

BURNLEY
LITERARY AND SCIENTIFIC CLUB

ESTABLISHED 1873

TRANSACTIONS

VOL. XXXV

1917-18

GEORGE ANDERSON (BURNLEY) LTD.
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MDCCCXVIII.



Burnley Literary and Scientific Club

ESTABLISHED 1873

OFFICERS OF THE CLUB

YEAR 1917-18.

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R. S. HEAP

R U L E S .

- Rule 1 That the Society be named the " BURNLEY LITERARY AND SCIENTIFIC CLUB."
- Rule 2 That the objects of the Club shall be the instruction and mental recreation of its members by means of original papers, discussions, and conversation of a literary and scientific character. Party politics and religious controversies to be excluded. That arrangements be made during the summer for excursions to places of historic and natural interest.
- Rule 3 That the Club consist of Ordinary and Honorary Members and Lady Associates. That the Committee shall have power to accept the services of other than members.
- Rule 4 That Associateship be open to ladies, who shall be elected as mentioned in Rule 7 and shall have the privilege of attending all meetings of the Club. They shall not take part in the management of the Club, nor shall they be entitled to introduce a friend.
- Rule 5 That the Club meet on Tuesday evenings at 7-45, the meetings being weekly from September to April, Any meetings held in the summer months to be preparatory to the excursions.
- Rule 6 That the Secretary shall commence the proceedings at each meeting by reading the minutes of the last meeting.
- Rule 7 That candidates for membership or associateship be proposed and seconded at any meeting of the Club, and shall after the expiration of five days be considered as elected unless two members object to such election. Any such objection shall be stated to the Secretary in writing, signed by both objectors, within five days from the nomination ; and shall as soon as conveniently possible thereafter be considered by the Committee, who shall have power to elect or refuse the proposed candidate. Candidates for honorary membership shall be proposed only after a recommendation from the Committee.
- Rule 8 That the officers consist of a President, six Vice-Presidents, Treasurer, Secretary, and a Committee of six members, who shall manage the affairs of the Club ; four to form a quorum. Such officers to be chosen by ballot at the Annual Meeting, which shall be held on the first convenient Tuesday in April. Nominations to be received only at the three meetings next preceding the Annual Meeting.

- Rule 9 That the reading of any paper shall not occupy more than one hour, the remaining portion of the time, up to ten o'clock, to be spent in conversation and discussion. No speaker to occupy more than five minutes, or to speak more than once, except by permission of the chairman.
- Rule 10 That a Sessional Programme shall be prepared by the Secretary, and printed, in which the business of each evening shall be stated. All subjects proposed to be brought before the Club to be approved by the Committee of Management.
- Rule 11 That each member shall have the privilege of introducing a friend* but no friend so introduced shall be allowed to take part in the proceedings unless invited by the Chairman, to whom the said person's name shall be communicated on his entering into the room. The Committee shall have power to declare any meeting "Special," and to make such arrangements as to admission of friends at such meetings as they shall think proper.
- Rule 12 That an annual subscription of 10s. be paid by ordinary members, and of 5s. by associates, and any person whose subscription is in arrear for three months shall cease to be a member of the Club.
- Rule 13 That the Accounts of the Club shall be made up by the Treasurer to the end of December in each year; and a Balance Sheet shall, after having been audited, and passed by the Committee, be laid before the members at the Annual Meeting.
- Rule 14 That the Rules be altered only at the Annual Meeting in April, or at a Special Meeting; in both cases a fortnight's notice shall be given to the members, stating the nature of the proposed alteration. The Secretary shall be empowered to call a special meeting on receiving a requisition signed by six members.

* No gentleman residing within the Parliamentary Borough, not being a member, will be eligible for admission. A friend is considered to be "introduced" (Rule 11) to the meetings of the Club when he or she attends with the sanction (by card or otherwise) of a member.

ANNUAL REPORT,

1917-18.

The work of the Session 1917-1918 does not call for any very special comment. There has, perhaps, been greater difficulty in securing the services of speakers, but the Committee have been able to arrange for each meeting to be held, and the average of attendance has been maintained. Of the twenty-one speakers who have addressed the Club, ten have been members, and the Committee are grateful to them for coming forward at this time.

A special evening was devoted to consideration of the gift made by Mrs. Strange, of certain papers, slides and drawings relating to the connection of the late Mr. Strange with the Club. Our President, (Mr. Wood), and Mr. F. J. Grant, and Mr. Bellingham spoke on different aspects of Mr. Strange's work and of his interesting personality.

The membership of the Club again shows an increase, which, together with the good average attendance, has thoroughly justified the policy of "carrying-on" during the war.

THOMAS FOSTER,

Hon. Sec.

BURNLEY LITERARY AND SCIENTIFIC CLUB.

Dr. Treasurer's Account for the Year ending the 31st day of December, 1917. **Cr.**

	£	s.	d.		£	s.	d.
INCOME.				EXPENDITURE.			
142 Members' Subscriptions	71	0	0	Expenses in connection with papers	30	3	9
6 do. (half-session)	1	10	0	Advertising	5	7	6
1 do. (arrears, 1916)	0	10	0	Collector's Commission	5	6	9
52 Lady Associates' Subscriptions ..	13	0	0	Postages	1	0	5
2 do. (half-session)	0	5	0	Printing and Stationery	4	11	7
	—	—	—	Rent	11	19	0
	—	—	—	Reports of Meetings for Transactions	5	0	0
	—	—	—	"Transactions," Volume 34	24	17	0
Bank Interest	86	5	0	Manchester Geographical Society	2	2	0
	1	0	9	Hall-keeper	1	10	0
	—	—	—	Bank Cheque-book	0	2	6
Total Income	87	5	9	Total Expenditure	92	0	6
Balance on hand, Dec. 31st, 1916	36	9	2	Balance in hand	31	14	5
	—	—	—		—	—	—
	—	—	—		£123	14	11

FRANK E. THORNTON, Hon. Treasurer.
27th February, 1918.

Audited and found correct,
ARTHUR BARDSLEY. March 30th, 1918.

SYLLABUS.

OCTOBER TO DECEMBER, 1917.

-
- Oct. 9—" Florence and her famous men "
REV. J. H. BURKITT.
(Illustrated by the Lantern).
- „ 16—" What Kepler, Galileo and Newton did for Science " ..
REV. J. R. RENDELL.
(Illustrated by the Lantern).
- „ 23—" Medical Science in War " DR. W. J. S. REID.
- „ 30—" Edward Fitzgerald of Omar Khayyâm Fame "
REV. SHERWIN SMITH.
- „ 6—" A visit to Lisbon " FRED GREENWOOD.
(Illustrated by the Lantern).
- „ 13—" Four months with the B.E.F. on Western Front " ..
REV. T. ORMEROD, B.Sc.
- „ 20—" Science and Sanitation " T. W. WADDINGTON.
(Illustrated by the Lantern).
- „ 27—" Old Homesteads in Lancashire and Cheshire "
J. H. CRABTREE.
(Illustrated by the Lantern).
- Dec. 4—" Lakeland :—Scenes that Linger " R. S. HEAP.
(Illustrated by the Lantern).
- „ 11—" Thomas Edward Brown :—National Poet of the Isle of
Man " W. H. KNEEN.
- „ 18—Soiree Directors { THE PRESIDENT.
F. J. GRANT, J.P.
A. A. BELLINGHAM
- Exhibition of MSS. Books, Lantern Slides, Heraldic and other
Sketches, given to the Club by Mrs. Strange.

SYLLABUS.

JANUARY TO APRIL, 1918.

- Jan. 15—"The Story of a River" . . . REV. J. FARQUHAR, M.A.
(Illustrated by the Lantern).
- „ 22—"Charles Lamb" THOMAS BANK.
- „ 29—"Some Diseases of Garden and Allotment Plants: their
Causes and Prevention" . . . A. WILMORE, D.Sc., F.G.S.
(Illustrated by the Lantern).
- Feb. 5—"Our Own Countryside" J. D. BERWICK.
(Illustrated by the Lantern).
- „ 12—"Russia and its Peoples" . . . REV. A. J. MORRIS, B.A.
(Illustrated by the Lantern).
- „ 19—"Rambles in Wensleydale and Upper Swaledale"
T. WINSKILL.
- „ 26—"Art and Life" LAWRENCE HAWARD.
- Mar. 5—"Top o'th Town Memories" THOMAS PRESTON.
(Illustrated by the Lantern).
- „ 12—"Swinburne" T. E. RHODES.
- „ 19—"With the Serbians in Macedonia"
J. H. WATSON, F.R.C.S., M.B., B.S.
(Illustrated by the Lantern).
- „ 26—"Industry and Human Nature" . . . THOMAS FOSTER.
- April 9—ANNUAL MEETING.

SPEECH OF THE PRESIDENT.

(G. A. WOOD M.A.)

ON OPENING OF SESSION, OCTOBER 9TH, 1917.

My first duty upon rising to open the 1917-18 Session of the Club is the very pleasant one of thanking you for the honour of electing me to be your President for another year. In this capacity I shall to the best of my ability try to promote at all times the interests of the Club. Happily, through the extreme forbearance of your Committee and especially by reason of the unremitting labours of your Secretary my task has been rendered a comparatively light and genial one. I am afraid that while mine is the honour, theirs is the unseen yet vital work.

The Press on Saturday was kind enough to notice the excellence of the syllabus for the coming half-session. I can assure you that the task of compiling a lecture sequence such as ours—a sequence which shall uphold that standard of excellence to which our past history commits us, is, under the most normal conditions, not an easy one. Under war conditions therefore when everyone left behind is so fully occupied with other tasks, the difficulties become infinitely greater and at times seem well nigh insuperable. It is for this reason therefore that I wish to congratulate our Secretary and to assure him, on this my first public opportunity, that his efforts in this matter have been very highly appreciated by the Committee and by the Club in general.

Without proceeding to any detailed analysis of the current syllabus one may say at once that there is a balance about the lectures considered as a series—the various sides of our Club's activities, Science, Literature, and Travel being well represented without any one unduly preponderating—and this balance of interest I think it very desirable to maintain. I am particularly pleased too to notice that in these very difficult times three of our own members—all of whom by reason of the importance and pressure of their work might reasonably have pressed for exemption so long as the war lasts—have very kindly consented to contribute lectures.

It seems to me that the Committee's policy of continuing the activities of the Club during war-time has been abundantly justified. It keeps in continued progress an effort which we venture to think has been all to the advantage of the town and neighbourhood for over 40 years, and it provides in a time of strain and mental pre-occupation some slight relaxation from the stress to which all are subjected in these very critical days. It is my sincere hope and I am sure yours too, that before another session opens the natural burden and anxiety will have been lightened and that Peace, if not an accomplished fact, may be seen to be near at hand.

FLORENCE AND HER FAMOUS MEN.

BY REV. J. H. BURKITT.

OCTOBER 9TH. 1917.

It was only necessary to call to mind a few of the great names associated with Florence, and to think of what the city had been in the past and what it was to-day, to perceive how cursory and rapid must be the treatment of the subject. Dean Farrar, in a fine piece of word-painting had described the town of Nazareth as "lying like a handful of pearls in a goblet of emerald." That description might well be applied to the situation of Florence, only the pearls were of an exceptionally fine and magnificent character. Nestling at the foot of the Apennines, enclosed by hills on the north and on the south, with the classical river Arno flowing between, it presented a scene of enchanting beauty.

In pre-historic times the Etruscans dwelt round about here, and intellectually and artistically they were the pick of Italy. Florence rose commercially in the 13th century, almost simultaneously with her rise in literature under Dante and in painting under Giotto, and reached her summit in the great days of the Renaissance. Her history had been turbulent and chequered, the city having been ruled in turn by powerful factions (the Guelphs and the Ghibellines), by the rich burghers, and by the oligarchical Medici. Subsequently she was constituted a Republic, and later became the capital of the Grand Duchy of Tuscany. For half-a-dozen years before the conquest of Rome in 1870 she was the capital of the Kingdom of Italy.

Santa Croce, the church of the Holy Cross, was a Franciscan foundation dating from the end of the 13th century. The architecture, sculptures, mosaics, and frescoes all have relation to the Holy Cross. In the course of time the church developed into a Pantheon and had been aptly called the "Westminster Abbey of Florence." Monuments to Dante, M. Angelo, Galileo, and many other famous Florentines are there. The first-named was undoubtedly the greatest poet of Italy, and one of the three greatest poets in the world.

The lecturer briefly outlined the life of the author of the "Divina Commedia." Discussing his relation to Beatrice, he was sure that Dante's love for her was an idealised love, born of the age of chivalry; and he suggested that an under-

standing of it might be obtained by reading the chapter entitled "My Beatrice" in the recently published Autobiography of Bishop Boyd Carpenter.

The Dominican Church of S. Maria Novella, with its famous Giottoesque frescoes, in particular that of the Spanish Chapel, was next dealt with, followed by the Baptistery in which Dante was baptized, world-famous on account of its wonderful doors or gates. The eastern doors, sculptured by Ghiberti, were declared by Michael Angelo to be fit for the Gates of Paradise. Close by this Tuscan-Romanesque Baptistery was the exquisite Gothic Duomo or Cathedral, with its lily-like Campanile. Ruskin has said: "The characteristics of power and beauty in their highest degree exist only in one building in the world, —the Campanile of Giotto."

The old monastery of San Marco, now a national museum, introduced the artistic work of Fra Angelico, the ecstatic and mystical religious painter. A great reformation was wrought by the preaching of Savonarola, "the Samuel of the Florentine theocracy." The lecturer sketched the life of the great prior, the extraordinary power of his preaching, the Bonfire of Vanities which took place in the Piazza Signoria under his leadership in 1497, and the re-action that set in, terminating in his martyrdom in the same square only twelve months later.

The fortress-like palace of the Guilds of Florence, the Palazzo Vecchio, has many lovely sculptures in the adjacent Loggia. The Uffizi and Pitti Art Galleries are famous for their collection of world-renowned treasures. Robert and Elizabeth Barrett Browning were passionate lovers of Florence and had their home near the Pitti Palace. In that home Mrs. Browning died in 1861. Robert Browning quitted Florence immediately after, and years later wrote: "I never hear of anyone going to Florence but my heart is twitched."

Other places of interest, such as the Bargello, the Mausoleum of the Medici, with M. Angelo's noble sculptures, probably his finest work, Galileo's residence, and the Villa Palmieri, associated with Boccaccio, were enlarged upon and illustrated. The views of the city from San Miniato and from Fiesole, enable the onlooker to appreciate the words of Dante: "Famossissima e bellissima figlia di Roma." The city, indeed, was fair and lovely, beautiful for situation, rich in the gifts and genius of her sons and in the fruit of their splendid toil. Well might some modern psalmist among her citizens exclaim: "If I forget thee, O Florence, let my right hand forget her cunning."

WHAT KEPLER, GALILEO AND NEWTON DID FOR SCIENCE.

BY REV. J. R. RENDELL, B.A.

OCTOBER 16th, 1917.

The Lecturer said Tycho Brahe was the man who laid the foundation of accurate observation in Astronomy. He was born in 1546. His discovery that the Copernican planetary tables were inaccurate led him to devote his life to the preparing of new astronomical tables. Illustrations of his quadrant and method of calculations were given. Many of his theories did not long survive his death, but he was a magnificent observer, and his Rudolphine Tables remain a monument to his diligent research and wonderful powers of observation.

John Kepler was born at Kehl in Wurtemberg in 1571 and was a friend and pupil of Tycho Brahe. In his early youth he determined to raise the Science of Astronomy to a special dignity. His mind was greatly agitated by many astronomical questions. Why were there six planets—Mercury, Venus, Mars, Jupiter, Earth, and Saturn? Was there any connection between their distances from the sun and their orbits and the times of describing them? After trying countless theories, he published a book, in the belief that he had made a great discovery. Of the book he said he regretted no time wasted and grudged none of the days and nights spent in calculation. His discovery proved worthless, but the publication of his book brought him into relation with Tycho Brahe. His subsequent appointment as “Imperial Mathematician” to assist Brahe in his calculations, gave Kepler scope to develop his theories. Baffled by the erratic movement of the planet Mars, he concentrated on this planet with astonishing diligence, working day and night for years. His ultimate formulation of the three most important laws of motion of the planet Mars, known as Kepler’s Laws, brought order of chaos. No wonder he could write “I care not if my book is read now or by posterity, it may well wait a century for a reader, since God had waited 6,000 years for an observer.” The Lecturer remarked that whenever he looked at the planet Mars, he was reminded of this man, who in feeble health and poverty, rose to a height from which he saw clearly the design of the Universe. The name of Kepler would always be associated with the planet Mars.

Galileo came of an old and noble family : his father was a man of wide culture. Their native place was Florence, but Galileo was born in Pisa in 1564 and received his education in that city. At this period there was very little experimental science. Teachers considered the authority of Aristotle's works supreme, though written 1,900 years before. Galileo's refusal to accept the whole of this teaching, and his questioning spirit, rendered him unpopular with his fellow-students and professors. When quite a youth, as a result of watching the swinging of a lamp in a Church at Piza, Galileo made a far-reaching discovery, proving that distance travelled had nothing to do with time. (This the Lecturer demonstrated by a practical experiment). This discovery led to the construction of a "Pulsilogia," or time measure for the pulse, which was soon adopted by the medical profession. A further triumph was his experiment from the leaning tower of Piza, which proved that (neglecting air resistance) the speed at which a body fell to earth was independent of its weight, i.e., a hundredweight and an ounce if let fall at the same moment would reach the earth at the same time. This being contrary to the teaching of Aristotle, Galileo's unpopularity with the great philosopher's followers increased. His greatest triumph was the construction of the telescope, an invention in which Naval and Military men saw vast possibilities. Though alive to its usefulness in these directions, Galileo's chief concern was in its application to the heavenly bodies. Amazing revelations resulted. Mountains in the Moon, Jupiter had four Moons, Saturn was provided with rings! But Aristotle had mentioned none of these things! These discoveries and his daring assertion that there were spots on the sun, infuriated his numerous enemies and aroused their hatred, but Galileo remained fearless, and later endured cruel persecution. His most enduring monument was the vision of a new Universe he gave to the world and the new spirit of enquiry that he instilled into his pupils and breathed into the world. His name will endure as long as the sun shines and the Moons of Jupiter are to be seen.

Sir Isaac Newton was born in the Manor House of Woolsthorpe on Christmas Day, 1642, the same day on which Galileo died. Though originally intended for a farmer, his intense interest in mathematics led an uncle to send him to Cambridge, and at the age of 20 he had commenced his mathematical discovery "The Differential Calculus," a method of dealing with quantities that vary from moment to moment, and has been described as the most powerful engine of mathe-

matics man yet devised. It was Newton who first, by a prism, analysed the light of the sun into component parts. The lecturer showed that it was a mistake to attribute the discovery of gravity to Newton. Men had talked of gravity before Newton was born. In fact, a Frenchman had propounded a law according to which the force of attraction would fall off with the distance. Sir Christopher Wren, Robert Hooke, and Edmund Halley, were discussing the law of inverse squares and its application to gravitation. Sir Christopher offered a prize to the one who could prove it. Approached by Halley with the question, if a small body rotates round another under the central attraction which falls off according to this law, what would be the curve? Newton promptly replied, "An Ellipse;" asked how he knew this, Newton said that he had thought it out some time before, and showed Halley his MSS. Newton never seemed to realise the importance of making his discoveries known. But for Halley and the Royal Society we might never have had his masterpiece, the "Principia." His discovery that if the earth is a sphere and attracts bodies near it according to the inverse law, the distance should be reckoned from the centre of the earth, led him to apply this principle to the moon, and after laboriously working out calculations to discover what gravity would be at the distance of the moon, he eventually proved that the moon moved under gravity according to the law of inverse squares. His application of this law to all the bodies in the universe proved absolutely that the seven planets move in ellipses, a discovery which was indeed a new light in the darkness. The Lecturer stated that Newton's greatest discoveries did not lend themselves to popular exposition, but he was undoubtedly a great genius. Newton himself characterised genius as "industry and patient effort."

MEDICAL SCIENCE IN WAR.

BY W. J. S. REID. M.D., M.A., B.Sc. OCTOBER 23RD. 1917.

Dr. Robinson, who occupied the chair on this occasion, congratulated the Club on securing the services of Dr. Reid. He said a good deal had been heard about the devotion, self-sacrifice, and heroism which the war had evolved, but when the history of the war had been written, after peace had been declared, and when men could write with calmness and when they were capable of weighing in the judicial balances all the pros and cons of the question, he ventured to say that no more brilliant history could be written than that regarding the achievements of the medical services. He did not know a profession which was more sympathetic, more heroic, or more self-denying.

Dr. Reid said the war was a subject which to most of them was a painful one. To him it was the most painful memory of his life. He had to go through the first two years of it in France, and there he had the agony of soul and body in seeing the best of this kingdom wiped out or maimed in some way or another. War was a brutal thing, but he wondered if his hearers realised how dreadfully brutal it was. He never did, and he could not realise yet that it was so brutal, because things happened so suddenly that even in the presence of the most awful death and mutilation, one did not somehow get the same terrific sense of disgust that one would get from a tramway accident in peace time. All wars partook of that more or less, but in this war it was specially pronounced. We had been accustomed to talk of the methods of our enemies in this war as barbarous, and the Germans as barbarians. He wondered if we should not turn aside and apologise to the barbarians for that comparison. In all ages barbarians—men who were beyond the pale—had fought as men always would fight. But in the later ages of the dawn of civilisation all decent tribes had amongst themselves rules of war which were sacred to the tribes engaged. We started this war with a certain set of rules, but the Germans did not keep them, and therefore war had become a worse thing than ever.

The Germans had done all manner of things, but he questioned whether the struggle would be finished without the aid of Science as a killer, as apart from Medical Science as a healer. He had studied with the Germans, and their

sacred belief was that everything that was for Germany's good was right. Medical Science could produce an instrument of destruction far greater than any creation of Zeppelin's, in the production of an instrument of insidious death to hurl upon one's enemies. Thinking why the Germans had not used that instrument he could come only to one conclusion. The better known Germans in Medical Science were amongst the world's brightest exponents of the science of bacteriology, but they were not really Germans, they were Jews. He hesitated to think that these men would ever allow themselves to be used by the Kaiser or his Government for the purposes he had hinted at. As a matter of fact, Professor Nicolai, who was Court Physician to the Kaiser, and whom he (the speaker) was proud to number as one of his friends, had lately been imprisoned, and goods taken from him, because when he was approached by the High Command of the German Army for his opinion on a fiendish design to drop plague germs on Russia, he condemned the idea and made the mistake of condemning it in public.

Turning to the question of medicine as a healer, he said that in face of the scandals that were allowed to be perpetrated in Mesopotamia and Gallipoli, it was with trepidation that the ordinary man could talk of success of medical science in war. I have considered it and have never had any doubt as to the magnitude of the successes:

“To cure was the dream of the past.
To prevent is the Divine whisper of the present.”

And this is truer to-day than it ever has been.

To eradicate disease in the body of the individual or the mass is a great achievement, whether measured by medical or economic standards, but to prevent disease is an infinitely greater achievement, and that is what the new branches of the Army Medical Services have accomplished.

In former wars, Typhoid Fever, Enteric, or the group of diseases known by that name, has been responsible for more deaths than the enemy. In this war it is different, and why, because of the use made by the authorities of the scientific prevention of the disease.

These diseases were chiefly got by drinking impure water. Sanitary Science had done much to prevent these diseases at home, but it was faced by certain limitations in the field. It remained therefore to protect the individual by inoculation with anti-typhoid vaccine before going to the

Front. The method was to have two inoculations within a short period, but in the early days of the war men had to be rushed over as quickly as possible, so that in the first winter the results should not be assessed as an index of the power of inoculation to keep away typhoid. The result, however, was the practical absence of the disease among the troops even in the first winter.

After a time cases cropped up which were of a similar type to typhoid, but were less serious though serious enough to keep a man away from his duty on the field. These were due to two germs of the same family, and at last the Authorities acted on the advice of the experts and gave inoculation against these two germs.

The results of these inoculations cannot be divulged during war, but I can assure you that the deplorable results of these diseases in the South African Campaign and in the early days in Mesopotamia have been replaced by most brilliant ones. The mortality from these diseases in our training camps and in the field is probably lower than in civil life and this is due in great measure to the inoculation I have spoken of—a triumph of medical science indeed.

Then there was the disease of lockjaw, which was caused by germs which got chiefly into jagged wounds, where they could hide in little pockets. These germs lived chiefly in the intestines of the horse, and gardens and cultivated places were particularly liable to harbour them. The battlefields of France and Flanders were over cultivated and were hotbeds of these germs. It was found that the blood of animals inoculated with the germ contained a chemical substance which neutralised the poison. At first it was only injected into men who had shell wounds, but deaths occurred in men who had other injuries, and ultimately the order was given that it must be injected into everyone who had a breach of the surface of the body. The result was that the disease was practically non-existent. He would not give any figures. We were still at war, and these matters were absolutely confidential. Figures were impossible till the end of the war, but if he were allowed to give them, they would be delightfully surprised, because the disease had been practically cut off, as it were with a knife.

Another condition which, in the early days of the war, was a source of danger, was spotted fever, or cerebro-spinal meningitis. To us in this country that was not a great danger until the Overseas Forces came, especially the Canadians. Early on it began to be rampant, and the War Office

took a firm attitude, and a particularly effective method of dealing with the disease was advocated. Where a case of trouble was found, a sample of the fluid of the spinal cord was taken and examined. Four types of the disease were found, and they were treated by the injection of serum. In Spotted Fever the prompt measures taken to put specialists on to the disease at once wherever it occurs and to isolate cases have been responsible for much saving of life, especially amongst young soldiers.

The diseases he had mentioned were those of temperate climes, but there were diseases of the tropics, such as dysentery, which had had to be dealt with. Our activities in this world strife have not been confined to temperate climates and preparations have been made to fight the diseases of tropical and sub-tropical climates and amongst these first and foremost as a mankiller is Dysentery. This disease has always included the two varieties of Bacillary Dysentery and Amœbic Dysentery, the first a disease somewhat akin to Typhoid, the second a disease practically by itself, and until this war very little was known of it. This has been changed and special doctors have taken control of the examination of the men and there is no trouble too great to prevent men being sent back to their units who are unfit.

The medical treatment before the war was hopeless, but now, thanks to strenuous workers, is in a very happy position indeed. The state of affairs in Dysentery is wonderful when compared with what it was on the day war was declared. We had all read much of these diseases and some of us had studied them to some extent, but they never became a reality to us until the war, and the Science of Medicine has been advanced thereby.

Another disease which was common to all countries was what journalists euphemistically referred to as "the hidden plague." It was one of the worst of our foes because when a soldier broken by any other of the diseases came home to his people and to modern sanitation he lived his own more or less useful life without danger to his friends and the disease died with him, but with this disease it was not so, and it must be to the credit of medical science that at last it had set its face to the stamping out of this disease.

Equally great triumphs had taken place on the surgical side. In the early days of the war when the army was giving ground and the Casualty Clearing Station was well behind the lines, no very wonderful surgery was performed until the unfortunate casualty reached a base or general hospital.

But only certain classes of cases were able to stand the journey without serious hurt. Since then our line had become more fixed and in some places progressive, so that by re-arrangement the Casualty Clearing Station had become what it should be—an advanced Base Hospital for cases of severe injury—and operations which formerly could not be attempted so near the trenches were performed daily, and the wounded man had the advantage of the finest surgical and medical skill within a few hours of his being wounded. This had meant a great saving of life in abdominal wound cases and in other severe cases.

I know now of the case of an officer who was injured on the 9th of last month by shrapnel, which produced a compound fracture of the skull, causing unconsciousness. At the Casualty Clearing Station he was operated upon. The wound was so deep that it had opened the central cavity of the brain and the brain fluid flowed from the wound, which was on the left side and therefore extremely dangerous. He recovered from the operation and was removed to the Base Hospital, where he recovered his speech and control of all his faculties and his limbs. This was perhaps an exceptional case, but it indicated the tremendous strides that Medical Science had taken since the outbreak of war. Mistakes and failures were like out crops of rock on a fertile level plain. A few of them were seen from a long distance, and overshadowed the plains completely. He hoped he had diverted their eyes from the outcrops of rock and pointed to the fertility of the valleys.

EDWARD FITZGERALD OF OMAR KHAYYĀM FAME.

BY REV. SHERWIN SMITH, M.A., B.D. OCT. 30TH, 1917.

Edward Fitzgerald was born at Woodbridge in Suffolk in 1809. His genius was the genius of friendship—a real friendship, and not the kind that befriends you. The danger of persons who befriend you is that they want to interfere with your manner of life; perhaps that is one reason why the poor resent the help of those better off than themselves. Fitzgerald was shy and retiring, and hated intrusion. He was exceedingly delicate in dealing with his friends and took people as they were; and with a minimum of robustness, gathered about him a circle of the greatest spirits of the last century.

Fitzgerald's genius is the genius of a Dutch painter—a Dutch interior—of an open pantry door with the housewife putting the jam on the shelf. He has this sort of genius throughout his correspondence. He complimented his friends by writing to them immortal letters; but with no touch of publicity about them. No man can pay you a greater compliment than to write you a letter that is immortal. If a man with a friend's soul and a friendly nature will sit down and read these letters aloud to the members of his family circle, he will become friends with this genius for friendship.

In 1821 Fitzgerald went to school at Bury St. Edmunds, and there began gathering about him his friends. Three of his greatest friends date from school days. One was W. B. Donne, a well-known historical writer, and later a licenser of plays. J. M. Kemble, who became a famous Anglo-Saxon scholar, and James Spedding, who devoted his life to writing the life of Francis Bacon.

Some of Fitzgerald's letters are provocative of happy mirth. Spedding possessed an unusually high forehead, and in writing to a friend, Fitzgerald refers to it in this fashion: "not swords, not cannon, nor all the Bulls of Bashan butting at it, could, I feel sure, discompose that venerable forehead. No wonder no hair can grow at such an altitude; Thackeray and I occasionally amuse ourselves with the idea of Spedding's forehead; we find it somehow or other in all

things. You see it in a milestone, Thackeray says. He also draws the forehead rising with a sober light over Mont Blanc, and reflected in the Lake of Geneva. We have great laughing over this. The forehead is at present in Pembrokeshire, I believe, or Glamorganshire; or Monmouthshire, I know not which; it has gone to spend its Christmas there."

In 1826 Fitzgerald went to Cambridge and again began to gather friends. Thackeray was there, and Alfred, Charles and Frederick Tennyson. Alfred regarded "Old Fitz" as amongst his greatest friends. Fitzgerald was not content merely to do things for others, but would woo them. More than that, he would, in a delicate way, offer them money help when he thought they were in struggling circumstances. Fitzgerald was a great literary critic. He discovered John Wesley's Journal; he discovered William Blake, and discovered the Shakesperian-mindedness of Keats, and reckoned up Tennyson. His critical sense was preternaturally acute. He was unbiassed by popular feeling and would go his own way. He wrote about Tennyson in this way: "The more I see of Tennyson, the more cause I have to think him great. His little humours and grumpinesses were so droll that I was always laughing; and was often put in mind of my little unknown friend, Undine—I must say, however, that I felt what Charles Lamb describes, a sense of depression at times from the overshadowing of a so much more lofty intellect than my own; this (though it may seem vain to say so) I never experienced before, though I have often been with much greater intellects; but I could not be mistaken in the universality of his mind; and perhaps I have received some benefit in the now more distinct consciousness of my dwarfishness."

Another friend was John Allen—afterwards Archdeacon of Salop. He was the most religious friend Fitzgerald had, and tried his hand at getting him into harness, and to cure him of his Bohemian ways, but with little success.

After leaving Cambridge, he spent the next few years moving about from place to place. The delightful times he had whether with Spedding at Bassenthwaite, with Allen at Tenby, or with W. K. Browne, a farmer's son, for whom he had a great affection, and with whom he spent many happy hours—lived long in his memory. He was happy in the memory of a day ten years after and makes you happy in the recital of it.

For a time he settled down with his family at Boulge Hall, but later lived alone at the lodge of his father's house. There in dressing gown and slippers, his pipes and books ranged about him, he lived his own life at the gates of his father's house. His father had estates at Naseby and at Castle Irwell. He lost money digging coal mines on his estate at Naseby on which the Battle of Naseby was fought. Edward Fitzgerald found that Carlyle had made a mistake in his account of the Battle of Naseby and wrote to Carlyle about it, and in that way the two became friends. It was a strange friendship. Fitzgerald contradicted every maxim of Carlyle's, and the contrast between the two was most marked. Carlyle said : "Do the duty that lies nearest to thee and thy second duty will always become clearer." Fitzgerald in writing to a friend once said : "I believe I love poetry almost as much as ever ; but then I have been suffered to doze all these years in the enjoyment of old childish habits and sympathies, without being called to more active and serious duties of life. I have not put away childish things though a man. But at the same time, this visionary activity is better than the mischievous activity of so many I see about me ; not better than the useful and virtuous activity of a few others." Fitzgerald insisted upon being friends. Probably Carlyle would not have been content to keep it up and be content to write without receiving replies, but though Fitzgerald loved a man, he did not necessarily ask love in return. In later years some characteristic epistles passed between them.

Fitzgerald had a brother—John Fitzgerald, an eccentric character who devoted a great deal of time to evangelistic work. He had a habit of undressing himself while preaching and when in the pew, would often take off his boots and stockings. Edward was wont to remark : "All the Fitzgeralds are mad, but John is the maddest of the family, because he does not know it." Through his brother Edward he was brought into contact with Rev. T. R. Mathews, one of the most learned spirits of the last century. A close and lasting friendship sprang up between these two. Another friend was Bernard Barton, a Banker's Clerk, a Quaker, and the father of Fitzgerald's wife. This man had a wonderful way of drawing out good letters, and some of Fitzgerald's best letters were written to Barton. (Fitzgerald's letters are his great thing apart from Omar K.). Another friendship that was closely linked with Omar K, clustered round a man and his wife, Mr. and Mrs. Cowell. Cowell had many

literary gifts, which previous to his marriage, nobody seemed to have discovered, but his wife discovered them, and insisted on him going to Oxford. While Cowell was studying hard and laying the foundation of his future scholarship, Fitzgerald found these two out. Together they studied the Greek Poets, Eschylus and Sophocles; they studied Sanscrit and Persian, which was to give Fitzgerald an entrance into Omar Khayyam. When the time came for Cowell to go to Oxford, Fitz could not bear the thought of parting with these two with whom he had spent the happiest years of his life. No one can explain what it meant to Fitz, when later they left England for India. Mrs. Cowell was the woman who had most influenced him, and in whose company, along with her husband, he was most at home. Later, in writing of the parting, he says: "I believe there are new channels fretted in my cheeks with unmanly tears since then." When the Cowells were gone, home was gone, and he decided to manage one for himself, and married Miss Barton, daughter of his old friend. The story of his marriage is an unhappy one. He was eccentric—she was a Quaker. He was Bohemian in his ways—she desired to manage her home in a conventional way. They separated after six months. Fitzgerald has been blamed a great deal, but he suffered most. They only met once again. Once a year Mrs. Fitz. visited Woodbridge, but her husband always contrived to be absent. Once when walking with a friend whom he called "Posh," Fitz. suddenly exclaimed "Here's my wife." He was beginning to put out his hand to his wife, but his courage failed him, and turning to his companion said "Come along, Posh." The anguish he endured after his marriage peeps out in some of his letters to the Cowells, and he tells them he is finding consolation in Omar K. His definition of Omar K. is this: "It is a desperate sort of thing; unfortunately at the bottom of all thinking men's minds, but made music of."

He kept up his power of making friends to the end of his life. Two friends of his later life were famous American writers, Lowell the Poet, and Professor Norton, upon whom he squandered the wealth of his memories. To Norton he wrote the sort of letter that will be historical in the days to come. "Dante's face I have not seen for some time, only his back on the bookshelf. What Mr. Lowell says of him recalls to me what Tennyson once said 35 years ago. We were stopping before a shop in Regent Street where were two figures of Dante and Goethe. I said, what is there in old Dante's face that is missing in Goethe's, and Tennyson replied: "The Divine."

A VISIT TO LISBON.

BY FRED GREENWOOD.

6th NOVEMBER, 1917.

Formerly a journey from Liverpool to Lisbon, 1,078 miles, occupied from five to six weeks, but in modern times it can be accomplished in three to four days. Nearing Lisbon, a quaint and striking landmark known as the "Tower of Belem" is seen. This marks the spot where Vasco da Gama landed on his return from the discovering of India, and was built about 1520 as a fort to defend the city from sudden attacks by pirates. As seen from the deck of a vessel, Lisbon presents such a series of panoramic views as once seen can never be forgotten. It is built on a number of hills, in some places so steep that the houses appear to be built on the caves of those in front, and rise tier upon tier from the water's edge. The city is an entrancing sight by moonlight, the distant buildings, silhouetted against the deep blue of a cloudless sky, and the myriad of flickering lights make it seem like a vision of fairyland.

Lisbon stands out prominently in history as having been the scene of the most disastrous earthquakes on record. The most serious of all took place in 1755, when it is stated 60,000 people perished, and property to the value of £80,000,000 was destroyed. The city was afterwards re-built with finer streets and many magnificent squares. An imposing feature in one of these squares is a statue of Don José, erected after the earthquake out of gratitude for the energy he displayed in rebuilding the city. The Arc de Rua Augusta, standing 70 feet from the arch to the ground is another imposing structure, with its colossal statues, 23 feet high, representing Glory crowning Genius and Valour. In Dom Pedro Square is a magnificent column erected to Dom Pedro IV. (first Emperor of Brazil), standing 92 feet high. The pavements in this Square are laid with black and white marble and are said to have been laid by bands of prisoners manacled together. This mosaic gives a peculiar "wavy" effect, which has occasioned some of our "Jack Tars" to nickname it "Roly-poly Square."

The ruined church of Carmo, standing as the great earthquake left it a century and a half ago, is a beautiful relic of Portugese art, and was built in commemoration of a vow made by General Nuno Alvares Pereira in 1386, when at

the Battle of Aljubarrota 6,000 Portugese, using artillery for the first time, completely routed 25,000 Spaniards.

The oldest Ecclesiastical building is the Cathedral, situated in the Moorish part of the city, and was supposed to have been a Moorish Mosque when the city was taken from the Moors by Alfonza Henriques in 1147.

Few houses in Lisbon of the poorer classes have water laid on. The water is carried in an open trough across the Valley of Alcantara from Bellas, 15 miles away. The Aqueduct which crosses the valley has 127 arches, the highest is 204 feet, with a span of 95 feet. George Borrow, in his book "Bible in Spain," says: "I boldly say that there is no monument of man's labour and skill pertaining to either ancient or modern Rome, for whatever purpose designed, which can rival the water works of Lisbon. I mean the stupendous aqueduct whose principal arches cross the valley to N.E. Lisbon."

Lisbon's proudest possession is the Church and Monastery of St. Jeronymous, which with its magnificent cloisters furnishes one of the finest examples of the Manneline style of architecture to be met with. It is of great historical interest, being erected in fulfilment of a vow made by King Don Manuel. As Vasco da Gama and his intrepid companions sailed down the Tagus in four small ships on their voyage of discovery, the King vowed that if their enterprise proved successful, he would erect a Church to commemorate the event. It is the great national Mausoleum where rested the ashes of Vasco da Gama, Camoes, the great national poet, and the historian, Herrulane. The double-storied cloisters, with their graceful arches and exquisite ornamentation, reveal one of the finest examples of Portugese sculpture to be met with—an art in which the Portugese excel.

The Portugese as a class are very indolent and easy going. Two of their favourite words are "amantria," which means to-morrow, "Paciencia," "do not be in a hurry." They have an inveterate prejudice against carrying burdens, and their menial work is done by Galegos. The Portugese have a saying, "God made first the Portugese, and then the Galegos to wait on them."

The principal beasts of burden are mules and bullocks. Bullocks are used for anything and everything, being slow, patient, plodding creatures, very docile and obedient, and little trouble.

Some curious street scenes are witnessed. If milk is wanted, there is no doubt about it not being water, as cows are milked in the streets, and fresh warm milk can be obtained at any time. Even a Christmas dinner can be selected while it is walking about the streets, as there are always plenty of turkeys to select from.

Portugal being a Catholic country has many Saints Days and High Festivals. The Saints Days are recognised by elaborate processions, which are highly spectacular and very impressive. In some of these processions a life-size figure of the Saviour is carried through the streets. Great reverence is shown and no man remains with his head covered while it passes—not even policemen and soldiers. A "Procession of Health" has taken place annually since 1569 to commemorate deliverance from visitation of plague in centuries gone by.

Another phase of national life is the Bull Fight. Displays are usually on Sundays and Saint Days. This sport is not so cruel and revolting as in Spain. The bulls' horns are protected so that they cannot gore. The bulls are not killed nor are deadly weapons used. The sport is at times very exciting and commands admiration for the courage and skill of the performers, but to English eyes it is a degrading form of amusement, and not sport in our acceptance of the term.

Portugese currency gives little trouble as it consists of "reis" only; twenty "reis" equals Id. It is therefore no uncommon thing to see in the shops articles marked 50,000 reis.



FOUR MONTHS WITH THE B.E.F. ON THE WESTERN FRONT.

BY REV. T. ORMEROD, B.Sc.

NOVEMBER 13th, 1917.

It was in February this year that I arrived in France to serve four months severe labour with the Y.M.C.A. The place to which I was allocated was Bethune, and there I duly arrived after one of the most wearisome railway journeys from Boulogne, a distance of some 60 miles, which was accomplished in 18 hours.

The little town of Bethune is only about four miles from the line. It is almost equi-distant from Lille and Arras, which are N.E. and S.E. respectively, and about 20 miles away. It is within a short distance of Lens and Vimy Ridge on the south, and the Belgian battlefields on the north, and near enough to each to make two nights stand out for ever in one's memory : that of the storming of Vimy Ridge, and the taking of Messines. It is just opposite La Bassee, where here is a formidable German salient which has not moved an inch in either direction for three years, and which is generally regarded as impregnable to frontal attack.

Bethune itself is very ancient and is referred to by Dumas in his earlier romances. It has all the features of old-world beauty of the typical Flemish town, though geographically it is just outside Flanders. The Market Square, though now a heap of ruins, was a perpetual delight, and a thing of haunting beauty on a moonlight night. As the town was constantly occupied either by battalions resting from the line, or on the march from north to south, it was periodically shelled and bombed by the enemy, and as every point had been accurately registered they were able to do as they pleased with it, and a sorry picture it presents to-day; It had a fine University, a Municipal Theatre, and a School of Music. This latter building was in the line of shell fire, and early in the war suffered badly. The roof and the windows were destroyed, and apparently the musicians thought it time to depart, and the building was taken and partially repaired by the Y.M.C.A. and converted into a Soldiers' Club. It was my duty during the whole of my stay in France to manage this undertaking, and we were particularly fortunate during the many bombardments of the town to be hit only twice, and that without any serious damage. The bombardment of

the town seemed to indicate that the Bosch had intimate knowledge as to the movements of the troops in the town, and there is little doubt that they had agents who kept them well informed. But the most interesting thing about their bombardments was its psychological effect. The shells followed each other at intervals of almost exactly three minutes, and produced what is called cumulative sensation. The first half dozen or so did not produce much effect on the feelings, but when the number reached ten, twenty, or thirty, the effect was increasingly unpleasant, and when it reached forty it was positively distressing. The scream of a shell is the most horrible noise on earth, and is heard before the explosion in the gun, because the shell travels faster than the sound. The gun which was apparently set apart for this work was about nine miles distant, and was accurately located by a clever electrical device invented by a young engineer. It was not, however, destroyed whilst I was there, being well placed in a tunnel and appearing only at the moment of firing.

We dealt with a constant stream of men, 1,000 to 1,500 per day, who provided for us an unceasing study of human character. In quick succession would come a Lancashire operative, a Cambridge Undergraduate, a London Bus-driver, a Cathedral Organist, a Coal Miner, a Solicitor, a Music Hall Entertainer,—all sorts and conditions of men, every type of which the pencil of a Bairnsfather could depict, all linked together in the great enterprise, all class distinction forgotten, and every man regarded as a comrade. For this symposium of manhood the Y.M.C.A. caters, supplies every necessity, and provides facilities for rest, recreation, and worship. Concerts and entertainments nightly, services on Sunday and mid-weekly, prayers every night, communions at intervals, an abundant supply of materials for letter writing, rest rooms and reading rooms, and, not least, a staff of men who are always ready to give sympathetic heed to the various troubles of the men, and to advise and comfort them in every difficulty. The one outstanding anxiety of the man at the Front is not his danger or privation, but the welfare of those he has left behind at home. A characteristic of our men is an unquenchable optimism in the face of all their trials. No words can describe their unfailing cheerfulness, and one's admiration of their splendid qualities is simply unbounded. As they come in, straight from the trenches weary and mudstained, they make their way to the rest room, and in less time than it takes to tell, have shuffled off their pack and are fast asleep. In conversation about the life in

the trenches—living in a ditch—they treat the whole affair as a joke in which they are fortunate enough to participate. As to the actual dangers they are constantly facing, one rarely hears a word, except that the night before he is going over the top the man usually comes in to evening prayers, and may shyly ask for a Testament, which he regards as a sort of talisman against evil. All trials and difficulties are met with the same inscrutable and imperturbable demeanour, and a keen sense of the humour of a situation robs it of half its horrors. The difficulties which they encounter in speaking the language may be cited as an illustration on the lighter side, of the way in which difficulties are invariably surmounted. There are two or three accredited ways of speaking French. There is the way of the man who thinks that French is only English spoken very ungrammatically and as one might speak it to a half-witted child. This method is usually hopeless. Then there is the man who thinks that with a little judicious clipping of the consonants and the alteration of vowels, French is spoken by the mispronunciation of English. This succeeds a little better, but is not always triumphant. The usual type of man gets firm hold of a few, a very few, really useful words and works them hard. He puts in a good word here and there and liberally supplies the necessary gestures. An unfailing fund of common sense on one side, and great natural intelligence on the other, coupled with the utmost good humour on both sides get over the language difficulty with surprising ease, and this is only an illustration of the wonderful way in which all difficulties are surmounted.

The religion of the trenches is the religion of home. There can be no doubt as to the revival of the ideal of home. It is the one unfailing topic of interest, the centre and stronghold of the affections, and the constant inspiration of the imagination. It is a religion, whose roots are real and deep and strong. Every scrap of news from home is eagerly sought and treasured, and home is idealised, and made the symbol of all that is beautiful and desirable. It will be a bad day for England when the war is over if these visions are doomed to disillusionment.

War is the sternest of all realities, and it is evident that a new order of values quickly asserts itself in this strenuous life of reality. Shams and pretences of all kinds are scorned as they deserve to be, and it is safe to predict that when these men return home they will make short work of the unrealities of our modern life, whether they be found in our religions or social or political life. They go straight for the point

they wish to reach without circumlocution. Directness of speech and action are most marked in everything, and shams of all sorts will not hold water for a moment. The language of the men is one sure indication of this. In terseness and brevity it leaves little to be desired, and as the man would say "it gets there every time." On the way into the trenches one sees a notice board with the laconic words, "Dead Horse." In the trenches at a dangerous corner is a sign which haunts one yet, "Sniper not accounted for," but perhaps the best illustration of all is the notice warning men not to trespass on the little trench railway which carries rations and munitions from the stores into the front line trench. Instead of the long involved notice so familiar to us, there is the simple inscription in crude but bold letters, "Get off." These things are parables, and they indicate that there is a bad time in store for those who prefer to conduct their business along lines which are not conspicuously straight. As one boy said, "There will have to be no going round by Padiham to get to Colne."

The standards of morality are based on the same principle, and if there are loose notions regarding the rights of ownership, they are compensated by a generosity and sympathy which are so real as to be free from all ostentation.

In regard to the work they are doing at present, they are inflicting the maximum of loss on the enemy with the minimum of loss to themselves. The way may be long, but the end is sure. It behoves us at home to keep up heart and courage, to write more frequently to our boys, to send out more newspapers, and, in the words of Dumas, to exhibit that sum total of human wisdom which is embodied in the two words, "Wait and Hope."

SCIENCE AND SANITATION.

BY T. W. WADDINGTON.

NOVEMBER 20th, 1917.

The problems of the disposal of domestic waste counted for little in those primitive times when man sought the shelter of caves to protect him from the weather and wild beasts, or built rude dwellings on piles driven into the bottom of lakes, or in nomadic fashion wandered from place to place. It was only when people gathered together in more settled communities that the necessity became a pressing one. In England this became marked near the middle of the 18th century, but until quite recently primitive methods were in vogue, and prior to the 19th century the most advanced sanitary code was contained in the Mosaic Law.

England during the middle ages had poor dwellings with rush covered floors as described by Erasmus; its towns had narrow, tortuous, unpaved streets, without sewers or drains. There were also devastating epidemics such as the Black Death, Sweating Sickness, and the Great Plague, which seems to have been stamped out by the great fire of London in 1666.

The Public Health Act gives facilities for the borrowing of money for public purposes, repayment being spread over a number of years. Registration of deaths, &c., began to be made, and a Registrar General appointed, the publication of whose reports led to many sanitary reforms.

Leenwenhoek, at Delft, in Holland, in 1675, made a small lens by which he was able to see Infusoria in stagnant water. This discovery opened up new fields of knowledge and with improved lenses led to the discovery of bacteria and so laid bare the root causes of many epidemic diseases.

Dry methods.— Once, and that not very long ago, middens were to be seen in all sorts of odd corners. These were unsightly dangerous, and often the playground for children. Gradually smaller receptacles were constructed for groups of houses or for single ones, small galvanized bins which require emptying once a week being now often used. The huge public tip has given place to the destructor, the waste slag is put to use for various purposes, the heat generated is utilized for the generation of steam, the driving of a dynamo, and so converted into light or power.

Conservancy Methods.—The waste materials about a house used to be kept when the privy and cesspool were in use. These latter gave place to the pail and later to a large extent to the water carriage system which aims at getting the waste away from the house as soon as possible.

The early sewers were intended for surface water only, their use for foul water being prohibited. About 1810 water closets were introduced and the sewers were used to take the overflow from cesspools and discharge to the nearest water course.

The Towns Improvement Act of 1847 legalised the pollution of rivers, but as this became acute, complaints began to be made and in 1875 the Public Health Act was passed and this prohibited the discharge into streams. Before 1870 practically no sewage purification was attempted. The recommendations of the Sewage Commission (of which Dr Frankland was one) were embodied in the River Pollution Act of 1868, and land was insisted on for the final treatment of sewage. It was then erroneously believed that sewage was purified by direct oxidation, the real agents, bacteria, being overlooked, although the work of these agents had been indicated by others some time before.

The lecturer next dealt with the methods of sewage treatment as practised to-day. In a town the sewage is collected by a wonderful network of sewers and delivered at the sewage works. Here it is passed to the detritus tanks, screened, and then led to the tanks proper, which are generally of three types, oblong, circular or cone-shaped, the two latter having special means by which the sludge can be emptied without the tanks being thrown out of use. Tanks are used as subsidence, precipitation or septic tanks. In the first deposition of the heavier solids takes place, where precipitants (such as lime, iron or aluminium salts) are used colloidal matter is thrown down and a much clearer effluent obtained. Septic tanks are either open or closed, and the work effected by anærobic bacteria consists mainly of the decomposition of urea into ammonia, fats into soaps and glycerine, and cellulose into carbon dioxide and marsh gas. Instances were given of the utilization of the marsh gas for lighting and heating. The sludge obtained from the tanks is dealt with in a variety of ways. In some cases it is sent to sea in sludge ships, in others it is pressed in sludge presses, and applied to the land for the growing of crops, or air dried and used for the same purpose.

Examples of the use of sludge for gas making, were given, and the case of Bradford was cited, where from the recovery of grease a profit of many thousands of pounds per year is made. The effluent leaving the tanks is further treated in a number of ways. On land by broad irrigation or intermittent downward filtration; on sand or polarite filters; and in contact beds or on percolating filters.

A description of various types of the latter was given, the construction of the filters, the walls, the underdraining, the distributors used, such as troughs, tipping troughs, fixed sprays, revolving sprays, the McFiddian, &c., and the dosing chambers, by which they are fed, together with a brief history of the introduction of the different types of filters and distributors. Next, the chemical changes taking place in the filters brought about largely by aerobic bacteria, were indicated, viz., the oxidation of ammonia to nitrous and then to nitric acid, thus giving the nitrates, so beneficial to vegetation.

The sewage fly, the spiders and birds associated with filters, and the moulds and algæ associated with effluents were in turn mentioned.

Finally the newest method of sewage treatment known as the actuated sludge process was described. It may be described as intensive bacterial treatment. In this process air is continuously blown into the tanks, the sludge, with the bacteria, being brought into intimate contact with the same and wonderful purification results therefrom. The enforcing of the provisions of the Rivers Pollution Act by the Rivers Boards has caused the sewage problem to be dealt with in an earnest manner. This, and improved sanitation methods, have brought about a lowered death rate and made it possible for the salmon still to be found within a dozen miles of such an industrial area as the Burnley district.

OLD HOMESTEADS IN LANCASHIRE AND CHESHIRE.

By J. H. CRABTREE.

NOVEMBER 27TH, 1917.

AT the South East corner of the "County Beautiful" stands that doyen of "magpie" buildings called Moreton Old Hall. Whether seen in close proximity or from a distance as an ornamental landmark, Moreton is at once striking and attractive. Its chief positions as seen to-day belong to those happier Tudor times when civil wars had just ceased and men began to think of beauty and decoration in their homesteads rather than thick walls and lofty tiers. No other of the many half-timbered houses in the United Kingdom can compare in perfection of detail with the bays and porticos of Moreton. The bays are built later than the adjacent parts of the Hall. We read on the uppermost tiers that "God is all in all thing. These windows were made by William Moreton in the year of our Lord 1559." In a lower storey of the bay are no fewer than 1,665 pieces of glass. Most are plain but some bear heraldic signs and colours. In the long gallery—a veritable study of English oak in beams, floors and panels—the Moretons and their friends danced to the music of the piper and flautist. It is said that Queen Elizabeth was well acquainted with this long gallery.

Gawsworth Old Hall is seven miles from Moreton. This architectural veteran lies off the beaten track, and must be sought for even in the tiny hamlet which, on more than one occasion, has made the country ring. Hidden behind a modern villa, the curious bay window looks on a wild garden, and peeps upward with a creepy-looking gable. What may happen some stormy March day in this lonely garden it is hard to say. This house is well supported with iron stays, or it would have vanished long ago.

Addlington Hall—for 400 years the home of the Legh families—is another "magpie" dwelling. As a rule, the timber work of these "magpie" dwellings is painted black and the intervening plaster white; here, that order is reversed. During the Civil War, 150 soldiers of the King crowded this courtyard and the rooms adjacent. For two weeks they kept the besiegers at bay, until hunger starved them to submission. They retired to their houses, leaving 700 rifles and 15 barrels of gunpowder.

The Great Hall contains the magnificent organ on which George Frederick Handel often played when visiting Adlington. It is said that he composed "The Harmonious Blacksmith" here, after sundry reflections at the local smithy. This conclusion is quite wrong. The real "blacksmith" concerned was the parish clerk of Whitchurch, near Edgware, during the period when Handel was organist at the Church there. Adlington people like the story to be applied locally; but it will not fit. An inscription on the portico records the erection of this part of the Hall by Thomas Legh and his wife "Sibbel" in 1581. The imposing front, facing the meadows, strikes another order altogether. The massive stone columns, adorning a plain brick frontage, were erected by Charles and Hester Legh in 1757, and command a magnificent view of the broad Cheshire Plain.

Handforth Hall was the home of Sir William Brereton when General of the Parliamentary Armies in the North, during the Civil War. Sparing neither friend nor foe who differed from his opinions, he wrought dreadful havoc even among his own relatives. Over the doorway of Handforth is an inscription noting that the Hall was built by Uryan Brereton and his wife Margaret. The wife was the mainspring of this noble effort—she found the money.

Bramhall, the "house beautiful," stands on the hill above Davenport Park. It is often regarded as the most remarkable of Cheshire's "magpie" buildings. Bramhall Hall lies due north and south, the terrace facing east. Beyond the terrace front is the courtyard—a brilliant spectacle on a bright summer's day. This open space was originally quadrangular, but the buildings and gateways on the west front were demolished 150 years ago. A magnificent panorama of woodland and meadow, for miles ahead, then lay before the main building. It is glorious to behold to-day. Just 40 years ago Bramhall was sold to a Manchester Company for £190,000. Ultimately, it was purchased by Mr. Charles Henry Nevill whose death, last year, was deplored by all who knew him. The dining hall embraces an elaborate portico, with a most wonderful display of window tracery. A little further is a fine oriel bay, with five carved gables corresponding to five sides of an octagon. This bay forms an offshoot of the Great Hall within. A noticeable feature of the lower window is the extreme delicacy of the glass-work. On each of the sides there are close upon 700 pieces. It is interesting to note that Bramhall had once a long gallery

at the top, like Moreton. This was taken down a century ago as it imperilled the safety of the Hall.

Marple Hall has a place in our Island's story. For several years this was the home of John Bradshaw, the judge who, in Westminster Hall, pronounced sentence on England's martyred king. When young Bradshaw became a lawyer's clerk at Congleton, he spent much of his holidays in the shade of the old Portico at Marple. But the old home was too tame for his fiery spirit, and he flew away to London, where he studied law at Gray's Inn. Bradshaw frequently revisited Marple Hall when it was occupied by his brother Henry, a leader of the Parliamentary forces in the North. A fine oaken bedstead in the Hall Chamber bears this significant motto :—

“ He that is unmerciful, mercy shall miss,
He shall have mercy, that merciful is.”

From Marple to Knutsford is not a far cry. There is one homestead of Knutsford which readers of “ Mary Barton ” never fail to appreciate. This is the early home of Mrs. Gaskell, where she lived until she became the wife of the celebrated minister of Cross Street Chapel, Manchester.

Passing over the border to Lancashire, we find there are very few half-timbered homesteads. Probably the Poet's Corner, in the old Millgate, Manchester, is among the best known examples. This house was formerly known as the “ Sun Inn,” and was kept by William Earnshaw, who is described as a scholar and a gentleman.” Here the literary cult of Manchester used to meet occasionally, and breathe their poetic lays. Among them were John Bolton Rogerson, who generally presided, John Critchley Prince, Sam Bamford, of Middleton, Elijah Ridings, and Richard Wright Proctor—worthy names in Lancashire literature. Ordsall Hall stands near the heart of the city, and is the old home of the Radcliffe family. It is said that the house was built, in part, of the timbers taken at the demolition of the first parochial church of Manchester. If so, the church must have been built by a master hand, for the timbers of Ordsall bid fair to last for centuries to come, as the oriel bay bears witness. In the changeful atmosphere of the Tudor period, Ordsall provided knotty problems. It is credited with secret chambers, magic panels, and devious tunnels. The occupants of Ordsall, at one time, swayed the destinies of England. A Radcliffe was the “ sweet friend ” of Richard III., when it was said that

“ The cat, the rat (Radcliffe), and Lovel the dog,
Rule all England under a hog.”

According to Harrison Ainsworth, Ordsall harboured the arch-plotter of November 5th, and the novelist tells a fantastic story of the desperado's love match with Viviana Radcliffe, an only daughter. Guy Fawkes was soon caught in the cellars of the Parliament House, and never saw his lady more. Ordsall Hall is now used as a training institution for the clergy.

In the sweet vale of Kersal, two miles from Manchester, is an old homestead known as Kersal Cell, where Dr. John Byron wrote the “ Christmas Hymn,” beginning

“ Christians, awake ! salute the happy morn.”

The house was built on the site of a monastic priory, hence its name. Kersall Hall belonged to the estate, and was eventually converted to a farmstead. It is believed that a secret passage once existed underground, between the Hall and the Cell, where suspects could escape, unless sorely pressed at both ends. To-day both termini are sealed.

Within a stone's throw of the Cathedral Tower of Manchester stands the Old Hall of Manchester. Hundreds pass it daily without a thought of its existence. It has withstood the storms of 550 years at least. Chetham's Hospital, or School for 100 boys, is the ancient Manor House of Manchester. When the foundations were laid on the stony banks of the Irwell, no man knows. Thomas de la Warre, Rector of Manchester, was owner and occupier when Henry VIII laid hands on the religious houses. The King gave this house to the Third Earl of Derby, who lived here during a part of each year. Later on, Cromwell's agents seized it, martyred the owner in Bolton Market Place, and offered the house for sale. Then Sir Humphrey Chetham, bachelor, merchant, philanthropist, conceived the idea of purchasing the Hall from the sequestrators, and converting it into a school for orphan boys. Unfortunately, he died, in the midst of this noble effort, at Clayton Hall. £9,000 had been allocated to the scheme which was faithfully carried out by the trustee. The Dining Hall bears his monument in marble, but a grander memorial is to be found in the lives of men the wide world o'er, who have gathered around the ingle nook of this homestead. The old house of the De la Warres is full of historic interest. Its stones preach sermons ; its crannied chambers volumes ; its furniture and carvings are the silent witnesses of a glorious past.

Belfield Hall, near Rochdale, has some affinity with Burnley. Two centuries ago, it was occupied by Colonel Richard Towneley, a relative of the Towneleys of Towneley Hall. In days more remote, it was tenanted by John Byron, an ancestor of the poet, who was Lord Byron, of Rochdale. John was childless, and he adopted a niece of singular charm and grace. At Chadwick Hall, lived Roger Chadwick, the lover of Nellie Byron. The match was intensely popular, and Roger and Nellie prepared for marriage. When returning from the marriage, an attack was made upon the bridal party by a company of hirelings from Trafford Hall, then the seat of an avowed enemy. In the scrimmage, Roger Chadwick fell from a bayonet thrust and was carried to the Hall, where the ladies had taken refuge. This was indeed a day of events.

LAKELAND : SCENES THAT LINGER.

By R. S. HEAP.

DECEMBER 4TH, 1917.

I WONDER if you have noticed when listening to our great pianists that the sonata is usually preceded with some form of prelude. In the case of Paderewski the prelude has two chief characteristics. First, it is brief, second, it starts with ferocious fulness, gradually dying down, and finally finishing on a single note ; but that note is the key to the situation ; it is the foundation around which the whole structure is built. It is a sort of avenue to which he manoeuvres you in order that you may see the exact view he wishes to present. It is an atmosphere which he creates for you to breathe in order that you may be in the correct mood to appreciate that which is to follow. It is only inasmuch as I can induce you to come to my view point, to look down my avenue, and to breathe my atmosphere that I shall be enabled to adequately convey to you my impressions of " Scenes that linger."

There is a scene in " David Copperfield " that Dickens was longing to describe. It goes something like this. " I now approach an event in my life, so awful, so unlike anything which preceded it, that it stands before me now like a great column on a plain." That was the scene of the storm at Yarmouth: I remember a scene, a sunset, so vividly engraved in my mind that I see its contours and its colours so really now, so accurately, that I see them now just as truly as when I saw them, many years ago. I was standing on Friar's Crag, Derwentwater. Across the western sky lay a band of brilliant gold, it looked like a huge ingot just drawn from the full fury of the furnace. Silhouetted against it were all the Western peaks of Lakeland, nature always insisting that high lights and deep shadows shall come together. The higher the light the deeper the shadow.

The light in the west was so intensely brilliant that the mountains in contrast seemed carved in solid carbon. Skiddaw had a dark dense cloud at its summit, the underneath of which caught the glare from this huge cauldron in the west and deflected the warm light on the surface of the lake.

I sat looking and lingering over the scene until the brilliant light died down. As the light grew dim the shadows grew less intense, and as the light faded away and the warm rays gave way to colder hues, a light breeze began to blow. The mountains seemed to be enfolding themselves in mists, as though preparing themselves for a period of repose. The ripples made musical accompaniment. It seemed as though Nature was singing a kind of lullaby as though singing herself to sleep. The words of John Ruskin came to my mind: "There is not a single moment in any of our lives when Nature is not producing picture after picture, scene after scene, glory after glory."

We arrived at Windermere late in the afternoon in the month of June. The year was at its best. We set off to walk to Coniston that night. The sun was already getting behind Wetherlam as we crossed the ferry. We passed through Hawk's Head and reached Tarn-Hows just in time to get another glorious sunset. A very fine view is to be got from the south side of the Tarn, but it must be seen either in Spring or in Autumn, and whether seen early or late you must see that sunset, when the light is coming from the West and you get the presence of the oblique rays. You have the Coniston mountains at a very close foreground. You also get Scawfell, Bow Fell, and the glorious Yewdale. Langdale Pikes, Helvellyn and the High Street Range stand out prominently, the whole making a very composite picture, and in the foreground you have the Tarn; the numerous pine trees produce a very striking effect. We lingered until the moon rose, and went down the hill as the Coniston clock was striking eleven.

A MOUNTAIN TARN.

The tarns reflect more quickly the varying moods of nature. Let me describe a visit to Keppelcove Tarn. Keppelcove Tarn is situated on the slope of Helvellyn under the Swirrel Edge

Secluded, sheltered, and round in shape, looking from the summit of Helvellyn like a perfect little basin. "Tarn" means a tear on the cheek of the mountain. It is evening, and as we approach the Tarn we are impressed with the silence. The surface of the water is perfectly still, not a ripple, not even the slightest breeze to disturb the stillness. It is like a mirror. The thick moss renders our footsteps noiseless. So still, so impressive is the quiet that you naturally fall into the habit

of speaking in whispers. We carry on a conversation across the tarn (half mile wide) in the faintest whispers, and without difficulty.

The silence arrests you, it is ever the most impressive force exerted on the human mind. It is a beautiful evening. We feel to be experiencing the peace that passeth understanding.

Let us pay a visit and see the same tarn in another mood. The wind is in a frolic. As we climb the hill and approach the Tarn a violent blast strikes us over the shoulder of the mountain that is distinctly awakening. I am not easily scared with wind, but this was one of two occasions when I have been brought in contact with it and been forced to conceive its danger. We did not proceed far before it was clear enough to all of us that it was very questionable pleasure. After a brief consultation, four of us decided to go on. Immediately after starting a sudden wind struck us "like a hammer that breaketh the rock."

One friend was blown off his balance and came with his "beetle-crushers" right on my ankle—I said—better not tell you, as it could not by any stretch of imagination be put under the head of literary or even scientific. With difficulty we reached the Tarn. The huge amphitheatre is in a state of pandemonium. The terrific blasts are striking the Tarn in all directions and causing a state of things so turbulent, so boisterous, that it is difficult to imagine and impossible to describe. We seek protection from the storm in a sheepfold close by the tarn. The water is lifted over us in great sheets. First the rush is in our direction, then a stronger gust comes down one of the gullies and drives the water in a direction at right angles followed by a sudden change about. At last the wind is directed by the walls of the amphitheatre in a continuous blast that sweeps the water round and round (like you can do with a spoon in a basin). The centre lowers and forms a hole, then as if with a colossal corkscrew a shaft of water is drawn from the centre and sent 100 feet into the air, when it is caught by the savage blast and hurled against the crags hundreds of feet over head.

Baddeley tells us the storms experienced sometimes in these Tarns defy description. The ferocity of them has to be experienced to be pictured or understood. I know not words that will describe them. Nature in her wildest moods is formidable in the extreme and works on a scale so colossal that

nothing short of the words of Isaiah could describe them. "I will make thee a threshing machine with teeth that shall hew down the mountains like chaff."

It is hardly necessary for me to remind you that sometimes in the Lake District it rains. Doubtful rain is discomforting, that is the sort of day when you don't know whether to take umbrella or a waterproof. Continuous rain is more understandable because you know what to do. Its continuity becomes a virtue. Then you have torrential rain which is distinctly interesting, and if sufficiently bad becomes entertaining.

We drove down from Keswick one morning to Seatoller, there leaving the coach, and proceeding by way of Honister, Brandreth and Great Gable, with the idea of climbing Great Gable. When we reached the summit of Brandreth we were suddenly enveloped in a dense rain-cloud, the water seemed to be coming down in almost solid masses, it was more than rain, something so exceptionally unusual, the only fact that was comforting was the fact that we knew ourselves to be insoluble in water. We returned to Seatoller drenched. Shortly, whilst having tea, there was a knock at the door and the coachman informed us that if we didn't come at once we should be unable to get back to Keswick that night.

The information was confirmed by the landlady. The hillsides were almost white with foaming torrents dashing down every gully. The lake had risen over five feet in four hours, and you could have sailed in a small boat all the way from Seatoller to the end of Bassenthwaite.

The driver was much concerned about the lower stretches of the valley about Rosthwaite, where we had often noticed the flat-topped walls—which, of course, are the footpaths in weather of this kind.

When crossing the valley about Rosthwaite we had to sit on the backs of the seats with our feet on the cushions to be clear of the water, the driver requesting us to cease talking whilst he carefully held the noses of the horses above the water.

When passing Lodore, the noise of the falls was deafening, and wet as we were, we couldn't resist seeing the falls under such conditions.

For once it was worthy of the well-known poem "How the Water comes down at Lodore."

THOMAS EDWARD BROWN,
National Poet of the Isle of Man.

By W. H. KNEEN.

DECEMBER 11TH, 1917.

THOMAS EDWARD BROWN was born at St. Matthew's Vicarage, Douglas, I.O.M., on the 5th May, 1830. At the age of two, his father became Vicar of Braddan, and the family removed from Douglas. Towards 1840 the Vicar's sight began to fail, and as he was an insatiable lover of books, he would have his sons read to him for hours at a time. In this way Tom acquired a wide knowledge of English Literature. He was sent to King William's College in 1845. Among his classmates were many boys, who afterwards became well-known men, *e.g.*, Dean Farrar, Professor Beesley, and Dr. Fowler, President of Corpus College. As a servitor at Christ Church, Oxford, his life was unendurably miserable, and he never referred to it except in words of bitterness. In 1853, he gained a Double First Class in the Law and History Schools, being the first Double First that had been scored at the University, under the then, existing system. Yet that night after gaining the Double First was the most intensely miserable he was ever called upon to endure. There was no precedent for the election of a servitor to a studentship of the University, and so all his great hopes were dashed to the ground.

The following year Brown entered for a fellowship at Oriel College. There were eleven competitors, some of them distinguished men, for two vacancies. Brown's English Essay in this Examination was a production which one of the examiners said he would never forget. Brown was one of the successful two, the other being G. H. Pearson, afterwards historian and Australian Statesman. After a few terms as an Oxford Tutor, Brown relinquished the position and returned to the Isle of Man. His motive for giving up a lucrative appointment is unknown. The story of his brilliant achievement was told to Gladstone, and the great statesman wrote offering him political work. But he refused. Politics did not move him. Throughout his poems there is hardly a single reference to the events of the hour. His life was given to his friends, his memories and his thoughts. It appears from phrases in his letters that he felt the influence surrounding an

Oxford Don would lead him to settle down into a life of self-satisfaction and mental stagnation, and he suggests that it was to escape these baneful consequences that he left Oxford. Soon after returning to the Island he was appointed Vice-Principal of King William's College, and in the following year, 1857, he married his cousin, Miss Stowell, daughter of Dr. Stowell, of Ramsey.

In 1860, Brown went to be Head Master of the Crypt School, Gloucester.

In 1863 when Dr. Percival was appointed Head Master of Clifton College, Bristol, Brown was appointed to take the modern side, and at Clifton he remained until his retirement in 1892. Notwithstanding that a sense of duty made him give of his best to the profession of his choice, in his heart he was always far away among the heather clad hills and rocky bays of his native isle. His poem "Clifton," was written only a few years after he went there, but he endorsed it at the end of his sojourn by altering the words "six long" to "thrice nine."

As the years passed by of his retirement in the I.O.M., he began to see his life at Clifton in a new light, and eagerly anticipated a visit there which he made in 1897. This proved to be his last journey. While addressing the boys on the subject of "The Ideal Clifton," he suddenly swayed and fell, and died a few hours later. He was buried in Redland Green Churchyard, by the side of his wife and son, surely a fitting place for his remains to rest, though Manxmen must ever feel a pang of regret that he does not lie beneath the soil of that land which he knew so well.

Most of Brown's poems were written in the first instance without thought of publication. Often they were scribbled in pencil on some scrap of paper or on the fly-leaf of a notebook, and many of those appearing in his complete poems were never revised for the Press. Brown never had any tastes but his own to satisfy. Hence his genius remained clear and original to the last. It has been fashionable among apologists for Brown to compare him with Browning, Wordsworth, Tennyson and other great poets, and to assert the superiority of some poem by Brown over some other similar tenour by some poet of acknowledged eminence; but posterity will not ask how he looked alongside of Shakespeare, or of Shelley; they will look for original genius. A true poet must be able to stand on his own feet.

By far the greater part of Brown's poetry is written in the Anglo-Manx dialect, and the preservation of accurate records of this dialect which was rapidly dying out, may be said to have formed his life work, and it is on his dialect poetry that he himself would have wished his claims to an enduring place in English Literature to be based. Into the production of his dialect poetry his genius concentrated all its rich and varied gifts. His English poetry was merely the pastime of a leisured hour, the clothing of a stray fancy, the preservation of some memory or conception, which in dialect would have seemed ill at ease and undignified.

However, Brown has a large collection of English poems of sufficient merit to justify a high position in the ranks of the poets. They are chiefly lyrics and anecdotes, and memories of friends and scenes. Brown's Anglo-Saxon poetry is all in the first person, and the words are put in the mouths of various speakers all belonging to the humbler ranks of life. One series entitled "In the Coach," consists of monologues supposed to have been delivered in the old stage coach which was run by a man named Crow, and is referred to in Hall Caine's "Manxman."

Brown's poems received many notable tributes in literary circles. "The Doctor," another dialect poem, was put by Max Muller in his list of the hundred best books of the world. He is reported to have read it to Browning at Venice, and to the Empress Frederick at Berlin, both of whom expressed their delight in it.

Brown has been accused of carelessness of rhyme in his dialect poems, but it is evident from phrases in his letters, that this apparent neglect of the strict rules of prosody was deliberately adopted as suited to the character of the rugged sailor who is supposed to relate the narratives. While Brown's Manx poems are full of humour, playfulness, wit, and intimate observations on life and events, his English poems are scarcely ever gay and buoyant, and are sometimes sad, almost to moroseness, and express his own moods of grief and melancholy fancies. It is as if there were two Browns. When in melancholy temper, brooding over some real or fancied sorrow, the scholar predominated, and he clothed his thoughts in the language of the Schoolmaster. When however, his high spirits returned and the sense of the joy of life filled his bosom, then he slipped into the vernacular and his thoughts ran high on in Anglo-Manx. Some of Brown's poetry seems to have been

written when his mind was in a spirit of rebellion against the stern fate which tied him to the classroom for a living—a career that was irksome to his nature. When however, free from the trammels of the school he roamed in rapturous freedom and buoyancy of soul over the hills and moors of the Severn Valleys, the spirit of Manxland communed with his spirit, and his dialect verse was the result.

The English verses are often irregular in metre and of a rugged staccato style. Once we are accustomed to the jerkiness of his rhythm and see it as the embodiment of a deliberate idea, it gathers round it a charm of its own. Brown did not believe in too great a musicality of rhythm, yet upon occasion he could give his verse an almost Swinburnian swing and sugariness. An instance of this is found in his poem "Roman Women." Brown's English poetry contains the memories of his youth, his mature reflections on life, his theories on the universe, man, and God; impressions created by some incident, some experience, or some object of natural beauty. In the lovely lines entitled "Braddan Vicarage," he reveals the gradual unfolding of his boyish outlook on life as he pictures some other boy growing up in the very place where his own youth was spent.

In his hours of semi-despondency he found his solace in nature, and many of his poems deal with her various aspects and manifestations. Nature spoke to him a message of peace, and in this peace, whoever might question the greatness of his name, he was content to go on the course he had mapped out for himself, possessing confidence in his own powers which placed him above the carpings of the critics.

SOIREE, EXHIBITION OF BOOKS, MSS.,
LANTERN SLIDES, HERALDIC AND OTHER SKETCHES,

Given to the Club by Mrs. Strange.

*Directors—The President, Fred J. Grant, J.P., and
A. A. Bellingham.*

18TH DECEMBER, 1917.

MR. GRANT took the chair, and explained that before Mrs. Strange and her family left Burnley for Devonshire, they handed over to the Club many documents, sketches, lantern slides, and manuscript papers, directly connected with Mr. Alfred Strange's work for the Club. And so for the first time in the forty years of its history an evening was set apart for the examination and consideration of the product of one member of the Club as such. They recalled the well-known figure with his cheery salutation, his retentive memory, his readiness of perception, his keen eye for the comical, and his love of the pun; remembering also his boyishness on the excursions, his quips and cranks, his nods and becks and wreathed smiles. They honoured his memory because for a generation he was a diligent enthusiastic member and official, and spared neither time nor pains to further the interests of those higher studies of art, literature, history and philosophy, which their institution was formed to foster and encourage.

From the moment of his arrival in the sturdy north from the sunny south, he set himself to study the archaeology of the town and district of his adoption which ever had for him a growing charm. Richly endowed with the historic sense, he explored the abbeys, the mansions, the churches of the neighbourhood, got together a valuable library of books dealing with the subject, and enshrined in scrap book the record of any incident or allusion elucidating the history of North-East Lancashire. Then he would incorporate all these in papers to be read to their members. He was alert, discriminating, intelligent, methodical, with an innate love of history. In his lecture on "Browsholme," he collected from various sources most interesting particulars of the Parker family. (The MSS. with Colonel Parker's annotations, were on the table). Some of the views of the hall (exhibited during the evening) were unique. When he spoke of the great men

associated with the historic mansion (one of whom was Oliver Cromwell), he was full of delight. Mr. Strange's sense of humour could never remain long without expression. This was specially noticeable in his review, thirty years before, of one of the Towneley manuscripts purchased by the Club, in his paper on Emmott Hall, and his description of the successful search on Pendleton moor of the grave of Jeppe Knave, a robber in the olden time. The paper modestly styled "A Chat on Heraldry," was, in fact, a learned historical dissertation on the art, origin, use, and meaning of the once greatly esteemed science of heraldry. In that paper his facility of association was well brought out, and the coloured sketches (the work of his daughters, and now the property of the Club), displayed in pictures bright the pomp of local heraldry. There was another aspect of their friend's work besides the lighter side: he is not insensible to the more serious aspects of life, the lessons of history and experience were ever in his thoughts, and the Miracle and Mystery Plays of Towneley and elsewhere, appealed to the æsthetic, religious side of his nature. He had the defects of his qualities. He did not pretend to write history after the fashion of an Acton or a Morley, nor would he have cared to be judged by his style: but his attainments and his glorious enthusiasm did much to establish and maintain the Club as a great factor for good in the town. He lightened the tedium of historical pedantry, and relieved the humdrum of hard facts; and this he did by simple playful allusion, by the introduction of local incident, and by giving

" A set of themes with fugue-like variations,
Of diverse saws with diverse applications,
Of texts with near and far fetched annotations."

And as he played his honourable and useful part that gathering surely had its lesson, viz. : that it was the duty of every one of its members to contribute of his best for the information instruction, and delectation of his fellows. They had seen what valuable work could be done and accomplished by one man, and what great and abiding service to the community that work had proved to be. Like Alfred Strange, others might set themselves to diligent study of some branch of knowledge, give to the Club the product of their research and thought, and thus earn the chevron accorded for faithful and loyal service.

THE PRESIDENT, G. A. Wood, M.A., first dealt with the way in which the accounts of Henry Blackmore, J.P., of Fulfilledge House, came to light. They were written originally on the blank leaves of the diary of the Rev. Benjamin Robertshaw, headmaster of the Burnley Grammar School, who died in 1728. Blackmore was his Executor, and it was in this way that the diary came into his possession, and thirty odd years later he used spare leaves as his own private account book for the years 1759 to 1763.

After unknown vicissitudes the diary was unexpectedly recovered from the secondhand bookshop in Standish Street, formerly kept by Mr. Wild. The twenty or thirty pages containing Blackmore's accounts were ruthlessly cut out, and these fell subsequently into Mr. Strange's hands, and, careful man that he was, he bound them together and inscribed on the front of the slender volume so formed :—

A.D. 1759.

Fulfilledge House Accounnts.

The spending of the monies of Henry Blackmore, J.P.

This small but valuable manuscript is now in the permanent possession of the Club, thanks to the thoughtful generosity of Mrs. Strange.

The year 1759 takes us back a long way in the history of Burnley, and in the history of England. When Blackmore was setting down his expenditure in the scratchy cramped hand-writing of the time, Crompton and Arkwright had yet to invent those machines which meant everything to the industrial rise of Lancashire. Watt had not yet invented the steam engine, and the Jacobite débacle of 1745 was still fresh in people's minds. "Old" Samuel Johnson was still comparatively young, and Gray's "Elegy" was the latest thing in English poetry.

One wishes that the details of Blackmore's expenses had been more explicit. Unfortunately for us, he disbursed to his wife, quarterly, the sum of £42 10s. 0d. for ordinary house-keeping expenses, and so we are forbidden to know, in detail,

what Mistress Blackmore paid for beef, tea, sugar, candles, flour, and dozens of other things, the prices of which in 1759, would be intensely interesting to us now. Let it suffice, however, that we do know that, apart from dresses and hats for herself, ordinary housekeeping at Fulfilledge House cost at that day something near 65/- per week.

Needless to say, Burnley in those days was not a municipality and the machinery of what communal organisation there was, was largely provided and worked by the Church. Sums raised for the relief of the poor in Burnley were under the control of the inhabitants and wardens of the Chapelry, and "leys" or rates, were levied at the Easter vestries upon those having estate within the parish. In 1759 the "ley" for this purpose was at the rate of 2d. in the pound, which meant for Henry Blackmore 11/8, thus proving Fulfilledge House to be assessed at £70. The "window-tax" was regularly paid by Blackmore and amounted in 1759 to 6/8¼, rising in 1762 to 7/10½. Then there was the Copyhold of Duke's Rent which meant 6/- per year. It is interesting to note that Blackmore was regularly summoned to attend the Copyhold or Halmot Court, but consistently ignored the call; for this dereliction of duty he was most regularly "amerced" or fined 2d. In those good old days there was tax to pay on the gold or silver plate one possessed. In this matter Blackmore was in 1762 three years in arrear, and on July 29th of that year he paid £3 in discharge of the dues demanded. We are reminded, too, that the old watchman or town constables were still in pomp and power, and in October of each year, Henry Blackmore paid 13/- or 14/- constable-assessment towards the support and upkeep of Burnley's Dogberrys and Verges. Occasionally, special rates were laid for particular purposes, as for instance that paid in March 1759 towards the cost of repairs to the Church; at times there seem to have been levies for the repair of the highways in Burnley; the solitary example which the accounts contain is one of 6d. in the pound, and 35/- was paid.

Blackmore would seem to have been well on into middle age, and in 1759 was living a quiet and retired life with his second wife. There is no item in the accounts which suggests that he had children. He wore drab coat and knee breeches, muslin neckcloths, and his clothes were set off to the best advantage, with the aid of much buckram and glazed linen. His waistcoats were trimmed, and on his old bald pate he wore a peruke or bob-wig, iron grey ("grisel") in tint. In

bad weather he sallied forth clad in a blue "surtout," also trimmed. His hats cost about 12/- and his buckle shoes 5/6. Dresses and hats for his wife, as well as livery for his men-servants, he undertook out of his own moneys. The cloth for clothes and shirts was always purchased separately, often in Halifax, and "made up" locally. A few entries relating to clothes may not be out of place :—

Dec. 7th, 1759—Pd. for a hat for my spouse with gold-cord and spangles.....	1	4	6
Mar. 8th, 1760—Pd. Mr. Hartley's bill for a Benjamin for my wife.....	2	14	0
Apr. 16th, 1760—Pd. for 9 yds. of Callimanto for my nightgown lining at 1/- per yard.....	0	9	0
May 1st, 1760—Pd. Ramage for a piece of cloth for shirts, 25 yds. at 2/4 a yard.....	2	18	4
Nov. 5th, 1760—Pd. for fustian for 4 nightcaps for myself	0	6	0

A lined nightgown and fustian nightcaps are not to be wondered at when one remembers the low lying river mists which envelop Towneley Holmes at times.

After the fashion of his time, he took his red port which he purchased by the hogshead from one Salisbury, of Lancaster. The usual cost was £10 per cask, and 13/- carriage from Lancaster to Burnley. Tobacco he seems to have provided for his smoking acquaintances when he expected them, but by no means in excess; in the four years record we only find two purchases, viz.: October 29th, 1759, 1 oz. 1½d., and April 25th, 1760, ¼ lb., 5d.

It was most distinctly a country life that Henry Blackmore lived, and the old pages leave one with a vivid impression of Fulfilledge House being surrounded by acres of cornland and pastures and meadow. There are very frequent entries referring to the purchase of heavy quantities of lime for the land, of timber for repairing his farm buildings; there are frequent items of expenditure for the making of hay and cutting of corn, for carting, for the "breaking in" 9 horses. The Chaffer family are greatly in evidence, for besides being builders and carpenters they were open to lend horses and men for harvesting, leading coals or haymaking. For the hire

of either man or beast a flat rate of 6d. per day was the regular charge. On New Year's Day 1762, Blackmore purchased a barred cow for £5 from a Dr Holt.

What contrasts! Fulledge 1759: Pasture and corn-land, the bronzed haymakers in the noontide heat or the worthy Master Blackmore gone out of an afternoon to watch the harvesting, resting

“ On a half-reaped furrow, sound asleep,
Drowsed with the fume of poppies.”

Fulledge 1917: Great areas of small tenements, the ear-splitting Oxford Road, and the steamy smell of supper-bars. One wonders if, perchance, when the moon is high and the night is quiet, one may not meet the shade of Henry Blackmore, J.P., in blue “surtout” and grisel peruke, seeking still that 11/9 hat which the rude wind snatched from him for ever one night in August 1762, and for seeking which, the more effectively, he disbursed on the 16th of that ill-fated month, sundry coppers to divers small boys. If ever his spectral form be seen, will it not be lost in amaze amid the draughty parallelograms of modern Fulledge Streets, peering and blinking, and wondering at those huge cotton mills, the products of a later century, and the source of the undreamt-of wealth which his native Burnley was subsequently to enjoy?

Interesting details were given in the lecture of the nature and cost of structural repairs at Fulledge House in Blackmore's day, as well as particulars and cost of his journeys, few and restricted though they were, to Lancaster Assizes, to Preston, and to Halifax. But if his travels were few, his correspondence seems to have been frequent and regular. The cost of a letter from London to Burnley was 5d. paid by the receiver of the letter. A letter from Hertfordshire cost 8d. Letters sent from Fulledge to Scotland were delivered to the local bypost and carried to Rochdale, where presumably they would await the Manchester and York Mail Coach and proceed via Blackstone Edge. The most romantic postal entry in the book is one: “Pd. for a letter from the ship “Mermaid” at sea.” But the blind fury with the abhorred shears has forbidden us to know the cost, and we are left with the imagination stirred but unsatisfied.

Blackmore was not a particularly bookish man, though he subscribed regularly to Smollett's “History of England,”

which was, in 1759 and following years, appearing in sixpenny fortnightly parts. He was a very regular reader of the "Manchester Mercury," and occasionally secured parcels of the "Sheffield Public Advertiser." There is no entry of expenses for books beyond 9d. each December for a copy of the next year's almanack.

Only once does the life of the great outer world make its appearance in these pages. On the occasion of the death of the Monarch (George III.), Mr. Blackmore's expenditure on clothes for the national mourning was £2 7s. 11d., whereas Mistress Blackmore's bill for mourning weeds was no less than £7 2s. 6d. In a few things the world is fairly constant; but then Henry was thrifty, and instead of buying new hose, had his old stockings dyed black at a modest cost of 4½d.

Henry Blackmore and his servants, and his spouse, and all the goodly company of Burnley tradesmen who ministered to his temporal needs are all gone now. Nothing is left but these few and pathetically faded pages. It is a comforting thought that the surnames which occur so often in them—Ingham, Halstead, Nelson, Stanworth, Hartley, Chaffer, and many more—bid fair to be eternal in the valleys which cradled the forbears of those who claim them now; and this fact in itself gives one a sense of stability and permanence in the midst of a fleeting and a constantly changing world.

Mr. A. A. Bellingham dealt with some of the MSS. of Lectures which had been given to the Club by Mr. Strange. He spoke more particularly of those relating to Tenby and Browsholme, and shewed on the screen a number of views referring to these, which had been prepared by Mr. Strange. An interesting series reproduced the portraits of the Parker family of Browsholme.

THE STORY OF A RIVER.

BY REV. J. FARQUHAR, M.A.

JANUARY 15TH, 1918.

The story of a river is a long story whether with regard to length of time it has been running, the number of geological phases through which it has passed, or the number of miles which it traverses from its source to the sea.

For the origin of some rivers we have to go to the great mountain ranges and their snowfields. The Wetterhorn in Switzerland illustrates such a snowfield. As the snowfields descend the mountains they change into glaciers, which in turn give rise to the full-grown river. In our country, where there are no such snowfields, the rivers rise in much humbler surroundings. The mountains of the Lake District are typical of the place where our rivers rise. Very often, the rivers rise in a spring, others rise in storm gulleys, such as the one on the North side of Pendle; these storm gulleys become the gathering grounds of the moisture that oozes out of the soil in the neighbourhood and give rise to a little stream which ultimately finds its way to the river.

The river has been described as "Nature's Great Landscape Artist," and it is interesting to know how it does its work of carving out the scenery to which it gives rise. In the first place, the river is an expert quarryman. In its course it meets with a great obstacle in the shape of a huge rock. It will clear a way for itself by driving wedges into the natural joints of the rock and in time, with the aid of particles of mud, sand, and gravel will succeed in removing it. The river is also a first-rate sawyer. In sawing a rock it takes advantage of the natural joints, this time, not by driving wedges, but by simply running along the joint, carrying sand with it and in that way cutting right through the rock. The river also acts as a borer, using stones and mud as boring materials with which to make the "potholes" frequently to be seen in the sides of the gully. These "potholes" gradually widen and run into each other and eventually a canyon is formed. The river also "mines" very intelligently, taking advantage of the softer strata below and cutting it away faster than it does the harder strata above. The river may also be regarded as a chemist. When the rocks are of a nature that water will

solve, as in the case of limestone, it cuts an underground passage for itself by solving the material in the rock, and in this way forms underground channels. Switzerland possesses some marvellous examples of underground river beds. Malham Cove is a local example. The river there evidently found an easier way out than by coming over the top, thus taking advantage of its chemical knowledge.

When a tree ventures too near, the river will act as a lumberman and remove the tree gradually by burying it very deeply in the silt of the river. The root, in course of ages, becomes a fossil root ; thus the river is an historian. The river is also a landbuilder. It uses the stuff that was carried down from the mountain gorges to build up its banks. As soon as the river acquires new soil it begins to cultivate it, and so acts as a ploughman, continually turning over the right bank to the left, and the left bank over to the right. It does this in a very methodical and beautiful way, widening its valley and lengthening its own course.

When a river gets down to its own reaches it flows more quietly, and oscillates according to certain well-known laws. If the fall in the river is something like 10 feet in the mile, the course of the river, if nothing interferes, is nearly straight. If the fall in the river is reduced to something like three inches in the mile, its course is nearly a semi-circle. Where the water moves smoothly and quietly it oscillates in regular curves in about four times its own width. Some of the oscillations of the Ribble are almost a perfect circle.

The results of the artist's work vary according to the kinds of rock and size of stream. When the harder strata are below and the softer strata above, a waterfall takes the form of steps and comes down in leaps and bounds. When the softer strata are below and harder above, the result is an almost perpendicular waterfall. When a river has to be crossed and there is no bridge it is well to know that a river runs swiftest in the centre and at the surface if straight. If curved it runs deepest and swiftest at the concave bank.

CHARLES LAMB.

By THOMAS BANK.

JANUARY 22ND, 1918.

CHARLES LAMB was a Londoner, born on the 10th February, 1775. He got the beginnings of his education from William Bird, who had a School near Fetter Lane. When he was in his eighth year he entered Christ's Hospital (Blue Coat School) and remained there seven years.

Samuel Coleridge was one of his school-fellows, and the two formed a friendship which lasted as long as they lived.

Two years after he left school Charles Lamb got an appointment in the South Sea House, and from that place went into the service of the East India Company at a salary of £70 a year. He remained in that service until he retired on a pension.

The friendship between Lamb and Coleridge was maintained, and both had resolved to be authors. In the spring of 1796, a volume of poems was published which contained pieces by the two friends. One poem of Lamb's related to a love affair, an affair which never came to anything, but which haunted Lamb all through his life.

In the very year in which Charles Lamb attained his majority, he was called upon to bear one of the most appalling domestic sorrows which can well befall any man; a sorrow which is a tragedy, a blow whose reverberating echoes sound aloud again and again at intervals of the 40 years of life which remained to him.

It is questionable whether Charles Lamb ever thought that what he had written would be read in 1918. He would have been the last, too, to claim to be a great teacher; he never shakes the admonitory finger; he is too gentle, too gay; too whimsical to dream of setting up as a preacher and a guide. He had that indefinable thing, style, an uncommon way of writing about common things, which was the natural result of his temperament, his outlook, and his reading. Ruskin once expressed the opinion that the ease with which Charles Lamb did his work was a mark of his greatness.

In spite of some failings which Lamb undoubtedly possessed, it can be truly said that to those who know him, Lamb is better loved than any other English writer.

Lamb displayed an inimitable faculty for drawing a portrait in words. One notable example is to be found in his Essay "Old Benchers of the Inner Temple," where he draws a vivid picture of his father, who is described in the Essay as "Level." Another striking "word portrait" is that of the Deputy Cashier in the "South Sea House."

A notable feature of Lamb's writings is his habit of writing in parenthesis. In the first paragraph of the "South Sea House," there are no fewer than four sentences in parenthesis. The habit never obscures his meaning, and all the pauses and turnings aside are clear.

Lamb may be described as a sauntering writer. He loved to walk leisurely about the London streets, to stop to look at print shops, to halt before a bookstall, and linger while he watched the faces and the actions of wayfarers, and his writings have this same leisurely quality. In "Old China," only at the beginning and the end does he mention Old China. Had anyone pointed this out to Charles Lamb, he would have probably smiled, and said something about take it or leave it.

Lamb's pen flowed with the milk of human kindness, but occasionally he dipped it in irony, as when in "Popular Fallacies" he wrote on the theme "Home is home though it be never so homely."

The relationship that existed between Charles and his sister Mary makes the characters of both shine out with rare virtue. Mary had repeated attacks of her malady, and she had again and again to return to the asylum. These attacks became more frequent as the years went on, and when Charles died in 1834, she was oblivious of her great loss. The letters of Lamb bear witness to the anxiety her condition caused him to his ceaseless care for her, to his loneliness in her absence; and on the other hand they bear witness, as do his other writings, to the service she rendered him; she was indeed his better half in a sense which is more true than when the expression is applied in many cases to man and wife.

In the year 1806 Charles and his sister began the "Tales from Shakespeare," Mary taking the Comedy and Domestic Plays, and Charles, the Tragedies. Sixty guineas were

promised for the work, and they found the money very acceptable. The tales were such a success that a second edition was called for immediately. Then Charles did the "Odyssey" in the same manner, and after that work undertook a commission from the firm of Longmans, "Specimens of English Dramatic Poets contemporary with Shakespeare." He dealt with Marlowe, Peele, Moreton, Chapman, Ford and Webster. Shakespeare was well-known; he had a permanent stage existence,—that best of commentaries which fine acting supplies, and to which Lamb himself from childhood had been largely indebted. But if Shakespeare stood well ahead of his contemporaries in matter and treatment, these others deserved to be rescued from the oblivion into which they had fallen. It is to the merit of Lamb that he did rescue them, and at the same time established his reputation as a critic. The revived study of the Old English dramatists—other than Shakespeare—dates from the publication of Lamb's book.

Charles Lamb wrote many letters to his numerous friends, Coleridge, Barton, Southey, Wordsworth, Hazlitt; full of humour, shrewdness, delicate fancy, wisdom, criticism. He was no niggard with his ideas, he retailed them pretty freely to his friends. Many of his letters have to do with his sister's malady. But in the main they are gay, with an infectious gaiety that keeps the reader in a happy state of mind. Much of Lamb's writing has an "atmosphere," an intangible something about it, which cannot be transmitted.

Southey has said "There are some reputations that will not keep, but Lamb's is not of that kind. His memory will retain its fragrance as long as the best spice that ever was expended upon one of the Pharaohs."

SOME DISEASES OF GARDEN AND ALLOT- MENT PLANTS :

THEIR CAUSES AND PREVENTION.

A. WILMORE, D.Sc., F.G.S.

JAN. 29TH, 1918.

THE revival of Horticulture is a war time measure, but had probably come to stay. The world shortage of food is partly due to increased demands of our populations and the rising standard of living. People are no longer satisfied with the low standard of food which passed muster in days long ago. There is also an increased population notwithstanding the terrible wastage of war.

Many people are realising that fresh vegetables from our own gardens are very different from those which have been knocking about the markets; and that there is health, fun, joy and wonder in gardening operations.

It is essential that we should have the best yield from our land, but there are difficulties in the way. The scarcity and dearness of manures, climatic vagaries, and sometimes (in our district) harsh and gritty soil, render gardening operations very difficult.

Plant diseases are on the increase. Intensive cultivation for purpose of plant growth finds increased food for plant enemies. Our forefathers used to allow their gardens to lie fallow, in the belief that somehow the land became cleaner and plant enemies disappeared. We cannot allow our land to lie fallow, but have gone almost to the other extreme. We have not quite the climate and quite the soil for getting catch crops between our main crops. It is better to do the season's work well than make too keen attempts at catch cropping.

Then we have against us the very great interchange that modern times have set up. There is a great interchange of roots, seeds, and cuttings. These come from every clime; and bring with them diseases which sometimes find suitable habitats.

In addition we have our exceedingly unsystematic transference of empties. Diseases are carried from place to place in that way over and over again. Potato disease has frequently been traced to the careless use of empties which were affected with the disease.

A typical example of disease which has been introduced into our country is gooseberry mildew. This is a native of North America and came to this country in 1900. It is dangerous and troublesome, and is now scheduled. In some parts of the country, cultivation of gooseberries is practically an impossibility.

The loathsome looking disease of black scab on the potato came from the continent about 1892-3. This was introduced from Holland into the South Eastern Counties, and has now a very curious distribution. It found the climate of the North West of England, and of Scotland suitable, and seems to like the western slopes of the Pennines where there is more rain, but there is little of the disease in the Eastern Counties.

Probably the most famous of all diseases is the famous potato blight. This disease came from South America via U.S.A. about 1838-42. It came across in potatoes brought from U.S.A. to Ireland and spread rapidly to England. In its beginnings there was the great Irish Famine of 1845. Nothing was known in that country about the cause of the disease, and nothing about the best treatment.

The downy mildew of the grape came from North America about the year 1878, and in the eighties caused a terrible time in France.

Cucumber mildew came from the West Indies about 1867, and is now a most serious pest. This is an exceedingly difficult disease to get rid of. The Board of Agriculture is keenly alive to all these things, and has published some excellent pamphlets dealing with these diseases. Black Scab and Gooseberry Mildew should be reported at once and the Board of Agriculture will take the matter in hand. The United States have many laws to prevent the spread of these diseases; they realise how much this means to them. We also ought to think about the general good and make more stringent laws about the prevention of plant diseases.

Heavy loss is caused by these diseases. It is estimated that the loss from potato blight in America each year is £7,000,000. California lost £2,000,000 by vine disease in 1892, and the loss in cereals is at least £3,000,000 per annum. France too, loses at least £1 000,000 per annum. They have a vast number of small holdings in that country, and the loss falls on the smaller cultivators. Our losses are not readily assessed but must be enormous.

France was the pioneer in the matter of remedies, and we owe a good deal to that country for research work in con-

nection with plant diseases. In 1883 in the South West of France it was noticed that vines which had been tied up to stakes soaked in copper sulphate escaped disease. Research was commenced at the Agricultural School at Bordeaux. It was found that lime and copper sulphate proved a specific against vine disease. This was rapidly taken up in the United States, and a huge literature has grown up in that country dealing with these things.

Fungi are among the chief causes of plant diseases. These fungi have certain interesting characteristics which make them difficult to deal with, i.e., the absence of green colouring matter and the power to synthesise. As these fungi have not the power to build up their own food stuffs, nature seems to have endowed them with a marvellous power of re-production. That power is very great and very wonderful. Cell division takes place very rapidly and the spores spread with enormous rapidity. In the club disease which affects cabbages and swedes one cell may contain 100,000 spores. One diseased turnip may thus contain hundreds of thousands of cells.

A type of these disease is the raspberry cane mildew. Whatever we may have wrong with our soil we can grow raspberries in this district. If we wish we can produce good crops of raspberries. There is not so much trouble with disease. The remedy is either ammoniacal copper sulphate or sulphate compound. Strong preparations should be avoided.

Currant leaf spot is a disease imported from America, and is said to be spreading very rapidly. It attacks not only leaves, but the stalks and canes, and often the berries are affected. The remedy is to spray early with ammoniacal copper sulphate, alternating with sulphate or other solution.

Fungoid diseases produce something akin to ptomaine poisoning. Sulphur is one of the best specifics and should be used as a preventive in such cases as cucumber mildew. Rose mildew can also be prevented by spraying with a specially made sulphur preparation.

Another mildew is that of the potato blight. This appears in the leaves first of all, and then travels down into the tuber. It is an extremely difficult disease to overtake when once it has got hold, and it is better to prevent the disease by spraying early on.

The potato disease known as brown rust does very little damage as it is only skin deep, but plants affected by it are more susceptible to disease later on. The seed potatoes should be soaked in disinfectant to kill the spores of the disease.

OUR OWN COUNTRYSIDE.

By J. D. BERWICK

FEBRUARY 5TH, 1918.

THE President said that what precisely might be the scope of Mr. Berwick's lecture he did not know. "Our Countryside" is a theme which lies open to endless variations of treatment, just as the phrase "love of nature" lies open to many interpretations, ranging from the vague but exalted emotional delight in great open windy spaces, down to the definite concentrated intellectual appetite for the study of the minuter forms of the Flora and Fauna of an English hedgerow.

Just so, "Our own Countryside" may refer to those types of landscape which we consider characteristic of our country—the wide sweeping valley of the Ribble, the great slumbering Cheshire plain as seen from Beeston or Mow Cop, the vast prospect of the rich heart of Surrey which one gets from the Hog's Back on an autumn afternoon.

It may equally refer to those pictures of less scope and canvas which one might class as the lesser and more idyllic sights no less characteristic of England—the ivy-covered church surrounded by its God's acre standing so serenely amidst the clustered cottages of the hamlet—the hayricks tha ched and trim—the grouping of cows at pasture—the familiar outline of copse and wood.

The title of our lecture would cover also the cameos or miniatures of our countryside—the sparkle of dew upon the bramble—the nest and eggs cunningly hidden in the hawthorn—the shy glories and wonders of the hedgerows which only the loving seeker may discover in their infinite variety.

But whatever aspect Mr. Berwick chooses he will find us his very willing followers. There never was a time when Englishmen felt more intensely the peculiar joys, the peace, the quiet, the healing balm of our own countryside. Anyone who has followed at all the great renaissance in English poetry which has been proceeding of late years, will know that it reflects a deepening sense of attachment which is binding our hearts to the love of all the sights and sounds of our homeland as they have never been bound before. And for this reason Mr. Berwick's lecture is extremely opportune.

The Lecturer said that some of our great landscape painters had, by their delightful pictures of rural scenes,

developed our love of the countryside. The camera too, was an additional means of making pictures by which we could literally hold a mirror up to nature. He then spoke of the pleasures of country life in England and Scotland, and more especially in Cheshire and Derbyshire, and the varying aspects of the countryside in the four seasons of the year, and illustrated the various phases by a series of beautiful lantern slides, a large proportion of which had been coloured by the lecturer himself.

RUSSIA AND ITS PEOPLES.

By REV. A. J. MORRIS, B.A.

FEBRUARY 12TH, 1918.

THE story of Russia is really the story of her rivers. In days of our Alfred the Great, a large amount of trade was carried on in the regions of the Neva, the Dnieper, the Volga and the Don, and to protect the main trade route between the Baltic and the Black Sea, the traders called in a warlike people called Rus—either Scandinavian or Goth in origin. They came to protect and stayed to rule, and it was they who started to build up what ultimately became the Russian Empire.

The sacred city of Kiev was captured from the Turks in 980. It was to Kiev that Christianity first came, and it is to Kiev that Russia still looks at the present day. In 950 Princess Olga brought Christianity with her from Constantinople. Later her grandson, the Emperor Vladimir, sent out Ambassadors to report on the Mohammedan and Christian religions, and on the Ambassadors' report was to depend the religion of the Russian people. These people were not impressed with the Mohammedan religion which they said was "sad and of evil odour." Those who went to Constantinople said "there was such beauty, God dwells among men and angels worshipped with them in the temple." On the strength of this report, the people of Russia became Christian, of the Eastern branch of the Church.

Vladimir started a series of Grand Duchies. The Duchies did not descend from father to son, but to the oldest survivor. Russia began to spread, sometimes eastward, occasionally northward, but more often southward. Following the rise of Russia on through the Ivans, we find that Ivan Moneybags was the most interesting of them all, because it was he who stemmed the great danger that threatened Russia—the Tartar invasion. When we complain that Russia has got behind the rest of Europe, we must remember that she was for 300 years fighting for her life against the Tartar hordes, and against the Turks.

The Ivans started Moscow as a centre of residence and made it the rallying ground of the Russian people.

Then followed a series of very weak kings. In 1612 occurred a curious instance of Constitutionalism, such as we

find in the days of our Lancastrian kings. But it was too soon in both instances.

With the Romanovs, who were definitely elected monarchs, began the rise of modern Russia. Peter the Great determined to make Russia great, and it was he who saw that Russia was shut in on all sides, and would never become great until she got to open water. His chief aim was to get to the Baltic, and to do this he had to fight the Swedes. This was a long and laborious business, but he was determined to conquer, and spared neither pains nor energy in his attempt. The east coast of the Baltic became his after Charles XII. was killed at Pultava. Peter the Great started to make Russia what it really is in modern times. He studied ship-building, studied everything in the way of finance, and all modern methods which might make Russia great.

Russia learned a great lesson in 1906 at Port Arthur. The Russo-Japanese war taught her that she was not ready, that size was not everything, and that she had enemies who were prepared to seize their opportunities. She then set about to put her house in order.

We do not understand the Russian monarchs if we look upon them as being bloodthirsty aristocrats. They have had many difficulties to contend with, and from time to time Emperors and Czars have tried to give constitutional rule to Russia. Anarchists and assassination have made it extraordinarily difficult. Our present Czar was really interested in the reforms of his people, but the pressure of the Court and pressure of the Ministers were too great for him.

If anything is going to save Russia it is the fact that there is no population in the civilised world so largely made up of agriculturists. 85% of the population are agriculturists. They own their land in common; they will readily sit up all night and argue as to which reaping machine or which plough they will eventually buy in common. The difficulty has not been to give the Russian his land but to get him to take it, because the "Mir" demand rates according to the amount he has in cultivation, and for this reason also he is not allowed to leave his village without permission.

If he goes off to the towns for the winter he does not escape his obligation to the village "Mir." Many modern makers of Russia, some of them millionaires, are still paying their proper family quota to the "Mir" of the village from which their grandfathers came in far off days to make their fortunes.

The lure of the railway has been great to the Russians. From time to time the Government has issued strictly accurate details of land which was suitable for the Russian to go and colonize. At least one from every five families had in view the place to which they intended going, and whether it was the agricultural land of Siberia or on the verge of Turkistan, the Russian engineers had been there and laid out roads, and if necessary, drawn up schemes of irrigation. These representatives would stay a whole year to see the advantages of the land, and if on their return with a satisfactory report, their friends decided to emigrate, the Government took them bag and baggage, providing food for them on the way. Many emigrants have travelled a distance of 5,000 miles for the sum of 19/4.

If anything is going to save Russia it is her religion. The priest is known in his village as the "little father," and nothing is done without his blessing. The Russian is an intensely religious person. No man will come in or go out of his house or sit down to a meal without crossing himself before the ikon, or sacred picture, which is a perpetual sign of religion in the house. Nowhere is life more centred in the Church than in Russia. Their Church services sometimes last three or four hours. There are no pews in the Churches, everybody stands. The Russian is really at home in his Church. The Bishops are chosen out of the Monasteries, and what Ecclesiastical learning there is in Russia is found there. The Bishops are now beginning to realise that there is a lack of intelligence amongst the people; that the priests as a body are ignorant; but there are schemes for bettering the education of both priests and people.

What will become of Russia it is difficult to say. It is to be hoped that the saner sense of the agricultural communities will come again to the front.

Russia has been thoroughly beaten. The war has left her as she was in the days of Peter the Great, with no exit to the sea, no touch with Western politics, and she is absolutely cut off. Bismark was always afraid of Russia and her schemes to dominate the world. Germany has got what Bismark never could get, total freedom on one side.

RAMBLES IN WENSLEYDALE AND UPPER SWALEDALE.

By T. WINSKILL,

FEBRUARY 19TH, 1918.

THE Lecturer remarked that Wensleydale should be called Ure or Yoredale just as we had Wharfedale, Swaledale, Ribblesdale, etc. The Ure takes its rise on the western slope of Great Shunner Fell, 2261 feet above sea level.

For the exploration of Wensleydale there could be no more favourable centre than the well-built old market town of Leyburn, with its interesting ridge of rocks known as Leyburn Shawl, where at the Queen's Gap (as tradition has it) Mary Queen of Scots was recaptured in her attempt to escape from the custody of Lord Scrope at Bolton Castle in 1568.

Wensley, from which the dale takes its name, is one of the beauty spots of Wensleydale, and boasts of great antiquity. It was the market town of the dale before the Norman Conquest. Its church abounds with relics and carvings in wood and stone. The chancel stalls dated 1527 are especially noteworthy, as is also a splendid Flemish Brass, which is one of the most magnificent in existence, and commemorates Sir Simon de Wensley, Rector of the Church in the 14th century.

Many noted men have been born in the parish of Wensley, one of whom was John de Thorsby, Archbishop of York, who died in 1374. He was a man of whom all British people should be proud, on account of the splendid monument he left behind him. He had built in his own lifetime and at his own expense, the beautiful choir stalls of York Minster.

Middleham is a place of far greater antiquity and historical importance than any other in the dale. It is noted for its castle, the ancient home of the "Nevilles." Much of the history of the middle ages was made here. Richard III's only son Edward, Prince of Wales, was born at Middleham Castle. It was to secure for this Prince the throne of England, so we are told, that the two boys were smothered in the Tower of London.

Coverham Abbey was formerly a house of white canons, built in the year 1214. Among the noted men born in these parts was Miles Coverdale, Bishop of Exeter, and John Wycliffe.

Bolton Castle was for centuries the lordly abode of the Scropes, and was largely built by Richard, the first Lord Scrope, High Chancellor of England in the later part of the reign of Richard II. It was a Lord Scrope who headed the Wensleydale men at Flodden Field, when they made sad havoc of the Scotchmen.

Bolton Hall, a fine place, was built in 1678 by Charles Powlett, Marquis of Winchester. One of the members of this family is at present M.P. for the Richmond Division of Yorkshire.

The picturesque falls of Aysgarth were described by the lecturer. Turner, the famous artist, once painted the lower falls, and had difficulty in disposing of the canvas for £5; later the same picture was sold for £300.

The old world features of Askrigg, its church, and fine Elizabethan Old Hall overlooking the market place, built by William Thornton in 1678, were next dealt with, after which reference was made to Nappa Hall, which stands on the east side of Askrigg. This was the feudal home of the Metcalfes. Nappa, according to Leyland, was bought by Thomas Metcalfe from Lord Scrope about the time of Richard III, the ground being then worth £4 per annum.

Bainbridge, a pleasant little village with a large open green in the centre, stands on the banks of the river Bain, which is said to be the shortest river in England. Bainbridge boasts a history dating back to the time of the Romans. The "Forest Horn" is still blown every evening from Holyrood to Shrovetide at 10 p.m., as it has undoubtedly been for hundreds of years.

Proceeding to Hawes, the lecturer described the scenery in the neighbourhoed. Some of the glens descend 1,200 to 1,600 feet on each side and are full of varied beauty, some of the finest waterfalls in the North of England being found there. Wensley owes a good deal of its beauty and fertility to the geological strata upon which it rests; most of the waterfalls are projected over scars of upper scar limestone.

The celebrated Buttertubs Pass was then crossed and a visit paid to Upper Swaledale. This romantic valley was

described as the most remote of Yorkshire Dales, and as no railroad has yet penetrated this part of our land, the mode of life and customs of the dalesmen still remain as in the days of their forefathers.

The village of Muker was described as the smallest place with a market in England. It was once a busy mining village, but with the advent of free trade the lead mining industry of Swaledale had declined.

Thwaite has an interest for nature lovers as being the birthplace of the celebrated Kearton brothers, the well-known nature photographers.

A mile up the dale is Keld, 1,000 feet above sea-level. The glory of Keld is its waterfalls ; in time of rain the views from the top of the rocks is superb.

With views of Ivelet, Satron, Gunnerside, and Reeth, the lecture concluded at Richmond, noted for its interesting old castle.

ART AND LIFE.

By LAWRENCE HAWARD.

FEBRUARY 26TH, 1918.

THE Lecturer said Art was supposed by many people to be a luxury, which consisted of objects put into museums and galleries. But Art was something broader and deeper than this, not something outside us which could be obtained for the asking, or even purchased by money.

Art was rather a point of view—a frame of mind—a philosophy.

Wherever we go we find Art and Life separated from each other. Many connoisseurs who store objects of art in their galleries—Art of a dead age—forget that these were the products of living men, and that they are enjoying the products of a past epoch. There is a strong tendency at the present day to purchase a very peculiar form of picture which goes by the name of “gallery picture,” which often has very little connection with Art, and certainly very little with Life.

The Art renaissance which flourished for many years, the 18th century romantic movement, and the 19th century æsthetic movement, have resulted in the estrangement of the artist from his public. This is not the artist’s fault entirely, the public are also to blame. We get the plain man and the artist throwing stones at each other across a gulf, and the separation is bad for both.

The artist is often regarded as an egotist ; it is his business to be an egotist, to express his views, feelings, and convictions in the strongest and most convincing way. He is out for a definite end, and is not concerned with immediate results. He is concerned primarily with contemplation, he is detached from what he is doing. If the artist has become detached from his public, he has the advantage of becoming a disinterested spectator and obtains a more concentrated vision ; nor is he distracted by a large number of irrelevant things which get between him and his object. By this detachment his individuality is imparted and communicated to others. This increased vitality is one of the things which makes the artist wish to create.

A fundamental characteristic of the artist is that he not only experiences things in a detached way, but wishes to hold, to keep, and to fix that experience. His experience is much

too vital to be lost. He does this by giving external form to his experience. The moment he has done this he has communicated his experience in concrete form to others. The artist does not merely reproduce what he has seen and heard, but selects from the number of impressions he has had and chooses the medium which best expresses what he has felt. It is owing to this reason that we get so many puzzling surprises in Art.

Art is not merely a means of communicating pleasure, this is only a bye product of the artist's creation. It is only when the artist tries to express himself that we get not only the pleasure, but the real joy in creative work. The painter, for instance—who only represents one small section of Art—gives the vision without which the people perish. He enables people to see what they have already seen and forgotten. There is nothing more striking to one who has to spend his life among works of art than to hear comments. One of the most frequent is "I should never have thought it looked like that." People see things which their eyes ought to tell them, but don't, because their eyes are not sufficiently trained.

The artist wants to make the world after his own ideal, and not to leave it in the state in which he found it. The world is not intelligible, it is a muddle of man's own making, and the artist wants to unmake it.

The artist's instinct for finding the most satisfying, satisfactory, and significant form of expression is a very primitive human instinct. The savage, when he sat down on the seashore, needed a pot to cook his food. He selected the material which best suited his purpose and made a pot that fulfilled its function. When the savage found that the pot satisfied him, he went on making pots for the pleasure of making them. This idea is at the root of all our industrial art,—making things for pleasure after making them for use.

If the world is going to be a better place, it will be necessary for the artist to have his proper place in the world and have scope and power given him, and he should be the ally of those who are running the state and the towns. It is just this absence of co-operation between the artist and those who are governing, that has led to the appalling hideousness and ugliness around us. The reason why most chairs are uncomfortable is that they are not really designed for the comfort of the human body, and so do not fulfil their function. Our houses are arranged in such way that half the things we want cannot be found; the wide streets of our large towns usually lead to nowhere, and our principal stations are usually

in inaccessible quarters. In all these things we find that the artist has not been consulted, with the result that there is inefficiency, waste of time and labour, and loss of temper. The Decorative artist must have a place in the community.

In Japan and China we find philosophy and art linked with life because beauty has a place in them all. Their homes are designed for use and pleasure. They believe in the virtue of emptiness, they do not cram their things. The Japanese will have one picture in a room and change it week by week in order to enjoy the beauty of that object by itself. Neither do they build their temples in crowded parts of the town. They choose a spot with as much care as they bestow on the temple itself.

In China, on one of the great mountains, is a series of terraces on each of which is a temple placed in such a way that pilgrims get a view of these successive temples in a most telling aspect. The rocks that one passes are carved with inscriptions in the beautiful caligraphy of the most celebrated poets. In a Japanese valley a notice indicating the way to a celebrated temple bears the inscription: "It is worth while to have been there once." People who can put up notices like that are people to whom beauty is a very real thing.

The Greeks of the 5th century, B.C., had an extraordinary appreciation of the value of beauty. We still have fragments of sculpture and literature. No other people who ever lived had such a complete sense of the unity of life—the sense of fitting things for their proper purpose, the sense of the fusion of the inner and the outer, the real and the ideal.

We must give the artist his opportunity. He has the power and the means to give order to this world of ours, but we must not be content to let him do things for us. We have got to learn to give expression to ourselves from what is in us, it cannot be done by proxy. Everyone is a potential artist, and we must see that our artistic qualities are given exercise and used for the benefit of the community. We have got to bring back unity between industrial and decorative art—we have got to see that things fulfil their function.

Art has got to be again rooted in democracy. "It does not matter how beautiful the fruit on the tree may be, the tree will wither if the soil is not well nourished."

“TOP O’TH’ TOWN ” MEMORIES.

By THOMAS PRESTON.

MARCH 5TH, 1918.

MR. THOS. PRESTON read another Paper on portions of Old Burnley : this evening on the district more immediately around the old Parish Church of St. Peter (dating from the 12th century), and known as “ Top o’ th’ Town.” Mr. Preston’s paper was full of interest, especially to the older inhabitants of the district, calling up old places and faces. His paper was too lengthy to be given in our Transactions, so we must content ourselves with a few leading features ; but it is printed in *extenso* in a booklet form which will be kept in the Club’s library, and can be referred to by members.

Mr. Preston began his tour of reminiscences at the Canal aqueduct made about 1800, noting the old Yorkshire hotel (since rebuilt), where officers and visitors were amply accommodated in the days of “ Old Catlow.” It was from this house that General Scarlett went to meet his bride, the younger daughter of Colonel Jno. Hargreaves on December 19th, 1835. Then down Gunsmith Lane, which is said to take its name from some gunsmiths who lived there in 1733. Here were two very old small dwellings in one of which lived the two last members of the real old Halsted family, who were assisted by the Misses Halsted, of Hood House, so informed by the late Richard Charles.

Near to, lived old Wm. Clarke, painter, who remembered seeing Mr. Pickup’s horses grazing in his pasture, hence the name of the district—Pickup Croft. Interesting details were given about the buildings and people about the Star Inn, and Hill Top, and old Johnny Law’s mill. In 1842, when the plug-drawers drew old Law’s boiler plug and then came into Mr. Butterworth’s Corn Mill yard, he, hearing the ringleader say, “ Oh, this is a corn mill, we will let it alone,” called out : “ Nay, nay, you must draw our plug too, for if all the mills stop there will be no money for flour.” Mr. Butterworth assisted a Mr. Whitaker in collecting and paying out the proceeds of the great Turnpike Trusts of those days ; and in St. Peter’s Church accounts of fifty years ago, an account of £19 10s. 0d. was received as cash from the Turnpike Trust. Some time after Mr. Whitaker’s death, Mr. Butterworth married the widow, and with the two Misses Whitaker, bought Springfield House and lived there.

Mrs. Veevers lived at Scar House. She was a daughter of Mr. Jno. Witham, of Pheasantford, and married Jno. Sagar Veevers, of the Coal Clough family. Before Spencer and Moore's great factory was built, the view across the river over the "Park," and on to North Parade was extensive and beautiful. The steep escarpments alongside the river up to and round the Church brought a romance that cannot now be gratified. Mrs. Veevers and her son and daughter could see the homes of Henry Palmer, old Jerry Spencer, Jno. Moore, Anthony Buck, Thomas Chaffer, Dr. White, David Greenwood, Wm. Waddington, and Elijah Helm, the old Grammar School (with the date 1693 over the porch door), and probably a portion of Brown Hill

Next to Scar House, set well back from Church Street, was the fine Elizabethan house where it is claimed the Crossleys lived before removing to Halifax. Further up Church Street, and on the other side of the road, was Adlington House (now the Coach and Horses beerhouse), with extensive gardens extending down to the river, where were the old stepping stones to reach the "Park." The house was built and occupied by Richard Chaffer, a builder and stone merchant. He was the father of Thomas, Benjamin and Richard. Near the house ran steep Rakefoot down to Riley's tan yard. Old Jno. Riley had two daughters. One married Wm. Rumbold, the joiner, and the other "Kit" Slater, who worked at the tannery, "Kit" Slater became an important and very well-known man in Burnley—as Sanitary Inspector, Master of the Fire Brigade, teacher of singing at the Mechanics' Institution, and in other positions.

Past Well House and the old White Hart Inn stands without doubt the oldest dwelling in Burnley—the next house is more modern and yet is dated 1597.

The last cottage in the row had a look-out at the gable end to the Old Sparrow Hawk. Jno. Pollard, said to be the oldest bellringer in the country, lived in it. Beyond Pollard's gable was a wall and door leading to allotment gardens. On the wall was inscribed in cut letters: "This land belongs to Earl Howe." The Howes and Curzons held land in Burnley at one time, and left their names in Curzon Street and Howe Street. Next stood the "predominant secular" building at the "Top o' th' Town," standing high above the spacious old square, with the Stocks and Market Cross in the centre—the Old Sparrow Hawk Inn, with its mullioned windows, generous height and breadth of frontage. It belonged to the Towneleys. The portly landlord, Shuttleworth Hind, and his especially ample wife, brought up a fine family

The four sons assisted their father in the workshops and smithies behind the Inn. Godley Lane ran past the smithies, where in a plantation on the left hand side stood the Paulinus Cross, and on the right Rawlinson's Rope Works. The lane went over a canal bridge to the Ridge, where the Haslams lived for some time. A group of old houses stood opposite the Church yard, now pulled down. Near by stood the old Talbot Inn at the corner of Shorey Street, which led to the famous Shorey Well, with such good water that people came for it from great distances. In a small detached cottage, old Henry Hargreaves, called Henry o' James's, lived to be over 100. He was 95 in 1852, and had lived in the reigns of George II., George III., George IV., William IV., and Queen Victoria. The old clerk, Henry Clegg, lived near; he had clerked at the Church for fifty years, and lived his ninety years within sound of its bells.

Mr. Preston concluded his most interesting paper, of which this is a very slight outline, with the words: "I must now wind up with meagre memories of the "Top o' th' Town" School and Church 60 years ago. Travelling, as I did, through the various classes from the sixth under Charlie Hargreaves, to the fourth in 1854, when I caught the eye of Mr. Master in a book he gave me, and becoming head boy with prizes from General Scarlett, Mrs. Parker, Mr. Gunn, art master, and others, brought me into intimate touch with Mr. Grant's all pervading personality. His appeal to the walls if they could speak, betokened the man of inspiring force, indignant with idle dunces and unbalanced clowns. His scripture lessons were his greatest asset. His speech at the Old Scholars' Re-Union in the Literary Institute, on March 28th, 1868, was very touching, and the whole proceedings a corollary of the old school days under the faithful master.

"I'm glad I went to school in Grant's great day. My recollections of teachers and scholars would take up many a night. I leave them with the most tender adieu. And now coming to the Brun-circled fane of St. Peter's, what changes I have seen. The restoration of the Church in 1854 swept away the ancient three-decker pulpit, the great organ at the east end, and the hearse house near the bridge. A new east window was erected to show respect to Mr. Master, who saw the work completed and then in 1855 made way for the Rev. A. T. Parker. Mr. Parker played a capable part, and towards the close of his career nobly spent himself and his means in the extension of churches in our populous districts, and to the creating by a special Act of Parliament a Suffragan Bishopric of Burnley in association with the Rectory of St. Peter's."

SWINBURNE.

By T. E. RHODES.

MARCH 12TH, 1918.

Mr. RHODES said we did not appreciate all that the English language and literature owed to Swinburne. His work covered such a vast amount of ground, so great a variety in its scope, that to form a just appreciation required much time and practical study.

An interesting point about Swinburne was how far his personality had influenced his work.

He was the son of Admiral Charles Henry Swinburne. His mother was Lady Henrietta, daughter of the third Lord of Ashburnham. She was a fine mother, she guided his early studies and saw that his eager nature was not overburdened ; watched over his delicate frame, and saw that proper physical exercises were accorded to it. His poem "Thessalius" was a fine picture of what Swinburne's boyhood had been. His early life was spent between Bonchurch in the Isle of Wight and Capherton in Northumberland, and these scenes had inspired many of his finest poems.

At 12 years of age Swinburne went to Eton. He did not mingle with the generality in their love of games ; books were his constant companions, and there was no doubt that his early training, and his wonderful memory, were fruitful sources of his wonderful vocabulary. The Lecturer said that Swinburne's command of words was more of a detriment than a help to him.

At Balliol College, Oxford, Swinburne came under the influence of that admirable scholar Jowett ; T. H. Green ; A. V. Dicey ; G. Birkbeck Hill (well-known as editor of "Boswell's Johnson") ; and Rt. Hon. Bryce. He won Taylorian prizes at Oxford for French and Italian, but never took his degree, and seemed to have pursued the same independent course of reading which he adopted at Eton.

On the continent he met Walter Savage Landor, whom he greatly admired ; Mazzini and Victor Hugo, both of whom he idolized. The two latter inspired him to write many very fine poems on liberty, his ode to Mazzini being one of his masterpieces.

On settling down in London to begin his life as a poet, Swinburne entered into the Pre-Raphaelite Brotherhood; this greatly influenced his outlook on life and the colouring and imagination of many of his poems. Dante Gabriel Rossetti, Burne Jones, and William Morris were in the same circle. During his London life Swinburne seems to have expended a great amount of nervous energy. When writing a single poem he would carry it off to his friends and read it to them; such was his charm in reading or recital that two hours' recital did not weary his audience.

Swinburne's London life lasted until 1899. There he made many friendships and a great many enemies. One of the finest friendships he made was that with Theodore Watts Dunton, a lawyer and man of letters, who quietly took charge of this less experienced man of the world; looked after his contracts with publishers, and all the business side of his life. This friendship was maintained, with very few breaks, for over 30 years.

Turning to Swinburne's poetry, the Lecturer said that when reading it we felt to be in a tropic atmosphere; we were overpowered with the sensuousness and imagery of his poems. A Scotch critic had discovered in these poems a moral lesson—the lesson of “don't,” for Swinburne showed in the pictures he drew, the satiety of Vice, and how it lowered manhood.

The finest of his early efforts was “Atalanta in Calydon,” a model of a Greek poem. This was best appreciated if read through at a sitting, the whole unity of the poem was so fine. The blank verse, lyric, and dialogue all flowed wonderfully together, and formed a very fine piece of work.

Swinburne was greatly influenced by Darwin and other pioneers of the new thought of the middle of the 19th century. “The Triumph of Man” was the inspiration of many of the young radicals of his day. They had often been heard to chant the “Triumph of Man” as their watchword of liberty.

In 1881 Swinburne produced what was reckoned to be one of his finest poems: “Tristram of Lyonesse.” This was an instance of rhymed couplet. The whole poem embodied Swinburne's love of the sea and love of swimming, and altogether was an exceedingly musical poem.

Swinburne, in his poetry, made use of many daring experiments; his use of certain words and his use of alliteration helped to swell the music of his poetry. Some of his words

sparkled like little gems, and his phrases seemed to scintillate. When we had finished reading Swinburne's poems, no great picture was left upon the mind. He appealed to the senses through the ear. By hearing them read rather than by reading them ourselves, we got his wonderful flow of language, and could better appreciate the music of his work. To those who were taking their first plunge into Swinburne's poetry, Mr. Rhodes recommended his "Selections."

Amongst Swinburne's prose writings, the tribute he paid to the Brontës, and his appreciation of William Blake, were the most valuable.

Along with Charles Lamb, Swinburne shared in the glory of making the Elizabethan Drama live; these two had done a great deal to make us appreciate the glory of our own literature.

Mr. Rhodes interspersed his lecture with selections from some of Swinburne's finest poems, and finished with Thomas Hardy's poem on "The Dead Singer."

WITH THE SERBIANS IN MACEDONIA.

By J. H. WATSON, F.R.C.S., M.B., B.S. MARCH 19TH, 1918.

DR. WATSON prefaced his address with a brief history of the Serbians, and described the geographical position of the country. The virility and gallantry of the people were remarked upon, and the speaker said it was the gallantry of Serbia which had stood across the path of the German invasion of the East. The murder of the Archduke at Sarajevo was touched upon. Mr. Watson remarking that the part of Serbia in the war was fully equal to her reputation. Passing on, the speaker referred to the great retreat to Scutari and the belated efforts to give them assistance by means of the Salonika force. It was apparent that the true meaning of the attack upon Serbia lay in her position as holder of the gate which secured to the Central Powers access to Constantinople and Salonika. Our interest for Serbia was, therefore, not merely the sentimental one of a big ally for a small one.

Regarding his own experience in Serbia, Dr. Watson said that when his unit arrived at Salonika in June, 1916, the fighting force of the Serbian army, numbering about 120,000, all that was left after the hardship of retreat and the ravage of disease, was being gradually sent up to the Front. The equipment of the force was undertaken by France and Great Britain, while each nation undertook to supply accommodation for 7,000 wounded and sick. When his unit moved up from Salonika to near Vestekop, at the beginning of July, there was very little to stop a Bulgar advance, had the enemy wished to leave Serbian territory. The disposition of the army at the time was defined by the speaker, who referred to the sudden attack by the Bulgars and the retirement of the Serbs. Things, he said, were looking very black for the hospitals, but more especially for Serbian supplies and reinforcements. A little further, and the Bulgars would have sent them all off.

Rumours of Greek mobilization about Verria and an advance on the Kozani road would have meant their speedy isolation and capture. But the Serb reinforcements fought brilliantly, and the Bulgars were exhausted after reaching Sorovitch, although they had achieved their object in opening the way to Kozani. The subsequent success of the allied forces was dealt with, and proceeding, Dr. Watson said that the hospitals at Vertekop were established in July, beginning

with a few hundred beds and reached at this period 3,000. It became one vast camp of marquees.

In September it was daily receiving convoys of wounded both by road and rail. The French and Serbs had provided advanced dressing stations. In those days there were no casualty clearing stations, and they got their wounded in a most pitiable condition. Gas gangrene, that most foul and dreadful infection of war wounds, owing to delay in transport and difficulties of gathering the wounded in such rough country, supervened far too frequently, necessitating extensive and mutilating operations, ending only too frequently in death. They found that most of the abdominal wounds arrived too late, but they were most impressed by the cheerfulness and fortitude of this brave race of peasants. The hospital sisters were devoted to them, never a grumble was heard, and always the patients began to help them in the wards as soon as they could get about. This was very soon, their recuperative powers being marvellous. He had done abdominal operations on the men, and they had been out of bed the same day, wandering about, to the utter consternation of the sisters in charge, who had great difficulty in getting them back to bed. Their great anxiety and desire was to be in the sun and to have plenty of water to sprinkle about on themselves, and with which they also watered the bedclothes and everything else in the vicinity. At first the staff had some difficulty in feeding them, they did not like the bread and bully beef, and the large meat ration was most unpalatable. The Serbs were essentially vegetarians and wanted vegetables, stews, eggs, and poultry, which was somewhat scarce in the early days. Later on they got some of their own and all went very well, so much so that they declared their anxiety and desire, when the war was over, to be linked to the British Empire as another British colony.

Dr. Watson dealt with the brilliant attacks by the Serbs which drove the Bulgars out of Monastir. Thus far, the only considerable success of the campaign conducted from Salonika had been the work of the Serbs, who had shown that despite adversity and homelessness their spirit remained unconquerable, and upon the allies a sacred trust had been placed. To-day the Serbian nation was broken up and scattered over the face of Europe, but they looked forward to the day when they would be politically and financially an independent Kingdom of Jugoslavia which would comprise the states of the Serbs, Croats, Slavenes, including the territories of Croatia, Slavonia, Herzegovina, Bosnia, Serbia, and Montenegro, under the leadership of the Kara George dynasty.

INDUSTRY AND HUMAN NATURE.

By THOMAS FOSTER.

MARCH 26TH, 1918.

Mr. FOSTER pointed out at the outset that although many people looked for a restoration of something like pre-war conditions after the war, evidently regarding those conditions as ideal, they would find that the war would make a distinct break with the past in all departments of industrial life. They could not travel backwards. They must go forward, but where? Were they going to allow reason to guide them, or were they going to (as in the past) stumble forward without any sense of direction? There was much industrial unrest before the war, and it was with us still. On this point many people regarded serious trouble in the future as inevitable. It was their business to consider this problem very seriously. Industry was necessary to human life, and its conditions could not be ignored. Mr. Foster submitted two propositions: (1) That with most people the great object of life was to reach a stage where work was unnecessary for oneself; and (2) to go through life doing as little as one could and yet secure a living. Most people, it could not be denied, regarded work as something to be shunned. There must be a reason for this, and it would be of interest to enquire what it was. This would involve an enquiry into the nature of industry, and into human nature. Social science had been too much neglected, and human nature was the most important part of social science. Its study was intensely interesting and its applications were probably more useful than those of any other science. Its study needed to be greatly extended.

It was customary to attribute to human nature all that was bad and unsocial, and thus account for all bad and selfish practices. What about the good side? Human nature was undoubtedly capable of all that we knew or could conceive of goodness. It was also known that human nature was capable of modification for good or for ill. Whilst many men sought to shirk work, many on the other hand loved their work, and found a joy in it. It could not be natural that men should dislike work. It would be noticed that much of the play of children was imitative of work. Some of it evinced a creative spirit, and great pleasure and satisfaction was evidently derived from it. William Morris said: "Time was that when a man made a thing he made it a thing of

beauty." A man could not make a beautiful thing unless he put some of his own soul into it, and in order to do so he must be interested in his work. If a man's interest in his work could be secured, he would do good work and enough of it. On the contrary if he was not interested in it, he would do bad work, and as little of it as possible. It was obvious that if a man was not doing the best he was capable of, his heart was not in his work. For the good of the man he should get as much pleasure from his work as from the best occupations of his leisure. Men did not like their work, either because it was unnatural in itself, or because the conditions under which it was carried on were unnatural.

In times when society was less complex than now the workman was more closely related to the source of his material, its ownership, and its disposal. Industrial developments had resulted in great division of labour and cleavage of interests, those engaged now in industry being divided into owners, managers, and manual workers. Moreover, the manual worker was now far removed from contact with the consumer or user of the commodity he produced. The material surroundings were often unsatisfactory, being often unhealthy, and the processes being often monotonous. Much labour was wasted in the production of useless and unnecessary things by people who needed useful things and could not get them. These conditions were not calculated to produce a real interest in work.

The lecturer quoted Mr. Clutton Brock as follows:—
 "What is the real reason of the profound and growing discontent among our workers? Is it that they do not for the most part feel that their work is worth the doing for its own sake, and therefore that their one concern is to get as much wages for it as they can squeeze out of their employers. To them work is something imposed on them by the iniquity of society, and it is that so long as society is content that they should produce rubbish without joy. Often the workman does not know the real cause of his discontent; he thinks that it is with the amount of his pay, not with the quality of his work, and so of his life. But his real quarrel with society is that it is wasting his life, that he can get no joy in his work, but only in pleasures away from his work. What wonder then is it that he should want as much of those pleasures and as little of that work as possible? So long as the workman has to produce rubbish he will not be satisfied with his work or his life, no matter how large his

wages may be or how short his hours. He will be satisfied only when he has work that will satisfy his soul ; and he will get that only when the public want it from him."

Mr. Foster went on to contend that the community could, and must, make industrial conditions such as souls could be developed therein. Ruskin suggested that "the final outcome and consummation of all wealth is in producing as many as possible full-breathed, bright-eyed, and happy-hearted human creatures," and "that among national manufactures, that of souls of a good quality may at least turn out quite a leadingly lucrative one."

Our new motive for industrial and for all other social activities should be the production of such souls. If this became life's object, individually and nationally, industry would easily conform, and we should hear no more of industrial discontent. Under such a regime useless toil would be abolished, dangerous and unpleasant occupations mitigated, and only things that were good for men would be produced. The humblest worker would realize his relation to the object of his work, and industry would partake of the joy of social service. It may have needed the war to focus public attention on this question, but in the main it had been focussed. Industrial unrest had become so serious that the Government had appointed a Committee (Mr. Whitley's Committee) to investigate and report. Its findings were in effect that we cannot return to pre-war conditions, nor was it desirable to do so. As a nation we had realized something of the birth-right of our young people, and of their right to life. Who would doubt as to our future if we would only give our better nature a chance ? We should not only have a new industrial order, but a new social order, in which "Man will not seek his own, but each his neighbour's good."

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HON. SECRETARY, 1906-15.

