinero, A. W. .. His House in Order.
 Do. .. The Thunderbolt.

Davis, H. H. . . Mrs. Gorringe's Necklace.

Shaw, B. . . Plays: Pleasant and Unpleasant, 2 vols.

Do. . . Three Plays for Puritans.

Do. . . Dramatic Opinions and Essays, 2 vols.

Wilde, O. . . The Duchess of Padua.

Do. . . Lady Windermere's Fan.

Do. . . An Ideal Husband.

Barker, G. . . Three Plays.

Gregory, Lady . . . Seven Short Plays.

Yeats, W. B. . . The Land of Hearts' Desire.

Do. . . Deirdre.

Synge, J. M. . . Two Plays.

Masefield, J. . . The Tragedy of Pompey the Great.

Davis, H. W. C. . . The Political Thought of Heinrich von Treitschke.

Herdman T. . . Some Geographical Factors in the Great War.

Binyon, L. . . The Winnowing-Fan: Poems of the Great War.

Maeterlinck, M. . . Pelleas and Melisanda.

Oxford Pamphlets: German Sea-power. By C. S. Terry.

Wilkinson, S. . . First Lessons in War.

Muir, R. . . Britain's Case against Germany.

Wilson, J. D. . . John Lyly.

Do. . . Martin Marprelate, etc.

Barrie, J. M. . . Der Tag.

Do. . . The Little White Bird.

Do. . . Half Hours.

Croly . . . Progressive Democracy.

Ely, R. T. . . Property and Contract in their relations to the Distribution of Wealth, 2 vols.

Wells, H. G. . . The War that will end War.

Worcester, Dean C. . . The Philippines, Past and Present, 2 vols.

Mawson, Sir D. . . The Home of the Blizzard, 2 vols.

Galsworthy, J. . . Memories.

Sampson, A. . . Studies in Milton, and an essay on Poetry.

Barclay, Sir T. . . Law and Usage of War.

Horsbrugh, E. M. (Ed.) . . . Modern Instruments and Methods of Calculation.

Loos . . . Studies in the Politics of Aristotle and the Republic of Plato.

Loch, J. . . Artificial Parthenogenesis and Fertilization.

Hudson, W. H. .. An Introduction to the Philosophy of Herbert Spencer.

Morison, J. C. .. The Service of Man.

Jones, H. .. Idealism as a Practical Creed.

Arrhenius, S. .. Theories of Chemistry.

Bragg, W. H., and W. L. .. X-Rays and Crystal Structure.

Deussen Dr. P. .. The System of the Vedanta.

Do. .. Outline of the Vedanta System of Philosophy.

Wilson, H. H. .. The Bhashya or Commentary of Gaurapada; together with a translation of the Sankhya Karika.

Kitchin, D. B. .. Bergson for Beginners.

Maeterlinck, M. .. Our Eternity.

Jevons, F. B. .. Philosophy: What is it?

Sait, U. B. .. The Ethical Implications of Bergson's Philosophy.

Jacob, Col. G. A. .. A Concordance to the principal Upanisads and Bhagavadgita.

Mach, E. .. The Analysis of Sensations, and the Relation of the Physical to the Psychical.

Do. .. Popular Scientific Lectures.

Lucas, E. V. .. The Life of Lamb.

Clutton-Brock, A. .. Thoughts on the War.

Chesterton, G. K. .. The Barbarism of Berlin.

Goodspeed, G. S. .. A History of the Babylonians and the Assyrians.

Driver, S. R. .. An Introduction to the Literature of the Old Testament.

Berger, P. .. William Blake, Poet and Mystic.

Dunning, W. A. .. The British Empire and the United States.

Pearson, Karl .. On the Theory of Contingency, etc.

Do. .. On the General Theory of Skew Correlation, etc.

Do. .. A Mathematical Theory of Random Migration.

Do. .. On Further Method of Determining Correlation.

Do. (Ed.) .. Tables for Statisticians and Biometricalians.

Picht, Dr. W. .. Toynbee Hall and the English Settlement Movement.

Buchanan, R. J. M. .. The Blood in Health and Disease.

Hawk, P. B. .. Practical Physiological Chemistry.

Pavy, F. W. .. On Carbohydrate Metabolism.

Abderhalden, E. . . Text-book of Physiological Chemistry.
 Chittenden, R. H. . . Physiological Economy in Nutrition.
 Do. . . The Nutrition of Man.
 Sherrington, C. S. . . The Integrative Action of the Nervous System.
 Salkowski, Dr. E. . . A Laboratory Manual of Physiological and Pathological Chemistry.
 Wiley, H. W. . . Foods and their Adulteration.
 Baty, T., and Morgan, J. H. . . War: its conduct and legal results.
 Maeterlinck, M. . . Poems, done into English Verse.
 Johnson, Rev. J. B. . . The Place-names of England and Wales.
 Walker, H. . . The English Essay and Essayists.
 Risley, Sir H. H. . . The People of India.
 Jones, J. H. . . The Economics of War and Conquest.
 Swan, J. A. L. . . Report on the Industrial Development of Bengal.
 Low, S. (Ed.) . . The Spirit of the Allied Nations.
 Ranade, M. G. . . Miscellaneous Writings.
 Beale, Sir W. P. . . Crystallography.
 Carpenter, E. . . The Healing of Nations, and the Hidden Sources of their Strife.

Correspondence.

To ADVICE TO FRESHMEN.

THE EDITOR, *Presidency College Magazine*.

SIR,

Would you kindly convey to the freshmen of this College through the medium of your magazine a piece of friendly advice which I, as a senior member of this College, have a privilege to offer? Students who have been members of this College for more than two years have surely had occasions to notice with pride and gratitude the extreme courtesy and affection which invariably mark all dealings of the Principal with his pupils.

Fresh members will come to feel this ere long, if they have not done so already. I think they have. The very first notice that was put up in the new session, inculcating upon the students the necessity and value of discipline and good behaviour, was worded with a phraseology in which courtesy was the watchword. An extract from that notice will help their memory. "Students are requested to keep in mind how much the convenience and efficiency of work as well as its

seemliness depend on the quiet and orderly bearing of students individually during working hours—movement from one class to another should be as quiet as possible and talking should be in quiet tones."

The placards in the library containing "Silence is requested" are in my opinion the most courteous injunctions ever tried by a Principal and the most successful too. There is something more than friendliness in a place where students receive so much consideration from the Principal. Reverence and gratitude will spontaneously flow to him from every juvenile heart, but our duty to him will scarcely be discharged until we can show our appreciation of him with strict obedience to his orders. It grieves me sore to notice a band of howling freshmen at 12 every Wednesday racing through the top floor corridor in open and unblushing defiance of all laws of courtesy and good breeding, not unoften to the disturbance of many senior classes unhappily situated on their boisterous track. I will consider myself fortunate if such things cease to happen after my appeal has been read.

Yours, etc.,

B. K. B.

A GRIEVANCE.

To

THE EDITOR, *Presidency College Magazine*.

SIR,

I was one of those who hailed the abolition of the Test Examination with exultation and tasted the happy boon the first time it was granted. But "it was in my mouth sweet as honey, but in my belly it was bitter." It is indeed enjoyable to while away the winter months with impunity snugly laid under the warm quilts, but when the final ordeal is to be met, the punishment comes with a redoubled vengeance. In the third number of your esteemed magazine a fellow sufferer of mine brought quite a bagful of logic to bear upon the question and he proved with an ingenuity which astonishes me all the more because it was vain, that the innovation was a curse in disguise. Now that the time-honoured twin sovereigns ^{Test} _{Annual} have been deliberately deposed from the cover of the Examination books to make room for the uncertain régime of *Periodicals*, any more eloquence to bring back the old order will only be a cry in the wilderness. So from that I reluctantly desist. I only bring forward to the authorities the sweet uses of their new favoured system. *Periodicals* are good substitutes no doubt, and the frequency of their visitation is an excellent memento. But we are

having *too much* of Periodicals—a fact to which the Principal himself, if I remember aright, expressed a pronounced aversion. Too much of anything is bad and too much of that excellent periodical commodity is a positive evil—an instrument of oppression and persecution, unbearable and intolerable. Theorising is a cheap commodity and our professors in their councils have had enough of it. The few good results that our College has seen this year in the B.A. degree Examination have been ascribed by them to the frequency of *Periodicals* held last year, and upon that theory they intend to apply the same stimulant upon their flock this year. Theorising is catching, too, and professors who never cared for statistics are now benevolently treading on the royal road of their colleagues. But the wiles of the new discovery so much fascinating to our professors are positively tormenting to their pupils who have continually to fashion their studies to these examinations, leaving new acquisition in the background. My own case is an instance in point. I am a 4th year student with Honours in a subject other than Mathematics. The comparatively good results in Mathematics this year have provoked periodicals in the subject to come down upon us with a measured malice, and we are feeling its terrible grip every Saturday. Other subjects also have followed suit. Where then is the time for attending to the Honours subject, which alone will determine my position in the list? The disappointing results of this College in this year's Honours list are partly due to the preponderance of exercises in Pass subjects. So far as I know, our Principal is averse to frequency of exercises, and it is my conviction that he is sanctioning such a state of affairs at the advice of the Professors' Councils. Has not our voice a right to his audience in a matter so intimately concerning ourselves? Let him have about him "men that are fat" and I will answer for one.

Yours, etc.,

FAT MAN.

"PENNIS NUNE HOMINI DATIS."

The following extract from a letter recently received from England may possibly interest our readers, as it describes an experience which probably very few of us in Calcutta have a chance of getting.

"We had a delightful trip home, and rose to the rather lofty altitude of 9500 feet. Close on 10,000 is quite a respectable height. It was a delightful sensation! We seemed to be above the highest

layer of clouds—not very far, only about fifty feet above them, so that we seemed to be skimming along the top of them. Every now and then there would be a blue opening and one could peep down and see other clouds far below, and perhaps through a second opening in those, see the earth very far below again! It was quite weird. It seemed like moving among fairy icebergs with the sun gleaming on very soft white snow covering them.

When at our highest, X cut off the engine entirely; the propeller stopped, the engine ceased to vibrate and we began to glide smoothly and gently downwards. The absence of noise seemed most strange and allowed one to hear the wind whistling and moaning among the wires. It was very chilly, but you have no idea how exhilarating the sensation was. We glided right to earth like this; and it took us about seventeen minutes to do the descent from over two miles above the ground. We did no violent spirals, and we went smoothly all the time.”

A GRIEVANCE.

To

THE EDITOR, *Presidency College Magazine*.

DEAR SIR,

I beg to draw the attention of our Principal through the medium of your esteemed magazine to the following fact:—

It is a great shame to lose both the shields at a time; but it is no wonder that we lose seeing that no preference for admission is given to a man who is a good player but a middling student. Specialisation is the order of the day, and the man that shines in sports cannot fairly be expected to be in the fore-front in purely academic work as well. If special favour is shown to the scions of aristocratic families is it not reasonable to demand that sporting interests should also be recognised? It is needless to dilate upon the healthy effect produced on body and character by participation in games. Every care should be taken that this beneficial influence does not languish for want of support. The Principal is himself a sportsman, and we can surely depend upon him to see that the necessary sporting element is admitted next year.

Yours, etc.,

SPORTSMAN.

To

THE EDITOR, *Presidency College Magazine*.

SIR,

I fully join in the timely 'query' which has been put by 'An Admirer' in the last number of your magazine as to what is being done to perpetuate the memory of Mr. Percival in the College. I believe immediately after his retirement subscription books were handed round and subscriptions promised, but we have yet to learn that anything further has since been done by the Committee, if there was any, to that end.

Mr. Percival put in thirty years' uninterrupted, patient and ungrudging work—one of the longest terms, if not the longest term, of service in the College, during which two generations of Bengal's best and ablest students passed through his hands. But, well, Mr. Percival does not stand in need of any commendation at my hands.

To those of us who accompanied the memorable procession to Mr. Percival's house in the scorching heat of an April noon in the year 1911, when the students, in spite of his entreaties, unyoked the horses and drew his carriage all the way down to Park Street, and had the honour of witnessing that outburst of emotion on Mr. Percival's part, as he stood sobbing and choking in the porch, it has seemed, to say the least, not a little strange that nothing has been done during these four years to mark our reverence and admiration for him and his work in the College—the more so, as so many other activities have been started and carried to fruition in the meanwhile. To Mr. Percival, in the days of his retirement, the memory of that day will perhaps be a source of more genuine and lasting satisfaction than any stone or canvas. But for us, it is a solemn duty we owe to ourselves, and the sooner it were discharged the better.

My idea is that a fitting tribute, however modest and tardy, will be paid by hanging up a portrait of his in the English Seminar or lecture room, so that he, with those flashing eyes of his, may still in a sense be watching over the work which had once been so dear to his heart.

I shall be much obliged if you will kindly find a corner in your esteemed journal for these few lines.

I have, etc.,
PRAMATHA NATH MITRA.

76, UPPER CIRCULAR ROAD,

6th September, 1915.

Reviews.

“The World at War.”—By J. NELSON FRASER: Published by Humphrey Milford at the Oxford University Press Price 14 annas.

Mr. J. Nelson Fraser's services to education are many and various. He has never done better service than in this little book which in 113 octavo pages sets out the leading facts about all the chief countries engaged in the war,—Germany and Austria, France, Belgium and Italy, Russia, Poland and Turkey, England and the British Empire,—in their historical connection, and states the issues involved with such simplicity and clearness as to be well within the comprehension of young students. The task attempted is one of great difficulty. It requires along with a vivid imagination a vast range of accurate knowledge of history. At every turn generalisations have to be made involving summary judgments. It is not to be supposed that Mr. Fraser's judgments will satisfy all critics. Some of his pronouncements on historical matters may not find acceptance. Further, one great excellence of Mr. Fraser's handling of his subject is its careful moderation. He sets the case from the German point of view with studied fairness and in a calm spirit. He nowhere denounces. Some will think he allows too much to the enemy and understates in places the British case. But, on the whole, for the purposes in view, his survey probably gains by this restraint. When the German case has been stated with the same dispassionateness as the British and the Belgian, there is left such a clear balance against Germany that the reader of Mr. Fraser's summary is little likely to be in two minds about his conclusions. It is, however, when we come to chapter IX, *The Conduct of the War*, that the balance of recorded fact tells fatally against the Germans. “When the German army passed through Belgium it left behind little but smoking ruins, and corpses of men, women and children.” (Page 90). “Not for ages has the world felt such a thrill of astonishment and horror as on the morning when it read of the destruction of Louvain.” (Page 91). This and chapter XI on the Issues of the War are the crucial chapters. From chapter XI we may quote, “Britain and Germany differ in their views as to the use of Imperial power. In this much they agree, that each nation would give its own character to its empire, but the British character prefers to see different nations or communities follow their own ideas and progress on their own lines, while the German character imposes on every-

body German ways." (Page 102) "the British Empire seeks to extend over its share of the world a common government in which different histories and different aims can co-operate and live at peace" "Here again we meet with a difference of policy between Britain and Germany. It may be true there are many peaceful Germans, but it is true that Germany is a military country in a sense in which England is not. The honour paid to the military uniform, especially that of the officer, is unknown in England. In England the military officer is never more than a simple citizen; in Germany he is in many ways above the law" (page 103). Equally telling is the exposition in the pages next following of the issues involved concerning International law. There are also interesting chapters on Modern Arms and Warfare and on India and the War.

The book is dated February the 1st of this year. Many things, of course, have happened since then, and here and there statements made by the author need to be amended in the light of what has happened since. These corrections, however, can easily be supplied by the intelligent reader. The value of the book as an exposition of antecedent facts and ultimate issues remains unaltered.

H. R. J. .

The Conflict Of The Nations.—By K. K. SINHA: Thacker, Spink & Co.: Second Edition.

We are glad to see that Mr. K. K. Sinha's war pamphlet has reached a second edition. This shows that its plan is well conceived and that Mr. Sinha has carried it out successfully. The book has special value as embodying the judgment of an Indian gentleman who has thought out for himself the issues of the great conflict now filling the world's arena. Mr. Sinha has studied his documents carefully and has a firm grasp of facts and reasons. He brings to the process of judgment independent elements of Hindu thought. All this makes his exposition very valuable, both as helping the judgment of his fellow-countrymen and as expressing the verdict of one whose standpoint is, to some extent, detached and disinterested.

Mr. Sinha's style is a little unequal, but it is generally clear and in places rises to eloquence. As samples of his quality, we may quote:

"The character of a nation is reflected in its literature. The mind of a man is known by his words or deeds. The history of the world can hardly show another instance in which there has been such an

organised system of the preaching and practising of the art of war. The uniform of the German soldier has become a part of his body. The sword of the German is his right hand. He sleeps with the sword he dreams of the sword ; he rises with the sword." Pages 3 and 4.

"The strength of England does not lie in the rifles and guns in her forts. Her strength does not depend on her red coats and her blue jackets. The character of her sons is her strength. The education of her people is the mainstay of her life. She is powerful because she is great ; and she is great because she possesses culture and character." Pages 13 and 14.

"India is by training, by tradition, and by religion the respecter of such doctrines of peace and goodwill and of those that hold them. She cannot but have deep hatred for the dismal cant of brutal supremacy, and she is bound by nature to treat with sovereign contempt the nation that favours it." Page 20.

"Such is the German principle." The conquered belongs to the conqueror with his wives and children!!! "We shall look in vain for a parallel passage. When the Romans lost much of the nobility of their character and fell into depths of degradation, they had a better and a greater regard for their fellow-men. This deceitful symphony of the German teachings is much more dangerous and terrible than the thunderous roaring of the German artillery. The German creed is a perpetual danger to the peace of the world." Page 91.

H. R. J.

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THE
PRESIDENCY COLLEGE
MAGAZINE

VOL. II.

OCTOBER, 1915.

No. 3

EDITORIAL NOTES.

THE M.A. and M.Sc. results were published in the *Calcutta Gazette* on September the 16th. They are extremely flattering to us. In each of the subjects in which our College prepares candidates for the Master's degree we claim the first place, only in English we have to go satisfied with the second place. Surely this is an achievement sufficient to dispel any disappointment that might have been felt about our Intermediate, B.A. and B.Sc. results. If there was any doubt then there can be none now of our unapproachable position and continued vitality.

* * *

Once again the best results are those shown for Mathematics and Political Economy. Messrs. Satyendra Nath Basu and Jogis Chandra Sinha easily head the lists and they have brought fresh laurels to the College by breaking all previous records in their respective subjects. The College is proud of them, and we wish them as great success in life as they have made their own in the examination.

Speaking generally, in Mathematics we have the first three places in the First class in M.Sc. and the only two First classes awarded in M.A. In M.Sc. there is 1 Second class and 2 Third classes besides. In Economics and Politics Group A we have 3 Firsts, the only ones awarded, 5 Seconds and 1 Third; in Group B there are 4 Seconds including the 1st and the 3rd place and 5 Thirds. Further the failures have been very few. The staff concerned may take a legitimate pride in the share they had in bringing about this happy state of affairs, and specially gratifying it must have been to the individual Professors of the subjects concerned.

The results for History also are very satisfactory and we have 2 Firsts out of the 3 awarded. There are also 5 Seconds and 4 Thirds. Our hearty and brotherly congratulations are offered to our Ex-editor Mr. Pramathanath Banerjea, who heads the list, and to our Ex-secretary Mr. Jogeschandra Chakravarty, who occupies a high place in the Second class.

In English there are 7 Seconds including the 1st and the 3rd place and 7 Thirds. But there has been a serious falling-off in the percentage of passes which however is not confined to this College alone. Let us hope we shall have more pleasing things to record next year.

In Physics M.Sc. we have the only 2 Firsts awarded, 4 Seconds and 3 Thirds. In Physics M.A. there is 1 Second.

The results for Chemistry have been published just as we go to press. Our College has 4 of the 5 Firsts, including the first three places, 5 Seconds, and one Third. Altogether we have 7 Firsts in M.A. and 9 Firsts in M.Sc., 22 Seconds in M.A. and 10 Seconds in M.Sc., 17 Thirds in M.A. and 6 Thirds in M.Sc.



The end of the war seems as far removed as ever. The last month has seen no important change in the relative positions of the belligerents in the theatres of war in Gallipoli, the Trentino and France. In Poland the Austro-German armies have advanced farther in the centre taking the important railway centre at Vilna. At the extreme north and south, however, the Russians have resumed the offensive with some effect, and as we go to press, we learn of the Allies' offensive on the western front, which we hope will bear fruit rapidly.

It is now apparent that the war will be a long one demanding the utmost sacrifices. Although over three million men have enlisted in Kitchener's armies for service at the front the military authorities now seem to think much larger numbers will be needed to bring the war to a successful issue and the question of conscription is being seriously considered. Of course the sinews of war must also be provided on an equally unprecedented scale, and two months after the floatation of the giant war loan of 1,000 millions sterling Mr. Asquith was again in the necessity of moving for a vote of credit of another quarter million. The new budget also provides for an increase of taxation amounting to 80 millions sterling.



England alone could have faced these astounding sacrifices without flinching. Rightly she has drawn upon her own resources first and

foremost, not desiring to tap the slender resources of the outlying parts of the Empire. She has been in fact, as she has often been called by metaphor, the heart of the Empire.



It has been frequently observed that India has been, of all countries, the least hit by the war. Economically she is still, in a large measure, self-sufficient. Though this fact is usually a source and sign of unprogressive industrial methods in times of peace, in the rude shock of war, when in so many other directions there is a harking back to the primitive from the civilized, the seemingly outworn system stands the strain better than the new.



All the same, however, India is having her share of misery, and if she has escaped some of the evil effects of war, at least an equally dreaded calamity and one peculiar to herself, viz. famine, has befallen her. In Sind and in Central India the situation is so serious that general relief measures have had to be organised. There have also been destructive floods in the U.P. and thousands of people have been rendered homeless and penniless. The town of Lucknow itself was extensively damaged and some localities remained under water for a fortnight and more. In Bengal there has been too much rainfall in the eastern districts and too little in the western districts. The prospect on the whole is a gloomy one. Even now the districts of Sylhet, Tipperah, Comilla, Noakhali, and Bankura are practically in the grip of famine. Nothing can be more pitiable than death from starvation. No effort, no sacrifice can be too great that is devoted to the prevention of this *useless* loss of human life.



We refer with regret to the illness of Lady Carmichael which necessitates her return to England at the earliest date on which she may be able to make the voyage. She took a kindly interest in all public charities, and she specially identified herself with the organisation for providing comforts for soldiers at the front. She will be sadly missed. We wish her *bon voyage* and a speedy return after restoration to health.



The friends of Dr. Harrison at Presidency College—and they are many—will be interested to hear that he is now placed on deputation

for military service and that his new style and title is Garrison Engineer, Bombay. He has charge of military cantonments at Deolali, near Nasik, and in addition of Santa Cruz and of Colaba (the southern portion of the Island of Bombay). He describes himself as having plenty of hard work. His latest undertaking was the design and construction of a "water supply for two thousand horses." The work was to be finished in four days with two days' notice. Great as is the energy of various kinds known to be generated in the Physics Department of this College, and strenuous as has been Dr. Harrison's share in it, we doubt if he ever before put through so large a piece of work in so short a time.



It is with great pleasure that we note the appointment of Mr. Bhupatimohon Sen as Professor of Mathematics in the I.E.S. at Dacca College. He is one of the most distinguished of our ex students, having a brilliant career here as well as at Cambridge. In fact he is the only Indian who has won the Smith's prize, the highest mathematical distinction at Cambridge.



The first number of the Hare School Magazine has recently reached us. We give a very hearty welcome to our young contemporary and relative, and wish him a long life. The first number is well got up and well illustrated, and the matter it contains, both English and Bengali, is well written.



The boarders of Ward V of the Eden Hindu Hostel gave a farewell entertainment to Babu Hridaychandra Banerjee, the late superintendent. The Principal presided, and the function was a great success. A report will be found elsewhere.



The Cooch Behar College Football team came down to play inter-collegiate matches in Calcutta and were our guests at the Eden Hindu Hostel. We should like that other mufassil colleges will follow suit, so that some sort of fellowship may grow up between students of different colleges spread all over the province. The Football season is passed, but cricket will soon afford fresh opportunities.



It is with great sorrow that we refer to the death of Mr. Matindra-nath Sen of the First Year class. He was a student of great promise,

and his character endeared him to all who came in contact with him. "Whom the gods love die young." A pathetic interest attaches to the photo which is reproduced elsewhere showing him in his last sleep.



The interest of the subject of advanced study under Calcutta University has recently been revived by the proposal in the Joint Faculty of Arts and Science for the appointment of a committee of enquiry and by the issue to principals of colleges of a letter from the Registrar requesting replies to a series of questions, one of which bears on this subject. We, therefore, make no apology for printing a note written by the Principal last year which describes the work of the seminars at Presidency College and the aims by which that work is guided.



We are obliged to the Censor for permission to publish two very interesting sketches of "A Visit to the Trenches" and "A Reconnaissance" written by Flight Second-lieutenant James, the elder son of our Principal.



We are indebted to the proprietor of the *Aryavarta* for lending us the use of the block of Capt. D. L. Richardson in the last number. Our similar obligations are due to Messrs. K. V. Seyne and Bros. for lending us the block of Dr. J. C. Bose from which his striking likeness is reproduced in this number.

Aims and Methods of Post-Graduate Study in Calcutta University.

IDEALS are usually spoken of with respect. Sometimes that respect is qualified with more than a touch of contempt, on the ground that an ideal is something visionary and in its nature unattainable. If I spoke of the ideals of post-graduate study in Calcutta University, I should only mean the practical objects which we ought to make our aim, the practicable means we should adopt to reach our aim. I, therefore, prefer to speak of aims and methods.

The measures adopted by the Senate of this University on Saturday, March the 7th, make a careful consideration of these aims and methods a subject of supreme concern at the present time, because according as the right aims are clearly conceived and kept in view, and the methods which will best lead to the attainment of the aims are

understood and followed, the measures taken by the Senate for the better ordering of post-graduate study will prove to have been well advised or mistaken.

I do not take upon me to offer advice to the Governing Body for post-graduate study, or to lay down with authority what the right aims and the right means are. I only desire to offer the results of my own experience as a worker in education for six years on these very problems and of that of the staff who have been working with me, as a contribution to that solution of this important problem which the Governing Body of post-graduate study have now to find for themselves.

First I would say that no one is in a position to judge soundly of the various questions that arise in relation to this problem who has not looked a little carefully, and a little critically, into the history of the University. In particular, it is necessary to realize carefully what were the weaknesses which led to the movement for University reform from 1900 to 1906, of which the present phase of post-graduate study is one outcome. The weaknesses which led to such crying evils that there was an insistent demand for reformation in 1901, were the expansion of numbers beyond effective teaching power, the predominance of a system of instruction which consisted wholly in the delivery of numerous lectures in English to classes of students, large numbers of whom were incapable of following these lectures with understanding. Worst of all was a tendency which resulted from this state of things, and which was all but a universal practice, for examinees to rely almost wholly and solely on lecture notes committed to memory, supplemented by the aid of summaries. This is a more than thrice-told tale. But however trite the tale, the facts are there; and to bear them in mind is necessary to any right understanding and, therefore, of right handling of the problems of this University. Considerable improvement has, we may hope, been effected by the effort after university reform during the last seven years, but it is too much to hope that these original weaknesses have all been improved away. It is even much to be feared that the tendency to these abuses lasts beyond the degree stage and is a reality to be grappled with, and a pretty formidable reality, when we set to the task of scheming the practical direction of a course of M.A. study.

We use the term "post-graduate" studies of the courses after the taking of the B.A. and B.Sc. degrees, but if we are considering the problem from the standpoint of comparative education, it is possible that we might find reason to doubt whether the term was being rightly

used. There are people who tell us, and people whose opinion is entitled to respect, that the first half of the course for the ordinary Calcutta degree—the Intermediate course—properly belongs to school studies. If this view is correct, and if an academic course of study should be of three or four years' length, the Calcutta degree examinations would more properly be conceived as a stage on the way to the goal of the ordinary academic course, which would then be the Master's degree. It is approximately accurate to say that the standard of the Calcutta M.A. degree is equal to that of the B.A. Honours degree at Oxford, Cambridge and London, with the qualification that the pass or third class standard for the M.A. degree is altogether below any Honours standard.

Because of these facts and because of these rooted tendencies in our students, certain consequences follow for the determination of the methods likely to lead most surely to the attainment of the ends we set before ourselves. The ends of post-graduate study in Calcutta are, I suppose, the same as the ends of post-graduate study in other universities. They might, perhaps, be most comprehensively defined as *the formation of the faculty of independent judgment and the attainment of the capacity to handle new material independently*. This covers what is ordinarily called "research," but is not confined to it. After all, as life consists in action rather than research, too much must not be made of research. The ends of post-graduate study are the same as the ultimate ends of higher education, to fit men for the highest duties in society, and, particularly, to endow them with a ripe and balanced faculty of judgment.

The ends, then, can be in no wise different here from the ends in other universities. If there is any difference, it will be only as to the means. Broadly also the means must be the same. We have only to follow in Calcutta University the methods found most efficacious elsewhere. We had better waive the disputable term "post-graduate" study and direct attention to what are broadly higher university studies, whether technically post-graduate or not. Now it may be contended that when your student has advanced to a certain stage of maturity, all you have to do is to give him the opportunity of coming under stimulating intellectual influences and leave the rest to him. You need university teachers who are all of them men of special accomplishment in their subjects. You provide courses of lectures by the professors, and you require your student to attend certain courses of lectures; the rest you leave to him. This is practically the method in German Uni-

versities; and, given a sufficient state of preparedness in the student, and a tradition of high culture and independent work among your students, and, of course, free accessibility of books in university libraries, this method is adequate, possibly even the best. The student gets his stimulus from the lecturer ; from great thoughts and great work presented to him in the lecture room ; and he guides his own course under this inspiration and so gains in self-reliance. Sometimes, however, it seems advisable to supply a little more of personal guidance. You have the institution of the seminar, in which a knot of students studies and works under the more personal supervision of the professor. This, too, you have in Germany which is the original home of the seminar, though the system has been most fully adopted and elaborated in the United States. You may further have the more particular and individual guidance of the Oxford system, where in every college the Honours man takes essays to a tutor in every leading branch of his subject.

When face to face with the practical problem as it exists in Calcutta, we at Presidency College have endeavoured to adapt as much as was desirable and feasible of these methods to our own needs. We are convinced that a purely lecture system is not only inadequate for our students, but dangerous. We are perpetually beset with the undoubted tendency of all but the few best students to learn notes and summaries by heart. If left to themselves, that is what most Calcutta students will certainly do : it is what many M.A. students even now do. We have therefore endeavoured to limit lecture courses strictly. No M.A. student of ours attends more than nine or ten lectures a week. We supplement the lecture courses by seminar work and essays taken individually. Each of the subjects, English, Philosophy, History, Political Philosophy and Political Economy, has its seminar. There is firstly a seminar *room* which is reserved to the students of the subject, where they can read at any hour of the working day and where meetings for discussion are periodically held. In each of these seminars, a limited number (we propose to extend the number gradually) of the most essential books in the subject are kept for reading and reference at all times while the seminar is open. Books can also be lent out. The seminar, in fact, contains a small specialized library of the advanced books in the subject. The professors in the subject visit the seminar daily to give advice on the choice of books and courses of reading. They also give advice as to subjects for discussion and preparation of papers. Seminar meetings are held about once a fortnight through the session. It is intended that a scheme of work should be planned for

every subject, and that papers should be assigned to members of the seminar against specified dates. This has not been completely carried out as yet, but it is the standard towards which we are working. Essays are also set from time to time to the whole class or individuals, as appears advisable. The standard here again should be once a fortnight, but it has not always been possible to reach this. The essays are read and discussed with the writers and an estimate of their value is recorded.

This is the system we have introduced at Presidency College and which is working very fairly. We are not doing quite all we aim at, but the work, as far as it goes, is real, and a good deal of what we aim at is actually done. I again deprecate very positively any intention of laying down any sort of authoritative precepts to those who are taking up similar tasks for university classes, but a statement of what is being attempted and achieved at Presidency College, as well as of our difficulties and shortcomings, may not be without its value. Naturally things should be better done by the University. I desire, however, to state very clearly my conviction that a lecture system alone will not conduce much to the attainment of what I have assumed to be the end of these studies—the production of men fully trained in mind and judgment for the highest social and intellectual work. Some people find essay work drudgery; but I have always thought that in presence of the special educational problems of India the best minds should not shrink from drudgery, if it clearly appears that this drudgery conduces better than anything else to the attainment of the ends for which they are working. It is perhaps more profitable for a professor with a subject to profess to give his time to his own work on the subject; certainly it is easier and pleasanter. But if he is under obligation to the College or University which claims his services, it may be right that he should not spare himself the drudgery. Further, if a more far-sighted view is taken of the ends of his teaching, the drudgery may be found in the highest sense to be pleasant and profitable and even to take on some faint halo of glory. For the end in terms of actual achievement is to produce from Indian universities, men, scholars and scientists able to hold their own with the scholars and men of science of other universities, men who will do first-class work in all departments, able to meet on equal terms the ablest men in other countries. Some men like this have been produced already. We aim at producing such in greater number; such a number and of such a quality as shall entitle Indian universities to rank fully with the best

universities in the world. From a mob of examinees, passed or failed, such men are not produced, and appear only by miracle ; I am inclined to say that in proportion as the culture of our students at the M.A. stage is individual and careful, the chances of the production of such men are increased : but, if not quite that, I am sure it can confidently be said that from carefully thought out and co-ordinated system of study, organized somewhat on the lines described, the chances of the production of men of the desired quality and capacity will be greatly increased.

H. R. JAMES.

March, 1914.

Hindu Festivals.*

IN our numberless festivals, religious and pseudo-religious, we have not only an unbroken contact with a hoary past of four or five milleniums, but a careful analysis of them presents us also with a panoramic view of the successive chequered phases through which our national existence has passed in course of this long interval. Compared to the number and picturesqueness of our festivals, those of the Western nations are quite few and humdrum in character. In case of those nations who have begun their life after the Christian era, a few religious festivals like Christmas and a few stirring incidents of national life like the National Day celebration of the U.S.A. make up the whole list. The antique gods and goddesses, in whose worship their primitive fore-fathers revelled, and from whom they drew their inspiration, have long disappeared. The teaching of the Prophet of Nazareth instilled such a monotheistic fervour into the life-blood of these youthful nations, that before its irresistible sway, the ancient system collapsed in no time. Even the torch-bearers of the pagan civilization found themselves impotent before the new spirit.

Mighty Rome gave up her gods and goddesses, from the all-highest Jupiter to the humblest *Lares* and *Penates*, without a sigh or without a tear. Aesthetic Hellas grew indifferent towards her beautiful gods and goddesses. The festivals, under which the national lives of these two wonderful peoples had bloomed and borne ample fruit, became superannuated in course of time, and collapsed before the new spirit.

* Much of the data and information utilised in this article has been taken from Professor Jogesh Chandra Roy's admirable History of Hindu Astronomy.

They disappeared into a nothingness and oblivion from which no fresh upheaval, spiritual or literary, could conjure them back to life.

But not so with the Hindu. The ravaging current of time has made no erosion on the solid walls of Hindu conservatism. The fierce onslaughts of frequent religious and spiritual upheavals, both from within and from without, only shook the outer structure, but could not materially injure the solid foundation. The Mahomedans carried fire and sword to every temple from the Indus to the Brahmaputra, and from the Himalayas to Adam's Bridge. The helpless deities were ruthlessly disfigured, battered, and pounded into dust. But in spite of the proved impotency of the gods, the Hindus clung to them. Even the humblest village deity, be it a stone or a tree, did not miss his usual quota of reverence and offering. No festival transmitted from of old was given up, while every fresh upheaval, be it a religious or a social one, contributed some fresh ones to the already over-crowded Pantheon. Not only that, but every new land which the Hindu colonised contributed its share of local godlings. The number of festivals thus multiplied to an enormous extent.

But beneath all this parasitic growth we can discern a very simple and highly aesthetic system, upon which the later innovations or adaptations have been either imposed or ingrafted. If we classify our festivals according to the following scheme, we shall see what this system is.

(1) Festivals which are clearly seasonal, and can directly or indirectly be traced to primitive "Nature Worship."

(2) Sectarian festivals, usually connected with some saint or religious reformer.

(3) Local festivals. Every province has got its peculiar deities, and every village or city has got its own Lares and Penates.

(4) Festivals connected with gods and godlings which point to an unmistakable non-Aryan origin.

Each of these classes of festivals forms quite a study by itself. For example, under the heading local festivals, we may include the worship of several snake and tiger godlings whose favour is invoked in the Sylvan regions of Bengal infested by these deadly creatures. These deities owe their origin to the environment and are unknown elsewhere. In the river-bound regions of Bengal, several patron-saints and demi-gods also receive their due meed of veneration. It is interesting to note that several of these demi-gods were Mahomedan saints.

The sectarian festivals are generally confined to particular sects.

For example we may take the case of the *Mahayanic Buddhists*. Their system gradually developed into a form of worship, the *Tantric* form, in which the mental and moral attributes were deified under suitable names. Thus *Prajna-Paramita* (perfection of knowledge) symbolized the spirit of perfect knowledge. *Abolokiteshwara* symbolized the spirit of universal mercy. This form of symbolization was of course known to the primitive Hindus, but the process was carried to perfection by the *Mahayanic Buddhists*. The primitive Hindus, as we shall see later on, rather preferred to symbolize the powers of nature. But the *Mahayanic* system led them to a revision of their own system, and to a reorganization of their festivals on a broad philosophical basis, which culminated in the Hindu *Tantric* system. In this system, many dark gods of non-Aryan origin were adopted, and identified with more gentle gods of the Aryan Pantheon, and thus spiritual ascendancy over all races was secured.

It will therefore be very difficult to sift out the second class of festivals. They lie on ground "debatable," and any untoward remark may wound many pious hearts. Some scholars are of opinion that most of the dark midnight orgies connected with the worship of Siva, and of Kali, the god and the goddess of destruction, are of non-Aryan origin. Phallus-worship, which is now the chief feature of the worship of Siva, is severely condemned in the *Atharva Veda*, as being practised by the *Dasyus* only (the aborigines). Similarly, the popular goddess Kali has no place in the older Hindu Pantheon, but her votaries try to identify her with a more gentle goddess of antiquity (Uma, whom we meet in the *Upanishads*). The worship of these deities was carefully planned and organized, and holy places (*Pithas*) were set up all over India to catch the popular mind. In this way, the priests and other interested parties ensured their spiritual ascendancy over the mass.

Let us now turn our attention to the first class of festivals—those which can be traced to primitive nature worship. These are *par excellence* Aryan, and can be traced to the oldest scriptures. They show a keen sense of the beautiful on the part of the people who observed them. These festivals are also the most ancient, and the most widely prevalent. In course of time, they have been in some cases confused with other festivals, and have changed names, but sufficient data have been preserved to establish their identity.

To this class of festivals belong the ब्रह्म उत्सव, the spring festival, which commences on the first full moon in the spring, and the उत्तरायण संक्रान्ति or पोषपालेषु the day on which the sun turns on his north.

ward course.* This last is a festival which, under different names, is celebrated all over the world. It will surprise many to learn that the festival on Christmas Day was observed even before Christ, and had at first nothing to do with Christ. The Christmas and our *Pous Parvana* are essentially the same solar festivals. Almost every full moon was the occasion for some festival, as we shall see by and by.

The spring-festival may be taken as a fair representative of this type of festivals. In ancient and mediaeval times, it was the principal festival of the year. In several Sanskrit dramas, there are glowing accounts of the manner in which the luxurious citizens of the Imperial city of Pataliputra celebrated it. The worship of Kamdeva, the Cupid of Indian Pantheon, formed a prominent part of the festival.

In modern times, the festival has come to be known as the Holi Utsab, and has suffered great variations in different parts of the country. In Bengal, it has almost lost the vivacious element, and has become a purely sectarian festival. The demi-god Krishna has ousted the lovely Cupid. But the up-country Hindus still observe it much in the original form, though not in the proper time, owing to the fact that the Hindu calendar has remained unreformed for the past fifteen hundred years.

The *Snán Purnima*, or the bathing festival, was the festival of the rainy season. It is now observed chiefly in Orissa.

The *Rákhi Purnima* (or the '*Jhulan Purnima*' as it is called in Bengal), observed during the rains, is still an occasion of much rejoicing in the upper parts of India. On this day, friendships are contracted, and friends tie *rakhi*, or the thread of fraternity and friendship, round each other's wrists. In Bengal, every festival has undergone a curious distortion, and this beautiful festival has almost lost all its original features, and has become a purely sectarian one.

The whole autumn, like the spring, was full of joyous festivals. Early in autumn, we have the great *Puja*, but it is doubtful whether it is, at least in its present form, a festival of any very great antiquity. On the day of the full moon is celebrated the worship of Lakshmi, the goddess of Fortune, in pleasing anticipation of a plentiful harvest in the following season.

After the autumnal full moon comes the *Rás Purnima*. In Bengal it has become rather a sectarian one, but originally it had nothing to do with any particular deity. Originally, it was a festival in

* Astronomically, the winter solstice.

which youths and maidens danced in a circle in some pleasure garden round a flower grove.*

Last in this list comes the *Dipavali Amabasyá* on the last new moon of the year. It is the last new moon night of the lunar year, and houses are brilliantly illuminated with rows of light throughout the night, as if to hail the new year. It is still widely celebrated all over India, and is an occasion of much joy and felicity among all classes. To this cycle of festivals belong also the *Pousa Purnima* and *Maghi Purnima*, two minor but very ancient and widely prevalent festivals. The first was the occasion for the *Pushyá-Abhishek* (or the Ceremonial holy bath, which is an indispensable item of coronation) of kings. The second was a purely solar festival.

The *Maha Vishuba Sánkranti*, or the day of equinoxes, is another solar festival which was meant to be celebrated on the last day of the solar year. [According to the Hindu calendar, the solar year, be it remembered, begins on the day following the vernal equinox]. But it is now observed full twenty-two days after the real (i.e. astronomical) vernal equinox. This is due to two causes—firstly, the Hindu Astronomers looked upon the precession of the equinoxes as oscillatory in nature, and therefore did not introduce the requisite correction into their calculations; secondly, their measure of the solar year, was a wrong one. A prolonged series of observations might have led them to a detection of the errors, but Hindu national life became atrophied from the 8th century downwards, and thenceforward

“ From living nature they had fled
To dwell 'mong fragments of the Dead.' ”
(*Goethe, Faust.*)

M. N. S.

(To be continued.)

The Saviour of Europe.

“ *The War Speeches of William Pitt the Younger.*” Selected by
R. Coupland, M.A. Clarendon Press, Oxford, 1915.

IT is impossible to speak too highly of this publication. The book is timely in its appearance; the introduction is lucid; the selection of the speeches and portions of speeches to be reprinted has been admirably made; and the general get-up of the book is tasteful. A frontispiece reproducing Hoppner's portrait of the younger Pitt adds the final touch

* *Vide* Bankim Babu's *Krishna Charitra*.

of excellence to a piece of work upon which both the Clarendon Press and Mr. Coupland are to be congratulated.

Despite the momentous happenings in France, Pitt in 1792 expresses his belief in the prospect of peace for fifteen years to come. This belief he showed not by words only, but by reducing the land and sea forces of Britain.

In 1789 the first French Assembly had declared that wars of aggrandisement were forbidden. In November, 1792, however, the Convention of the new French Republic offered the protection of France to any people which rose against its Government. Belgium (the Austrian Netherlands) was invaded.

Meantime, what was Pitt and England doing? The prevention of the domination of the low countries by any of the stronger neighbouring powers had always been a cardinal precept of British foreign policy. For this England had fought Philip II; for this she had fought Louis XIV. In 1713, by the Treaty of Utrecht, England had acknowledged Austrian rule over part of Belgium, and had recently confirmed it by the Convention of Reichenbach in 1790. What should England do at this crisis? She was in no mood to ally with Austria for the defence of Belgium, since Austria and Russia and Prussia were in 1792 preparing to crush the Polish patriots and absorb their country. Pitt therefore declined to make a *casus belli* of Belgium; he accepted the French assurances that the Austrian Netherlands, i.e. Belgium, would be evacuated by them at the close of the war and announced England's neutrality in the war between France and Austria—the very thing which Mr. Asquith refuses to do in 1914.

Was Mr. Asquith wrong to refuse to accept the German assurance in 1914? Let the history of 1793 shed its light on the question.

On November 16th, 1792, the Convention instructed the French Generals to pursue the retreating Austrians into any country in which they might take refuge, in other words Holland, the ally of England. A second decree declared that the River Scheldt between Antwerp and the sea, where it passed through Dutch territory, as it does to-day, should be freely navigated. French warships actually sailed up the river to bombard Antwerp. The right to navigate the Scheldt had been reserved to Holland ever since the Treaty of Munster in 1648. Britain had guaranteed the reservation by treaty in the Anglo-Dutch Alliance of 1788. France had recognized the reservation in five treaties since 1713.

Antwerp fell, November 28th, 1792. The Dutch informed England that the French were demanding unopposed passage through the Dutch

fortress of Maestrecht, and formally appealed to Britain for help. Britain, as in 1914 and as in all the cases of her political life, stood by her word

“Whom the gods would destroy they first drive mad.” The French Minister of Marine, prototype of Tirpitz the Terrible, not content with the legal justification for war which had been given to England, sent a letter to the friends of liberty and equality in British seaports, announcing the imminent descent of French forces on the coast to overthrow the tyranny of the British Government. “We will hurl thither fifty thousand caps of liberty, we will plant there the same tree.”

War was obviously inevitable, unless France would give way. This was impossible, owing to the infatuation and insolence of the French Republican Government. To use a slang phrase, everyone in France was “seeing red.” Then, as in 1914, rebellion in Ireland and the “liberation” of India formed part of the programme. On the 21st January, 1793, Louis’ head fell under the guillotine; and Danton, crying ‘Let us fling down the head of a king to the kings as a gage of battle,’ carried a decree annexing Belgium to France. Next day France declared war on Great Britain and Holland.

Between 1793 and January 23rd, 1806, when he died, Pitt from time to time in his speeches gave utterance to the motives and principles which were guiding him in his policy, and for those who are inclined to halt or doubt in the present awful crises of the fortunes of England, no better literary tonic could possibly be prescribed than Mr. Coup-land’s selections from those heroic utterances.

Let us quote some typical sentences. In his speech in February 1793, in which he reviews the whole question of the advisability of war, Pitt states:

“England will never consent that France shall arrogate the power of annulling at her pleasure and under the pretence of a natural right, of which she makes herself the only judge, the political system of Europe, established by solemn treaties, and guaranteed by the consent of all the Powers.” Mr. Asquith’s language expresses exactly the same sentences about Germany in 1914:

“If this House means substantial good faith to its engagements, if it retains a just sense of the solemn faith of treaties, it must show a determination to support them.” Scrap of paper-ism may be new in Germany; the solemnity of treaties is at all events an old doctrine in England.

A month later he said: “This is a war in which not merely

adopting empty professions, but speaking the language of our heart and fulfilling the impressions of our duty, we are ready to sacrifice our lives and fortunes for the safety of the country, the security of Europe, and in the cause of justice, humanity, and religion.”

In June, 1793, on Fox’s motion for peace, Pitt spoke words strangely applicable to-day: “It would be a principle somewhat new if when unjustly attacked and forced into a war, we should think proper to cease from all hostilities, as soon as the enemy should be unwilling to support their attack and go on with the contest.” “Are we to be content merely with the French relinquishing those conquests which they have unjustly made, without either obtaining reparations for the injuries they have already done us, or security against their future repetition?”

On a motion for a separate peace with France, March, 1794: “Instead of seeking to abandon our present alliances, we ought rather to do everything in our power to cement and confirm them.”

Anent the misfortunes in Poland of our great ally Russia in 1915, let us take hope from Pitt’s words of hope in December, 1794, in an equally gloomy moment: “Will any man say, that the bare event of military disasters and territories taken is a fair way of weighing the resources of the belligerent powers? No. All wars depend now on the finances of the nations engaged in them. This observation particularly applies to the present war.”

In 1800, Pitt was challenged to define the real object of the war. “He defies one to state in one sentence the object of the war. In one word I can tell him it is security—security against a danger, the greatest that ever threatened the world.”

In 1803, on the renewal of the war after the Peace of Amiens, Pitt took occasion to point out the magnitude of the danger: “Englishmen must look to this as a species of contest from which by the extraordinary favour of Divine Providence, we have been for a long series of years exempted It is for our property, it is for our liberty, it is for our independence, nay, for our existence as a nation; it is for our character, it is for our very name as Englishmen; it is for everything dear and valuable to man on this side of the grave I trust we shall at length see that wicked fabric destroyed which was raised upon the prostitution of liberty, and which has caused more miseries, more horrors to France and to the surrounding nations than are to be paralleled in any part of the annals of mankind.”

Pitt’s last speech was made in answer to the Lord Mayor on

November 9th, when he was toasted as the "Saviour of Europe." It was brief and noble :

"I return you thanks for the honour you have done me; but Europe is not to be saved by any single man. England has saved herself by her exertions, and will, as I trust, save Europe by her example."

A month later Pitt's warning that Europe was not yet saved was justified in only too melancholy a fashion. In December 1805 Napoleon routed the Austro-Russian army at Austerlitz. Trafalgar was forgotten in the staggering blow. The continental war was over. Russia obtained an armistice. Austria surrendered Venetia and bought peace. And Prussia? Before Austerlitz Prussia, true to her dishonoured acquisitive propensities, had sought to barter her help to the Coalition. Pitt offered his generous terms; he would pay for every Prussian soldier in the field; he would help Prussia to legitimate acquisitions in Europe; he would surrender at the end of the war all the oversea conquests of England, except Malta and the Cape. The Hohenzollern burglar demanded Hanover, which no English minister of George III could offer. After Austerlitz Prussia took Hanover, as a reward for joining Napoleon. In less than a year Napoleon threw off the mask, and Prussia learnt to "fear the Greeks when they bring gifts in their hands."

Of all this dirty work Pitt never knew. "Prussia, Prussia, what would Prussia do?" was the constant burden of his anxiety as he lay dying, stricken down by Austerlitz. "Which way blows the wind?" he asked, and when told it was in the East he smiled happily, for so more quickly would come the message from Berlin. Happy Pitt, who never learnt that Prussia had finally and utterly sold her soul. Finally? No, not finally, for in 1813 her people saved her, as perchance the better soul of her people may one day save her again, when the devil has been exorcised. But on that night of January 22nd, 1806, no news came from Berlin, and early on the 23rd he died. "My country! How I love my country" were the last words he spoke.

So lived and spoke and died the greatest of all that long line of England's statesmen, "brave men and worthy patriots, dear to God, and famous to all ages." For us now, in the words of Pericles, "it remains to rival what they have done, and knowing the secret of happiness to be freedom and the secret of freedom a brave heart, squarely to face the war and all its perils. For the whole earth is the sepulchre of famous men; and their story lives on woven into the stuff of other men's lives."

Baby.

Baby dear ! and shall we sever ?
 All your own
 Mother is, and yours alone.
 Father goes, he cares not he !
 Comes, and now from other shores,
 Baby dear, your deity
 Woos he, and adores.
 Never heed him ! he was never
 Yours !

My one bliss, and would you lonely
 Leave my heart,
 Thus from mother's lap to part ?
 O what is it, charm of charms,
 Seek your lips incarnadine,
 Stretching forth your little arms,
 With that cry divine ?
 Enchantment ! art thou not only
 Mine ?

Fret not so, nor fear my raiment :
 Heed not thou !
 Softly though he flatters now.
 Words nor whispers thinks she sweet,
 Mother, to thy vague murmurs :
 Men, the world, the roaring street,
 Father, he prefers.
 Hers you are 'gainst every claimant,
 Hers !

Leave him ! Not a kiss deserves he
 Lonely here
 To forsake us, baby dear.
 Toils and troubles all the week
 They possess him, toils like tares
 For the rose of baby's cheek
 Not a thought he cares.
 'Tis for them his heart preserves he,
 Theirs !

Laughing, see, has baby known him,
 And small hands
 Stretching out, his beard demands.
 O his flattery well I know,
 Sweet he comes, as April showers ;
 Wait, poor prattler, he will go,
 False as April flowers.
 No, my joy, we cannot own him
 Ours.

From his arms to keep you ? Never !
 Baby dear !
 From his arms, your native sphere.
 Home from labour comes he tired,
 You and I, his only bliss.
 Crown him, crown our king desired
 To adore and kiss
 You and I his slaves forever,
 His.

MANMOHAN GHOSH.

The Philosophy of Grumbling.

“ I sing the grumbler, I who lately sang
 Matter, soul and God, and touched with awe
 The solemn chords, and with a grumbling hand
 Escaped with pain from that adventurous flight
 Now seek repose upon an humbler theme.”

That much by way of introduction, reader. I hope that is enough for letting you guess who I am or why I am here.

To our philosophy then. What is this grumbling habit of man ? Grumbling, as we all know, springs from a feeling of disgust or displeasure. A man is seen to grumble when things are not exactly what he likes them to be, when he welcomes a change, so to speak, in the course of events. In this desire for change, this hankering after a better state of things lies the essence of grumbling. Reformation is the child of discontent and grumbling is the eloquence of the dissatisfied.

Grumbling is universal. It is inwoven with the very tissue of our nature and throbs in the movements of our experience. Every man born under the sun,—be he great or low, rich or poor, young or old—must and does grumble. Thus grumbling, like death, levels all distinctions. The ‘ throned monarch ’ has as good a right to grumble as the

humblest of his citizens, although one kind of grumbling may mean quite a different thing to the world from another. For it is true that:

"When beggars grumble, there are no Zeppelins seen.

The heavens themselves blaze forth the grumbling of princes."

Indeed, who does not grumble? And what is this present great European war? To me it seems to be nothing but a huge piece of grumbling. The German Kaiser grumbles when puny Belgium braves his anger and prefers death to dishonour. His Imperial Chancellor grumbles when England refuses to subscribe to "a scrap of paper" politics. And England herself grumbles when all her peace proposals fail and she is compelled to throw down the gauntlet. In all these grumbling has been at work, and what mighty events have sprung from such a trivial (?) cause! Who will deny in face of such facts that grumbling is real, real as life itself?

Grumbling is, however, not a simple problem, and there are varieties of grumbling. For instance, some are born grumblers such as college-clerks; some acquire grumbling like the briefless barristers; and some have grumbling thrust upon them—these are the modern dyspeptics. Let us go a little deeper into the psychology of grumbling.

Grumbling is either implicit or explicit. Implicit grumbling is the grumbling of the weak—grumbling that 'burns inly' and dares not speak aloud. Implicit grumbling is either wholly silent or (what is much the same thing) manifests itself in a low, humming sound, like the faint echo of a sound dying away in the distance. This kind of grumbling is the *forte* of the weak and the guilty in general, and of young people in particular.

The transition from the implicit to the explicit stage is not always very definite and marked. The one rather imperceptibly glides into the other.

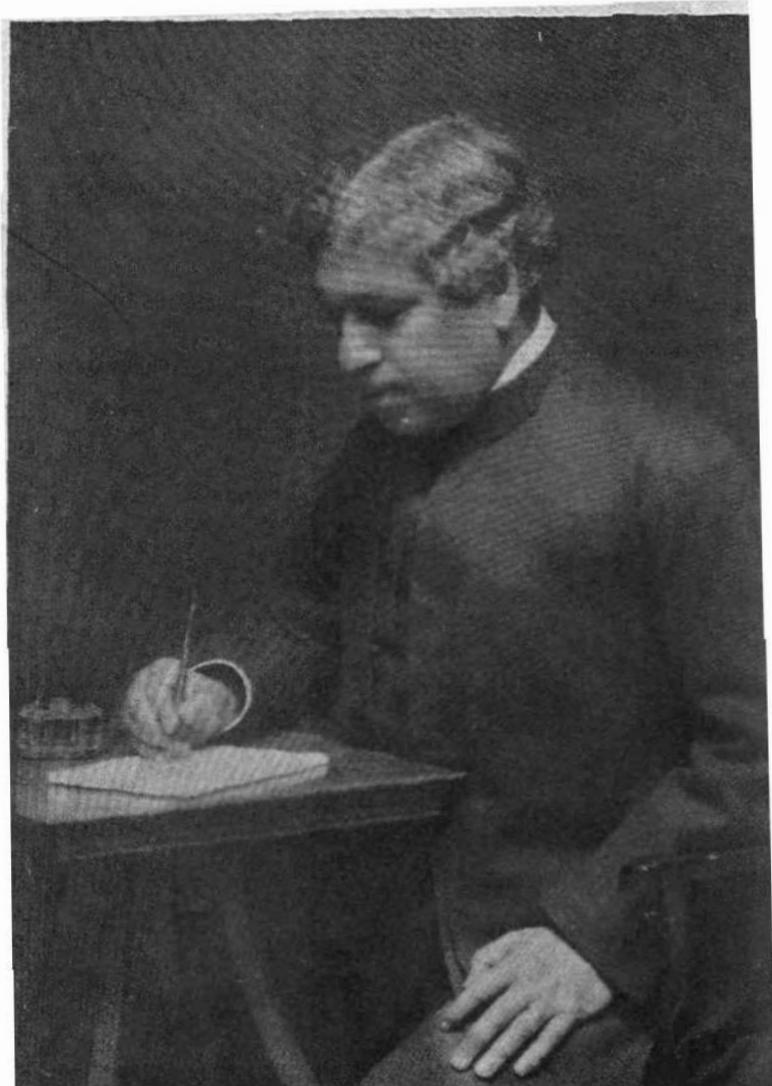
It is well illustrated in the case of the students in a class, where the presiding deity goes on with his lecture even when the death knell to his 'hour' has already sounded. He is too good a friend of the students to be satisfied with his 'hour'—his own sixty minutes which tire Job's patience out—and what is the result? The exchange of glances with which friends greet each other from a distance (for there is the Roll Order to separate friends), the arch smiles that play upon their lips, constant and rigorous glances at the clock, supplemented by (where the case is hopeless) blank looks and wide yawns and perfected by humble, yet imperfect attempts to beat the devil's tattoo—all these that follow show too clearly that grumbling is at work in the whole class.

Explicit grumbling is grumbling proper, and is the more effective of the two types. The father's rebuke, the professor's "advice" etc. are some instances of the simplest kind of explicit grumbling. But there are explicit grumblers of a complex type too. Public speakers and orators are such grumblers, newspaper editors also fall under the same category. (I generously spare some particularly notorious magazine correspondents). There is a third type of explicit grumbling which may be called grumbling with the rod or the birch. The village schoolmaster is unrivalled here. This type of grumbling seems to have been much in favour with Mrs. Pankhurst's followers in England before the war, and well do we know how convincing it proved to be to laymen and ministers alike. It is obvious that this is the most powerful type of grumbling. A mild form of this is the obsolete but occasionally revived custom of barring out a professor by the students.

Grumbling is real, and who denies that? Not the Presidency College students, I believe. Indeed, it seems to me that grumbling is the essence of a student's life in College. To come at ten in the morning and to get into the class just to see that you are a minute too late for the percentage; to rot for three long leisure hours in the nether common room and then to go home at five in the evening, to sacrifice your percentage for the sake of paying your College fees at the right time or for getting a book out of the library—to do all these and not to grumble is as easy and possible as to open and shut your window at the same time. *We* need not grumble for mere grumbling. We are grumblers *par excellence* and that is not our fault.

So much for the psychology of grumbling. What about its ethics? Should we grumble at all, and if we do, should there be a standard of grumbling? Yes, grumble we must, but we must grumble wisely. A man who does not grumble is no good in life. To him the future is walled up and all his energy and activity are at an end. Grumbling is necessary. Without it there will be no progress, no reform but absolute stagnation. What do those two highly grumbling institutions, the press and the platform, teach us? What cannot they do, and what have they not done?

Moreover, grumbling pays in our every-day life "It blesseth him that gives and him that takes." "It is mightiest in the mightiest." The grumbling father has obedient children, the grumbling master has careful servants, the grumbling professor has 'pin-drop silence' reigning in his class and the grumbling principal has no students loitering in the corridors. Look out into the wide world and see into the depths of



J. C. Bose

Dr. J. C. BOSE.

things and you will find that grumbling is not only the life of the individual but of society as well.

Good as grumbling is it is sometimes overdone. An overdose of grumbling simply defeats its own end. The sinners in the college office and the library should take this as gospel truth.

Such is grumbling, and surely it is a most fascinating problem. Do you grumble, reader, now that you have spent the few minutes in my company in pain? If you do, I shall not mind. "The wise grumbler is the world's benefactor." Grumbling is a boon and not a bane to mankind.

Here stand I with my message to the world as the watchword of this century— "Wisely grumble."

Wisely grumble away your lives."

✓ PRABHAS CHANDRA GHOSH,
Fourth Year Class.

Dr. Bose Round the World.

IT is not easy to estimate the profound influence of Dr. Bose's work on various branches of science. However, I shall attempt to give a short account of his recent visit to Europe, the U.S.A. and Japan.

Realising the unique character of Dr. Bose's researches, the Royal Society devoted one complete issue of its Philosophical Transactions for their publication. Keen interest was thus aroused in the scientific circles and he was invited to lecture before the leading universities and scientific bodies of the world. The Government in response to these invitations sent Dr. Bose, for the fourth time, on a Scientific Deputation, to lay the results of his investigations before them.

Dr. Bose sailed from Bombay on the 4th April, 1914, and reached London on the 19th. He took with him his own instruments and his sensitive plants. One great difficulty which confronted Dr. Bose was the climatic conditions. His plants accustomed to the moist heat of the sunny Gangetic plains lost their excitability in the crisp cold climate of the British Isles. But Dr. Bose is never at a loss. With a resourcefulness peculiarly his own, he was able to reestablish their excitability throughout his lecture tour round the world. The actual experimental demonstration of his theories before the Universities of Oxford, Cambridge and London had such a great success that he was requested to write out a practical course of study embodying his extensive series of researches, in the form of a Text Book, and supply it with his highly ingenious and remarkable instruments.

The Royal Institution showed its high appreciation of Prof. Bose's work by inviting him to deliver a Friday Evening Discourse in their historical Hall where Davy and Faraday used to address the audience. These Friday Evening Discourses are reserved only for the greatest scientists of the age. Here the speaker is never introduced to the audience—he must be too well known to need any.

His private laboratory at Maida Vale was a centre of great attraction for such prominent leaders of English thought as Sir William Crookes, Sir James Dewar, Mr. Arthur Balfour, Lord Crewe, Sir James Reid, Sir Lauder Brunton, Prof. Gilbert Murray and Mr. Bernard Shaw. The significance of Dr. Bose's work for the science of medicine was fully realised by the premier medical body of the British Empire—The Royal Society of Medicine. And he was invited to give a Discourse before this Institution. The Secretary of this Institution, on behalf of the Society, informed the Secretary of State for India that the Discourse given by Prof. Bose was one of the most important events in the history of the Society.

About the impression he created in England the *London Nation* says:—

"Dr. Bose has attacked with imagination many problems just at that point where scientific botanists had given them up as being beyond their scope. The vegetable has been a parable for man, an analogy not quite on all fours, an argument by poetic license. Closer investigations by Prof. Bose has deduced from it laws of life immediately applicable to the once considered separate kingdom of locomotion. Plants like animals, grow tired, rejoice, despond. A greenhouse life makes them less than themselves, certainly overgrown and flabby, poorly capable of response to shock till they have carefully hardened to a fuller existence.

"It is impossible to estimate the effect of this rather psychic stone flung by Prof. Bose into the pool of physical botany; there are so many directions through which the ripples must run. We wonder what the verdict of his machines would be on the nerves and sentiments of those plants that are male on one root and female on another. Again what aid may they not render to the hybridizer or the producer of new varieties through selection? In the wider sweep of the ripple what bearing have they on the difficult heresy of the inheritance of acquired character? On the other hand the plant has become an eligible witness to prove the case for all life. Can plant be trained to anticipate its shocks and respond by association of ideas? Can it show memory in a finer sense than that of the scarlet-runner referred to by Sir

Francis Darwin in his address to the British Association in 1908? There are countless questions for the answering of which our little brothers, the 'vegetating animals', will be put to the test."

The scientists on the Continent were equally enthusiastic about his work. After Dr. Bose's lecture before the University of Vienna, Prof. Molisch, one of the leading physiologists of the day, said: "We did not know that India was so far ahead of us in these researches." The Post-Graduate scholars of the University requested Dr. Bose to be allowed to work under him in his Calcutta Laboratory. In Paris also there was the same enthusiasm. His lectures before the German Universities were scheduled for the month of August. He was invited to lecture before the Universities of Bonn, Strasburg, Munich, Leipzig, and Berlin. On the first of August, 1914, he was to have delivered his first lecture at Bonn. Of course he could not fulfil his engagements, and in fact narrowly escaped being interned.

In America he spoke before the New York Academy of Sciences, the American Association for the Advancement of Science, the Brooklyn Institute for Arts and Science, the Philosophical Society of Philadelphia and the joint meetings of the Washington Academy of Science, the Botanical Society, and the Bureau of Plant Industry. Among the leading Universities he lectured before Harvard, Columbia, Wisconsin, Chicago, Illinois, Iowa, Clarke, Michigan, Stanford and Barkley. It was indeed a very pleasant surprise for Dr. Bose to find that the University of Columbia gives a special series of lectures about his recent researches. The authorities of this University have formally asked Dr. Bose whether they could send their Post-Graduate scholars to work under him in Calcutta, instead of sending them to Germany,

There is yet another aspect of Dr. Bose's researches. The leading psychologist, President Stanely Hall of the Clarke University, in introducing Dr. Bose said that he was the first to realise the significance of his work in psychology and that he had incorporated his works in the post-graduate course of his University.

As a physicist Dr. Bose is well known all over the world. Many had been the occasions when he was asked whether he knew the other Bose—the distinguished physicist. And great was their surprise when they were told that he was the same Bose. Prof Kunz, the famous physicist of the Illinois University, pays a glowing tribute to the versatile genius of Dr. Bose in a recent issue of the *Scientific American*. Referring to the three fundamental achievements of the human mind in the realm of natural science—first that of Newton, who laid the

theoretical foundations for mechanics and astronomy, second that of Faraday Maxwell, who came to the conclusion that light is an electromagnetic phenomenon, and third that of Charles Darwin, who came to the conclusion that all living beings are connected with each other through a process of evolution, Prof. Kunz says, "Prof. J. C. Bose's work is intimately connected with the last two wide syntheses, namely the electromagnetic nature of light, and the unity of all life on the earth. The electric waves predicted by Maxwell with all their properties were discovered by Hertz. These waves were still about ten million times longer than the beams of visible light. Prof. Bose has thrown a bridge over this gulf by creating and studying electric waves of about six millimeters, the longest heat and light waves known at the present times being about 0.6 millimeter." Then after describing in detail how Dr. Bose found all the properties of visible light in his short electric waves, he adds, "Prof. Bose determined the index of refraction of his electric waves for different materials and eliminated a difficulty which presented itself in Maxwell's theory as to the relation between the index of refraction of light and the dielectric constant of insulators. In order to produce the short electric oscillations, to detect them and study their optical properties, he had to construct a large number of new apparatuses and instruments and he has enriched physics by a number of apparatuses, distinguished by simplicity, directness and ingenuity.*** He found further that the change of the metallic contact resistance when acted upon by electric waves, is a function of the atomic weight. These phenomena led to a new theory of metallic coherers. Before these discoveries it was assumed that the particles of the two metallic pieces in contact are, as it were, fused together, so that the resistance decreases. But the increasing resistance, appearing for some elements, led to the theory that the electric forces in the waves produce a peculiar molecular action or a rearrangement of the molecules which may either increase or decrease the contact resistance. Self-recovery and fatigue effects remind us of the phenomenon of living organisms. Here we find indeed the natural bridge between the two fields of the scientific investigations of Prof. Bose, between Physics and Physiology. With the advance of various sciences it became more and more difficult for a single investigator to make contributions to different fields of knowledge. The special theories and the methods of each science increase every year, and the definitions of the concepts are so different that a scientific man rarely finds himself at home in a science outside his own field. Prof. Bose is one of the very rare excep-

tions. And as in physics, we find his investigations in physiology of plants and animals clustered round one fundamental idea, the idea of unity of all that lives. Again as in physics, Prof. Bose made contributions to physiology by the construction of new instruments in investigation, characterised by marvellous simplicity, ingenuity and sensitiveness. I will mention among a large variety only one, the Resonant Recorder, in which the friction of the writing pen is eliminated by means of the principle of resonance and which allows the measurement of time as small as the thousandth part of a second."

Prof. Kunz concludes : " The uniformity of responses by animals, plants and metals are recorded by diagrams so identical that one could not tell which belongs to the animal kingdom or to the plant or to the dead metal. The laws of nature holds uniformly throughout the whole material world."

Dr. Bose sailed from San Francisco on March 20th. The severe mental and physical strain put on him by his extensive lecture tour in the United States—where distances are measured in thousands of miles and feverish activity is the rule—told on his health and he was ordered complete rest by his Tokio physicians, and had to cancel all engagements. But he could not avoid the pressing request of the Tokio University, where he gave a remarkable discourse before a crowded and distinguished gathering. The president in thanking Dr. Bose on behalf of the audience said, that his was the most fascinating and instructive lecture they had ever had. And the audience stood up as a mark of their great respect for this sage from the land of Buddha, whose scientific achievements have contributed so much to the world's thoughts. His lectures were translated in all the Vernacular papers. A little incident will show the impression created by Dr. Bose's visit to Japan. A party of Indians with his assistant went to get some plant specimens for Dr. Bose from a flower stall. On being told that they came from Dr. Bose, not only would not they accept any money for the purchase but decorated them with flowers instead.

Thus we find that Dr. Bose's contributions on so many different branches of science, such as Physics, Physiology, Botany, Medicine and even Psychology, are of a fundamental nature. One unacquainted with the exact nature of his work, wonders which of these branches can claim him as her votary. In Dr. Bose one finds the synthetic methods of the East co-operate with the analytic methods of the West in a single mind. He has proved that there are not sciences but one science.

After his most eventful and glorious lecture tour round the world

Dr. Bose is in our midst again. Again he is to be seen busy with his most fascinating researches, and inventing yet newer and more marvellous instruments to probe farther into the secrets of nature. One wonders how he has produced from his insignificant workshop instruments of such unprecedented delicacy. The account of success of Dr. Bose's work makes very pleasant reading and indeed fills our heart with joy and pride, but seldom do we ponder to realise what is behind all his achievements.

It is one continuous chapter of struggle against disappointments and limitations of our existing conditions. He had to create a laboratory where there was none. He had to get together the wherewithal to meet the enormous expenditure which a research like his entails. He had to create a spirit of original research amongst his students whose scientific activities after receiving the University degrees generally culminate in securing a Deputy Magistracy or in joining the Bar. Making little of these formidable difficulties some thirty years ago, with a grim determination, silently and steadily he set to his task. He has made the apparently impossible possible. For himself he has achieved an everlasting fame. For India he has won a recognized place in science, where research scholars from the Western Universities would come to learn the scientific methods initiated by him. He has carried the name of our College to the farthest ends of the earth. And for us, let us hope the torch he has lighted will kindle many a flame.

War and Finance (IV).

By PROF. J. C. COVAJEE.

IT is one inconvenience of writing on contemporary events, that the subject cannot be treated in exact logical sequence. We have to follow the rapid evolution of events, and study their changing aspect as we obtain the necessary material for their study. A study of the economic causes of war should have been the beginning of our studies, properly speaking; yet it will be years before the matter will be fully investigated.

Authorities differ as to whether the causes of the present war were purely economic; but all agree that economic causes had a great deal to

do with the origin of the war. As Mr. Jones observes in his "Economics of War and Conquest": "The penultimate cause of the present war is probably economic. The war partly represents the attempt of a nation whose economic development has been subordinated to political power to defeat a rival nation whose recent political history has been largely shaped by economic ideas, and to increase its political strength by imposing its will upon that rival, largely to the latter's disadvantage. In other words, although German statesmen avow that the political policy of the nation is dictated by economic necessity, the truth probably is that that policy is rendered necessary, not by economic conditions as such, but by the will to advance, under present conditions, that prestige or power in international politics which is the dominating idea of Prussianism. The *welt-macht* of the Prussian statesmen by no means finds approval among the German people; but the economic situation is such that the method necessary to secure world power is one that appeals to different groups in the community for different reasons. A vigorous colonial policy appeals to the industrialist because it offers the prospect of a secure market for manufactures, and ensures an adequate supply of raw materials. A strong navy appeals to specialists (such as Rohrbach) because "it guarantees a plentiful and continuous supply of the necessities of life, which are imported in increasing quantities as the population grows and the nation becomes more industrialised."

This quotation puts the case well and clearly, and throws much light on the question. Our own views on the subject may be put in the form of two propositions.

(1) In a world organized dominantly for peace, economic factors cannot be the direct causes of war. The reason is that economic affairs are best promoted by peace. In a certain sense, however, economic factors may be the *penultimate* or *indirect* causes of war. A nation, like Germany, may see economic advantages possessed by other nations and may try to transfer them to itself by means of war. This is what has actually happened in the case of the present war.

(2) In a world which is not organized dominantly for peace, there is an economic factor making for war. Thus Europe, in last two decades, could not be said to be dominantly organized for peace, since a very considerable share of its resources was being expended on armaments and other preparations of war. This burden has a tendency to become cumulative; and thus to trench upon what may be called the necessities of national life. At last a time must arrive when the econ-

mic strain is too much for some nation which is economically weaker but politically stronger than other members of the same group of nations. This nation will then undertake war for its economic self-preservation.

Our conclusion from the above reasoning is that in a world mainly organized for peace economic factors can be only indirect causes of war, but also that under certain exceptional circumstances they can also be the direct cause of war. The facts of the present war may be studied to illustrate this. Germany has hurried on the war to snatch at certain economic advantages; Europe has been also partly driven into the war by the burden of armaments.

High authorities can be quoted to show that Germany brought on the war to secure economic advantages. Prof. Levy Bruhl considers that besides the Alsace-Lorraine questions and the suspiciousness and military pride of the Germans, one of the main causes of war has been the demand for an expanded sphere of custom for the large scale production of Germany. Prof. Prato argues on the same side; his arguments are summed up in the summary: "The organization of industry on a large scale necessitates exportation. The use of force to secure an outlet came naturally to the German mind."

To the same purport may be quoted Dr. Marshall's views. He used to say in his lectures that of the total area of wheat-land in the world, by far the larger proportion belonged to England; and such a state of things was bound to be challenged ere long. A spirit of prophecy must have dictated these utterances of the venerable Professor.

The economic ambitions of Germany and the idea of securing them by force of arms have been testified to by no less an authority than Schmoller. In his "*Grundriss der Volkswirtschaftslehre*" he says, "The two paths -- that of conquest and that of tariff unions--lead to the same destination; and that destination is the erection and obtaining of larger markets. The first path has been chosen by the former great empires; but Germany should achieve its aim by constructing a great Central-European league. We have said that between 1880 and 1894 many voices were raised in favour of this course. But since those days the plan has been pushed into the background mainly on account of the Protectionist agitation. So that for some time it would appear that only a few savants have clung to the older view. Of that plan the three great world powers (England, Russia and the United States of America) are the natural enemies; and the jealousy and shortsightedness of the smaller states are still greater obstacles in the path of our

programme" (Vol II, p. 646). This passage informs us that the aim of Germany is to secure larger markets; that a few savants alone believe in the possibility of acquiring them by peaceful means. The majority are impatient of the "envy and shortsightedness" of the smaller powers who have no idea of surrendering their economic independence to Germany. Schmoller does not bring out the fact that the political independence of these smaller powers would not long survive their economic independence. In any case Schmoller admits that the vast majority of his countrymen are not inclined to the more peaceful methods of opening up markets. Indeed he himself a few pages later (pp. 647-75) expounds a theory which is not likely to bring this nation of Hotspurs to a more peaceful frame of mind. He observes: "We shall first ask, at what periods has appeared the most brilliant economic progress? Among the Greeks after the Persian war, among the Romans from the conquest of Italy to the end of the Punic Wars; in France after the work of Louis XI, Louis XIV and Napoleon I * * * * * Generally the increase of political power and territory has given the chief stimulus to great economic progress; especially in the old Oriental empires increase of territory has caused the progress of industry and trade." Such being the views of even the great savants among German economists, it is no wonder that Germany took them at their word. If economic progress depends on territorial expansion, wars are justified from the point of view of economics. If the smaller states will not join the German Empire through their "shortsightedness," this should not be allowed to stand in the way of German economic progress; rather they should be coerced into a union.

What great economic prizes were dangled before the eyes of Germany can be judged from the secret memorandum communicated by Bethman Hollwegg to the six most important economic organizations in Germany. The first great idea of that memorandum is that Germany should obtain an outlet on the Atlantic. "We should hold the coastal region bordering on Belgium up to the Somme. This will give us an outlet on the Atlantic." On the Eastern side also Germany meant to stretch out and deprive Russia of its most fertile and best situated tracts of land. "It is necessary to strengthen the agrarian foundation of our economic system. We must make possible a German agrarian colonization on a large scale * * * * All this demands a considerable extension of the Eastern frontiers of our Empire and of Prussia by the annexation at least of certain parts of the Baltic provinces and of the territories to the south of them * *. * The war indemnity

to be demanded of Russia should consist in great part of cessions of territory."

Then comes the German economic motive of annexing Belgium. "Because the territory of Belgium, which is of such great economic importance, is closely linked with our principal industrial territory, Belgium must be placed under the legislation of the German Empire as regards monetary, financial and postal questions. The Belgian railways and waterways must be closely linked up with our communications. By constituting a Walloon area and a preponderant Flemish area, and by placing in German hands the economic enterprise and properties so important for the domination of the country, we shall organize government and administration in such a way that the inhabitants will not be able to acquire any influence upon the political destinies of the German Empire." This passage has been worth quoting, as it throws a lurid light on Schomoller's plan of forming a Central European Union. If the smaller states joining it were to be reduced to such political and economic inferiority, no wonder that they were "shortsighted and jealous" enough to oppose the consummation of such a union. It is also a sinister comment on the expression used by Schmoller "the aim of conquest and of tariff union is ultimately the same."

But all this by no means sums up the list of the economic prizes which the Germans hope to gain. The iron and coal fields of Belgium and of France were also to be acquired. This makes it "impossible to allow France to recover Longwy or to retain Verdun," and "it is necessary to annex the mine basis of Briey."

Such are the extravagant economic and political demands of Germany. Both have a common source. The ruling caste in Germany is following what Bismarck called the "policy of prestige." It tries to prolong the day of its domination by entrancing the people with projects of splendour and dominion. It has by means of enormous preparations of war caused a heavy economic drain on Germany's resources, and the only return it makes for the sacrifices of the nation is to dazzle it by schemes of political and economic aggrandizement. That military caste was jealous of Russia's influence spreading in the Balkans. For, as an American writer, Mr. E. R. Turner remarks, on that day that Russia acquires Constantinople, it would "control all Danube trade, her finger would be upon the artery of Austria, and on that day must come to an end the dream of the Germanic powers to stretch their dominion to Babylon. And, on the other hand, if ever Germany through Austria won the Bosphorus and the Hellespont, then would

Russia, thrust back upon the north and south and east, lie like a giant bound among its enemies, a vast, but an inferior and a secondary power." In short, Germany wanted to keep Russia in a kind of economic dependence. Such were the economic ambitions of Germany on her Eastern and Western frontiers, and to these must be added covetous views about some English colonies, which were to be acquired and peopled with the teeming millions of the Fatherland.

It may be instructive to notice the arguments put forward by some of the apologists for German action. Prof. Brentano of Munich has put forward the theory that "the French bourgeoisie looked to the restoration of monarchy as a means to escape Socialist taxation, and war as a means to the restoration of monarchy." To this it need only be answered that at the time the war began there was no propaganda of any kind going on to overthrow the French Republic. France, having lived under the Republic for a longer period than under any other regime, had no desire to change its government. Moreover, it was not from France that the spark came which set Europe ablaze; it came from Germany. Prof. Brentano argues further: "Germany does not fight for territory, French or other. She does not need colonies for the expansion of her population. What she does need is free play for the development of her people's powers, secured by freedom of the sea." We have already seen from the Memorandum we have quoted that land-hunger was particularly rife in Germany. As for the "development of her people's powers," no one knew better than Germany that her children were always given the utmost freedom of commerce and settlement in the British Empire.

Prof. Pareto attributes the war to the natural antagonism between the aristocratic bureaucracy of Germany and the democratic plutocracy of England. The reply to this is that no one worked harder for peace than Sir Edward Grey, and both Germany and Austria repeatedly recognized the support which he had given to the cause of peace. Moreover a plutocracy by reason of its riches is naturally averse to war.

So far we have dealt with the economic factors and ambitions which indirectly made for war; we now come to the direct economic cause of the war. The burden of armaments was increasing at an unprecedented rate. As the Czar declared in his note as early as 1898, "the unceasing increase in financial burdens is threatening the very roots of public prosperity." The Czar's efforts to produce a reduction of armaments were opposed by Germany and her representative said that the

military expenditure and compulsory service were not to be regarded as a heavy burden, but as a sacred and patriotic duty.

The Czar's proposal having fallen to the ground, the race for superiority in armaments went on vigorously. Mr. Hirst in his "Political Economy of the War" has collected some instructive statistics about the war. Thus, "between 1890 and 1913 France would appear to have added more than sixteen millions to the cost of her army, and above ten millions to the cost of her navy. Considering that her population has been stationary, it is not surprising that these additions coupled with the Morocco war, caused large deficits." As early as 1898, the permanent standing armies of the world were costing annually £210 millions. Consequently, the loss to the world by their retention under colours was £420 millions, as these men if not employed as soldiers could have done productive work. But it is gratifying to find that the worst sufferer was Germany—the country which had opposed all schemes for reduction of armament: "The strain was too much for German finance, and in 1913 a capital levy of fifty millions for the army and for fortifications was proposed and put into execution." Under such circumstances war was at hand. As Mr. Turner has justly observed: "So great was the burden that some even hoped for the speedy coming of war to remove what could no longer be borne. But the most peaceful dared not disarm for fear of annihilation."

From Somewhere at the Seat of War.

A Visit to the Firing-line.

I HAD an exceedingly interesting experience yesterday in which I made my first acquaintance with the trenches. I and two other R.F.C. men spent the afternoon in the firing-line and were entertained to tea in the local officers' "dug-out." It was an experience I would not have missed for anything, and the whole expedition was one of vast interest to me. We left here in a light tender, motored through the town and out the other side. Unfortunately we took the wrong road at first and went a long distance out of our way. We then returned to the town, and having found the right direction proceeded on our way as quickly as possible. Within about seventeen minutes we entered the main street of a large village on the extreme outskirts of the town. It was a long street, with houses and shops on each side, but there was ruin and destruction everywhere, and the whole place

was empty of inhabitants except for a certain number of soldiers billeted in such buildings as could still be partly used as dwelling-places. This street is still frequently shelled, but nothing took place while we were passing down it. We stopped at a large house now used as "Headquarters"—one of the few places still more or less undamaged—and after a little interview were given a guide to take us up to the trenches. We proceeded a little further in the tender which we then left in a sheltered position. The road here was under rifle as well as shell fire, so one had to be careful. We now entered at the head of the communication trench. This was of considerable depth and so offered good protection. This trench had many twists and turns and was close on two miles in length we were told. As we came nearer the scene of action, we could hear the bullets whistling overhead, and the noise of the exploding shells seemed very near. On the way the trench ran through another village and it seemed strange indeed to pass through peaceful orchards, between cottages, and by the village church and cemetery in this unusual way. Of course, the place was entirely in ruins. At last we reached the front line which was behind the firing trench. Just as we arrived here, we were welcomed by three shells which shrieked over our heads in quick succession and burst a hundred yards or so behind us. These shells are exciting customers. One can hear them coming for several seconds before they arrive. There is a sort of distant squeal, which grows rapidly louder, until the thing passes with a loud scream overhead; then a second after there is a deep explosion, followed by the whistling of the shell fragments in all directions. The men in the trenches obviously have considerable respect for their powers, and everyone crouches under the nearest cover as one passes close. An officer came up to us and we were taken to the "mess", quite a cosy little underground place in a protected position. We afterwards went up into the firing line and were taken to the point nearest to the German trenches, where the enemy's parapet could be seen only from twenty-five to thirty yards away. We also saw two mine craters. They were both large, and one of them astonishingly so. It looked almost as though there had been a volcanic eruption. Parts of the trenches we were in had been captured from the Germans, and these mines had been exploded in driving the enemy out. Both sides had used mines to a great extent in this part of the line, we were told. We then went to some brick-fields and climbed to an observation post in a stack of bricks. To get there we had to rush a short space which was under the fire of German snipers. However, they did not fire at

us, and I assure you we got across without wasting time unnecessarily. The observation post was a great point of vantage and commanded a good view of the German trenches through loopholes, while behind us the country was quite open to view. A number of shells passed over us, while we were there, and exploded most conveniently for us to watch about a hundred and fifty yards away. They were mostly shrapnel; but one high explosive arrived just before we left, this one falling nearer to us than any of the others. It was all extraordinarily interesting. While we were at this point, a heavy thunderstorm which had been threatening all the afternoon broke over us, and the rivalry between the thunder and the guns was quite weird to listen to. It rained very heavily, so we returned to the officers' "dug-out" and were entertained to quite an excellent little tea before returning. On the return journey we had a good specimen of trench life in wet weather, and walked through water most of the way! We stopped at the little ruined village halfway back and climbed out of the trench at a sheltered point to see a little graveyard of men killed in the neighbourhood. It looked most peaceful and well tended, despite the ruins all around, but was rather a tragic sight. It was placed close to what had been the church, the skeleton of which made a background to the pathetic little group of rough crosses. We found our tender quite safe and then proceeded back to the chateau after an afternoon full of new and interesting experiences. * * * * *

I also had an interesting day about a week or so ago when I visited a large town further along the line. This place is only about two miles from the firing line and had been bombarded almost daily. It had suffered severely, but still has many inhabitants, including a surprisingly large number of women and children, all of whom go about looking entirely calm and unconcerned. On that day I also went through a smaller town which has been crushed out of existence by German shells. We walked about the deserted streets and it made one feel quite weird. Not a single house remained that had not been badly damaged, and the church—a large one—looked as though it had been cut in half by some sort of pounding machine. In some windows lace curtains were still fluttering and there were all sorts of household furniture, bedding and clothes to be seen mixed up among the ruins. There was a large country-house through the little town, but the roof had two gaping holes and the walls were bulging outwards as though about to fall out. I believe the place was full of inhabitants when the bombardment started, and the results are not nice to think of.

“Pennis non homini datis.”

A Reconnaissance.

WE were unable to start before 6-30 owing to clouds. These rose a bit later, but none the less hindered my observation considerably all the way. However, all went quite well. We penetrated about fifty miles behind the German lines. They only shelled us slightly on the way out, as we were well above the clouds, but they were more energetic, and moderately skilful, when we crossed the lines on our return. It is “some” sensation being shelled up there, but strangely enough it does not at the present upset me at all—in fact, I actually enjoy it. There is an exhilarating excitement in watching the explosions and in realising that the Huns are uselessly wasting all their energies, and all that costly ammunition, just on account of oneself! Of course, they did not hit us; we were about 10,000 feet up at the time, so it is not surprising, and also we were able to retire into a friendly cloud. One always crosses the line at a great height which very greatly lessens risks.

Vitamine.

(*A suggestion for the improvement of the Eden Hindu Hostel Diet.*)

By N. C. BHATTACHARYYA, M.A., Professor of Physiology, Presidency College, and Superintendent, Eden Hindu Hostel.

AN opinion which I have expressed elsewhere and which has now grown into a conviction in my mind may be repeated here. I have seen that the Bengalis of the orthodox school, who still follow the diet and mode of living of their forefathers, are healthy and longlived. The same is the case of those Bengalis who have adopted an European mode of life. But the ‘educated Bengalis’ who follow the middle course—a combination of orthodox and European modes of life—are the most unhealthy of all. The reason for this I believe is that the old Hindus developed by experience a system of diet and mode of living that was suitable for this country. The European has a similar complete system of his own which has been evolved through ages of experience and scientific knowledge. Now the mixed Bengali system of diet and

living is still on its trial and it will have to be evolved and perfected by experience. But with the help of modern scientific methods we can get more experience within a shorter space of time than would have been possible in old times.

That things which at first seem to be too insignificant to attract our attention may produce far-reaching effects on the living organism may be illustrated by the following experiments of Professor Hopkins. He made experiments on two batches of young rats. They were kept under exactly similar state as regards temperature, light, air and other environmental conditions. Both the batches were fed on boiled milk. All the other conditions were exactly alike excepting the fact that one batch was given a very small quantity of raw milk which was denied to the other batch. The amount of raw milk was too small to produce any real difference in the quantity of food provided. The result of the experiment was very remarkable. The rats without the quota of raw milk began gradually to lose appetite and weight and finally they died. The other batch which got the raw milk increased in weight and developed into full-grown animals. Hopkins concludes that there is some principle in raw milk, which though minute in quantity is nevertheless very important for the life of the young animals and for want of which the animals rapidly lose their appetite and weight and finally die.

Another physiologist (Cashimir Funk) made a series of experiments with pigeons. If pigeons are made to live for some time on a diet of polished rice, they gradually lose weight, undergo various nervous disturbances and finally die. Funk succeeded in isolating a substance from rice polishings, which he named vitamine. If a little of this substance could be injected into the body of the pigeons a day or two before the death was likely to take place, the animals would recover from the disease and escape death. Funk succeeded in obtaining this substance from various other raw food materials, and people normally eat a little of it with those things. Vitamine is destroyed by an exposure to high temperature, so it cannot be sterilized. Funk also found that animals which are fed on a large amount of carbohydrate food require more vitamine than those who take more of protein and fat. Thus we Bengalis who take rice—a carbohydrate-rich food—require more of this thing than the Europeans who take a large quantity of meat or the Hindustanis who take wheat. According to Funk vitamine in small doses possesses antineuritic, appetising and weight-keeping properties.

An attempt to make men live entirely on sterilized diet has always ended in various digestive disturbances, loss of appetite and weight, neuritis, beriberi or scurvy.

From the researches of Hopkins, Funk and other physiologists we Bengalis can obtain a very good lesson. This is—that *raw food however small in quantity should form a part of our daily dietary.*

I have seen in Calcutta people live for long periods of time on sterilized diet and suffer various digestive troubles in consequence. In the morning they take rice, dál and curry which are all thoroughly boiled. The same diet at night. In the afternoon they take loochi and sweets—all cooked at a high temperature.

If we examine the natural dietaries of nations, we find that vitamine containing fresh food constitutes an important part of them. The Europeans seldom cook their meat so thoroughly as we do. By their method of cooking the inner parts of large limbs of animals are little affected by heat. They take raw milk with their tea, and they regularly eat fruits at the end of their dinners. And the wines which are not distilled contain some extract of yeast which is rich in vitamine. The Japanese eat raw fish; the Chinese and Burmese fermented fish; the Arabs eat dried dates. The Hindustanis' chapati is seldom uniformly heated. The áchárs that they take are nothing but raw fruits dried or steeped in oil. Every old-fashioned Bengali house had its household deity to whom daily offerings of fruits were made and all the members of the family got shares of that. The Bengali peasants used to eat in the morning fermented rice containing acetic acid bacteria. Even Metchnikoff, who is the greatest advocate of sterilized food, has made the sour milk, containing the lactic acid bacteria, immortal.

From the above summary it would seem that it is in recent times and in the cities we have begun to live entirely on sterilized food for long periods of time. This custom is a bad one and should be abolished. Our country is rich in various fruits and their proper importance should be recognized. They are not by themselves very important as nutritive material, but when taken in small quantities with our ordinary food they improve appetite and increase weight by helping assimilation of food. Sour milk also may be conveniently used in place of fruits.



The Eden Hindu Hostel Notes.

BABU Hriday Chandra Banerjee, M.A., B.L., who was the Superintendent of the Hostel from 1906 to 1915, retired from the hostel last June. The hostel saw an all-round improvement under his able supervision. The boarders feel his departure keenly. May God grant him health and happiness.

Babu Nibaran Chandra Bhattacharya, M.A., has succeeded Babu Hriday Chandra Banerjee as the Superintendent of the Hostel. We welcome him most cordially. * * *

The total number of boarders this year is 260, of whom 194 are newly admitted. * * *

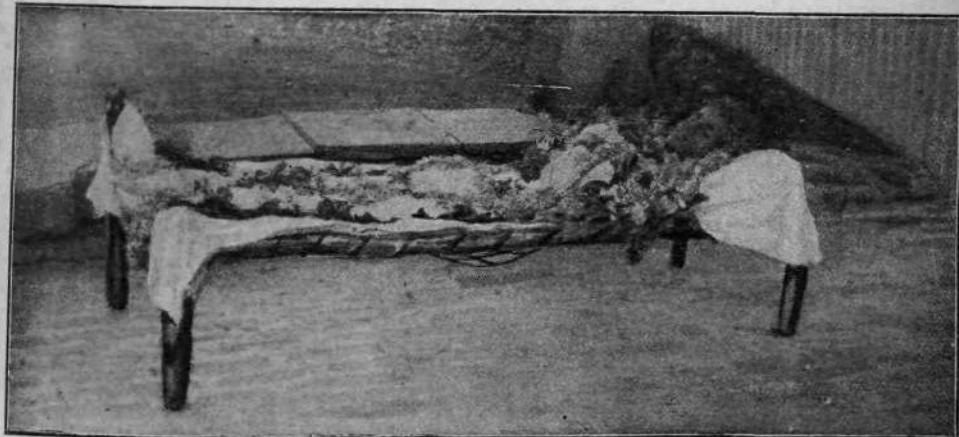
The Prefects for this session are Babu Rajendra Nath Bose, B.A., for Ward I; Babu Krishnprasanna Haldar, B.Sc., for Ward II; Babu Rabindranath Choudhury, B.Sc., for Ward III; Babu Ananga Mohan Dam, B.A., for Ward IV; and Babu Hemchandra Chakravarti, B.A., for Ward V. * * *

Babu Sham Chandra Tripathy, B.Sc., an ex-boarder of Ward V, who obtained a State scholarship last year, started for England on the 3rd September last. His friends, specially of Ward IV and of Ward V, gave him a farewell on the previous evening. * * *

Members of Ward II met in the evening of the 6th September to bid farewell to the ex-boarders of the ward. The function was a success. Short addresses marked by expressions of mutual friendship were followed by an entertainment of music and light refreshments. * * *

The boarders of Ward V bade farewell to their late Superintendent Babu Hriday Chandra Banerjee in a meeting on the evening of the 18th September. Our Principal, Mr. James, presided. A nicely bound address was presented to our late superintendent and afterwards a photo of him with our Principal and the boarders of the ward was taken. The same evening an ex-boarders' farewell meeting of Ward V was held. Babu Hriday Chandra Banerjee, our late superintendent, was in the chair. The ex-boarders were entertained with light refreshments, songs and various amusements. * * *

The subjects discussed in the debating clubs give us a comprehensive view of the intellectual life in the hostel.



THE LATE MOTINDRANATH SEN,

son of Babu Mohendranath Sen (Pleader, Jessor) of Valla, District Jessor: boarder of the Eden Hindu Hostel; student of the First Year I.A. class, occupying the 5th place in the last Matriculation Examination: died at 9-45 a.m. on the 21st September, 1915.

The Ward Magazines appear this year as in the previous years with their regular irregularity, and *Rising Star* has not yet even made its appearance in the horizon.

This year a paid librarian for the Hostel Library has been appointed and the committee is to be congratulated on their excellent management and some recent improvements.

One of the remarkable changes that has taken place this year in the hostel is the introduction of the mess system, under which there is no fixed charge for board. This has caused some inconvenience specially to the boarders who are poor.

“The old order changeth, yielding place to new” seems to have been the motto of this year’s mess committee. Under their able management the quality of the hostel diet has far improved and feasts are of frequent occurrence.

The Cooch Behar Victoria F.C., who came to play a friendly football match with our College eleven, put up in the hostel during their stay in Calcutta. Rooms 66 and 67 were placed at their disposal. We had a happy time with them. Our hearty congratulations to them on their victory at the football match with our team.

It is gratifying to note that the hostel was able to send a few workers to the area affected by flood and famine in East Bengal and that it has contributed a lump sum to the Famine Relief Fund of the College.

The cruel hand of Death has been upon us. One of our new friends—Babu Matindra Nath Sen of the First Year class, a boarder of Ward IV—died on the 22nd September. He had been suffering from high fever accompanied by pneumonia for two days. On the morning of 21st his condition became critical. He was removed to the Medical College Hospital the same evening, where he expired the next morning at about 9-30. When the news of his sad death reached the hostel and the College it gave rise to universal expressions of keenly felt regret. The First Year class was at once dismissed. We all grieve his untimely loss and pray to God that He may console his bereaved family. Our thanks are due to our noble-hearted Principal and our kind superintendent who took all possible care for his proper treatment and nursing. It has been decided to present a cup and raise a tablet in memory of the deceased.

Seminar Reports.

ECONOMICS SEMINAR REPORT.

President—Prof. J. C. Coyajee, B.A. (Cantab), LL.B. (Bombay).

Secretary—Babu Jamini Prasanna Rai, B.A.

The work of the Economics Seminar last year was a brilliant one. More than eight essays were read during the whole Session in Economics and a corresponding number in Politics.

The papers were all the thoughtful product of a critical study of a large number of treatises on the science all of which were recommended by our learned President, and consequently we were very much benefited by the great worth and usefulness of the papers. But yet to an incalculable degree did we profit by the skilful and masterly treatment of each subject by our learned President, Prof. J. C. Coyajee, B.A. (Cantab), LL.B. (Bombay), who in each sitting after the paper was read and debate finished, not only explained and elucidated the subject-matter—but also gave us such an interesting and comprehensive summary of all the topics concerned as to render them for us quite an easy affair to grasp.

The following papers were read during the last session 1914-15:—

Date.	Paper.	Name.
Aug. 5th 1914 ..	The Relation of Economic Welfare to General Welfare ..	Babu Jogis Chandra Sinha, B.A.
Aug. 19th 1914 ..	The National Dividend ..	Do.
Sep. 2nd 1914 ..	Eugenics and Economics ..	Do.
Nov. 6th 1914 ..	Pareto's Law ..	,, Bhupendra Nath Chatterjea, B.A.
Nov. 20th 1914 ..	Retaliation ..	,, Krishnabendu Saha, B.A.
Nov. 27th 1914 ..	Uncertainty bearing as a Factor of Production ..	,, Bhupendra Nath Chatterjea, B.A.
Dec. 4th 1914 ..	Industrial Combinations ..	,, Chunilal Mukherjee, B.A.
Jan. 15th 1915 ..	Trade Unions ..	,, Bankim Chandra Mitra, B.A.

But the current Session also gives us no less promising signs of success than in the previous one. Four papers have already been read and the fifth one comes off on the 1st October next:—

Date.	Paper.	Name.
July 30th, 1915 ..	The Mobility of Factors of Production and its Economic Effects ..	Babu Jamini Prasanna Rai.

Date.	Paper.	Name.
Aug. 20th, 1915 ..	The National Dividend ..	Babu Jamini Prasanna Rai, B.A.
Sep. 3rd, 1915 ..	Inequality in Distribution —whether it can be reduced to a law ..	.., Mohit Kumar Sen Gupta, B.A.
Sep. 17th, 1915 ..	Laws of Increasing and Diminishing Returns ..	Do.
Oct. 1st, 1915 ..	The Relativity of Economic Doctrines ..	.., Rohini Mohan Chaudhury, B.A.

JAMINI PRASANNA RAI,
Secretary.

THE FIFTH YEAR ENGLISH SEMINAR.

To speak well of ourselves, our seminar has been doing good work for the last few months. Since our last report we had four papers. In his "Rabindranath as an English Poet" by Mr. N. R. Das Gupta he gave us an excellent appreciation of Rabindranath's poetical work. Our Principal attended the meeting and our friends from other classes came and took part in the discussion. The meeting was a successful one.

We next had an article on the "Later Romantic Plays of Shakespeare" from the pen of Mr. D. N. Mukherjee. The subject was well managed and discussions were lively.

The "Elizabethan lyrics compared with those of the Romantic Revival" came next. The essayist Mr. S. G. Mukherjee gave us a good paper, only it was too long for one sitting. His comparison of the lyrics of the two ages was fully appreciated.

Next week came a brilliant essay on the "Greek Tragedy compared with Elizabethan Tragedy." The essay was long and packed with information and criticism, and we sat two days to hear and discuss it. We congratulate our essayist Mr. B. Kakati on the excellence of his essay.

We must not lose this opportunity of thanking our President Prof. M. Ghosh for the life and spirit that he has infused among us by his kindly interest in our meetings. Many not very industrious students, who do not care much for meetings and discussions, regularly attend the meetings in the hope of hearing our President speak.

J. GHOSH,
Secretary.

ENGLISH SEMINAR, 6TH YEAR.

The following Seminar meetings have been arranged for this term :—

Date. 1915.	Subject.	Essayist.
Sept. 9th ..	Comedy in the Morality Plays	B. N. Roy.
„ 16th ..	Discussion Continued ..	...
„ 23rd ..	Comic Element in the Interludes	S. A. Ghoshal.
„ 30th ..	Comedies of Llyly ..	B. N. Chakravarty.
Oct. 7th ..	Early Shakespearean Comedy ..	P. N. Ghosh.

Next term, the Principal will conduct a Seminar in 19th Century Literature, while Mr. Holme will continue the Seminar in Elizabethan Drama, the subjects being :

1. Shakespeare's Middle Comedy.
2. Romantic Comedy.
3. Ben Jonson and the Comedy of Humours.
4. The Comedy of Manners.
5. The Decay of Comedy.

J. W. HOLME.

POLITICAL PHILOSOPHY SEMINAR.

The first meeting of the Seminar came off on the 23rd August. Prof. R. N. Gilchrist, M.A., was in the chair. The subject was "The Rights of the Minorities" and the essayist was Mr. P. C. Mallik, B.A., who discussed the subject very ably. The President in his address clearly explained the rights and specially those which are of recent growth. He further gave a very instructive account of the different steps that have been taken for the protection of the rights of the minorities. The meeting then dissolved.

The second meeting of the Seminar took place on the 10th September under the presidency of Prof. R. N. Gilchrist, M.A. The subject for discussion was "Dangers of Democracy" and the essay was read by Mr. S. C. Roy, B.A. The essay was marked by great width of range and commendable literary felicity. The President remarked, "It is one of the best essays ever read in the Seminar." The President called upon the gentlemen present to take up the discussion. Mr. B. C. Bhattacharya, B.A., spoke a few words on the subject and made some interesting suggestions. The President then explained the salient features of Democracy, clearly pointing out the dangers incidental to it. The meeting then separated.

GEOLOGICAL INSTITUTE.

The first meeting of the session 1915-16 was held on the 2nd September, 1915, in the Geological Lecture Theatre at 3 P.M. Prof. H. C. Das Gupta, M.A., F.G.S., the Vice-President, was in the chair. After the transaction of some formal business of the Institute, Mr. Bijoy Kumar Dutt of the 4th year B.Sc. class read his paper on "An Excursion to Barakar in the Gondwana Coal Fields." The writer gave a short account of the geology of the area personally visited by him in course of the last college excursion and described, among other things, the changes produced in the seams of coal on account of intrusion of dykes of Mica-peridotite through them. The paper was illustrated with specimens and rock slides.

In the discussions that followed many junior members took part.

After the conclusion of the Presidential remarks, the Secretary on behalf of the Executive Committee proposed that a medal be awarded annually from the funds of the Institute to the best writer of a paper on a geological subject. This resolution was carried unanimously.

After this some more formal business was gone through and the proceedings came to a close with a hearty vote of thanks to the chair.

BIJOY G. SEN,
Hony. Secretary.

PHILOSOPHICAL SEMINAR.

The first two meetings have been held. On both the occasions Dr. A. N. Mookerjee presided.

In the first meeting the Secretary read a paper on the "Meaning of Good and Bad in Ethics." He discussed the problem historically and critically and adopted Spencer's position that 'good' and 'bad' are determined by reference to some extraneous end. But he did not go so far as to discuss what that extraneous end is,—because that is a question which more properly belongs to Metaphysics than to Ethics.

The paper was followed by a debate led by Prof. Birendra Chandra Mookerjee, M.A. Many of the students also took part in the discussion.

Dr. Mookerjee in his presidential address characterised the debate as disappointing. He remarked that the relativity attaching to the words 'good' and 'bad' has all along been misinterpreted. What is relative is not the intrinsic goodness and badness of things, but the form of our consciousness with regard to any particular thing.

In the second meeting, Babu Bipin Vihari De, B.A., read a paper on "Evolutional Ethics" which in the opinion of Dr. Mookerjee showed a pretty good acquaintance with Evolutional literature. The paper was mainly critical, the essayist holding the position of Green. The discussion finally turned on two points:—(1) the possibility of the derivation of the moral from the non-moral, and (2) the controversy between the biological and the spiritual views of life. Prof. R. K. Dutt, M.A., contributed much to the discussion, after which Dr. Mookerjee threw much light on the points discussed by his learned remarks.

We met for the third time on Friday, the 24th September, to discuss the problem of "Intuitionism and Ethics." Babu Pares Ch. Ganguli, B.A., gave us a paper on that subject.

We generally meet on Fridays at 2 P.M. Occasionally we meet also on Mondays.

I append below a list of subjects to be discussed in the Seminar.

13- 9-15.	The Meaning of Good and Bad in Ethics.	..	Susil Chandra Mitra—5th year.
17- 9-15.	Evolutional Ethics	..	Bipin Vihari De—6th year.
24- 9-15.	Intuitionism and Ethics	..	Paresh Nath Ganguli—6th year.
1-10-15.	Intellect and Intuition	..	Susil K. Mazumdar—6th year.
12-11-15.	Problem of Freedom	..	Saroj Kumar Das—4th year
19-11-15.	Relativity of Knowledge	..	Sudhiranjan Roy Chowdhury—4th year.
26-11-15.	Agnosticism	..	Bhulanath Roy—5th year.
3-12-15.	Psychology and Metaphysics.	..	Pravas Ch. Ghosh—4th year.
10-12-15.	Plato, Sankara and Kant	..	Sourindra Mohan Dutt—6th year.
13-12-15.	Idea of the Absolute	..	Bipin Vihari De
17-12-15.	Theism and Pantheism	..	Sudhir Chandra Mitra.
22-12-15.	Plato's Doctrine of Ideas	..	Brijendra K. Chaudhury—6th year.
31-12-15.	Matter and Spirit	..	Susil Chandra Mitra.
7- 1-16.	Nature of Pleasure and Pain	..	Nagendranath Karmakar.
14- 1-16.	Science and Religion	..	Mahendranath Chatterjee.
21- 1-16.	Ethics of Green and Martineau	..	Ananga M. Dam.
28- 1-16.	Humanism and Instrumentalism.	..	Kshirod Chandra Deb.
4- 2-16.	Ultimate End of Action	..	Kazimuddin Ahmed.
11- 2-16.	Idealism	..	S. A. Q. Surwardy.
18- 2-16.	Pessimism	..	Manibhusan Mazumdar.
25- 2-16.	Baudha doctrine of Impermanence in relation to European Thought.	..	Susil K. Mazumdar.
3- 3-16.	Will to Believe	..	Debnarain Mukerjee.
10- 3-16.	Rationalism and Empiricism	..	Gopal Ch. Bhattyacharya.
30- 3-16.	Ground of Moral Obligation	..	Mahima Mukul Hazra.

SUSIL CHANDRA MITRA,

Secretary.

Library Bulletin.

The following books have been added to the Library since the issue of the last bulletin :—

Adam, A. M. Plato: Moral and Political Ideals.
 Annals of the Royal Botanic Garden, Calcutta, Vol. 6, Part 6. Fresh-water Algae. By West.
 Banerji, Pramatha-nath . . . Indian Economics.
 Belloc, H. General Sketch of the European War.
 Das Gupta, J. N. . . . Bengal in the 16th Century A.D. 2 copies.
 Farmer, J. B. . . . A Practical Introduction to the study of Botany: Flowering Plants.
 Froude, J. A. . . . Oceana, or England and her Colonies.
 Henderson, T. F. . . . The Ballad in Literature.
 Hudson, W. H. . . . An Introduction to the study of Literature.
 Kipling, R. . . . The Seven Seas.
 Lipson, E. . . . Economic History of England.
 Murray, Sir J. A. H. . . . Oxford English Dictionary. Trink-Tum-down, (Vol. X).
 Peel, Hon. G. . . . The Future of England.
 Seeley, Sir J. R. . . . The Expansion of England.
 Spurgeon, C. F. E. . . . Mysticism in English Literature.
 Stephens, W. (Ed.) . . . The Book of France.
 Swinburne, A. C. . . . Poems and Ballads, 3rd Series.
 The Times History of the War, Parts 50, 51, and 52 (Vol. 4) and 53 (Vol. 5).

The Students' Consultative Committee.

CLASS REPRESENTATIVES.

6th Year Arts	.. { 1. Hem Chandra Chakravarti. .. { 2. Pashupati Nath Ghosh.
6th Year Science	.. { 1. Bhupan Mohan Bose. .. { 2. Rabindra Nath Chowdhuri.
5th Year Arts	.. { 1. Bholanath Ray. .. { 2. Sarada Ch. Chakravarti.

5th Year Science	..	1. Khagendra Nath Chakravarti. 2. Durgadas Ray Chowdhuri.
4th Year Arts	..	1. Sudhindra Lal Roy.
4th Year Science	..	1. Pramatha Lal Sarkar.
3rd Year Arts	..	1. Subhas Chandra Basu.
3rd Year Science	..	1. Nalini Kanta Bose.
2nd Year Arts	..	1. Bhupal Chandra Rai Chowdhuri.
2nd Year Science	..	1. Bankim Chandra Mukerjee.
1st Year Arts	..	1. Lokaranjan Sen.
1st Year Science	..	1. Jahar Lal Basu.

MUHAMMADAN REPRESENTATIVES.

4th Year B.A.	..	1. Sultan Muhammad.
4th Year B.Sc.	..	2. Md. Zakaria Abu Kazem.
4th Year B.A.	..	3. Nader-uz-Zaman.

School Notes.

HARE SCHOOL.

1. *Debating Club*.—The debating club of the Hare School is doing good work. Since the opening of the School after the Summer holidays, about five or six meetings have been held under the presidency of Babu Makhanlal Roy Chowdhury, B.A., B.T. The attendance was greater than before, showing that more boys begin to take interest in it and feel its importance. The subjects that were discussed are:—

- (1) The Railway and its advantages and disadvantages.
- (2) "The Brahmacharya" or the student's life in ancient India.

2. *The Hare School Magazine*.—It is with much pleasure that we notice that the boys of the Hare School have recently published a magazine called "The Hare School Magazine." It contains articles both in English and in Bengali on various subjects, chiefly literary, the writers being all students of the School. The Magazine, though it is the first issue, has already attracted favourable attention not only on account of its good get-up but also for its contents. Rai Saheb Isan Chandra Ghosh, the Head Master, has kindly consented to be its President. May the magazine enjoy a long and useful career!

3. *Sporting Club*.—We are now playing some inter-school competitions such as Saini Memorial League, Chatterjea Fancy Cup and so on. The most important trophy open to the Junior teams and schools, "the

S.F.A. Challenge Cup," has been won by us this year. We were to play the Scottish Churches School in the Semi-Final, but they did not turn up. In the Final we met the Mittra Institution and beat them by 5 goals to nil.

PRATUL GHOSH.

Correspondent.

THE HINDU SCHOOL.

The Debating Club.—Two ordinary meetings of the Hindu School Debating Club were held in the course of the last month. The gathering, on either occasion, was fairly large and the subjects were keenly discussed. The subjects for discussion were :—

- (i) The Primitive *vs.* The Modern.
- (ii) Town Life *vs.* Country Life.

The former was discussed in Bengali and the latter in English.

New office-bearers of the club for the session 1915-16 will most probably be elected in the month of November, after the Pujah vacation.

The Sporting Section.—Fourteen friendly and six cup matches have already been played. Of the former two have been lost, and of the latter, three. In the inter-class league, started in memory of the late Sriman Satcouri Mullick, the 2nd class, Section A, has won this year. Another cup match is going to be played.

The Poor Fund Section.—The Poor Fund is doing useful work. Two general meetings of this section were held during the last month.

The School.—There have been some changes in our tutorial Staff. The School breaks up for the Pujah vacation on the 12th October and reopens on the 8th November, 1915.

AMAL GANGULI,

Correspondent.

Athletic Notes.

THE football season is passed—a season, which, unfortunately for us, saw no success. We anxiously await the Cricket season when we hope to show better form in the Lansdowne and the Harrison Shield Competitions. We have quite a lot of good players who, with regular practice (which is seldom the case !) may hope to win back these much coveted trophies.

In the meantime, our athletic enthusiasts cannot remain idle. They have taken up Tennis in good earnest. Indeed such is their

ardour that from seven in the morning till seven in the evening the tennis court, by the side of our Physical Laboratory, is mobbed by numbers of players with racquets in their hands—veritable Herculeses with clubs! Even rainy days see no exception to this.

We cannot boast of a large number of good Tennis players; but the few that we have can, with regular practice, shape well in the Junior Competitions, held in the cold weather. But as the beginners are in a majority, sufficient practice for good players is simply out of the question. Accordingly the secretary tried to divide players into groups, men of the same degree of proficiency being placed in the same group. But this good idea has been nullified by the beginners, each of them demanding to have his name entered in the best group. "To improve our game" is the plea they put forward. But they forget that in doing this they bring down the few good men to their own level. If they want to 'improve their game' let them practise hard among themselves and then nobody will question their activities.

The two lawns, the Secretary assures us, will be ready after the Pujas. This will, no doubt, greatly facilitate Tennis practice.

Office-bearers for the ensuing Cricket Season.

J. Bhoumick, B.Sc	..	.. Secretary.
Sankar Nath Sen	..	.. Assistant Secretary.
—ATHLETE.		

University Notes

ON August the 28th last there was a meeting of the Senate. The most important item on the agenda was the motion for the publication of a "Statement of accounts showing all payments of money, with the exception of payments of petty cash." Sir Rajendra Nath Mukerjee proposed an amendment to the motion of Mr. Archbold. After a discussion of nearly two hours Sir Rajendra's amendment to adopt the Board of Accounts' recommendation was carried by 15 votes to 11. Mr. Archbold has since entered a protest against this resolution of the Senate



On the same date there was a joint meeting of the Faculties of Arts and Science and the adjourned debate on the proposal of Sir Asutosh Mukerjee for the appointment of a committee of 16 members to report on the condition of secondary and collegiate teaching under the

University was resumed. The points of divergence of opinion were—(1) should there be one committee or two ? and (2) should the scope of the inquiry include the whole field of secondary and collegiate teaching ? Sir Asutosh Mookerjee's proposal was accepted by a majority of 22. Mr. Biss's amendment for the appointment of two committees was lost by 24 votes, and Mr. Sudmersen's amendment for the narrowing of the enquiry to the Matriculation teaching was lost by 12 votes to 23.



On September 27th the joint Faculties of Arts and Science met again, to select the members of the Committee of Enquiry proposed by Sir Asutosh Mookerjee. In the very beginning Sir Asutosh Mookerjee read a letter from Mr. Hornell, declining to act on the Committee and also intimating that members of the Educational Service would have to get permission from the Government, if they wished to act on the Committee. The Governments of Bengal, Behar and Orissa and Assam have all issued Circulars to this effect. The personnel of the Committee was determined upon, our College being represented by Principal James himself.



On the 14th September, 1915, Rai Saheb Dines Ch. Sen began his lectures for 1915, as the Ramtaun Lahiri Research Fellow. The subject was "The Bengali Ramayans and their relation to the cycle of Ramayanic Legends"—a subject of great interest, which has been masterly dealt with by the speaker.



The Hon'ble Dr. Deva Prasad Sarvadicarry, Vice-Chancellor, went to Simla during the latter half of September, to consult with the members of the Government of India concerned and discuss with them the educational problems of the University.



This year there will be a hard struggle in the graduates' election to our Senate. Already seven candidates have appeared in the arena—four lawyers and three doctors. We are sure if the enthusiasm of the returned candidates remains as keen as it is at the time of the election, any of these men will really be an acquisition to the Senate.

On the 6th September last Mr. J. C. Coyajee gave an address on "France of To-day" in the University Institute. The substance of the address appears in this issue of the Calcutta University Magazine.

The annual garden party of the University Institute was held on the 1st September in the garden of the late Babu Butto Kristo Pal at Dum-Dum. Some 1000 junior members of the Institute availed themselves of the opportunity to go out of the "City of Smoke" for a few hours. There were swimming and Badminton Competitions and the members present had some light refreshments. A delightful afternoon was spent by the students.

R. M.

About Other Colleges.

THE Krishnanath College, Berhampore, has suffered an irreparable loss by the untimely death of Principal E. M. Wheeler.

Lately Botany and Persian have been included in the list of subjects taught in this College.



St. Stephen's College (Delhi). Mr. G. C. Chatterjee, M.A., of the College has been awarded a State scholarship and will shortly proceed to Cambridge. In this connexion, it may be remembered, that the son of Principal Rudra of this College is serving at the front.



Poona-Deccan College men seem to be good Tennis players. Mr. Desphande has won the Senior Single Championship in Tennis and the Pant Challenge Cup. Messrs. Kirloskar and Joshi are the winners of the Senior Doubles.

Principal Rawlinson (well remembered as the author of "Indian Historical Studies") has offered two prizes to the students for essays on "Imperial Strategy and the Present War."



Ripon College has at last got its own magazine. The first number is decidedly a good number. We wish it every success. The staff of the College as well as the students are well represented on the Committee.



Principal Holland of St. Paul's College recently went to the flooded areas in Eastern Bengal to see with his own eyes the condition of the unfortunate victims. He has published a report of his inspection to

the *Statesman* where he says that he met with, among others, a group of workers from Presidency College and was impressed with their zeal and enthusiasm for service.



We congratulate *the Medical College* on their winning the Elliot Shield. The doctors-in-the-making always put up a very tough fight in shield matches. They have at last persuaded dear old "Elliot" to leave its familiar old glass-case in our Common Room.



We offer our best congratulations to *the Metropolitan College* on winning the first place among College football clubs of the City. They have beaten us who beat the Medical College, who in turn beat the Metropolitan in the Elliot Shield competition.

Reviews.

"*Indian Constitutional Documents.*"—By PROFESSOR PANCHANANDAS MUKHERJI, M.A.

Prof. Mukherji has rendered a signal service to students of Politics and Public Administration by publishing this valuable collection. Only a teacher of the subject can appreciate the patient labour involved in this wide and judicious selection. The introduction shows great reading and excellent judgment and is pithy, clear, up to date and full of information. Where there are so many good features it is difficult to discriminate; but I would draw the student's attention to the chapter on the development of the system of Provincial Financial Settlements, as one particularly worthy of careful study.

J. C. COVJEE.

In Memoriam. SARADA CHARAN MAHAPATRA. Printed at the instance of the students of the Scottish Churches College. (Not for sale).

This is a collection of the literary remains, English and Bengali, of the late Babu S. C. Mahapatra who died when a student of the Second Year class of the S.C. College. The volume contains about 250 pages and is elegantly printed and bound. As one glances through the contents one is struck by the wide reading, catholicity of taste and power of expression that are there displayed. Indeed he was a "Macaulay's schoolboy" if there was one, and the wonder remains

how he acquired so early such a thorough knowledge of European history and literature. His friends have good reason to be proud of the talents of their departed friend, and they have done well in giving their memorial this very useful shape.

M. S.

Correspondence.

SOME MORE WAR PHRASES.

To

THE EDITOR, *Presidency College Magazine*.

DEAR SIR,

I am thankful to you for the place you gave to my correspondence on this subject in the last issue. Recently I have come to know of several other similar phrases from your readers. The other day I saw in an English paper a list of words and phrases which owe their origin to this war, prepared by the late lamented compiler of the Oxford Dictionary—Sir James Murray. It gives us a long list of such words as *gassed*, *bombed*, *Zep.*, *Hun*, etc. But it is no use repeating them here. Of the phrases which I have come across since the last issue the “*Sure Shield of the Empire*” is perhaps the most prominent. As is known to everybody, this memorable phrase fell from the lips of H. I. M. King George V in his message to the grand British Fleet which is keeping watch over the North Sea and is waiting for the German Fleet to come out of Kiel Canal.

“*Der Tag*” will long be remembered and will perhaps be used with reference to some long-expected and wished-for day of crisis. “*An army goes on its belly*” is another popular phrase among military experts. It is said to owe its origin to the grandfather of the present German Emperor at the time of the Franco-German war.

The Kaiser’s conscript host apparently does not find it possible to obey the command of their supreme War Lord when he suavely asked them to walk over General French’s “*Contemptible little army*.”

“*Dogs of war*” is a well-known phrase which has been used to indicate soldiers as well as battle-ships. Apart from these, there are several phrases and words which have been used in connexion with the chief figures in this war. For instance K. of K. has been styled “*the right man in the right place*”; the generalissimo of the brave French army has been called “*Silent Joffre*”; and Lord Curzon has dubbed the Kaiser as “*The Pinchbeck Napoleon*,” in spite of the Kaiser’s best attempts to look like Napoleon on the battlefield.

Before concluding, I should like to express my thanks to Prof. P. C. Ghosh for kindly pointing out to me a mistake in my last letter. The phrase "*Baptism of Fire*" was not used for the first time by Emperor Napoleon during the Franco-German war. It can be traced back to the Bible.

I will be much gratified if any of your numerous readers be kind enough to point out any such mistakes which may have crept in here.

I am, etc.,
S. M.

PROFESSOR GILBERT MURRAY'S ADVICE TO
INDIAN STUDENTS.

To

THE EDITOR, *Presidency College Magazine*.

DEAR SIR,

We reproduced in another issue what the great Ex-Lord Chancellor of England had to say to Indian students. Now here are similar words from one who is no less well-known in academic circles. Professor Gilbert Murray, the reputed Oxford professor, in addressing Indian students on "*A word with Young India*", gave utterance to some words which are very significant to us, Indian students in India.

After explaining the strengthening bond between India and England, the learned Doctor asked the question "What is the end to be? Not now, but hereafter, when you and I are in our graves to east or west of the great ocean, and the disputes, and grievances, and schemes of policy that divided us are forgotten or remembered as curious puzzles for future historians to make sense of. Is the great Empire—I wish there was another word for it—of which you and I are part, for which your brothers and mine are shedding their blood together in Flanders, in Egypt, on the shores of the Persian Gulf, to grow to be, indeed, a Commonwealth, the greatest community of free men and women that the world has seen? Or is it to fail, to end in bloodshed and ruin? Or again, to establish and stereotype itself as one more in the great world list of despotic empires, Babylon, Egypt, Rome, Byzantium, which have sometimes lasted so long and passed away so unregretted?"

Professor Murray dealt at length on the various aspects of this question of primary importance, and in doing so made some very thoughtful remarks on the spirit of *Bande Mataram*—the devotion to our great Mother. In this connexion he incidentally answered the

question he put. "But is there not—I put this question quite practically"—he says, "a greater mother whose children we all are, whose day is coming, but not yet come? Cannot you and we work together in the service of this greater Commonwealth, which is also the service of humanity?" It is certainly a pleasing coincidence that our Rector, H.E. the Governor of Bengal, used almost the same expressions on the occasion of the laying of the foundation-stone of the new University Institute Building.

In conclusion, Professor Murray gave some very pertinent advice to all Indians who have the welfare of their country at heart: "To an Indian who wishes to make India great I would say: Beware of losing yourself in reverie while others are fighting the battle of life. Beware altogether of dreams and dreamlike passions. Face facts, get knowledge; cultivate common sense; learn to trust and be trusted; serve your community. Do not lose yourselves in admiration of your own past or your own racial peculiarities; think of your future, and be not afraid to uproot from your culture every element which prevents India taking her place among free and progressive nations * * * Let us preserve our national character. Let us use our feelings of patriotism and nationalism to inspire us and to give strength to our hands; but at the back of our minds let us always remember our wider Commonwealth, our greater Mother, and think of the time when we brother nations may bring our various gifts to her feet and say together our "Bande Mataram."

Let all of us take to heart these words which come straight out of the heart of a sincere lover of India.

I am, etc.,
COMMON ROOM.

COUNTER-ADVICE.

To

THE EDITOR, *Presidency College Magazine*.

DEAR SIR,

I think the Newtonian law of an equal and opposite reaction for every action is not yet obsolete, so I hope a bit of counter-advice would not be unscientific though it may not be quite pleasant.

The conception of "courtesy and good breeding" as conveyed by the letter of your learned correspondent Mr. B. K. B. appears to be entirely different from that of all "freshmen." To honour new-comers to the College by such epithets as "howling", "boisterous", "un-

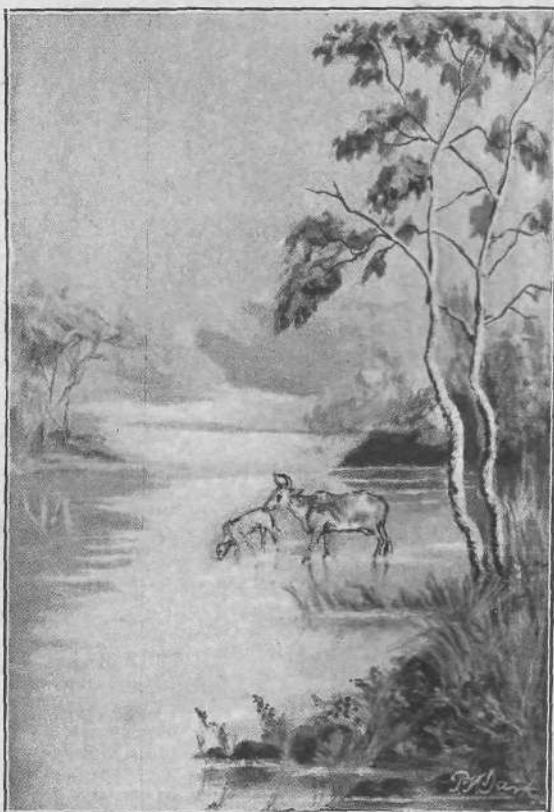
blushing" is not the quite right sort of reception expected from a "senior student" who assumes the proud role of an adviser. That would have been uncharitable and discourteous in the extreme even if the accusations were just and true, but I think many would testify to the fact that generally speaking "Senior men" are as much "boisterous" as freshmen, and more. Perhaps I would be excused if I in turn advise him to learn more of those principles himself before delivering a sermon on them.

Yours sincerely,

BHOLA N. RAY,

5th Year Philosophy Class.





“COUNTRY SIDE.”

Reproduced from the original of
Mr. Prafulla Kumar Sarkar, Fifth year class,
Presidency College.

THE PRESIDENCY COLLEGE MAGAZINE

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No. 4

EDITORIAL NOTES.

THE Puja vacation this year has been of the usual length, extending from the 11th of October to the 9th of November. After three months of strenuous work in the rains term, a recess of a month was very welcome. Of course the largest number of students went back to their homes and had a good time in the festive Puja season. But the ravages of malaria are at their height at the time and marred the happiness of many a home. Indeed that scourge is proving itself so deadly in Western Bengal that many students kept away, those who could afford it sojourning in the salubrious plains of the Sonthal Parganas or taking a trip to the hills and to the many places of interest in Northern India. It is sad to think that the villages of Bengal should have become so notoriously unhealthy as to put in hazard the health and even the life of its inhabitants. The mortality last year from malaria was great; by all accounts it will be much greater this year.

The Principal with Mrs. James spent the holidays at Naini Tal. He gives his impressions in the article "The Pleasure and Peace of the Hills," which will be found elsewhere.



The Founders' Day, January the 20th, will be celebrated, as last year, by a gathering of the past and present members of the College. The programme has not yet been definitely settled; but it is expected that it will be much the same as in the previous year and will include a dramatic representation, cricket and tennis contests between the Old and the New members and a conference of ex-students. This function presents a unique opportunity to ex-students to come together and

revive old acquaintances. Many also there are who will be glad to see their old teachers and visit the class-rooms where many of their happiest hours were passed. The splendidly equipped Baker Laboratory, which Dr. J. C. Bose has consecrated by his world-famous researches, should prove a strong attraction. Altogether we can promise a most enjoyable evening to one and all who can make time to attend the function, and, on behalf of the present members of the College, we cordially invite them to it. Again we say that the occasion is unique and should not be missed.



Dr. J. C. Bose completed the usual term of service on the 30th November. He is still, however, in the prime of life and, highly appreciated though his researches are, as he himself said the other day in the Rammohun Library, they are only the first fruits of a plentiful harvest to come. It is only due to him, therefore, that he should be asked to continue his work and that every facility should be placed at his disposal. Accordingly the Secretary of State has created a special appointment for him, for five years, at a salary of Rs. 1,500 per month. His duties as a member of the staff cease. The portion of the Baker Laboratory which had been specially fitted up for him will continue to be at his absolute disposal and a special non-recurring grant of Rs. 25,000 has been made for additional equipment. The whole cost will be borne by the Government of India. Needless to say, this generous recognition of Dr. Bose's work has given universal satisfaction.



Professor Bhupendranath Bose has taken leave for three months and our distinguished ex-student Mr. Chandicharan Mitra has been appointed to act for him. Certain of the Calcutta dailies lent their authority for the news that Mr. Kuruvia, a Madrassi gentleman with a distinguished academical career at his own university as well as at Oxford, has been appointed in the I.E.S. as Professor of Political Philosophy at Presidency College. But no official confirmation has yet been received.



It is with great sorrow that we record the death of Mrs. Mitter, wife of Professor Khagendranath Mitter. His affectionate nature has endeared him to all who have come in contact with him, and by many it will be felt as a keen personal loss. We beg to offer our sincerest condolences to Professor Mitter.

Competition for the Public Service is everywhere keen, but nowhere keener than in Bengal. It is, therefore, gratifying to note that more than half the appointments to the Provincial Executive Service have been secured by Presidency College men. Mr. D. N. Saha, M.A., has the special distinction of having been nominated by the University. Mr. A. F. M. Mohsin Ali, B.A., threw himself into every aspect of College life and counts many friends among the students and the staff. They all rejoice in his good fortune.

There can scarcely be a higher tribute to our students than the fact that quite a number of them who have obtained their Master's degree only this year should have been selected for post-graduate teaching and research at the University. Mr. Jogish Chandra Sinha has been selected lecturer in Economic History, Messrs. Jnanchandra Ghosh and Jnanchandra Mukherjee research scholars in Chemistry, and Messrs. Sailendra Nath Ghosh, Satyendra Nath Bose and Meghnad Saha research scholars in Physics.

We congratulate all of them and wish them every success in their new sphere.



Lovers of Tennis are indebted to the Governing Body for the two fine grass tennis courts prepared during the Puja. The Tennis Club has 50 members, and now that three courts are open everyone should get a chance of practice. The College expects that with these facilities provided, on the Founders' Day, the Present members should shape better than they did last year.



The cricket season has begun, but so far as present indications go it is not going to bring any credit to the College Cricket Club. Not so long ago it had a team that could hold its own against the best teams in the city. We hope it may yet repeat its performances during the current year.



The history of the war during the last two months is crowded with events of the utmost importance. We had just time to notice in the October issue of the great western offensive begun on September the 25th. It may readily be admitted that it did not realize results then anticipated. Nevertheless, it showed the magnificent spirit of sacrifice and valour inspiring the Allied Army, and conclusively proved that the seemingly invincible German lines can be broken if the necessary

costs, in men and material, are forthcoming. The incredible success of Lord Derby's recruiting campaign and the enormous increase in the output of munitions under Mr. Lloyd George's direction are surely bringing near the day when the issue may be decided in our favour.

On the Dvinsk-Riga front the Germans have been definitely checked and in places thrust back. For the present, however, this theatre of war has sunk into secondary importance. The Italians are still fighting bravely against the inclemency of nature and the ingenuity of man, but no marked success has so far rewarded their gallant endeavour.

Important developments have taken place in the Balkans and the Kaiser for once has scored a diplomatic victory by inducing Czar Ferdinand of Bulgaria to throw in his lot with him. The whole of Serbia has been overrun by the Teutons and the Bulgarians. Fighting against great odds and exhausted by three successive years of warfare, the Serbian army could do no more than delay the advance and exact a heavy price for the conquest. Now that British and French reinforcements have arrived and a Russian army has appeared on the Bulgarian frontier, the work of re-conquest may be expected to proceed.



Other noteworthy events have been the accident to the King while on a visit to his soldiers in France; the formation of the War Council of the Cabinet; Lord Kitchener's mission to Greece, Italy and France; the reconstruction of the French cabinet with M. Briand as Premier; the Kaiser's visit to Vienna and the Germanisation of the Austrian cabinet; and the enemy's submarine activity in the Mediterranean.



The report of the College Famine Relief Committee makes it quite clear that acute famine conditions continue in Bankura and relief operations must be carried on for some months more. A second appeal for donations has accordingly been issued to ex-students, and we trust that the response will be worthy of the deserving object.



The Presidency College contribution to the latest issue of the *Calcutta Review* (October) is, as usual, considerable. There is a timely and instructive paper by Professor Coyajee on Russia and Constantinople; a sympathetic study of 'Anglo-Indian Melancholy' by Professor

Oaten and an article on 'Muhammadan Marriage Customs in Calcutta' by A. F. M. Mohsin Ali. The last is probably the first instance of an article in the *Calcutta Review* written by a Presidency College student in *statu pupillari*. Mr. Mohsin Ali is already known to us as a contributor to the *East and West*; we congratulate him on this new appearance. Among the other articles, which include a dissertation on 'The Nebulae and Their Relation to Cosmic Evolution,' by Rev. A. C. Ridsdale, a well-written article on Australia and the Australians, very welcome at the present time, and a suggestive paper by Professor Douglas of the Scottish Churches College on "The Glory That Was Greece," we note for special interest a very attractive paper by *Ace Vieme* describing the charm and the relation to the Indian renaissance of the art of Sarojini Naidu.



One of the best things said about the war occurs in an article in the last issue of the *Hare School Magazine*, "This war is certainly showing what a true pal India is to Britain." There are several other good articles and poems. Altogether the magazine reflects great credit on the literary powers of the school boys. The Editor takes a peculiar pride in noting this new role of his successors at the school.



Last year the Magazine Committee decided that there should be six issues of the magazine in the year, and as the first number was published in November, only three numbers could be brought out before the close of the session. Nevertheless, the whole income from subscriptions as well as the Government grant of Rs. 600, amounting together to Rs. 2,250, was spent and there was a deficit of nearly Rs. 100. It was clear that the size of the magazine could not be maintained; in fact it had to be reduced by one-half and the plates could only be sparingly inserted. Even with these economies it has been found that the existing income cannot be made to cover the charges of publishing more than five issues. As one issue had to be dropped it has been decided to drop the issue due in November. We shall again make our appearance in February.



The Pleasure and Peace of the Hills.

THE pleasure of the hills, the true pleasure, is not known to those who go to a hill-station and stay there, reproducing as nearly as possible in the presence of soaring cliffs, deep ravines and a scarcity of level ground, the familiar life of the plains. The true pleasure is only known to those who get away from the station "and out of sight of the station" buildings which, commodious as they are at Simla or Mussoorie or Darjeeling, do but affront the majesty of the mountains. This pleasure is known in its keenest form to the hunter and to the explorer, the men who force their daring way

"Where foot of man hath ne'er or rarely been."

The travelling official with his portable camp equipment tastes it very fully. He has every facility for getting the best out of a return to the nomadic life; he carries his dwelling with him, or rather it goes ahead of him ready for his reception at the end of the day's march; and enjoys in the wilderness not a little of the refinements of civilised life. But the mere pedestrian, the scholar, the student, without camp equipage, may enjoy a good deal of pleasure, too, if he starts out for a long day on the road among the hills, carrying a frugal meal with him, or, if he is luxurious, chartering a cooly to carry his tiffin-basket. And does not a benevolent Government plant dak bungalows, dharamsalas, and other places of shelter along many routes? From Darjeeling or Simla, from Mussoorie or Naini Tal, there is an abundance of such facilities. Who could want a better all-day trip than that from the Mall at Mussoorie to Cloudend? It is well within the powers of an ordinary "well-girt" man, as Herodotus would call him. And if you want to improve on the enterprise, you can leave the bridlepath and plunge straight down to the depths of the ravine and up the Mussoorie ridge beneath the Happy Valley. For the man who wastes his life among books—the life meant for brisk air and sunshine—great is the efficacy of getting dead tired in the open air. Let our student or professor walk himself to a standstill: it is an odd feeling, but an interesting experience. I who write have done it more than once: the state when you are too tired to put one foot before another, and must even sit by the roadside till the power to climb up the steep path returns. There are many other excellent day walks from Mussoorie: to the Jumna Bridge; round by the Camel's Back, down and then up, over Landour; and to more than one pleasant

stream and waterfall. Or you can descend down and down to the stream below the Charlville and try and scale the great ridge on the other side. From Darjeeling there is the mild and pleasant walk to Rangaroon, or the high-way to the bungalows at Tonglu or Chakang. From Nainital you can walk to Bhimtal, or Sathatal, or Khairna, or Ramgarh, or Ranikhet; and as much further as you please. For there is a great commodity of dak bungalows in Kumaun. There are pleasant and interesting walks also from Simla; and still better from Mashobra, especially the inexhaustible charm of the Old Tibet Road; and, if you do not mind a scramble and climb up without a path, there is a way back by the main road under Wild-Flower Hall. I am considering only the walks open to the scholarly pedestrian without such adventitious aid as ponies or camp equipage, the free and sturdy votary of the open road. But I know best, and love best, the walks beyond Almora in Kumaun. Up to Binsar, or down to Howalbagh, or, after crossing the great chasm along the ridge, to Panwanunla; or, farther afield, by easy stages through the endless variety of scenery to Phurkia and the Pindari Glacier. I suppose it might fairly be laid down that every intelligent and patriotic denizen of India, whether born there, or immigrant, ought at least once in life to see the great mountains. There are no grander sights in the whole world, none more exhilarating, more restorative, none better fitted to renew and freshen the tired student of books. These are the true pleasures of the hills! Happy is he who knows them!

There is one thing more, even better than the pleasure of the hills: and that is the peace of the hills. By a right instinct the ancient Hindus placed their heaven among the snows of the Himalayas. With good reason many of those who leave the world and follow the life of contemplation, find a hermitage among the rocks of some lonely ridge fronting the Snows. Peace does dwell in the hills; in the sweeping outlook from the mountain road skirting the side of a dark ridge; in the depths of the pine forests with the pines crackling under foot and the sun glinting through the branches; in the deep ravines where the path crosses some mountain stream; on the lonely ridge-line out of sight of human habitation, if you climb to it; and on the rock pinnacles in which it culminates, with the dark ridges rolling line after line beyond like gigantic waves of stone; and soaring high into the heavens, nearer the horizon, the majestic snow summits, with their message of aspiration and effort, all that which is everlastingly worth striving for and everlastingly unattainable.

The Farm-way.

June, 1915.

From Farrell-ridge the path dips down
 To join the grass-grown Roman road ;
 It leads by ferny hollows brown
 To where the hay-wains, load by load,
 Brought in, last June, the teeming yield
 Of every scented close-shorn field.

And then by devious ways and cool,
 It threads the maze of Elmhurst wood,
 By many a sweet and secret pool,
 Where you and I so oft have stood
 And marked in shade of iris-flower
 The pike at anchor hour by hour.

You loved it all, but nevermore
 Shall we together tread that path
 To see, piled up in barn and store,
 The bounteous season's aftermath.
 For you in Flanders now lie dead
 And I, left here, bow down my head.

The Kaiser's Dream.

An Unconventional Dialogue.

“ Good night, gentlemen.”

“ Good night, Majestät.”

(*I*t is the eve of the beginning of the culminating struggle of the great war, the spring of 1917. On the west the French and British artillery, now in overpowering strength, has been for weeks battering the first lines of the German trenches out of all recognition. In the east the Russians, in incredible numbers, are about to attack the attenuated German line in shattering masses of surging humanity. The Italians, now in possession of Trieste, have finally organised their triumphant march on Vienna, in co-ordination with the Russians. Roumanians, Greeks, French, English and Serbians advancing from the south, and only await the order from the joint staff of the Allied nations to begin the grand attack. It is obvious that the

simultaneous shattering offensive is not far distant. The Kaiser knows it and his staff knows it. A long and anxious colloquy between the Kaiser and his staff has ended, and late at night Wilhelm II, haggard and worn out, enters the sleeping apartment of the travelling carriage. Quickly his orderly divests the Kaiser of his uniform, and within a few minutes the arch-fiend of modern Europe falls into an uneasy slumber. Nothing breaks the silence except the tramp and occasional challenge of the sentries posted outside the door. Suddenly a short muffled figure steals into the room, not through the door, but seemingly through the wall at the Kaiser's side. It gazes at the sleeping Kaiser.)

The Figure: So this—this is the would-be master of Europe and the world! I have long desired to see his face. Yes, 'tis the face of a conqueror and ruler, hard, stern even in sleep, the face of one who would slaughter all men, and all women, to attain his purpose. And yet,—yes I think, I see the mark of the Hohenzollern strain of lunacy too. What freak of nature made genius and madness such close kinsfolk? So this is Wilhelm Hohenzollern!

The Kaiser (seeing the figure): Help, help: Quick, Hans, Fritz, help!

The Figure: Don't get excited. You think you called for the sentry, but you didn't. You're really asleep. You're really dreaming. You're not awake, though you think you are!

The Kaiser: Who are you? How did you get in here?

The Figure: I came in through the wall. People can do that in dreams, you know!

The Kaiser: Help, help, Fritz, Hans!

The Figure: Don't be silly! You think you are calling for the sentry. You're really fast asleep. You can't escape me!

The Kaiser: What do you want?

The Figure: I've come to see what sort of a man you are, chiefly; and secondly to have a talk with you. His Majesty let me out immediately I told him what I was going up on earth for.

The Kaiser: His Majesty? What Majesty?

The Figure: The Devil—his Satanic Majesty.

The Kaiser: Oh! I see. Then you are really dead.

The Figure: Dead? I've been dead for a hundred years—nearly!

The Kaiser: You're dead, and I'm asleep. This is very confusing!

The Figure: Not at all. You'll soon get used to it.

The Kaiser: Well, well, I'll try, anyhow. Now what have you come to see me for?

The Figure: Oh, nothing much! Only I rather wanted to test Schilling's statement. You've read Schilling?

The Kaiser: Of course. But what statement?

The Figure: You'll remember Schilling said that the French can't devise anything so absurd that the Germans, in imitating it, will not make it still more ridiculous.

The Kaiser: I remember, of course. But what's that to do with me?

The Figure: Oh, nothing, very possibly. Only you'll remember that this idea of fighting Europe all by yourself isn't exactly original. Certain Frenchmen—Louis XIV or Napoleon—tried it long before you did. Now they made a very creditable attempt, but they both looked rather foolish after a while. I've just come to test Schilling's statement, that's all!

The Kaiser: Sir, you insult me; but you shall smart for it. Hi! Hans, Fritz. We've martial law now, you know!

The Figure (wearily): Don't be silly! I tell you, you're asleep and I'm dead. You can't escape me.

The Kaiser: Himmel! this is confusing—and very undignified. What a horrible position to be in! Oh well, go on.

The Figure: Good! Now let's take Louis XIV the first. Now he was rather fond of the divine right of kings, and not exactly gifted with the virtue of humility. In fact divine right of kings is rather a French invention. Perhaps you remember Bossuet on kingship. He said "Grandeur separates men for a little time, but a common fall makes them all equal at the end." "Oh kings, exercise your power with humility." Now Louis chose Bossuet as tutor for his son. Did you get someone like that to teach your little Wilhelm?

The Kaiser: What nonsense! Kings rule with humility? Kings and commoners equal at the end? The Hohenzollerns, with God as the special ally of the family, just ordinary flesh and blood? Why, my divine grandfather would—

The Figure: All right, we'll leave that topic. I see Schilling was right so far. Let's come on to my—er—Napoleon.. Did you ever read the Original Journals of his Eighteen Campaigns?

The Kaiser: Oh yes. Quite good reading they are.

The Figure: Well, then you'll remember his conversation in Cairo. Let me quote: "Whilst at Cairo, Bonaparte, on a visit to the Pyramids, seated himself on the Soros, and held a long conversation with the muftis. 'Glory to Allah!' said he, "Muftis, the divine Koran is the delight of my soul and the object of my contemplation....

Favour the commerce of the French in your country, and their endeavours to arrive at the ancient land of Brahma. Let them have store-houses at your ports, and drive far from you the English, accursed among the children of Jesus!" Have you tried any such game as that, Wilhelm?

The Kaiser : Oh yes, I told all my agents and spies in Persia, Turkey, Egypt and India to spread the same idea. I'm very much indebted to the great Frenchman for the suggestion.

The Figure : And this in the twentieth century, in the days of newspapers, and education, and universities! Do you think Mussalmans are fools? Do you really think many of your Turkish and Arab friends are inspired by the thought of their caliph-to-be, Wilhelm?

The Kaiser : Oh yes, the suggestion has undoubtedly helped us tremendously.

The Figure : Perhaps. But on the whole I think Schilling's dictum holds here too. Anyway, we'll leave that. Now take this idea of conquering all Europe. Don't you think you've made a poorer show than Napoleon?

The Kaiser : By no means. I occupy all Belgium, Poland, Serbia, and North France.

The Figure : Napoleon, you may remember, was the ally of Russia, and held all the rest of Europe except England. And by the side of his definite achievement of the conquest of nearly all Europe, your meagre acquisitions are rather ridiculous, don't you think?

The Kaiser : Not at all! Look at Belgium.

The Figure : Oh, what about Belgium?

The Kaiser : That is a solid acquisition which saves me at least from ridicule.

The Figure : And, I expect, gives you hate instead. But have you really conquered Belgium?

The Kaiser : All except a little bit.

The Figure : Ha ha! All except a little bit! I think history will find that failure to conquer *all* Belgium the supremely ridiculous part of your attack upon it. Napoleon was at least thorough in what he undertook. He entered Berlin, Moscow, Madrid, Rome, Vienna, Cairo. And you—you have entered Brussels and Belgrade—capitals of two of the smallest countries in Europe! Yes, yes. Schilling was right! I say, Wilhelm.

The Kaiser : You're extremely familiar, sir, even for a dead man. But say on.

The Figure: Do you remember that clause in the Treaty of Fontainebleau, after Leipzig? "The Island of Elba, adopted by his Majesty the Emperor Napoleon as the place of his residence, shall form during his life a separate priucipality, which shall be possessed by him in full sovereignty and proprietorship." Take my advice. get down to-morrow into a trench, and hope for a Jack Johnson to blow you to heaven. You can't think how beastly it is to be Emperer of a little island you can walk round in a day. They'll probably make you Emperor of Heligoland, you know! Elba was small enough, but Heligoland would be too ridiculous. Schilling over again! So just take my advice and, if you possibly can, get in the way of a bullet. That's all, Wilhelm. Good-bye!

(*Vanishes through wall. The Kaiser stirs uneasily and then wakes*).

The Kaiser: Hans, Fritz! Bring me a brandy and soda. Curious to meet Napoleon in a dream. Didn't talk a bit as I thought he would. Has far less admiration for me than he ought. Afraid he was rather laughing at me. Well, well, to work, for Fatherland, the Hohenzollerns, and God! Emperor of Heligoland? No! Emperor of the World—or death!

E. F. O.



The British Commonwealth to the Prussian War-lords.

September the 25th, 1915.

What, ye want war, then ! Well, ye shall have war—War !
 War on the ocean, war in the riven heaven,
 War o'er the *scarred* face of all the earth,
 War on the seas and underneath the seas,
 War in the clouds and high above the clouds,
 War in the mountains, war on the level plains,
 By field and forest, river and marsh-land, war.
 Climb ye to heaven, or burrow, neath the ground
 We'll meet you man to man and stroke for stroke.
 Steal underneath the waves, we'll meet you *there*,
 And spoil your sport and teach as good a game.
 We'll fight you with all weapons or, with none :—
 With high explosive, shrapnel, hand-grenade,
 Trench warfare, bayonet charge, whate'er ye will ;
 Aye with the chemist's arsenal of gas,
 If ye will have it so. For though we seek
 Peace, nor delight in war, as vainly ye
 Pretend, making a ritual mock-divine
 Of war, we come of races proved in war,
 Freemen, who have not lost their manhood yet,
 Freemen, who train their strength in manly play
 And we will play this game as long, as far,
 As ever ye have heart for. Play't we will,
 Fair, an ye will, by rules of honest war ;
 Or, an ye list, with no rules, merciless
 To the uttermost. We'll follow you hot-foot
 In every trick and turn and ruse of the game ;
 Only in this we will not follow you :
 In lies and slanders, treacheries, broken oaths, —
 For to brave men such falsity is shame :
 Nay, nor in cowardly murder in cold blood,
 Nor in vile pillage, rape and massacre.
 But for the game of daring, war and death,
 We are with you, since it must be ; and, once in,

We'll see it to the end, be sure of that,
And play the game out.

What could ye ever think
That we who are British, of the blood of those
Who fought with Nelson and with Wellington,
Who foiled the Corsican when he was fain
To ride in triumph over land and seas
To England, him, the matchless Corsican,—
That we should shrink to touch the battle gage
Flung in our faces, blanch at the Prussian sword
When flourished by a German emperor ;
Tamely see treaties torn like so much paper,
And basely suffer Belgium to be wronged,
And France unfairly struck at on the side
Where she was undefended, save by the law
Of nations ? Fools and blind, so well ye knew
This England and her peoples !

Or did ye deem
Britain so sore divided 'gainst herself,
She had no power to oppose you ? Fools and blind,
Ye did not know the strength that freedom gives
And equal laws, the bond forged by free speech,
That at the touch of common danger draws
The Commonwealth together. Fools and blind !
Ye could not see, while yet it could avail,
How firm the ties that bind to the Motherland
Her over-seas kindred. Triply fools and blind
In that ye rashly deemed no love and trust
Bound India's warrior-races to good faith !
Fools, ye know better now, since ye have seen
Rajput and Sikh and Gurkha and the sons
Of Islam from the Punjab and beyond
Charge on your wavering hordes, deal and receive
Death, as true soldiers faithful to their sworn
Allegiance.

The Imperial Commonwealth
Stands all together, each constituent part
Arms at the common danger and sends aid
Proportioned to its strength. This ye have done.

Ye have made this Empire one, a Commonwealth
United in fair league for all true ends ;
Seeking defence for all and threatening none,
But pledged to abate this menace of the sword
Brandished in iron hands of ruthless warlords ;
Unscrupulous, unrelenting, evil of heart,
Vainglorious as cruel, which has whelmed
The whole wide world in blood.

Ye have your way.

Horror stalks shuddering through the length and breadth
Of Europe: nations mourn their myriads slain.
Your own land cries against you for her slain,
Her youth and manhood lessening day by day,
Till haply one day they be found too few
To guard the Fatherland.

But till that day

Since ye have willed war, have of war your fill.
We are with you to the gates of Heaven and Hell—
Aye and beyond—if there be footing there
In that beyond where we may come to grips.
Ye have desired war and ye shall have war :
Ye have loved war, and war shall be your doom.
Ruthless destroyers of the whole world's peace,
Ye shall swill the draught of war, till your strong throats
Sicken of it and ye loathe what ye have loved.
Ye shall shed blood in streams and pour your own,
Till your blood-thirsty souls at last are glutted
And ye grow weary and faint.

Lift your proud eyes

And see what ring of steel girds Germany,
A ring of your own forging. It may give
A little here and there :—give, but not break,
Though, like the giant, struggling 'neath the mass
Of vainly shaken Etna, your great host
Writhe, heave, wrench, agonize.

Fix your gaze in the West.

Lo, as ye gaze, the long-drawn, winding lines,
That stretch through the tormented land of France
From Belfort to the sea, burst into flame !
Ten thousand cannon spurt forth fire and smoke ;

Ten thousand shells shriek through the mangled air,
 And search the staggering trenches up and down,
 Till man and all his works crumble away
 And the few living cower. Ye have taught the game :
 But see we learn it well, Russians and French,
 British of the Isles, British from overseas,
 And British-Indians from far Hindusthan :
 We learn it, too, and pay you back in kind.
 All through the lands the labouring factories
 By day, by night, are busy working death.
 The insatiable cannons cry for food
 And million-handed labour feedeth them.
 All the free nations of the earth are armed
 To snatch your triumph from you. Now the woe
 Ye planned for others falls on your own heads.
 Out-gunned, out-numbered, and out-generalled,
 Your hosts sink down beneath the hurricane
 Of shattering, scattering death.

Lo the day dawns !

Ye have slain pity ; but yourselves shall cry
 For pity, ere the reckoning has been paid.
 Ye have called darkness light, and evil good ;
 Evil and dark shall be your portion now !
 Ye have sown death and terror ; ye shall reap
 Terror and death. For they that take the sword
 Shall perish by the sword. Hark, the guns speak !
 These spouting flames now flash the signal forth !
 This shock and crash proclaim the coming doom !

Haridas, the Saint.

AMONG the band of holy men who had collected round Sri Chaitanya, one of the mildest and most effulgent was Haridas. The following account of his life, which is taken from Vaishnava literature, may be found interesting.

Haridas was born of Brahmin parents in the village of Boordan (now in the district of Jessore).* His father's name was Sumati and his mother's Gouri. They are both mentioned as pious people who were

* According to some it is in the district of Khulua.

always engaged in worshipping God. Late in life they were blessed with a son whom they named Brahma Haridas, but when the child was only six months old his father died. The devoted wife followed her husband on the funeral pyre and Haridas was left in the care of a kind Mahomedan woman who brought him up like her own son. For this reason he was known as Yavana Haridas.*

From his boyhood Haridas delighted in that form of worship which consisted in constantly taking the name of God. Early in youth he left home and built a small cottage in the jungles of Benapole (near the modern Railway station of that name) for the purpose of worshipping God in seclusion. But being teased by a neighbouring zemindar he left the place and went towards the banks of the Ganges. He reached Fulia (Santipur) and there met the famous Vaishnava saint, Adwaita Gossain. Both of them delighted very much in each other's company. Day and night they were engaged in Nam Sankirtan, and Haridas astonished everybody by his wonderful love for God manifested by thrills of delight which passed over his body at the utterance of His holy name.

There lived in the neighbourhood a Kazi whose name was Gorai. He was very angry that Haridas who was brought up by a Mahomedan should make such a display of his Hinduism. He complained to the Mahomedan governor of the place and had Haridas hauled up there for trial. Haridas went without any fear. The governor asked him why he was attached to the Hindu faith instead of the Mahomedan faith. Haridas replied, "Listen to me. God is the same for all. The Koran and the Purans teach the same cardinal truth. Man acts and speaks as he is made to do by God. God is making me worship Him like a Hindu. In this I am powerless."

All the Mohammedans who were reasonable were satisfied with this explanation. But the Kazi was not, and he insisted on the governor to punish Haridas as otherwise he would spoil the other Mohammedans by his bad example. Haridas was once again requested to renounce his faith, but he answered quietly, "Whatever befalls me does so, I am sure, with the will of God. I shall not give up the name of Hari even though you cut up my body into a thousand pieces.†" So Haridas had to be

* Many think from his name that he was of Mahomedan descent. But the above account of his life, which will be found in the book named "Chaitanya Sangita," appears to give the truth.

"ଥାଏ ଥାଏ କରି ମେହ ସାହି ଥାଏ ଥାଏ ।

ତତ୍ତ୍ଵୋ ଆମି ବନେ ନା ଛାଡ଼ି ହରିନାମ ॥"

ଚତୁର୍ଦ୍ଦଶ ଭାଗସତ ।

punished, and it was ordered that he should be publicly whipped in twenty-two market places. This cruel order was relentlessly carried out. But Haridas was all the while uttering the name of Krishna, and in the joy of the name he entirely forgot his physical pain. The only pain he felt was for the future of those men who were beating him. He prayed to Krishna that these men might not be punished for their sins in after life.*

At last thinking him dead the wicked people threw him into the river. Haridas floated with the stream and after some time touched land. He got up, apparently uninjured, and walked to Fulia uttering the name of Krishna loudly. His friends were overjoyed to find him again in their midst. His enemies also realized that he was a great man. The governor with folded hands asked his pardon, which was readily granted. Haridas began to live in a sort of cave on the bank of the Ganges and used to take the name of God 3,00,000 (three lacs) of times every day. Some time after Haridas began to live at Navadvip as a devotee of Chaitanya and at the command of his master he and Nityananda went about the town preaching the name of Krishna from door to door.

A few years later Chaitanya renounced the world, and adopted the robes of a Sannaysi. He took up his residence at Neelachal (Puri) and thither his devotees went from Bengal to visit him. Among these was Haridas, the humblest of the humble. Chaitanya welcomed his favourite devotees one by one and saw all whom he expected except Haridas. Not finding him he enquired, "Where is Haridas?" All his followers looked about and found Haridas lying prostrate on the road at a little distance. They ran towards him and asked him to come forward for the lord (Sri Chaitanya) wanted him. "No," replied Haridas. "I am of low caste and cannot go so near the temple. If I can get that solitary corner in yonder garden I can live near the lord and spend my days in peace." The lord heard all and immediately procured for Haridas the spot indicated, where there was a small cottage. The lord then went forth to meet him there. Haridas stepped back fearing to touch his master's holy body. But his master ran towards him and embraced him vigorously.

* "এ সব জীবেরে কুকু করহ অসাদ ।
মোৱ দ্রোহে নহ এ সত্তাৰ অপৰাধ ॥"

চেতন্ত ভাগ্যবত ।

Readers will perceive the remarkable similarity with Christ's prayer, "Father, forgive them, for they know not what they do."

Haridas began to live in the retired cottage and continued his daily utterance of God's name three lacs of times. Chaitanya spent some time with Haridas every day before he went to bathe in the sea. Years passed on. Haridas became old and infirm. The lord saw that Haridas now found it difficult to utter the holy name so many times and tried to induce him to diminish the number, but in vain. A thought suddenly struck Haridas. It was that if he lived longer, the lord may depart from this world before him. The thought of living without the lord was unbearable to him. So with many supplications he induced his lord to permit him to depart this life. Next morning the lord with his followers went to the cottage of Haridas who was slightly unwell. They began *Sankirtan* (singing hymns in praise of God) and walked round and round keeping Haridas in the middle. Then the lord began to speak to his followers and grew eloquent in praise of Haridas. They all took the dust of Haridas's feet and then Haridas quietly passed away keeping his eyes fixed on the sweet face of his lord and uttering his name. Chaitanya caught the lifeless body in his arms and began to dance in ecstasies of delight. They then went in procession to the sea-side with *Sankirtan*. The body of Haridas was bathed in the sea and the lord declared, "From to-day the sea will be a great place of pilgrimage." A grave was dug in the sea beach. Haridas was laid in it. The lord threw sand on the body. His followers did the same, and soon the grave was filled up.* They then bathed in the sea and returned singing and dancing. Coming near the temple the lord held out his cloth and began to beg at all the shops for the performance of the *Sradh* of Haridas. This created a sensation and all the shopkeepers ran forth to give the lord whatever they had with them. The followers of Chaitanya interfered and persuaded their master to go home. They then collected alms. Large quantities of *Mahaprasad* (food offered at the temple) also came forth. The Vaishnavas were fed sumptuously, the lord himself serving the meals at every leaf. After the feast was over, the lord honoured each guest by offering sandal and garland with his own hands. He then declared that whoever took any part in the funeral ceremonies of Haridas will ere long attain Krishna. Saying this he began *Sankirtan*, and all his followers joined in it.

Thus did the lord honour Haridas, the incarnation of humility, whose mission was to preach the glory of the name of God (*Nâma-mahimâ*).

BASANTA KUMAR CHATTERJEE.

* The grave of Haridas exists to this day near Swargadwar (in Puri).

The Appreciation of Scientific Education in Bengal.

By PROF. SATISH CHANDRA MUKERJI, M.A.
Chemical Laboratory, Presidency College.

THE gradual evolution of English education in Bengal, including scientific education, has been pretty exhaustively dealt with by our Principal in his book, 'Education and Statesmanship in India.' Dr. P. C. Ray in an article contributed to this magazine has clearly set forth the steps of progress of chemistry teaching in the Presidency College, which practically means the chemistry teaching in Bengal. In the present article it is intended to point out how warmly scientific education has been appreciated by the people of Bengal ever since the introduction of English education into this country.

It is significant that when Raja Rammohan Ray pressed the claims of English education over oriental education he specifically named the science subjects as being of special importance. He pleaded for the "employing of European gentlemen of talent and education to instruct the natives of India in *Mathematics, Natural Philosophy, Chemistry, Anatomy, and other useful sciences* which the natives of Europe have carried to a degree of perfection that has raised them above the inhabitants of other parts of the world." So it is evident that the main reason why Raja Rammohan, the representative of the intelligent Indians a century ago, hailed English education was that it was only through the medium of this education that Indians could learn the all-important sciences. The keynote that was thus struck at the very beginning of English education has ever since dominated the opinions of the great Bengali writers on education.

Babu Bhudev Mukerjee (1825-1894) has been considered by competent persons who read Bengali to be one of the greatest thinkers of modern India, and there is no doubt that he will receive homage from all parts of the country when his works are translated into English. He has written much in praise of scientific education. "Science is the best portion of European knowledge," said he.* But he was very much dissatisfied with the defective system of science teaching that was in

* Vide *Samajik Prabandha*, p. 296.

vogue in his time and was very anxious to see the introduction of the true system. "In this country," wrote he, "there is hardly any cultivation of science worth the name. In the science classes of our Colleges, students only hear some stories of science." In another place he says, "It is useless to teach science unless the students themselves perform experiments. The state of scientific education being as it is, students memorise the formulae of science for examination purpose, but they gain no scientific insight. Then again there are hardly any scientific works or factories in this country where students may observe scientific processes in operation. Consequently neither in the College nor outside the College does the student come in direct contact with scientific truths and their application."*

In social matters, Bhudev Babu voiced the opinion of the orthodox section of the Bengali community that had received English education, according to whom a Hindu lost his caste by undertaking sea voyage. It is therefore very significant that he advised young Hindus to go to Europe to learn science and industries. "A man who has real regard for his own society," says he, "may go to foreign countries to learn science and technology. Hindu Sastras and Hindu Society never hinder any really good piece of work."† There can hardly be a better proof of the importance attached to scientific education by a representative of orthodox Hindus.

Babu Bankim Chandra Chatterjee has been styled by Mr. Ramesh Chandra Dutt as 'the greatest writer of modern India.' Now the students of Bankim are quite familiar with the high opinion of the European sciences entertained by him. He observes in one place that in order to complete one's education one should study the chief branches of knowledge. With this end in view, a Hindu should study Sanskrit for poetry and philosophy, while he must learn the physical sciences from the Europeans. In another place he writes that our country is badly in need of scientific education which is essential for her regeneration.

To another remarkable writer Babu Akshaya Kumar Datta (1820-1886) belongs the honour of popularising the scientific knowledge of the West in this country through the medium of Bengalee, almost half a century ago. He was a great admirer of science and his scientific essays in Bengalee contain some of the most eloquent passages ever written in any language delineating the intellectual pleasures derived from the study of science.

* Ibid., p. 129.

† Ibid., p. 298.

Then again in a former issue of our College Magazine we have read the eloquent address in favour of scientific education delivered by the learned Principal Prasanna Kumar Sarvadikari as long ago as 1852.

It is easy to multiply quotations, from other writers, but I think enough has already been done to establish the fact that almost all of our great writers on education have laid special stress on the importance of science teaching. And now let us see what work has actually been done by the people themselves to advance the cause of scientific study in this country.

In the seventies of the last century when the Government was busy reorganising scientific education, the people too were not idle. In 1876, thanks to the indomitable energy of Dr. Mahendra Lal Sarkar, a great scholar and one of the few of our countrymen who had imbibed the true spirit of science, a grand laboratory with a spacious lecture theatre, called the Indian Association for the Cultivation of Science, was erected entirely at the people's expense. It is one of the largest and costliest educational institutions unconnected with the University and stands as a living monument to the Bengali's admiration for scientific culture.

But for a long time the Bengalis were imbibing scientific truths passively without being able to do any research work. Gradually they became very much dispirited and began to think that the Bengali intellect was unsuited for original scientific investigation. It was in the middle of the nineties of the last century, however, that the news of the scientific discoveries of Dr. J. C. Bose and Dr. P. C. Ray came as a pleasant surprise to the public. After all, then, the Bengalis were capable of research work if the necessary facilities were available. The people regained their self-confidence and the younger generation were keen to follow in the footsteps of their beloved Dr. Bose and Dr. Ray. And what more convincing proof can there be of the appreciation of scientific culture by the people than the fact that the names of Dr. P. C. Ray and Dr. J. C. Bose have become household words not only in Bengal but also throughout India?

Ever since that time there has been a regular rush of the students to the scientific departments of the Colleges, and after the formulation of the B.Sc. and M.Sc. courses, many students every year have to be denied the pleasure of studying science for want of accommodation in the laboratories.

It is also to be noticed that formerly young Indians used to go to England for studying Law or Medicine or for the Civil Service Examination. But recently there is a respectable number of young men who go

not only to England but also to America and Japan for learning science, Applied as well as Theoretical. It is certainly a very hopeful sign that a society has been formed, thanks to the enthusiasm of Babu Jogendra Chandra Ghose, to collect subscriptions from our rich countrymen in order to help students in prosecuting their scientific studies in foreign countries. This society materially supplements the work of the Government which awards some scholarships to Indian students learning Applied Science in England.

If any further proof of the Bengali's admiration for scientific education was wanted that has been supplied lately by the unexampled donations of Sir Tarak Nath Palit and Sir Rash Bihari Ghose to the University Science College.



Dante meets Beatrice in the Terrestrial Paradise.

Oft have I seen, before the break of day,
The glowing East all rosy with the dawn,
While in the West a softer flush was spread;
The sun arose, o'ershadowed first with mist,
Granting mine eyes endurance of his beams.
So, deep within a far-spread cloud of flowers
Flung round by angels' hands, I could discern
A lady olive-crown'd; her veil was white
But shining through her mantle green she seemed
Cloth'd in living flame. My weary spirit,
That long ago had trembled, broken down
With awe of that fair presence, felt again
The might of ancient love. Again there smote
Upon my eyes the splendour of her soul,
That first had pierced me even in boyhood's days.
Then as a frightened child runs trustingly
Unto its mother's knee, I turned me round
To say to Virgil "Every drop of blood
Throughout my body trembles, for I feel
Within my heart the flames of ancient love."
But he my master, he my constant guide,
To whom for my soul's good I gave myself,
Had left me with the vision; all the grace
That our first mother lost could not avail
To keep from my bedewed face the tears.
"Weep not, O Dante, weep no more for this,
Keep back your tears for yet another sword!"
As some great seaman from the bows or stern
Looks o'er the crews that serve him in his fleet,
And heartens them to greater deeds, so I,
Turning around to hear whence came my name
Saw there my lady, bending down her eyes
To where, across the stream, I stood. Her veil,
Crowned with Minerva's leaves, obscured her face,
Yet regally she stood, and spoke as one
Whose burning words are kept unto the last:—
"Look well on me; indeed am I, indeed
Am I Beatrice."

(PURG. xxx).

tr. J. W. HOLME.

The Limits of the Scientific Method.

By FRANCIS V. FERNANDES, M.Sc.

IT has always been the prerogative of the so-called philosophers, both ancient and modern, to delve into the unknown and explain the mysteries, the first cause, the origin and purpose of all phenomena, visible and invisible. At the same time science has waged an incessant war with philosophy, the grounds for the controversy being the conviction of scientists that there are definite limits to human knowledge. From the very beginning, science has fully recognized that in the investigation of the world a point is finally reached when human understanding and reasoning prove deficient. Philosophy has arrogated to itself this place as the starting point, and being without a compass has broken loose completely.

It is our purpose in this short article to discover whether there are any limits to the scientific method and whether philosophy is justified in holding that there can be knowledge beyond that reached by science.

The definitions of science (even those given by the masters) are almost all unsatisfactory. It has variously been described as "a higher development of common knowledge," "organized common sense," "classified and criticised knowledge," "an understanding of facts," "the universal element in knowledge," "our correlated experience," etc. These definitions, which are all perhaps somewhat vague owing to their epigrammatic nature, have some ideas in common, and suggest that broadly speaking science consists in the classification of facts, the recognition of their inter-relations, and the formulation of their sequences. Science deals with what can be isolated and with what can be studied objectively. *It is by no means an explanation of phenomena, but merely a description.* To define philosophy is more difficult than to define science. Indeed, it seems that there is no definition at all. There are as many definitions as philosophers. To give only a few, philosophy has been defined as "a disease" although "a sacred" one, "perfect wisdom," the "highest music," "visitation of Deity," "the science that equates entity with nonentity, and nonentity with entity," "meditation on death," the "science of the sciences." Such is the array of definitions we meet with! Let those who dare find the har-

mony among them. If there is any agreement underlying them all, it is that no two philosophers have the same definition of any particular concept or have the same system, each one excluding to a large extent all the others.

The chief characteristic of science is unity. All the sciences have one aim in view and work to the same end. Their field is the whole universe and they seek to attain as perfect knowledge as possible under the conditions which obtain on earth. Every little detail discovered by any particular science is the property of all, and will be taken into account when the correlation of the sciences is attempted. We cannot speak of the philosophical systems in the same breath. There is scarcely any unity in them, and mostly they are all contradictory to one another. They usually differ in their very premises, and so they cannot hope to arrive at the same conclusion.

“The unity of all sciences,” says Karl Pearson, “consists alone in its method, not in its material.” And here it will not be out of place to determine what the scientific method may be. We may state at the outset that science claims no mysterious methods of its own. Its method is the method of common sense. “The man who classifies facts of any kind whatever, who sees their mutual relation and describes their sequences, is applying the scientific method and is a man of science.” The man of science eliminates self and produces a reasoning which is as true for each normal mind as for his own. *In fact, this is the chief characteristic of the scientific turn of mind—to form a judgment unbiassed by personal feeling.* Hence it is that the deductions of science are universally valid.

The methods of science are applicable to every physical and mental phenomenon. To say that the scientific method does not apply to certain fields of perception and thought is merely to point out that the rules of methodical observation and inference do not apply to the facts of the universe. Hence such subjects as metaphysics do not come within the definition of *true knowledge*. And if philosophy is not knowledge, may we be permitted to ask what it is? It is not art, nor law, nor science, nor anything in fact that any normal man cares about. Its proper, though unconventional, methods are imagination instead of reasoning, poetic flights instead of prosaic thinking. Let metaphysicians place what they will behind the sense-impressions—matter, God, will, mind-stuff. They have never been, nor will ever be, able to influence the judgment of one another. Although the scientists often differ among themselves, the difference is to a great extent superficial

and it is not difficult to discern certain points of fundamental agreement among them all. And where the scientific problems are contradictory, it is frankly admitted by every genuine scientist that they are unsolved.

Though we cannot deny that certain systems of philosophy, although termed metaphysics, have in reality a safe and healthy germ of scientific truth in them, there are others based on utterly wrong premises. Thus Kant's "Critical Philosophy" solely inquired into the sources and authority of our knowledge in order to set up a definite standard for the investigations of philosophy. It aimed at the same conclusion that a principle discovered *a priori* by pure thought was a rule applicable to the method of pure thought, and nothing more; it could give us no real, positive knowledge. We can only contrast this with the philosophy of Hegel, which fell on the philosophers and scientists of his time like a shell burst amidst a distracted crowd. The very principle from which he started was false; the facts of nature were against it. The philosophy of Identity could not find a place for the ordinary phenomena and processes of nature.

This brief exposition suffices to show that the scientific method is the only path to true knowledge. But a few more words as to its scope and meaning would not here be out of place. To be scientific does not mean to be infallible, but simply to be as exact and methodical as it is possible to be. Belief, which plays such an important part in philosophy, is not absolutely excluded, but is regarded as a tolerably useful prelude to knowledge. It attains its end by the process of induction. It establishes universal laws. The goal of science is clear—it is nothing short of a perfect knowledge of the universe. But the goal is an ideal one, for perfect knowledge would be possible only if we could know the present as the outcome of what is past, and the cause of what is to come. It marks, however, the way in which our intellectual activities should be directed.



Dead Roses.

Through these low-shelving downs my love and I
 One sweet-breathed summer eve went hand in hand.
 Soft breezes blowing wanton kissed and fanned
 The roses on her breast ; brown now and dry,
 Faded and sweet no more, a pledge they lie
 Here on my heart, and only in the land
 That stretches far beyond the healing strand
 Of dreams, may I her gracious charm feel nigh.
 So when the common strifes of sordid day
 Sink with the sun, the lost hours of my bliss
 Rise dim like shadows ; scented seems the way
 With long-dead roses ; once again I kiss
 Her lips, her brow. But with the coming morn
 The vision fades, and light comes grey, forlorn.

Fulia.

The Birthplace of Krittivas and the Seat of Saint Haridas.

IT was on a pleasant autumnal morning of this year when the rays of the rising sun had streaked the Eastern horizon with hues mingled in different proportions with grey, I started for Fulia, a Nadia village a mile off from the Bhagirathi and about two miles from the railway station at Boincha on the R. K. Railway. By a rare coincidence I had the good fortune of visiting the place with Mr. Lindsay, I.C.S., the present District Magistrate of Nadia. The place we are sure will well repay a visit by the excursionist. The village is associated with the blessed memories of Krittivas, who may be said to be the fountain of Bengali poetry, and Saint Haridas, a favourite disciple of Lord Chaitanya, two names that stand out prominently in the social history of Bengal.

At the western extremity of Fulia we were shown a slightly elevated plot of land with the remains of the 'Dolamancha' of Krittivas. The credit of discovering this rests with the poet Novinchandra Sen. The Krittivas Memorial Committee, founded mainly through the endeavours of Mr. Muraridhar Ray, is to be congratulated on their having sunk

lately a well in honour of the great poet. They also propose to erect a pillar in his memory. A school, of which the building is under construction, will soon be started in his name. The ceremony of the laying of the foundation stone of the memorial pillar will, it is expected, be held early this winter, when Sir Ashutosh will lay the foundation-stone and august visitors are expected from Calcutta and elsewhere. In this connection should be mentioned the name of Babu Annadaprosanna Bhattacharya of the district, who is making a gift of the land required for the purpose.

Not very far from the site of the 'Dolamancha,' deep in the bosom of a bamboo grove, may be found a clearing with a yard at one corner of which we were shown what is generally known as the 'samadhi' of Krittivas; and beside this are the remains of the cell of Saint Haridas, now preserved in the form of a well. Here, it is said, was the den of Mahanag mentioned in the Chaitanya Bhagabata, who out of reverence to Haridas gave him shelter in his distress when swept away by currents due to floods in the Bhagirathi. Attached is a brick-built house which a devoted Vaisnava erected and consecrated to the blessed memory of the saint. The building now stands badly in need of repair. Behind in the midst of a wood is a spot popularly believed to be the 'Vastu Bhita' or dwelling place of Krittivas.

It may not be out of place, perhaps, to mention here something about the poet. Recent researches place his date of birth about 1440 and astrological calculations put it as 1432. It is, however, certain from evidences that the poet flourished before Chaitanya. The fact of the existence of his 'Samadhi' that may suggest for his creed Vaisnavism does not go against our conclusion. The discovery of his autobiography or 'Atmanivaran' has dispelled many wrong notions about the poet. The poet, we are informed by this, was a profound Sanskrit scholar. When twelve years old, the boy Krittivas went to 'Barah Ganga Parah' for his education. After finishing his education there at the hands of 'worthy teachers' he came back to his native village, Fulia. Like his ancestor Narayan Ojha who removed to Fulia and was for a time a pandit at the Court of a Chief in East Bengal, Krittivas aspired to be admitted into a court; accordingly he offered himself in verse to the King of Gauda, who he tells us was struck by his genius and became favourably inclined to him. It was at the wish of the King of Gauda that Krittivas undertook to translate the Ramayana of Valmiki, a source of inspiration to poets and writers of all ages. His rendering is not a mere translation, it is at the same time marked by the personality of

the translator. In his autobiography we have a glimpse into his family life.

In this connection we should note the 'Fulia mel,' one of the thirty-six subdivisions—according to demerit—into which was divided the Radiya Brahmans of Bengal later on by Devivar Ghatak, an important personage of his time. The members of the 'mel' are all descended from Gangadhar Mukhopadhyaya, an ancestor of our poet.

It is not easy to estimate the influence of Krittivas over the people of Bengal. No other Bengali poet has helped so much in moulding the national character of the people as Krittivas. Even Chaucer, the father of English poetry, to whom he has sometimes been compared, cannot claim the same influence over the popular mind as the father of Bengali poetry. Krittivas's popularity continues unabated down to this date. The literary public, we are sure, will not be slow to help forward the commendable project of the Memorial Committee to execution.

PRAFULLAKUMAR SARKAR.

Library Bulletin.

The following books have been added to the library since the issue of the previous bulletin—

Adye, E. H. . . . Modern Lithology, illustrated and defined.
 Alston, L. . . . Elements of Indian Taxation.
 An Analysis of the system of government throughout the British Empire.
 Angell, N. . . . Prussianism and its Destruction.
 Annalen der Physik Band 33, heft 2.
 Annual Report of the Archaeological Survey, Southern Circle, 1914—1915.
 Annual Report of the Assistant Archaeological Superintendent for Epigraphy, Southern Circle, 1914—1915.
 Bastable, C. F. . . . The History of International Trade.
 Beck, Dr. R. . . . The Nature of Ore-deposits.
 Belloc, H. . . . A general sketch of the European War, Vol. I.
 Besant, Annie Wake up, India; a plea for Social Reform.
 Bevan, E. . . . Indian Nationalism.
 Bosanquet, B. . . . Three Lectures on Aesthetic.
 Bower, F. O. . . . The Origin of a Land Flora.
 Bowley, A. L. . . . The Nature and Purpose of the Measurements of Social Phenomena.

Bowley, A. L., and
Burnett-Hurst, A.
R. Livelihood and Poverty.
Brooke, S. A. . . Tennyson.
Burns, C. D. . . Political Ideals.
Calendar of the Civil Engineering College, Sibpur, for 1915.
Campbell, D. H. . . A University Text-Book of Botany.
Carritt, E. F. . . The Theory of Beauty.
Chaitanya Charitamrita, 3 parts.
Chamberlain, J. . . Chamberlain's Speeches, 2 vols.
Cheyne, T. K. . . The Reconciliation of Races and Religions.
Chhandogya Upanishad (in 10 parts).
Columban, Dame M. The Irish Nuns at Ypres.
Cross, W., Iddings,
J. P., and others Quantitative Classification of igneous rocks.
Curzon, Lord . . War Poems and other Translations.
Davis, G. M. N. . . The Asiatic Dionysus.
Deussen, Dr. P. . . Outlines of Indian Philosophy.
Dicey, A. V. . . Law and Opinion in England.
Dozy, R. . . Spanish Islam.
Drinkwater, J. . . Swords and Ploughshares.
Ellis, H. . . Man and Woman.
Evans, H. T. . . Wales and the Wars of the Roses.
Fayle, C. E. . . The Great Settlement.
Firdausi . . The Shahname, English Translation, 7 vols.
Flecker, J. E. . . The Old Ships.
French Sculpture of the 13th Century.
Furneaux, W. S. . . Field and Woodland Plants.
Gardiner, J. H. . . Harvard.
Gray, A. . . Botanical Text-books, 2 vols.
Guilland, A. . . Modern Germany and her historians.
Haberlandt, Dr. G. . . Physiological Plant-Anatomy.
Harkar, A. . . Tables for Calculation of Rock Analysis.
Hasbach, Dr. W. . . A History of the English Agricultural Labourer.
Headlam, J. W. . . The History of Twelve Days.
Helps, E. A. (Ed.) . . Songs and Ballads of Greater Britain.
Herrick, M. T., and
Ingalls, R. . . Rural Credits.
Higgins, A. P. . . The Hague Peace Conference and Other International Conferences.

Hill, N. . . . Poland and the Polish Question.

Holdsworth, J. T. . . . Money and Banking.

Hutchinson, L. . . . The Panama Canal and International Trade Competition.

J'Accuse ! Von einen Deutschen.

Kittredge, G. L. . . . Chaucer and his Poetry.

Leach, A. F. . . . The Schools of Mediæval England.

Le Goffic, Charles . . . Dixmude.

Les Poetes de la Guerre.

Lewis, Sir G. C. . . . An Essay on the Government of Dependencies.

Lowell, A. L. . . . The Governments of France, Italy and Germany.

Macmillan, H. F. . . . Handbook of Tropical Gardening and Planting.

Macnicol, N. . . . Indian Theism from the Vedic to the Mohamedan Period.

Mitchell, P. C. . . . Evolution and the War.

Mügge, M. A. . . . Friedrich Nietzsche.

Muirhead, J. H. . . . German Philosophy in relation to the War.

Nisbet, J. . . . British Forest-trees and their sylvicultural characteristics and treatment.

Omond, T. S. . . . English Metrists in the 18th and 19th Centuries.

Oxford Pamphlets The War and its Economic Aspects.

Page, F. (Ed.) An Anthology of Patriotic Verse.

Perris, G. H. . . . The Campaign of 1914 in France and Belgium.

Petre, M. D. . . . Reflections of a non-combatant.

Physikalische Zeitschrift, Jahg. 13, no. 19.

Ditto nos. 21—22.

Pigou, A. C. . . . Economic Science in relation to Practice.

Pitt, W. . . . The War Speeches of William Pitt, the Younger.

Planek, Dr. M. . . . Thermodynamics.

Pollard, A. W. (Ed.) . . . English Miracle Plays, Moralities and Interludes.

Posepny, Prof. F. . . . The Genesis of Ore-deposits.

Pouchet, F. A. . . . The Universe.

Powell, E. T. . . . The Evolution of the Money Market.

Pownall, G. H. . . . English Banking.

Punnett, R. C. . . . Mendelism.

Quarterly Journal of Economics, vol. 27, nos. 2 to 4.

Ray, S. C. . . . Economic Causes of Famines in India.

Reinsch, P. S. . . . World Politics at the end of the 19th Century as influenced by the Oriental Situation.

Rhys, E. . . Lyric Poetry.

Rivers, W. H. R. . . Kinship and Social Organisation.

Rutherford, M. . . Last Pages from a Journal.

Seaman, O. . . Wartime Verses.

Schelling, F. E. . . English Drama.

Seeley, Sir J. R. . . Introduction to Political Science.

Sidgwick, E. M.,
Murray, G., and
others . . . The International Crisis.

Slater, G. . . Peace and War in Europe.

Soloviev, V. . . War, Progress, and the End of History.

Stevenson, Mrs. S. The Heart of Jainism.

Studies in Southern History and Politics.

Suess, E. . . The Face of the Earth, vols. 2, 3 and 4.

Sykes, Lt.-Col. P. M. A History of Persia, 2 vols.

Taussig, F. W. . . Principles of Economics, 2 vols.

The *Times* History of the War, Pts. 54 to 60 (vol. 5).

The Mineral Resources of the Philippine Islands for the year 1914.

Thirty Minor Upanishads. Translated into English.

Tinker, C. B. . . The Salon and English Letters.

Tynan, Katherine . . Flower of Youth.

Upadeshasahasri of Sankaracharyya.

Vidyasagar, Iswar
Chandra . . Vyakarana Kaumudi, 4 parts (in one).

Vinogradoff, P. . . The Growth of the Manor.

Walton, J., and
Cotton, C. . . The Compleat Angler.

Weigall, A. E. P. B. A History of Events in Egypt from 1798 to 1914.

Wells, H. G. . . The Peace of the World, 2 copies.

Wesselitsky, G. De Russia and Democracy.

Willis, J. C. . . A Manual and Dictionary of Flowering Plants
and Ferns.

Wilson, P. W. . . The Unmaking of Europe.

Wilson, W. . . Constitutional Government in the United States.

Withers, H. . . War and Lombard Street.



Eden Hindu Hostel Notes.

IN spite of the dreadful war and famine that are now convulsing the world outside, this almost self-sufficient 'city state' of E. H. H. has been little affected in its life and its usual course of amusements has suffered little check as yet.



The much expected Autumnal Feast which had to be discontinued of late for various reasons was revived this year under the able Mess Committee, helped by the superintendent. All the boarders co-operated with them in making the arrangements as satisfactory as possible.

We hear that the authorities are now contemplating a better system for the work of the Mess Committee.



The activities of the debating clubs are commendable. Before the Pujas the various clubs held their sittings and some of the subjects discussed in them were of a very useful and interesting nature. Our superintendent conducted the proceedings of some of them. The debating club of Ward II had two very successful sittings, in one of which Prof K. N. Mitra, M.A., kindly took the chair and the subject for discussion was "Should students join in Social Service"; the other was held under the presidency of Prof. T. S. Sterling, M.A., warden for Ward II. The subject discussed was "India; her Past and Present." The meeting was a pronounced success.



A l'allegro meeting, peculiar to Ward II, was arranged by its boarders in September last. The programme, as might be expected, included various sorts of amusements and the function was altogether a successful one.



The Senior Bridge Club, Ward II, had its record sitting in September last. The club sat for 24 hours without a minute's break. The patience of the members is commendable indeed.



Our beloved ex-superintendent, Prof. H. C. Banerjee, M.A., was entertained at a social gathering held in the hostel before the Pujas on the occasion of his retirement.

In connection with the anniversary of Ward II various competitions in games began early in December and prizes were announced. The programme included among other events an eating competition, in which Mr. J. Sanyal of the Second Year I.A. class distinguished himself by taking a little over $2\frac{1}{2}$ seers of boiled rice to the general admiration of the onlookers.



The hostel dietary, as our superintendent too has observed, needs a little regulation, and it is gratifying to note that some practical steps have been taken in this direction. We should like to emphasise the need of a fruit vendor for the hostel. It is inconvenient and unhealthy to depend solely on confectionery. We hope that provision will soon be made for a regular supply of fruit and biscuits in the hostel.

PROFULLA K. SARKAR.

School Notes.

HARE SCHOOL.

Poor Fund.—The Hare School Poor Fund is doing remarkably well. The amount at present being distributed among poor students is Rs. 15 per month. The total deposit at the Post Office Savings Bank is over Rs. 360.

Sporting Notes.—We had a most happy evening in October last, when the Ghosh Challenge League was presented to its winners, the First Class team.

On the presentation day we arranged a football game between the East and West Bengal boys of the School. The game started punctually at 5-30 P.M. The West Bengal boys played a fine game from the very beginning and won easily by four goals to one.

After the game Mr. E. F. Oaten, Professor, Presidency College, very kindly gave away the prizes. Mrs. Oaten, too, was present on the occasion. The captain of the West Bengal team received a silver medal while the captain of the First Class team received a silver medal and the League Cup. We must express our thanks to Mr. and Mrs. Oaten for the keen interest they took in our game. We must also thank Mr. Prafulla K. Sanyal of the Mohan Bagan Club who kindly supervised our game on that day. His judgments were all that could be desired.

With the Ghosh League we have closed our Football Season.

Soon after the Poojah Holidays we opened our Cricket Season and hope it will be a successful one.

PRATUL GHOSH,
Correspondent.

THE HINDU SCHOOL.

The School.—After a vacation of thirty days the School opened on November the 10th. Teachers and students vigorously returned to their respective duties with an energetic heart and fresh mind, after the Puja holidays. Most of us left the town during the holidays.

The "Hindu School Magazine."—In the wide arena of school and college magazines, the *Hindu School Magazine* has at last made its appearance. Both English and Bengali contributions find place in the magazine. The first number is a distinct success. We have our headmaster Rai Rasamay Mitra Bahadur as the president of the Magazine Committee.

The Debating Club.—“Which is more powerful—The Pen or The Sword?” was the subject of discussion in an ordinary meeting of the Debating Club held under the presidency of Babu Saratindu Ray, B.A. The subject was well handled and some forty-five members were present.

AMAL GANGULI,
Correspondent.

Seminar Reports.

REPORT OF THE HISTORICAL SEMINAR MEETINGS.

THE inaugural meeting of the Historical Seminar took place on August 12th in the presence of Mr. E. F. Oaten, M.A., LL.B. (Cantab), the president, and Messrs. J. N. Das Gupta, B.A. (Oxon), Bar.-at law, and H. C. Roy Chowdhury, M.A., the vice-presidents. Prof. H. C. Roy Chowdhury opened the session with a paper on “The Greek and Gothic elements in the Hindu Population.” His contentions were that there was a Greek and a Gothic element in the population of India. The writer’s second proposition, which he based on two words ‘Irilya’ and ‘Gatana,’ found in a Gupta inscription, and explained as ‘Eorl’ and ‘Goth,’ respectively, was disputed by Sj. Saroj Kumar Sen, B.A., and Sj. Narayan Chandra Banerjee, B.A., on ethnological and historical grounds. In answer to the criticisms the writer said that as yet he did

not make any bold assertion of his contentions, but expressed a hope that in some near future he may be able to do so. The President then wound up the debate and congratulated the reader for the able treatment of a very interesting subject. The meeting was then dissolved.

The second meeting of the Historical Seminar took place on September 2nd. Under the kind presidency of Mr. E. F. Oaten, M.A., LL.B. (Cantab), Sj. Saroj Kumar Sen, B.A., read a paper on "Sovereignty over the air." He first considered the question of complete freedom of the air kingdom. He refuted the arguments of those who drew an analogy to the high seas by saying that men do not live under water so that any accident on the high seas does not affect any one directly, except those who are actually in the ship; but any accident with the airship would affect those below it and that most seriously. He then pointed out that the safety of states would be endangered, spying encouraged, and in times of war, neutral life and property destroyed by a fight over-head. He also showed that this would present an anomaly, as a motor car in the streets is within the powers of the State Government, but an airship skimming one inch above the surface of the earth would be beyond all authority. He next considered the question of a zone, suggested by some on an analogy to the three-mile limit of the high seas. This was shown to be useless as none would add greater safety to the subjacent states as long as the force of gravitation exists. Moreover, no two jurists or states have as yet agreed as to the extent of the zone, which also shows the impossibility of the proposition. The writer also pointed out that the range of artillery, which settled the three-mile limit when it was first laid down, would not in modern times allow any air vessel to pass above any state. Thus complete or partial freedom of the air kingdom was shown to be impossible. He next considered the question of state sovereignty and showed that it had the advantage of simplicity, and greater safety for states and had the support of all State Governments as shown by their actions during the present war on several occasions. He thus advocated state-sovereignty and concluded with a remark that with the conclusion of the present European war there would be no question as to what should be the rights of states over the superjacent air. The President remarked that it was a difficult subject and the writer had clearly stated the views of that school of international lawyers whose opinions on this subject were gradually gaining ground. He gave no judicial decision, he said, because his opinion was formed long before and was quite in harmony with the writer's. The meeting was then dissolved.

The third meeting was held on the 28th of September under the presidency of Mr. E. F. Oaten and in the presence of Profs. J. N. Das Gupta, H. C. Roy Chowdhury and a fair number of members of the Seminar. Prof. Gauranga Nath Banerjee, M.A., B.L., P.R.S., M.R.A.S., of the University College was invited to read a paper. His subject was 'Antique Art and Civilisation' with special reference to Egypt, Greece and India.

The subject was highly interesting. The writer said that "the art of a country like the character of its inhabitants belongs to the nature of the land," and as such we can make no comparison between the art of any two countries, as each is relatively the best for its own conditions and each is out of place in other conditions.

'The only bad art is mechanical and an age of copying is only a despicable age.' He then considered the comparative antiquity of the art of the different countries, but made no remark on the comparative value of the different civilisations and their influence on modern civilisation. We expected from him something on this line. There was no criticism of the paper.

The President, on behalf of the Seminar, thanked him for his paper and expressed a hope that this would not be his last visit to the Seminar of which he was some time a member. The meeting was then dissolved.

SAROJ KUMAR SEN GUPTA,

Secretary, Historical Seminar.

THE FIFTH ANNUAL REPORT OF THE BIOLOGICAL
SOCIETY, PRESIDENCY COLLEGE.

The fifth year of the Biological Society began on the 25th November, 1915. At the general meeting on that date, the following office-bearers were elected to conduct the business of the Society :—

<i>Honorary President</i>	.. Principal H. R. James, Esq., M.A. (Oxon).
<i>President</i>	.. Prof. S. C. Mahalanobis, Esq., B.Sc. (Edin.).
	F.R.S.E.
<i>Vice-Presidents</i>	.. Prof. N. C. Bhattacharjee, M.A., B.Sc. ,, N. M. Basu, M.Sc.
<i>Hon. Treasurer</i>	.. Babu Jitendranath Mukherjee, B.Sc.
<i>Hon. Secretary</i>	.. Promoderanjan Das Gupta, B.Sc.

Altogether we had six meetings during the year under review, and comparing the number of the meetings held in this year with that of

the previous years, we are glad to say that there has been a distinct improvement on the work of the previous years.

The quality of the papers also show a distinct improvement, many of them being original in thought and lucid and clear in style. We are glad to say that our papers will compare favourably in their quality with any of the papers that have been read in any of its sister societies. Of these six papers, one being read at each meeting,—

One was read by a member of the College staff,
Four by senior students, and
One by a undergraduate member.

A comparative table of the number of meetings that have been held during the last five years—

1910—1911	..	..	..	4 meetings.
1911—1912	..	..	..	2 meetings.
1912—1913	..	..	..	5 meetings.
1913—1914	..	..	..	1 meeting.
1914—1915	..	..	..	6 meetings.

Details of the meetings :—

(1) The first meeting was held on the 25th November, 1914, under the presidency of Prof. N. C. Bhattacharjee, M.A., B.Sc., when a extremely interesting paper on “Dyspepsia and its physiological aspects” was read by Sr. Hamesh Chandra Das Gupta, B.Sc. In the paper, the writer dealt on the various physiological aspects exhaustively and also the various means by which the cure may be brought about.

(2) The second meeting was held on the 25th February, 1915, under the presidency of Prof. S. C. Mahalanobis, B.Sc. (Edin), F.R.S.E., when a paper of considerable scientific interest on “The workmanship of Nature in the construction of the Heart-pump” was read by Mr. N. M. Basu, M.Sc. This paper was characterised by much originality of thought. The way in which the problem was discussed was very interesting.

(3) The third meeting was held on the 5th March, 1915, under the presidency of Prof. S. C. Mahalanobis, B.Sc. (Edin), F.R.S.E., when the Secretary of the Biological Society read a paper on “The Food Problem and the place of fruits in an Ideal Diet,” in which it was argued that fruits should be given a more prominent place in our daily diet than they now occupy. The writer supported his view by many illustrations and observed facts.

(4) The fourth meeting was held on the 18th August last under the

presidency of Prof. S. C. Mahalanobis, B.Sc., F.R.S.E., when a paper on "Water and its relation to Metabolism" was read by Mr. Dharamidhar Bera, B.Sc. The paper was written in a most elegant style and was heard with rapt attention by all. In the paper the writer advocated a liberal taking of water.

(5) The fifth meeting was held on the 23rd August, 1915, under the presidency of Prof. S. C. Mahalanobis, B.Sc., F.R.S.E., when a paper of considerable physio-historical interest on "The Debt of Biological Sciences to William Harvey" was read by Mr. Binodebihary Sen. In the paper the writer pointed out how the discoveries of William Harvey has opened out a new branch of Physiology.

(6) The sixth meeting was held on the 29th September under the presidency of Prof. S. C. Mahalanobis, B.Sc., F.R.S.E., when a paper of immense interest on "The Evolution of Costumes and its physiological significance" was read by Mr. Narendra Nath Mitra, B.Sc. In the paper the writer dwelt at length on the gradual evolution of costumes from the earliest days to the present time and showed how the different steps in the evolution was necessitated by the physiological factors.

The attendance.—All our meetings were largely attended and the discussions in the meetings were lively and interesting, all of which clearly point to the increasing popularity of the Society.

The members.—It is a happy sign that the number of members has increased to nearly five times the number of members in the previous years.

Changes in the office-bearers.—Babu Bijalibihary Sarkar, B.Sc., was elected to be the Hony. Treasurer of this Society by the members of the Society in place of Babu Jatindranath Mukherjee, B.Sc., on leave.

The Secretary's thanks are due to the writers of the papers for the interesting way in which they have entertained the members, and the Secretary hopes they will continue to do the same in future.

PROMODERANJAN DAS GUPTA,
Secretary, The Biological Society.



The Presidency College Flood and Famine Relief Committee.

DISTRESS continues to prevail in East Bengal. It is gratifying to learn that the Government has taken up the task of alleviating the distress by all necessary measures. Consequently many of the societies hitherto working there have retired from the scene of distress. We have not wholly given up our work there, but have left the Kamalpur centre and confined ourselves solely to Sasidal in Brahmanberia, where we have given the local authorities to understand that we shall continue the work at least till the end of December.

Meanwhile acute distress owing to famine resulting from drought, has taken place in the District of Bankura. We have received first-hand reports of the magnitude and acuteness of the distress prevailing there from Mr. Mitchell, Principal, Wesleyan College, Bankura. Our Committee has sent Rs. 200, together with Mr. James's special contribution of Rs. 30 to Mr. Mitchell's organisation. To follow this up, we are intent on sending more money and men, if available.

To help us to continue relief operations at Bankura, which, as up-to-date reports distinctly show, is still suffering and will continue to suffer greatly for some time, we are issuing a fresh appeal to our fellow-students, ex-students and well-wishers for more contributions. As times are going hard greater sacrifice than hitherto borne is required of us.

Below we give a statement of the amounts raised from different sources and the expenditure hitherto incurred.

We beg to acknowledge thankfully the receipt of the following contributions from members of our College-staff:—

	Rs. A. P.		Rs. A. P.
Dr. P. C. Ray	.. 50 0 0	Prof. J. N. Das Gupta	.. 10 0 0
„ J. C. Bose	.. 50 0 0	„ H. C. Das Gupta	.. 10 0 0
*Principal H. R. James	.. 30 0 0	„ S. P. Das	.. 10 0 0
Prof. C. W. Peake	.. 25 0 0	„ C. Bhaduri	.. 10 0 0
„ S. C. Mahalanobis	.. 20 0 0	„ B. B. Bannerji	.. 10 0 0
„ J. Bhaduri	.. 20 0 0	„ M. Ghosh	.. 10 0 0
Moulavi Hidayet Hossain	.. 10 0 0	„ K. N. Mitra	.. 10 0 0
Prof. S. C. Mukherji	.. 10 0 0	„ P. C. Ghosh	.. 5 0 0
„ J. C. Coyajee	.. 10 0 0	„ N. C. Bhattacharya	.. 5 0 0
„ G. B. Sen	.. 10 0 0	„ J. C. Nag	.. 5 0 0
Dr. A. N. Mukherji	.. 10 0 0	„ J. M. Bose	.. 5 0 0

* In addition to this, the Principal has sent Rs. 30 to Mr. Mitchell's (Principal, Wesleyan College, Bankura) organisation.

	Rs. A. P.	Rs. A. P.
Prof. H. C. Bannerji	.. 5 0 0	Prof. D. K. Mozumdar .. 2 0 0
,, N. Chakravarty	.. 5 0 0	,, S. Mitra .. 2 0 0
,, R. K. Dutt	.. 5 0 0	,, G. Basak .. 2 0 0
,, N. Basu	.. 5 0 0	,, B. Maitra .. 2 0 0
,, S. Bannerji	.. 5 0 0	,, H. Bannerji .. 2 0 0
,, Ashutosh Sastri	.. 4 0 0	,, S. K. Bannerji .. 2 0 0
,, R. N. Ghosh	.. 4 0 0	,, H. C. Ray Chaudhuri 1 0 0
,, B. C. Basu	.. 4 0 0	
,, K. M. Khastagir	.. 4 0 0	Total .. 389 0 0

The following is a statement of the total receipts up to date, together with the total expenditure and the total balance:—

RECEIPTS.	EXPENDITURE	Rs. A. P.
Hindu School .. 100 0 0	Stationery 1 5 6	
Hare School .. 100 0 0	Tram-hire 1 3 0	
College Staff .. 389 0 0	Printing Charges .. 10 4 0	
Ex-Students .. 707 1 0	Stamps 6 11 0	
6th Year Science Class .. 51 0 0	Relief Centre at Sasidai	
,, Arts .. 6 0 0	(Brahmanberia) .. 1,450 0 0	
5th,, Science .. 35 9 0	Sent to Bankura for famine-	
,, Arts .. 13 0 0	relief 200 0 0	
4th,, Science .. 20 12 0		
,, Arts .. 44 4 0	Total .. 1,669 7 6	
3rd,, Science .. 57 5 0		
,, Arts .. 114 14 0	Total Receipt .. 1,956 8 0	
2nd,, Science .. 57 7 0	,, Expenditure .. 1,669 7 6	
,, Arts .. 55 12 0		
1st,, Science .. 42 12 0	Total Balance .. 287 0 6	
,, Arts .. 90 12 0		
Ward H. E. Hindu Hostel .. 18 0 0		
,, III,, .. 23 0 0		
,, IV,, .. 30 0 0		

We beg to publish this list of errata relating to the first list of subscribers published in a previous issue:—

For Sarat Kumar Chudhuri ..	read Sanat Kumar Chaudhuri.
,, Suresh Chandra Bhaduri ..	,, Suresh Chandra Bardhan.
,, Jagadbandhu School Boarding	,, Jagadbandhu School Boarding-
House Charity Club Rs. 5-0-0	House Rs. 5-0-0.
,, Upendra Nath Banerji ..	,, Upendra Chandra Bannerji.
,, Rishindra Nath Sarkar ..	,, Rishindra Chandra Sarkar.
,, J. C. Boral ..	,, G. C. Boral.
,, S. C. Hazra ..	,, J. C. Hazra.
,, M. N. Basu ..	,, M. M. Basu.
,, R. N. Das Gupta ..	,, R. M. Das Gupta.
,, Jagat Bhusan Ray ..	,, Jagadbandhu Ray.
,, K. Chatterji ..	,, Kshtish Neogi.
,, Meghanath Shaha ..	,, Meghnad Shaha.

The P. C. Flood and Famine Relief Committee. 273

We gratefully acknowledge receipt of the following contributions sent in after we had published our first list of subscribers :—

	Rs. A. P.	Rs. A. P.	
Hitherto published	510 11 0		
Mr. Sarat Ch. Bannerji	25 0 0	Mr. Taradas Chatterji	1 0 0
„ Madan M. Burman	25 0 0	„ Gaur Mohon Dutt	1 0 0
A friend	15 0 0	„ Sarada Ch. Maiti	1 0 0
Mr. Sailendra N. Mitra	10 0 0	„ Amulya K. Guha	1 0 0
„ Satish Ch. Ghosh	5 0 0	„ Bhudhar Haldar	1 0 0
„ Satyendra N. Mukherji	5 0 0	„ Santimoy Mozumdar	1 0 0
„ D. N. Bagchi	5 0 0	„ J. M. Mitra	1 0 0
„ Charu Ch. Mitra	5 0 0	„ Bibhuti B. Shaha	1 0 0
„ Gopal Ch. Ganguli	5 0 0	„ Ajendra Nath Dutt	1 0 0
„ Dwarka N. Mitra	5 0 0	„ Bhupendra K. Basu	1 0 0
„ B. K. Das	5 0 0	„ Jogindra K. De	1 0 0
An Ex-student..	5 0 0	„ Saradindu Mukherji	1 0 0
Mr. D. Chakravarty	5 0 0	„ Jnanendra N. Dutt	1 0 0
„ Suresh Ch. Basu	5 0 0	„ Srish Ch. Haldar	1 0 0
„ Bhabanath Das Gupta	4 0 0	„ Nityananda Sen	1 0 0
„ Romesh Ch. Mozumdar	3 0 0	„ M. M. Chatterji	1 0 0
X. Y. Z.	2 0 0	„ N. K. Neogi	1 0 0
Mr. Lilamoy Ray	2 0 0	„ Akshoy Ch. Mozumdar	1 0 0
„ Kanchanendu Guha	2 0 0	„ Arun Ch. Roy	1 0 0
„ Gurudas Sinha	2 0 0	„ Nitai Ch. De	1 0 0
„ Bhupendra K. Ghosh	2 0 0	„ Surendra Chandra Laha	1 0 0
Sm. Lilamoyee Roy	2 0 0	„ Purnendu Pal	1 0 0
Prof. Kumar N. Bannerji	2 0 0	„ Phaniendra M. Dutt	1 0 0
Two boarders, Hardinge Hostel	2 0 0	„ Pran Krishna Samanta	1 0 0
Mr. Tarak Nath Poddar	1 0 0	„ L. Agarwallah	1 0 0
„ Rajendra N. Deb	1 0 0	„ Mohammed Ali	1 0 0
„ Sailesh Ch. Mitra	1 0 0	„ M. N. Chandra	1 0 0
„ Sailesh Ch. Bannerji	1 0 0	„ Anil Krishna Deb	1 0 0
“A friend”	1 0 0	Other collections	12 0 0
Mr. Purna Chandra Ray	1 0 0	Small collections sent by	
„ V. C. Laha	1 0 0	Babu S. M. Karmakar	0 6 0
„ Chandi Charan Chandra	1 0 0		
		Total	707 1 0

HARISH CHANDRA SINHA

and

SUBHAS CHANDRA BASU,

Secretaries.



University Notes.

ON Saturday, the 4th December, 1915, in the Senate Meeting of the Calcutta University, the now famous motion of Dr. E. R. Watson again came up for discussion. Dr. Watson wanted the Senate to "view with alarm the rapid increase of passes" in the Matriculation and B.A. Examinations and desired "an immediate enquiry." Dr. Kedarnath Das proposed to amend the motion as follows:—

"An enquiry be held as to the cause and significance of the rapid increase of passes in the University Examinations, especially in the Matriculation and B.A. Examinations, which have taken place in recent years."

After a protracted debate Dr. Das's amendment was carried and Dr. Watson's motion was thrown out by 39 against 20 votes. We may note here that Principal James thought that both the amendment and the motion should be withdrawn, as the appointment of the committee would be merely "waste of time." The motion as amended by Dr. Das was then put and carried by 32 against 20 votes. The question then arose as to the constitution of this new Committee. In the proposed list of Members there was the Vice-Chancellor's name, but he asked to be excused from serving on the Committee. Principal Herambachandra Maitra, Dr. Suresprasad Sarbadhikari, Mr. Bhupendranath Basu, and the Hon'ble Mr. Mahendranath Ray, who were proposed in turn, also declined to serve. The committee finally appointed stands as follows:

Dr. Brojendranath Seal, President.

Dr. P. Brühl, Secretary.

Dr. Nilratan Sarkar.

Mr. C. J. Hamilton.

Dr. E. R. Watson.

One of the grounds of the members who opposed the motion, was that as a committee had already been constituted by the Joint Faculties of Arts and Science on the motion of Sir Asutosh Mookerjee, there was no need for a second committee. Those in favour of the motion argued that the former committee was not quite representative and that its field of enquiry was too wide. .

It is worthy of note that four members of the new committee are members of the former committee and that the fifth member, Dr. Watson, refused to serve on the first committee.

Dr. W. H. Young, Hardinge Professor of Mathematics, has returned to India, after a tour in America and Japan, where he visited all the great Mathematical institutions. He is said to have drawn up a report on the condition of those institutions, as also a scheme for the improvement of Mathematical study in the Calcutta University.

His first public lecture this session was delivered on Monday, the 6th December, 1915.



Babu Dineschandra Sen, Ramtanu Lahiri Research Fellow, delivered on the 29th September, 1915, the second course of lectures on "The Bengali Ramayans and their relation to the cycle of Ramaynic Legends."



Dr. Brajendranath Seal, Regius Professor of Philosophy, has begun a course of public lectures in the Durbhanga Buildings.



Professor J. N. Dasgupta, as Reader to the University of Calcutta, delivered an address on "The Early English Voyages to the East Indies" at the Senate House on Monday, the 4th October, 1915. The Vice-Chancellor presided.



The award of the Premchand Roychand Studentship for 1915 has at last been made. The award in Literary subjects is made to Babu Bhujangabhushan Mookerjee and that in Scientific subjects to Babu Surendramohan Ganguli. Babu Bhujangabhushan Mookerjee is an old student of our College.



The Hon'ble the Vice-Chancellor and the Syndicate are to be congratulated on their attempt to have lectures delivered, by different scholars, on the model of the Extension Lecture System prevalent in Cambridge, London, Chicago, Harvard and elsewhere. The following is the list of gentlemen who have already agreed to deliver lectures this winter:—

1. Dr. J. C. Bose.
2. Dr. P. C. Ray.
3. Professor A. Brown.
4. Mm. S. C. Vidyabhushan.
5. Dr. B. N. Seal.

6. Principal Biss.
7. Principal S. Ray.
8. Principal H. C. Maitra.
9. Principal H. R. James.

R. M.

About Other Colleges.

St. Paul's College may well be proud of the glorious honour which belongs to its late professor, the late Lieut. L. R. Burrows. He has fallen for his country, and what more could one want to make himself famous! He has fallen with the true missionary spirit in his heart—while trying heroically to save two of his wounded comrades. It is superfluous to say that St. Paul's men will raise a memorial worthy of the achievement of its late professor. We salute the late Professor Burrows for his lofty heroism and sturdy patriotism.



The Serampur College celebrated its Foundation and Degree Day with great success. H.E. the Rector presided over the meeting held on the day and made some very important utterances. Here we may remind our readers that our own Principal, Mr. James, presided over this very function year before last. For the first time in its annals this great College conferred degrees on its alumni. The aspirations of its great and noble founders are nearing fulfilment.



Professor J. R. Barrow of the *Dacca College* has been raised to the Principalship of Chittagong College. The *Chittagong College* raised funds to help the famine-stricken people of Eastern Bengal.



Deccan College (Poona) has started an "Oriental Society" under the presidency of Principal Rawlinson, who himself gave the first start to the Society by reading a paper on "The materials for the Life of Shivaji: their Use and Abuse."

The prizes for the "War Essay" (offered by Principal Rawlinson) have been won by Messrs. Chitnis, Albekar and Barland in order of merit. H.E. the Governor of Bombay has offered ten prizes amounting to the

value of Rs. 500 for the best essays on "The World War, its Effects and Moral."

* * *

The Ravenshaw College Economic Society made a trip to Bidyadhar-pur Experimental Farm. A Bengali branch of the College Debating Society has been established and is carrying on its work very successfully. The College has raised subscriptions for the relief of the famine-stricken people of E. Bengal.

Professor A. B. Mohanty is giving lectures on the war.

S. M.

Review.

An Introduction to the Study of Literature.—By HENRY WILLIAM HUDSON.
Messrs. Harrap & Co. Net 4s. 6d.

This, if I do not mistake, is a book for which many a student of literature, especially one who has made some little advance beyond the first beginnings of critical study, has long been on the lookout. In it he will find all the chief puzzles which he has encountered incidentally in particular studies :—what is poetry; what is literature; what is poetic truth; what is the secret of style; what is the value of biography in relation to literature; what is the significance of literary technique; what is the justification of the chronological and the comparative and the historical methods; why we labour to trace the source and assign the dates of Shakespeare's plays, and generally submit any piece of literature to the elaborate, and sometimes tedious, processes which fill the sections of the introductions to text-books and form the headings of lecture notes :—all treated orderly and methodically within moderate compass, and always with sane and well-balanced judgment. There are separate chapters which treat in detail of the three great branches of literature—poetry, prose, fiction and drama—covering all the leading subjects of discussion in regard to these.

Mr. Hudson's own method is eminently inductive. His procedure is to set out the elements of judgment and very seldom to lay down anything dogmatically. The student is invited to pass in review all the main aspects of the problems discussed and is generally left to form his own conclusions. Nevertheless, Mr. Hudson pronounces clearly enough on some vital and fundamental points, as, for instance, the inadequacy of Taine's ultra-scientific formula (page 50); and he never tires of emphasizing the supreme importance of the "personal charac-

ter" of literature, and the intimate bond between literature and life. "A great book owes its greatness in the first instance to the greatness of the personality which gave it life. For, what we call genius is only another name for freshness and originality of nature, with its resulting freshness and originality of outlook upon the world, of insight, and of thought. The mark of a really great book is that it has something fresh and original to say and that it says this in a fresh and independent way."

The interest and value of the whole book culminate in the last chapter on the Study of Criticism, wherein the characteristic excellences of his treatment,—clearness, impartiality, moderation, compactness combined with adequacy, are well exemplified.

H. R. J.

Correspondence.

STILL MORE WAR PHRASES.

To

THE EDITOR, *Presidency College Magazine*.

DEAR MR. EDITOR,

Your readers' appetite for war phrases seems to be increasing; so here are some more for them. I suppose some of them have heard of the word "*Mafficking*." The Boer War was responsible for the birth of this curious word—the uproarious and riotous fashion in which the *fall of Mafeking* was celebrated in London being the occasion of the genesis of the word. The word "*commandeer*," meaning to impress forcibly into service, also passed into the English language at the same time.

Future philologists will scratch their heads over such outlandish words as "*Anzac*" and "*Strafe*" which owe their origin to the present war, the first denoting the "Australian and New ZeAlander Contingent" fighting in the Dardanelles, and the second arising out of the solemn (albeit blasphemous) invocation of the Boches, scattered over their letter-heads and postcards "*Gott Strafe England*." The irrepressible British sense of humour has seized on this imprecation and converted it to ludicrous uses, and the tin-opener which fails in its purpose or the cab-horse which stands still and refuses to budge are equally and impartially "*strafed*!" A series of comic pictures is even now running in one of the English weeklies entitled "People who deserve to be *strafed*." Similarly the German submarine "*policy of frightfulness*," which was meant to terrorize the British people, has become one of the stock jests

of the comic papers, alas for its solemn and fatuous exponents, Von Tirpitz and Co! The words "*Slacker*" and "*Shirker*" have also passed into common use to denote the people who are not "*doing their bit*" for Old England. The words "*Hun*" and "*German*" have become synonymous as denoting atrocious barbarians, but someone cleverly combined the two, and now we hear of the "*Germ-Huns.*"

The rapid and phenomenal rise of the aeroplane to usefulness in war (both for scouting and fighting) has led to its being termed the "fourth arm," while the German Count who invented and gave his name to those monstrous gas-bags (which will go down in history as the instruments for murdering unoffending civilians)—*Zeppelins*—has placed nursery rhymsters under a debt of gratitude as having furnished a word beginning with Z—

"Z is the Zeppelin right overhead
Isn't it luck to have something for Z?"
(To quote from *Mr. Punch's "Alphabet of War."*)

I am, etc.,
THE SAME MAN.

CHANGE OF LECTURE ROOMS.

To

THE EDITOR, *Presidency College Magazine.*

DEAR SIR,

Will you please allow me to ventilate a general grievance through the columns of your journal?

It is probably known to you that we, English Honour Students of the Third Year Class, have to attend lectures in Room No. 13 which overlooks College Street. Now it is almost impossible to attend properly and appreciate the lectures that are daily delivered there in the midst of the terrible noise that constantly makes itself heard in that room. Tram-car bells, tom-toms, motor-horns, clammerings of all sorts,—these are the things that daily vie with the voice of the professor which, by the by, far from rising above them, becomes almost inaudible. We lose half the benefit of our attendance on account of this Babel of noises. I do not know what the Third Year English Honours students have done to deserve this punishment. We have borne this infliction for a long time, and now it is really high time that it should change shoulders.

I am, etc.,
ONE OF THE POOR LOT.



THE
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EDITORIAL NOTES.

WE referred in our last issue to the special appointment for research created for Dr. J. C. Bose. Knowing well his dislike for *tamashis* the students restrained their enthusiasm when, crowned with many laurels, he came back to them from his lecturing tour in the West. Of more import than all these honours, highly coveted though they are, is the creation of the special appointment. This ample and complete recognition of his achievements by the Government of his own country has appealed greatly to the students' imagination; but their feelings of pride are mixed with a tinge of selfish regret at the thought that the acceptance by Dr. Bose of the special appointment carries with it his retirement from the staff. They can no longer claim Dr. Bose as their own professor. However, they have now the consolation of knowing that his name will continue to be associated with the College, the Governing Body at the instance of the Principal having conferred on him the title of *Emeritus Professor of the College*.

The high regard in which Dr. Bose is held universally led to the spontaneous movement to hold a social gathering to meet him, in order to congratulate him on the unique honour done to him in the creation of the special appointment for research, and also to bid him farewell on the termination of his long and happy active association with the College. The students urged upon Dr. Bose the special circumstances and procured his consent. The function which took place on the 16th December last was the result; it was highly successful, the huge pandal erected for the occasion being packed with students, members of the staff and many distinguished visitors. The arrangements were perfect and the utmost cordiality prevailed. A full report will be found elsewhere.

On January the 10th the Prize-giving ceremony of the Hare and Hindu Schools took place. They are the leading schools in the province and it may be said without exaggeration that most of the aristocracy of Bengal and many of the foremost men in professions and in Government Service received their early education in one or the other of them. It is fitting that their pre-eminent position should be publicly recognised. No happier way of doing this could be imagined than that His Excellency the Governor should preside over the prize distribution ceremony. This happy consummation was realised this year. To commemorate the occasion quite a number of medals and prizes have been endowed. Details of them as well as a full report of the proceedings of the meeting will be found elsewhere.



We are reminded of the fact that our own College has very little to show in the matter of endowments for the awarding of prizes and scholarships to proficient students. It is certainly an anomaly that having the largest number of them the College should offer so few rewards to keep them up to the mark. Comparisons are odious; but we cannot help remarking that the Dacca and the Scottish Churches Colleges have much better provision in this respect. No doubt a good deal of the spirit of emulation stimulated by the award of prizes is due to the fact that they are given away in public and the recipients are publicly honoured. We can have none of it for the simple reason that we have not got our College Hall. No mortal knows when that want is going to be removed; but it strikes us that nothing but good can result by multiplying prizes and scholarships even now.



The best thing we can do in this magazine is, we think, to draw a veil over the events of January the 10th to the 12th in the College. Surely some malign influence like the Greek 'Ate' had led some of us astray. Occasional variations from the ordinary round of college work are welcome but not such as this. We want no more of such distractions!



We have great pleasure in welcoming to the College two new professors of Political Economy and Political Philosophy—Mr. Kuruvila Zachariah, B.A. (Oxon), who has been appointed in the I.E.S., and Mr. Panchanandas Mukherjee, M.A., who has been appointed in the P.E.S. As we noticed in our last issue, Mr. Zachariah had a distinguished

career both at Madras and at Oxford. Mr. Mukherjee is well-known as a successful teacher at the University and now returns as Professor to the College of which he was a conspicuous student.

Mr. Surendranath Maitra, M.A., of the Physics Department, returned recently after four years' advanced study at Cambridge and London Universities. We are glad to have him back in our midst.

Rai Saheb Isan Chandra Ghosh, M.A., Head Master, Hare School, retired on the 17th ultimo. Lord Carmichael paid him high compliments on the Prize-giving day, referring to his character and to the wholesome influence he had exerted on successive generations of students. The Editor takes a peculiar pride in noting this recognition of his old teacher and is sure that his feeling will be shared by many others.



Long-realised experience has bred in us the expectation that Presidency College men should have the best of it in all competitions for the Public Service. It may be worth noting how this is justified even in these days when Presidency College is by no means the only well-equipped college in the province. Two probationers have been selected for the Finance Department on the results of the competitive examination held in December last. Both are Presidency College men, Messrs. Prafulla Kumar Chaudhury, M.A., and Hemendrakumar Basu, M.A. Our heartiest congratulations are offered to them on the notable success they have achieved.

Some disappointment was felt here at the results of the last Civil Service Examination in England. But this has been turned into universal satisfaction by the information received lately that Mr. Satyendra Nath Modak, M.A. (Cal.), B.A. (Cantab), has been appointed to the Indian Civil Service on the nomination of the Secretary of State for India. No better selection could have been made. Mr. Modak's académical career has seldom been equalled. He secured the first places at all the University Examinations he sat for at the Calcutta University right up to his Master's degree, and at Cambridge he obtained a First Class in Mathematical Tripos, Part I. He was a student of wide interests and, for one thing, was a very enterprising Secretary of the "*Kabi Sammilani*" (the Poets' Union) at the Eden Hindu Hostel. The whole college rejoices in his good fortune.

We may add that there is a peculiar felicity in the selections for the Finance Department : Messrs. Chaudhuri and Bose are both Economics men. Mr. Modak is, of course, a Mathematician.

This cold weather the University has made a very useful departure by introducing the scheme of 'Extension lectures.' Eminent scholars from all parts of the province are taking part in the scheme. Our own College is represented by the Principal, Dr. Bose, Dr. Ray, Prof. Gilchrist and Prof. Coyajee. Professors Geddes and Glover who happened to be at Calcutta readily responded to the request of the University authorities, and each delivered a couple of lectures on his special subject to very appreciative audiences.



Dr. Dwarkanath Mitter, M.A., D.L., Vakil, High Court, has been elected a Fellow of Calcutta University by the Registered Graduates. He is an old Presidency College man, and our congratulations are offered to him on his success.



Principal James and Professor Peake have been re-elected representatives of the Senate on the Syndicate, and Professor S. C. Mahalanobis has been re-elected a member of the Syndicate by the Faculty of Science.



The over-crowding in colleges in Calcutta has become notorious. To relieve the situation the Maharaja of Cossimbazar has very generously sent forward a proposal to the University to found a big residential college with provision for day students also. The proposal is now under consideration.



In a few weeks' time the University will be holding its Matriculation, Intermediate and Degree Examinations, and we hope that our traditions of success will be worthily maintained. With all their imperfections, examinations, it must be admitted, effectively bring out faculties of concentration, mental alertness and clarity of thought and expression and, in fact, give a very good estimate of a man's capacity. Examinees will no doubt have already realised the significant step that they are about to take.



Lord Hardinge laid the foundation-stone of the Hindu University at Benares on February the 5th. A splendid ceremony was arranged, many of the foremost Ruling Chiefs, zemindars, professional men and merchants attending from all parts of India. The University has been munificently endowed, and it is natural to expect that starting under such good auspices it will, in course of time, come to fill a wide field of activities.

The Calcutta public is indebted to Sir Rabindranath Tagore for the opportunity presented to it of combining charity with the highest degree of pleasure. 'Falguni,' the latest musical play of Sir Rabindranath, was staged on two nights, the proceeds, amounting to several thousands of rupees, going to the Bankura Famine Relief Fund. The cast comprised besides the author himself members and friends of the Tagore family and the students of the Bolpur Asram; and needless to say the technique of dramatic representation was beyond all praise. Students attended in large numbers, and they will long recollect with pleasure the fascinating performance which they were privileged to witness.



The war continues to take its enormous toll of men and resources. After eighteen months of war there are no apparent signs of exhaustion on either side, and every calculation of statisticians has been confounded. Not even the worst militarist could have thought before the war that the world could stand this slaughter and destruction. But now we see that it can, and indeed determination to continue seems to increase as time goes on. No better illustration of this spirit is possible than the fact that even the liberty-loving Englishmen have cheerfully submitted to conscription.

For the moment the main interest is centred in the Balkans. Serbia and Montenegro have been overrun and their armies are now fugitives in Albania. The success of the enemy in this campaign has been unfortunately complete. Gallipoli has been evacuated by the Allies, enabling the forces concentrated at Salonica to be largely reinforced. But it now appears that the enemy is not going to invade Greece, and the future course of action of the army at Salonica is not known.

The Russians have gained small successes in Galicia and in the Caucasus region. But it seems time is needed before they are in a position to take up the offensive on a large scale.

On the Italian and French frontiers the fighting has been incessant but indecisive. We shall shortly hear more of them when spring sets in.

Mesopotamia threatens to assume prominence as a theatre of war. The battles of Ctesiphon, Kut-el-Amara and Sheikh Saad have been very stubbornly fought, and the best traditions of our army have been maintained. The Bengal Ambulance Corps is doing splendid work and has suffered quite a number of casualties. A student of the Hare

School, Mr. Sailendranath Bose, joined the Corps as a private. He was found missing in the retreat after Ctesiphon. Information has now been received that he is a prisoner in the hands of the Turks. We hope to have the pleasure of welcoming him back after the war.

Serbia and the Serbians.

ALTHOUGH theorists of the type of Bernhardi are wrong when they eulogize war as the parent of all virtues and greatness, yet there can be no hesitation in saying that war tests thoroughly and brings into deserved prominence strength and virtue where they already exist. The present war—the culmination and the ultimate point of all wars—has naturally been very rich in examples of great bravery, lofty patriotism and energetic organization. These examples must make a deep and lasting impression on the minds of the rising generation particularly. The world can never again be either politically or in spirit what it was but two years ago. We have entered an epoch not only of vast political change, but an era of greater mental strenuousness. The whole character of mankind is bound to be profoundly modified by the present war and its sequelae. We have, if we are to keep abreast of the times, to assimilate its lessons, and among its lessons of heroism and energy some of the most important and striking are to be learnt from that chapter of it which deals with the achievements of Serbia. That little country has covered itself with glory; and it is no exaggeration to say that even if Serbia were now annihilated, yet it has achieved enough to have earned for itself a lofty pedestal in the pantheon of history.

The glories of Serbia and of its little ally Montenegro date back to very ancient times. Mr. Gladstone once said: "In my deliberate opinion the tradition of Montenegro exceed in glory those of Marathon and Thermopylae and all the war-traditions of the world." From his death-bed the great statesman sent the message that "his interest in Montenegro had always been profound, and he prayed that it might prosper and be blessed in all its undertakings." Tennyson has sung the praises of the Serbian and Montenegrin race in beautiful verse. Admiration from such high quarters has been justified by the struggle for liberty which has been the one prolonged episode in Serbian history, whether the struggle was waged against the Cæsars of Byzantium or their successors, the Kaisers of Roum (as they styled themselves) or

against the combined forces of the Kaisers of Germany and Austria. Their's was the spirit of liberty portrayed by Byron :—

“ The dead have been awakened—shall I sleep ?
The world's at war with tyrants—shall I crouch ?
The harvest's ripe—and shall I pause to reap ?
I slumber not—the thorn is in my couch :
Each day a trumpet soundeth in my ear,
Its echo in my heart.”

A brief review of Serbian history will show how well the race has deserved of the world, how through the darkest ages they have kept alive the spirit of opposition against tyrants.

It is curious to contemplate how the same tendencies have worked in Serbian history for more than a thousand years. To-day we see how the Teuton wants to work his will on the Balkans by playing off the kindred races of Serbia and Bulgaria against one another. The Turk conquered the Balkans by playing the same game. But even before him the Byzantine Caesars had kept down Serbia by the same means. But he did not always succeed. At the end of the 12th century Serbia was roused into a powerful kingdom by Nemanja who triumphed at once over the Bulgars and against his Byzantine foes. It is curious to watch how early the Germans felt an interest in the affairs of the Balkans. Nemanja was a friend of Emperor Frederick Barbarossa who not only sent embassies to Serbia, but paid a visit to the Serbian Monarch in Belgrade. Under the successors of Nemanja Serbia was aggrandized by the union of Bosnia and Dalmatia, and Stephen Uros got himself crowned as the “ Independent King of Serbia, Dalmatia and Bosnia.” Nine hundred years have gone by and we are expecting a near reversion to the same state of affairs.

In the thirteenth century Serbia rose to the pinnacle of its ancient prosperity under its great ruler Stephen Dushan. He took advantage of a civil war in Byzantium to spread his dominions eastward and then he turned westward and defeated the Hungarians. Dushan foresaw the advent of Turks into Europe and formed a scheme to anticipate them and to seize Constantinople. His sudden death brought the scheme to naught and led to the downfall of Serbia.

But though weakened, Serbia presented a bold front to the Turk and proved a valiant champion of Christendom. It disputed the Turkish advance inch by inch and its resistance was not crushed till after three strenuous combats : that on the Maritza, of Berat and of Kossovo, and in each battle a Serbian King lost his life for his country and for Christen-

dom. When Serbia's own resistance collapsed it continued to be the battle-ground between Islam and Christianity. The Serbs now looked to Austria to recover their liberty. But Austria has always been an opportunist. Whenever it wanted to invade Turkey it sought the help of the Serbians; but when it was again at peace with Turkey it remorselessly gave up the Serbians to the tender mercies of the Turks.

The liberty of Serbia was at last achieved by its own arms. Early in the nineteenth century two great Serbians emancipated their country from the Turkish yoke: they were Kara George and Milosh Obrenovic. But though Servia had by her own strong right arm vindicated for herself a place in the sun, it was not so easy for it to shake off the trammels of Austria. Economically Serbia must be dependent on Austria as long as there is no Serbian seaport on the Adriatic and so long as Austria continues to be the best market for Serbian products. And Austria has used her power over Serbia in the spirit of a tyrant. When Serbia and Bulgaria showed signs of friendship and signed a Customs Union, Austria declared a tariff war on Serbia. But here Austrian violence over-reached itself, for Serbia was taught by this tariff war to look for other markets for her wares. During the war of 1877 Austria held back Serbia from going to the assistance of Bulgaria in her struggle for independence. Still later she managed by subsidizing Milan, the impecunious King of Serbia, to hold the latter in virtual tutelage. It was only with the accession of King Peter that the Austrian yoke has been shaken off. The success of Serbia in the Balkan war has also been gall and wormwood to Austria, who soon managed to get up another Balkan war between Bulgaria and Serbia. But she had the mortification of seeing her protégée Bulgaria brought to its knees. Austria thereupon made up her mind to find a *casus belli* against Serbia, but for some time she searched in vain. In 1908 Austria annexed Bosnia and Herzegovina and treated contemptuously all Serbian protests. In 1909 came the famous Friedjung trial. The tyrannical Magyar rulers of Hungary were viewing with suspicion the fraternizing of the Croats and Serbs in Austria. An Austrian historian, Dr. Friedjung, came forward with charges of high treason against some Croats and about fifty Serbian subjects of Austria. The Hungarian Government welcomed these charges; but when the trial took place it was proved that the documents supporting the charges were forgeries and that some of them were concocted at the Austrian legation in Belgrade.

How far Serbia can be reproached with the murders of Archduke Francis Ferdinand and the Duchess Hohenberg and with thus directly

initiating the present conflagration has now to be considered. No proof has been advanced which can show reliably that the hand of Serbia was at work in this affair. I would refer you to an excellent article on the subject by Mr. H. W. Steed in the *Edinburgh Review* for October. He says, "There was undoubtedly a plot to assassinate the Archduke. In part, at least, it was organized at Belgrade, but so were most of the bogus anti-Serbian forgeries exposed during the Fried-jung trial. It is possible that some corrupt and fanatical Serbians may have been implicated in it, but there is not a shred of evidence to implicate the Serbian Government. More enlightening than any circumstantial evidence is, however, the application of the test : *Cui prodest?* Serbia and the Serbian Government had nothing to gain and every thing to lose by a crime which was bound to revive the memories of the assassination of Alexander and Draga, and to put Serbia out of court in most European countries. Serbia had, moreover, just emerged exhausted, albeit victorious, from two Balkan wars, and was in no condition to pick a quarrel with the neighbouring monarchy. The monarchy, on the other hand, had been repeatedly foiled in its efforts to pick a quarrel with Serbia. Had a pretext been deliberately manufactured to put all the apparent right on the side of Austria, and all the wrong on the side of Serbia, and to reduce to a minimum the Serbian chances of receiving sympathy or help from Russia, England or France, no apter pretext than the Serajevo assassination could have been forged.

Mr. Steed's suspicions that the plot for assassination had an Austrian not a Serbian origin is backed up by numerous significant circumstances. At Serajevo the authorities deliberately neglected to provide protection for or even to grant an escort to the Archduke and his wife. When the news was received in Vienna the general feeling was one of barely concealed pleasure. "In view of the Emperor's age, it seemed a great gain for the dynasty that an Heir-Presumptive of uncertain mental stability should have disappeared. Although he had been the executive head of the army, full military honours were only accorded to the Archduke's remains in the capital under pressure from the aristocracy; and the arrangements for their conveyance from Vienna to the vault at Arstetten were little short of scandalous. If it is easy to understand the satisfaction of sundry members of the Imperial family at the removal of the Archduke and of his morganatic wife, whose presence on or near the throne might have given rise to endless complications, the neglect of the court officials to pay due honour to the dead can only be explained by their obedience to instructions."

That apart from the Serajevo incident Austria and Germany had resolved on wiping out Serbia might be gathered from the numerous pretexts sought to secure a *casus belli* against the Serbians.

(1) First came the Prochaska incident when during the Balkan war a charge was trumped up against the Serbians of causing hurt to the Austrian Consul at Prizrend.

(2) Then there was a complaint lodged by Austria that Scutari—a Turkish fort—had been seized by Montenegro.

(3) Next came the Austrian instigation under which Bulgaria declared war on Serbia.

(4) Fourthly, as Signor Giolitti has proclaimed, Italy was invited to undertake a war in the Balkans against Serbia.

(5) Finally, Signor Barzillai has revealed on July 15th, 1914, "the German ambassador at Constantinople informed confidentially his Italian colleague, the Marquis Garroni, that the ultimatum was so drafted as to render war inevitable."

It was in a most hopeful mood that the Austrians undertook their first expedition against Servia. Worn out by two wars the Serbian army was caught comparatively unprepared. The orders placed abroad for cannon and stores had not yet in any degree rearmed the Serbian troops. There were not enough rifles to arm at once the troops in the line of battle and those in reserve, and the latter had to arm themselves by snatching weapons from those who had been slain. Moreover Serbia was exposed to Austrian attacks at so many points that the Serbian staff had to divide its army and place it in two positions which were far apart. The Austrians did their best to perplex the Serbians further by making feints on the Danube side or the North, while they really meant to attack from the north-west of Serbia through Shabatz. This is a spot of such strategic value that the Roman, the Hun and the Turk had each seen its great value and had fortified it. The Serbians had however to guard against all eventualities—an attack from the North would have brought the enemy by the nearest way into the heart of the country. Hence about half the troops were placed at Luzavvatz while only the other half was placed to oppose the real Austrian attack on the side of Shabatz and the Drina. The resources of Serbia had to be still further diverted to meet the Bulgarian machinations in Macedonia where attempts had been already made to cut the railway to Salonica.

Thus there were excellent grounds for the optimism shown by the Austrians. Servia may have measured strength with demoralized Turkey and petty Bulgaria. But now she was to meet Austria and here

the struggle would be between a small peasant state against a great power with vast financial and military resources supported by a skilfully constructed railway system which threatened the Serbian frontier at numerous points. The Austrians sent against Serbia overwhelming forces in order that after the short 'straf expedition' they could turn against Russia whole-heartedly. It was also believed that the Serbians had been already exhausted by the campaigns against Turks, Bulgars and Albanians.

The two armies concentrated and the struggle on the Jardar River opened on the morning of the 16th August. The skill of a young Serbian—Major Djukitch—who was on the right wing showed his superiors how to drive a wedge between the enemy's left and his centre. But in the centre the Austrians advanced and drove back the Serbians and when the Austrian centre was checked, the Austrian right attempted to restore the battle. Attempts were also made on the Serbian right. We are told that "having rounded up some 2000 of the female inhabitants of Shabatz the Austrians forced them to march in advance as a cover against the Serbian fire." At last however the Austrian centre at Kos-nanigrad was broken by Serbian charges, and on the arrival of Serbian reinforcements the Austrians fled. They turned through the villages crying out to the peasants as they went "Where is the Drina? where is the Drina?" The Austrians lost a fourth of their army for both in their reckless advance in close formations and in their disorderly retreats the Serbian artillery worked havoc among them.

The second expedition of the Austrians need not detain us long. Encouraged by the fact that the Serbians had not followed their advantage four Austrian corps again invaded Serbia (September). It was, of course, no fault of the Serbians that they had not followed up their advantage. They had no reserves, and an advance would have meant such an extension of their line as would not have been warranted by their numbers. The second Austrian expedition was better planned than the first, but even so after six weeks of heavy fighting it ended in a stalemate. The Austrians could not cross the Drina in spite of the assistance of their monitors. Five of these monitors had been shelling the Serbian trenches at night, till on the night of October 22nd, one of them struck a mine and sank. The struggle was so severe that one position, that of Matcho Kamen (literally the "cat's leg"), was taken and retaken eight times. Finally the invasion seemed to die away in a sort of siege warfare such as is common both on the eastern and western fronts.

The middle of November brought the third invasion. All this time

the Serbians had been growing weaker, while the Austrians had been reinforced till they numbered five army corps. The Turks too had thrown in their lot with the Austro-Germans, while the Czar Ferdinand was engaged in his Machiavellian intrigues. Under these circumstances it would have been wiser in the Serbians to have abandoned their water-logged trenches in the plains and to have at once retired on the mountainous positions. But this was not possible on account of the Austrian atrocities which would have deluged with blood every town abandoned to them. As it was, the Serbians had to fall back for want of ammunition. Their morals seemed for a time to have been shaken. The Austrians enjoyed the gratification of occupying Belgrade for a fortnight where they showed themselves apt disciples of the Prussians in the art of atrocities. But while the Austrians were celebrating their victories in torrents of blood and wine the Serbians were rallying as more ammunition reached them. Their King Peter came to fight in their midst and issued a stirring proclamation, "Heroes," he said, "You have taken two oaths; one to your king and one to your country. I am an old and broken man on the brink of the grave, so I release you from your oath to me, but from the other none can release you. If you feel that you can endure no more, go to your homes, and I swear that after the war, if we survive, no evil shall come to you. But I and my sons remain here." Apart from this fiery zeal, there was another factor in the success, *viz.* the skill of the General Mishitch, a sturdy peasant warrior, who was placed in command of the first Serbian army which was suspected to have fallen back too precipitately. The Serbians too were refreshed, for they had found even the marches less fatiguing than trench warfare. The great battle of Ridges otherwise called the battle of Subovor lasted from 1st December to 5th December, 1914. Mishitch led the advance with the first army. The Austrian centre was broken and their right was completely destroyed. The third invasion ended in a greater debacle than its predecessors—the Austrians losing 100,000 men and 133 cannon. Belgrade fell before General Stephanovitch another peasant soldier who was so devoted to war that even in peace he spent all his leisure in dreaming out plans of campaign in the great park of Belgrade. Just as Hindenburg's military dreams on the Masurian lake had borne fruit at the battle of Tannenberg, so the dreams of Stephanovitch had been realised before Belgrade. The military prestige of Servia had now risen very high. In the last three years, they had gained the great victory of Kumanovo against the Turks which had avenged the ancient battle of Kossovo. They had humbled the Bulgarians at Bregalnitsa and had

forced them to admit the military virtues of the Serbians. To Serbia also belonged a great deal of the glory of storming Adrianople. At the battle of the Jardar river they had overthrown the Austrians; and now the battle of Subovor seemed to have set the seal on their military greatness.

We have now to deal with the fourth and the last invasion of Serbia.

From one point of view, as Col. Maude puts it, it has a spectacular side. Germany has failed in its invasion of France. Nor has it fared better on the Russian side. The attacks on Riga and Dwinsk have failed and the Germans have been unable to occupy the Riga-Dwinsk-Baranowitsch-Rowno railway. On the side of the Pripet marshes and in Galicia the Russians have even advanced. Still it was necessary for Germany to invade the Balkans and to make an impression on the states of that Peninsula who have wavered so long. But thanks to the pressure of the Russians, the Germans have not been able to enter Serbia in very large numbers and their progress in Serbia has been so slow that the Bulgarians have with reason complained of it and have been contrasting it with their own more impetuous advance.

On the other hand, Germany must needs advance into Serbia, if it is at all to assist its Turkish allies either in Europe or Asia. M. Toupanic has discussed admirably the strategical significance of Serbia in an article in the *Nineteenth Century*. The Romans in old days used the valleys of the Serbian rivers in their march towards the east, and the Turks invaded Europe by the same road. If the Germans had any notion of lending a hand to their Turkish allies, they had no choice but to invade Serbia. But it is comforting to remember that the Serbian army is safe in the inaccessible fastnesses of Serbia, that it is receiving help and reinforcements from Italy, and that the Germans cannot possibly advance towards the Dardanelles, with the Serbian troops in their rear and the Anglo-French force on their flanks at Salonica.

But as it was, Germany had too many irons in fire. Her attack on Serbia was comparatively speaking so feeble that left to themselves the Serbians could have held out against it easily. But the treachery of Bulgarians exposed the right flank of the Serbian defence and Putnik had to throw back his right wing so as to hold as long as possible the railway from Nish to Salonika which has been well described as the spinal cord of Serbia.

There is a close similarity between the recent strategic retreats of the Russians and the Serbians. The idea of both was to keep the field army intact until better equipped and reinforced it can again assume the offensive. In both cases every inch of the ground was contested and

posts like Kovno or Monastir were defended to the last. In neither case was any defeat suffered. In the case of the Russians the retreat was assisted by their vast distances, in the case of the Serbians by their mountain strongholds. In both cases the Germans have felt that their main object has escaped their grasp. On the one side the Germans will yet have to retreat as Napoleon retreated a century ago, on the other side they have been unable to decide the fate of the Balkans as they had expected in another battle of Kossovo.

It would be a great mistake to think that because the Serbians have retired to the mountains of Albania, Serbia is crushed. Countries of backward economic conditions can afford to be overrun and can suddenly by a reaction rise again to their full strength as long as their armies are intact. The student of Indian History who wishes to realize this truth has only to look up the annals of Mewar. As often as Mogul invasions came on Mewar seemed to have been wiped off the surface of the world. But as soon as Mogul pressure relaxed, the brave Rajputs would come down from their refuge in the Aravalli hills and re-occupy their old homes : and in the end we find Mewar still flourishing, and it has long survived its Mogul invaders. Such is the case with Serbia too in its struggles with Turkey and Austria.

And now we may turn to contemplate the action of the allies in supporting Serbia. From the first the allies definitively announced their determination to stand by Servia. But to the superficial observer it may appear as if the promise had not been fulfilled ; and such an opinion may seem to be strengthened by the recent retreat of the Anglo-French force from Strumnitz to Demir Kapu, Gevgely and even beyond. But such a view is based on a shallow reading of history and strategy. It is easy to show that the allies have kept their word and stultified the operations of Germans and Bulgarians in the Balkan. The presence of the Anglo-French troops in Macedonia and the threat of a Russian landing in Bulgaria have effectually prevented Czar Ferdinand from launching his whole army on Serbia. If while the Germans were occupying the Serbian army on the North, the Bulgarians had been free to attack its flank and rear, Serbia would have been doomed. The present orderly and slow retreat of the Serbians towards the fastnesses of Albania would have been impossible. Indeed but for the support of the Italian navy in the Adriatic, a Serbian retreat to Albania would have been fruitless, for the Serbian army after it has fallen back in that direction has to be supplied with ammunition and provisions. Even the Italian navy left to itself would have been unequal to the task in

the face of the Austrian men-of-war, but for the terror of the British navy. Thus Serbia has been able to keep its army intact and supplied only through the action of the allies.

Here should be noted a striking historical parallel. A hundred years ago when Napoleon had entered Spain and was about to destroy the Spanish armies, they were saved from utter ruin only by an interposition of the English troops very similar to the present Salonika expedition. To prevent Napoleon's advance Sir John Moore launched an English army on his communications and this threat sufficed to save the Spanish armies by diverting Napoleon's attention from them. Having achieved his task Sir John Moore fell back on Coruña much as the present Anglo-French expedition are falling back towards Salonika.

Not for a moment should the temporary successes of the Germans make us despond. The whole history of the Middle Ages has shown the incapacity of the Teuton to conquer, colonize or absorb other nations. Thus the dynasty of Hohestaufens—one of the strongest set of rulers in Germany—failed to subjugate even Italy, a disunited and feeble country at the time and one full of internal dissensions. The same masterful and cruel methods which are now arousing such a strong reaction in Europe were used by the Teuton rulers of those days. Hanging hostages and prisoners was freely resorted to by the Emperor during the siege of Milan in 1158, and with no effect. A number of the townsfolk's children came into the Emperor's hands, whom he had the cruelty to fasten upon a movable siege tower pushed up against the walls, so that several of the young victims were killed or wounded by the hands of their own parents, calling out to them "not to fear death in a good cause." These cruelties secured no success and Milan was taken only to be lost at once.

With the fall of the Hohenstaufen disappeared the German lordship of Italy that cost the emperors so dear and "the German Kingdom broke down under the weight of the Holy Roman Empire." Wit' almost a century of concentrated effort and the sacrifice of millions of troops Germany was unable to conquer even the province of Lombardy; while the attempt broke up for centuries all hopes of a strong German monarchy.

Moreover economic events are surely and steadily working on our side. You have been told this so often that the truism should be reinforced by historical parallels. But look back at the great American war of 1860. In that war the South had the better generals and at least equally good troops. Yet the victory remained with the North which

possessed stronger economic resources and a stronger navy which prevented all help from reaching the South. The part which the British navy took in the economic exhaustion of France under Napoleon is also memorable and makes us feel confident in the ultimate success of our side in this War of Nations.

But let us not forget that even higher than the economic influence is the moral influence. In human affairs one should recognize a series of distinct strata of which the higher and the more invisible always dominate and control the lower and the more obvious. Thus brute military strength which is the lowest stratum or environment is ruled and conditioned by the economic environment. But still higher be the moral forces which though for the time remain unseen and in the background are the strongest and the most decisive. This action of moral forces is no myth and no fiction. All history bears witness to it. In the struggle of Rome against Carthage, of England against Napoleon, of the Swiss against the house of Austria, of ancient Greece against Persia, we find that the moral factor is the most vital and powerful one. The entire history of Serbia bears witness to the fundamental truth of history: and we may be sure, seeing that still the same factor is on the side of Serbia, that she will emerge triumphant from the present struggle. As Napoleon declared, "The moral is to the physical factor as three to one."

J. C. COYAJEE.



A Night-Piece.

I follow through the darkness cool
 The winding path that Lydia trod,
 I scarce discern, by reed-fringed pool,
 The roses, phlox and golden-rod.

But stars leaned down to see her pass
 And caught new light from her grey eyes;
 The cedar-branches swept the grass
 And kissed her foot-prints lover-wise.

So, though the moon lends little aid
 To light me on my garden-quest,
 And though afar my Lydia's strayed,
 Her lips to mine will soon be pressed.

For flowers and stars and cedars dark
 Conspire with me by whispering low :—
 “Come hither! Come! By ways we mark,
 This way and this did Lydia go.”

Science and Philosophy.

(*Reply to an article entitled 'Limits of Scientific Thought' by Mr. Francis V. Fernandes, M.Sc., in the College Magazine for December 1915.*)

THE thoughts expressed in the article of Mr. Fernandes are mostly out of date and in fact at least half a dozen decades too late. These might justly have found a place in literature published during the sixties of the last century when the hostility between Science and Philosophy waxed very high in consequence of the clerical intolerance which in England attempted to excommunicate Darwin's biological theories because they clashed with the Book of Genesis. But now when the complementary character of both has been generally recognized by votaries of either branch of knowledge, and the former spite and hatred against each other are fairly forgotten, it is too late to rake up old disputes. Evidently the writer of the article is supremely innocent of the momentous changes which are taking place in the speculative world, so it may be worth our while to say a few words on the subject.

The purpose of Mr. Fernandes' article is “to discover whether there

are any limits to the scientific method and whether Philosophy is justified in holding that there can be knowledge beyond that reached by Science." Philosophy, in the opinion of the writer, is not "*true knowledge*"—in fact it is a misnomer to call Philosophy knowledge. It is nothing "that a normal man cares about." Its methods are "imagination and poetic flights." Indeed Philosophy is represented as consisting of wild ravings of a few cracked brains which audaciously dabble in impossible and useless questions.

Mr. Fernandes is to be particularly complimented upon his excellent selection of "an array of definitions." I wonder from what evangelical sources he has culled this beautiful array. Any one having even a smattering of Philosophy would at once see that they are monstrous distortions of what Philosophy really is.

However, allow me first to define the position of the writer. Technically speaking, he has betrayed in common with many scientists of the present day the *agnostic*—nay the *positivistic* spirit. Refusing to include Philosophy within the category of true knowledge, he implicitly forbids us to stretch our limbs to attain any object not falling within the consecrated domain of science.

Our learned writer would perhaps be surprised to learn that the methods of Science and Philosophy are one and the same. The philosopher gathers by *observation and experiment* a multitude of apparently disconnected facts, "classifies them and finds out their mutual relation" no less than the scientist. The real philosopher does not build a castle in the air. There is no royal road for philosophers to the gate of knowledge. No people have now any faith in the supremacy of the *a priori* speculative method. The philosophers' *a priori* reasoning is now invariably weighted down by the ballast of *a posteriori* or experiential considerations.

A glamour of plausibility that envelopes several arguments of the writer cannot however impose upon the mind of thoughtful men. Professedly the purposes of Science and Philosophy are widely different. While Science concerns itself with the *proximate and immediate* explanation of phenomena, Philosophy tries to grasp the ultimate reality of substances. Well then, if by 'true knowledge' be meant a knowledge gained through our physical senses, obviously, it is simply begging the question to say Philosophy is not "true knowledge." All this controversy is due to the false meaning attached to the term 'knowledge' and, we are afraid, the italics do not mend matters. One who runs may read a complete misunderstanding, I would not say misrepresentation, of the pur-

pose and value of Philosophy; while "Science" in the words of Herbert Spencer "is partially unified knowledge, Philosophy is completely, unified knowledge." While Science deals with cross-sections of Reality Philosophy aims at discovering the common bond or unity underlying different sciences. The aim of Philosophy is simply to prove what has been the favourite conception of Dr. J. C. Bose that "there are not many sciences but only *one science*." Thus while both Science and Philosophy aim at *unity*, the unity which Philosophy aims at is more profound and comprehensive.

One thing which has driven the writer into the precipitate conclusion is the great controversies which enshroud all philosophical problems. It must be admitted that the cut-and-dried solution which is possible for science to arrive at is from the very nature of the case impossible for Philosophy. But here Philosophy only shares a defect in common with many other branches of knowledge. The controversies as to the relative merits and defects of Democratic and Despotic states in Politics, of Free Trade and Protection in Economics no more invalidate those sciences than the controversies in the domain of Philosophy. It is difficult to appreciate the majesty of logic when it is held that because there are controversies with regard to the problems of Philosophy we must discard the case as absolutely hopeless. Because philosophers are not agreed as to whether there is a moral basis of this world must we, to avoid controversy, cease to investigate the *raison d'être* of the universe?

Finally, the injunction "not to delve into the (so-called) unknown" is impossible to obey on practical grounds. The eternal riddles—which have been very fittingly called The Riddles of the Sphinx—must occur to every passer-by at one time or other. The interrogatives of the Sphinx cannot be ignored. It may be that the worldly man deeply absorbed in selfish pursuits and the scientist vain of his partial dominance over Nature would not hear the whispers of the Sphinx for the time being, but they sadly deceive themselves if they hope to elude the tightening grasp of the siren once for all. The unanimous boast of scientists and mechanics who planned and constructed the Titanic 'you could sink a cork but not the Titanic' was drowned by the unanimous voice of the crew who when face to face with Death and Eternity cried 'Nearer my God to thee!' Far be it from me to belittle the services and achievements of science, but she must not lift up her head and say—"I am the All—the self-sufficing: The Rest is superfluous."

A Sonnet.

While I recall you o'er deep parting seas
 Lonelier have grown these cliffs, this English grass
 Haunt of my heart, dear faces, let me pass
 To that far south, till presence bring me peace
 Unsatisfied with those dead memories
 I muse, and mould from each secret day that was
 An image of the future: but, alas,
 What hunger can oblivious hope appease?
 My soul may travel to you: but the sea
 Sternly puts back the pilgrim feet of life
 With the harsh warning of necessity.
 That oft-taught truth my sighs would fain unlearn
 How idle is human passion! yet its strife
 Is duty and our hearts are made to yearn.

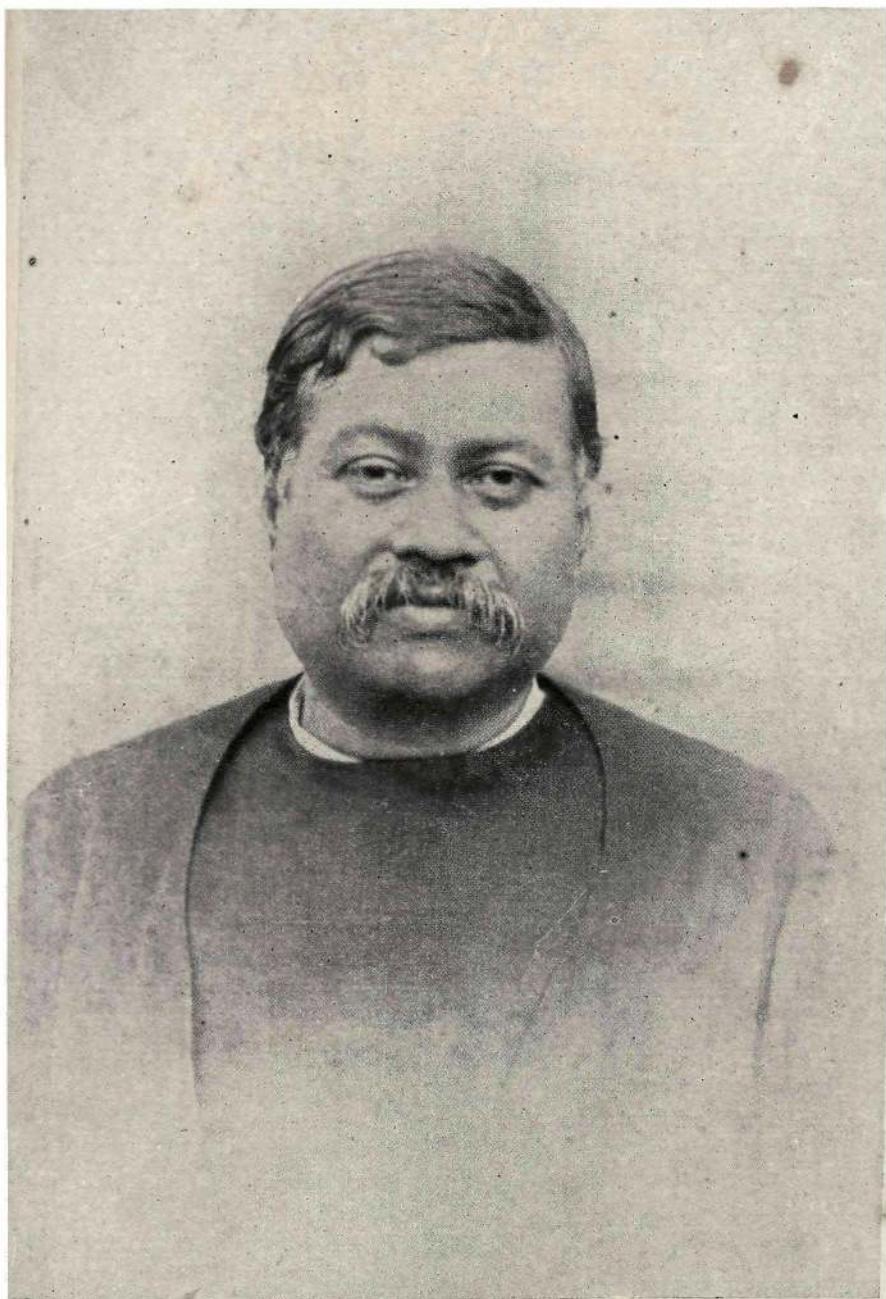
"Old Presidency College Men" Series.

Sir Rames Chunder Mitra.

By SUSIL MITRA, B.A., *Fifth Year Class.*

I WAS not a little honoured when, some time ago, I was requested by the Editor to tell his readers something about my grandfather, who, like many other great men of our country, received his education in our college. Yet I am fully conscious that no one more ill deserves the honour than I. To do full justice to a character-sketch like my grandfather's undoubtedly requires a more skilled hand than mine;—and I should have preferred to transfer this work to some other person who would have done it more ably. But I loved my grandfather so well that I ever love to talk of him. Now that I have caught hold of some hearers, I cannot bear to deny myself the pleasure of telling them of him.

When my grandfather died, I was scarcely five years old,—so that you cannot expect a vivid description of his personal appearance from me, unless I give it second-hand. When I think of him, all that I remember is a face bright indeed with intelligence, yet pale with the



Sir Ramesh Chander Mitra.

shadow of death then slowly descending upon him. His heart was ever cheerful and I have often heard of the uncommon fortitude and forbearance with which he endured the many domestic calamities that befell him. But during his last days of which I have but a faint remembrance he seemed to me to be rather melancholy. And though my childish judgment has very little value yet to justify it I might add that the reason of this might have been that even after the cruel hand of death had begun its work upon him, he lost, just two years before his death, his dearest daughter,—his only daughter.

If you expect to hear from me a tale of continual struggle against difficulties that beset life,—a tale as to how a very hard battle of life was fought and won, you will be disappointed. Sir Rames was not a purely self-made man,—as most of the great men of our country are. He had inherited from his father, Babu Ram Chunder Mitra, a pretty big estate at Bistupur, at which place he was born. There were, however, some obstacles in his way, caused by the death of his father in 1844 when he was just four years old. But his mother, Mrs. Kamalmani Mitra, being a lady of high accomplishments and attainments he was able to get over all these. He was the youngest of all Kamalmani's children; and as he was fatherless at the age of four, all her affection was naturally concentrated upon him. To the high talents and shrewdness with which he was naturally endowed was thus added all the sympathy and tenderness which he inherited from his mother. So when he grew to be a man he was a profound scholar, an able judge, a generous and sympathetic friend to the poor, and above all a quiet, unostentatious, amiable and loving gentleman.

As to his early education, suffice it to say that he first studied in the David Hare Pathsala, and then in the Hare School from which he passed his Junior Scholarship Examination and joined our College in 1856.

Although the son of a rich man he had not all the facilities of study which are generally enjoyed by wealthy men. He had no separate study of his own. At night he used to read on a big wooden chest in a verandah while in the adjoining room his elder brothers used to amuse themselves with music of all kinds. Here I might incidentally refer to the fact that one of his brothers Babu Kesav Chunder Mitra was one of the greatest *Pakwaj* players in India. Sir Rames himself had an inordinate fondness for music and after his retirement he used to have musical entertainments in his house every Sunday.

In spite of the difficulties referred to above Sir Rames got through

his Senior Scholarship Examination in 1858 and obtained a scholarship of twenty-five rupees. He graduated in 1861 and qualified for the Bar in 1862. For some time he did the editorial work of Hay's Law Report. Very soon he became a leading member of the Bar, and was elevated to the Bench in 1874 on the death of Mr. Justice Dwarkanath Mitra.

During all these years of success at Calcutta, he never forgot the homely surroundings of his native village. He loved it and its people very dearly: country-life had a special charm for him,—and he used always to spend a portion of his holidays in the country. This frequent association intensified his deep love and affection for his country people into a burning desire to improve their condition and promote their welfare; and to the facilities of communication already afforded them by his generous mother who constructed a pucca road running through the heart of the village, he added the facilities of education by establishing there a High English School, and the facilities of sanitation by establishing there a charitable dispensary. These are still maintained in an efficient condition; and on the one hand provide opportunities of higher education to many who would never have otherwise seen the “ample page of knowledge,” and on the other, give them considerable protection from malaria.

Sir Rames was on the Bench from 1874-1889. As a judge, he soon acquired a wide reputation. Says “*The Bengalee*,” “Among the great Indian Judges, Sir Rames Chunder Mitter was one of the greatest. His grasp of legal principles and their application to facts were only equalled by an inflexible honesty of purpose, and an independence that on a memorable occasion was proof against the persuasions of honoured colleagues on the Bench. * * * His whole personality was dominated by a large fund of shrewdness and commonsense combined with an almost instinctive perception of truth amid the most complex circumstances and conditions.”

In 1882, Sir Richard Garth, the then Chief Justice of the High Court, applied for three months' leave. And in spite of all the irrational, though vehement objections of a certain section of the Anglo-Indian Press, it pleased His Excellency Lord Ripon to select Sir Rames to officiate for Sir Richard. This office he held once again in 1886, when Sir Comer Petheram took leave on account of ill health. Sir Rames was thus the first Indian to hold the office of Chief Justice.

This period of his life was perhaps the most eventful. In 1883 he laid the foundation-stone of the City College Building and presided at the

Prize-distribution ceremony of that college. In fact, Sir Rames took a keen interest in all matters educational. He was in close touch with the South Suburban School, Bhowanipore, the Metropolitan Institution and the Ripon College,—was for some years a fellow of the Calcutta University, and was the first Indian gentleman to be appointed the President of the Faculty of Law. Of female education he was a staunch advocate, and of Oriental learning a whole-hearted supporter. He founded the Hindu Girls' School at Bhowanipore which now bears his name. The Bhagavat Chatuspathy of Bhowanipore also owes its origin to him. He always rendered it pecuniary assistance and made provision for it in his will.

During his tenure of office as a judge he was appointed a member of the Public Service Commission. In 1893, at a public meeting held in the Town Hall, he expressed his views on the Simultaneous Civil Service Examination in India. I regret I could not get access to the original speech he delivered there, and so cannot give my readers even a brief exposition of the arguments by which he refuted the theory that there should not be a simultaneous Civil Service Examination in India.

In 1889, owing to failing health, he retired, and was knighted immediately after his retirement. About this time, he was appointed a member of the committee appointed to report on the Jury Notification Bill. This Bill, which owes its origin to the verdict of acquittal given by the Jury in the famous Shambazar Riotong case, proposed the abolition of Trial by Jury. It is needless to say that Sir Rames and his other colleagues recorded a strong note of dissent and the Bill was thrown out.

In 1891 he became a member of the Supreme Legislative Council, but failing health compelled him to resign his office very soon. During his tenure of office, however, the famous Age of Consent Bill came up for discussion. He made a strong protest against this Bill by a speech from which we can well gather up his ideas about our society. He was a Hindu of a liberal character,—but at the same time had a deep veneration for the Hindus of the more orthodox type, and would not allow the legislators of this country to concern themselves with the question whether the interpretation of the shastras as accepted by the orthodox Hindus was correct or not. That would, he said, imply a deviation from the just and the wise policy of the Government announced by Her Majesty Queen Victoria in her Proclamation of 1858, by which she charged her officers not to interfere with the religious rites and duties of her Indian subjects on pain of her highest displeasure.

If his veneration for Hindu customs and usages was great, his veneration for Hindu literature and philosophy was still greater. During the last ten years of his life he studied with great assiduity Sanskrit Philosophy and Ethics in original under a Sâṅkyatirtha Pundit. His charities were so large and so wide that they hardly require any special mention. He was the chief organizer of the Bhowanipur Sahayya Samiti which renders monthly pecuniary aid to the poor and the deserving. Besides, numerous families were fed by him for months and years together. During the latter part of his life of retirement, i.e. during the last three or four years of his life, he spent the whole amount of his pension, i.e. Rs. 1,900 per month, in charities. Yet he was careful to see that they did not go to undeserving parties: where a man was a drunkard and of loose morals and yet poor he would send rice and other articles of food to the man's wife.

He was held in great esteem by Mr. Allan Hume, the father of the Indian National Congress, and in 1896 he was elected the Chairman of the Reception Committee; but owing to ill health he could not personally welcome the delegates. The speech he prepared for this occasion, which was read out by Sir Rashbihari Ghosh, breathed throughout that spirit of profound patriotism and loyalty, independence and honesty of purpose which characterised his whole life. He acknowledged, with heart-felt gratitude, the numerous blessings England has conferred upon India but at the same time did not hesitate to criticise the Government for not listening to the Congress. In a country where the rulers and the ruled, and even the ruled themselves, belong to different races and religions, speak different languages and are used to diverse manners, customs and traditions—misunderstandings may and necessarily arise. The Congress volunteers to clear up these misunderstandings yet the Government did not then listen to it. "We approach the rulers," said Sir Rames, "with help in their difficulties; some of them cast furtive glances and fight shy of us, imagining that we carry with us robbery or murder. We tell them we mean no harm, and get in return flung in our faces the unkind riddle that we cannot think our thoughts." This is no doubt a very severe criticism on the measures of the Government, but as Sir Rames' utterances were always judicious, well-balanced and well-reasoned, a few lines after he added,—"Perhaps they are not altogether to blame, perhaps in spite of all our efforts, we have not been sufficiently explicit. Perhaps we have not as yet caught the particular phrase which is intelligible to their ears, but it will be conceded that we have spared no efforts to

make our aim and intention as clear as possible. We expect that openness should be met with openness. We have told our rulers what we are, and what we mean to do, and if there is any misapprehension touching our aims or any potent defect in our method of work, we shall only be too glad if our rulers let us know how to remove the one and rectify the other. We court criticism, or even censure, if offered or administered in a really genuine spirit of sympathetic guidance. But beyond the application to us of some enigmatically condemning epithets, we have been favoured with nothing except cold and perhaps sullen silence."

Sir Rames died on the 13th of July, 1899.

Before I conclude, I should like to add that I am fully conscious that none of my readers will be satisfied with the above hopelessly incomplete account of the life of my grandfather. I should therefore like to mention to my readers Dr. Nares Sen Gupta's work which is shortly to be published.

An Historical Excursion : Saligram and Salivahana.

STUDENTS of history may well utilise their holidays by taking trips to places of historical interest to supplement their book-learning with direct observation.

In the Pujas I equipped myself with a character-certificate from our Principal Mr. James to provide against possible difficulties of a student on his holiday trip and visited Saligram. Saligram is an out-of-the-way village; though distant only three miles from Muragacha on the Ranaghat-Murshidabad railway,

At Saligram may be found what is popularly supposed to be the ruins of the residence of King Salivahana which are as yet unnoticed in antiquarian records. Deep in the woods on the south-western skirts of the village are to be seen traces of trenches and earthen ramparts crowned with bamboo-groves which formed part of the old fortifications. We have in the description of Burdwan fort in Ramprosad's *Vidyasundar*—

চৌদিকে ঘেরা বেড বাঁশ

ବୁରୁଜ ବିବମ ଉଚ୍ଚ ପାହାଡ ତାହାର ତୁଳ୍ଟ
ଜାଲେ ଚରେ ଲକ୍ଷ ଲକ୍ଷ ହେଲା ।

In the bamboo-groves, it is said, flocks of peacocks were to be seen even fifty years ago. Tradition has it that here, of an unknown date,

was the palace of King Salivahana. Not very far from the ruins I saw on the banks of a tank now dried up what is known as 'Yogatitola,' with a banyan tree named 'Yogati tree' and 'Salikhetra.' Tradition at Salikhetra has it that at the beginning of every Bengali year Salivahana used (during the time he was independent) to celebrate with pomp the worship of the goddess 'Yogati,' which is most probably the "Yogadya" of the fifty-two 'pithas.' Traces are found of tanks, 128 in number according to popular belief, in the vicinity of these ruins. The name of one of these is 'Chandpukur.' We are told that in the days long gone by a merchant in the course of his journey to sea anchored his vessel near Saligram then on the Bhagirathi. The people are not sure whether the name of the merchant was Chand, Dhanapati or Srimanta. We are also informed of the existence of a road bearing the name of Salivahana.

It should be noted here that side by side with the ruins of the residence of Salivahana may be found a mound (of a later date), remains of the ancient place of residence of the 'Mahasayas.' Here we found an inscription in clay which shows that they existed some two hundred years ago. I believe they are connected with 'Khitisvansavali.'

As it is hazardous to draw any hasty inference from new facts of history I would at present refrain from such an attempt and before concluding this brief note invite the attention of students of antiquities to Saligram.

PRUFULLA KUMAR SARKAR,
Fifth Year Class, Presidency College.

Saligram, though situated in the Nadia district, lies almost on the eastern boundary of the district of Burdwan.

"The Bhattis in the west are now Musalmans, but they are of a roving disposition, having at various periods emigrated and settled in the adjacent countries (countries near about Delhi), particularly to the eastward of the Ganges. Such an emigration took place of late years and they settled in Rohilkhand: but at a much more ancient and unknown period, they crossed the Ganges and settled in the district of *Buddhaown*, and there built a fort called after their supposed grandsire, Côte-Sáliváhana or Sálbáhan, the fort of Salivahan and which is mentioned in the *Ain-i-Akbari*, and this happened before they had embraced the Moslem faith."

—*Essay on Vikramaditya and Salivahan—Asiatic Researches, Vol IX.*

In the *Ain-i-Akbari* there is mention of a Kóte-Salbahan in the Sarkar of *Burdanu* near Gujrat. I cannot but express my debt of gratitude to Prof. Maulavi Hedayat Hossain who helped me in getting out the reference from the *Akbarnama* in Persian.



A Protestation.

I.

O lady of the laughing eye,
 O daughter of the Cam,
 If you will but be Mrs. I,
 You'll know how true I am.
 As steel is hard, so am I true
 To you, the all-enchanting You.

2.

You are the model of my art,
 The glory of my dream ;
 I see your likeness in my heart
 Where it will reign supreme
 For evermore : so tell me true
 If you will let me worship You.

ROBY DATTA.

The Origin of Numerals.

IT has now become a commonplace to say that Arithmetic had its origin in India and was introduced into Europe by the Arabs. But the curious may enquire as to the possibility of identifying the particular province of India where the science of Arithmetic was first built up. Though historical data are wanting there is, happily, internal evidence of a sufficiently definite character to warrant a conclusion of considerable value and interest.

I shall now proceed to prove that the numerals had their birth-place in Bengal. I shall begin by showing that the Bengalee numerals were derived from the Bengalee alphabet and that this correspondence holds good in no other language. Let the reader study the following interesting table :—

Words.	The first letters.	Corresponding numerals.
এক	এ	১
দুই	দ	২
তিন	ত	৩
চার	চ	৪

Words.	The first letters.	Corresponding numerals.
পঁচ	প	৫
ছয়	ছ	৬
সাত	স	৭
আট	ট	৮
নয়	ন	৯
দশ	শ	১০

Is the similarity or even the identity of the first letters and the corresponding numerals merely accidental or are the latter derived from the former? Mark, first, the absolute identity of the letters প দ র and ন with their corresponding numerals ৫ ৮ ৩ and ৯. As regards ছ ক and ট and their corresponding numerals ৬ ৭ and ৮, it will be found that the only variations are in ক, the curve being a little to the right of the axis, instead of intersecting it as in ট; take off the tail of ক and you get ৬ and delete the upward flourish of ট and you get ৮. But the most important and significant letter is প. Both in প which yields ৫ and প which yields ১০, all that you have to do is to take off the axes to get the numerals. Knock off the axis of প and you find emerging before you the two-figured ১০, the soul of Arithmetic. Now, it may be objected that though there is no similarity of shape observable between the Roman alphabets of such words as one, two, three, four, five, etc., and the numerals they represent, in most Indian languages and, especially in Sanskrit, as represented by its Devnagri alphabets and its numerals, there is often observable a close similarity, though not as close as that between Bengalee letters and their corresponding numerals.

But the crucial point is the peculiar shape of the letter প and its resemblance to the figure ১০, which occurs in the expression ৪৫ and which is *not* the case in any other language (*cf.* the Sanskrit equivalent of প=১০) and which letter, minus its axis, gives directly the decimal numeral ১০, with the 'o' in the correct position to the right of ৪. Now, this derivation of the numeral ১০ bodily from a letter in the Bengalee alphabet and Bengalee alphabet alone need not cause undue surprise; for most prime truths in the world were discovered quite by accident. A philosopher will probably find in such accidents merely the irrefutable proof of Divine design, which, in fulness of time, realises itself by ushering forth a valuable truth into the ken of human knowledge.

The 'cipher,' as every tyro in Arithmetic knows, is the soul of the numerals. We know how the Romans laboured in piling up letters, one

after another, by which they succeeded, though clumsily, in representing large figures, but owing to the absence of the cipher and the knowledge of its magical properties, they could make no advance in the study of Arithmetic.

We have, however, yet to dispose of one more objection to the acceptance of the above theory. Which is, then, the older language,—Bengalee or Sanskrit? Could Bengalee be older than Sanskrit, so that the latter could borrow numerals from the former? Well, does not the very name *Sanskrit* signify revised or reformed? Is not the language of the people known as Prakrita and is not Sanskrit, the language of the sages, a refinement of Prakrita? In Sanskrit dramas the ladies and the common people speak in Prakrita while the sages or wise men speak in Sanskrit. In fact it is not now disputed that Prakrita is an older or more archaic form than the 'perfected' Sanskrit. The history of Bengali literature has yet to be compiled from the materials that are being gradually unearthed. But I venture to suggest that old Bengalee is a form of Prakrit, and it is not inherently improbable that the Sanskrit numerals should have been derived from the Bengalee numerals.

SIDHWESSUR MUKHERJI,
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Responsibility and Irresponsibility.

THOUGH it is to be feared that it may not conduce to the popularity of this magazine to make it the vehicle of any form of sermonising, or what the irreverent school-boy used to call a "pi-jaw," recent events in this college have been so disagreeable and so unprofitable to us all that I venture to ask the editor to allow me to make them the text of a few reflections more or less apposite: I will try to make them more. Five years ago, in addressing the College towards the end of a session,—it was in December 1910,—I used the following words:—

"The disastrous effects of want of a sense of responsibility in individuals are illustrated in all the departments of life, in business, in a laboratory, on a railway, in the common affairs of life, in office work and administration. One man forgets to turn a switch, or leaves a sluice open, and a train is wrecked or a country flooded. The consequences of neglect of duty in business or in a college are not so serious, yet it is clear that the sum of attainment is made up of the efforts and perform-

ances of individuals. When many are concerned in a common result, the irresponsibility of any one may spoil the efforts of all the rest."

How exactly experience bears out the truth of these propositions is illustrated by the events here of Monday, January the 10th. Only observe the subtle interlacing of causes and effects! One member of a teaching staff comes late to his work and, forgetting his responsibility towards his class, leaves them to make the best or worst of it. Students of this class, careless of college rules, instead of remaining quiet in their class-room like self-respecting members of the college who claim to be men not school-boys, gather about the door and stand talking in the passage, so disturbing a neighbouring class, whose professor has come in time and is keen to use his time in teaching. Other students of this class choose to leave their lecture in order to attend a school prize-giving, and think nothing of coming back in despite of college rules at a quarter or twenty minutes past the hour. Another member of the teaching staff for a moment forgets the extreme sensitiveness of students to anything like the use of force towards them and, impatient at the slow obedience of some of the students who have disturbed his work, inadvertently gives them just that pretext for a quarrel for which the ill-disposed are only too readily on the look-out. The students of a whole class are so fired with the concept of their own offended dignity, to the neglect of every other consideration, that, rather than exercise a little self-control, they recklessly stop the work of the whole college, regardless of consequences. The members of the Students' Consultative Committee, chosen expressly to mediate on occasion of any real misunderstanding between students and the staff or the Principal, are so eager to display the influence of their office that they forget altogether the reason for which they were invested with it. All these showed, in greater or less degree, a failure to recognize their part in responsibility, and the evils which followed are the accumulated result of a number of small neglects of duty. We may fairly say, I think, that as regards the general body of students there was a terrible want of sense of proportion. For a comparatively slight cause of offence—even if so much be granted—they were content to throw over discipline, good feeling, gratitude, the advantages they receive as students of the college, and weighty considerations of their own interests in life.

So much for irresponsible *action*. We have also had a good deal of irresponsible *criticism*. It is so easy to sit in judgment and blame, when you are not yourself called upon to do anything, and when you do not even have to give account of your irresponsible judgment. So we have

heard a good deal of the weakness of the responsible authorities. Only the irresponsible critics differ widely in their view of the nature of the weakness. Some take the weakness to be that college authorities do not take up students' grievances with a strong hand and bring errant members of the staff to book in some conspicuous manner. It has not so far been suggested how. Doing penance in a white sheet, and standing in the pillory, at all events in the physical sense, are punishments now quite out of date. But there are other critics who understand weakness in altogether another sense. The weakness of the authorities in the view of these latter critics is in listening to the trivial grievances of students at all. The course of strong action *they* desire is that students making such complaints should be sent sharply about their business. When criticism follows such divergent paths, what should be the judgment of fair and moderate minds? Another form irresponsible criticism takes is through the use of the word "indifference." The Principal, some say, showed indifference to the complaint of students. Now, in one sense, "indifference" means impartiality. In this sense a judge not only may be, but ought to be, indifferent. But indifference may mean also careless disregard, and want of consideration and sympathy; and then facts should be considered before such rash statements are made. In *this* sense the Principal may claim that he has never been indifferent about the concerns and interests of any member of the college, whether staff or students.

But setting aside all these minor particulars, I should like to persuade the college to take altogether higher ground in this matter. Let us agree to begin with that the interests of all members of the college are the same, that each has his several part in the common welfare of the college as a whole. The college is one and the interests of all are the same. From this standpoint there cannot be any real opposition of interest, either of students against staff, or of Indians against Europeans. Let us consider the lesser opposition first. Suppose for a moment we can set the non-Indian members of the college staff apart and view them as contrasted with the other members of the staff and the whole body of students. The first thing we should see is that in number the members of the European staff are exceeding few. The Indian members of the staff are many in comparison, and the whole body of students are overwhelmingly many. If there is any law applicable to their mutual relations, it must be the universal law of consideration and courtesy, the first clause of which is that special consideration, special courtesy, should be shown to the minority, to those who are fewer in number and placed at

a disadvantage by a certain strangeness in their surroundings and dividing differences of education and modes of thought. If due regard were paid to this, which seems to me the weightier matter of the law in this connection, we should never hear this difference of race alleged as a reason for the many to rise in their wrath against the few. It is at best a bad reason; and its hollowness was in the present instance plainly demonstrated by the occurrence of outbreaks, like that of Presidency College, in other colleges where no such difference of race can be found at all. The true cause appears to be the same in all cases—an overweeningly high opinion of the rights and dignities of college students. When the offended majesty of students under instruction has to be conciliated by the responsible authorities, surely we have a complete inversion of the natural and right relations.

There is just one other set of considerations we might with advantage pass in review before leaving the subject—that is, the effects of these outbreaks of insubordination in colleges which go by the inappropriate name of strikes. The first and most obvious effect is the stoppage of work for one or more days. As the total of authorised holidays is already amply sufficient, this can only be regarded as a dead loss to all concerned. Then, besides the loss of time, there is the loss of something far more valuable. The damage done to the affections, the respect and regard with which, on the one side, students regard their teachers, and the kindly sympathy and consideration which in ordinary times teachers feel for their pupils. The damage may be made good by the healing effects of time, but he would be a bold man who contended that strikes make for better relations between teachers and students. There may in time be a complete or almost complete return to the old relations; but it is hardly possible but that for some time a certain soreness of feeling on both sides should be left. All this is regrettable and bad; for the time being irredeemably bad. For it is quite clear that the welfare of a college as an organized community bound together by many and intimate ties of association—its smooth working in all its parts and the good success of the work done in community—depends, above all, on mutual goodwill. Anything that lessens that goodwill impedes smooth working, impairs success, hinders welfare, and, therefore, is a hurt and a damage to all individually, as well as to the college as a whole.

So much for the effects inside the college. But the effects do not stop within the college, they extend to the greater world outside with which the college stands in relation. The effects of dissensions inside a college have serious effects on the good name of the college. They also

affect the repute in which Indian students generally are held. These are most important considerations, and they are so wide that I do not think it well to enter upon them now at the end of this paper. I might possibly take up the subject some other time. It is enough for the present to point out that students do claim to be regarded as responsible persons, qualifying by their course of education for responsible citizenship. That to such a conception of responsibility any hasty and ill-considered action is damaging, all must allow. Students have much to gain or lose.

H. R. JAMES.



The P. & O. S.S. "Persia."

Sunk 40 miles south of Crete, December the 28th, 1915.

Vengeance is Thine, O Lord, oh then, repay
 Th' inhuman murderers, who lie in wait
 To whelm the vessel with its living freight
 Of peaceful travellers voyaging on their way
 Back to their Indian homes ; who with dry eyes
 See children perishing in the clutch of death,
 Watch women fighting the last fight for breath—
 And smile, and mock their dying agonies.

But we, who are but men, we wait, O Lord,
 In passionate anguish, seeing what we see ;
 We wait, till Thy slow wrath adjudge the fight
 To them who armed with God's own vengeance smite
 A guilt-enfeebled foe ; and victory
 Shall be in our just hands a flaming sword !

H. R. J.

Message from a Student of Science

I CONFESS, as a Hindu, I am overwhelmed with feelings which I can scarcely give vent to on rising to speak from a platform in this city. Benares, Vārānasi or Kāsi, hallowed with the associations of a glorious past has been the cradle of a civilization dating almost from prehistoric times. While Rome and Athens had barely sprung into existence, she—the epitome and embodiment of Hindu thought and culture—had developed a literature and promulgated a philosophy which still rank as unrivalled.

There is a belief current among the Hindus that no earthquake can overtake this sacred city; let the geologist and the seismologist find out if there is any foundation for this belief. Figuratively, however, it conveys a lesson which forces itself upon us. Dynasty has followed dynasty, revolution has come in the wake of revolution; foreign and mighty conquerors from far and near have come and gone, but Benares has heeded not these upheavals—she has stood unmoved as if these have been no concern of hers. In the happy words of the poet 'she saw the mighty legions pass in solemn disdain and plunged in thought again.' Life

glides on as smoothly here to-day as it did three thousand years ago. Yes, this Eternal City is a living monument of the vitality of the Hindu nation and of the immobility of the East. Political disturbances and upheavals have scarcely left any impressions upon her.

To the student of science Benares is linked with the origin and foundation of the surgical branch of medicine. Tradition has it that Dhanwantari, the revealer of *Salya-tantra* or Surgery, descended on earth in the person of Divodāsa, King of Kāsi, the teacher of Susruta. It is not necessary to take this what may be after all a mythical origin in its literal sense. There is, however, an underlying substratum of fact, which assigns to Benares the singular honour of being the birth-place of Susruta Tantra. In my History of Hindu Chemistry I have been led to reproduce from it in its entirety the chapter on *Kshārapākavidhi* or preparation of caustic alkali. After describing in detail the processes I have concluded by observing that the method is so accurate and scientific that it may be bodily reproduced in any treatise in modern chemistry. The late M. Berthelot, the greatest chemist of his time, and himself the author of several monumental volumes on the history of chemistry, in reviewing this portion of my work, comes to the conclusion that so exact and scientific preparation of caustic alkali could not possibly have been known at such a remote period and he naively adds that it was probably borrowed from the Europeans through the medium of the Portuguese, who had contact with India in the 15th century. Perhaps, this is indirectly the highest compliment which could be paid to our Susruta, for, it has been conclusively proved that the cauterisation of bad wounds by means of caustic alkali was an established custom in ancient India.

I hope the time-honoured association of Benares with medical science will be remembered in connection with the new University just come into being. I hope the Prince of Ramnagar, the Kasirāja of our present day, will prove a munificent patron of science.

Coming to recent times I find, again, this ancient and sacred city the seat of mathematical and astronomical sciences. The Māna-Mandir or Observatory erected by Raja Jay Sing, who may well be called the Tycho Brahe of India is still an object of admiration to visitors from distant parts of the world. It was under his auspices that Pandit Jagannath translated Euclid and Napier's Logarithm into Sanskrit. It is needless to add that Pandits Bīpudeva Sastri and Sudhakara Dvivedi of this city have in our times maintained the traditions of Raja Jay Sing.

I confess I was filled with anxiety—bordering almost upon alarm—when the scheme of the Hindu University was first mooted. It has

always appeared to me that the new India which is springing into existence should have no room for sectarian seats of learning. It is, however, a matter for sincere congratulation that the promoters of the Hindu University have steered clear of the rock ahead and have in unmistakable terms made it manifest to all that her portals will be thrown wide open to persons of all castes and creeds.

Alberuni, the cultured Moslem of the 11th century, who was singularly free from race-bias and who was as much at home with Socrates and Plato as with the *Samkhya* and the *Gita*, speaking of what he calls the self-conceit of the Hindus and their depreciation of anything foreign quotes the famous passage of Varāhamihira, which runs as follows:—

स्त्रेच्छा हि यवनान्तेष्व सम्भक्त शास्त्रमिदं स्थितं
कृषिवत्ते इपि पूज्यन्ते.....

which interpreted means, “the Greeks are unclean, but the science of Astronomy is their *forte*; we have to learn at their feet, and these teachers are to be adored like our own Rishis.” There is a catholicity underlying the tone of the Hindu Astronomer of the 6th century.

History repeats itself. Twelve centuries later our astronomer-prince, Sevai Jay Sing, in order to check his own calculations based upon seven years’ observations, sent a deputation to the court of King Emanuel of Portugal, invoking the help of an European expert.

It will thus be seen that in ancient as in modern times the representative Hindus who were given to scientific pursuits were anxious to profit by what their European *confreres* had to communicate.

It is now well-known that there was frequent interchange of ideas between the East and the West at Alexandria, where the neo-Platonists were not slow to absorb the principles of Vedantism, and this intellectual intercourse was kept up during the days of the Kaliphs of Bagdad. “In Science, too,” as Professor Macdonell so aptly puts it, “the debt of Europe to India has been considerable. During the eighth and ninth centuries the Indians became the teachers in arithmetic and algebra of the Arabs, and through them of the nations of the West. Thus, though we call the latter science by an Arabic name, it is a gift we owe to India.” In my History of Hindu Chemistry, referring to the indebtedness of the Arabs and through their intermediary of the Europeans as regards chemical science to the Hindus, I have said, “Mussalman students in their eager thirst for knowledge, used to flock to the centres of learning in India (including, of course, Benares), and there drank deep at the very fountain-head. Indeed, it had come to be regarded as an essential

part of completing one's liberal education to travel to India and to learn the sciences first hand."

It is now the turn of Europe to pay us back her debt, perhaps with compound interest. Paradoxical as it may seem, the period of renaissance in Europe is almost synchronous with the commencement of the decline of our intellectual activities. I have spoken above of Jay Sing as the Tycho Brahe of India; his labours, or of any of his predecessors, did not however result in the making of a Kepler and there being no Kepler no foundations were laid upon which a future Newton could build his Law of Gravitation. That glory was reserved for Europe. Bhāskara who probably flourished in the 12th century is the last star of Indian Astronomy and Arithmetic, as Weber puts it. After his day no further progress was made and the astronomical science of the Hindus became once more wholly centred in astrology out of which it had originally sprung. What Herbert Spencer calls the "bias of patriotism" has often been the means of leading people astray into dark paths and false moves. We must look about. The whole of Asia is astir and instinct with new aspirations, and pulsating with new life. It will not do for us tenaciously to hug the past and live like the proverbial frog in the well. We should invoke the liberal and catholic spirit of Varāhamihira and learn at the feet of western teachers.

Every devout Hindu pilgrim to Benares makes it a point to drink of the *Jnāna Vāpi* or "Well of Knowledge." I trust the new University will be a veritable *Jnāna Vāpi* to the students who will flock here from the distant parts of India. To me it has been a source of sincere gratification that ample provision has been made for teaching the different branches of science and of furthering the promotion of original research. I hope the starting of this University will inaugurate a new era and I trust it will be a sacred confluence of ideals of the East and the West and will play a prominent part in the building of the India of the future.

This is my brief and humble message.

[Dr P. C. Ray delivered this lecture forming one of the series of lectures by eminent scholars organized in connection with the ceremony of laying the foundation stone of the Hindu University at Benares.]



A Trip to a Temple City.

ONE gloomy August morning found us straining our eyes across the billowy expanse of the Bytarani in quest of a boat to convey us to the other bank. Crossing the Bytarani,—Bytarani the Hindu Styx,—the very idea sends a shiver through the Hindu breast, and makes him think of acts done, and of the doom awaiting him on the other shore. Our minds were gloomy enough. The tedious journey of the previous night in a ramshackle country cart over 14 miles of barren, dreary waste while the unwelcome rain was beating mercilessly on us, with the disgusting prospect of having to wait for a good length of time for a boat, could make our minds anything but cheerful and jovial as is the usual case with sightseers and excursionists. Our gloomy mental state was in unison with, nay, heightened by, the still silence that sat upon the scene with the view of the sombre clouds brooding over the shaggy hills of Assayi in the distance.

However, there is an end to everything, and on landing on the other bank we were agreeably surprised by the rich verdant vegetation of the riverside. Our grumblings disappeared and our spirits revived amidst the freshness of Nature.

Greater pleasures were in store for us. We were already on the road to Jajpur, the city of Jajati Kesari, the King of Orissa. A rather loud and unfriendly barking told us that we were approaching the town, and soon we were in the midst of a busy bazaar, where the gaily-dressed daughters of Orissa were gazing wonderingly at us three strange-looking foreigners. An unpretentious, dwarfish temple greeted us with a smile that was three centuries old. We were indeed in the city of Temples. Lots of Siva temples, of various sizes and types, some well kept, others left to perish in negligence, met our gaze and reminded us of Benares where the number of temples and idols probably exceeds that of the resident population. Nor is this extraordinary, for Jajpur, which was the capital of the Punyabhumi Orissa for many eventful centuries, which saw the revival of Brahmanism after the final overthrow of its rival, Buddhism, must of necessity be the seat of many places of worship, many temples richly endowed by the fond wealthy people of yore who were anxious to wipe out their sins by a lavish extension of patronage towards Brahmins, and by expending munificent amounts of their ill-gotten money on religious ceremonies. Like most of the ancient Hindu capitals, Jajpur possesses nothing in the shape of

what we would call scientific and authentic history. The ruins of royal palaces, the stray monuments and temples of antiquity, are almost the only materials together with living legends and traditions, but on these only a vague and imperfect history of Jajpur can be constructed.

Jajpur was the centre of the polemics of the early centuries A.D. when Buddhism and Brahmanism were engaged in a final tussle for supremacy, and traces of this, especially of the fall of Buddhism, are to be met with in stray statues and other figures—often caricatures of Buddhist *Vikshus*—affixed to the niches of temples. The present religious importance of the place centres round the *Birojâ* temple, a very simple unadorned edifice dating back to the 8th century A.D. Here we meet with a curious fact. The Vishnuite legend of the slaying of the demon *Gayâ* and the Saiva legend of the tragic death of *Sakti*, the wife of *Siva*, are represented here side by side. The pilgrims offer *pindâs* to their forefathers at the shrine of *Gaya*, while the Goddess *Biroja* protects them from all harm.

In its neighbourhood is the Temple of the *Siva Agniswara*, said to have been built by a grandson of *Jagati Kesari*, who was in exile. One strange fact which we noticed is that the colour of the stone *lingam* has changed from time to time. The *Chandeswar* Monolith is 22 ft. in height. It stands on three tiers of square pedestals and has on its top a representation of the calyx of the lotus. It was erected to commemorate the victories of the *Kesari* Kings over the neighbouring hill tribes.

Overlooking the river is the Temple of the Seven Mothers, where the queen-like *Indrani*, the fierce *Varâhi*, the nun-like *Vaisnabi*, the graceful and chaste *Kumari*, the hideous *Yamamatri* and the awe-inspiring *Kali* with two others are to be found. The figure of *Kali* with the uplifted bloodstained sword in one hand, the terrible and defiant expression on her face, the garland of hideous human skulls dangling round her neck—is a powerful representation and does credit to the master-hand of the sculptor.

Even in times of Pathan and Moghul domination in Orissa, Jajpur did not lose its importance. The Nawab Abu Nasir Khan made it his capital and has left as his memorial a beautiful mosque overlooking a secluded and shady creek of the river, a proper place indeed for the invocation of the Deity. The inscription on the walls has a loyal reference to the pious hermit, Emperor *Alamgir I*.

It pains one to see these temples which once used to be thronged by men and women taking refuge from the sea of toils and troubles of

the world, crumbling away stone by stone. It pains one to stand on the site where probably in days gone by a king used to hold his court in pomp and splendour, in the fulness of his power and glory—now all, all sunk in oblivion. With a heavy heart, we bade adieu to this Punyabhumi, whose every particle of sand treasures within it the kiss of many a revered foot.

BHUPATI BHUSAN MUKHERJEA.

"Early English Voyages to the East Indies."

PROF. J. N. DAS GUPTA, B.A. (Oxon), Bar.-at-law, delivered a lecture on the "Early English Voyages to the East Indies" immediately before the Poojah holidays in the Senate Hall. The meeting was presided over by The Hon'ble the Vice-Chancellor, and distinguished visitors like Sir Gooroodas Banerjee, Kt., graced the hall. It was an extremely interesting paper, and to use the language of Sir Gooroodas it was simply charming. Here I attempt to give a rough sketch of it, bringing out the main features, and I hope it will interest all students of Indian History.

The lecturer began by warning us that it would be a mistake to think that English voyages to the East began with the incorporation of the London East India Company. As a matter of fact many an English voyager tempted the perils of the journey to the East Indies, and excited public curiosity with narratives of his rich experiences, before the patent of incorporation could be secured by Clifford, the Earl of Cumberland, whose image "hairy and hatted" adorns the walls of the Bodleian at Oxford, though it is no doubt correct to say that English trade directly with India is hardly heard of till the latter end of Queen Elizabeth's reign when the charter was granted to the merchant adventurers trading to the East Indies for 15 years revocable at pleasure on two years' notice given under the Privy Seal.

As illustrations to his statements he mentioned Sighelius, Bishop of Shire-berne who is said to have come in the reign of Alfred, 883, another who came in 1243, John Newbury and Ralph Fritch, Raymond and Lancaster who came in 1591, and such other names which have been forgotten by many historians.

Rapidly passing over these names he came to John Mildenhall of London ' merchant, who undertook a voyage from London to the East Indies in the good ship called *Hector of London*, Richard Parsons being

the Captain, which carried a present to the Grand-Seigneur in the same voyage.’ He started on his journey in 1599 and visited Agra and Delhi in 1603, ‘when the illustrious Akbar was the reigning monarch. The difficulties he encountered, the obstacles and rivalries he had to overcome, are but typical of the experiences of later ambassadors like Sir Thomas Roe, in days when the reins of Government had passed from the resolute hand of Akbar into the weaker hands of Jehangir and Shahjehan.’

Moreover, John Mildenhall, appears to have been the first Englishman who secured certain trading privileges as he tells us “to the profit of his nation” from the Great Mogul, though the firman embodying these privileges has not come down to us probably because during his sojourn in India, the London East India Company had already been incorporated. The relevant portion of Mildenhall’s narrative which is contained in his second letter to Richard Staper, written from Persia on the 3rd day of October 1606, is brief, plain and unvarnished. He was most graciously received by the Emperor to whom he presented a Nazur of 29 fine horses and some jewellery. But he met with considerable opposition from the intrigues of the Jesuits, particularly the Italians of whose enmity he bitterly complains. He soon realized that he could do nothing because of his ignorance of the language of the country. Hence he studied hard and made himself sufficiently master of the Persian tongue by which he found means to ingratiate himself into the favour of the Great Mogul, and at last obtained large privileges ‘much to his satisfaction.’

After reference to a number of illustrative extracts gathered from the journals of the 17th century travellers he said—“I would let the extracts which I have so far placed before you spiced as they are every now and then with touches of romance and elements of poetry, speak for themselves—and tell their own tale regarding Akbar’s caravanserais and Akbar’s pilgrimages on the one hand, the beliefs and practices of the Hindus and the life of the villagers on the other. Truly the encyclopaedic nature of these entries makes us feel that in these journals we have so to speak so many gazetteers of the Mogul Empire and yet something more which is of far greater interest and importance than mere gazetteers, viz. vivid glimpses of the real India of Akbar and of Jehangir.

He then said that ‘the first voyage set forth by the London East India Company was commanded by James Lancaster, one of the leading seamen of the Elizabethan Era, who received the honour of Knighthood for his notable services—services for which he is rightly regarded

as "the founder of the English trade with the East Indies which led to the formation of the British Empire in India."

Neither of the expeditions under Lancaster touched the shores of India proper. Their interest to the Indian historian in the opinion of the lecturer lies chiefly in the experimental nature of their operations. They familiarised English mariners with the route round the Cape of Good Hope. They spoke of the resources of the various stations and halting places on the way to India. They spoke of possible dangers and forearmed succeeding voyagers by their forewarnings. But above all their interest lies, said the Reader, in the fact that the first commercial treaty between England and an oriental potenae, ruling over an island of the Indian archipelago—Sultan Alauddin, Sultan of Achim in the island of Sumatra, was negotiated by Lancaster in course of the very first voyage set forth by the London E. I. Company. The negotiations which led to the ratification of the treaty illustrate that policy of caution and prudence, of sympathy and insight, of real statesmanship, which characterize the doings of the principal agents of the East India Company from the beginning of its history, the policy which enabled it to triumph over its European rivals on the main land of India and which has made England to-day the supreme power in the East.' The account which Lancaster gives us of his travels is interesting not merely because of the graphic description of the banqueting, dancing and merry making with which he was received, not even because of the light which the narrative throws on the life of the people and the court in the island, but because we have here 'a prefiguring of the future policy which indicated the surest way to empire-building.'

He then went on to describe the third voyage set forth by the E. I. Company, the voyage associated with the names of Captains Keeling and Hawkins—a voyage of the most momentuous consequences to India—for the first English ship which came to Surat was the *Hector* commanded by Captain William Hawkins, who brought a letter from the Company, and another from James I to the Great Mogul Jéhangir requesting the intercourse of trade.

He did not give us any detailed account of the experiences of Hawkins during his stay in India and residence at the Mogul Court, 'experiences which were mostly painful, harassing as well as embarrassing,' but proceeded to invite our attention to the supplementary chapter, that is the concluding section of the narrative of Hawkins 'where that rough and ready sailor endeavours to lift the veil for us and enables us to catch just a glimpse but no more than a glimpse of the real Mogul

India of the day. Evidently Hawkins was better fitted to fight his country's battles at the sea than to combat the dilatoriness of oriental diplomacy, and the subtle intrigues of the wily and courtly Portuguese at Delhi or to review the passing events of the hour with the practised eye of an acute observer like Sir Thomas Roe, and the picturesqueness and penetration of a modern diarist like Russel. Yet the chapter under reference speaks to us of the resources of the empire and the life at court, the attitude of the Great Mogul towards the peers of the realm as also towards the commonalty and hence incidentally something of the rigour of the laws, the administration of justice in general and something of the daily occupations and pursuits of the sovereign himself; and rough and ready sailor that he is, his account does not differ in any essential particular from the accounts of our other diarists and travellers.

But the most interesting parts of the address were the illustrative extracts bearing on:—

- (1) Akbar's tomb at Sikandra.
- (2) The practical working of the Mogul administrative system.
- (3) The Mogul peerage which was unquestionably a life peerage and not a hereditary nobility.
- (4) The land system of the period, which was a sort of feudalism—a feudalism of office—dissimilar to that of Europe in that it was not hereditary, the land descending to the successor in office and not to the son or heir of the late holder.
- (5) The court-life of the day, the favourite amusements of the Emperor—the great festivals, the Nooroja and the king's birthday feast.

The lecturer concluded thus—“When one thinks of the formalities and the ceremonials of the court which the Mogul omrahs looked upon as essentials of life, the punctiliousness, *e.g.* about the red rail, the riches of the Mogul sovereigns, their splendour, their love of magnificence and yet their delight in petty things, their architectural achievements not the meanest of which is that splendid sepulchre at Sikandra, the capricious proceedings of Jehangir's impulsive personality, when we think of all these, the force of that saying is brought home to the historical student as I believe it is brought home to all of us at times.—what shadows we are and what shadows we pursue! And yet through it all comes a supremely inspiring lesson—the lesson of hope and of constant endeavour, the conviction that

“through the ages one increasing purpose runs,

And the thoughts of men are widened through the process of the suns.”

The voice of the true historian is ever luring us on to follow the gleam, for, along with the poet and the scientist, the truth which he proclaims, is the fact of the constant progression of the human race."

SAROJ KUMAR SEN-GUPTA,
6th year History.



To Dr. Jagadish Chandra Bose.

Translated from a poem by SIR RABINDRANATH.

Young image of what old RISHI of Ind
 Art thou, O Arya savant, Jagadish ?
 What unseen hermitage hast thou raised up
 From 'neath the dry dust of this city of stone ?
 Amidst the crowd's mad turmoil, whence hast thou
 That peace in which thou in an instant stoodst
 Alone at the deep centre of all things—
 Where dwells the One alone in Sun, Moon, flowers,
 In leaves, and beasts and birds, and dust and stones,
 —Where still one sleepless Life on its own lap
 Rocks all things with a wordless melody
 All things that move or that seem motionless !
 While we were drunk with the remote and vain
 Dead glories of our past,—in alien dress
 Walking and talking in an alien tongue,
 In the caricature of other men—
 Their style, their bearing,—while we shouted, yell'd
 Frog-like with swollen throat in our dark well,
 O, in what vast remoteness wert thou then ?
 Where didst thou spread thy hush'd and lonely mat—
 Thy mat of meditation ? Thou, thy mind
 Curling into calm gravity, didst plunge
 In thy great quest after the viewless ray,
 Beyond the utmost borders of this world
 Of visible form, there where the RISHIS old
 Oped, and passed in beyond the lion-gates
 Of the Manifold and stood before the One,
 Silent in awe and wonder, with joined hands !
 O Hermit, call thou in the authentic words
 Of that old hymn called Sāma ; “ Rise ! Awake !
 Call to the man who boasts his SASTRIC lore
 From vain pedantic wranglings profitless,
 Call to that foolish braggart to come forth
 Out on the face of Nature, this broad earth.
 Send forth this call unto thy scholar band ;
 Together round thy sacrifice of fire

Let them all gather. So may our India,
 Our ancient land, unto herself return.
 O once again return to steadfast work,
 To duty and devotion, to her trance
 Of earnest meditation ; let her sit
 Once more unruffled, greedless, strifeless, pure
 O once again upon her lofty seat
 And platform, teacher of all other lands.

M. GHOSH.

Story of King Bharat as told by the Bengali Kathak.

I.

LONG ago, there lived in this land, the King Bharat. It was he after whom this country is named *Bharat Barsha*.

And a great king he was. A great king is a great warrior, a great statesman, organizer and administrator. He is revered and worshipped by the people of the land as the image of God on earth. But what hard is his lot ! What great responsibilities rest upon him ! What anxious nights he must spend with his ministers in solving the problems of his realm. If there be any untimely death in the land the king is held responsible for it. Is he not the head of the state ? Is it not his business to prevent untimely death in his realm ? If such death takes place on account of famine, why has he not stored provisions for future use of his subjects ? If it is due to disease, why has he not made proper sanitary arrangements beforehand ? If it is due to an increase in the murderers and robbers, why has he not taken proper steps for punishing the evil-doers ? If the people suffer disease and death due to their own folly and ignorance or idleness, why has he not taken proper measures for educating them ? So the king has no excuse when there is untimely death in his land. But King Bharat was really a good king and there was no early death in his kingdom. There were no famines, no diseases, no robbers or ignorant persons in the country. His subjects were all very happy, and he treated them as his own children. Their parents were only responsible for the birth of their children ; their education and bringing up were entirely in the hands of the state.

According to the *sastras* an Indian king was not allowed to rule his kingdom till he was laid up in his death-bed. After performing his duties of the world he had to mind his own salvation. He would not care to be encumbered with earthly affairs after a certain period of life. The *sutra* says that every householder should abdicate his little kingdom after his fiftieth year.*

And King Bharat was a true religious man and he followed all the injunctions of the *sastras*. After completing his fiftieth year he handed over his kingdom to his eldest son and retired from his worldly duties and entered into the third state of a man's life. Here he was required to travel to all the sacred places of the land. He met the great *risis* and sages; he talked with them and learned the lessons of spiritual life from them.

Then the king built a small hermitage on the bank of the sacred river *Saraswati*, amidst deep forests and far away from any human habitation. Here the ex-king devoted himself entirely to the meditation of the supreme being, excepting the short time he used to spend on the bank of the river for his ablution and also for collecting a few fruits of the forest trees, which constituted his sole diet.

Here one day the king was bathing in the river, when he heard the terrible roar of a lion from a distance. Then he noticed a deer pursued by a lion jump into the river. The deer was pregnant and her time of parturition was near by. The terrified animal died in consequence of that mad jump, after giving birth to an offspring. The little animal was carried away by the current to where the king was bathing. He felt a great compassion for the small, helpless creature. He took it in his arms and brought it to his hermitage. There he made it warm; procured some milk and fed it. The animal survived, and it thrived under the fostering care of the king, who was anxious to see it live and who took the place of its mother. He picked up young grasses and other suitable food for it. When it was big enough it showed its great fondness for the king by licking his body and following him closely wherever he went. The king gradually became quite enamoured of the little deer. His meditations of the supreme being gradually began to leave him and their place was being taken up by the thoughts of the beast. If by any accident the deer was away for some time the king grew anxious for it. He would search after it and could not recover his calmness of mind unless he got it back.

Thus the great king, who had renounced all the world and its enjoyments, his children and relations for the purpose of getting rid of all material thoughts, now became enamoured of the little deer and practically thought only of it.*

At last one day the little deer was lost; it went away but never returned. The old king was extremely sorry for it. He searched after it among the woods and ravines and dales and hills; he called after it aloud; his own sound reverberated through the forest and came back to him. He returned to his hut deeply dejected. During this search he had over-stepped the limits of the strength of his old limbs. He laid himself exhausted on his bed of dry leaves—never to rise again. There he thought not about his long-forgotten children, not of the great luxuries he enjoyed, not of the great deeds of valour and virtue he had done, not of his great meditation performed for the realization of his Brahman, but about the companion of his old lonely days. He thought of the young deer. “What has become of it? Is it dead? Has it been devoured by a tiger? Has it got entangled in the net of a huntsman and is suffering there the agony of death?” And as his last hour drew on, he thought only of the deer, the deer and the deer. What beautiful eyes! so soft, so sympathetic and kindly. What shapely limbs! The little deer is come; it is licking his body. He is caressing it; it is dancing round him; how beautiful—what! there is nothing but the little deer in the world; oh! he himself is the little deer. And he expired.

II.

The thought of the deer was uppermost in the mind of the king when he died. The body dies but the soul remains; it is imperishable; it is eternal; it is part of the Brahman; the individual soul is separated from the universal soul by a thin veil of *maya* (illusion). It is this *maya* which is the cause of creation and of re-birth.

In his next birth the king became a deer.† His dying thought was that he had become a deer and so he was born a deer. The last desire of a man is always fulfilled in his next birth. If he thinks of becoming a rich man, he becomes a heir in his next birth. If he thinks of becoming a powerful man or a great statesman or a great scientist or a great

* কর্মেন্দ্রিয়াণি সংযমা য আজ্ঞে মনসা প্ররণ।

অহঙ্কার বিমুচ্যাঙ্গা স্মিথ্যাচার ম উচ্চাতে ॥

+ যৎ যৎ বাণিপি প্রবন্ধ ভাবৎ তাজ্জন্মে কলেবরম ।

তৎ তমৈবেতি কোন্তের সদা তত্ত্বাব ভাবিতঃ ॥

soldier, so he becomes in his next birth. If his thoughts are bloody he may become a ruffian or a tiger and so on, according to the kind of thought, which may be uppermost in his mind.

Now, a man is part of the Brahman. And like Brahman he is also all-powerful; whatever he wishes or desires must be fulfilled before he can attain his salvation. And the desire of the king also must be fulfilled before he can unite with the Supreme Being.

So the king was born a deer and enjoyed all the pleasures and troubles of a beastly life. It danced and danced on the green meadows; drank of sparkling water from the rivulet; it fondly loved its young ones and enjoyed their company. The little ones played around it and when fatigued slept near it hiding their little heads underneath its breast. What confidence and pride the mother felt for her little ones! Then it had its troubles. How it ran hard terror-stricken and exhausted to get out of the reach of the huntsmen or tigers! And when it found itself safe with its little ones, what happiness was in that!

This went on for some time. But a soul that has once tasted of a higher life can not remain satiated like that for a long time.* The work that we do, the thoughts that we think, all keep their record in consciousness. It may be forgotten at times but under appropriate conditions it will manifest itself. All the good works and *tapasyas* (meditation) which the king had performed kept their *samskars* or records on his consciousness. These *samskaras* were dormant up till now, but gradually they manifested themselves. On account of these the king gradually felt a sort of hankering after something, a sort of dissatisfaction with the present state of things, he felt as if he lost something, as if he has not done something which he ought to have done. Gradually this longing became clearer to him and he felt that he was a great *yogi* who slipped from his path of meditation. Now he remembered everything about his previous birth. Great souls sometimes may remember everything about their previous births.† And now the king thought only of how to recover his previous advanced self.

With this thought uppermost in its mind the deer one day was attacked by an arrow of an hunter and died in consequence. Thus ended the second birth of King Bharat.

* পুরাণামের তেনেব হ্রিযতে হরশোহপি সঃ ।

জিজ্ঞাসুপি যোগস্য শব্দত্বাতিবর্ততে ॥

† বহুনিমে ব্যতীতানি জগ্নানি তব চার্জুন ।

তান্যহং বেদ সর্বাণি ন তং বেথ পরম্পর ॥

III.

The king was next born as the youngest son of a pious Brahmin. A healthy, strong and beautiful child it was. And in this life also the king retained the faculty of remembering the events of his previous life. As the child grew up, the parents observed to their utter dismay that it was a very peculiar child; though perfectly normal in every respect—healthy, cheerful, beautiful and intelligent—it had a peculiar abstracted air; nothing could make it take to worldly affairs in a serious manner. Nothing could destroy his equanimity of mind. He was always cheerful and composed. Nothing could make him angry. He bore malice to nobody. Good or bad food was a matter of indifference to him. He was one day employed to drive away crows from devouring rice that was spread on the ground to dry. After a little while a member of the family came and saw that the lad was engaged in deep meditation and the crows were devouring all the rice. He was given no food as punishment that day; but it had no effect on him; he was neither sorry nor angry with anything or anybody. On account of these peculiarities people called him *Jara* or the inert. At first they thought him very stupid and used to cut many practical jokes with him; used to tease him in various ways; but his serene countenance gradually frightened them; they were attacked with a superstitious fear and thought that if anybody behaved wrongly with the innocent *Jara* he was sure to meet with some trouble. And this saved him a good deal of annoyance.

When his own people and also other people unconnected with him gave up all hope of getting either any work or any fun out of him, *Jara* had more time for his meditation.

Few people tried to probe into his mind. His brothers treated him with pity or contempt. They did not know that he also felt pity for them. There was one brother who was working hard to be a great learned man. There was another whose ambition was to make money. And he thought only of money. A third wanted to enjoy life, and a fourth was a great philanthropist, he was working hard for the good of the unfortunate—the cripple, the blind, the diseased and the poor. Now a man who had only one life could get enamoured of these hobbies. But could *Jara* who remembered his innumerable previous births now, take to those things with the same amount of earnestness. An eternity of power, of enjoyment, of scholarship, of philanthropy—what a terrible fate it would be! He had had enough of those things and he no longer wished to be encumbered with them.

When *Jara* had barely passed his childhood one day his father died. And soon after the mother also followed him. Thus *Jara* lost both his loving parents. The brothers thinking him too stupid to manage any property, divided all the patrimony amongst themselves. *Jara* was to live with each brother for a certain number of days. His eldest brother was a very good man and so was his wife a very estimable and kind-hearted lady. The second brother though not a bad man had a quarrelsome wife, who used to tease *Jara* in various ways. But nothing could change the serene equanimity of *Jara*. He was never sorry, never angry, never revengeful, and never swayed by any passion.* But all this angered the lady more and more, and her treatment of *Jara* became gradually worse. She sometimes used to beat him. She made him work like a domestic servant. *Jara* had neither sympathy nor antipathy for any particular kind of work, therefore he did not care what work he did. While he lived with this brother he was given very bad food prepared from refuse. This was carelessly prepared, sometimes over-boiled, sometimes under-boiled, and sometimes charred. But *Jara* never complained about his food or treatment, and he thrived as well as before.

One day *Jara*'s eldest brother's wife noticed that the remains of *Jara*'s food had a very pleasant smell. She pointed out the matter to all the housewives and they were all astonished at this phenomenon. Next day there chanced to be a little food left on the dish. It had not only a delicious smell, but also a fine taste. They all came to the conclusion that this must be the divine food *amrita*; and they congratulated the second brother's wife on her successful cooking, and they all implored her to teach them the method. This lady thought that she had really discovered a process of preparing the divine food—*amrita*. And she became very mysterious and self-conceited. The news of the preparation of *amrita* spread to all the country round and people flocked to her and requested her to cook some *amrita* and let them all eat it. Her husband was highly delighted with his wife's remarkable discovery. And when he learned about the ingredients his wonder knew no bounds. Just think, that the divine food *amrita* was to be manufactured from the husks of rice and the refuse skin of vegetables. He collected

* ଅହେଷ୍ଟା ସର୍ବଭୂତାନେ ବୈକ୍ରମ କରଣଃ, ଏବ ଚ
Also ମନ୍ତ୍ରଃ ମତତ୍ ସତ୍ୟା ଯତାଜ୍ଞା ଧୃତନିଶ୍ଚଯ ॥
ସମ୍ମାନୋଦ୍ବିଜତେ ଲୋକଃ ଗୋକାନୋଦ୍ବିଜତେ ଚ ଯ
ହର୍ଷମର୍ଦ୍ଦରୋଦେଶେ ମୁକ୍ତଃ ସଃ ସ ଚ ମେ ପ୍ରିୟ ॥

these materials from the neighbours whom he invited to eat *amrita* in his house. The day for *amrita*-cooking came. His wife in a secret room began the operations. The whole food was boiled and afterwards properly charred, and the house was filled with a nauseous smell. People thought that the preliminary part in the cooking of *amrita* must be very troublesome. Then came the time of distribution of the divine food. Thousands of hungry people were seated on the open ground eagerly awaiting the delicacy to be served. When the food was brought an evil odour filled the air. And its appearance was anything but prepossessing—it was a mass of charred rice, husk and skins of potato and other vegetables. Still people thought that everything would be all right while eating the food. The little boys refused to partake of it, but they were urged to do so by their parents. Everybody exerted his will to the utmost to gulp down a little of the food. Then there ensued a period of indescribable confusion, of shouts, of vomiting, of running after water, of imprecations and wild gestures of angry and hungry men. The cook and her husband were chased by the infuriated mob which was restrained with difficulty. Thus ended the celebrated cooking of the divine food *amrita*.

After this event this vain and quarrelsome lady's wrath fell on *Jara*, who, she thought, had played a trick on her. She treated him most inhumanly, and the more she felt it impossible to produce any impression on the serene countenance of *Jara* the more her wrath increased, and she turned him out of her place, wishing to have never more anything to do with him. But the eldest brother's wife stepped in and took entire charge of *Jara*.

She had an inkling about the mentality of *Jara*. She had known from her learned husband that great souls sometimes travel in this world as dumb and stupid fellows for fear of being recognized by ordinary men as great saints and of being hunted by them for the fulfilment of their worldly desires. She took *Jara* into her place and treated him well. The food she gave him was good but she found that the little of it that was left in *Jara*'s dish had the smell and taste of the divine food. And she determined to find out the cause of this. One night she peeped into the hut of *Jara* and found to her wonder and delight that *Jara* was not a fool but a saint. *Jara* was then seated in the posture of a *yogi* in deep meditation, his body erect and motionless and his face beaming with a divine delight. To her dazzled eyes the room seemed to be filled with a beautiful aura. The greatest person—the *parama purusa*—the Brahman, who is without any form, who can not be

felt by any of our senses, who is without any shape or colour, or sound or taste or touch, who is eternal and all-pervading,* seemed to materialize into a corporeal form as if to partake of the devotional offerings of *Jara*.† To her it seemed that the boy-god Krisna stood before the motionless form of *Jara* who was now in a deep trance. What a beautiful form it was! He looked like a sportive boy of ten of beautiful sky-blue colour; his fine eyes looked like the petals of a lotus; his nose was beautifully chiselled. On his breast hung a beautiful garland of wild flowers. His curly hair was properly arranged, and from the top shone the peacock's feathers. His robe was flowing and of bright gold colour, and his body seemed to radiate a dazzling light on all sides. The god seemed to partake of the food which was offered to him by *Jara*, and immediately the food was converted into divine *amrita*. All these supernatural phenomena bewildered the lady's mind so much that she fell into a swoon.

IV.

Gradually *Jara*'s soul ascended the highest stage of spiritual perfection. It is in this stage the mind of the *yogi* becomes completely united with the Divine One. No desire can enter into his mind even in his sleep. Thus completely freed from all desire he is no more afraid of mixing with people or talking to them. In this stage he lives entirely with and in God. Sometimes he thinks himself united with God; now he sheds tears of joy and laughs, and dances at other times. Sometimes he thinks he is far away from God and weeps in consequence. He would sometimes walk away a considerable distance from home in an absorbed manner. Sometimes he would sit on the bank of a rivulet for hours together wrapt in deep meditation.‡

* অশৰ্মস্মৰণপ্রয়োগ তথারসম্ম নিত্যব্রগক্ষেবযৎ ।

Also কত চতুরানন মরি মরি যাওত

ন তুয়া আদি অবসানা ।

তোহে জনমি পুন তোহে সমাঘোত

সাগরি লহংকী সমানা ।

+ পত্রং পুষ্পং ফলং তোরং যো রে ভক্ত্যা প্রযচ্ছতি ।

তদহং ভক্ত্যু পদ্মশারি প্রযত্নামঃ ॥

যৎ করোবি যদশ্বাসি যজ্ঞহোথি দমাসি যৎ ।

যৎ তপস্যাসি কৌচ্ছের তৎ দুর্বলসদর্পণম् ॥

‡ এবং ব্রত প্রত্যয়নাম কৌর্ত্তাজাতুরাগে ।

ক্রতচিন্ত উচ্চে হস্তাখ বোদিতি বোতি,

গায়ত্র্যাদব্রত্যাতি লোক বাহঃ ।

Also “কি কহব রে সবি আনন্দ ওর
চিরদিমে সাধব মন্দিরে থোর ।”

He was seated in this condition one day by a picturesque and solitary country road-side, when he was rudely awakened from his trance by some rustic labourers. The king of the country had been out for a tour in his palanquin; but in the middle of the road one of his bearers became ill and had to be discarded. The other bearers went out to find another man for his place. Seeing that *Jara* was a strong man they got hold of him and made him carry the palanquin of the king. The bearers had done similar things before and never felt any difficulty. But with *Jara* things were different; contrary to their experience *Jara* did not show any dislike for the work; but when the walking began, *Jara* from time to time would give a jump to avoid trampling any little insect crawling on the ground. This upset the equilibrium of the palanquin. The bearers became alarmed; they tried alternately threats, entreaty and persuasion on him, but none of these were of any avail. At last the king demanded angrily the reason for the disturbances. The frightened bearers said that it was all due to the new man. And the king asked, "Who is fool that is creating this trouble?" *Jara* who had again passed into an abstracted air answered mechanically, "What fool am I! Is it the body or the soul? As the soul is part of the Brahman, it can not be a fool; the body being matter only, can not be endowed with any intelligence." The king who was a very experienced man felt that the answer was not like that of a labourer. He thought that something was wrong; he stopped the palanquin and came down. From his appearance the king at once recognized *Jara* as a Brahmin, and he felt ashamed for having used him as his bearer. He fell on his knees and implored his forgiveness, and wanted to punish the bearers in his presence. But *Jara*, who bore no malice to anybody, prevented the king from doing any injury to them. The king became so much impressed by *Jara*'s personality and spiritual advancement that he wanted to become his disciple. Then there ensued a conversation between the king and the *Risi* (for *Jara* was really a *Risi* now) in which the *Risi* explained to the king how in the beginning of creation there was nothing but Brahman, and how Brahman with the help of desire or *maya* created the seeming world. The individual souls are nothing but parts of the Brahman; surrounded by different desires they travel in the world as animals, plants or men—good or bad. The soul is always yearning to unite with its master the Brahman. It is being purified of its desires in each birth and approaches a step higher towards God. This and other spiritual knowledge he imparted to the king.

After the conversion of the King, Bharat remained in this world for

some time ; then he passed into that supreme state of *samadhi* in which the union between the soul and Brahman becomes complete. It merges into that from which no return takes place. It shines in the Supreme Being by whose light every thing seems to be lighted.*

N. C. BHATTACHARYYA.

Social Gathering

In honour of Dr. J. C. Bose, M.A., D.Sc., C.I.E., C.S.I.

A SOCIAL gathering to meet Dr. Bose after his highly successful tour through Europe, America and Japan was held on Thursday, the 16th December, 1915, at 5 P.M., in a spacious and tastefully decorated pandal erected for the occasion in the college compound. The Principal was in the chair. There was a large and distinguished gathering consisting of European and Indian ladies and gentlemen of whom the following may be specially mentioned : Sir Gurudas Banerjee, Dr. Deva Prasad Sarvadhicary, Sir R. N. Mukerjee, the Hon'ble Messrs. P. C. Lyon and K. C. De, Principals H. C. Maitra, J. Watt, S. C. Bagchi, R. S. Trivedi, S. C. Vidyabhusan, Dr. Henry Stephen, Dr. S. C. Banerjee, Dr. Nilratan Sarkar, Dr. and Mrs. B. L. Chaudhury, Mrs. S. M. Bose, Mrs. D. N. Roy, Mrs. D. N. Dey, Mr. S. N. Tagore, Mr. G. N. Tagore, Kumar Sri Panchanan Mukerjee and Miss Mcleod.

Before the proceedings commenced Dr. Bose and the President were garlanded by Mr. Sukanta Rao, a student of the 4th year class. The function formally opened with a chorus song in Bengali composed for the occasion by Mr. A. Dam, B.A. Mr. Ajit K. Chakravati then read an excellent poem also specially composed for the occasion by the poet Satyendra Nath Datta. This was followed by recitations in Bengali and Uriya. A Bengali poem † addressed to Dr. Bose by Sir Rabindra Nath Tagore was ably recited by Mr. A. K. Roy Chaudhuri, a student of the first year class, and an Uriya poem by Mr. S. Rao.

The Principal who rose amidst cheers spoke as follows :—

“ *Dr. Bose, Ladies and Gentlemen, and especially all members of the Presidency College,—Dr. Bose has received so many honours in*

* হৃষের ভাস্তুমুখ ধৰ্তি সরুঃ
তমা ভাসা সর্বশিদঃ বিভূতি ।

† We are deeply thankful to Prof. M. Ghose, M.A. (Oxon), for having translated this poem into English verse for the benefit of English visitors. It is printed elsewhere.

so many parts of the world, and such high honours, that it might well seem that any honour which we could do him here at Presidency College must be by comparison of slight value. But I know that is not so. I know it by many signs and also because Dr. Bose himself has almost told me so, and I can give you the reason. Even to the most far-travelled, honours are sweetest when paid by those at home. And here at Presidency College Dr. Bose is at home. In one sense India is his home, in another and closer sense Bengal is his home, in another sense Calcutta is his home: but in a sense more intimate than any of these, Presidency College is his home, because Presidency College has been the home of Dr. J. C. Bose's work. Here his work was begun, here it has been carried on for more than thirty years, and here it is still to go on. Not only has Dr. Bose's work been done at Presidency College, but wherever he has gone, Dr. Bose has taken care that Presidency College should be associated with his work. Wherever he has gone, he has seen to it that he should be known not merely as the eminent Indian scientist Dr. J. C. Bose, or Dr. J. C. Bose, the man of genius from Bengal, but also as Dr. Bose of the Presidency College, Calcutta. For this, because Dr. Bose has made our college known in many parts of the world, where otherwise it might never have been heard of, we owe him gratitude. We owe him gratitude for many other reasons. I will mention just one other. In a sense, it may be said that we owe to Dr. Bose these laboratories which, except for the covering of this tent, you would see towering above our heads. I say in a sense because I know, of course, that the laboratories were actually designed when Dr. Bose was away from India, and I also know that there have been many other workers in Science both earlier and later. Dr. Bose would himself be the first to acknowledge this. There were, for instance, in earlier days, Dr. Mahendra Lal Sircar, Sir Alexander Pedler and Sir John Eliot, and there are, happily, young scientists coming on in great numbers now. For all that it is true that in a sense we owe these laboratories to Dr. J. C. Bose and Dr. P. C. Ray, whose names will go down to posterity linked together as the two men who won for scientific work in India complete recognition. In support of what I am saying, I may recall the words used by His Excellency Lord Carmichael in opening these laboratories in 1913, words which many here may remember. His Excellency said: "Good scientific work benefits not only the place where it is done but the whole world."

By building these laboratories you have shown that you recognize the value of the work done by my friends, Dr. J. C. Bose and Dr. P. C. Ray, and that you recognize it in a way in which all truly scientific men would soonest see their work recognized by furnishing those distinguished men with better facilities to carry on their researches."

I think that while to-day we take pride in the greatness of Dr. Bose's work and his success, we may also take pleasure in the happiness of his career as a man of science, in its peculiar felicity. When I say that, I do not mean that Dr. Bose has not had his difficulties. All men have their difficulties. It has been written, "The heart knoweth its own pityness and a stranger doth not intermeddle with its own joy." This is true of all, both great and small. There is also the loneliness of the men of science. In one way, no doubt Science is the most catholic and universal of all things, because its results are for all, and benefit the whole world. But in another way, the teacher of new truth, whether in science or in any other sphere, is lonely. He has his own thoughts, his own aims, which, for a long time, perhaps the rest of the world can not understand. So Dr. Bose, like other lesser men, has had his difficulties to get over and occasional disappointments. The great fact, however, about Dr. Bose's career is, its astonishing success, the completeness of the recognition which he has now won. This recognition culminates in the new appointment which is in part the occasion of our meeting here to-day. You have all probably heard of this new appointment and so I need not go closely into details. Dr. Bose is henceforth to be free to give all his thought and all his time to his research work. A sum of Rs. 25,000 has been granted him at once for equipment and, independently of that, there is a grant of Rs. 30,000 a year for five years. It is, I believe, a quite unique honour that the work of a man of science should be endowed by the State in this way. Research has, no doubt, been endowed by the State in many countries, but it has been research in general, not the researches of a particular man. Possibly Pasteur is an exception, and there may be others. I do not know enough of the subject to speak with complete assurance, but it is certain, I think, that no man of science has ever before been so honoured in India. I very much doubt whether any man of science in the whole world has been honoured quite in this way.

The honour done to Dr. Bose by Government is a very rare honour.

We offer our heartiest congratulations to Dr. Bose, and wish him long life and prosperity and continued success in his work. We should also not omit an acknowledgment of our gratitude to the Government of Bengal and to the Government of India. For the Government of India and the Government of Bengal have collaborated in what has been done. Some share of the praise, you will agree, should also be given to the man who in Bengal has been most instrumental in bringing about this consummation, Mr. P. C. Lyon.

I will now only just read to you a resolution passed this afternoon by the College Council, and two resolutions to which the Governing Body of the College have recently expressed their agreement. The resolution of the College Council is :—

“ That the College Council congratulate Dr. J. C. Bose on his new appointment and at the same time record their regret that his active connection with the staff, of which he has so long been a member, now terminates. They wish him full success in the continuance of his great work.”

The resolutions of the Governing Body are :—

- (1) “ That the Governing Body of Presidency College offer their congratulations to Dr. J. C. Bose on his new appointment, and on the recognition accorded thereby to the value and importance of his work. At the same time, they desire to express their great regret at the close of his active association with the teaching staff of Presidency College and their sense of the benefits his work and his example have conferred on the College and on science studies in India.”
- (2) That in recognition of his eminent services to science and Presidency College, Dr. Bose be appointed *honoris causa* Emeritus Professor of the College.”

It is now high time that I should withdraw and give place to those who are the real hosts this evening, and to whom the inception and carrying out of this social gathering is wholly due, the students of the College.”

Mr. Ananga Mohun Dam, B.A., then delivered a speech on behalf of the present students of Dr. Bose. Referring to the great importance of Dr. Bose's researches and the high honour accorded to him in all parts of the globe, the speaker said that though the students here had heard and read of great savants in the domain of science, they had

never the opportunity of coming into direct contact with them, but in Dr. Bose they were in actual contact with an intellectual dynamo. Dr. Bose's splendid achievements have finally given the lie to the erroneous view entertained in some quarters that the Indian soil is not congenial to the growth of science. It is extremely gratifying that several foreign universities have established scholarships to enable their students to carry on research work under the direct supervision of Dr. Bose at the Presidency College Laboratory, and this very agreeably recalls to our mind the golden days of Ancient India when students from distant countries flocked to the Universities of Nalanda and Takshasila to sit at the feet of great Indian savants. In conclusion the speaker said that Dr. Bose by scientifically demonstrating the presence of life in all things has realised the noble mission of a spiritual conquest of the world by India contemplated by the late Swami Vivekananda.

This was followed by an excellent speech from another student, Mr. Chaudhuri Afsar Ali, B.Sc.

The following resolution was then read and carried with acclamation :—

“That the meeting places on record its deep-felt gratitude to the Government for the high recognition of the services rendered in the cause of Science by our Professor Dr. J. C. Bose in the creation of a new appointment for research, and further resolves to send the following telegrams to the Government of Bengal, the Government of India and the Secretary of State for India :—

The students of the Presidency College are deeply thankful for the unique honour done to their Professor Dr. J. C. Bose by the special appointment for research.”

Mr. Rabindra Nath Chaudhuri, B.Sc., on behalf of the students of the College, presented a big brass *Arati Pradeep* * to Dr. Bose.

Dr. Bose, who was lustily cheered as he rose, said that it was his rare good fortune to have been amply rewarded for the hardships and struggles that he had gone through by the generous and friendly feelings of his colleagues and the love and trust of his pupils. He would say a few words regarding his experience in the Presidency College for more than three decades, which he hoped would serve to

* The Secretaries gratefully tender their thanks to Sir Rabindra Nath Tagore for suggesting and to Mr. Abanindra Nath Tagore, C.I.E., for selecting this presentation article, which symbolises the spreading of the light of knowledge in all directions.

bring all who loved the Presidency College—present and past pupils and their teachers—in closer bonds of union. He would speak to them what he had learnt after years of patient labour, that the impossible became possible by persistent and determined efforts and adherence to duty and entire selflessness. The greatest obstacle often arises out of foolish misunderstanding of each other's ideals, such as the differing points of view, first of the Indian teacher, then of his Western Colleague, and last but not least, the point of view of the Indian pupils themselves. In all these respects his experience had been wide and varied. He had both been an undergraduate and a graduate of the Calcutta University with vivid realization of an Indian student's aspirations; he had then become a student of conservative Cambridge and democratic London. And during his frequent visits to Europe and America he had become acquainted with the inner working of the chief universities of the world. Finally he had the unique privilege of being connected with the Presidency College for thirty-one years, from which no temptation could sever him. He had the deepest sense of the sacred vocation of the teacher. They may well be proud of a consecrated life—consecrated to what? To the guidance of young lives, to the making of men, to the shaping and determining of souls in the dawn of their existence, with their dreams yet to be realised.

Education in the West and in the East showed how different customs and ways might yet express a common ideal. In India the teacher was, like the head of a family, reverenced by his pupils so deeply as to show itself by touching the feet of their master. This is no servile act if we come to think of it; since it is the expression of the pupils' desire for his master's blessings, called down from heaven in an almost religious communion of souls. This consecration is renewed every day, calling forth patient foresight of the teacher. As the father shows no special favour, but lets his love and compassion go out to the weakest, so it is with the Indian teacher and his pupil. There is in the relation something very human, something very ennobling. He would say it was essentially human rather than distinctively Eastern. For do we not find some thing very like it in Mediaeval Europe? There too before the coming of the modern era with its lack of leisure and its adherence to system and machinery, there was a bond as sacred between the master and his pupils. Luther used to salute his class every morning with lifted hat, "I bow to you, great men of the future, famous administrators yet to be, men of learn-

ing, men of character who will take on themselves the burden of the world." Such is the prophetic vision given to the greatest of teachers. The modern teacher from England will set before him an ideal not less exalted—regarding his pupils as his comrades, he as an Englishman will instil into them greater virility and a greater public spirit. This will be his special contribution to the forming of our Indian youths.

Turning to the Indian students he could say that it was his good fortune never to have had the harmonious relation between teacher and pupils in any way ruffled during his long connection with them for more than three decades. The real secret of success was in trying at times to see things from the student's point of view and to cultivate a sense of humour enabling him to enjoy the splendid self-assurance of youth with a feeling not unmixed with envy. In essential matters, however, one could not wish to meet a better type or one more quickly susceptible to finer appeals to right conduct and duty as Indian students. Their faults are rather of omission than of commission, since in his experience he found that the moment they realised their teacher to be their true friend, they responded instantly and did not flinch from any test, however severe, that could be laid on them.

A hearty vote of thanks to the chair and to the guests was then proposed by Mr. Rajendra Nath Bose, B.A. The function came to a close with a song of Sir Rabindra Nath Tagore sung by Mr. Ajit K. Chakravati, B.A.

Tea and light refreshments were then served to the guests and to the students of the College.

BHOLA NATH ROY.

Library Notes.

The following volumes have been added to the College Library since November last.—

Author.	Title.
Abney, Sir W. DeW.	Researches in colour vision and the trichromatic theory. 8vo. London, 1913.
Allen, H. S. . .	Photo-electricity: The liberation of electrons by light,—with chapters on fluorescence and phosphorescence and photo-chemical actions and photography. 8vo. London, 1913.
Austin, A. . .	Alfred the Great: England's Darling.

Baldwin, C. S. . . An Introduction to English Medieval Literature.
8vo. New York, 1914.

Baly, E. C. C. . . Spectroscopy. 8vo. London, 1912.

Bailey, J. . . Milton. 12mo. London.

Barker, E. . . Political thought in England from Herbert Spencer to the present day. 12mo. London.

Bose, Rai Bahadur Chunilal. { Physical effects of some intoxicating drugs.

Bayliss, W. M. . . Principles of General Physiology.

Bevan, E. . . Brothers all: the war and the Race question.
[Papers for War Time, No. 4]. 8vo. London, 1915.

Bowley, A. L. . . The effect of the war on the external trade of the United Kingdom: an analysis of the monthly statistics, 1906—1914.

Buller, A. H. R. . . Researches on Fungi. 8vo. London, 1909.

Campbell, N. R. . . Modern Electrical Theory. 2 copies. 8vo. Cambridge, 1913.

Cajori, J. . . A History of Physics in its elementary branches, including the evolution of Physical laboratories.
8vo. New York, 1914.

Chree, C. . . Studies in terrestrial magnétism. 8vo. London, 1909.

Cohen, J. B. . . Organic Chemistry, vol. 2.

Collins, V. I. . . Princeton.

Cornford, L. C. . . With the Grand Fleet. And a message from Admiral Lord Charles Beresford.

Conant, L. L. . . The number concept: its origin and development.
8vo. New York, 1910.

Datta, Roby . . Poems.

Do. . . Stories in blank verse.

Dicksee, L. R. . . Business Methods and the War.

Dicey, A. V. . . An Introduction to the study of the Law of the Constitution.

Dunning, W. A. . . A History of Political Theories from Luther to Montesquieu.

Duroiselle, C. . . A Practical Grammar of the Pali language.

Ensor, R. C. K. . . Belgium. 12mo. London.

Halliburton, W. D. . . The essentials of Chemical Physiology for the use of students. 8vo. London, 1914.

Hollander, J. H. . . The abolition of Poverty.

Hopkins, A. A. . . The Scientific American Cyclopaedia of Formulas.
8vo. New York, 1915.

Hopkins, E. W. . . The Great Epic of India: its character and origin.
8vo. New York, 1902.

Haas, P. & Hill I. G. An introduction to the chemistry of Plant products.
8vo. London, 1913.

Holt, L. H. . . An Introduction to the study of Government.

Hoffmann, Dr. J. . . Alpine Flora for tourists and amateur Botanists.
Translated by E. S. Barton (Mrs. A. Gepp).
8vo. London, 1912.

Findlay, A. . . Osmotic pressure. R. 8vo. London, 1913.

Friend, J. N. . . The Theory of Valency. 8vo. London, 1909.

Goswami, Satyananda. } Tatta Sandharba.

Guthrie, J. . . Practical Physics: Molecular Physics and Sound.

Kaviraj Rash Behari Roy. } Ayurveda Tattava Vijnana, pts. 1 and 2.

Kaye, G. W. C. . . X-Rays.

Imam Abu Basher } Al-Kitab.
Amar al-Sibwyah.

Lewis, Sir G. C. . . An essay on the Government of dependencies.
8vo. Oxford, 1891.

Lloyd, R. E. . . The Growth of Groups in the animal kingdom.
8vo. London, 1912.

Do. . . What is Adaptation?

Do. . . An Introduction to Biology for students in India.

Marshall, A. . . Principles of Economics; An introductory volume. 8vo. London, 1910.

Marshall, J. H. A. . . The Physiology of Reproduction.

Meredith, J. C. . . Kant's critique of Aesthetic Judgment. Translated with seven introductory essays, notes and Analytical Index. 8vo. Oxford, 1911.

More, L. T. . . The Limitations of Science. 8vo. New York.
1915.

Marriott, J. A. R. . . Second chambers: an inductive study in Political Science.

Murray, G. . . The Foreign Policy of Sir Edward Grey, 1906—
1915.

Mayor, J. B. . . Chapters on English metre.

Mukherjea, P. (Ed.) Indian Constitutional Documents (1773—1915) with a supplement, 3 sets. 8vo. Calcutta, 1915.

Plimmer, Dr. R. H. A. Practical Physiological Chemistry. 8vo. London, 1910.

Planck, Dr. M. . . Treatise on Thermo-Dynamics. 8vo. London, 1912.

Rashdall, H. . . The Metaphysics of Mr. J. H. Bradley. (From the Proceedings of British Academy, Vol. V.) 8vo. London.

Rutherford, E. . . Radio-active substances and their radiations. 8vo. Cambridge, 1913.

Rappoport. Dr. A. S. (Ed.). . . Selections from Russian Prose. Selected, compiled and translated by Dr. A. S. Rappoport. 16mo. London.

Rawlinson, H. G. . . Shivaji the Marhatta. 8vo. Oxford, 1915.

Russell, L. T. . . An Introduction to Logic from the standpoint of education. 8vo. London, 1914.

Searle, G. F. C. . . Experimental Harmonic Motion: a manual for the laboratory.

Silberstein, L. . . Vectorial mechanics. 8vo. London, 1913.

Sorauer, Dr. P. . . A Popular Treatise on the Physiology of Plants, for the use of gardeners or for students of horticulture and of agriculture. Translated by J. E. Weiss. 8vo. London, 1895.

Tagore, Rabindra }
Nath. } Gora (in Bengali). 2 parts. 8vo. Calcutta, 1911.

Saladdin Khuda }
Buksh. } A History of the Islamic peoples. 8vo. Calcutta, 1914.

Timiriazeff, C. A. . . The Life of the Plant, translated by Miss Anna Cheremeteff. 8vo. London, 1912.

Vredenburg, E. W. . . A Summary of the Geology of India. 8vo. Calcutta, 1910.

Vincent, S. . . Internal Secretion and Ductless Glands.

Webb, C. C. J. . . A History of Philosophy. 12mo. London.

Whetham, W. C. D. . . Science and the Human Mind.

Wright, H. N. . . Catalogue of coins in the Indian Museum, vols. 2 and 3.

Young, J. W. . . Lectures on fundamental concepts of Algebra and Geometry; with a note on the growth of Algebraic Symbolism. 8vo. New York, 1910.

Young, J. W. A. Monographs on topics of modern mathematics relevant to the elementary field. 8vo. New York, 1911.

Zeller, Dr. E. . . Outlines of the History of Greek Philosophy. Translated by S. J. Alleyne and E. Abbott. 8vo. London, 1914.

King's College Calendar, 1915—1916. 8vo. London, 1915.

Geological and Natural History Survey of Minnesota:

Final Report, vols. I, II, III, IV and V (2 parts). R. 4to. Minn., 1882—1900.

Annual Report Nos. 3, 6, 10, 11, 18, 20, 22, 23 and 24. 8vo. Minn., 1878—99.

Bulletins. Nos. 1, 5, 7, 8 and 10. 8vo. St. Paul and Minn., 1889—94.

Ashi 'At al-Lam'at
fi Sharh al-mish-
kat; Tuḥal al-
Qutub; Abwab al-
Jinan; Dewan
Shahib. } Four Manuscripts presented by Md. Zakaria
Abu Kasim (4th Year B.Sc.).

Calcutta University Minutes for 1915, Pts. 1 to 3.

The "Times" History of the War. Parts 61 to 64, 66, 67.

Carnegie Foundation for the Advancement of Teaching: Annual Report 1914.

Indian Thought: A quarterly devoted to Sanskrit Literature, vols. 3 to 7.

English translation of Sushruta Samhita. Edited by Kaviraj Kunjalal Bhishagratna, 2 vols.

Report of the Dr. Bose Reception Committee.

A MEETING of the students of Presidency College was held on Monday, the 29th November, 1915, in the Physics Theatre under the presidency of Dr. D. N. Mullick, and it was proposed to hold a social gathering in honour of Dr. Bose. A committee was then formed consisting of eight students to represent undergraduate classes and eight students to represent post-graduate classes, including two joint secretaries, one from the Arts and another from the Science Department. The members of the Committee were entrusted with the work of collecting

subscriptions from their respective classes while the secretaries collected subscriptions from the staff.

Contributions amounted to Rs. 378 in all, of which Rs. 98 was subscribed by the staff and the rest by the students.

Below is a detailed account of our disbursements :—

			Rs.	A.	P.
Invitation cards, admission cards and programmes			..	51	0 0
Refreshments	119	0 0
Pandal	29	0 0
Presentation articles	40	0 0
Telegrams	24	0 0
Postage stamps	2	0 0
Flowers	14	8 0
Coolie hire	9	10 0
College bearers	16	0 0
Miscellaneous	11	2 0
Total			..	316	4 0

Of the surplus Rs. 61-8, Rs. 30 was paid to the Dr. Bose Bust Fund and the balance (Rs. 31-8) was made over to Mr. Harish Chandra Sinha, B.Sc., Secretary of the College Famine Fund.

We take this opportunity of conveying our heartfelt thanks to our generous contributors and to the enthusiastic band of workers who in many ways helped us in bringing our event to a successful close. To Maulavi Hidayat Husain, Senior Professor of Arabic and Persian, we are particularly grateful for kind advice and for giving us the use of his class rooms at great personal inconvenience.

In conclusion, we thank Mr. J. C. Mitter, Deputy Accountant General, and Dr. S. C. Banerjee of the Improvement Trust for their welcome proposal of erecting a marble bust of Dr. Bose. We appeal to the liberality of Dr. Bose's many ex-students and admirers for handsome contributions to enable the Committee to give effect to the worthy project.

BHOLANATH RAY, B.A.,
BEJOY KRISHNA BASAK, B.Sc.,
Secretaries, Dr. Bose Reception Committee.



Students' Relief Fund Committee.

<i>President</i>	..	Prof. P. C. Ray, Ph.D., C.I.E.	
<i>Treasurer</i>	..	Prof. K. N. Miter, M.A.	
<i>Secretary</i>	..	Prof. P. C. Ghose, M.A. (P.R.S.)	
			RS. A. P.
Carried over from last year's account	..	215 0 0	
Loan from Prof. P. C. Ghose, M.A.	..	87 0 0	
Loan returned	..	20 0 0	

		Total Receipts	.. 322 0 0

Charity	..	59 0 0	
Loan	..	225 0 0	
Returned to Prof. P. C. Ghosh	..	30 0 0	

		Total Disbursements	.. 284 0 0

The amount disbursed include Rs. 4 given away to a student outside the college.

PRAFULLA KUMAR SARKAR,

Asst. Secretary.

Seminar Reports.

THE BIOLOGICAL SOCIETY.

THE fifth annual meeting of the Biological Society was held on the 21st December last at 5-30 P.M. in the Physiological Laboratory under the chairmanship of our most esteemed Principal, Mr. H. R. James. Many distinguished men were present, among whom the following may be mentioned :—

The Hon'ble Dr. Devaprasad Sarbhadhikary, the Vice-Chancellor ; Dr. J. C. Bose, Dr. B. L. Chowdhury, Dr. D. N. Mallik, Dr. Bimani-bihary De, Dr. G. S. Bose, Prof. Geddes, Prof. S. C. Mahalanobis, Prof. S. C. Mukherjee, Prof. H. C. Das Gupta, Prof. N. C. Bhattacharjee, Prof. S. C. Banerjee.

The hall was crowded by students and ex-students of Biology, numbering about 300.

The meeting commenced with music, followed by a song suitable

to the occasion, after which came an address of welcome by the President of the Society, Prof. S. C. Mahalanobis. In the course of his address he traced the history of Biological studies in Presidency College from the earliest days to the present time and referred to the increasing enthusiasm with which much larger numbers of students are now taking up Biology.

The Secretary, Promoderanjan Das Gupta, then placed the report of the working of the Society for the fifth session before the meeting.

He was followed by Professor Geddes who delivered a short and interesting speech on the utility of studying the Biological Sciences.

The Vice-Chancellor, Dr. D. P. Sarbadhikary, then gave a very interesting speech, remarking that he was very glad to see that such excellent progress had been achieved by the Society.

The Chairman then addressed the meeting. He remarked that Physiology is a science of the utmost importance, the general principles of which everybody ought to know. He hoped that the Society would in future arrange a series of lectures embodying the general principles of the science for the benefit of the general body of students.

Prof. N. C. Bhattacharjee thanked the guests for the kind encouragement they had given to the Society by their presence.

Afterwards lantern demonstrations of some experiments of biological importance were shown.

The guests and the members were served with refreshments, after which the meeting dispersed.

THE PHYSICAL SOCIETY.

The proceedings of the Physical Society were opened by a popular Lecture on the "History of a Discovery" by Dr. J. C. Bose. It was a highly interesting lecture, and in it the learned lecturer showed how a Scientist had to work patiently in order to get recognition of his theory. The substance of the lecture has been published (see *Modern Review*, December 1915) and so we need not give it here. There were more than 250 students present in the meeting.



Dr. D. N. MALLIK, Sc.D., F.R.S.E, on "Researches on the Electric Discharge through a gas."

The first regular meeting of the Society was held in the large Physics Theatre when Dr. Mallik read a paper on his Researches on the Electric

Discharge through a gas. The lecture was illustrated by lantern projections. The whole work was carried on in the Physical Laboratory of the Presidency College by him and Mr. A. B. Das, M.Sc. Starting with discharge at pretty high pressures, the learned lecturer demonstrated the various changes in the nature of the discharge as the pressure was decreased gradually. The showery discharge changed into band discharge which rotated under a transverse magnetic field. On further reduction of pressure, the band became thicker ; and Cathode dark spaces became more prominent. At this stage the rotation was found to cease and there was dispersal of discharge lines and twist on exciting the magnetic field. As the pressure was further reduced, the discharge became striatory which became more and more prominent and thicker. The action of the magnetic field was quite different in this case, increasing the number of striae, shortening the dark space, and bulging out the striae. As the pressure was still further reduced, the Cathode glow extended the whole tube and striking the glass surface made it phosphorescent. Magnetic field in this case produced illumination and concentrated the phosphorescence in the form of a ring. All these investigated phenomena have been explained theoretically. He showed that all these changes depended on the relative number of positive and negative ions, changing with pressure. The lecturer finally showed how the spectrum of ordinary air changed in a peculiar way with pressure.

Prof. C. W. Peake, our President, took the chair and there were more than 70 members present.



MR. SAILENDRA NATH GHOSH, M.Sc., on "Properties of iron deposited electrolytically in a magnetic field."

The second meeting of the Society took place on the 7th January 1916, when Mr. Sailendra Nath Ghose read a paper on the "Properties of iron deposited electrolytically in a magnetic field." This is the paper on the strength of which (according to the new Regulations) he obtained his M.Sc. degree this year, standing first in the First Division. It is also a great credit to him that he is the first M.Sc. to obtain the degree by submitting a thesis in Physics. In this paper he showed how he obtained a new magnetic constant—"Retentivity Constant" = Coercive force \times (Retentivity \div max. magnetising force)—which was independent of the mass, length, and physical condition, etc. of the magnetic substance. He examined ordinary watch spring and finely

deposited iron and found that in both cases the constant comes out and this is independent of the quantities mentioned above.

Prof. C. W. Peake took the chair and there were about 35 members present.

RABINDRANATH CHAUDHURI.

Under the auspices of the Physical Society we had on the 21st of January last a very interesting lecture on the Art of the Violinist by Mr. C. V. Raman. The lecturer's extensive researches on Vibrations are well-known to students of Science. The scientific study of the Art of the Violinist which formed the subject-matter of the lecture is one of the many fruitful results which have been yielded by his researches.

He said that the art of producing music on the Violin consists in regulating the pressure and velocity of the string at the bow-point. What happens is that the string moves with an acceleration for some time and then it suddenly slips back and is brought to rest. The nature of the motion at the bow-point he demonstrated by lantern slides of actual photographs taken by him. He demonstrated with a violin to the audience the difference in the "sharpness" and quality of the tone under different pressure and area of contact.

The function of the 'mute'—which some violinists use to modify the tone of the violin—he showed by putting it in different parts of the bridge. The action, he said, has been explained by the rocking of the bridge in its own plane. However, he has been led to believe by his own investigation that over and above the fact that the bridge rocks in its own plane, a transverse to and fro motion takes place—and it is the latter which is solely responsible for the action of the mute. His investigations are proceeding in this line and we hope to hear of further developments shortly.

DURGADAS BANERJI,
Fifth Year, Physics.

REPORT OF THE ECONOMICS SEMINAR.

The work of the Economics Seminar has been going on well. Six papers have been read up to this month; all of them are highly successful and contain elaborate information on the different branches of the subject—showing also a high degree of originality on the part of the writers. The President, Prof. J. C. Coyajee, took a very keen interest in the discussions and suggested new directions and improvements.

The records of all the papers read have been preserved in the Seminar with care. The last paper was read on the 7th December 1914 by Babu Mohit Kumar Sen Gupta, B.A., on Eugenics. It dealt with the important problem of the influences of heredity and with the necessity of improving our species, and showed how extensive production of necessities, comforts and luxuries consequent upon industrial improvements and inventions though tending to the economic welfare of the people, has left unsolved the question of improving in quality and efficiency the stock of our species, how in spite of education and other healthy environmental influences furnished by the care of the civilised governments, the inborn defects and evil tendencies have been continuing from generation to generation, how the humanitarian spirit of the modern civilised work has been contributing towards maintaining the existence and promoting the propagation of our unfit members to such an extent that an alarm has been expressed at the danger that lies ahead. The paper concluded that the problem though difficult is capable of solution and proposed certain proper remedies for the purpose.

The paper was well written and based upon the well-known authorities of Galton and Karl Pearson. The President in his speech noted a few more important points from other sources and the meeting then came to a close.

JAMINI PRASANNA RAI,
Secretary.

PHILOSOPHICAL SEMINAR.

Since our last report we have had six meetings, but two of the papers having required more than one sitting for complete discussion, we had only four papers. The following is the list of the subjects discussed :—

1. "*Baudha doctrine of Impermanence in relation to European Thought*," by Babu Susil Kumar Mazumdar, B.A.
2. "*Problem of Freedom*," by Babu Saroj Kumar Das.
3. "*Agnosticism*," by Babu Bholanath Roy, B.A.
4. "*Relativity of Knowledge*," by Babu Sudhiranjan Roy Chowdhury.

In all the meetings Dr. A. N. Mookerjee presided. We must heartily thank Dr. Mookerjee for the very keen and lively interest he takes in these meetings; and but for his efforts we could not have made them the success they were.

Dr. P. K. Roy and Dr. B. N. Seal inspected our Seminar and were very greatly satisfied with our work. Dr. Ray very kindly went through our proceedings, and immensely benefited us by his valuable suggestions.

SUSIL MITRA,
Secretary.

SCIENCE NOTES.

The third session of the Indian Science Congress was held at Lucknow this year under the presidency of Sir Sidney Burrard, K.C.S.I., F.R.S. We are glad to note that the members of our College took a very prominent part in the deliberations of that body. The Chemistry Section was well represented by Dr. P. C. Roy, Prof. Rasiklal Dutt and some of our ex-students working in the Presidency College Laboratory. Dr. Roy's paper on Compounds containing a Sulphur Chain and his discovery of the substitution of lighter radicals by heavier ones were received with much interest. In the Physics Section also the papers of Dr. D. N. Mallik and Mr. A. B. Das on discharge through vacuum tubes created a very good impression.

Prof. H. C. Das Gupta communicated several papers to the Geology section, but unfortunately he could not take part in the proceedings personally.

The most outstanding feature of the occasion from the point of view of the general public was the entertaining lecture of Prof. J. C. Bose on "Invisible Light." The Senate Hall was packed though admission was by tickets (of Re. 1) only. His Honour Sir James Meston graced the occasion with his presence. The lucid exposition, the quiet humour and the magnificent experimental skill of the professor gave to the narration of the abstruse subject the charm of a fairy tale.

JNAN CHANDRA GHOSH.



Hostel Notes.

EDEN HINDU HOSTEL NOTES.

WE are glad to notice that the hostel is keeping excellent health and that it has not lost its morale though the examinations are so near. The boarders are having their usual round of amusements and are as jolly as ever.



This is the season of our ward anniversaries and witnesses a good deal of life in the hostel. A ward anniversary savours a little of party-spirit and is sometimes responsible for unpleasant happenings. But it has its utility. It supplies a pleasant link between the boarders and the ex-boarders and calls them back to the old and dear home of their student life. It opens to us facilities for meeting our professors on a social basis. It fosters a healthy spirit of emulation by offering prizes for proficiency in sports and literary exercises. It also encourages sociable feelings and the shyest man in the ward develops a wonderful sociability. Last but not least it gives us the pleasure of extending our hospitality to all our fellow-boarders in the hostel.



The Ward II anniversary took place on the 11th December, 1915. Prof. J. C. Coyajee presided and took a keen interest in its proceedings. We are grateful to Mr. Coyajee for his kind and appreciative remarks. The interest of the evening was enhanced by the presence of Mrs. Coyajee who kindly distributed the prizes. The function was a great success, from many points of view, though we must note with regret that we missed some familiar faces, students and professors.



The boarders of Ward IV have nobly resolved to forego the pleasures of an anniversary this year to help the famine-stricken people of our country. Their enthusiasm has not, as it often does, ended in eloquent speeches, but a very decent sum has been raised for the purpose. Eighty-seven rupees were promised on the spot and altogether a sum of Rs. 188 has been sent to the Bankura Famine Relief Fund. This self-sacrificing spirit we shall be glad to see emulated.

Ward III is not in a position to hold its anniversary. This ward has the smallest number of boarders and the number was still further reduced after the Pujas. The boarders have a pretty hard time of it. For instance, they have to send workers for the Mess-Committee just as other wards do. The fact that the rooms of Ward III are dark and ill-ventilated explains its thinning numbers.



Ward I has not yet determined on its course of action. The general opinion seems to favour the idea of giving aid to a night school instead of holding an anniversary.



The Durbar Day was celebrated in the hostel with festive cheer. Ward V organized a meeting under the presidency of our Superintendent. Ward II arranged for fire-works and a concert and the other wards enthusiastically joined in the celebration. Three lusty cheers for the King-Emperor were echoed and re-echoed in the hostel quadrangle.



The Mess-Committee is becoming a very popular institution. To its able management we owe the improved hostel diet. Instead of the monotonous "permutation and combination" of potatoes we daily expect a surprise in the dining hall.

The boarders were all disappointed to learn that they would be deprived this year of the usual New Year's Day Feast at the expense of the Government. A sort of feast was however arranged on the 1st January, but the unfortunate feature about it was that many boarders were at the time away from the hostel. But the present Secretary is, we hear, shortly going to treat us to a richer feast.



The hostel Library is gradually being turned into a highly useful institution and is in fact being used as a supplement to our College Library. It subscribes a large number of English dailies and Bengali magazines, and has a good stock of Bengali books. The Bengali books are in special demand and the gentlemen in charge have quite a busy time of it. Every day our common room attracts a large number of boarders who spend here a very pleasant and profitable hour.



The wholesome influence of these self-governing institutions such as the Mess-Committee, the Library Committee, the Poor Fund Committees,

and the Nursing Societies are not always borne in mind. The boarders evince a strong interest in these institutions which are working admirably. Our hostel provides a scope for the full and free play of all our faculties and seeks to equip us with the necessary virtues of a worthy citizen.



The Hockey season is now in full swing. Every morning and evening one can see a number of players running about with their sticks, to the no small terror of a party of Badminton players in a corner of the field. It is quite amusing to notice how some belated gentlemen hang about the field in the hope of taking the place of somebody retiring 'wounded' or for any other reason.

BAKER AND ELLIOT HOSTEL NOTES

Mr. A. F. M. Wahab, who was the Superintendent of the Baker Hostel has retired and Mr. M. D. Yusuff, M.A., has succeeded him as the Superintendent of the Hostel.

Mr. Yusuff is a very able and enterprising man and during his office the hostel, it is hoped, will prosper a good deal. He already takes a keen interest in the material and moral progress of the students. We welcome him most cordially.

The total number of boarders this year in the Baker Hostel is 94, and in the Elliot Hostel 45.

The Madrasa Hostel Duty Fund, which was started with the noble object of helping the poor and deserving students, is doing very well. It has been helping many poor students. We are grateful to Mr. Hashem Ali Khan, B.A., for the attention he gives this Fund.

The anniversary meeting of the said fund was held last month with great éclat. Mr. N. D. Beatson-Bell, C.S.I., I.C.S., who presided on the occasion, congratulated the organizers on the success they had achieved in this laudable work.

The annual "melad-sarif" was held on the 29th January, to celebrate the Fatiwa-Dwajdam. The boarders of both the Baker and the Elliot Hostels joined in the ceremony. Light refreshments were served to the students.

The Debating Society 'Al-sihad' organized by the boarders of the Elliot Hostel is doing very useful work. Weekly meetings are held under its auspices, and many interesting subjects are discussed. A library has been started for the benefit of the students.

The Recitation competition of the boarders of the two hostels took place at the Muslim Institute: prizes were distributed to the successful competitors.

A. H.

Athletic Notes.

TENNIS CLUB NOTES.

Presidency College vs. Medical College.

FIRST day:—The game was played on one of our new lawns. Our Principal was present at the game.

Our College was represented by Tarak Sen and Sarat Sarkar, both of whom did well. At first the Medicals did better than our pair but after the first set was over our pair was the better of the two. In the third set the game was one-sided. The Home pair won the last two sets by 6-4, 6-1.

Second day:—Our College was represented by Sukanto Rao and Rajendra Barua. The standard of the game was much lower than the first day's game. But on the whole our pair was the better one. Rajendra played a very steady game. The game ended in our favour: we won the first two sets by 6-4, 6-2.

Metropolitan College vs. Presidency College.

The Metropolitan pair was a very fine combination and the Home pair was defeated quite easily. Although we were defeated yet the best of the four was Tarak Sen. Metropolitan College won by 6-3, 5-7.

Present vs. Ex-students.

The games were played on one of the lawns and on the Pucca Court. Most of our best pairs did not turn up. However the games were played with those who were present.

The College was represented by Sukanto Rao, Kshetramohan Mitra and Akhya Laha; among the ex-students Mr. J. M. Sen-Gupta was the most prominent. The first pair was easily defeated by the ex-students. Mr. Sen-Gupta was smashing every ball from the service line and his opponents were quite helpless. The game was one-sided and ended in favour of the ex-students by 6-1, 6-2.

The second pair did better than the first; among the second pair of the ex-students Mr. P. C. Roy was prominent. But the game ended in our favour by 6-2, 7-5.

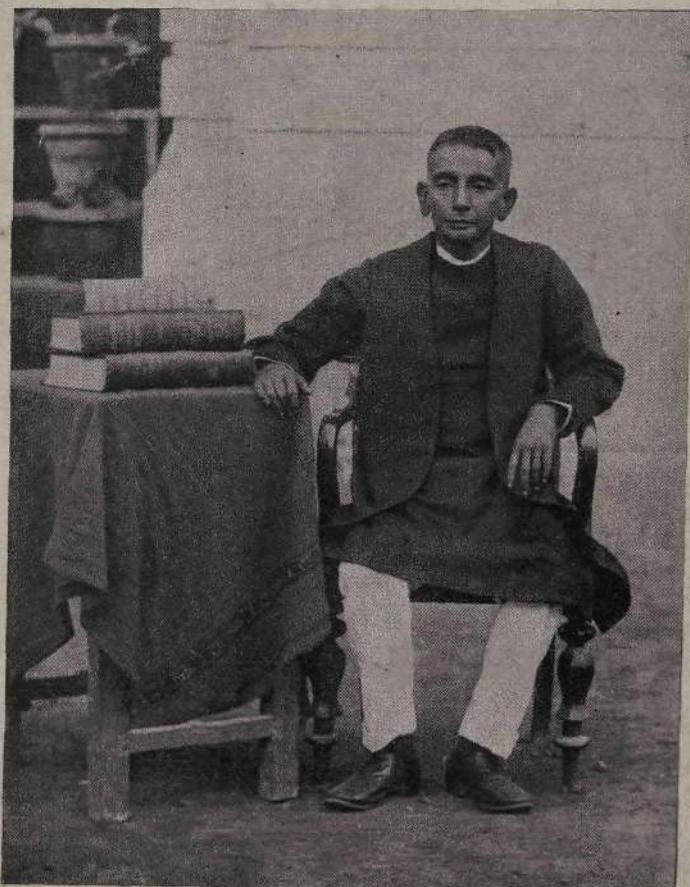
School Notes.

PRIZE-GIVING DAY.

IN a spacious pavilion artistically decorated with flags, festoons and floral wreaths, in the compound of the Hare School, the annual prize distribution ceremony of both the Hare and Hindu Schools came off on January the 10th. The great interest that Principal James takes in these institutions is well-known, and it was by his good offices that the students had the unique privilege of receiving their prizes from the hands of His Excellency the Governor of the Presidency. The Principal received the guests, old students and guardians of the present students. There was a notable gathering among whom the following were noticed —Maharaja Kumud Ch. Sinha of Susang, Raja Manmatha Nath Roy of Santosh, Kumar Sri Panchanan Mukerji of Uttarpara, Kumar Manmatha Nath Mitra, The Hon'ble Mr. P. C. Lyon, The Hon'ble Mr. Monahan, Mr. Gourlay, Dr. Satish Ch. Vidyabhusan, and others. All the gentlemen present were presented with button-holes and His Excellency was garlanded amidst loud cheers while stepping on to the dais. A batch of students opened the proceedings by singing a welcome song in chorus. Rai Rasamay Mitra Bahadur, Head Master Hindu School, then welcomed His Excellency to preside over the function in the course of the following speech:—

“May it please Your Excellency.—On behalf of the staff and students of the Hindu and Hare Schools, two of the oldest institutions of the province, I most respectfully welcome Your Excellency to our humble ceremony to-day. Words fail us to express how grateful we are for Your Excellency's gracious presence. Aware as we are of our various imperfections and of Your Excellency's numerous engagements, Your Excellency's keen and lively interest in all that concerns the welfare of the student community emboldened us to approach Your Excellency, through our kind-hearted Principal Mr. James, our friend, philosopher and guide, and your worthy Private Secretary, Mr. Gourlay, with the humble prayer that our prize-giving ceremony this year might be graced by Your Excellency's presence. Proud are we to see that our humble appeal has not gone in vain. Your Excellency's presence has not only been a great honour done to our ceremony, but has been a source of inspiration and encouragement

to us. Our boys and their guardians are enthusiastic over it. To commemorate and do honour to this auspicious occasion of Your Excellency's visit, several noblemen and gentlemen of the presidency, headed by the Maharaja Bahadur of Cossimbazar and the scions of the family of the late Raja Digamber Mitter, C.I.E.,



Rai Sahib Isan Chandra Ghose, M.A.

have founded medals, some to be named after Your Excellency, to be awarded to meritorious students. Happy will the recipients be to-day and ever after in their lives to think that they were the first winners of these tokens of merit from the hands of the first and foremost Governor of Bengal, Lord Carmichael of Skirling.

Your Excellency, our happiness would have been complete, were it possible for your noble consort, Her Excellency Lady Carmichael, to have graced our children's ceremony with her genial and inspiring presence. We very much regret the circumstances that have necessitated her absence from the country. We heartily wish Her Excellency a speedy recovery and safe return to Bengal.

I once again accord Your Excellency a hearty welcome and most respectfully pray that Your Excellency be pleased to preside on this auspicious occasion, which, owing to Your Excellency's presence, will be regarded as a red-letter day in the annals of the two schools and will be cherished in memory with pride, pleasure and gratitude."

A programme of recitations and dialogues in English was gone through by the students of both the schools. Then prizes of books and many gold and silver medals were awarded to meritorious students by His Excellency. The Head Master of the Hare School, Rai Isan Chandra Ghosh Saheb, then made over to Principal James, Government Promissory notes for Rs. 200 for "Peary Charan Memorial Prize" in memory of the great educationist Babu Peary Charan Sirkar, some time Head Master Hare School, and Rs. 400 for "Bimal Chandra Memorial Prize" in loving memory of his deceased grandson.

His Excellency stood up amidst the cheers of the students and delivered the following speech :—

"Mr. James, Teachers and Scholars of the Hare and Hindu Schools, —I have been present at many prize-givings in India, but at none have I been more pleased to preside than at this joint prize-giving of the Hare and Hindu Schools. Your two schools are the leading institutions of their kind in Calcutta. I am told that there is a healthy rivalry between them, and I am confident that that must help you to realize the common interests which bind you together. Both schools are associated with the name of David Hare—a man whom every Englishman may well be proud to claim as a fellow countryman. Both schools are among the oldest of those institutions which have brought the blessings of Western Education to India. Next year we shall celebrate the centenary of the Hindu School and that of the Hare School will follow a year later. Both schools are closely associated with the leading families of Bengal, and they have both of them been the training ground of many of Bengal's greatest men. I need only mention such names as those of Sir Ramesh Chandra

Mitter, Sir Gurudas Banerji, Ramesh Chunder Dutt, I.C.S., B. L. Gupta, I.C.S., Sarada Charan Mitter, N. N. Ghosh, and our present Vice-Chancellor from the Hare School, and of Keshub Chandra Sen, Michael Madhu Sudan Dutt, Maharaja Sir Jatindra Mohan Tagore, Prasanna Kumar Tagore, W. C. Bonnerjee, Sir Tarak N. Palit, Sir Chandra Madhab Ghosh from the Hindu school. It is a great thing to belong to a school with traditions such as these two schools have. The memory of the company of great men who have gone before you is I have no doubt a real bond drawing you together and giving strength to your determination that the traditions of your school shall never suffer through fault of yours. What the boys of 20, 30, 40 years ago have become, you too may become 20, 30 or 40 years hence. Many of you will, I have no doubt, then be among the leaders of Bengali thought and action.

Things have changed since the days when David Hare came daily to the little Pathsala,—Western Education was then in its infancy, Raja Ram Mohan Roy was but a youth. Western Education has since then spread throughout the land and the demand for it has far outstripped the available supply of teachers. The struggle for existence among the educated classes has become harder. Many who start out in the race with great hopes drop out long before the goal is reached ; that I am sorry to say cannot be denied, but though the struggle is keener, the opportunities are greater. There are avenues to distinction, and opportunities of serving your fellowmen open to you to-day, of which the scholars of the early days had no conception. As examples to be followed I would quote to you the lives of Rai Isan Chandra Ghosh Saheb, and Rai Rasamay Mitra Bahadur, Head Master of the Hare and Hindu Schools respectively. Both these men have for many years influenced the youth of Bengal for good by their high personal characters. Both are nearing the end of their active service in the Education Department, both have been honoured by the Government, and I am glad to have this opportunity of thanking them publicly on behalf of the Government for what they have done.

For 42 years the founder of these two schools lived and laboured for the youth of Bengal; the tablet which many of you see daily in the Hare School bears eloquent testimony to the devotion to him of both teachers and scholars. On it are graven the lines, written by one who was the Head Master of the Hare School.

“Ah, warm philanthropist! Faithful friend,
 Thy life devoted to one generous end,—
 To bless the Hindu mind with British lore
 And Truth’s and Nature’s faded lights restore;
 If for a day thy lofty aim was crossed,
 You grived like Titus, that a day was lost,
 Alas! it is not now a few brief hours
 That fate withholds, a heavier grief o’erpowers.
 A nation whom you loved as if your own—
 A life that gave the life of life is gone.”

I trust—and I hope—I may do so with confidence—that the memory of that great Englishman who did so much for Bengal—the land of his adoption—will never be forgotten, but that the example which he set of pure unselfishness and devotion to the cause of others may always continue to find followers among those who profit by the work which he began.”

After the Presidential speech was over, Rai Saheb Isan Chandra Ghosh, Head Master, Hare School, proposed a hearty vote of thanks to the President in the course of the following speech:—

“*Gentlemen and Boys of the Hindu and Hare Schools*,—It has devolved upon me to perform the last but most agreeable part in to-day’s function, viz. to thank His Excellency in your behalf for the trouble he has taken to encourage us with his august presence and give away the prizes. I undertake it with the greatest pleasure as it is the proudest and almost the last day of my official life. Both the Hindu and Hare Schools are about a hundred years old, but never in their annals, as far as I know, were they so honoured by the ruler of the land. The very announcement that His Excellency would preside at to-day’s prize-giving, was the occasion of an outburst of enthusiasm on the part of both boys and their parents, the like of which I have never seen during these twelve years of my tenure of office at the Hare School. Offers of special prizes and medals poured in from various quarters, some of which I had most reluctantly to decline as the number was going to exceed all our probable requirements. It is to His Excellency’s presence, too, that we owe this unusually large gathering around us.

And all this is quite natural. No ruler of Bengal has been more popular than Lord Carmichael. Lord Clive, as History tells us, was the first Governor of the presidency, but that was under an old order of things: Lord Carmichael is the first Governor of a new—rejuvenated—reconstructed Bengal. Clive and Carmichael—

you mark the striking alliteration between these two names; and the similarity between their lordships' achievements is no less striking, for while the one conquered by the sword, the other has conquered by love. The former captured our cities, the latter has captured our hearts.

Let us hope that this is the beginning of a close touch between the head of the presidency and the boys of our secondary schools, boys who will gradually pass over to colleges and thence turn out as citizens of the Empire. It is an object lesson which cannot fail to convince them of the sincere solicitude of the great English nation for the moral and intellectual welfare of our motherland. I am sure, boys, that you value the prizes you have won to-day, not for the gold and silver and gilt-edged books of which they consist, but that their worth has been a thousand times enhanced by His Excellency's touch, and that you will always remember this as a most memorable day in your life.

I fear I am going to be prolix and prolixity is said to be a besetting sin of my people, though I may fairly claim to be an exception, as never in my life I even attempted to make a speech. I conclude, therefore, by thanking our beloved Governor most heartily for having spent full two hours to-day for one engagement, heavy and manifold though his duties are as the ruler of the presidency. I also ask you all to give three hearty cheers for our gracious King-Emperor."

The function thus came to a close.

HARE SCHOOL NOTES.

Durbar-day Celebration.—The Durbar-day was celebrated with great enthusiasm as usual. Professor Sterling and Dr. A. N. Mukerji delivered lectures on "War" in English and Bengali respectively. There were sports, amusements, refreshments, etc.



Sporting Club.—We played several matches. The results were mostly satisfactory.



Retirement of the Headmaster.—Our Headmaster Rai Saheb Isan Chandra Ghosh, M.A., has retired. He has been succeeded by Babu Hara Kanto Bose, B.A., Headmaster, Uttarpara Government School.

Bengal Ambulance Corps.—We are sorry to learn that Mr. Sailendra Nath Bose, a student of our school, has been recently taken prisoner by the Turks. He went to the field of action in June last with the Bengal Ambulance Corps. We pray for his long life and safe return to India.

PRATUL CHANDRA GHOSH,
Correspondent.

REPORT OF THE HINDU SCHOOL.

The number on the rolls of the Hindu School during the year under report was 595, and the income from fees and fines was Rs. 27,163 and the expenditure was Rs. 27,947. This small deficit being due to the payment of the back pay of some teachers promoted with retrospective effect.

In the Matriculation Examination held in March 1915, 61 boys passed, viz. 44 in the First Division, 12 in the Second Division and 5 in the Third. Of these boys six obtained Junior scholarships, two of them occupying the 2nd and 5th positions in order of merit. The latter secured the highest marks in Mathematics at the last Matriculation Examination.

The Boys' Association attached to the school continued to do useful work in its three sections, viz. Physical, Debating and Poor Fund. Despite the serious drawback of the absence of a suitable playground the school did well in inter-school athletic competitions and won four cups, viz. the James, the Griffith, the Wilson and the Satkari Memorial, three medals and other trophies. In the Swimming Competition held under the auspices of His Excellency the Governor of Bengal the Hindu School was not unrepresented and Bijayratna Basu and Mohini Mohan De won medals in two different events. During the year under report the boys of this school succeeded in winning the Wilson cup, a trophy the contest for which is open only to the Hindu and Hare Schools. The Annual Sports came off in January last on the Marcus Square grounds under the presidency and patronage of Mr. H. R. James, the Principal of Presidency College. All the boys took part in them. A large number of interesting events were gone through and a goodly number of prizes were very kindly given away by Mrs. C. W. Peake, who herself by way of encouraging the boys awarded two additional prizes. These were most thankfully and cheerfully received. Physical Exercise, viz. Drill and Gymnastics, was compulsory for all boys except those who were declared unfit by medical opinion. Fair progress seems to have been made in them.

In the Debating Section, subjects of juvenile interest were discussed in both Bengali and English by the boys under the guidance of a senior teacher.

The Poor Fund section did useful work in its humble way. The students contributed their mites to the Fund and valuable help was rendered to people in indigent circumstances in general and to poor students in particular. Handsome contributions were made to relieve the people in distress in the districts of Burdwan and Bankura and in East Bengal. A sum of about Rs. 200 was contributed to the War Relief Fund.

Both Free-hand and Model Drawing received its due share of attention, and the progress made in them was very satisfactory. Some of the excellent drawings have been hung up in the School Hall by way of encouraging the artists.

The enthusiasm with which the Durbar Day was celebrated by the boys of this school with voluntary subscriptions raised from among themselves was most gratifying and was worthy of its position and traditions. Mr. H. R. James, Principal, Presidency College, who takes a keen interest in everything connected with the school, kindly deputed Prof. R. N. Gilchrist and Prof. Dr. D. N. Mallik of his college to address the boys on the occasion. The learned professors explained to them in a most impressive manner why the 12th day of December should be looked upon by all in India as a red-letter-day in their history. The lectures were highly appreciated by them.

During the year under report the school was visited several times by the members of the Visiting Committee and by the University Inspector as well and their reports were on the whole satisfactory.

The discipline of the school was in excellent order. The members of the Visiting Committee as well as the several European and Indian gentlemen invited to witness the annual sports were perfectly satisfied with what they saw of the conduct of the boys.

A course of interesting lectures on Malaria and its remedies, illustrated by lantern slides, was addressed to the boys in December last, and was much appreciated by them.

Thanks to the liberality of the Government of Bengal the removal of the University Institute from our buildings to its new site will for the time being partially solve the question of inadequacy of accommodation.

The prize-giving will be looked upon as a landmark in the annals of the school on account of the gracious presence of His Excellency the Governor of Bengal. To commemorate and do honour to His

Excellency's visit some noblemen and gentlemen of the presidency, who were either themselves students of the school or whose sons or wards were brought up in it, have instituted certain medals, as permanent measures, to be awarded to students of the school who do best at the Matriculation Examination as well as to those that secure the highest number of marks in some of the subjects in the highest classes. The happy recipients of the prizes will look back with genuine pride and pleasure to the occasion when they received the awards from the hands of His Excellency the first Governor of Bengal.

MEMORIAL PRIZES. .

1. *Jadulal Memorial Prize*—awarded to KULADACHARAN DAS-GUPTA of 1st class for proficiency in Sanskrit.
2. *Ramjodu Memorial Prize*—awarded to BIJALIBHUSAN SHOME of 1st class for proficiency in History.
3. *Abhoycharan Memorial Prize*—awarded to SARBANI SAHAY GUHA-SARKAR of 2nd class for proficiency in English.
4. *Subolkrishna Memorial Prize*—awarded to SUDHIRNATH SANYAL of 4th Class for proficiency in English.
5. *Chandidas Memorial Prize*—awarded to KULADACHARAN DAS-GUPTA of 1st class for proficiency in English.

MEDALS.

1. *Raja Digambar Mitter Carmichael Medal*—awarded by the Raja's grandsons MANMATHANATH MITRA and NARENDRANATH MITRA to PURNACHANDRA ACHARYYA for proficiency in Bengali at the Matriculation Examination.
2. *Maharaj Kumar Kirtichandra Memorial Medal*—awarded by The Hon'ble Maharaja Sir MANINDRACHANDRA NANDY, K.C.I.E., of Kasimbazar, to RASHBEHARI MITRA for proficiency in Mathematics at the Matriculation Examination.
3. *Rajarsi Banamali Medal*—awarded by his son RADHIKABHUSAN RAY of Tarash to LOKERANJAN SEN for proficiency in Sanskrit at the Matriculation Examination.
4. *Rajchandra Chunder Memorial Medal*—awarded by his sons Babus NIRMALCHANDRA CHUNDER, M.A., B.L. and KAMAL-CHANDRA CHUNDER B.A. (Oxon), to SUDHIRKUMAR MANDAL for proficiency in History at the Matriculation Examination.
5. *Manahardas Memorial Medal*—awarded by Babu MADANMOHAN BARMAN to SUDHANSUKUMAR BOSE for proficiency in Geography at the Matriculation Examination.

6. *Durgamani Memorial Medal*—awarded by Babus KUMARISH and AMARESH SHIKDAR to PURNACHANDRA ACHARYYA for general proficiency at the Matriculation Examination.
7. *Chandidas Memorial Medal*—awarded to KULADACHARAN DAS-GUPTA for general proficiency at the Test Examination.
8. *Nabinchandra Baral Memorial Medal*—awarded to RAMENDRA-NATH SARKAR for proficiency in Mathematics and Mechanics at the Test Examination.
9. *Raja Dinendranarayan Ray Memorial Medal*—awarded by RAJENDRANARAYAN RAY to SADANANDA BHADURI for proficiency in Bengali Composition at the Test Examination.
10. *Rai Lalitmohan Singha-Ray Medal*—awarded by RAI LALITMOHAN SINGHA-RAY BAHADUR to SARBANI SAHAY GUHA-SARKAR for proficiency in English Composition.
11. *Rasamay Mitra Medal*—awarded by RAI RASAMAY MITRA BAHADUR to NIRANJAN MUKHERJEE, for proficiency in English Composition.
12. *Krishnachandra Ray Memorial Medal*—awarded by his son Dr. RAMESHCHANDRA RAY to SARBANI SAHAY GUHA-SARKAR for proficiency in English.
13. *Kaliprasad Khaitan Medal*—awarded by Babu KALIPRASAD KHAITAN to PURNACHANDRA BANERJEE for proficiency in Drawing.
14. *A Silver Medal*—awarded to GAURGOPAL GUPTA for proficiency in Music.
15. *Lord Carmichael Medal*—awarded by The Boys' Association Hindu School to SARBANI SAHAY GUHA-SARKAR of the 2nd class for general proficiency.

University Notes.

THE question of the affiliation of the Belgachia Medical School came up for final disposal in the Senate Meeting on the 8th January, 1916. Sir Pardey Lukis made a statement as regards the financial aspects on behalf of the Government of India. The terms proposed were as follows: “(1) That so far as the Government of India are concerned the orders of the Secretary of State must be regarded as final, and that the payment of no portion of the grant of 5 lacs non-recurring and Rs. 50,000 recurring can be sanctioned until and unless the requisite income has been secured; (2) That, before the Government of India agree

to the affiliation, the sum of two and a half lacs, which has been promised must have been actually paid into the credit of the school; and (3) that the responsible authorities of the school admit their liabilities in this matter and acknowledge that they accept the above conditions." The Hon'ble Dr. Nilratan Sarkar, on behalf of the School authorities, accepted the conditions and the affiliation up to the Preliminary M.B. Examination was, subject to the above conditions, recommended by the Senate.

Professor Panchanandas Mukerjee, M.A., who was an Assistant to the Minto Professor of Economics, having been appointed an Additional Professor in the Presidency College, was permitted to resign his University appointment and in his place Prof. Durgagati Chattoraj, M.A., an old student of our college, and till lately serving in the Scottish Churches College, was appointed. Babu Jogischandra Sinha, who is also one of our past students, has been appointed Additional Assistant to the Minto Professor.

Another important appointment has been made in the person of Dr. Narendranath Sengupta, M.A., Ph.D., who has acquired distinctions in our University as also in the University of Harvard. He has been appointed Assistant Professor of Philosophy and will work in Psycho-Physics, a subject which is taught nowhere else under the University.

* * *

Dr. H. D. Hazeltine, M.A., LL.D., who was elected Tagore Professor of Law for 1915, to deliver a course of twelve lectures on "The Growth of the English Law when transplanted," has informed the University authorities that on account of the submarine perils he was prevented from delivering personally the Tagore Law Lectures. He suggested that the manuscript of the lectures be read by a substitute, and that he would personally deliver twelve supplementary lectures, without further fee, after the war.

The Syndicate, in accordance with the recommendation of the Faculty of Law, has decided not to accept the arrangement suggested, and the Professor has been informed accordingly.

* * *

Babu Nilratan Dhar has been awarded the Government of India Scholarship tenable in England. He has gone to England and has already joined the University of London. Babu Nilratan Dhar is one of the best products of Presidency College coming from the Laboratory

of Dr. P. C. Ray. It is worthy of note that Babu Nilratan Dhar just before going to England was awarded the Griffith Memorial Prize for 1914 for his thesis on "Catalysis."



The election of Fellows by the Registered Graduates is at last over. They have returned Dr. Bidhanchandra Ray, B.A., M.D., F.R.C.S., M.R.C.P., and Dr. Dwarkanath Mitra, M.A., D.L., by 186 and 149 votes respectively.



Dr. Young, Hardinge Professor of Mathematics, delivered five public lectures during January, 1916. On the 20th January he spoke of "Functions and their Differentials" and on the 25th January on "Integration."



Professor Geddes held his Town-planning Exhibition at the Senate House from the 14th to the 21st December, 1915. He also delivered peripatetic lectures on Town-planning and citizenship in the course of the Exhibition, which were attended by several hundred graduates and under-graduates.



Dr. Ganesh Prasad, Sir Rashbehari Ghosh Professor of Applied Mathematics, gave an interesting exposition of "The Vibrating String with Indefinite numbers of edges" on the 24th January.



Babu Dineschandra Sen, Ramtanu Lahiri Research Fellow, has resumed his public lectures on "The Bengali Ramayana" and delivered five lectures in January.



Babu Akshaykumar Maitra has resumed his course of lectures on "The Downfall of the Pal Kingdom in Bengal" and delivered the four concluding lectures in January, 1916.



Principal James delivered the first of the University Extension Lectures, a system newly introduced in our University. His subject was "The Romantic and Classical Poetry of the 18th Century."

The next lecture delivered was on the 3rd January, 1916, by Prof. Arthur Brown on "Emergency Legislation" with His Excellency the Rector in the chair. Prof. Brown spoke on the same subject on the

5th and the 7th January, and he will renew his lectures again in February next.

His Excellency also presided at the first lecture delivered by Dr. J. C. Bose on "Automatism" on the 31st January.

Dr. P. C. Ray delivered a course of lectures on "Pursuit of Chemistry in Bengal" on 11th January.

Mr. J. R. Banerjee delivered a lecture on "Carlyle" on the 18th January, 1916, and one on "New Tendencies of Thought in Europe and America" on the 27th January.

On the 19th January Dr. T. R. Glover, M.A., LL.D., gave an address on "Athens in the days of Plato."

On the 26th January Prof. J. N. Dasgupta read a paper on "A mid-eighteenth Century Bengali Manuscript."

Principal Biss spoke on "Constructive Ideals in Education" on the 28th January.



The University College of Science will be in full swing from the next session. Most probably Dr. P. C. Ray and Mr. Raman, Palit Professors of Chemistry and Physics, will join their posts in June next. Already Research scholars of distinction have been appointed by the Boards of Management.



Babu Radhakumad Mookerjee submitted his revised thesis on "The History of Indian Shipping and Maritime Activity of the Ancient Hindus" for the degree of Doctor of Philosophy. The thesis has now been approved by the Board of Examiners and he has been declared qualified for the degree.



Both the Committees appointed by the Faculties of Arts and Science and the Senate have begun their work. Already meetings have been held by each of the Committees. Dr. Howells has been elected a member on the former Committee in place of Professor Owston Smith, who was refused permission by the D.P.I., Behar, to serve on the Committee.



In the University Institute also many public lectures by eminent men are being delivered. Professor Coyajee delivered a lecture on Serbia and spoke for one hour and a half on the condition of that country from the beginning of the war. Principal James was in the chair.

Dr. Bentley's lecture on "Malaria" was attended by a large number of students.

Mr. Wordsworth's lecture on "War" was appreciated by many of the Junior Members of the Institute.

Mr. R. C. Bonerjee, with Mr. Justice Greaves in the chair, addressed the students on "Courage."

It is a matter of great satisfaction that Sir Lancelot Sanderson, Chief Justice of Bengal, has been elected a Senior Member of the Institute.

The members of the University Institute met Dr. J. C. Bose in a social gathering. The hall was packed to suffocation. A play "Advice Gratis" was staged by the members, and light refreshments were arranged. There were also arrangements for music.

New rules, which had been framed by a special Sub-committee, were placed before, and approved by, a meeting of the Senior Members. The old rules have in some places been materially changed.

R. P M.

About Other Colleges.

Krishnagar College students have set a splendid example of self-help by raising a good sum of money for the Famine Relief Fund by earning the wages of coolies who used to be employed for pumping water for the laboratories. We congratulate our Krishnagar friends on their happy idea and hope others would follow their example.



The American College (Madura) men had some 'College Extension Lectures' this session. Further the two Colleges of Madura are going to have "Inter-Collegiate Lectures" in History. This is surely a feature which might advantageously be introduced here in Calcutta.

The Senior Historical Lyceum is having a busy season just now.



The Deccan College (Poona) students celebrated their anniversary with great success last term, the Governor being present. The College Gymkhana has elected its new office-bearers; the Tennis Tournament is over and the Boat-Club Regatta will commence shortly.

Sir N. G. Chandravarkar delivered a lecture on "The Crown Imperial of India and the Crown Imperial of England" under the auspices of the College Debating Union.

Forman College (Lahore) students have included Basket-ball among their College games. Can't we introduce it here in our colleges in Calcutta?

A new hostel is under construction and will be named after its late distinguished President, Dr. Ewing.



The members of the *Ravenshaw College* Economic Society undertook "economic" trips to Bhubaneswar, Khandagiri and Udaygiri under the guidance of their professors.



St. Joseph's College (Trichinopoly) students had a lecture on the "Poetry and Art of Rabindranath" from Principal J. C. Rollo (Principal, Panchayappa College) under the auspices of their Literary Union.

They celebrated their Prize-day in the Lawley Hall under the presidency of Lord Pentland last month, and the prize-winners set a splendid example by voluntarily handing over the whole cost of the prizes to the Madras War Fund. They also celebrated the Rector's Day in the same month.



The Ewing College (Allahabad) students have organized an association under the name of "Jumna Friends' Association" for social service. They intend to open night schools for the depressed classes and also deliver lectures on hygiene and sanitation to them. Further they will open a co-operative store after the Dasarah celebration. We in Calcutta might very usefully follow our Allahabad brothers in this direction.



Mr. Satis Ch. Roy, M.A. (*Lond.*), Ph.D. (*Kiel*), an old student of our College has been selected for the Principalship of the *Dayal Singh College* (Lahore). We offer our heartiest congratulations to Mr. Ray on this fitting recognition of his brilliant academic career.

S. M.



Correspondence.

To

THE EDITOR, *Presidency College Magazine*.

SIR,

Allow me to point out some mistakes, not very trivial in their way, which have crept into the report of the History Seminar meeting in which I read my paper on "The Greek and Gothic elements in the ancient Hindu population"—as it has appeared in the December issue of our magazine.

At the outset the name IRILA has been wrongly spelt Irilya and the word GATANA which I am represented as having explained as Goth, is really the genitive plural form (in Prakrit) of the word GATA (i.e. youth) corresponding to the Sanskrit गतानाम्. So that "Irila Gatana" means Irila of the Gatas (i.e. Goths). Then, the inscription in question is NOT a Gupta inscription, but a Junnar inscription of the second century A.D.

Reference to this inscription has been made by Prof. Bhandarkar who, while admitting that the name IRILA is un-Indian, has not taken into consideration the all-important word GATANA which occurs also in another Junnar inscription. It stands to the credit of Dr. Stenkonow that he suggested the only possible explanation of the word, and of the name IRILA. For those who feel interested in the subject, I refer to my paper which has been printed in the C. U. Magazine for September, 1915, and to the following Periodicals: Indian Antiquary 1911, p. 7; J.R.A.S. 1912, p. 379; Epigraphia Indica, Vol. X, 1909-10, Appendix.

I am,

Yours faithfully,

H. C. RAYCHAUDHURI.

A GRIEVANCE.

To

THE EDITOR, *Presidency College Magazine*.

SIR,

Will you please publish these few lines in the columns of your journal?

I presume everyone in this College has heard of the name of the late Prof. Peary Churn Sircar of revered memory. In Bengal at least, his name is almost a household word. He was a great educationist, a social reformer and above all a philanthropist. It is a matter of great regret that the memory of such a man, who was closely connected with

Presidency College as a professor of English literature, has to be kept up by a decrepit and distorted likeness which hangs in the Library wall. Surely this worn-out likeness ought to have been replaced by a fresh one long ago. We hope the matter will receive consideration from the authorities.

Yours sincerely,

S. N. SIRCAR, B.A.,

Fifth Year Class.

RHEIMS CATHEDRAL.

To

THE EDITOR, *Presidency College Magazine*.

DEAR SIR,

A very interesting question has been raised by the December number of the *Strand Magazine* regarding the havoc caused by war to historic buildings in France and Belgium. The question was to this effect:—"Should the great and sacred buildings of France and Belgium which have been damaged or destroyed be restored after the war, or should they be left as they are?"—and some distinguished French and Belgian experts were invited to give their opinions on the question. Though their opinions have differed, some very interesting answers have been given.

Some of them (including the French philosopher M. Emile Boutroux and the great Belgian poet M. Emile Verhaeren) think that it would be neither charitable nor noble to keep these monuments of misfortune as they are. But others (including the French writer and the winner of the Nobel Prize for Literature last year, M. Romain Rolland) are opposed to reconstruction. Their feelings are beautifully expressed by the following lines:—"Reconstruct the Cathedral of Rheims and the Town Hall of Arras! Why not restore the arms of Venus of Milo? Do not let us add the barbarism of the antiquary to the barbarism of the soldier." "A ruin," the same writer says, "keeps its life, its feeling, its poetry. A ruin is a noble thing which restoration only spoils."

Would the Historical Seminar put this very interesting question on the table and let us know their views and judgment? I am, etc.,

C. R.

FOOTBALL IN SHAKESPEARE'S TIME.

To

THE EDITOR, *Presidency College Magazine*.

SIR,

In the August number of the *Magazine* J. K. U. contributed some interesting quotations from Shakespeare, "which are very suitable for giving expression to those emotions and feelings which rush in our minds when watching a well-contested game" of football.

I have come across some passages from which we know it for certain that football was played in the 16th and 17th centuries; more than that—a contemporary writer gives some of the rules of the play. I communicate to you the passages, hoping that they may interest your readers, especially footballers, who may very well compare those rules with modern ones. The old way of playing the game is sufficiently described in the following passage from Strutt: "When a match at football is made, two parties, each containing an equal number of competitors, take the field, and stand between two goals, placed at a distance of eighty or a hundred yards the one from the other; the ball, which is commonly made from a blown bladder, and cased with leather, is delivered in the midst of the ground, and the object of each party is to drive it through the goal of their antagonists, which being achieved the game is won. The abilities of the players are best displayed in defending and attacking the goals; when the exercise becomes exceeding violent, the players kick each other's shins without the least ceremony, and some of them are overthrown at the hazard of their limbs." It is in the last sentence above quoted, wherein lies the material difference between the Elizabethan game and our own. Verily one playing Elizabethan football may exclaim with Hotspur in Henry IV. (II. 3. 96). "We must have bloody noses and cracked crowns" or with Montano in the death scene of Desdemona in Othello (V. 2, 241). "Let him not pass, but kill him rather."

The game was often played with no attention to system or rule of play. In fact, the open street served for a football ground, a mark taking the place of a regular goal. "We also hear that it was a popular sport of the Londoners and was played in the courtyard of the Royal Exchange. It was a winter as well as a summer sport, and is mentioned as one of the games played upon the frozen Thames in 1608."

I am indebted to Professor Henry Thew Stephenson, of Indiana University, for these quotations from Strutt from Stephenson's book "The Elizabethan People."

Yours faithfully,

RAMA PRASAD MUKHOPADHYAY.

SANATORIA FOR STUDENTS.

To

THE EDITOR, *Presidency College Magazine*.

DEAR SIR,

I shall be highly obliged if you allow me a little space in your magazine for the following project:—

That the 'tired students of books' should need from time to time the 'refreshing influence' of healthy natural surroundings can not be doubted. We are informed of a system that obtains in Austria and to some extent in America and Germany under which students are taken by their teachers to places of interest—a plan whose salutary effect on the body as well as on the mind is considerable.

The physical deterioration of Bengali students should be the subject for the anxious consideration of all interested in the welfare of the country. The dull unhealthy surroundings of a city like Calcutta and the malacious atmosphere of mofussil towns in which our students are unfortunately placed tell severely on their health. We need not mention here that most of them, for want of sufficient means or suitable arrangements, have to give up the idea of taking a change or a long trip during holidays. In consideration of this the need for boarding houses for students set up by the University authorities for long holidays on the sea or in hill stations cannot be too highly exaggerated.

It is proper that our educational authorities should do something in the way of this. Boarding houses may be run by the university or by the individual colleges. But it will probably be found that the centralized arrangement would serve the purpose best. Of course the students will bear the expenses as under the system for attached messes and hostels. The University should appoint a Superintendent and pay his salary. At present it is not advisable that permanent quarters be erected for the purpose. To start with, two houses may be rented suitable for the purpose, of which one should advisably be on the sea and another in a hill station.

The benefits likely to accrue from this plan cannot be doubted. We hope that our proposal will receive the consideration it deserves at the hands of the authorities.

Your sincerely,
PRAFULLA KUMAR SARKAR.

THE FICTION OF THE BLACK HOLE TRAGEDY.

To

THE EDITOR, *Presidency College Magazine*.

DEAR SIR,

Now that Mr. J. H. Little has come forward with his array of historical facts to smash up the "Fiction of the Black Hole Tragedy" it will be well to remind our readers of the names of two unostentatious workers in the field of historical research who also, long before Mr. Little's praiseworthy attempt, exploded the same theory with unchallengeable evidence. Babu Akshay Kumar Maitra of Rajsahi is quite well-known in Indian literary circles and so is also Rai Sahib Behary Lal Sarcar of journalistic fame. These two scholars claim as much credit from the public as Mr. Little for proving the baselessness of one of those pernicious fictions which are not infrequent in the current Indian history of the last two or three centuries.

I am, etc.,

HISTORY.

A SUGGESTION ABOUT SYLLABUS.

To

THE EDITOR, *Presidency College Magazine*.

DEAR SIR,

I should like to suggest to the University authorities through the pages of your esteemed magazine that the Politics of Sukracharya "Sukraniti" and that of Chanakya "Kautileya Artha Shastras" may be prescribed for higher study in Political Science. This is likely to encourage comparative study of the subject and to stimulate research work in Indian Politics. We may note some curious analogies between the ways of thinking of these two philosophers of the East and thinkers like Aristotle, Machiavelli and Bernhardi of the West.

I am, etc.,

"POLITICUS."

Review.

Sivaji the Maratha, His Life and Times.—By H. G. RAWLINSON, M.A., I.E.S., Professor of English, Deccan College, Poona. (Clarendon Press, Oxford, 1915).

This is the first connected account of the life of Sivaji in English, and the author has proceeded to his self-imposed task with a rare breadth of mind and impartiality of judgment. He has sifted with patience the materials at his disposal, viz. the accounts left by English and Mahol. Ian historians and the *Bakhars* or family chronicles still to

be found in almost all the great families of the Deccan. Eastern things and men should be judged by Eastern standards and Western by Western; but there runs beneath the surface of distinctions and differences among races an undercurrent of common sympathies and aspirations which make the whole mankind kin. Professor Rawlinson's enthusiasm for the romantic life of Sivaji, in which a sternness of character is combined with a singular piety, intrepid valour and generous disposition towards friends and foes alike, is ill concealed. But he has not allowed his admiration for his hero to influence his judgment, nor has he permitted himself—which is so common a practice—to judge by the Western standards of modern times the incidents and character of the people in those dark days of despotism, intrigue and confusion in the midst of which Sivaji acted the eventful drama of his life. He truly conceives the object of the historian to be "Nothing to extenuate, Nothing aught set down in malice"; and we have no hesitation in saying that he has amply fulfilled the promise which he held out in the preface. Only with regard to the murder of Afzal Khan, he has not stated both sides of the case as in all fairness he should have done. He has mainly followed the account given by Khafi Khan, but he has not given in detail the version of the Maratha *Bakharkars* (chroniclers) beyond saying in a foot-note that "the *Bakhars* all give slightly different versions." Even Grant Duff, who, with memories of Maratha power still recent in his mind, speaks of him as a freebooter and an assassin, does not forget to mention that "the vulgar opinion is that Khan was the aggressor." In his estimate of the character of Sivaji, Professor Rawlinson agrees in the main with Khafi Khan and speaks in no unmeasured terms. Grant Duff says—"We view his talents with admiration and his genius with wonder." So it is not the Indian writers alone who, in the opinion of the author, are "prone, often for political ends, to exaggerate his good qualities to an extraordinary degree." It is difficult to see what political ends can be served by exaggerating the merits of one "whose claim to high rank in the page of history" is not disputed even by Grant Duff. Similarly we may treat as *obiter dictum* his statement that "the so-called bureaucracy against which it is now often the fashion to inveigh, is really indigenous to the soil and probably more suited to the needs of an Eastern people than any form of representative government." We may simply refer him to the pages of the *Manu Samhita* and the *Mahabharata* (*Santivana*). There is another defect which strikes the reader, viz. many important facts and incidents of Sivaji's life and times have been passed over in silence. After all, Professor Rawlinson's work is a nonograph

and not an exhaustive study. But he has executed his limited task admirably and in a very fascinating style.

Sivaji's force of character and sense of discipline are very forcibly illustrated by an incident related by Rawlinson. One of Sivaji's Captains captured Kalyan for him and sent as a present to his master a young woman of striking grace and beauty. 'The great Maratha, on seeing her, merely remarked with a laugh that had his mother been half so beautiful, he himself might have been a little less ugly, and dispatched her, with every sign of respect, to her relations.' (But Sivaji was not ugly). Orme also does justice to this side of Sivaji's character and quotes from Father Navarette, "I was told at Surat that Subagi Mogul" (Sivaji was far from a Mogul) "was extraordinarily careful that no woman should be in his army; and if he happened to find one he immediately turned her out, first utting off her hair and ears."

The book contains besides a portrait of Shivaji by Ravi Varma said to be copied from a contemporary Dutch print, a map of the Deccan and an appendix in which a translation of the Singhagad ballad and some account of the poets Tukaram and Ramdas are given.

K. N. M.



