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St. Bartholomew's Hospital



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St. Bartholomew's Hospital Journal,

OCTOBER 14th, 1896.

"Æquam memento rebus in arduis
Servare mentem."—Horace, Book ii, Ode iii.

Inaugural Address to the Abernethian Society,

October 8th, 1896.

BY HOWARD MARSH, F.R.C.S.

MR. PRESIDENT AND GENTLEMEN,—No task could be more entirely congenial to my feelings than that which, on the invitation of your Committee, I have now to discharge.

When I was asked to give the address at the opening of the present session of the Abernethian Society, my mind at once grew busy with the subject, and the more I reflected the more clear was my conviction that the Abernethian Society has been for upwards of a hundred years, and is now more distinctly than ever, one of the most valuable

accessories of the Hospital and School. But this view was only the confirmation of a conclusion which I had formed some thirty-five years ago, when I was myself a student, and, a little later, house surgeon.

I well remember how regularly I then attended the meetings of the Society. I remember also that the Society occupied a very high position in the estimation of us all. For not only had Lawrence, Paget, Baly, Kirkes, Rolleston, Savory, and others contributed many valuable and interesting papers, but it was here that a highly important event in pathology had taken place. In November, 1835, Paget, who had become a student of the Hospital only a few weeks before, announced his discovery of the *Trichina spiralis*; while Kirkes, in 1850 or 1851, as I have always understood, brought forward his observations on the effects of embolism of the systemic and pulmonary arteries. His original paper on the subject is published in the *Transactions of the Royal Medical and Chirurgical Society for 1852*. Such achievements as these not only conferred lasting honour on the Society; but they created a standard of work which, although it is not likely to be often reached, must always remain as an abiding stimulus and incentive to all those to whom, each in their turn, is entrusted the responsibility of safeguarding the scientific reputation of the Abernethian Society.

I am sure everyone who has ever tried the experiment must have found how useful a thing it is to take part in the active work of the Society by writing a paper or joining in the discussions. A paper that is worth anything requires a good deal of careful and solid work. It is necessary in the first place to get at the essential facts of the subject in hand, a proceeding which involves much patient labour, and the exercise of the critical faculty. Sir James Paget used to say that you should not make an assertion unless you feel that you can take your oath to it. You must then read and think about what others have written, and you must next arrange your facts in their proper relative order. Then you must endeavour to draw sound conclusions from them, and, lastly, present the result with clearness and in the best literary form of which you are capable.

No one ever took up a subject, and thus worked at it, without largely increasing his knowledge and training the best faculties of his mind.

The discussions that follow the reading of a paper are also very valuable. I can assert without exaggeration, that some of the most interesting debates I have ever heard have been at the Abernethian Society, and I have heard Sir William Savory make an exactly similar remark.

And here we may remember with just pride, that with a single exception (the Medical Society, founded 1773), the Abernethian, started in 1795, was the first of its kind established in London. The Medical and Chirurgical was founded in 1805, the Hunterian in 1819, the Harveian in 1831, the Pathological in 1846, the Clinical in 1867; others are more recent still. In late years, National and International Congresses have followed, and although, no doubt, congresses, like everything else, are here and there open to criticism, they have done a large amount of good. Thus the Abernethian Society, with the Medical, was the pioneer in this field of work. When in course of time I became Secretary of the Medical and Chirurgical, and afterwards of the Clinical, I observed how closely they had followed the lines of this Society.

When Nelson fought the battle of Trafalgar, the Society was about ten years old. It now seems an unhappy omission that no Surgeon of the fleet, present at that ever glorious victory, came here to relate his experiences. Had he done so, with what great interest should we now look back on his account. And this reflection prompts me to offer a suggestion. If those members of the School who go on foreign service, or who reside in the uttermost parts of the earth,—and even there St. Bartholomew's men are to be found,—would bring, or send home for this Society, or for the Hospital JOURNAL, reports either of their experiences of active service, of the districts through which they travel, or of the habits and customs of races with whom they come in contact, they would be affording very great pleasure and much instruction to their old friends at home. I can even imagine that, by degrees, a museum might be formed of specimens of various kinds that had been collected and placed in your hands.

I have alluded to the advantages which the Abernethian affords to its individual members: let me now refer to the Society as an element in our public life. In any community the first essential for real success and prosperity is harmonious action: and this can exist only when there is some central idea, some overshadowing influence, which commands the allegiance of all. Such an influence, such an *esprit de corps*, so long as I can remember has always been a marked characteristic of our School. Let me trace its origin, and point to its results.

It has been derived in part from the historical side. The Hospital has stood where it stands to-day for nearly eight hundred years, and during those long centuries it has lived

because its mission was high and honourable, and because that mission has ever been honourably fulfilled. And if this is its history, who would venture to become one of its sons, and yet sully his birthright by any unworthy action? It has been largely inspired by the example and the memory of those who have here lived and worked. By the memory of Harvey: for what man is there amongst us worthy of the name of a student who can tread the very ground which Harvey trod while he wrestled with those problems, the solution of which issued in the greatest discovery ever made in biology,—for remember that directly out of the discovery of the circulation of the blood there has come our present knowledge of the mechanism of nutrition in the whole animal and vegetable kingdoms,—who, I say, can tread such ground without imbibing some at least of the spirit of Harvey, and becoming the disciple of his methods?

Then, after Harvey, we had John Hunter; for when, in 1751, Cheselden had a stroke of paralysis John Hunter, who was then attending his practice at the Chelsea Hospital, came over to St. Bartholomew's, and worked for two years under Percivall Pott. And as we call the roll of the past we encounter the names of men who were not only great in their profession, but wise, just, and magnanimous, whose principles and rules of conduct will challenge imitation on the part of all who come here susceptible of the inspiration of a high ideal.

Again, the sentiment I am alluding to has been derived in large part from the fact that the pursuit in which we are all engaged is of absorbing and never-ending interest, so that we are ever, or we ought to be, drawn away from things that are merely personal, and therefore in a manner paltry, by fresh discoveries and advances, which afford some of the best illustrations of Tennyson's conception when he speaks of "the fairy tales of science and the long results of time."

Lastly, this sentiment is due in no small degree to the fact that—as every newcomer among us is soon aware—we live a life of liberty and fraternity, in the true meaning of these words. Underlying our system are laws as inexorable as any that could be named, but as we often see with the forces of nature around us, they become hostile only when they are opposed.

The influence which these various causes have combined to establish can be best understood by the results it has produced. These are loyalty to our Alma Mater, mutual confidence and regard, and a deeply-rooted feeling that each and all must maintain and transmit unimpaired the high level of conduct which our predecessors established and bequeathed to us.

A great deal is being said at the present time about the ethics of our profession, and there is now a section of ethics at the annual meetings of the British Medical Association. Ethics are very important, but I am happy to feel that they are so naturally present in our system, that wherever St.

Bartholomew's men are found, any artificial culture of ethics is a needless work.

Now I believe that nothing has contributed more largely to the establishment of this system than the Abernethian Society. And this we owe to Abernethy. The Society was founded by Abernethy when, following Percivall Pott, he was one of the surgeons, and in 1832 it was named after him. It is often impossible to foresee the results of a particular action. No doubt the Society began in a very small way, and Abernethy probably had no thought for the future: but so long as the hospital remains,—and can you, Mr. President, conceive how it should possibly come to an end while the world and its suffering last?—so long will our Society continue, and the name of Abernethy flourish, and be honoured among us. True, he made no grand discovery like Pasteur or Koch, nor did he, like Lister, revolutionize the practice of surgery. His name will live because he early saw that one of the soundest and most profitable methods of studying medicine consists in debate and discussion, because he founded a Society to give his conception its embodiment and effect, and because by this action he initiated one of the most important departments of our School.

For many years the Abernethian Society confined its work to the reading and discussion of papers. Its meetings were held in the Abernethian room over the Library of those days. But when the new School buildings were erected in 1877, the present Abernethian room was provided for the use of the Society. As time has gone on the Society has gradually widened out, and enlarged its functions in a manner in the highest degree valuable and advantageous to us all. It is no longer a mere debating society. It is, in fact, the Senate of our Republic, and in that capacity it shapes, regulates, and legislates upon all the affairs of the body-politic; and creates, formulates, and establishes public opinion. Its code is for the most part unwritten, but this makes it all the more efficient. An unwritten law is more subtle and more penetrating, and at the same time more elastic, than a written ordinance. It therefore more readily adapts itself to particular cases. It is the reflection of general public opinion, and thus its strength lies in its comprehensive equity, which springs out of, and embodies the conception, on the part of the majority, of the fitness of things.

If you reflect for a moment, you will see that such a form of government is essential in the circumstances under which we live. We form a large body, each individual of which is at first a complete stranger to everyone, or nearly every one he meets. We come from all parts of the world, and from widely different surroundings. A small proportion have, through their families, already some connection with the profession, but the great majority come, some from the ranks of commerce, some from the army, or the church, and many from Greater Britain,—from our splendid colonies,

Australia, Canada, New Zealand, and the rest. Moreover, every six or seven years the members of the community are almost completely changed, and—to slightly paraphrase the lines of the poet—"Another race the former's place supplies; they pass successive, and successive rise." And you will not challenge my statement, that they pass more quickly and in larger numbers here than in any other school in London, and that they rise into practice more quickly than in any other instance whatsoever.

It always seems to me that it would be difficult to name an institution which is so complete a little world in itself as that which is formed by St. Bartholomew's Hospital as it is at present constituted. We are a parish all to ourselves—St. Bartholomew the Less, a title which some enthusiastic spirit might think should be St. Bartholomew the Great; but let that pass,—what's in a name?—and we have our own parish church founded some centuries ago. We study so many subjects under so many heads, that it takes upwards of sixty people to teach them. We have nine athletic clubs, a musical, and a dramatic society, and a Lodge of Freemasons; and we publish our own Journal.

Well, gentlemen, it is under the guiding influence of the Abernethian Society (of which let me not forget to say the staff as well as the students are proud to be members) that this elaborate system works with perfect regularity and smoothness, and with an *esprit de corps* which we are amused to observe some of our rivals think we carry a little too far. But we do not carry it one inch too far. We only claim that we are the oldest, the richest, and best hospital there is; and what can our old friends Guy's and St. Thomas's see to complain of in that? While in our relations to each other, is there any member of the staff who would say an arbitrary or unsympathetic word to a student, or any student who would say an unfriendly word to a member of the staff? Now, while all this is the case, we may feel that our Institution stands foursquare to all the winds that blow.

But now let us glance at what I may term the social life of the School. The establishment of the various means of recreation—the musical and dramatic societies, and the different athletic clubs—is the true complement of our intellectual work, and has been productive of advantages which those who have not carefully considered the matter do not perhaps fully appreciate. Nothing to my mind could have been better calculated to render our system sound and durable, or to promote the well-being and happiness of individual members.

I can remember the time when many a student's life was wretched, and led to deplorable results. After a healthy country life among his relations, or at school, or at one of the Universities, the student of forty years ago found himself, on coming to London, in a miserable position. When his day's work at the hospital was over he went, so to say, into outer darkness—his lodgings

were dirty, his food was badly cooked, and there was a complete absence of anything in the way of pleasant surroundings and healthy recreation. What followed depended upon the temperament of the individual. Many bore the weariness of their sordid life, and worked on in dreary discomfort; others, however, found relief by casting in their lot with some kindred spirit—and thus were formed, as is often the case among companions in hardship, friendships which neither time nor separation ever could efface. But in other instances men threw themselves into all the amusements of the town. Once turned in this direction, they met with ever ready and sympathetic assistance. In the forties and fifties, and even somewhat later, there were at the hospital men of a very peculiar order, happily now completely extinct. They were students of eight or ten years' standing, who had never passed, or even presented themselves, at a single examination; but they were past masters of music halls and billiard rooms. They walked the Hospital—that is the Hospital square—on one or perhaps two days a week, when they came to pass their time and to look for recruits.

I remember the following incident. One of this fraternity asked a member of the staff to sign his schedule of attendance on the lectures on medicine, and said he found them so interesting and instructive that during the whole session he had hardly missed one. Unfortunately, however, the personage he was addressing was not the lecturer on medicine, Sir George Burrows, but someone entirely different!

Some men obtained from their relations preposterous fees for bogey examinations, or for a large assortment of surgical instruments. And the other day I was reminded by Dr. Chapman, of Richmond, of one who applied to his father for five pounds for the purchase of a Eustachian tube, for, he said, all the other men had one. Finding supplies fall off they became parasites of the lowest order. As senior men, they were at a great advantage in approaching a first year's student; their manners were cordial and reassuring; few men in their first year could resist the flattering privilege of intimacy with such mature men of the world. The question, "Will you walk into my parlour?" was answered with fatal readiness. The parasite enriched his very bare exchequer—at billiards or cards—and the victim of 1850 became, in his turn, the worthless parasite of 1855.

But the times are changed, and now a man who, after an honest—that is a hard—day's work turns to the recreation which is most to his taste, and which our system amply provides, will find, when years have rolled past and the time for a retrospect has come, that his hospital days were after all the happiest period of his life.

Now I believe those among you who are familiar with Plato will agree that our community presents a very striking similarity to his ideal republic. He says that man isolated

from his fellow-men is not self-sufficient, hence the origin of society and the division of labour, which becomes more minute as the members of the community increase. By this arrangement the necessities of life will first be secured; next, when luxuries are to be provided, there must be cooks, confectioners, barbers, actors, poets, physicians, &c. Now our Republic includes all these. Who after residence in the College, under the old system, will ever forget the College cook? For myself, though thirty years have elapsed, my recollection is still quite unimpaired. Or who could think without awe of the prospect of a personal encounter with the Hospital barber? Our Dramatic Society answers to Plato's actors. As to poetry,—I must pass by the limitations under which Plato would admit poets into his republic,—we have often had admirable minor poets among us; and are not almost all poets at present, from the Laureate downwards, minor poets? But let us recall the fact that our poets have not always been of the minor kind. One of the most gifted of living poets, Robert Bridges, was a student and afterwards house physician here: and it can scarcely be doubted that a medical student of the name of Oliver Goldsmith must have frequented the hospital,—although Dr. Shore will probably tell us that he never paid his fees. He lived in Green Arbour Court, which stood behind what is now the site of the Holborn Viaduct Station. He was the friend of Hogarth, and Hogarth lived in the Old Bailey, and, as you know, painted—though under what circumstances I cannot say—the cartoons on the staircase of the Great Hall of the Hospital. At a later period Goldsmith lodged at Islington, and there is a picture in Forster's *Life of Goldsmith* representing Hogarth engaged in painting the portrait of Goldsmith's landlady, Mrs. Fleming, to keep her in good humour till her tenant could pay his rent.

Under the head of guardians—as members of his republic—Plato has obviously foreshadowed the officers of your society and their followers. What more accurate description could be given, Mr. President, of your committee? "They must," he says, "be strong, swift, and brave, high-spirited but gentle, and with a taste for philosophy." This reference to the need of philosophy is positively startling, for it seems to suggest that Plato must, at some stage of his career, have been imperfectly successful at one of the conjoint examinations.

As to your President, gentlemen, it is clear that Plato had him especially in his mind when he was speaking of magistrates, in the following terms,—which I know will be accepted and heartily endorsed by everyone who has the pleasure of Dr. Stephens' acquaintance. "They must indeed be the oldest, the most prudent, the ablest, and above all the most patriotic and unselfish members of the body."

The object of music, Plato tells us, is to foster and develop in the minds of all a sense of beauty, harmony and proportion, which will influence their whole character, and

all their intercourse with one another. And who, let me ask, ever listened to one of our concerts in the Great Hall, without being affected in precisely the manner which Plato describes?

As to gymnastics, we learn that the diet of the guardians—among whom, from the context, Plato would evidently include the cricket and football teams—was the most simple and moderate, and therefore healthy. Under this head we are immediately reassured when we remember what a large proportion of you, gentlemen, habitually dine in College. The true mission of gymnastics, we find, is to develop the spirited element of our nature, just as music develops the philosophical; and the great object of all education, of which gymnastics are, in Plato's opinion, such an important part,—from which proposition, gentlemen, I think you will offer no dissent,—is to temper and blend these two elements together in just and harmonious proportion.

The women (*i.e.* the Nursing Staff), according to Plato, are to be trained and educated exactly like the men, for the woman is just as capable of music and gymnastics as the man, and like him displays marked ability for a variety of pursuits, the only difference being that of degree, not of kind, caused by the fact that the woman is weaker than the man. I am sure we shall all be convinced that Plato must have been endowed with profound insight; and that he must ever rank amongst the great prophets of our race.

Well, gentlemen, I think we have now arrived at a point at which you will expect me to announce a very interesting discovery. The "Republic" was written about 360 B.C., and Plato reminds Adeimantus that his object throughout had been to sketch a perfect Commonwealth, in the expectation of discovering thereby the nature of justice. The probability of realising such a Commonwealth, in actual practice, Plato remarks, is altogether a secondary consideration, which does not in the least affect the soundness of the method, or the truth of the results. Now you will search in vain through the pages of history for any case in which this ideal state has become a reality, and a survey of the world at the end of the nineteenth century will convince you, whether you glance at the Old World or the New, that no illustration can be found. Certainly it is not to be discovered at the present day either in Turkey or the Transvaal.

But among all the depressing contrasts that we see around us between the ideal and the real, between what is and what ought to be, do we not meet with one most happy exception, and is not this found in the School of St. Bartholomew, as it has been by degrees developed,—largely under the inspiration of the Abernethian Society? I am sure you will all agree with me that such is in fact the case. Should there be any cynics among us,—but Plato I think makes no mention of such misguided beings,—I hereby challenge them to show us in what material respect our Republic differs from

or falls short of the ideal which Plato sketched, to ascertain, as I have said, the true nature of justice.

Now under such circumstances need a word be said to induce those who are here for the first time to-night, at once to seek the advantages of admission into the ranks of your Society?—and so become members of a republic which for the first time in the history of civilisation illustrates a perfect form of government, under which the common good is secured by the submission of all to just laws, and in which the banner under which we march is inscribed with those two words, "Loyalty and Liberty."

I have only a few words to add as to the considerations which should regulate your work. The mind, like the body, is powerfully influenced by its environment, for its environment determines the degree and relative proportion in which its various parts are exercised. Now, a large portion of the training of a student of medicine consists merely in the exercise of the memory in the effort to accumulate facts. These facts are so numerous, and have reference to so many subjects that they form a "rudis indigestaque moles," beneath which the memory is in danger of being crushed and asphyxiated, while, as to the other departments of the mind, they are apt to be left so completely in abeyance that they undergo atrophy and entirely disappear. To prevent this one-sided use of the mind is a main function of the Abernethian Society; and the true method by which this end may be reached has been indicated by your predecessors. By such a student of anatomy as he whom we have just lost, Sir George Murray Humphry, and such a pathologist and surgeon as Sir James Paget. Some anatomists of first-rate reputation content themselves with the accurate enunciation and exposition of mere facts. Such anatomists are perfect surveyors and topographers, but they are nothing more. But the spirit in which Humphry worked and taught, and which pervades his book on the skeleton, is different from this mere mechanical work. Humphry's object was not only to describe the various structures and organs of the body accurately, but to go a step further, or rather, I should say, to rise to a higher level, and to grasp the meaning of what he saw—to get beyond "It is" to the "Why is it?" It is only thus that these dry bones can live.

One of the charms of the writings of Sir James Paget is that after he has described the facts with which he is dealing, he passes on to indicate how these facts bear upon others which may seem to one who has no insight, to be entirely independent of them; or to point to some hidden analogy, or to some general principle, the enunciation of which introduces light and order where before darkness brooded upon the face of the deep. Minds which can thus pass beyond the boundary-line between the seen and the unseen, and wrest some spoil from the region of the unknown, are they not, in however infinitesimal a degree, agents for the execution of that stupendous fiat, "Let there

be light"? To few is it given to tread these heights, but all should earnestly endeavour to keep a high ideal in view; and by reflection and discussion to cultivate their powers of insight, so that they may not only accumulate but also understand.

I confess I never recall the aphorism of Carlyle, "In everything there is inexhaustible meaning, the eye sees what the eye brings the means of seeing," without a sense of oppression and regret. For who can doubt that every day and from year to year all of us pass and re-pass things which if our eyes could see, and our hands grasp, would carry us forward at a bound. Gentlemen, I am convinced that a great opportunity for progress in your search after truth, lies in the work that is open to you at the Abernethian Society.

Let me conclude in words lately written by Max Müller: "What is wanted is the power of sifting evidence, and a simple love of truth. As Rosmini, one of the most eminent Roman Catholic divines, has well said:—We must be firmly persuaded in seeking for truth that in itself and in its consequences it must be good. Whatever value we may attach to our own most cherished convictions, there is something more precious than them all, and it is a perfect trust in truth if once we have seen it."

William Marrant Baker, F.R.C.S.,

Late Surgeon to St. Bartholomew's Hospital.



WILLIAM MARRANT BAKER died on October 3rd, at Nutbourne Manor, Pulborough, in his fifty-seventh year.

He was the son of Mr. Russell Baker, a solicitor at Andover, and was born on October 20th, 1839. After receiving his education at the Andover Grammar School under the Rev. J. Harrison, he was subsequently apprenticed to Mr. Payne, a practitioner in the same town.

In 1858 he entered at St. Bartholomew's Hospital, where he soon attracted the attention of his teachers by his application to study, and by the conscientious and accurate work which he bestowed on all that he undertook. In 1861 he was elected a scholar, and shortly after appointed midwifery assistant to Dr. Charles West,—the last, as it turned out, that Dr. West ever selected, for he resigned during Mr. Marrant Baker's tenure of office, and during the interregnum before Dr. Greenhalgh was appointed Mr. Baker discharged the duties of the vacant office with so much zeal and energy, that he was advised by some of his friends to turn his attention to that branch of medical science. But he was bent on the practice of surgery, and to it he turned his attention, resisting the seductions of a midwifery practice.

Soon after his duties as midwifery assistant came to an end he was elected a demonstrator of anatomy, in which

post his careful and conscientious work soon earned for him an excellent reputation as a teacher. In 1867, when Mr. Willett resigned the post of Warden of the College Mr. Marrant Baker was elected to fill his place, and for seven years he resided at the hospital, where his influence on the students was always for the best; for he maintained order by a quiet and firm determination, as the following instance will show.

Shortly after he was elected warden he was much annoyed by runaway rings at his two doors, one of which, as is well known, opens into the street, and the other into the hospital precincts. He was determined to put a stop to it. Hearing on one occasion a ring at the street door, he only arrived in time to see the culprit vanishing in the distance, but the view he obtained of him was more than sufficient, and waiting quietly in his hall, he heard some one stealthily approaching his door from the hospital side. No sooner was the bell rung than he opened the door, confronted and seized the culprit. "What do you mean by annoying me in this manner?" he quietly asked, and was much startled by the ready reply, "Please, sir, I came to apologise for ringing your street bell just now." The offender was probably equally startled by the reply, "Then behave as a gentleman in future, and never do it again." It is needless to add that his reply disarmed all opposition, and he was subjected to no further annoyances.

In 1869, when Sir William, then Mr. Savory, resigned the Lecturership on Physiology for that of Surgery, Mr. Baker succeeded him, and for nearly seventeen years his name was associated with that subject, and it became a household word to students of that period, both at St. Bartholomew's and elsewhere, from his association with Kirkes' Physiology, in several editions of which his name figures on the title-page.

In 1870 he was elected casualty surgeon, in 1871 assistant surgeon, and in 1882 full surgeon to the hospital, a post which he continued to hold until, in 1892, he felt himself constrained to resign owing to ill-health. A month later he was appointed a governor of the hospital, and remained one until his death. The last four years of his life were spent partly in London, and partly at Nutbourne Manor, near Pulborough, in Sussex, where he enjoyed as far as he was able the pleasures of rural scenery.

He was an early contributor to the Hospital Reports, in the very first volume of which will be found an excellent paper "On Tumours containing Fluid Blood," in which he clearly pointed out the liability of such collections to form the starting-point of malignant disease.

In his paper "On the Relation of Life to other Forces" he was in advance of his time, and one cannot read it now without feeling that when it was written this paper did not obtain a proper recognition.

Another excellent paper occurs in the thirteenth volume of the Reports on "The Formation of Synovial Cysts in the

Leg in connection with Disease of the Knee-joint." The views he there expressed were at once accepted, and these cysts are known amongst students of to-day as "Baker's cysts," though probably few who use the term know where to look for the paper in which they were first described.

When in charge of the Skin Department his demonstrations were eagerly sought after, for his knowledge of skins was very complete and exact, and his treatment at once judicious and simple. His kindness and courteous bearing were no mere surface gloss; put on to please for the moment; they were the outcome of a genuine honesty of nature, which was constantly prompting him to love his neighbour as himself. Whoever sought his advice, whether it was a patient, a first-year student, or a busy practitioner, all alike were sure to receive the fullest consideration, and feel that they were in the presence of a gentleman in the best sense of that word. He will long dwell in the memory of those who worked with him or were instructed by him.

Some Personal Reminiscences of Sir George Humphry.

MOST of ourselves remember Sir George Humphry in his later days, before he became Sir George and when he was most familiarly known as Professor Humphry. Although almost seventy, he carried his spare but well-proportioned frame erect, and walked with quick, active steps. His features were regular and aquiline, and his steady and piercing eyes shaded with finely pencilled and arched eyebrows; they were rather delicate but nevertheless strong, and such as betokened an artistic, nervous temperament. His hair was straight and, together with his moustache and beard almost jet-black, even to the last, a fact which, as he said with quiet humour, excited much speculation in the minds of the young ladies of Cambridge.

His mind was singularly quick and alert, and he was indeed a rash man who durst enter into an argument with him. Indeed, the writer has, amongst all the members of the medical profession whom he has known, never met with one who possessed such a keen and subtle intellect. Of his earlier days he often spoke. It was interesting to see how his mind went back again and again to those early days when he began his medical career. He often told those he knew best how he set off, when quite a boy, to go to his master at Norwich, saying, "Ah! how well I remember that little hair trunk which held all my belongings." It was truly a humble beginning for such a brilliant career. What would one not have given to see this slender, rather delicate, high strung, and sensitive youth—for such he surely must have been—entering with anxious expectancy his new world. The memory of stray conversations is apt to err, but used he not to say that he left his home at a time when his father had suffered a severe

loss owing to a speculation in iron works which did not do well? At Norwich he found "a very remarkable man," and one of whom he was never tired of speaking in terms of admiration and warm regard. There can be no question but that his first master, Mr. Crosse of Norwich, exercised a powerful influence for good upon the mind of his pupil. Sir George said that next door to his surgery he had a large room fitted up as a library and museum. At night, after the day's work was over, he was wont to sit there and look over the specimens he had obtained, and occupy his leisure in mounting new ones. This museum, too, used to make a profound impression on the minds of the humbler patients, and filled them with prodigious awe. The pupils had the run of the library and museum, and it is easy to imagine what an influence such opportunities, and such an example, must have had upon the receptive mind and keen intellect of at least one of his pupils. Of this Sir George Humphry was fully conscious all his life, and used to attribute his love of museums and museum specimens to those early days. There is hardly any curator of a London museum who has not seen the eagerness with which he came to see a rare specimen, and the pleasure with which he received one for addition to the Cambridge museum, for which he did so much. Nor was he parsimonious with his own windfalls; if a specimen could be divided without injury, some one was sure to have half, either as a gift or in exchange. His mind was too clear and enlightened to allow waste of anything, much less of that which he thought a treasure, and useful to others. It was most interesting to see him examine a new specimen. It was turned over and over again, and each observation made with minute care and accompanied with the shrewdest comments. Ofttimes when at a loss for an explanation he would turn to one of the most junior of his auditors and ask for an opinion. A sensible answer was a royal road to favour.

From Norwich Humphry came to St. Bartholomew's. He often spoke of the lectures of Dr. Latham. They were most impressive and most clear. The following example of Latham's style was often quoted. "The other day, gentlemen, I was called to a case of pneumonia; after bleeding he recovered. Was not that a wonderful cure? The other day I was called to another case of pneumonia, and he was bled and almost died. Was not that a doubtful thing? The other day I was called to a case of pneumonia and he was bled, and he died. Was not that a dreadful failure?" Those who have heard Sir George Humphry's own lecture on hæmorrhage will see what influence Latham had upon his mind. "The other day, gentlemen, I amputated a poor fellow's leg. He did well for a while until one night my little night bell went tinkle! tinkle! tinkle! and I learnt that he was bleeding. This was stopped. The next night, when I had fallen asleep, I was awakened by hearing that little night bell go tinkle! tinkle! tinkle! I said to

myself, 'Alas! there's that poor fellow bleeding again.'" How impressive this must have been, followed as it was by a vivid account of the scene, and the horrors of secondary hæmorrhage. Happily that lecturer lived to see the day when secondary hæmorrhage and all its horrors had become almost a thing of the past.

Others will tell of his departure to Cambridge. One was needed who could organise surgery there, and although Humphry was not yet twenty-five, Sir James Paget supported him for the post and, I believe, urged him to embark upon his career there—a career which he never regretted; indeed, it seems not improbable that he was hardly strong enough physically for the toil and stress of a metropolitan career. When he became surgeon to Addenbrooke's he was not twenty-five, and only a Member of the College of Surgeons. This may be inferred because he used laughingly to say that he was often told he was not a Fellow of the College at all. When the Fellowship was started the surgeons to country hospitals were asked to apply for election without examination, in order, it may be supposed, to found the new constituency by whom and from whom the Council was afterwards to be elected. Of course Humphry applied, and was elected, although at the time it was not noticed that his age was a little short of the now legal twenty-five years. But the writer is under the impression that the first Fellows were elected irrespective of age. At Cambridge he entered upon that career of anatomical and surgical industry which has made his name one of the best known, most often quoted, and probably most lasting, of almost any anatomist or surgeon of his time. He it was who designed and built Addenbrooke's Hospital, as we at present know it. Of this design he was always very proud. Those who knew him well could always delight him when he took them to Addenbrooke's by expressing admiration of the design. "Ah! now who do you think designed that hospital?" "Evidently, a very able man?" "Now, you knew it was myself." But, nevertheless, very pleased to acknowledge the fact. It was quite the custom for visitors to go round the wards with the professor after chapel at King's. It was always a most interesting and instructive function. A stool was brought for him to sit upon, and he used to perch by the side of the bed, stroking his beard. The unwary were sure to be caught over some odd case, for no questions were allowed, and no touching with the fingers, so a diagnosis became rather risky. To the students he used to say, "Eyes first and much, hands next and least, tongue not at all." It was remarkable what his own piercing eyes could see, and how acute his observations were.

With regard to the stool, that was required because he said his back was weak, and thus standing was fatiguing and irksome. He said he carried an umbrella oftentimes, not to protect against rain, but to lean upon at odd times. Latterly, too, he always travelled first-class betwixt London and Cambridge, because he was usually able to lie down.

In this way the journey, instead of being a fatigue, became a welcome rest for his back. Indeed, his body was but a frail tenement for such a soul. Owing to rheumatism, his shoulders were a trouble, and he oftentimes asked to be helped on with his coat, and jokingly said that he had lost the long head of the biceps, first on one side and then upon the other. And yet with all these detractions he hastened hither and thither, and worked in a way which would put to shame many an one who was strong and robust.

His manner of eating always used to remind one of accounts of a Japanese feast. When about to pay a visit in town to a medical friend, the question arose as to how he should be entertained at breakfast. In consequence of the advice which was given, a number of little plates were provided, one with a scrap of bacon, one with a little watercress, others with little portions of stewed fruit, and so on. He was quite delighted, and inquired eagerly how his host knew that he liked such things. Soon after he met the informant, and at once began to upbraid him for putting his host to such trouble. However, the attack was skilfully parried by the remark that next time the provision of kidneys and liver and bacon would be advised. He was horrified at the thought, and said, "How do you know that I hate all smooth-cutting viscera?" In fact, he often alleged this as a reason why he did not like to go out to breakfasts in Cambridge.

Sir George Humphry was a most hospitable, thoughtful, and kindly host. It was one of his pleasures to ask the younger men to spend Saturday and Sunday with him. On these occasions he exchanged opinions in the most candid way, and was eager to learn what was new, and to enter into the ideas of his guests. On Saturday evening he took his guests to dine in King's, and on Sunday he usually entertained students who had been introduced to him, or who had the slightest claim upon his kindness. These young gentlemen had usually to go through quite an ordeal, for in the kindest way imaginable they were asked the most searching questions about their work and goings on. There must be a great many who enjoyed this privilege, and who still have a keen recollection—nay, a most affectionate remembrance—of their sagacious and kindly host, and of that true gentlewoman his wife. A thing which always struck visitors was a number of very happy and healthy looking young girls who were being trained by Lady Humphry for domestic service. Their efforts, of course, led at times to strange results, but there can be few who could fail to be touched by such an instance of devoted kindness and unselfishness as that which befriended these humble girls. Sir George always called them "those little maids," sometimes adding with a smile, "You know, they are dreadfully afraid of me." This was surely an error on his part, for no one could fail to observe how patient and gentle his demeanour was towards them, least of all they themselves.

King's College and its chapel were one of his keenest delights. Seen by moonlight they present one of the most beautiful scenes; and still can one remember a lovely moonlight night, returning from Combination, when the solemn tones of St. Mary's bell fell upon the ear, the feeling, almost the rapture, with which he exclaimed, "Ah! listen to that beautiful sound!" Surely he had music in his soul. The service in King's was, he said, one of the most delightful and impressive things he knew. What could have been better than, when the inevitable hour came, that his requiem should have been sung in the place he loved so well.

C. B. L.

Some Superstitions of the Oldest Country.

ALTHOUGH the opening up of the country, as a result of increased railway facilities, has to a large extent swept away the spirit of romance from Cornwall, there still lingers in the remoter districts some trace of the weird beliefs which at one time constituted almost a religion for the natives of these parts. And it is curious to note that many of these beliefs are associated with the cure, real or affected, of diseased conditions. According to *Popular Romance of the West Country*, by Robert Hunt, F.R.S., perhaps the commonest are those concerning the cure of warts. One is to touch each wart with a new pin, dropping the pins into a bottle, which is then to be buried. As the pins rust the warts melt away. The fact that a bottle of pins was found in a newly made grave by the vicar of a Cornish church goes to prove that this superstition is still extant.

Another method is to tie in a piece of string as many knots as there are warts on the hands, each wart being touched with a knot, and the string then buried. The disappearance of the warts is synchronous with the decay of the string.

Yet another way is to touch each with a pebble; put the pebbles into a bag, and drop the bag on the way to church. This method is not calculated to foster a true spirit of charity towards one's neighbour, since the finder of the bag is in due course the recipient of the warts.

These charms are almost invariably successful, since multiple warts generally disappear spontaneously after a time.

The cure of paralysis demands a more elaborate ritual. The sufferer sits in the church porch, and presents her withered arm and open palm to the congregation as they leave after morning service. Thirty pence are thus collected in silence, until the priest comes out, when the paralysed one requests that he will change the copper coins for a silver one. This being done, the paralytic hobbles into the church, and three times round the com-

munion table, which is moved somewhat if necessary. The coin must then be made into a ring, which the paralytic wears in the firm belief that within three weeks she will be restored to health.

For rheumatism the cure is simple. One merely has to crawl under a bramble which is rooted at each end.

That for colic—to stand on one's head for a quarter of an hour—is obviously open to adverse criticism.

The use of a dock leaf for the cure of a nettle-sting is wide-spread. The cool leaf is placed on the inflamed spot, and the following rhyme said three times:

Out nettle,
In dock!
Dock shall have
A new smock.

Personal experience has proved that a dock leaf, without the charm, is a great palliative.

Strumous children are treated as follows:—Split a young ash tree vertically, and pass the child through the cleft nine times towards the sun. Then bind up the tree. If the bark unite and the tree live, then the child will live also.

A specific for whooping-cough is made thus:—Take nine stones from a stream, also a quart of water. Make the stones red-hot and drop them into the water. A wine-glassful of this, taken every morning for nine mornings consecutively, is so highly esteemed that, should it fail, it is believed that nothing else can possibly succeed.

For the bite of a serpent, its dead body bruised on the wound is infallible, according to the believer. So current is this opinion, that allusion has been made to it in "Polwhele's Sketches:"

"The beauteous adder hath a sting,
Yet bears a balsam too."

The enlightened mind of the nineteenth century, with its unbelief in and cynicism towards those creeds which are not easily proved, will doubtless be inclined to ridicule such superstitious practices as are mentioned above. But, before a hasty judgment be passed, it is well to consider that there may have been some apparent basis for the belief, however obscure such basis may now, from lapse of time, appear.

Notes.

WE take this opportunity of expressing our very deep sympathy with Mr. Howard Marsh in his recent bereavement. In doing so we know that we are expressing the sentiment of the whole school.

* * *

WE draw the attention of old Bart.'s men to the request of the Abernethian Society for copies of addresses delivered before the Society in years gone by. It is proposed to bind these pamphlets into volumes, and thus preserve them in a more permanent form.

AN EXAMINATION for Commissions as Surgeon in the Royal Navy begins on November 2nd next.

THE NEXT EXAMINATION for the final F.R.C.S. begins on November 23rd, and for the first F.R.C.S. on November 12th.

THE Medical and Surgical Staff of the Metropolitan Hospital recently presented Mr. Walsham, who has completed twenty years' service as surgeon to the hospital, with a handsome silver bowl mounted on a stand, as a token of the esteem in which he is held.

Amalgamated Clubs.

THE Annual General Meeting of the Amalgamated Clubs was held in the Anatomical Theatre on Monday, October 13th. Mr. A. N. Weir took the chair.

A MEETING of the Finance Committee of the Amalgamated Clubs was held on Monday, October 12th.

The minutes of the last meeting having been read, balance-sheets for the past year and estimates for the coming season were handed in from the various Clubs.

It was resolved to ask Dr. Fletcher, Mr. P. Furnival, and Mr. P. W. James to act as Auditors of the accounts of the past season.

A LETTER from the newly constituted Hockey Club was read, asking for the admission of that Club to the Amalgamation.

The following resolution was passed:—"That the Hockey Club be admitted as one of the Amalgamated Clubs, provided that a satisfactory estimate be brought to this Committee, and subject to confirmation at a General Meeting of the Clubs."

The business being finished, the meeting adjourned.

CRICKET, 1896.

Second Eleven.

The 2nd XI has had a most successful season; 24 matches were arranged, of which 18 were played, 6 drawn, 11 won, and only 1 lost.

The team scored very consistently throughout, the highest individual score being made by Mr. Nimmo, who compiled 130 for St. Anne's Heath. It is a noticeable fact that the only match lost was mainly due to the demon bowling of Mr. Bond, who figured in the ranks of the Winchmore Hill C.C. against us.

Table with 2 columns: Player Name and Score. Includes H. R. Skey (19), J. M. Collyns (16), H. E. Boyle (16), J. C. Sale (13), G. C. Marrack (12), C. G. Watson (10), E. F. Rose (9), F. J. Wood (7), H. Whitwell (7), F. H. Nimmo (6), W. H. Randolph (5), J. W. Nunn (4), J. R. Pank (4), H. J. Pickering (4), A. H. Hayes (3), D. J. Drake (1).

AVERAGES. Table with 5 columns: Player Name, No. of innings, Not out, Highest score, Total runs, Average. Includes H. J. Pickering (67), G. C. Marrack (8), C. A. Ridout (8), A. H. Bostock (13), R. H. Sankey (7), H. E. Boyle (8), C. G. Watson (11), F. J. Wood (10), T. M. Body (12), J. M. Collyns (10), E. Wethered (6), A. H. Hayes (9).

Those who have played less than 6 innings. Table with 2 columns: Player Name and Score. Includes W. H. Pope (33*), F. H. Nimmo (2), W. H. Randolph (1), A. Farrington (4), A. R. Skey (3), E. W. Lindsey (2), G. Hawes (1), J. C. Sale (1), J. W. Nunn (1), H. Whitwell (1), H. Bond (1), E. F. Rose (1), H. E. Scoones (1).

RESULTS OF MATCHES. Table with 4 columns: Date, Opponent, Score, Result. Includes London Hospital (203), St. Thomas's Hosp. (162), Barnet (196), Guy's Hospital (130), Berkhamsted School (208), Whitgift Wanderers (286), University College School (202), Merchant Taylors' School (113), Winchmore Hill C.C. (150), Maidenhead C.C. (101), Banstead Asylum C.C. (154), Whitgift Wanderers (69), St. Paul's School (116), Blackheath School (166), London Hospital (166), St. Anne's Heath C.C. (214), Southgate Adelaide C.C. (161).

RUGBY FOOTBALL CLUB. Table with 2 columns: Date and Match. Includes 10th-1st XV vs Civil Service, 17th-1st XV vs Ealing, 21st-2nd XV vs St. Mary's Hospital, 24th-1st XV vs Wickham Park, 28th-1st XV vs R.N.C., 31st-1st XV vs Upper Clapton, 4th-1st XV vs East Sheen, 7th-1st XV vs R.I.E.C.

Table of fixtures for the Association Football Club, 1896. Includes matches like Saracens vs St. Thomas's Hospital, Marlborough Nomads vs London Welsh, Merchant Taylors' School vs Croydon, U.C.S. Old Boys vs Kensington, Marlborough Nomads vs O.M.T.s, London Welsh vs Old Leysians, Croydon vs Wickham Park, Lennox vs University College School, St. Mary's Hospital vs Upper Clapton, St. Thomas's Hospital vs Harlequins, Guy's Hospital vs Merchant Taylors' School, Old Charltonians vs Marlborough Nomads, R.M.A. vs Upper Clapton, Northampton vs Mill Hill School.

ASSOCIATION FOOTBALL CLUB. FIXTURES.

Table of fixtures for the Association Football Club, 1897. Includes matches like R.M.A. vs Woolwich, Crouch End vs Winchmore Hill, Barnes vs Reigate, Old Wilsonians vs Winchmore Hill, Hastings vs Hastings, Old Brightonians vs Winchmore Hill, Eastbourne vs Eastbourne, Ealing vs Ealing, Casuals vs Winchmore Hill, Ipswich vs Ipswich, Enfield vs Enfield, Newbury vs Newbury, Marlow vs Marlow, Sittingbourne vs Sittingbourne, Old Reptonians vs Winchmore Hill, Old Westminsters vs Leyton, Mid Kent vs Maidstone, Eastbourne vs Eastbourne, Old Brightonians vs Elm Park, Casuals vs Tufnell Park, Reigate Priory vs Reigate, Civil Service vs Winchmore Hill, Newbury vs Newbury, Harrow Athletic vs Harrow, Barnes vs Barnes, Civil Service vs Aways, West Herts vs Watford, Enfield vs Enfield, Pemberton vs Winchmore Hill, Forest School vs Walthamstow, Norseman F.C. vs Winchmore Hill, St. Anne's Heath vs Virginia Water, Falstead School vs Falstead, St. Mary's Hospital II vs Winchmore Hill.

Table of fixtures for the Association Football Club, 1896. Includes matches like Aldenham School vs Aldenham, St. Thomas's Hospital II vs Winchmore Hill, Proprietary School vs Ealing, Old Foresters II vs Winchmore Hill, City of London School vs Winchmore Hill, Ealing II vs Winchmore Hill, Guy's Hospital II vs Aways, Barnes Incognito vs Barnes, Royal School of Science vs Aways, Tonbridge F.C. vs Tonbridge, St. Anne's Heath vs Virginia Water, Berkhamsted School vs Berkhamsted, Drayton F.C. vs Ealing, Barnes Incognito vs Winchmore Hill, St. Thomas's Hospital II vs Winchmore Hill, Norseman F.C. vs Edmonton, City of London School vs Beckenham Hill, Templars F.C. vs Winchmore Hill, Proprietary School vs Ealing, Ealing Reserves vs Ealing, St. Mary's Hospital vs Wimbledon, Drayton F.C. vs Winchmore Hill, Forest School vs Walthamstow, Old Foresters II vs Walthamstow, Guy's Hospital II vs Honor Oak, Aldenham School vs Aldenham, Tonbridge F.C. vs Tonbridge, Royal School of Science vs Winchmore Hill.

ST. BART'S O. R.M.A.

This match was played at Woolwich on Saturday, October 10th; R.M.A. won the toss and elected to defend the pavilion end. The Hospital kicked off about 2.45; the play for some time was somewhat scrambling, neither side being at all well together.

SHOOTING CLUB.

THIS, the first year of the amalgamation, and the second of the revival, of this Club, has not perhaps been as successful as the well-wishers of it might have desired. Still, when the difficulty of getting men to shoot and to practise is considered, the results are not so bad.

take place, on two occasions our opponents scratching to us, and on the third through our inability to raise a team.

We won matches against the R.I.E.C., Cooper's Hill, and St. Paul's School, and lost to Dulwich and to Guy's Hospital. This last defeat was wiped out at Bwisley, where our score surpassed that of Guy's.

The shoot for the Challenge Cup, presented by Mr. Waring last year, took place at Ilford on July 13th, under the same conditions as the Inter-Hospital Cup, namely, 15 shots at 500 yards. The holder of the Cup for this year is Mr. B. W. Holmes; Mr. H. E. Waller was second, one point behind the winner.

It is the earnest hope of the present writer that all men who do shoot, or wish to shoot next year, will communicate with the Secretary of the Club, as only by their initiative can that official become aware of their abilities or inclinations. The Club is now part of the Amalgamated, so no expenses are incurred beyond purely personal ones.

Abernethian Society.

THE opening address of the 102nd Session was delivered by Mr. Howard Marsh on Thursday, October 8th, in the Medical Theatre. The chair was taken by the President, Mr. J. W. W. Stephens. Mr. Marsh took for his subject "The Abernethian Society in relation to the Hospital and Medical School," and his address was just such as might be expected from one who has always been a warm supporter of all the varied activities of the Hospital. A *verbatim* report appears in this issue of the JOURNAL. A vote of thanks was carried with acclamation on the proposal of Mr. Meakin, seconded by Mr. Mitchell. The Nursing Staff were well represented, but as they were not present in the Library afterwards, of the "social" aspect of the meeting the less said the better.

The election of a President, *vice* Mr. W. R. Stowe, resigned, will take place on Thursday, October 22nd.

The Secretaries of the Abernethian Society would be much obliged if Bart's men, both past and present, who have spare copies of addresses delivered before the Society, would communicate with them. It is proposed to bind these pamphlets into volumes, and thus preserve them in a more permanent form; it is most desirable to have the collection as complete as possible.

St. Bartholomew's Hospital Hockey Club.

A MEETING of those interested in hockey was convened in the Smoking Room on October 7th. Mr. Meakin occupied the chair. It was unanimously decided to start a Hockey Club in connection with the Hospital.

The following gentlemen were elected officers of the new Club:—

President.—Dr. H. M. Fletcher.

Hon. Secretary.—Mr. J. W. Nunn.

Committee.—(1) Mr. F. H. Maturin, (2) Mr. V. Bell, (3) Mr. F. H. Nimmo, (4) Mr. D. J. Drake.

It was decided that the number of the committee be five, and that the election of the captain and the fifth member of the committee be postponed till the Club be in working order.

The following resolution was also passed:—"That the Hon. Secretary be instructed to apply to the Finance Committee of the Amalgamated Clubs for admittance of the Hockey Club to membership." The meeting then adjourned.

Further particulars as to trial games and fixtures will be announced when the Club has become a member of the Amalgamation, and when the preliminary arrangements have been completed. There is no doubt that there is sufficient material in the Hospital to form a very good team, and it now only rests with those gentlemen who play and are interested in the game to make the Club a success by turning up at the games.

St. Bartholomew's Hospital Smoking Concert Club.

SEASON MAY 1ST, 1896, TO MAY 1ST, 1897.

At a general meeting, held on October 7th, 1896, the following gentlemen were elected officers of the Club.

President—HOWARD MARSH, Esq., F.R.C.S.

Vice-President—P. FURNIVALL, Esq., F.R.C.S.

Chairman—Mr. D. L. E. BOLTON.

Vice-Chairmen—Mr. P. W. JAMES, Mr. H. G. MCKINNEY.

Treasurer—Mr. A. GRANVILLE.

Committee:

Mr. W. E. N. DUNN,	Mr. R. P. BROWN,
" H. B. MEAKIN,	" H. W. B. SHEWELL,
" T. J. HORDER,	" W. H. CROSSLEY,
" J. K. BIRDSEYE,	" H. BOND,
" T. MARTIN,	" C. J. MEADE.

Hon. Secs.—T. H. GLAZE,
H. D. EVERINGTON.

Gentlemen wishing to join the above club are requested to give their names in to the Hon. Secs. or Treasurer.

The annual subscription is 5s., which admits a member and one friend who is not a member of the Hospital.

Old Bart's men are cordially invited to join the above club.

The first concert of the season will be held early in November; further particulars will be announced later.

Any information required may be obtained by writing to either of the Hon. Secretaries.

The Old Students' Dinner.

THE Old Students' dinner was held as usual on October 1st, in the Great Hall of the Hospital. Over 120 old students and guests were present.

Dr. Champneys most efficiently occupied the chair, and was supported by Sir William Mac Cormac (President of the Royal College of Surgeons), Sir Trevor Lawrence (Treasurer of the Hospital), the Master of the Society of Apothecaries, Sir Alexander Rendel, Sir Dyce Duckworth, Dr. Church, Mr. Thomas Smith, the President of the Society of Actuaries, Dr. Gee, Mr. Willett, Mr. Butlin, and most of the other members of the Hospital Staff.

The secretary for the dinner (Mr. Bruce Clarke), is to be congratulated upon the success of the gathering, and particularly on the happy idea of having on the menu cards a reproduction, beautifully executed, of the Amalgamated Clubs' pavilion at Winchmore Hill, with the appropriate lines beneath:—

" 'Tis here

The organs, though defunct and dead before,
Break up the drowsy grave, and newly move,
With casted slough and fresh legevity."

HENRY V, Act 4, Scene 1.

The toasts of the "Queen" and "Royal Family" were proposed by the chairman in well-chosen words, and after these had been duly honoured, Sir William Mac Cormac proposed the toast of the evening—"The Hospital and School." He said it was impossible for him to speak properly of the noble work done by St. Bartholomew's for so

many years for the relief of the sick and suffering, not only in London, but indirectly all over the world. Its medical school was one of the most ancient in England—if not actually the oldest,—and had gone on increasing in usefulness and renown from year to year. The greatest of physicians—Harvey—was a student within its walls, and amongst the distinguished physicians and surgeons who have worked here in the past were:—Percivall Pott, the Drs. Pitcairn, John Abernethy, Sir Benjamin Brodie, Sir William Lawrence, Sir William Savory, and Sir James Paget. It was an interesting fact that the staffs of many of the other London hospitals were largely officered by students from this great school, and not very long ago the Professors of Anatomy in the three great seats of learning in the country—at Oxford, Cambridge, and Edinburgh—had been former students of St. Bartholomew's.

The toast was enthusiastically received; and Sir Trevor Lawrence, in responding, said that St. Bartholomew's was the only general hospital within the precincts of the City, and owed a great deal of its prosperity to the good offices of successive generations of the citizens of London. To illustrate the work of the Hospital, he mentioned that during the past ten years the number of in-patients treated had been 64,777, out-patients 172,500, and of casualty patients nearly 1,390,000. The medical staff, he said, numbered 66, and the teachers and attendants in the medical school, in addition to the staff, 46; the female staff 348; and altogether, the total number of persons employed in the Hospital and School is 625.

Mr. Thomas Smith, in his usual delightful manner, proposed "The Visitors," which toast was responded to by the Rev. E. F. Russell.

Dr. Church, who was particularly happy in his remarks, then proposed "the Chairman." Dr. Champneys replied, and proposed "the Secretary." After a few words from Mr. Bruce Clarke in reply, the company adjourned to the Library, where coffee was served.

The Rahere Lodge, No. 2546.

THE Rahere Lodge held the first meeting of the second year of its existence at Frascati's Restaurant on Tuesday, October 13th, 1896; Mr. Alfred Cooper, F.R.C.S. Eng., the W.M., being in the chair. Messrs. W. E. Bennett, F.R.C.S. Eng., J. F. Nall, M.R.C.S., L.R.C.P., of Yoretown, South Australia, and W. Netterville Barron were admitted Masons.

Bros. W. H. Cross, Edgar Willett, Balfour Neill, G. F. Collins, J. Valérie, T. Hampton, H. W. Lance, and H. W. Newton were passed to the Second Degree by Bro. R. J. Reece, assisted by Bro. J. H. Gilbertson.

Eighty members were present, of whom fifty remained for the banquet.

The Cambridge Graduates' Club of St. Bartholomew's Hospital.

THE attention of Cambridge men who have joined the Hospital this year is drawn to the fact that for the last twenty years there has been in existence a Dining Club for purposes of social intercourse between all those graduates of the University who have entered St. Bartholomew's Hospital as students of medicine.

A dinner is held at some time during the Winter Session, of which due notice will be sent.

Every graduate in arts or medicine of the University is, *ipso facto*, a member of the club, and there is no pecuniary liability beyond the price of the dinner, which is fixed at five shillings.

Since it is obviously to the mutual advantage both of seniors and juniors that they should have an opportunity of becoming personally acquainted, it is earnestly hoped that every one will make a point of attending the dinner, notice of which will shortly be sent to each member by the Secretaries.

Junior Staff Appointments.

The following appointments have been made, dating from the 1st of October last:

HOUSE PHYSICIAN TO—		SENIOR.	JUNIOR.
Dr. Church	.....	A. Woodward, M.R.C.S., L.R.C.P.	G. Wedd, B.A., M.B., B.C.(Cantab.).
Dr. Gee	.....	S. Gillies, M.B. (Lond.), M.R.C.S., L.R.C.P.	G. A. Auden, B.A.(Cantab.), M.R.C.S., L.R.C.P.
Sir D. Duckworth	.....	R. H. Crowley, M.D. (Lond.), M.R.C.S., L.R.C.P.	L. B. Barnett, B.A., M.B., B.C.(Cantab.).
Dr. Hensley	.....	W. E. N. Dunn, M.R.C.S., L.R.C.P.	T. Hampton, M.R.C.S., L.R.C.P.
Dr. Brunton	.....	C. E. Hedges, B.A., M.B., B.C.(Cantab.).	W. F. Cross, M.R.C.S., L.R.C.P.

HOUSE SURGEON TO—		SENIOR.	JUNIOR.
Mr. Smith	.....	G. V. Worthington, M.A., M.B., B.C. (Cantab.).	E. J. G. Calverley, M.R.C.S., I.R.C.P.
Mr. Willett	.....	E. W. Ormerod, B.A., M.B., B.C.(Cantab.).	J. W. Haines, M.B., B.S.(Lond.), F.R.C.S., I.R.C.P.
Mr. Langton	.....	T. P. Legg, M.B. (Lond.), M.R.C.S., L.R.C.P.	M. G. Pearson, M.B., B.Sc.(Lond.), M.R.C.S., L.R.C.P.
Mr. Marsh	.....	F. W. Robertson, M.R.C.S., I.R.C.P.	H. B. Meakin, M.D. (Lond.), M.R.C.S., L.R.C.P.
Mr. Butlin	.....	T. H. Butler, M.B., B.Ch.(Oxon.).	J. P. Maxwell, M.R.C.S., L.R.C.P.

INTERN MIDWIFERY ASSISTANT.—W. G. Clark, B.A.(Cantab.), M.R.C.S., L.R.C.P.
 EXTERN MIDWIFERY ASSISTANT.—L. C. P. Phillips, B.A., M.B., B.C.(Cantab.).
 OPHTHALMIC HOUSE SURGEON.—A. B. Ward, B.A., M.B., B.C.(Cantab.), M.R.C.S., L.R.C.P.

Appointments.

LANCE, H. W., B.A., M.B., B.C.(Cantab.), appointed House Surgeon to the East London Hospital for Children, Shadwell, E.

HAYCOCK, H. E., F.R.C.P. Edin., M.R.C.S., has been re-appointed Medical Officer for the Codnor Park Sanitary District of the Bedford Union.

DAVISON, R. T., M.D. Aberd., M.R.C.S., has been re-appointed Medical Officer by the Battle Urban District Council.

BALBEN, FRANK, M.A., M.B., B.C. Cantab., F.R.C.S., appointed Ship's Surgeon to the P. & O. S.S. "Sunda."

JAMESON, R. W., M.R.C.S., L.R.C.P., appointed Assistant House Surgeon to Addenbrooke's Hospital, Cambridge.

BACK, H. H., M.B. Lond., M.R.C.S. Eng., appointed Medical Officer of Health to the Aylsham District Council.

DALAL, RATONJEE DINSHAW, L.R.C.P. Lond., M.R.C.S. Eng., L.M. & S. Bombay, appointed Resident Medical Officer of the Finsbury Dispensary.

CARTWRIGHT, J. P., M.R.C.S., L.S.A., appointed Medical Officer of Health to the Wigmore Rural District.

ROGERS-TILSTONE, JOHN M., M.R.C.S., L.R.C.P. Lond., appointed Medical Officer for the Second East Malling District of the Malling Union.

WELLINGTON, R. HENSLOWE, L.R.C.P., M.R.C.S., re-appointed Medical Officer of Health to the Sutton Bridge Urban Sanitary Authority; also re-appointed Medical Officer of Health, Wisbech Port Sanitary and Port Hospital.

PARKER, H. D., M.D. Lond., appointed Assistant Medical Officer to the Eastern Fever Hospital, Homerton.

Iward of Entrance Scholarships.

THE Examination for the Entrance Scholarships, held on September 23rd and following days, has resulted in the following awards:

- 1. SENIOR SCIENCE SCHOLARSHIP IN BIOLOGY AND PHYSIOLOGY. (£75.) Awarded to C. J. Thomas.
2. SENIOR SCIENCE SCHOLARSHIP IN CHEMISTRY AND PHYSICS. (£75.) Awarded to A. J. H. F. Parker, B.A., Emmanuel College, Cambridge.
3. JUNIOR SCIENCE SCHOLARSHIP IN BIOLOGY, CHEMISTRY, AND PHYSICS. (£150.) Awarded to R. C. Elmslie.
4. PRELIMINARY SCIENTIFIC EXHIBITION IN BIOLOGY, CHEMISTRY, AND PHYSICS. (£50.) Awarded to R. A. S. Sunderland.
5. JEAFFERSON EXHIBITION. (£20.) Awarded to S. G. Mostyn.

We cordially welcome these "Freshmen," and congratulate them heartily on their success. They have won distinctions which it must be their endeavour to do full justice to, for the position of an Entrance Scholar to Bart.'s is one which has been held by many distinguished men in the past, and the present Scholars, we hope, will prove as worthy of the honour as their predecessors.

C. J. THOMAS has passed the Intermediate M.B. Lond., having studied so far at University College, Cardiff. H. F. PARKER is a graduate in the Natural Science Tripos at Cambridge, having given much attention to Chemistry and Physics. He has passed the Second M.B. Cambridge.

G. H. SCHOLEFIELD is a graduate in the Natural Science Schools at Oxford, taking particular interest in Chemistry. He has passed the First M.B. Oxon.

R. C. ELSLIE is already known to some of the present students, having worked in the Preliminary Scientific Class last year. He was first in First Class Honours in Chemistry at the Preliminary Scientific Examination last July.

R. A. S. SUNDERLAND also has worked for a year in the Preliminary Scientific Class.

S. G. MOSTYN is a graduate of Oxford, and has passed the Preliminary Scientific of the University of London, taking the first place in Honours in Physics.

We wish them every future success, and if they have not already done so, trust they will enrol themselves as members of the Amalgamated Clubs, and do all they can to support the best traditions of the Hospital and School.

Examinations.

SOCIETY OF APOTHECARIES—PRIMARY EXAMINATION. Part II., Anatomy and Physiology.—J. Valerie. Anatomy.—C. G. Meade, H. F. Stilwell. Physiology.—H. J. Pickering.

Retroversion of the Gravid Uterus without Impaction.

BY ONE OF DR. GRIFFITH'S CLERKS.

THE patient, æt. 35, came to Dr. Griffith, out-patient department, on June 4th, 1896, with the following symptoms and history.

She had been married fourteen years, had been pregnant six times, had four children and two miscarriages.

Menstruation ceased on April 6th, so that she was in the end of the second month of pregnancy.

Shortly after the birth of her last child in 1888 she had been treated for a slight prolapse of the uterus and vagina.

She now complained of—

- (1) Pain in the iliac and lumbar regions on the left side.
(2) Difficulty in passing urine, the amount passed at each attempt being small, and consequently micturition more frequent.
(3) Pain and difficulty in defæcation.

On examination per abdomen the bladder was found empty, and the uterus was not felt.

Per vaginam there was found a slight prolapse of the vaginal walls on straining.

The vulvar orifice was enlarged by rupture of the perinæum to the margin of the sphincter ani.

The cervix was found high up behind the pubes, the body of the retroverted uterus occupying the cavity of the pelvis.

The patient was placed in the genu-pectoral position, and the uterus easily replaced by the finger in the vagina. A Hodge's pessary was then inserted.

This case is an example of the common occurrence of pregnancy in a retroverted uterus. Many such cases undergo spontaneous rectification as pregnancy advances; others, like this, remain retroverted, and unless artificially replaced they become impacted with all the acute symptoms. Retroversion or retroflexion of the gravid uterus does not necessarily produce any important symptoms, but an impacted uterus, if enlarged by pregnancy or a fibroid, is at once a source of great danger to the patient.

Restoring the apparently Drowned.

RECALMSR many people think it useless to attempt artificial respiration where a person has been long immersed in water and is apparently dead, it has been suggested that I should give the JOURNAL an account of a case which occurred about eighteen months ago.

In the course of a morning walk I observed a small group of people by the margin of a piece of water. A man was bending over an object upon the ground; a woman was throwing up her arms and gesticulating wildly; and all seemed excited. Imagining what had happened I quickly ran over a field to the spot in question, and found a little girl had just been taken out of the water. Her clothes testified to recent immersion, and she was apparently dead. I lifted her up, and ran with her to a house 200 yards away, laid her upon a table, and commenced artificial respiration on Sylvester's method. The crowd assembled outside of the house attracted a policeman, who said she was quite dead.—Indeed everyone present believed she was. But I was not deterred in my efforts, and after twenty-five minutes natural breathing commenced. A few minutes after that she was crying, and Mr. Policeman expressed astonishment.

Subsequent careful investigation proved that she had been in the water for half-an-hour. Of course, I should have persevered for a long time—even hours—in the absence of encouragement, although I did not at the time know how long she had been immersed.

I am aware that there was nothing extraordinary about the case, but many people would have left the child to die; and some may be encouraged to make efforts towards the restoration of the apparently drowned, after reading this note.

W. MAWER.

Pathological Department of the Journal.

SPECIMENS sent by subscribers to the JOURNAL will be examined in the Pathological Laboratory and a report furnished under the supervision of Dr. Kanthack, at the following rate:

Table with 2 columns: Description of examination and Fee. Includes Ordinary examination, Bacteriological or Pathological, and Ordinary (qualitative) urine examination.

Any further report will be charged for at a special rate. If a mounted specimen is desired an extra charge of 1s. will be made. If a telegraphic report is required, the cost of the telegram will be charged in addition.

Specimens must be accompanied by the fee and a stamped addressed envelope, in which the report will be sent as soon as possible. Specimens, with, if possible, a short history of the case, must be addressed to "The Manager of the Journal," with "Pathological Department" written in some conspicuous place on the wrapper.

On application to E. H. Shaw, Museum Assistant, a set of bottles containing hardening fluids, and ready for sending away by post, can be obtained on remitting a postal order for 2s. 6d.

Correspondence.

To the Editor of St. Bartholomew's Hospital Journal.

SISTER MAGDALEN.

DEAR SIR,—I am sure that there are many old Bart.'s men who will learn with regret that Mrs. Boyce (the late Sister Magdalen) is in financial difficulties.

Mrs. Boyce entered the service of the Hospital as a nurse more than thirty-five years ago; after having been Sister of Sitwell Ward for some years she became Sister of Magdalen and Lazarus Wards, a post she held for over twenty years until her retirement a few years ago; it is unnecessary to recall her kindness and geniality to everyone.

At the present time her only son is an in-patient at the Brompton Hospital, and his wife and three children (two boys, aged 15 and 13, and a little girl of 12) are, in the main, dependent on what she can provide for them; unfortunately this only consists of her Hospital pension, which is quite inadequate for the purpose.

To assist her, therefore, a fund has been started, and it already amounts to over £30.

Feeling sure that there must be many who would be anxious to subscribe to it, I write to say that I shall be pleased to receive any contributions, which shall be duly acknowledged in the JOURNAL; in case friends should wish to send their donation direct to Mrs. Boyce, her address is, "Mrs. Boyce, Senior, 30, Shepherd's Bush Road, W."

In acknowledging a first instalment of £15, Mrs. Boyce writes, "Will you please thank all who have been so kind to me."

The following is the list of contributors to the fund, many of whom have generously promised further sums if necessary.

Table with 2 columns: Name and Amount. Lists names like Thomas Smith, John Langton, A. A. Bowly, Dr. Herringham, Owen Lankester, James Berry, Edgar Willett, Dr. Church, Dr. D. J. Slater, Alfred Willett, H. T. Butlin, W. Bruce Clarke, Richard Gill, Dr. Godson, Dr. W. S. A. Griffith, Dr. Lewis Jones, Dr. R. D. Batten, Dr. R. D. Brinton, T. G. A. Burns, Dr. H. P. Cholmeley, Dr. Lovell Drage, C. O'B. Harding, Dr. W. J. Gow, R. F. Jowers, W. T. Holmes Spicer, F. C. Wallis, H. J. Waring, Dr. C. P. White, E. G. Colville.

To the Editor of St. Bartholomew's Hospital Journal.

BOROLYGERIDE FOMENTATIONS.

DEAR SIR,—There is a very generally felt and expressed desire in the surgery that we should have a printed slip describing the method of applying borolygeride fomentations, similar to that given us for scabies. Such a slip would both save the time of the dressers and lend efficacy to the fomentation process. Few patients really grasp the details when given by word of mouth, however explicit the directions. Yours truly, A DRESSER.

October 19th, 1896.

To the Editor of St. Bartholomew's Hospital Journal.

THE SECOND XV.

DEAR SIR,—In previous numbers of the JOURNAL there have appeared letters to the Editor on the subject of the First XV "Rugger" team; two of these letters which I have in my mind whilst writing (the numbers containing them I have unfortunately mislaid) deal with the subject in rather a contradictory manner. For instance, "Rugger" is inclined to sneer at the efforts made by our First XV to obtain the Cup, whilst P. O. Andrew refuted his arguments in a distinctly vituperous way. Yet I am in perfect sympathy with P. O. Andrew as regards the First XV, and will honestly say that I felt proud of them when I saw them working like Britons for the Cup at Richmond. But enough of the First XV—they did their best, they were the pick of the Hospital, their defeat was lamentable, not disgraceful. But between "Rugger" and P. O. Andrew the Second XV get rather severely mauled. P. O. Andrew quite acknowledges that our Second XV is a "wretched apology," and puts it down to the fact that the men "won't play." It is here that I venture to differ. It is true that men who come to the Hospital from big public schools with a reputation for football to back them up, rather dispirit the leaders of "Rugger" football by their unwillingness to play. Let this be regretted, but it is rather a wrench—and few are high-minded enough to overlook it—that a man who at school played for his First XV, and may have been captain of it, should come to a hospital and be put in to play for the Second. Now there are one or two whose patriotism and love of football quite overcome their sense of wounded dignity, and these men play willingly enough; but there are others who, as P. O. Andrew says, will not play for the Second (although they jump at a chance of playing for the First). These men likewise allow their names to be put down on the notice board, and let them remain there without sign or signal that they consent or refuse to play until the last moment, when "swish!" goes a pencil mark through the name. Our long-suffering Secretary then campaigns round the rooms seeking fellows who will turn up and play in the vacant places. This task is made doubly difficult by the lateness of the notices; yet I have known these subs. on more than one occasion give up prior engagements, one or two even of a nature in which Venus is not lost sight of (my irrelevance will, I hope, be pardoned), to turn up and play for the Second XV. Now the point I am aiming at, and which I hope to make clear is this:

This scratch lot are frequently—I had almost said invariably—made up of the same fellows.

Now the disadvantages this scratch lot (who, if the truth be told, are really enthusiastic in the game) work under are almost self-evident. They get a game occasionally and when they least expect it. They cannot keep in condition like permanent players for the First XV. They would, in the event of their playing being certain, take a run at least once during the week, and probably more; but as their playing is uncertain, the inducement offered is hardly strong enough, and so they come on to the field hardly in a condition to do themselves justice. Again, the positions they are placed in on the field are varied on each occasion: a man will play forward in one match, the next one he is asked to play three-quarter, on the following occasion on which he gets a game he is told to play half.

Now, I beg to suggest that these men be treated with more fairness,—in other words, that they be played offener. Let them learn football under the auspices of the hospital if they can't do great things already, and with their willingness to do so there can be no doubt they will do it gradually, for their hearts are in it, and what is more they have a truer notion of patriotism, thinking first of their Hospital and next of themselves. Their form would improve, they would get to know their positions on the field better, and the teams they played against would soon learn respect for the Bart.'s Second.

We should not lose sight of the fact that one volunteer is worth three pressed men.

Therefore, I say again, if a man shows willingness to play as a sub to fill up a vacancy of one of those exemplary men who "won't play," let him be played again even to the exclusion of the man who "won't play," for herein lies his better qualification. It has not a brilliant public school record behind him of dropped goals, whole-length runs, &c., he will at least hamper the opposite side (I maintain he cannot hamper his own), and that is better than remaining off the field altogether, sulking, and saying, "Won't play."

Hoping that this suggestion will find favour with the heads of "Rugger" football, and with apologies to "Rugger" and Mr. P. O. Andrew for any liberties I may have taken, I remain, yours obediently,

BART'S MAN,
Who wishes every success in the future to the "wretched apology."

To the Editor of St. Bartholomew's Hospital Journal.

THE ABERNETHIAN SOCIETY.

DEAR SIR,—What has happened to the Abernethian Society lately? Surely there ought to have been a sale of papers somewhere about this time.

I am an ardent reader of *Punch*, as I think everybody ought to be, but why—oh why!—was there no copy of *Punch* in either the smoking room or the Abernethian during the last week of September? To-day (1st of October) I went to renew my search for the lost (?) copy, and instead found no less than three copies of the current week piled artistically in the centre of the table.

What are the cases kept for? Could it not be gently suggested to the man in charge of the papers—with due regard to his feelings—that he is paid to put the papers in their cases, and not to lump them in a heap together.

Please excuse this screed, it is the grumble of

A GRUMBLER.

October 1st, 1896.

To the Editor of St. Bartholomew's Hospital Journal.

VOLUNTEER MEDICAL STAFF CORPS.

DEAR SIR,—In the autumn of 1893, when the JOURNAL was just starting into existence, you were kind enough to insert a letter in which we tried to point out to our fellow-students some of the advantages of joining our Volunteer Corps.

Soon after this there was a large influx of recruits to our Bart.'s company. The men who joined the V.M.S.C. then, we are sure, have had no cause to repent of their decision, and those who have attended the various camps during the year must have thoroughly enjoyed their outing.

We are vain enough to think that our letter may have had something to do with this very satisfactory result. It is because of this that we venture to ask you again for some space in your excellent journal.

It is to freshmen that we wish especially to appeal, because, if a man joins at once when he comes up to the hospital, he can do his drills, go to camps, and be an all-round excellent volunteer without in the least interfering with his work. While a man is studying up here he needs some sort of physical exercise, and if he is not good enough to get into the "footer" teams, a very good way of taking exercise is volunteering.

The opportunity that the Corps affords of meeting men from other hospitals is unequalled, many firm friendships which would otherwise have never been made are thus formed. The camps are simply delightful. Anyone who has once lived in the open air and had the feeling of perfect health which such a life brings, will always long to go into camp. Another feature has lately been added to the Corps—a transport section. The men who join this are taught riding and driving with long and short reins on the military plan at military schools without any expense to themselves. At present this section, which consists of thirty-six men, is nearly all Bart.'s men.

Any freshmen, or others who might like to join the Volunteer Medical Staff Corps, are requested to apply to any members of the company, or to either of us, who will be very pleased to give them all information in our power.

H. G. McKINNEY.
A. GRANVILLER.

October 1st, 1896.

Obituary.

THE death of Mr. ERNEST PAUL TURNER, M.R.C.S., L.R.C.P., which took place on June 13th, at Hankow, China, came as a sad surprise to all who knew him. Only a short time ago as the end of last year he left England for China as an agent of the London Missionary Society, and had been but five months at his station, where he had been exceedingly busy owing to the somewhat short-handed condition of the mission, when he caught typhus fever from a patient, and, in spite of the most careful medical attention, died after an illness of ten days duration. Beginning his career in business in the City, he left the office and entered the Hospital in order to qualify in medicine with a view to mission work abroad. As soon as he had finished his exams. he became house surgeon to the Mildmay Mission Hospital, Bethnal Green, where, by his methodical painstaking hard work and unvarying kindness and consideration for his patients, he was held in the highest esteem by all. He remained there to within a month or two of leaving England. In manner very quiet, and perhaps somewhat reserved, he was not known to as many as he otherwise would have been; but those who did know him valued him at his true worth as one of the most sincere, earnest, and single-minded of men.

Births.

DUDFIELD.—October 10th, at 19, Bloomfield Road, Maida Vale, W., the wife of Reginald Dudfield, M.A., M.B., of a daughter.
EICHHOLZ.—September 18th, at Oakhurst, St. Barnabas Road, Cambridge, the wife of Alfred Eichholz, M.A., M.B., B.C., of a son.

Marriages.

BEADLES—LITTLE.—On September 15th, 1896, at Christ Church, Forest Hill, by the Rev. Gustavus Jones, M.A., Arthur Harry Beadles, M.R.C.S.Eng., L.R.C.P.Lond., of Park House, Forest Hill, to Sylvia Lucille, younger daughter of the late Thomas Little, of Woodville, Inglemere Road, Forest Hill, and of Mrs. Little, Byne Road, Sydenham.
HEPBURN—WORTHINGTON.—On September 20th, at St. Edmund's Church, Fritton, Great Yarmouth, Malcolm Langton Hepburn, M.D., B.S., F.R.C.S., of South Lowestoft, to Ruby Elizabeth, daughter of James Copland Worthington, Esq., J.P., of Lowestoft, Suffolk.
PATERSON—GILLIES.—On September 30th, at 6, Bayview Terrace, Londonderry, by the Rev. W. J. Christie, M.A., Rector of Newton Stewart, William Bromfield Paterson, F.R.C.S., L.D.S., of 64, Brook Street, Grosvenor Square, to Agnes Strirling, second daughter of the late David Gillies, J.P., of Londonderry and Buncrana, Co. Donegal.
WEST—JORDAN.—On June 27th, at St. Joseph's Church, Geneva, W. G. West, M.R.C.S., L.R.C.P., to Thérèse Jordan.

Deaths.

BAKER.—On October 3rd, at the Manor House, Nutbourne, Pulborough, William Morratt Baker, F.R.C.S., of 39, Woburn Square, W.C., aged 58.
HUMPHRY.—On September 24th, 1896, at Grove Lodge, Cambridge, Sir George Murray Humphry, M.D., F.R.S., Professor of Surgery in the University of Cambridge, aged 76.
MARSH.—On September 24th, very suddenly, Jane, the wife of Howard Marsh, of 39, Bruton Street, W.
TURNER, ERNEST PAUL, on June 13th, at Hankow, China, of typhus fever.

ACKNOWLEDGMENTS.—*Guy's Hospital Gazette*, *St. Mary's Hospital Gazette*, *The Nursing Record*, *The Hospital*, *The Charity Record*.

St. Bartholomew's Hospital



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NOTICE.

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St. Bartholomew's Hospital Journal,

NOVEMBER 14th, 1896.

"Æquum memento rebus in arduis
Servare mentem."—Horace, Book ii, Ode iii.

Acute Anterior Poliomyelitis in an Adult.

A Clinical Lecture delivered on October 16th, 1896,

By SAMUEL GEE, M.D., F.R.C.P.

JOHN C., æt. 55 years, was admitted into Luke Ward, on September 21st, 1896, suffering from loss of power in the arms.

On July 25th, after a pint or two of beer he felt dizzy, went home and lay down. An hour afterwards bad headache came on. Next morning he vomited. The next three days he was delirious, especially at night; and he has no recollection of what took place during this time. For this reason our knowledge of the symptoms which attended the onset of his illness is very incomplete, and we can do no

more than assume that they were the symptoms which usually occur in these cases.

In this form of spinal paralysis the onset is always sudden. The symptoms of the onset are of three classes. First, fever; we do not know that this man was feverish, but we may safely assume that he was so. Second, symptoms of an affection of the brain; in this patient, bad headache, delirium, and perhaps we may include his vomiting among the cerebral symptoms. Acute anterior poliomyelitis is very much more common in children than in adults; and in children the brain disorder often manifests itself by convulsions and by coma. Third, paralysis is an early symptom: it is sometimes marked at the very beginning of the illness; it usually attains its full extent in a few hours, or, in other words, in a few hours as many muscles are paralysed as ever will be paralysed; and, with regard to the extent of paralysis, in most cases you may say, after it has lasted a few hours, that any change will be a change for the better. As to the intensity of the paralysis, it attains its full height, sometimes equally quickly, sometimes less quickly: however, in a day or two, the degree of the paralysis will be as great as it ever will be; any change will be a change for the better. This is the rule; but as I have already said, we cannot ascertain whether the rule was followed in this man's case. It probably was not followed; probably the interval between the onset of the cerebral symptoms and of the paralysis was longer than usual, for he himself says that he did not find out that his arms were useless until a fortnight after the beginning of his illness. If this be true, for the occurrence of paralysis to be delayed so long was unusual.

There can be no doubt that the fever and cerebral disorder indicate a specific infection of the blood. In this form of paralysis there is no evidence that the brain itself is diseased. The brain symptoms,—headache, delirium, coma,—are not idiopathic, not due to disease of the brain, but sympathetic; the brain is poisoned by the poisoned blood.

We may, then, safely assume that there is a specific infection of the blood; but in most cases we know nothing about

the nature of the infection. And considering this change in the blood with respect to the spinal paralysis, what shall we say? Is the blood poisoned by the disease of the spinal cord, or is the spinal cord affected secondarily in consequence of the poisoned blood? There cannot be much doubt that the blood is not infected by the cord, and for two reasons. (i) The changes in the cord are not of a kind likely to cause fever. A very small abscess will infect the blood so as to cause high fever and other very serious symptoms; but so far as we know of the changes in the cord which occur early in this spinal paralysis, there is little more than excessive vascularity and disintegration of the nerve cells and fibres. (ii) There are certain infections of the blood, which are well known (such as measles and smallpox), which are known also to cause secondary disease of the spinal cord; and disease which in all respects resembles the spinal lesions of acute anterior poliomyelitis. I myself have seen a case of acute anterior poliomyelitis dependent upon smallpox. A young man, nineteen years old, was taken ill with pain in the back and headache, on November 23rd. On November 27th the rash of smallpox appeared. On November 29th, when he awoke, both arms were completely paralysed. Some of the paralysed muscles slowly recovered, but some were left in a state of atrophy, viz. the deltoid and triceps on both sides, the right pectoralis major and left biceps. Observe that in this case the palsy did not occur till the seventh day of the disease. So that, to repeat, no such local spinal lesions are known to infect the blood, and infections of the blood are known to cause local lesions of the spinal cord. Excluding such obvious infections as smallpox and measles, in the cases of acute anterior poliomyelitis which are left, and which constitute by far the majority, the only thing about the specific infection which we know is this, that the disease is sometimes epidemic: many persons suffer about the same time in the same place. It has seemed to me to be more common in hot weather. To the best of my belief no student of bacteriology has yet endeavoured to discover the specific cause; and in order to discover it, examinations of the blood must be made, so it would seem, during the first day or two of the disease. For the symptoms of blood infection are very transitory, and seldom last longer than a few hours, or a few days, or a week at the outside. And in concluding this topic, I must confess that in some cases it is not possible to obtain a report of any symptoms indicative of blood-poisoning; the patient becomes suddenly paralysed, and that is all.

The fever and brain symptoms soon pass away in all cases, and the patient is left more or less paralysed. Here also the report which the patient gives us concerning the course of his illness is very meagre. A doctor saw him on the fourth day, and told him to keep in bed and live on slops. The patient himself tells us that he was not paralysed until more than a week afterwards, he found that he could not move his arms. But in the early stage of the disease,

paralysis is easily overlooked; the fever, headache, delirium, coma, attract all the attention, and it is not observed that the patient does not move one or more limbs. So I can do no more than tell you what commonly occurs in acute anterior poliomyelitis.

The palsy at the onset is either universal or local. (i) By universal I mean that all the voluntary muscles are affected, excepting the respiratory muscles and those animated by the cranial nerves. (ii) By local palsy I mean palsy confined to one or two limbs, or to certain muscles in a limb, or even to certain portions of a muscle. Whether our patient's palsy was universal or local, at first, we do not know; it probably was local. And so we will pass on to the next fact.

On August 3rd (or on the tenth day of illness), he went into the Staines infirmary; he stayed there five weeks, and when he left, his condition was much the same as at present,—and I will now set his present state before you.

There is nothing wrong with him excepting paralysis of his arms, and the pain which he complains of in his shoulders.

As to the paralysis, some of the muscles are very much paralysed, others are less so. (i) The most paralysed muscles are the deltoid of the right arm, and the biceps, brachialis anticus, and triceps of both arms. He cannot raise the right arm to a right angle with the body. He can bend both elbows pretty strongly, but if you watch the arm when he does this, you will see that the flexion is almost entirely performed by the supinator longus. These much paralysed muscles are much wasted also, as is always the case in anterior poliomyelitis. Probably many of you know that the palsy, which is due to a lesion anywhere in the lower segment of the motor tract, always is a wasting palsy; a palsy attended by muscular atrophy, and more than this, by a degenerative muscular atrophy. The lower segments of the motor tract reach from the large multipolar cells in the anterior horns of the grey matter of the cord, along the nerves till they end in the muscles. In the form of spinal paralysis from which I believe our patient to be suffering, it is the anterior horns which are affected, and hence the name anterior poliomyelitis, as it were, anterior grey myelitis. I say it is a degenerative atrophy. How do we know this? All muscles which are paralysed waste more or less, but in many cases the atrophy is not degenerative, but is apparently due altogether to disuse, and admits of the muscle being completely restored to its normal condition. But in a degenerative atrophy the muscle is destroyed, and can be restored either with great difficulty or not at all. The best means of distinguishing these two forms of muscular atrophy during life is found by making an electrical examination of the muscles. In our patient, the right deltoid will not contract under a strong faradic or induced current: under the same current the left biceps will not contract; the right biceps and both triceps muscles contract feebly. Yet all

these muscles will contract to a feeble galvanic current than is necessary to make a healthy muscle contract. These are the most important reactions of degeneration, as they are called; they are signs of degenerative muscular atrophy,—that is to say, the affected muscles have lost their excitability to faradism, either altogether, or to a great degree, whilst to faradism they are too excitable. The reactions of degeneration occur very early in this disease. I have known faradic contractility to be quite extinct on the fourth day. (ii) A few other muscles seem weak, especially the left deltoid; but they are not much wasted, and do not give reactions of degeneration.

He complains of pain in the shoulders when you move them, and you feel a sort of crackling at the same time. The patient had nothing the matter with his shoulders before the paralysis occurred. The same thing happens in many cases of ordinary hemiplegia. I believe that there is arthritis, that nutritive degeneration occurs in the joints just as it does in the muscles; something very much like rheumatoid arthritis sometimes sets in; and when the smaller joints—wrist and fingers—are affected they may be red and swollen.

These are all the patient's symptoms; and now I will say a few words about diagnosis, prognosis, and treatment.

Diagnosis.—Wasting palsy I have declared to be due to disease affecting some part of the lower segment of the motor tract; and in this patient I believe the part affected to be the spinal marrow. But suppose somebody were to ask, what are your reasons for setting the nerves aside?—why is it not a neuritis? The only reply to this question I can make is this—that I know no kind of neuritis which affects the nerves supplying the deltoid, biceps, and triceps of both arms and those nerves only. So that I believe our patient is suffering not from a neuritis, but from a partial myelitis of the cord about on a level with the fifth cervical nerves.

The patient complains much more of the pain in his shoulders than of the palsy. I have just given you my reasons for believing that the affection of the joints is secondary to the paralysis. But let us ask this question: Is it possible that the primary disease is acute rheumatoid arthritis, and that the palsy is secondary? I say no; because in this case, the case of wasting palsy secondary to disease of joints, the muscles paralysed are the extensors of the joints. But you will reply that in this patient the extensors of the shoulders are paralysed, namely the deltoids. True; but what about the biceps muscles? His bicipites are very much more wasted than the deltoids, and it would be an unheard-of thing for disease of the shoulder to paralyse the biceps. So that, to repeat, I believe the arthritis to be secondary.

Prognosis.—Acute poliomyelitis is not a progressive disease,—that is to say, it does not go on from bad to worse. On the contrary, the paralysis is manifested to its full extent

and its full intensity from the first. It is a retrogressive disease, and tends to go from bad to better. The degree of the paralysis at the outset is no guide, because muscles which are at first completely paralysed, very often, and in the course of no great length of time, completely recover. The electrical reactions are no guide because muscles which are completely inert to faradisation may completely recover. Nay, more, muscles sometimes recover their power of contracting voluntarily while they are still dead to faradisation. I think that excessive galvanic irritability is a more valuable sign, or in other words, is a bad sign, and means that the muscle will waste. It is this wasting or muscular atrophy which affords the most trustworthy prognosis. Muscles which are very much wasted cannot recover. For this reason I fear that our patient will never recover the use of his biceps muscles, at least not of the left biceps; his deltoids are in a more hopeful state. Lastly, you may take it as a safe rule, that muscles which have not recovered after six months never will.

Treatment.—For the first few weeks of the disease the best drug to administer is belladonna. There are two reasons for advising it. First, we are told that it has the power of causing contraction of the small arteries in the spinal pia mater, and local hyperæmia probably constitutes an important part of the lesion in acute poliomyelitis. Next, some of the best recoveries I have seen have occurred to patients who were treated by belladonna early in the disease. But you know how very open to error loose experience of this kind is, and yet it is not easy to attain anything better. I myself give belladonna in full doses until the pupil is dilated, or a belladonna rash appears, or the patient's head is affected, and then I lessen the dose. I put a broad strip of belladonna plaster over that part of the spine which answers to the situation of the disease in the cord.

We are doing what we can for the final result of his disease, namely, for the muscular atrophy, but I fear it is not much that we can do. It is not to be expected that we can restore muscular fibres which are utterly degenerate and destroyed, but we may hope to improve the nutrition of any that are left. With this object we are employing assiduous massage of the wasted muscles. This is a remedy which cannot do harm, and which you may begin as early in the disease as you please. We are also galvanising the muscles. Now this is a remedy more unpleasant than massage, and not so easily carried out, because it requires that a medical man should do the galvanism. A knowledge of anatomy is required. There is an opinion current that galvanism should not be used during the first few weeks, lest it should aggravate the spinal lesion. Whether there is any truth in this opinion or not I cannot say. But about one point there is no doubt, that in parts where the muscles are nicely antagonised, say in the forearm, the hand, the leg below the knee, galvanism must be used with great circumspection, lest by improving the nutrition of the

unaffected muscles, whilst doing no good to the wasted muscles, you aggravate the deformity which is apt to ensue in the parts I have mentioned. So far as I know, massage has not this bad result. Moreover, it is much more easy to carry out massage than galvanism for a great length of time.

In conclusion, let me say that in my opinion acute anterior poliomyelitis is not a disease in itself, is not a disease by itself, or in one word is not idiopathic, but that it is an incident or accident in the course of some acute specific infection of the whole body, the universal affection being primary, and the local disease secondary.

Pathological Jottings.

By A. A. KANTHACK, M.D., Lecturer on Pathology.

II.—CHRONIC INFLAMMATION.

"CHRONIC inflammation" is a term in constant use,—physicians, surgeons, and pathologists alike use it, often to denote a known and recognisable condition, equally often to have a useful peg on which to hang a less defined lesion. In my previous note (this Journal, September, 1896, p. 182) I wrote that "such a thing as a chronic inflammation does not and cannot exist." This may appear to most to be either rank heresy, or the language of exaggerated generalisation, and I therefore owe some form of an explanation, and this I propose to give in the following lines. Although, partly on account of their sketchy character, they may fail in breaking up the old belief, which in unflattering expressiveness I called archaic, I hope that they will define the standpoint from which I have viewed this matter since 1888, when in Virchow's laboratory I worked at "chronic laryngitis."

What is a chronic inflammatory process? Examples of so-called chronic inflammations are chronic nephritis, chronic peritonitis, chronic laryngitis, chronic conjunctivitis, chronic endometritis, and, *sit venia verbo*, chronic endocervicitis. Some writers, e.g. Ziegler, even include chronic abscesses and chronic ulcers in this category. These latter processes are, in this country at least, not regarded as chronic inflammations, and for the present I shall leave them out of consideration, especially as they form splendid subjects for subsequent "jottings."

If we look at the various forms of so-called chronic inflammatory processes, we find that histologically they may be classified under several headings. (1) In some we find a hyperplasia or proliferation of the connective tissue; or, if a mucous membrane be affected, a hyperplasia both of the epithelium and underlying tissues, in which sometimes the glands also share; (2) in others we find so-called

catarrhal conditions when the lesion occurs in a secreting tissue; (3) in others again we have interstitial fibrous changes; and (4) in others a complete replacement of the primary elements by fibrous tissue.

Let us for a moment contrast a few apparently different lesions; and to make the matter simpler let us begin with chronic laryngitis (so far as it affects the vocal cords), and chronic catarrh of the mucosa of the cervix uteri. In a chronic inflammation of the vocal cords we notice chiefly (a) proliferation and hyperplasia of the subepithelial connective tissue, i.e. fibrous hyperplasia (or in more modern language, which is not satisfied without an "-osis" or an "-oma," fibrosis); (b) proliferation and hyperplasia of the epithelium itself, which frequently becomes horny; and (c) proliferation of the capillaries and vascular elements. The proliferation may be so complete and uniform as to lead to a papillomatous growth, or a pachydermia.

In a chronic cervical catarrh similarly we have (a) proliferation and hyperplasia of the subepithelial connective tissue; (b) proliferation and hyperplasia of the secreting epithelium itself, leading to dilated and elongated, or even cystic follicles, lined often by several layers of columnar epithelium; and (c) proliferation of the capillaries and smaller vessels. Here also the proliferation may be so complete and uniform as to lead to a beautifully papillomatous surface. The proliferated epithelium retains its secretory activity, and therefore we have the catarrhal flow. This is the only apparent difference between this affection and the laryngeal one; but here it is absent, because the squamous epithelium is not secretory in the ordinary sense of the term. The catarrhal flow, however, merely stands for increased functional activity, and that we have also in the case of the laryngeal lesion, where it shows itself in the shape of increased formation of horny substance (keratin). Hence we must allow that in point of principle there is no difference between these two processes which at first sight appear to be distinct; and therefore to the three factors mentioned, viz. hyperplasia of the connective tissue, hyperplasia of the epithelium, and slowly increasing vascularity, we must add a fourth, viz. increased functional activity. These changes are frequently, if not commonly, found in so-called chronic inflammations of mucous, muco-cutaneous, or cutaneous surfaces. But we cannot say that they are found in every instance of what is described as chronic inflammation. They are, therefore, not to be regarded as necessary criteria: excepting the fibrous changes, one or other may be absent. The "fibrosis" is an essential attribute of chronic inflammation. This will become clear, if we consider other examples.

In some cases, in place of a hyperplasia we notice, that on the contrary the mucosa is atrophic, as e.g. in atrophic rhinitis or gastritis. The attribute "atrophic" is, however, merely a macroscopic and not an essential distinction, for

on microscopical examination we find, during certain stages at least, firm fibrous tissue, contracting from the surface and, so to speak, smothering the glands, which for a long time remain functionally very active—*lest* the foetid secretion of ozæna, or the cystic dilatation of the glands in atrophic gastritis. In such cases, it appears as if instead of a hyperplasia we had an induration of the connective tissue, without proliferation of the surface epithelium and the capillaries. We must, however, keep in mind that induration could not have occurred without previous proliferation, the newly-formed fibrous tissue becoming condensed as soon as it is formed: it requires a proliferative stimulus for induration or—to borrow from modern language again—for sclerosis to ensue.

To us, as more or less casual observers, viewing matters through compound microscopes, it must seem to be somewhat of a chance whether newly-formed fibrous tissue should contract or go on increasing. A scar will generally condense into hard fibrous tissue, but occasionally it will become cheloid. It appears that the connective tissue, as Grawitz would have put it, having once awakened, there is necessarily no limit to the energy of its waking hours, that is to the fibrous hyperplasia; it may go on unchecked, in a condition of morbid insomnia, to continue the metaphor; but at other times it may stop at a certain point and it may either remain there, or condense into hard or indurated tissue. It must further be remembered that atrophy and polypoid hypertrophy (in the stomach, for instance) may occur together. Again, epithelial proliferation is frequently present in atrophic "inflammations," when, for instance, we find in ozæna the stinking mucosa lined by several layers of squamous epithelium, the product of a proliferative metaplasia, and papillomatous cysts in atrophic gastritis. So that even in these conditions we may have three of the four above-mentioned conditions present, although in modified form, viz.: (1) induration of the subepithelial connective tissue; (2) partial or complete proliferation of the epithelium; and (3) increased functional activity, the increased vascularity being impossible on account of the induration.

Chronic inflammations of the serous membranes, such as the pleura, peritoneum, tunica vaginalis, or pericardium, present themselves in the form of thickening which may vary considerably in degree. We may have either mere opacity or thickening, with or without contraction, i.e. we have fibrous hyperplasia with or without induration. Frequently there is also distinct hyperplasia of the epithelium (or endothelium), which by a process of metaplasia may even become converted into a kind of squamous epithelium, as in a specimen of thickened peritoneum examined by myself. Increased vascularity is often present, and with this hydrops is frequently associated, which followers of Heidenhain would be inclined to regard as an increased functional activity of the endothelium. Here, then, all the four factors

may be present, although one or more of them may be absent, but the fibrous changes are always there.

We now come to another form of chronic inflammation, viz. the chronic interstitial form. Examples of this we find in interstitial nephritis, cirrhosis of the liver, interstitial myositis and myocarditis. If we examine these lesions microscopically, we are struck with the marked fibrosis which has taken place,—fibrous tissue, more or less well formed, and often of exceeding firmness, surrounds the active or organic structures, whether they be kidney tubules, liver cells, or muscle fibres; the framework or secondary elements often may altogether outgrow the primary elements. The fibrous hyperplasia in these conditions, then, is well marked. Increased vascularity is often present, but may be absent in advanced stages: a hyperplasia of the epithelial tissues cannot of course take place where muscle is affected, as for instance in myocarditis or myositis; but in the interstitial forms of chronic inflammation it is generally absent also in organs which are largely epithelial in structure, as e.g. the kidney, liver, and pancreas. In an interstitial nephritis the renal epithelial substance becomes compressed and atrophied; the liver cells degenerate and disappear extensively in most forms of cirrhosis; and the pancreatic cells share the same fate.

I think that a consideration of the conditions which we find in myositis is instructive. (1) In muscle we may have, as a rule, as the effect of bacterial irritation, an acute interstitial inflammation, harmonising in its details with acute inflammation elsewhere. If this acute inflammation passes off without having caused serious lesion to the muscle fibres themselves, practically no permanent changes may be left behind. But if the acute injury did cause serious lesion, breaking up some of the muscle fibres or producing partial or total necrosis, then we shall find that repair is accompanied by formation of fibrous tissue: the foundation for a fibrous hyperplasia is thus laid. This newly-formed fibrous tissue, imbued with the progressive stimulus characteristic of all infant growth, will often extend beyond the original seat of lesion, between the sound muscle fibres, so that on transverse section at this stage one would find small and compressed muscle areas surrounded by rings of fibrous tissue, i.e. in current language "a chronic interstitial myositis." The effect of this compressing fibrous tissue is to cause further degeneration of the muscle fibres, and as these disappear more fibrous tissue appears—the "vicious circle" is established. (2) We have, however, another cause of chronic interstitial changes in muscle, viz. atrophy. If, for instance, a muscle atrophies after a central or peripheral nerve lesion, fibrous tissue often soon appears and takes the place of the muscle fibres, and we again have a chronic interstitial myositis. "Tissue degeneration, if not repaired, leads to fibrosis"—thus I expressed myself in my previous article; degenerated muscle fibres are replaced by invading and proliferating connective tissue. Professor Adami, who in

his views on chronic inflammation more or less agrees with me,—or perhaps I should say, with whom I more or less agree in his views,—has called this form of fibrosis “a replacement fibrosis”—a very useful term. It seems to me, therefore, that an important cause of progressive chronic interstitial myositis is the degeneration of the muscle fibres, which may be due (*a*) to an acute interstitial inflammation or (*b*) to myotrophic or neurotrophic lesions, and which (*c*) may be kept up by, or progress with, the appearance of the fibrous tissue.

Exactly similar conditions we find in so-called peripheral neuritis, as met with in diphtheria or lead-poisoning. As Dr. Sidney Martin and others have shown, the earliest stage in the process is a degeneration of the nerves, and this is followed by a proliferation of the connective tissue which may go on to fibrosis. “Tissue degeneration, if not repaired, leads to fibrosis.” I need not allude to the well-known changes in the spinal cord; everybody knows that the degenerated tracts and areas are replaced by fibrous tissue. The law is therefore strongly supported by our knowledge of neuropathology.

If we now turn to cirrhosis of the liver, we meet first of all with considerable difficulty, since there are many different forms of cirrhosis. We have the intercellular, lobular, and biliary types, widely different and diverse in their aetiology and histology; and it seems to me impossible to explain them all in the same manner. I am not going to discuss their causation and development here, however much I am tempted to do so, but wish to mention a point which has also struck Professor Adami and others, before we began to think on the matter. It seems to me that when the cirrhosis is so far advanced as to cause so marked a degeneration of the liver cells that recovery is impossible, then the degenerate cells may act as a further stimulus for progressive fibrosis. I am not yet quite prepared to believe that the primary cause of cirrhosis is *always* a degeneration of the hepatic cells, because we frequently find advanced fatty and amyloid degenerations without fibrosis; but I do believe that, when the process of cirrhosis has once begun, the degenerated cells are replaced by fibrous tissue, and that therefore the degeneration is to some extent responsible for a continuity in the cirrhotic process. Obviously the connective tissue must be in a position to respond by proliferation, before a fibrosis can result. If it be impaired, either because the whole individual is atrophying, or because it is itself hopelessly badly nourished, fibrosis cannot possibly take place. Therefore our law only applies, if the connective tissue be relatively sound or, at any rate, capable of proliferation.

Venous engorgement occasionally, though rarely, leads to induration in various organs, *e. g.* the liver, kidney, and spleen. This is probably due to the fact that on account of the engorgement, degeneration of the organic cells has ensued, which are then replaced by proliferated connective

tissue. But generally the tissues are too badly nourished to respond by proliferation. We cannot expect a complete fatty degeneration of the liver to lead to fibrosis, because generally the cause of such degeneration implies a general debility or a hopeless condition of the connective tissue, and the same applies to amyloid disease. When, however, such general debility or impairment is absent, then we find that even a complete fatty metamorphosis of the liver may be accompanied by fibrosis, *e. g.* in true fatty cirrhosis. At present I am not courageous enough to declare that ordinary cirrhosis of the liver is always due to proliferative changes in the interstitial, portal or lobular, connective tissue, appearing in response to cell degeneration, although I have a strong inclination towards such a view; I believe, however, that the degenerated cells promote the progress of the fibrosis.

Ordinary interstitial nephritis (red kidney) we may also explain as being produced by primary hyperplastic changes in the interstitial connective tissue; but it has to be proved yet that it is a primary hyperplasia, and not a hyperplasia called into existence by degenerative changes in the renal tissue. When the fibrosis becomes excessive, it no doubt causes organic destruction, which in its turn favours fibrosis. The chronic interstitial changes in a white kidney are certainly due to several factors: (*a*) the repeatedly recurring attacks of acute or subacute inflammation; (*b*) the organic destruction resulting therefrom, which awakens the connective tissue; and (*c*) the proliferative energy of the connective tissue, which I shall explain shortly.

If now, in order not to make this article too wearisome, we review shortly the various forms of chronic inflammation, we find that we have—(*a*) processes which begin primarily in the connective tissue; fibrosis appears and progresses, the process being in part maintained by the destruction of the organic elements (by Professor Adami termed *productive fibroses*); (*b*) processes which begin with an atrophy of the organic elements, the latter being replaced by hyperplastic connective tissue (by Professor Adami termed *replacement fibroses*); (*c*) processes which occurring on free surfaces involve all structures concerned, but where again the most striking phenomenon is the fibrous hyperplasia (by Professor Adami included under *productive fibroses*).

It is evident that “chronic inflammations” are different and diverse in their nature, origin and appearance.

An important law to which I am always fond of recurring is that “Tissue degeneration, if not repaired, leads to fibrosis,” provided of course that the connective tissue is capable of further growth—for if it be half dead itself it cannot possibly assume fresh vigour,—and provided also that the stimulus for proliferation is sufficient, or, adopting Grawitz’s metaphor, that the connective tissue has been sufficiently roused and awakened. It is curious how frequently biologists look at pathological phenomena in exactly

the opposite way to that which suggests itself to those who spend their days—and often their nights as well—in studying these phenomena. Thus W. Roux, in his work *Der Kampf der Theile*, makes an effort to persuade us that the degeneration of the nobler tissues (as Professor Adami calls them) is due to the invasion of the interstitial tissue, *i. e.* that we have a struggle (Kampf) between the highly differentiated tissues and the connective tissue; and if the latter win, degeneration and fibrosis result. Now it must be obvious to all pathologists that such a struggle does not exist, and many will agree that generally it is the degeneration of the nobler tissue which gives the connective tissue an opening. The tissues abhor atrophy and necrosis, and if homologous repair be impossible, the connective tissue fills up the gap.

Having briefly discussed some of the commoner types of chronic inflammation,—chronic endocarditis, atheroma and the various forms of endarteritis I shall leave for a future occasion,—I must now pass to the most important question, “Is chronic inflammation an inflammation?” I have already given my answer, which is as decidedly negative as it possibly can be, and to some no doubt must sound like rank heresy. I shall not attempt to define inflammation, because such an undertaking would occupy pages and pages, and because, with all due deference to those who have attempted to define it, I feel that no existing definition is absolutely satisfactory. We know inflammation by its appearances and phenomena, and we must remember that *inflammation is not synonymous with repair*.

If we look at microscopical specimens of tissues and organs in a condition of so-called chronic inflammation, we do not find the appearances of inflammation, but we find appearances characteristic rather of repair by fibrous tissue. True, at the outskirts of a chronically inflamed area we may often detect a few dilated vessels surrounded by clusters of round cells, but the bulk of the specimen shows nothing that one could call inflammation. If with Professor Adami we venture to define inflammation as a *series of changes which constitute the local attempt at repair of an injury to the part*, then chronic inflammation, exhibiting all the changes of repair, cannot possibly be inflammation, for *inflammation ceases where repair begins*, and chronic inflammation is a term which has been given to conditions which show already *completed* repair, or which show *excessive* repair. This excessive repair, to my mind, is an important element in some forms of “chronic inflammation.” By excessive repair I mean the hyperplasia and hyperplastic tendency of newly-formed fibrous tissue.

An acute inflammation, in the language of the surgeon or physician, is frequently followed by a chronic inflammation. What does this signify? Merely this, that the acute process has been repaired by fibrous tissue, developed from the proliferating connective tissue, but the latter once awakened to increased growth, in the full enjoyment of renewed vigour, continues to develop further and further on the

slightest provocation. An acute inflammation is often the precursor of a fibrosis, but surely that is no justification for calling the resulting fibrosis a chronic inflammation.

An acute nephritis may at once pass into gradual and progressive induration (contracting white kidney) on account of such excessive repair. But in most cases where a fibrosis has followed upon an acute inflammation we have had an injured and dying tissue left behind which acts as the proliferative stimulus upon a responsive and awakened connective tissue. And what is still more important, in most cases the acute inflammation recurs from time to time and rouses the connective tissue to continued repair, when it is already in a condition of initial fibrosis, ready to proliferate, so that every fresh acute attack only makes matters worse. A fibrosis may therefore result from a single acute inflammation or from repeated attacks of acute inflammation, but on this account it is not to be considered an inflammation.

Instead of repeated attacks of inflammation there may be repeated or continued irritation, which does not necessarily produce, or may stop short of producing, an inflammation. Thus the constant use of the voice may lead to a so-called chronic laryngitis, and from other causes the same effect may ensue. Exertion and irritation are followed by hypertrophy and hyperplasia, and in this manner we may obtain a true pachydermal condition of the vocal cords, without inflammation ever having existed. Such a state of things is at any rate conceivable, if it should be objected, that my premises are unproven by actual demonstration. In most cases, no doubt, repeated irritation does lead to repeated attacks of inflammation, so localised and so slight that they are not recognised, subjectively or objectively, but nevertheless sufficient to awaken the connective tissue to hyperplasia and fibrosis, and also to cause a hyperplasia of the epithelial elements and an increased functional activity. But even then the inflammatory attacks themselves do not constitute the chronic inflammation, they simply incite to hyperplasia and hypertrophy.

The treatment of so-called chronic laryngitis has always puzzled me. The trouble is the thickened condition of the cords, due to hyperplasia and keratinous changes of the epithelium, and proliferation of the subepithelial tissue. Yet the recognised treatment is strong irritation, produced by injecting or applying all sorts of astringent substances. No doubt this is good practice for those who wish to learn laryngological methods, but does it ever do much good? In my experience, which is not only that of an onlooker, hardly ever, not to say never. And how can it? It simply increases the fibrous and the pachydermal condition by exciting inflammation.

Similarly chronic catarrhs are generally the result of continued irritation, leading probably to slight inflammatory processes, sufficient to act as a proliferative tissue-stimulus, and to lead to a permanent change in the mucosa which cannot

be described as an inflammation, but is a hyperplasia and a hypertrophy. Cauterisation is often used to cure chronic catarrhs: of course it cures them if you only cauterise enough, to remove the whole mucous membrane, whether it be in the nose or cervix. Curetting, too, will be followed by the same success.

That a chronic peripheral neuritis is not an inflammatory lesion, I need not explain again, but I must say a few words regarding interstitial processes and especially cirrhosis of the liver and kidney. Here also we have nothing suggestive of an inflammation; we have, however, fibrosis. But it may be said, that this is the outcome of a previous inflammation. I simply answer, that I see no evidence of this, and that the processes appear in the interstitial tissue, which has been awakened either by irritant substances, actual or imaginary, or by degenerating cells, or by a combination of the two stimuli. Possibly here and there an acute hepatitis or nephritis may have existed to begin with, but then it merely acted as the initial stimulus. The essence of the cirrhosis is the progressive fibrosis, which appeared either independently of an inflammation, or in the wake of an inflammation as excessive or hyperplastic repair.

Of myositis or myocarditis I need say no more than, that by the time the process has become chronic, no trace of inflammation is visible, if it ever existed. But I may be called to book, and it may be objected, that necrobiosis and necrosis produce inflammation, and that therefore tissue degeneration leads to inflammation, and that the term chronic inflammation is justified. That is only true to a certain limited extent, where we are dealing with large necrotic areas, infarcts, hemorrhages, and such like conditions, but is assuredly not true when we are dealing with progressive degeneration. And even infarcts and necrotic areas may disappear in a scar, without an actual or real inflammation ever having existed. Moreover, I am not discussing here the repair of such lesions as necrosis and infarcts, but only these conditions which are generally recognised or described as "chronic inflammations." We can only say that tissue degeneration is a stimulus to repair: if the tissue can be repaired by a like tissue, so much the better; if not, the connective tissue must come to the rescue. The necrosed elements must first be removed. This may be done by a process of absorption or phagocytosis—if a term ending in "-osis" be preferred—with or without inflammation. This having been removed, then the fibrous tissue fills up the gaps. If there is only one gap to fill up, we have a cicatrix or repair—but that is not chronic inflammation; if, however, the necrosis or degeneration was both extensive and progressive, and is responded to by equally progressive reparative proliferation, then fibrosis ensues, or in ordinary language chronic inflammation.

I regard, therefore, chronic inflammation as a hyperplastic change of the connective tissue, occasionally accompanied by hyperplasia and hypertrophy of the

epithelial and glandular elements, produced either by repeated or continued irritation (extrinsic or intrinsic), or by single, and more often, by repeated attacks of inflammation; or called into existence by progressive tissue degeneration, when the epithelial and glandular elements, of course, do not share in the hyperplastic process. An inflammation it is not, because histologically it is a process which is solely concerned with tissue elements which we consider characteristic of repair; inflammation is not even a constant precursor. It would, therefore, be well to abolish the term chronic inflammation from morbid anatomy and histology, if not from clinical medicine and surgery; but at any rate we should make an effort to be clear in our minds what the pathology of a chronic "-itis" is, before we presume to diagnose or describe it or before we attempt to treat it.

In my next article I shall discuss the subject of "Fatty Degeneration and Infiltration."

The Nomenclature of some of the Wards.

By F. A. HOWARD CLARKE.

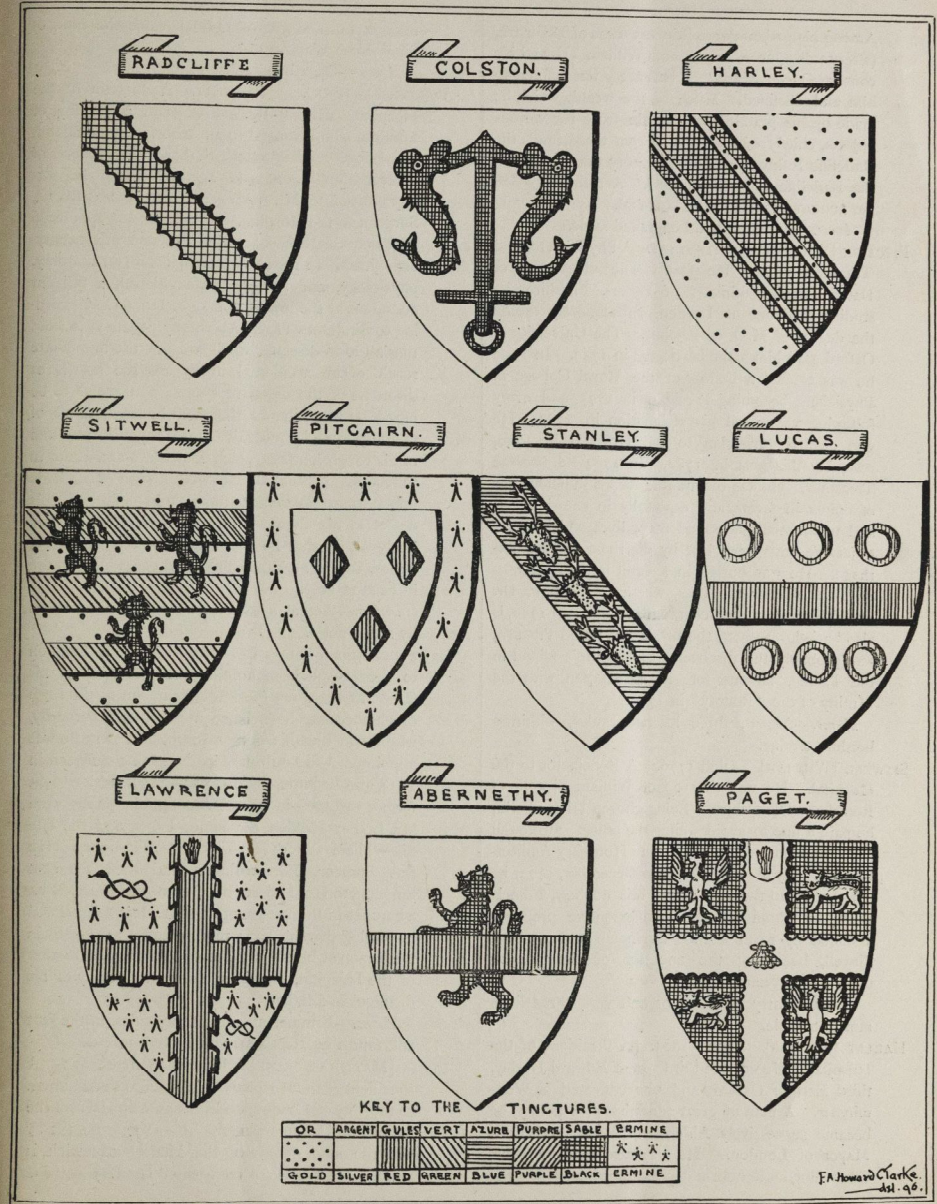
A WARD may receive the name of an individual for two reasons: first, for the purpose of differentiation; secondly, that it may be a perpetual memorial of the benevolence, professional attainments, or other claim to distinction of the individual.

A brief account is here given of some of those who have in this manner been associated with the Hospital. The armorial bearings are sketched in the hope that they may be of assistance to those artistic spirits who are interested in the Christmas decorations of the wards.

COLSTON [EDWARD]. 1636—1721. A Benefactor to the Hospital. A wealthy merchant of Bristol, he used his riches in the cause of mankind. Many almshouses and schools were founded and endowed by him, and many hospitals received large donations. He represented Bristol in Parliament from 1710 to 1713. He was buried in the church of All Saints at Bristol, and the reverence with which his memory is cherished in that town is shown by the fact that flowers are placed on his tomb every Sunday.

Arms.—Argent, between two dolphins haurient, respecting each other, an anchor, all sable.

RADCLIFFE [JOHN]. 1650—1714. A Governor of, and Benefactor to the Hospital. He was educated at the grammar schools of Wakefield and Northallerton, and subsequently entered University College, Oxford, graduating in Arts in 1669, and in Medicine in 1675. Settling first in Oxford, he moved in 1684 to London, where he soon acquired a large practice, more, it is said, by his ready wit than by his learning.



Among his patients were Princess Anne of Denmark, (afterwards Queen Anne), and William III and his consort Queen Mary. A baronetcy was offered to him and declined. Much of the wealth which he made by his practice was left in trust for various objects, chiefly educational. From these funds the Radcliffe Infirmary and Observatory were built, and the Radcliffe Library founded. A sum of £600 per annum was left to the Hospital.

Arms.—Argent, a bend engrailed sable.

PITCAIRN [WILLIAM]. 1711—1791. A Physician to, and Treasurer of the Hospital. The eldest son of David Pitcairn, minister of Dysart, Fifeshire, he studied medicine at Leyden, subsequently taking the degree of M.D. of Rheims. The University of Oxford gave him a similar degree in 1749. In 1750 he was elected a Fellow of the Royal College of Physicians, becoming President in 1775, and every following year until his resignation in 1785. He was elected Physician to the Hospital in 1750, resigning this post in 1780. In 1784 he became Treasurer. He was remarkable for his judicious use of opium in fevers, and especially in enteric fever, and undoubtedly he saved many lives which would otherwise have been lost by diarrhœa and hæmorrhage. He was buried in a vault in the church of St. Bartholomew the Less, where his nephew, Dr. David Pitcairn, a Physician to the Hospital in 1780, is also buried. Robert, the brother of David Pitcairn, was probably the discoverer of Pitcairn's Island in the Pacific, famous for its association with the Mutiny of the "Bounty" in 1789.

Arms.—Argent, three lozenges gules, within a bordure ermine.

SITWELL [WILLIAM]. Died 1776. A Benefactor to the Hospital. He was the son of William Sitwell, of Renishaw, Derbyshire. Being chosen High Sheriff, he paid a fine to avoid filling the office. Bridewell and Bethlem claim him as Honorary-Auditor-General. By his will, dated 1st December, 1773, he left £1000 to the Hospital. His nephew, Francis Hurt, to whom he left his extensive property, assumed by royal licence the name and arms of Sitwell, becoming the ancestor of the present family of that name.

Arms.—Barry of eight, or and vert, three lions rampant, sable.

HARLEY [THOMAS]. 1730—1804. A President of the Hospital. He was the third son of Edward Harley, third Earl of Oxford, and was educated at Westminster. A man of great administrative ability, he became successively Alderman, Sheriff, and Lord Mayor of London. He was also made a Privy Councillor, an honour which had not been conferred

upon a Lord Mayor of London since the time of Sir William Mayorth.

Arms.—Or, a bend cotised sable.

ABERNETHY [JOHN]. 1764—1831. A Surgeon to the Hospital. He was the son of John Abernethy, of London, who belonged to an Irish family of Scotch extraction. Educated at the grammar school of Wolverhampton, at the age of fifteen he was apprenticed to Mr. (afterwards Sir Charles) Blicke, Surgeon to the Hospital. In 1787 he was appointed Assistant Surgeon, becoming Surgeon after twenty-eight years. In 1791 he began to lecture on anatomy, physiology, and surgery, whilst himself a diligent attendant at the lectures of John Hunter. According to Sir James Paget, Abernethy "seemed to hold that all local diseases which are not the immediate result of an accidental injury are the results of disorders of the digestive system, and are all to be cured by attention to the diet, by small doses of mercury, and by purgatives." Many tales are told of his rough humour, which sometimes amounted to rudeness. These are so well known that it is unnecessary to repeat them. In spite of this defect in his character he was much admired, and justly so, in that he was a man of blameless life, honourable in all his dealings, and generous to those in need of help.

Arms.—Argent, a lion rampant, sable, surmounted by a fess gules.

LAWRENCE [SIR WILLIAM]. 1783—1867. A Surgeon to the Hospital. Adopting the profession of his father, at that time the leading surgeon of the town of Cirencester, he became a pupil of Abernethy, who made him his demonstrator. In 1813 he was appointed Assistant Surgeon, becoming Surgeon in 1824, and Lecturer on Anatomy—in succession to his former mentor—in 1829. Among his pupils were Mr. Luther Holden, Sir James Paget, and the late Sir William Savory and Sir George Humphry. He was Surgeon Extraordinary, and then Sergeant Surgeon, to Her Majesty the Queen, who created him a baronet in the last year of his life. It is to be noted in passing that he left a representative among us in the person of his son, Sir Trevor Lawrence, Treasurer of the Hospital, who is in every way worthy of his distinguished father.

Arms.—Ermine, a cross raguly gules, in the first and fourth quarters a serpent nowed, proper.

LUCAS [MATTHIAS PRIME]. Flourished circa 1820. A President of the Hospital. He was also an Alderman of the City of London, and his name appears on the list of Lord Mayors with the date 1827. He left by will the sum of £200, the interest of which is annually distributed on or about View Day to "one

or more deserving sisters and nurses, as an encouragement to be kind and attentive to the Poor Patients."

Arms.—Argent, a fess between six annulets gules.

STANLEY [EDWARD]. 1792—1862. A Surgeon to the Hospital. Educated at Merchant Taylors' School, at the age of sixteen he became apprenticed to Thomas Ramsden, one of the Surgeons to the Hospital, this apprenticeship being transferred to Abernethy on the death of Ramsden two years later. Becoming Assistant Surgeon in 1816, he was elected Surgeon in 1838. He was also Lecturer on Anatomy. He was twice President of the Royal College of Surgeons—in 1848 and 1857. In 1858 he was appointed Surgeon Extraordinary to Her Majesty. Stanley deserves notice more especially for having founded the pathological museum of the Hospital, the labour and expense of which he shared with Abernethy. A curious point in his character was lack of confidence in his own opinion, which he would withdraw if another, differing from it, were expressed. Nevertheless, his opinion was held in much estimation by his fellow surgeons.

Arms.—Argent, on a bend azure, three bucks' heads cabossed or.

PAGET [SIR JAMES]. Born 1814. A Surgeon to the Hospital. He was the son of Samuel Paget, of Great Yarmouth. Choosing surgery as his profession, he studied at this Hospital, being a pupil of Sir William Lawrence. He has been successively Assistant Surgeon and Surgeon, resigning the latter post for the one on the Consulting staff which he now holds. His works are marked by that close observation for which he is famous, among them being *Lectures on Surgical Pathology* and a *Pathological Catalogue of the Museum of the Royal College of Surgeons*. He is Surgeon Extraordinary to H.R.H. the Prince of Wales, and Sergeant Surgeon to Her Majesty the Queen, who recognised his professional ability by conferring upon him a baronetcy in 1871.

Arms.—Sable, on a cross engrailed, between in the first and fourth quarters an eagle displayed, and in the second and third an heraldic tiger passant, argent, an escallop of the first.

RAHERE. Died 1144. The Founder of the Hospital. He is first heard of as a frequenter of the court of William Rufus. Whilst on a pilgrimage to Rome he contracted malarial fever, being most probably nursed, during his illness, on the Island of St. Bartholomew in the Tiber. During convalescence he believed that he was directed by a vision of St. Bartholomew to build a hospital. It is related that in a subsequent vision the Saint appeared to him and added the building of a church to his original plan.

The tomb of Rahere, which may be seen in the church of St. Bartholomew the Great, bears an ancient stone effigy of him in his habit as an Augustinian canon, and is surmounted by a much later perpendicular canopy.

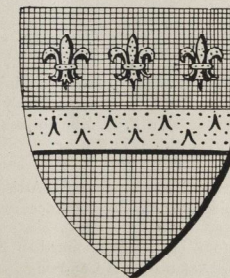
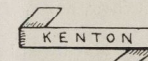
Arms.—It is believed that Rahere had no personal arms. Those frequently assigned to him, namely, Gules, two lions passant guardant in pale or, in chief two ducal crowns of the second, are really those of the Priory of St. Bartholomew.

My thanks are due to Mr. Cross, to Mr. Alfred Willett, and especially to Dr. Norman Moore, for kind assistance freely given.

Since writing the above I have found the armorial bearings of Kenton, and have added the following account:

KENTON [BENJAMIN]. 1719—1800. A Benefactor to the Hospital. Starting life as a waiter and drawer at the Crown and Magpie Tavern in Aldgate, he ultimately became the owner. This tavern was much resorted to by ship-captains, who entertained a high opinion of Kenton's wisdom from the fact that when they were dining upstairs, he, although not in the room, always knew when the wicks of the candles required snuffing. His explanation that it was simply from observation of a contemporaneous light in the bar, did not in any way diminish their estimate of his ability, which was afterwards justified by his discovery of a method of bottling ale so that it could make the voyage to India, round the Cape, without blowing the cork out of the bottle. It was to this apparently trifling discovery that Kenton owed his fortune, out of which he gave £5000 to the hospital. A memorial tablet in Stepney Church bears the following

Arms.—Sable, a fess ermineois, in chief three fleur-de-lys or.



Notes.

Table showing the entry of students this year as follows: Full entries 84, Special entries 59, Prel. Scientific Class 22, Total 165.

AS COMPARED with last year there is a considerable fall in the number of full students, whilst entries to special classes remain about the same. The figures for 1894 and 1895 are as follows:—

Table comparing student numbers for 1894 and 1895. 1894: Full Entries 119, Special 74, Total 193. 1895: Full Entries 105, Special 82, Total 187.

THE TOTAL ENTRY to the Metropolitan schools shows a considerable falling off. At Guy's there are 70 full students this year compared with 80 last year, and at St. Thomas's there are only 41 compared with 73 last year, whilst St. Mary's have 54 compared with 71 last year.

ON THE OTHER HAND, the entry in the Provinces shows only a very slight diminution, and in some cases a substantial increase; thus, at Manchester there are 74 full students, and at Liverpool 47, compared with 66 and 37 last year respectively.

AT CAMBRIDGE, 135 students have entered for the study of medicine.

DR. NORMAN MOORE has been elected a member of the Council of the Royal College of Physicians.

DR. W. S. CHURCH has been nominated by the President of the Royal College of Physicians to be a member of the Council of University College, Bristol.

A. B. WARD and H. J. MAY have taken the degrees of M.B. and B.C. of the University of Cambridge. Mr. Ward's thesis was on the "Etiology of Chorea," and Mr. May's on "Diphtheria as treated by Antitoxin."

MR. H. H. R. SKEY has passed first in the Naval Medical Service, at the examination recently held. He obtained 2860 marks. Mr. F. H. Nimmo passed eighth at the same examination with 2224 marks.

DR. J. H. DRYSDALE has been elected Assistant Demonstrator of Physiology vice Dr. Bowman, deceased.

DR. I. E. SHORE has been appointed an Examiner for the Second M.B. Examination at Cambridge.

THE number of names sent in for reproductions of Ouleus' portrait of the late Mr. Mark Morris has nearly reached 100—unless the number reaches 200 the reproduction of the portrait will not be undertaken. Those who would like to have copies, at a cost of about 10s. 6d., are asked to send in their names to the "Manager of the JOURNAL."

Amalgamated Clubs.

NEW MEMBERS.

Table listing new members for Amalgamated Clubs, including names like A. F. C. Pollard, F. G. de G. Best, and others.

GOLF MATCH.

GUY'S HOSPITAL v. ST. BARTHOLOMEW'S HOSPITAL.

On October 21st the third annual golf match between Bart's and Guy's was played at the Stanmore Golf Club ground. It was a beautifully fine afternoon, and the links were in excellent condition, considering the recent heavy rains, the putting greens being specially fast. Bart's won the first match, in 1894, at Stanmore, by 7 holes. Guy's won the second match at Bickley, in 1895, by 14 holes. Bart's winning the present match, as will be seen below, by 25 holes. Undoubtedly the stronger team won, two men in the Guy's team being almost novices at the game. Details of the play:—

Table of golf match results between Bart's and Guy's. Bart's scores: 3, 0, 9, 2, 0, 9, 9, 9. Guy's scores: 0, 1, 0, 4, 2, 0, 0, 0.

- 1. Both men were short of practice, Mr. Coventry just having returned from a sea voyage; but Mr. Robertson held the upper hand all through, winning by 3 holes.
2. Mr. Harmer, when 5 up and 6 to play, went to pieces, and lost the last 6 holes.
3. A better match than the result would indicate. Mr. Furnivall playing his best game, won somewhat easily.
4. This was an amusing match; rumour hath it that several holes were decided by spinning a coin. Mr. Evans was suffering from want of practice.
5. A ding-dong fight all the way, resulting in a win for Mr. Whitwell by 2 holes.
6. A very fine match; all square at the turn, the winning ball on the way home holing out in 36.
7 and 8. These matches need no description, Mr. Gray and Mr. Lacey being no match for their respective opponents.

STAFF v. STUDENTS.

This annual fixture was played at Mitcham on June 30th. A strong wind somewhat interfered with the "long game" of several members of both teams; but it was a fine afternoon, and the green was in very good condition. The Students again asserted their superiority at the game of golf, this being their third victory, the Staff claiming a solitary win in 1895. Details of the play:—

Table of Staff vs Students golf match. Staff scores: 0, 0, 4, 5, 0, 0, 0. Students scores: 6, 0, 0, 0, 3, 5, 2.

ASSOCIATION FOOTBALL CLUB.

RESULTS OF MATCHES.

Table listing football match results. Oct. 6: *Forest School vs Walthamstow (2-2). Oct. 10: *Crouch End vs Wood Green (3-4). Oct. 17: *Norseman F.C. vs Winchmore Hill (4-3). Oct. 21: *Felstead School vs Felstead (0-7). Oct. 24: *Reigate Priory vs Reigate (2-2). Oct. 28: *St. Mary's Hosp. II vs Winchmore Hill (1-0). Nov. 4: *Aldenham School vs Aldenham (6-2). Nov. 7: Hastings Athletic vs Hastings (3-3). Nov. 7: Old Brightonians vs Winchmore Hill (9-2). *St. John's College vs Oxford (3-3).

ST. BART'S HOSPITAL v. CROUCH END.

This match, which was played at Wood Green on October 10th, resulted in a win for Crouch End by 4 goals to 3. The first part of the game was marked by a want of combination on both sides. Crouch End, however, soon got better together, and quickly scored 3 goals. Bart's then got together a little better, and Woodbridge scored from a pass by Joy. Before half-time both teams again scored, Pickering rushing the ball through our opponents' goal, the score then being Crouch End 3, Bart's 2. In the second half the game became a good deal faster and more combined. For a time the Hospital pressed, and Pickering again scored. Crouch End, however, replied, and the game resulted as above.

Team.—E. P. Court (goal), R. P. Brown, L. E. Whitaker (backs), A. H. Bostock, N. H. Joy, D. S. Gerrish (half-backs), T. H. Talbot, C. A. Robinson (right wing), E. W. Woodbridge (centre), H. J. Pickering, H. N. Marrett (left wing), (forwards).

ST. BART'S HOSPITAL v. BARNES.

This match was played in wretched weather at Winchmore Hill, and resulted in a win for the Hospital by 3 goals to 1. Bart's won the toss, and Barnes kicked off from the pavilion end. The state of the weather rendered accurate play impossible. During the first half-time Bart's scored twice through Willett and Marrett. In the second half Barnes scored, but the Hospital quickly getting together again once more led by 2 goals, thus winning as stated above.

Team.—E. P. Court (goal), R. P. Brown (captain) and L. E. Whitaker (backs), A. H. Bostock, D. S. Gerrish, and H. J. Pickering (half-backs), T. H. Talbot and C. A. Robinson (right wing), J. A. Willett (centre), E. W. Woodbridge and H. N. Marrett (left wing), (forwards).

ST. BART'S HOSPITAL v. REIGATE PRIORY.

This match was played at Reigate on October 24th. Reigate won the toss and elected to play uphill. The play from start to finish was fast and exciting, and at times rather vigorous. For the first twenty minutes the game was fairly level, Bart's having rather the best of it. At last a capital run by Talbot and Robinson on the right took the ball to the Reigate goal, and from a pass by Robinson Woodbridge scored. Six minutes later Robinson added to the Hospital score. Just before half-time Reigate scored with a capital shot, which Langton could not reach. On resuming, Reigate attacked vigorously, but failed to score till just on time, the game thus ending in a draw of 2 goals each.

Team.—J. M. Langton (goal), R. P. Brown (capt.), M. G. Winder

(back), A. H. Bostock, D. S. Gerrish, H. J. Pickering (half-backs), T. H. Talbot, C. A. Robinson (right wing), J. A. Willett (centre), E. W. Woodbridge, H. N. Marrett (left wing), (forwards).

ST. BART'S HOSPITAL v. HASTINGS ATHLETIC.

This annual match was played at Hastings on November 4th before a good attendance. Hastings had their strongest side, while the Hospital were handicapped by the absence of Whitaker and Bostock. To add to their misfortunes R. P. Brown missed the train and arrived twenty minutes late. Hastings won the toss, and at once attacked and quickly scored three times. The Hospital now woke up and commenced a vigorous attack, which resulted in Woodbridge scoring rather luckily off an opposing player. The teams crossed over with the score 3-1 in favour of the home team. On resuming Bart's kept up the pressure and Willett rushed the ball through the goal, but the point was disallowed for handling. Soon after, however, Pickering scored from half backs, and just before the close Willett equalised. A good game resulting in a draw of 3 goals each.

Team.—J. M. Langton (goal), R. P. Brown, L. Orton (backs), M. G. Winder, D. S. Gerrish, H. J. Pickering (half-backs), T. H. Talbot, C. A. Robinson (right wing), J. A. Willett (centre), E. W. Woodbridge, H. N. Marrett (left wing), (forwards).

ST. BART'S HOSPITAL v. OLD BRIGHTONIANS.

This match was played on November 7th, at Winchmore Hill. Old Brightonians brought down a weak team, and were, in consequence, severely beaten. Bart's having lost the toss, kicked off towards the pavilion goal. The Hospital immediately pressed, and in the first half scored 5 goals (Woodbridge 3, Pickering, and Willett). In the second half the Hospital quickly scored 2 more goals through Robinson and Willett. Old Brightonians then played up better and scored 2 goals. The Hospital replied with 2 more (Robinson and Talbot), thus winning easily by 9-2.

Team.—A. Goodall (goal); R. P. Brown (captain) and L. Orton (backs), A. H. Bostock, D. S. Gerrish, and H. J. Pickering (half-backs), T. H. Talbot and C. A. Robinson (right wing), J. A. Willett (centre), E. W. Woodbridge and H. N. Marrett (left wing), (forwards).

Our match with the Hastings Athletic Football Club is always looked upon as one of the best matches of the season, and this year's match proved no exception to the rule. Four seasons ago, when we went down for the first time to Hastings, we won easily, but each year they have been gradually diminishing the number of goals, so that this year we had to content by making a draw of three goals each after a very hard and exciting game.

After the match the Bart's team were again very hospitably entertained by the Old Bart's men now in practice in Hastings. Our hosts were Mr. C. Christopherson, Mr. C. A. Coverton, Mr. C. B. Gabb, Mr. L. Jones, Dr. Trollope, Mr. T. H. Wadd, and Dr. A. Scarilyn Wilson. About a hundred invitations were issued to prominent men in Hastings, including the Mayor (Major Weston), Rev. P. F. P. Durnford, Dr. Redmayne, Mr. J. D. Hersey, Mr. N. Ballard, Mr. H. J. Holyoake, &c., and the members of the Hastings Athletic F.C.

Dr. A. Scarilyn Wilson took the chair. After a most enjoyable high tea, a very neatly arranged programme of songs had been prepared to fill in the rest of the time before catching our train back to town.

After an excellent quartette and violin solo had been rendered, the chairman, Dr. A. Scarilyn Wilson, proposed "Success to the St. Bartholomew's Hospital Football Club." He alluded to the short time there was at our disposal, and therefore he must somewhat curtail his speech. But there was a tradition at this annual tea—and they could not put the traditions aside, and that was that this tea was always associated with its old friend "toast." He was, therefore, privileged as chairman to propose the health of the St. Bartholomew's Hospital team, which that afternoon had met the Hastings team. There was a popular idea years ago that medical students were cheerful and somewhat loud individuals, who passed their days in the dissecting-room engaged in eating pork pie and drinking stout, and in the evenings by disturbing other people's knockers. He could not say that when he joined the Hospital this was the case. Dr. Trollope, who was at the Hospital some years before Dr. Scarilyn Wilson, also denied that this was the case in his time. But whatever might have been the case, they had developed other ways of spending time and letting off steam, and he could not imagine a better way than by coming down to Hastings and playing a good game of football. They of St. Bartholomew's Hospital were proud of the fact that they belonged to the most ancient hospital in the country, and one that was not only the most ancient but the

most illustrious. They were proud of their connection with it, and they were glad in any way to keep up that connection and to strengthen the bond of union which bound them to their old Hospital. A football field was the foundation of many a fast friendship, and was a highway to health. He asked them to drink success to the Bart.'s team, coupling with it the name of the Bart.'s captain.

After a song had been well sung by Mr. J. Valérie, Mr. R. P. Brown replied for the Hospital team, thanking the Old Bart.'s men of Hastings for the very kind way in which they had entertained the Bart.'s team. The chairman then proposed the toast of the "Hastings Football Club," to which Mr. Hall replied.

Mr. B. Middleditch submitted the toast of "Our Hosts," pointing out the increasing keenness of footballers in Hastings, and this was partly due to the interest which people of the town—especially the Old Bart.'s men—took in the welfare of the club. The chairman briefly thanked the gathering for the kind way in which they had received the toast, and after some more music a very pleasant time was brought to a close.

Dr. C. B. Gabb was the first to begin the very pleasant evenings the Bart.'s team have after their match with the Hastings club. Now all the other Old Bart.'s men in Hastings have joined him, but Dr. Gabb, we believe, is the active agent in arranging the whole programme. Every year he makes a point of coming up to the Hospital and arranging matters with the captain and secretary of the Association Club, in order that as much enjoyment as possible may be got in the short time at our disposal after the match.

MATCHES FOR NOVEMBER-DECEMBER.

Sat., Nov.	14.—Eastbourne	..... Eastbourne.
" "	*14.—Old Foresters II	..... Winchmore Hill.
Wed. "	*18.—City of London School	..... Winchmore Hill.
Sat. "	21.—Ealing	..... Ealing.
" "	*21.—Ealing Reserves	..... Winchmore Hill.
Wed. "	25.—Casuals	..... Winchmore Hill.
" "	*25.—Guy's Hospital II	..... Honor Oak.
Sat. "	28.—Ipswich	..... Ipswich.
" "	*28.—Barnes Incognito	..... Barnes.
Wed., Dec.	2.—Enfield	..... Enfield.
" "	*2.—Royal School of Science	..... Away.
Sat. "	5.—Newbury	..... Newbury.
" "	*5.—Tonbridge	..... Tonbridge.
Wed. "	*9.—St. Anne's Heath F.C.	..... Virginia Water.
Sat. "	*12.—Marlow	..... Marlow.
Wed. "	*16.—Berkhamsted School	..... Berkhamsted.
Sat. "	*19.—Drayton F.C.	..... Ealing.
		* Reserves.

United Hospitals A. F. C.

The following team has been selected to play on Wednesday, November 19th, against Middlesex County at Wood Green:

Goal	... A. E. Harrison (St. Thomas's).
Racks	... R. P. Brown (capt.) (St. Bart.'s).
	... J. Sharples (St. Mary's).
Half-backs	... E. F. Buzzard (St. Thomas's).
	... F. F. Lobb (St. Mary's).
	... H. J. Pickering (St. Bart.'s).
Right wing	... W. H. Agar (University).
	... J. F. Fernie (St. Bart.'s).
Centre	... G. P. Wilson (London).
	... E. Ellery (Middlesex).
Left wing	... A. Hay (St. Bart.'s).
Linesman	... Mr. J. F. Walker (London).

Guild of St. Barnabas for Medical Students.

OCTOBER SESSION, 1896.

A Meeting of the Guild will take place at St. John's, Red Lion Square, Holborn, on the following date—

December 2nd.

Tea at the Mission House, Fisher Street, at 5.45; Guild Office, 6.15.

All information concerning the Guild may be had on application to the Secretary, Mr. W. T. STORRS, 14, Berkeley Road, Crouch End, N.

The Bahere Lodge, No. 2546.

AN Emergency Meeting of this Lodge was held at Frascati's Restaurant on Tuesday, November 10th, 1896; W. Bro. Godson, acting for W. Bro. Alfred Cooper, W.M., in the Chair. Bros. Cross, Willett, and Valérie were made Master Masons, and Bros. Keetley, Barron, and Nall were admitted to the second degree. Fifty members and visitors were present, of whom forty afterwards dined together.

Smoking Concert of the Bart.'s Half-Company of the V.M.S.C.

THE members of the Bart.'s half-company of the Volunteer Medical Staff Corps assembled in force at the Champion Hotel, Aldersgate Street, on the 3rd inst., to hold their annual invitation smoker. The chair was taken by Surgeon-Lieutenant Miles, who was supported by Surgeon-Lieutenant Whyte, Captain André, Mr. J. S. Sloane, and the non-commissioned officers of the company. The guests included members of the Artists, London Irish, Civil Service, and other volunteer corps.

A capital programme had been arranged, and after Mr. Edgar had opened the proceedings with a selection of "Hymns" ancient and modern, Private Glaze delighted his hearers with a song, "The Ladies." Mr. Ben Nathan next gave a race for a monetary consideration, but was prevented from doing so by the fact that the other jockeys had been similarly commissioned. The encore was so unanimous that Mr. Nathan was compelled to oblige again, and his imitations of the various attempts of an Irishman, a dude, a Scotchman, and a Frenchman respectively to recite Tennyson's famous "Charge," brought forth a perfect storm of cheering.

Mr. Fred Smith gave "A Simple Maiden," from the "Shop Girl," and this was so appreciated that the audience compelled him to sing again. Mr. Cliff Ryland, the well-known patter vocalist and comedian, sang "The man of eccentric notions." His humorous interludes were much enjoyed.

The succeeding "turn" was one of the most enjoyable items of the evening. Mr. Herbert Lynwood is an artist of the first rank, and his rendering of the "Snowy-breasted Pearl" and "Sing me songs of Araby" were most artistically delivered. Mr. George Kenway gave some excellent "imitations," including a song as heard from a phonograph.

Mr. Avolo's fine bass voice was next heard to advantage in a song with the not inappropriate title of "Good Old English Beer." This melody must have considerably increased mine host of the Champion's exchequer, judging from the manner in which the audience emptied and refilled their tankards.

Further clever "imitations," and a well-sung song, "Gallery and Boxes," were given by Mr. Harold. The next performer was Corporal Meade, of "Ours," whose contribution was undoubtedly the hit of the evening. It is common knowledge that the Bart.'s Company at Aldershot was very conspicuously during the last campaign. The events were very cleverly recounted to the tune of "Killaloo," and Corporal Meade was not allowed to resume his seat until the song had been heard a second time.

The senior non-commissioned officer then referred to the gain to the Company by the accession to the ranks of Surgeon-Lieutenant Miles, and he called upon the members to welcome their new officer. The welcome was a royal one, and when Surgeon-Lieutenant Miles rose to respond he was accorded a second volley. In thanking them for their kind reception, he was glad to say that he was not a stranger for their kind reception, he was glad to say that he was not a stranger to No. 3. He had served in its ranks for five years, and it was a pleasure for him to resume his connection with the Company in his new position. He was sorry to find so few St. Thomas's men in the Company. He hoped that the fact of several representatives being present from that hospital to night would be the means of recruiting from that quarter. He wanted No. 3 to work with him to obtain the Shield. Without detracting in any way the merits of the Company which now held it, he thought No. 3 was good enough and strong

enough to compete for it successfully if the members would make a special effort (loud cheers).

After this pleasant interval, Corporal Meade again took the floor, and soothed the listeners with "Sister Mary Jane's Top Note."

Several other equally enjoyable turns followed, and the evening was successfully terminated by the Secretary gathering his famous No. 3 choir together, and singing their notorious "War March and Popular Chants."

Cases of Special Interest.

Mark, bed 10.	—Rheumatoid arthritis.
" "	24.—Morbus cordis.
Luke "	10.—Multiple neuritis.
" "	19.—Wryneck.
" "	22.—Pernicious anæmia.
Matthew, bed 3.	—Gout, tophi in ears.
" "	5.—Mitral stenosis.
Colston, bed 2.	—Rheumatism, morbus cordis, subcutaneous nodules.
" "	3.—Morbus cordis.
" "	20.—Double empyema (recovering).
Rahere, bed 10.	—Diphtheritic paralysis.
" "	16.—Morbus cordis.
Faith, bed 5.	—Malignant disease of rectum.
" "	15.—Morbus cordis.
Hope "	20.—Alcoholic neuritis.
" "	7.—Cirrhosis hepatis.
Mary "	9.—Abdominal new growth.
" "	10.—Jaundice.
John "	5.—Diabetes.
" "	5.—Paroxysmal heart hurry.

Appointments.

ADAMS, P. E., M.R.C.S., L.R.C.P., appointed House Surgeon to the Dorset County Hospital.

BRODIE, W. H., M.D.Edin., F.R.C.S.Eng., D.P.H., appointed Medical Officer to the First and Second Sanitary Districts of the Battle Union.

GLOVER, LEWIS, M.D.Cantab., appointed Medical Officer to the Out-patients at the Hampstead Hospital.

FARMER, W. H., M.R.C.S., L.R.C.P., appointed House Surgeon to the Royal Hospital, Portsmouth.

BRIGGS, J. H. D., M.B.Lond., M.R.C.S., L.R.C.P., appointed Assistant House Surgeon to the South Devon and East Cornwall Hospital.

HEDGES, J. H., M.R.C.S., L.S.A., re-appointed Medical Officer of Health for the Urban District of Leighton Buzzard.

WAYLEN, G. S. A., L.R.C.P.Lond., M.R.C.S.Eng., re-appointed Medical Officer of Health to Deveres Rural District Council.

CALVERT, CRACE, M.R.C.S., L.R.C.P., has been appointed House Physician to the Royal Free Hospital.

DUNN, P. H., L.R.C.P.Lond., M.R.C.S., has been appointed Medical Officer for the Fourth Sanitary District of the Hitchin Union.

VALENTINE, T. H. A., L.R.C.P.Lond., M.R.C.S., D.P.H., has been appointed Public Vaccinator for the District of Waitara, New Zealand.

Examinations.

FIRST CONJOINT.—*Chemistry and Physics*.—H. E. G. Boyle. *Pharmacy*.—G. B. D. Adams, A. H. Brewer, A. B. Brown, J. K. S. Fleming, A. F. Page. *Biology*.—F. J. C. Jeffcock, C. T. Price.

SECOND CONJOINT.—*Physiology*.—V. S. A. Bell. *New Regulations—Anatomy and Physiology*.—W. F. Bennett, H. Bond, W. C. Douglass, H. Goodman, W. G. Hamilton, S. Mason, H. G. P. Pinker, A. B. Pugh, C. C. B. Thompson, A. J. W. Wells, C. C. K. White, H. G. Wood Hill. *Materia Medica—Old Regulations*.—W. H. Crossley, A. W. Wilkinson.

FINAL M.R.C.S. and L.R.C.P.—The following, having passed in all the subjects of the final examination, have been admitted to the above Diplomas.—W. Smith, G. E. Gardner, W. H. Roache, D. G. Drake, S. L. Box, J. Boyan, F. E. Price, C. R. Maitland, E. L. Davey, A. E. Naisb, L. K. Harrison, F. H. Nimmo, H. Weeks, R. F. Baird, H. Williamson, T. H. Molesworth, H. W. P. Young, G. R. Baker, D. B. Keown, D. H. F. Cown, J. L. Maxwell, J. F. Fernie, R. Arncliffe, L. F. Marks, G. S. Pownall, R. H. Nesham, E. G. Deck, C. F. Gordon, M. Bleden.

CONJOINT BOARD.—OLD REGULATIONS.—*Materia Medica*.—W. H. Crossley, A. W. Wilkinson, P. Wood. *Physiology*.—F. S. A. Bell.

FIVE YEARS' REGULATIONS.—*Chemistry and Physics*.—H. E. G. Royle. *Practical Pharmacy*.—E. B. D. Adams, A. H. Brewer, A. B. Brown, J. K. S. Fleming, A. F. Page. *Elementary Biology*.—F. J. C. Jeffcock, C. T. Price. *Anatomy and Physiology*.—W. F. Bennett, H. Bond, W. C. Douglass, H. Goodman, W. G. Hamilton, S. Mason, H. G. P. Pinker, H. B. Pugh, C. C. B. Thompson, A. J. W. Wells, C. C. K. White, H. G. Wood-Hill.

UNIVERSITY OF CAMBRIDGE.—*D. P. H. Examination*.—W. W. Kennedy, C. Todd.

UNIVERSITY OF DURHAM.—*M. B. and E. S. Examinations*.—W. J. Codrington.

Correspondence.

To the Editor of St. Bartholomew's Hospital Journal.

NEWSING NEWS IN THE JOURNAL.

DEAR SIR,—The Bart.'s JOURNAL is widely read and with much interest among the nursing section of the community, both past as well as present. Could you see your way towards giving us news of each other with regard to appointments obtained by sisters and nurses, both within the hospital and after leaving it? If the Nurses' Press List or the name of the Gold Medallist were also published, it would lend an additional interest. If you could see your way to giving us a few items of such information, I do not think it would be trespassing much upon your valuable space, and I am sure would be much appreciated at home and abroad.

Believe me, yours truly,

ROSE S. WALTER.

282, Lytham Road, South Shore, Blackpool;
October 31st, 1896.

To the Editor of St. Bartholomew's Hospital Journal.

THE ABERNETHIAN SOCIETY.

DEAR SIR,—A Grumbler" asks several questions in your last issue; we will endeavour to answer them *seriatim*.

He asks what has happened to the society lately. The society is in a flourishing state, and has a larger average attendance at its meetings than ever. As to the copies of *Punch*, it is true that as during August and September fewer members are in residence, fewer copies are taken in. In the last week of September some members kindly put the copy of *Punch* under the cushion of the presidential chair, whence, after a diligent search, it was disinterred. On October 1st the copies arrived late, and thus were not distributed with the other papers. When they were brought the newsboy deposited them in the artistic manner mentioned, but they were placed in the cases when the attendant made his next round.

The cases are kept to put the papers in, your Grumbler may be glad to learn. If he could induce other members to realise this he would be doing an excellent service. All notices to that effect have hitherto been in vain. While members will persist in removing the papers from the cases, or in taking them from one room to another,

or in using them as mats, confusion must occur, despite the best endeavours of the attendant. As an example of the way the papers and magazines are treated, we may state that the current number of the *Pall Mall Magazine* disappeared for a few days, and was then returned in a mutilated condition.

As to the sale of papers, Grumbler spoils his own case by dating his letter October 1st. The rule provides that a sale shall take place in October. Even a Grumbler will admit it is better to wait till the men have returned before selling the papers. The sale took place in due course on October 14th, and, strange to say, the name of a Grumbler does not occur in the list of purchasers.—We are, dear Sir, the much-abused

HON. SECRETARIES.

To the Editor of *St. Bartholomew's Hospital Journal*.

SISTER MAGDALEN FUND.

DEAR SIR,—I am glad to be able to inform you that the appeal made through your columns on behalf of Mrs. Boyce (late Sister Magdalen) has been very generously responded to, as the following list will show. Mrs. Boyce again asks me to thank all her friends through you for their kind assistance to her.—Yours faithfully,
EDGAR WILLETT.

	£	s.	d.		£	s.	d.
Amount already ac-				Dr. W. B. Addison	0	10	0
knowledged	31	5	0	William Odell, Esq.	0	10	0
Howard Marsh, Esq.	3	3	0	Dr. A. E. Wynter	0	10	0
"L. W. A."	2	2	0	Dr. H. Willoughby			
Per Dr. C. P. White	1	10	0	Gardner	0	7	6
Dr. T. W. Shore	1	1	0	Effie, Gladys, and			
Dr. G. C. Taylor	1	1	0	Vawdray Capon	0	5	0
Dr. H. P. Taylor	1	1	0	Miss Julia Hurlston	0	5	0
Dr. Leuton Heath	0	10	6	Total	45	1	6
H. B. Tait, Esq.	0	10	6				
Miss Rolleston (Sister Elizabeth)	0	10	0				

For the sake of "An Old Bart.'s Man" we must again state that anonymous letters are not considered.

Review.

SECTION CUTTING AND STAINING: a Practical Introduction to Histological Methods for Students and Practitioners. By W. S. COLMAN, M.D., M.R.C.P. Second Edition (enlarged and in most part rewritten). London: H. K. Lewis, 1896.

This is a useful little book, compiled by one who is a practical worker. It cannot, of course, be compared with such works as v. Kahlden (translated by Dr. H. M. Fletcher), or Dr. Sims Woodhead's *Practical Pathology*; but it is handier and more suited to the beginner, who is apt to be misled and confused by having to choose between a number of methods. There are but few mistakes in the book, and, generally speaking, the various hints and directions given are as good and sound as they can be. The section lifter still finds a place in Dr. Colman's laboratory; it is a barbarous instrument, and a cigarette paper which everybody carries in his waistcoat pocket is a much more useful, as all who have worked in our own Pathological Laboratory know from practical experience. Dr. Colman is unduly severe on Leitz's microscopes, which we use ourselves, and which, on account of their cheapness and good quality, we do not hesitate to recommend. Leitz, who, by the way, hails from Wetzlar, although Dr. Colman refuses to place him among the first-class makers, now sells a splendid all-round microscope at £11, consisting of a non-inclinable stand with rack and pinion, substage condenser and iron diaphragm, double nose-piece, objectives 3, 7, and $\frac{1}{8}$ oil immersion and two oculars; so that there can no longer be any excuse for not possessing a useful microscope. Hot water might have been mentioned among the hardening reagents, for immersion in boiling water is one of the best, quickest and cheapest methods of hardening specimens, and they freeze and cut beautifully after having been fixed in this manner. Specimens are often sent up from a distance insufficiently hardened or fixed: hot water is preferable to weak spirit or whisky. The hardening properties of Müller's fluid can be considerably increased by warmth, spirit, or formalin, as described on page 20, but it is erroneous to imagine that it requires from four to eight weeks to harden in Müller's fluid; in most cases, for quick and

withal good work, a week is enough. Dr. Colman gives but meagre instruction as to the preparation of specimens in the shortest possible time, and yet this is, perhaps, the most important branch of morbid histology. With the hot water method a specimen can be cut and stained in less than fifteen minutes, with the formalin method in less than one hour, with the paraffin method in less than four hours, and with the freezing method by an experienced worker in less than five minutes. In morbid histology we often have to work rapidly. We do not agree with Dr. Colman when he says that staining operations are not easily carried out after cutting in paraffin; there is not the slightest difficulty about the matter, especially if the specimens be fixed on the cover-glasses. It is, in fact, not at all advisable to stain morbid tissues in block.

The cut paraffin sections should be floated on warm water as originally recommended by Dr. Gaskell, in order to flatten them out. We should warn neat workers against the use of bergamot oil and origanum oil; the former is redolent of a cheap hairdresser's shop, while the latter is a strong conjunctival irritant, and its odour is so strong and objectionable as to disqualify him who uses it from human intercourse. Farrant's solution may in many cases be replaced by thick cane-sugar solution, especially in mounting amyloid tissues. Sugar solution becomes quite hard, while Farrant's solution is always a nuisance, since it refuses to set. Osmic acid preparations may be mounted in Canada balsam if they are first passed through weak ammonium sulphide. There is no mention made of Weigert's modification of Gram's method, which possesses great advantages, and also stains fibrin in a brilliantly remarkable manner. Methyl blue, we wish to point out, is not the same as methylene blue.

We have looked carefully through the booklet, and have nothing more to criticise or to add; it is undoubtedly a good guide for the beginner, and therefore we have pointed out the few errors which we have detected, or suggested what seemed to us to be decided improvements. The book ought to be in the possession of all Pathology Clerks, for they would then find less difficulty in preparing good specimens, and Mr. Berry's work on Fridays would become much easier, for it is a severe task to diagnose a growth from a thick and badly stained section.—A. A. K.

Births.

- CUTFIELD.—November 6th, at Merton House, Ross, Herefordshire, the wife of Arthur Cutfield, B.A., B.Sc., M.R.C.S., of a daughter.
PIERCE.—October 22nd, at The Retreat, York, the wife of D. Bedford Pierce, of a son.
SHARPIN.—October 12th, at 23, Kimbolton Road, Bedford, the wife of Archdale Llyad Sharpin, of a son.
STEEDMAN.—October 28th, at Streatham, the wife of J. F. Steedman, F.R.C.S., of a daughter.

Marriage.

- QUARTEY-PAPAFIO-MEYER.—On October 8th, at the Church of St. Bartholomew the Less, St. Bartholomew's Hospital, London, by the Rev. W. Ostle, Vicar, Benjamin William Quarthey-Papafio, M.D., Edin., M.R.C.S. Eng., son of the late Chief Papafio, of Accra, Gold Coast, to Eliza Sabina, daughter of the late Richard S. Meyer, of Accra.

Death.

- FAVELL.—On October 21st, at Brunswick House, Glossop Road, Sheffield, W. F. Favell, M.R.C.S., J.P., aged 64.

ACKNOWLEDGMENTS.—*Guy's Hospital Gazette*, *St. George's Hospital Gazette*, *St. Thomas's Hospital Gazette*, *St. Mary's Hospital Gazette*, *London Hospital Gazette*, *The Nursing Record*, *The Charity Record*, *The Hospital*.

St. Bartholomew's Hospital



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NOTICE.

All Communications, Articles, Letters, Notices, or Books for review should be forwarded, accompanied by the name of the sender, to the Editor, ST. BARTHOLOMEW'S HOSPITAL JOURNAL, St. Bartholomew's Hospital, Smithfield, E.C., BEFORE THE 1ST OF EVERY MONTH.

The Annual Subscription to the Journal is 5s., including postage. Subscriptions should be sent to the MANAGER, W. E. SARGANT, M.R.C.S., at the Hospital.

All communications, financial or otherwise, relative to Advertisements ONLY, should be addressed to J. H. BOOTY, Advertisement Canvaser and Collector, 29, Wood Lane, Uxbridge Road, W.

A Cover for binding (black cloth boards with lettering and King Henry VIII Gateway in gilt) can be obtained (price 1s. post free) from MESSRS. ADLARD AND SON, Bartholomew Close. MESSRS. ADLARD have arranged to do the binding, with cut and sprinkled edges, at a cost of 1s. 6d., or carriage paid 2s. 3d.—cover included.

St. Bartholomew's Hospital Journal,

DECEMBER 14th, 1896.

"Æquum mentem rebus in arduis
Servare mentem."—Horace, Book ii, Ode iii.

A Visit to Falkenstein im Taunus.

A Health Resort for Consumption.

By HENRY RUNDLE, F.R.C.S.

AMONG the characteristic features of German life are the watering places and health resorts which are studded over the country. There is very little quackery. Instead of dosing himself with pills and patent medicines, the anxiety of the German for his health takes a sensible form; and he "takes his cure" at one of these places by dieting himself, drinking sundry daily glasses of waters, and living in the open air as much as possible. There are several places with medical establishments for the treatment of those suffering from diseases of

the lungs. Those at Nordrach and Falkenstein are the best known. Holiday travel took me a few weeks ago through Frankfort, where I halted for a day, as I was anxious to visit the "Curhaus" at the latter place. A railway ride of forty minutes brought me to Cronberg, a distance of twelve miles. The railways in Germany, most of which are State property, are decidedly slow, but very safe. Slow speed, with the risk of mishap reduced to a minimum, is better, says the German, than the momentary advantages of rapid travel. Cronberg is an idyllic place, and well deserves the name of "Crown of the Mountain." A drive of about four miles, passing the residence of the Empress Frederick, brought me to the "Curhaus." This has an elevated position, 1300 feet above the sea level, on the southern slope of the Taunus range. Few places in Germany have such surroundings—pretty enough to attract the ailing and the healthy alike. To arrive there is to feel that the beauty of the place must contribute to your well-being. The valley is protected on the west, north, and east, and open toward the south-east. On each side rise mountains, clad with firs and chestnut trees, which enclose a lovely view over the broad valley of the Main, dotted with towns and villages, and the plains of the Rhine district in the distance.

The Curhaus, which is surrounded by well-kept grounds and woods, consists of a main building, its two wings joining at an obtuse angle, so as to enclose a large terrace, and two annexes united to the main building by covered promenade galleries, opening towards the south. In direct communication, on the east side, is a large dining-hall, in which 200 persons can be comfortably seated. On the ground floor are drawing, music, and reading rooms, and a well-stocked library. The place is provided with all the comforts and luxuries needed for invalids.

The terrace enclosed by the wings of the main building has an especially protected situation, along which extend covered verandahs provided with curtains, so that even the weaker patients may be able to remain in the open air from morning to night. Similar structures and revolving pavilions are situated near the building, and serve the same purpose.

In these and the verandahs are placed cushioned, cane sofas, which enable the patients to carry out in comfort the main part of the treatment, namely, prolonged sojourn in the open air. The institution has a plentiful supply of excellent water derived from springs on the slope of the hill beyond, and a good system of drainage constructed by an English engineer. With reference to the climate, the air is pure and free from dust. I was unable to ascertain the percentage of moisture. The variations of temperature are rarely great or sudden, and there is no perceptible fall at sunset. The evenings are characterised, almost the whole year round by stillness and an even temperature. I was told that there is much warm sunshine in winter, enabling people to be out of doors a great part of the day. But Falkenstein is not merely a winter health resort like Madeira, or the towns on the Mediterranean coast. Experience has shown that the treatment may be carried out with equally good results in summer and winter. The Curhaus is open all the year, and the beneficial influences of climate and treatment are felt at all seasons.

As to the course of treatment. The main factor is the utilisation of fresh air. This is carried out, for the weaker patients by resting on the sofas, and for the stronger ones by additional general exercise, combined with breathing exercises. Regular rubbing, dry or with alcohol or water, and cold douches, are applied by trained nurses. The object of this is to increase the natural action of the skin, and to harden the system against the changes of temperature. The diet is a liberal one, with plenty of milk, which is obtained from a farm belonging to the institution.

The daily round of life is rather monotonous. If the temperature is raised, the patient is sent to bed and kept there until it falls. For those who have no fever, first breakfast is taken from 7.30 to 8.30, then a walk in the garden till 10 o'clock, when second breakfast is served. Then out of doors or lying down until dinner at 1 o'clock. After dinner lying down until 4 o'clock, when milk is taken. Supper at 7.30, and bed from 9 to 10. The fact that tuberculosis is a contagious complaint, and that every effort must be made to defend against its germ, is strongly impressed on all the inmates. No one is allowed to expectorate except in the spittoons containing antiseptics, which are placed in the house and grounds, or else in a small glass receptacle which is carried in the pocket. Tubercular milk is guarded against by frequent bacteriological examination.

I have had two cases which have been treated at Falkenstein, and am well satisfied with the results; both in a marked manner have benefited by the change.

Mr. O. D.—, æt. 21, had severe hæmoptysis in March, April, and May, 1892, with cough, expectoration, and night sweats, dulness over apices of both lungs, with moist sounds on left. At Falkenstein from December, 1892, to June, 1893. Weight on admission, 9 st. 10 lbs.; on leaving,

11 st. Since then has been free from cough and all symptoms of lung trouble. When I last saw him (August, 1896) he was quite well, and enjoying outdoor sports and amusements.

Miss M. A.—, æt. 17. Father died from phthisis. Had several intercurrent attacks of hæmoptysis in 1894; well-marked physical signs at left apex. Went to Falkenstein in September, 1894, and returned home in May, 1895. Weight on admission, 8 st. 5 lbs.; on return, 11 st. 3 lbs. A second visit of three months early in 1896. She writes me that she is "very strong and well, keeping quite a normal temperature."

In each of these cases hæmoptysis was the first symptom to attract attention. This alarmed the patients and their friends, and caused them to act promptly in seeking change of climate. It cannot be too strongly urged, if change of climate is to be tried, that it should be done early. Consumptives are often sent away in the later stages of illness, too late for sun and air to work their wholesome charms.

How change of climate works as a curative agent in phthisis is still uncertain. The late Dr. Hilton Fagge writes, "on the whole it seems likely that the good effects of change of climate depend partly upon its improving the general health and increasing the resistance of the organism to the further progress of the disease, partly upon its protecting the patient from fresh attacks of bronchial catarrh." I think that Falkenstein meets these conditions, and when the disease is taken in the early stage, I believe that treatment there, will often work a cure.

I must acknowledge the kindness of Dr. Karl Hess, the senior resident physician, for devoting a morning to showing me over the place, and also for much information which he placed at my disposal. The result is this short account, which may be instrumental in introducing Falkenstein and its Curhaus to some Bart.'s men, and possibly through them to consumptive invalids.

With the Baluch-Afghan Boundary Commission.

By Surgeon Captain F. P. MAYNARD, I.M.S.

THE following brief account of four months spent in crossing the Baluchistan Desert, is the result of a hint from our editor that the experiences of the medical officer of a Boundary Commission might be interesting.

The Commission, under Captain McMahon, C.I.E., consisted of five British officers and a survey party, with an escort of a hundred rifles and twenty-five sabres. We left Quetta on January 27th, 1896, and after meeting the Afghan Commissioner and his party at Khwāja, where a full dress durbar was held for the occasion, the first few weeks were spent demarcating along the Khwāja Amrān and Sarlat ranges of mountains as far south as Nushki. The hills were covered with snow, our camp was generally at an elevation of over 6000 feet, and the cold was intense. The minimum thermometer registered 15° below freezing-point; bath water, if left, was always frozen solid in the morning, and even the soda water froze, at first only on opening the bottles, but when it became still colder

it froze in the bottles without opening. From Nushki the route lay across sandy plains and barren rocky mountains as far as Robat; and from there we skirted along the northern foot of successive barren mountain ranges, crossing immense grassy plains separated by sand-covered mountains as far as the Koh-i-Malik Shah—the hill where Persia, Baluchistan, and Afghanistan meet,—a total distance of about 1000 miles. Sand-hills is a totally inapplicable term, as they really are rocky mountains that have gradually become covered deeply by sand. Water and vegetation were very scarce in such desolate regions, as may be imagined, and more than once we had to travel a hundred miles with water only to be found in one place along the route. Water had to be carried on camels in between, of course. Every one had to be mounted up on camels for the last 500 miles of the journey, partly on account of the difficulty in getting fodder and water, and partly because camels are the only animals fit to travel over such sandy deserts. The heat during the second half of the mission was even more intense than the preceding cold had been. Shade temperatures of 110° to 115° were common—taken in an observatory tent which we carried for the purpose, and which also came in very useful as an operating tent,—and the solar radiation thermometer several times reached 205°, the highest the instrument was able to rise to. Sand-storms and dust-storms occurred daily, and were very annoying. They generally occurred in the daytime, though sometimes during the night. On account of the intense heat and scarcity of water marching was done at night, and we halted during the day to obtain such rest as the "dust-devils," flies and heat, would permit. The duties as medical officer were not heavy, and chiefly consisted in seeing that every one actually got the ration of lime juice and sugar served out, in treating slight cases of fever, sore feet, &c., and in keeping up a few returns. There were very few inhabitants in the country, and those met with were—after leaving Nushki—all nomadic, living in blanket tents. But wherever we halted more than a day or two numbers of them came in for treatment, and some interesting cases were seen. 1275 patients received treatment, and forty-one operations were done. Among these there were nine senile cataracts, six operated upon without and three with iridectomy. One of the latter gave a poor result. In it the iris was adherent to the lens capsule in places, and the scoop and iris forceps had to be used in extracting the lens. The rest of the extractions, including one (without iridectomy) in both eyes, did very well.

Five vesical calculi were removed, one by litholapaxy and four by lateral lithotomy, from patients varying in age from five to eighty years. The dry calculi (all uric acid) varied in weight from 62½ to 268 grains. The fragments of the one crushed in a man twenty-six years old weighed 110 grains. One man, aged eighty, was broken down in health, had alkaline urine, a large prostate, and a sacculated bladder. The dry fragments of his stone weighed 245 grains. We carried him a great distance along with us, and left him at the main camp at Robat, where he recovered. All the other cases did well too. Among the other operations were five iridectomies for leucoma, incision and drainage of a cystic tumour in the orbit, causing severe proptosis, removal of a bullet from the sole of the foot, removal of a supernumerary thumb, and a plastic operation for a buccal fistula, the result of an old sword-cut. The last case came from Kandahar. The original wound had divided the nose completely, and both upper jaws partially, extending from below the outer angle of the right eye across to the angle of the lower jaw on the left side. He had stitched the left half up himself with a needle and thread, and, on the sixth day after, reached Quetta, where the civil surgeon sewed up the nose and the rest of the wound. This portion healed well (so much for science!) but his own attempts failed; the wound reopened, and for three years he had a fistula in his cheek, admitting the index finger, and allowing food, drink, and saliva to escape. Three days after the operation the hair lip-pin used was removed, but on the sixth day he was so pleased with himself, he went away without having the five horsehair sutures removed, probably thinking a few hairs more or less in his cheek made no matter. A sowar (trooper) of the Sindh Horse (our cavalry escort) was kicked on the knee by one horse whilst riding another. The joint was torn open. Treated on a Macintyre splint, and with iodoform and antiseptic gauze. After syringing out with perchloride lotion the wound healed without suppuration, and the man recovered, with a joint that showed no signs of having been damaged.

Diseases of the eye were commonest, though many cases of malaria with enlarged spleen and scurvy were met with. Considering the desert nature of the country, and that the people rarely, if ever, eat vegetables of any kind, it is rather to be wondered at perhaps that more severe scurvy was not seen. Much milk, goat's and camel's chiefly, is drunk by the people, and that may save them. One case

of rickets was seen in a baby. It is a very rare disease in India. This child's mother had died, however, and it had been fed on *karut*, or dried ox-gall, *i. e.* the dried curd from buttermilk. This is almost as hard as nutmeg, and is used by the nomads in their milk or to soften meat in cooking. Several sepoys got scurvy in spite of edema and hæmorrhages. All recovered eventually.

One or two curious customs we came across. Ground glass is a common application in cases of ophthalmia, with results more easily imagined than described. Still, as it has continued to be used, we can but suppose that it must prove useful in some cases. Moxæ are in common use. To relieve pains in his legs, a man will have a hole made, and a piece of rounded hard wood inserted and kept in place by a bandage until it has formed for itself a smooth granulation-lined cavity, and he contentedly wears this wooden plug for years. For enlarged spleen they burn deep holes in the skin over it, and very unsightly multiple scars are commonly to be seen as the result. As the spleen seems to derive but little benefit from this heroic counter-irritation, the magic virtue of our toddie of mercury ointment in similar cases can be but slightly due to its blistering powers. Pouches of cow-dung (where there are cattle, camel-dung elsewhere) are common as in India. Couching for cataract is done occasionally, but with even less success than in India judging from the few results seen.

Impotence is another disease for which one is consulted, and, like most Oriental races, the people try every sort of abomination and filth, hoping to obtain an aphrodisiac effect. The favourite drug appeared to be an oil distilled by heat from living lizards, and the pains taken by our followers, &c., to collect and cook these unfortunate animals in large numbers showed that they, at any rate, believed thoroughly in the potency of the oil. Unfortunately the majority of the natives attributed our zeal in collecting to a similar ambition, and I doubt if any explanation about museums and scientific results satisfied them.

Near the Persian frontier a man aged about sixty was met with suffering from a direct left inguinal hernia. It had come suddenly while lifting a heavy weight four years previously. He was branded with red-hot iron the same day, and the four deep scars testified to the efficiency with which this was done. He had severe pain and vomiting at once, but the same day his brother managed to push the hernia back, and made a truss for him, which I found him wearing. It consisted of a circular thin flat iron disc, three inches in diameter, with a narrow thin rim of iron a quarter of an inch broad, riveted on to its deeper surface with two rivets. To this surface was bound a pad of camel's-hair felt, thicker at one edge. The truss was fastened on to the body with four pieces of plaited cotton rope, three-eighths of an inch thick and three and a half feet long, tied on to the truss at four opposite points. The truss was applied with the thicker edge of the felt pad downwards. The man passed two of the ropes upwards and twice round his waist, while the other two he passed backwards, one on each side of the scrotum, and fastened on to the circular rope behind. The neat way he reduced his rupture and slipped the thing on would almost have satisfied Mr. Langton. The truss acted fairly well when he stood up. I measured him, and sent him a good truss out from Quetta by the head of his tribe, after showing the latter how to use it.

Before leaving Calcutta I had arranged to collect for the Royal Botanic Garden at Sibpur, for the Geological Survey of India, and for the Indian Museum, and Dr. Alcock of the Museum, kindly sent a taxidermist with us. Thanks to this and the enthusiastic help of Captain McMahon and the other officers of the mission fairly large collections were brought back, containing some new species. There are two new species of snakes as by the examination has gone, christened by Dr. Alcock, *Vipera McMahonii* and *Lytrochynus Maynardi*. The papers on the collections are now appearing in the *Journal of the Asiatic Society of Bengal* and the *Records of the Botanical Survey of India*. The sport we had was, in places, excellent. In Shorāwak (Afghan territory due south from Kandahar), where we halted ten days while boundary disputes were being settled, there was capital small-game shooting all along the Lora River. Various kinds of grouse (imperial, sand), partridge (chalcote, teal, duck, &c., and in large numbers the lesser Indian Bustard (*obara*), with a capital B, as he's capital shooting and capital eating. After leaving Nushki we had several excellent runs after foxes, "jacks," and "gād" (antelope) with some Afghan greyhounds we had with us. And there surely can be nothing finer or more exhilarating in the world than a hard gallop across the dead level plain, such as we frequently had in February in the early morning through the delicious champagne-like rarefied air of Baluchistan. The heat and horrors of the desert that came after are all forgotten in such memories.

We were very anxious to obtain a wild ass, and saw many. Previous Boundary Commissions had failed, and so did we. They are splendid-looking animals the size of large mules, salmon-pink in colour, with black cross-markings, very swift and wary, travelling in herds enormous distances to find fodder, and making for the gorges in the hills where there is water in the evening. Then or in the early morning, is one's only chance of shooting them, but though we tried often we never succeeded in bagging one. The Afghans told us that even if caught young they are difficult to tame, and useless as draught (?) or baggage animals, as their skins are too tender and chafe too easily. In the different hills we saw many, and shot a few, they and orial, while tracks of markhor were seen but no animals shot.

Returning by much the same route, we reached Quetta and civilisation on May 29th, 1896. It is noteworthy that within a few days of giving up the open-air life to live in civilised houses all the members of the mission caught severe colds, though one would have thought that sleeping and living out in the open air would have insured us of all draughts.

It may be mentioned that our experience of the value of sugar (as such or in the form of dates), in enabling one to undergo severe physical exertion, supported Dr. Vaughan Harley's views. Sugar, indeed, has much value in the eyes of the natives of India, and when superintendent of the Patna Opium Factory I found that the coolies working there have received a special sugar allowance from the beginning (probably of this century to enable them to perform the very hard work they have to do in great heat.

To be quite up to date we took with our mess aluminium cooking pots and a soda-water machine, both of which worked admirably, and contributed largely to the healthiness of all.

The Plague in England.

Being part of a Paper read before the Abernethian Society, on October 15th, 1896,

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WE were recently reminded by Dr. Gee, under the figure of Apollo and Python, of the victories which medicine had won in the past over "many pestilences which once defiled this fair land of ours: leprosy, ague, plague, dysentery, cholera, typhus, and smallpox." Some of these have been but scotched, and from time to time raise their heads ominously. Here I wish to bring before you a brief account of a victory complete so far as Europe is concerned, a serpent not only scotched, but slain.

The plague is a disease which has been known under several names—the black death, the pest, the botch, the Levantine or bubonic plague. How dire was its onslaught is hinted by the significant fact that it has so often been simply termed the plague. Of all the specific fevers it was the most fatal. In a recent epidemic at Bagdad 55 per cent. of the cases died, and in the Volga epidemic of 1879, 90 per cent., some villages being literally exterminated. At Eyam, in Derbyshire, 74 per cent. of the entire population perished.

If you turn to Clifford Allbutt's *System of Medicine*, you will find the following definition of plague: "An acute infective febrile disease accompanied by inflammation of lymphatic glands, partly miasmatic, partly communicable, caused by a micro-organism, the *Bacillus pestis*." Plague so closely follows the type of diseases due to micro-organisms that, although the bacillus was only found in 1894, by Kitasato, at Hong-Kong, its existence has long been suspected,—longer, in fact, than in any other disease, for Athanasius Kircher, in 1658, suggested that it was due to little worms so small and subtle that they escape every sense, and can only be detected by the most exquisite microscope. He believed these little worms to work their mischief by the elaboration of a poison. Here we have in brief the modern doctrine of micro-organisms and their toxins. But Kircher shows his modernity further by maintaining, in face of the prevailing belief, that a man cannot contract plague by imagination or fear alone, but that they only predispose "by condensation of spirits." To-day we should say "by lowering of resistance," and be no wiser.

This view was of course too advanced for his age. Dr. Hodges, one of the physicians appointed by the Royal College of Physicians

to investigate the plague of 1665, confesses, with submission to so great a name, that he could never discover them, and humorously suggests that as the sky of Italy is brighter than in England, Kircher, who studied at Rome, was at an advantage. Dr. Mead, writing in 1720, states the supposition was grounded on no sort of observation. No direct observation, perhaps, but it was grounded on a profound observation of general biological conditions—a species of research in which Dr. Mead whose tastes led him to give his few spare hours to books rather than to biological experiments, was not skilled. A contemporary and friend of his, Thomas Quincy, though devoid of Mead's learning, makes remarks which show more insight. He compared the process to fermentation, and had a clear idea of the toxic element in this and other infective disorders. Even Diemerbroeck thought it might be due to secret malignant and virulent seeds, consisting of very subtle and isolated particles; still the view has but recently gained general acceptance, and even in 1891 we find Dr. Creighton dogmatically enunciating that it involves a total disregard of the facts to consider plague as due to a species of lowest vegetable organisms: to regard it as breeding true is the "merest verbalism." "One has to figure the virus of the black death," says he, "not so much as carried by individuals from place to place in their persons . . . or clothes, . . . but rather as a leaven which had passed into the ground, spreading hither and thither as if by polarising the adjacent particles of the soil." Alas for the pitfalls of analogy! what is leaven but a species of low vegetable life? Does Dr. Creighton disbelieve in the existence of the yeast plant? And alas for the triumphs of the "merest verbalism," for the micro-organism predicted by Kircher in 1658, hinted at by Quincy in 1720, and so strenuously denied by the positive Creighton in 1891, was found by Kitasato in 1894, as already said, "a short rod with rounded ends, resembling the bacillus of chicken cholera," and fulfilling all Koch's requirements.

To state that the disease is due to a particular bacillus does not of course exhaust its pathology. The conditions under which it flourishes may be more conveniently considered after a brief review of its history, more especially with reference to England. The first great outbreak of plague was in the reign of Justinian, A.D. 542. There is a tradition of an epidemic in Libya in the third century B.C., or even earlier, and Aretæus speaks of *βουβωνικὴ λοιμώδης*. But the great plague of Athens, so vividly portrayed by Thucydides, appears not to have been bubonic, but scintillating malignant, while that at the time of Marcus Aurelius, described by Galen, seems to have been smallpox. You will find the story of this first epidemic of plague in Gibbon's stately page: "The fatal disease which depopulated the earth in the time of Justinian and his successors first appeared in the neighbourhood of Pelusium, between the Sorbonian bog and the eastern channel of the Nile. From thence, taking as it were a double path, it spread to the east, over Syria, Persia, and the Indies, and penetrated to the west along the coast of Africa and over the continent of Europe. . . . The infection was sometimes announced by the visions of a distempered fancy, and the victim despaired as soon as he had heard the menace and felt the stroke of an invisible sceptre. But the greater number, in their beds, in the streets, in their usual occupations, were surprised by a slight fever,—so slight, indeed, that neither the pulse nor the colour of the patient gave any signs of the approaching danger." He then goes on to describe the symptoms of the disorder and its spread, and says, "In time its first malignity was abated and dispersed, the disease alternately languished and revived; but it was not till the end of a calamitous period of fifty-two years that mankind recovered their health, or the air resumed its pure and salubrious quality. No facts have been preserved to sustain an account, or even a conjecture, of the numbers that perished in this extraordinary mortality. I only find that during three months, five, and at length ten thousand persons died each day at Constantinople; that many cities of the East were left vacant, and that in several districts of Italy the harvest and vintage withered on the ground. The triple scourge of war, pestilence, and famine afflicted the subjects of Justinian; and his reign is disgraced by a visible decrease of the human species, which has never been repaired in some of the fairest countries of the globe."

Probably this wave of pestilence broke upon our shore. Certainly during the next century there was a great epidemic in Britain and Ireland. Bede tells us how it more than decimated the monks at Jarrow, until he, then a boy in the monastery, alone was left to help the abbot in the antiphones and responses. The land relapsed into the barbarism from which it was slowly emerging, and even London was left deserted and in ruins. Whether this was due to war or pestilence may be open to doubt; both views have been maintained. Dr. Norman Moore has pointed out to me the interesting circum-

stance that St. Paul's Cathedral is built right over what must have been one of the main thoroughfares of Roman London—Walling Street, which could hardly have happened if the City had been continuously occupied. An early life of Fechin of Fore, an Irish saint, who died in 664, states that a great plague was the cause of his death, of that of the two reigning kings, and of a vast number of people in the same year.

From this time till the Black Death of 1347 we have no clear history of bubonic plague in England. Famine pestilences abounded—two bad harvests consecutively were sufficient to exhaust the resources of the country, which had no adequate means of importation or storage. England was a byword for her famine-pestilences, as was Normandy for leprosy, and France for St. Anthony's fire or ergotism. Creighton points out the significant fact that this last disease, "which is the truest index of an inferior diet, . . . had little or no place in our annals of sickness." It shows at least that the peasantry were not dependent on the bad rye-bread which seems to have been the staple diet of feudal Europe.

The Black Death of 1347-9 was the most fearful epidemic of bubonic plague which this country has known. Its very name, though of later date, suggests its violence, for the hæmorrhages under the skin are only seen in the most malignant types of the disease. Another symptom was severe hæmorrhage from the lungs, which, in most epidemics a rare complication, was here very common.

Arising in the far East, the pestilence poured into Europe by the usual trade routes—Bagdad, the Crimea, Aden, and Alexandria. At Caffè, in the Crimea, the Tartars were besieging the Genoese settlement, when the black death broke out among the assailants. With brutal cunning they, "by the aid of the engines of war, projected the bodies of the dead over the walls into the city," spreading the disease so rapidly as to almost exterminate the garrison. It reached Italy early in 1348 through Genoa and Venice. Of its ravages in Florence a vivid and truthful picture is to be found in Boccaccio: Petrarch's Laura died of the plague at Avignon. Rolling through France, the wave of pestilence seems to have divided, one going to Normandy, the other eastward to Calabria. It was the western wave which broke on our shore first, reaching Weymouth in August, and spreading over the western counties before the end of the year. At Bristol, says Knighton, "died, suddenly overwhelmed by death, almost the whole strength of the town, for few were sick more than three days, or two days, or even half a day." The contagion spread so rapidly throughout the land, that to follow its course accurately is impossible. London was reached, from one source or another, some time in the month of October. The mortality was so severe that new burial-grounds had to be opened: one on the site of the Minories; another in West Smithfield, between the gates of this Hospital and St. John's Gate, which is still standing in St. John's Lane; the third on the site of the Charterhouse. Oxford suffered terribly; here we University, there were 90,000 scholars assembled. "The school doors were shut, colleges and halls relinquished, and none scarce left to keep possession, or to make up a competent number to bury the dead" (Wood). The plague pit was dug, according to Thorold Rogers, in some part of New College garden. Nor was East Anglia less afflicted. Dr. Jessopp estimates that during the year ending March, 1350, more than half its population had been swept away. At Cambridge the plague pit was probably opposite St. John's College. "When the foundations of the new Divinity School were being laid," says Thorold Rogers, "I saw that the ground was full of skeletons, thrown in without any attempt at order, and I divined that this must have been a Cambridge plague pit." Dr. Jessopp extracts an interesting point from the Court Rolls. "On 28th of April, 1340, a dispute was set down to be adjudicated upon by the steward and a jury of the homage. It was a dispute between a husband and wife on a question of dower . . . The dispute was never settled. Before the day of hearing came on every one of the wife's witnesses was dead, and her husband was dead too." A pilgrim from Spain told a tale even more startling. "After supping with his host (who with his two daughters and one servant had alone so far survived of his entire family, and who was not then conscious of any sickness upon him) he settled with him for his entertainment, intending to start on his journey at daybreak, and went to bed. Next morning, rising and wanting something from those with whom they had supped, the travellers could make no one hear. They then learnt, from an old woman they found in bed, that the host, his two daughters and servant had died in the night. On hearing this the pilgrims made all haste to leave the place" (Gasquet).

Well might the people have said, "The Angel of Death is abroad in the land; you can almost hear the beating of his wings." England was left desolate and silent: memorials of that calamity are still seen in the architecture of the land, in noble works never finished, or completed in a later style. The western towers of St. Nicholas, Yarmouth, suspended for sixteen years. Half the entire population had perished, and the social effects were profound. The poor were generally most affected. "And no wonder," writes Professor Thorold Rogers, "living as the peasantry did in close unclean huts, with no rooms above ground, without windows, artificial light, soap, linen; ignorant of certain vegetables, constrained to live half the year on salted fig tree without fruit." As we look out to-day across the rural landscape it is interesting to remember that the hedges which are so conspicuous a feature originated at that date, the tenancies having to be split up into fields to make farming a success. For labourers were hard to seek, they were wandering off in search of better conditions, and the restrictions laid on them by the Statute of Labourers were inadequate to check them.

There is an amusing example of the old proverb, "The devil was sick, the devil a monk would be," in the fact that during the black death the dice manufacturers found that to do any business they must convert their dice into paternosters. But no sooner had the scourge passed away than there was an instance of Niebuhr's aphorism, "Almost all great epochs of moral degradation are connected with great epidemics." Piers Plowman tells us of a great declension of morals "sithen the pestilence." Father Gasquet, a scholarly writer on the Black Death, said in 1893, "It is a well ascertained fact, strange though it may seem, that men are not as a rule made better by great and universal visitations of Divine Providence. It has been noticed that this is the evident result of all such scourges; or, as Procopius puts it, speaking of the great plague in the reign of the Emperor Justinian, 'whether by chance or Providential design it strictly spared the most wicked.' So in this visitation, from Italy to England, the universal testimony of those who lived through it is that 'it seemed to rouse up the worst passions of the human heart and to dull the spiritual senses of the soul.'" A neat example of the absurdity of this horrible theory of Divine visitation it would be hard to find.

From the time of the Black Death till the great plague of 1665 the disease seems to have been periodically epidemic in Britain; always smouldering, it occasionally burst into conflagrations throughout the fifteenth and sixteenth centuries. The plague of 1464 was said to have been foretold. "A boy at Cambridge, while walking in the lane between King's College and the adjoining building of Clare and Trinity Halls, met an old man with a long beard, who addressed him thus:—'Go now, and tell to anyone that within these two years there will be such pestilence and famine and slaughter of men as no one living has seen.' Having said this he disappeared." It says something for the growth of scientific scepticism that doubts were at once cast on this story.

The sweating sickness, of which we hear a good deal in the years following the battle of Bosworth, can be clearly differentiated from plague, and was very probably a severe type of influenza. We hear the last of it in this form in 1551. Whereas plague always started with the poorer classes—so much so, indeed, that it was commonly called the "poor's plague"—the sweating sickness was most prevalent among the better classes; nor, as a rule, did these diseases appear in the same year. The great advances which this country made in Tudor times naturally led to more stringent regulations for the check of plague, but for a long time apparently without effect. Anthony Wood records thirty outbreaks of plague in Oxford during the sixteenth century "which led to great decline in the learning and morale of the place," occasioned, as 'twas thought," says Wood, "by the overflowing of the waters, and the want of a quick passage for them from the ground: also by the lying of many scholars in one room or dormitory in almost every hall, which occasioned nasty air and smells, and consequently diseases."

The epidemic of 1563 largely affected the neighbourhood of this Hospital. "The worst locality," says Dr. Jones in his *Dyall of Aqueus*, "was St. Sepulchre's parish, by reason of so many fruiterers, poor people, and stinking lanes, as Turn-again Lane, Sea-coal Lane, &c. Turn-again Lane owed its name to the fact that it ran straight down to the Fleet ditch, from which there was no other method of return. The Fleet ditch, as you are probably aware, ran outside the western wall of the city, along what is now Farrington Street, and entered the Thames at Blackfriars. Its filthy condition was clearly believed to play a part in the epidemic of 1563, and a memorial was prepared to get it stopped up; it was shown to have

been in the centre of the most infected district, and it was urged that "it is no material defence for the city, and halt the ditch has been stopped these many years."

London had, in fact, long outgrown its primitive walls, and the sanitarians of Tudor times strenuously opposed its further extension. From the time of Richard I to Henry VII it was a mediaeval walled city, with a population of from 40 to 50 thousand. Outside the walls were a few parishes, and on the west a wide thinly populated suburb, formed, in 1393, into the Ward of Farringdon Without, which reached to Holborn Bars and Temple Bar. This outlying district had similar privileges to the City, and was referred to as the Liberties. The City walls had Ludgate and Newgate on the west, and turning just south of the Hospital, ran along the route now indicated by London Wall; and its northern gates were Aldersgate, the small Cripplegate, Moorgate, and Bishopsgate. On the east was Aldgate and the small postern gate just by the Tower, where the wall terminated. Just outside Moorgate was the Moor—a great fen, the sanitary condition of which was a dangerous nuisance to the City. Its situation is still indicated in the name Moorfields.

Henry V was one of the first to show great care of the public health. Probably he remembered the Moor as a danger to be avoided after copious libations at the "Boar's Head," Eastcheap; Mistress Quickly's sack had a way of obscuring the points of the compass in the royal mind. Be that as it may, one of his first cares was to attempt to drain the Moor, and have roads laid down over it to the neighbouring villages of Islington and Hackney. But it was not till the time of Henry VIII that regular sanitary measures were taken. A certain level of plague was tolerated, but as soon as the infection became hot the well-to-do fled to the country.

In 1543 the following rules were put into force:—"The sign of the cross was to be put on all infected houses, with the inscription 'Lord have mercy upon us'; convalescents were to carry a white rod for forty days after; to mark them; all straw in their houses burnt, and all clothes 'cured'; beggars were to be kept out of churches, and dogs were to be kept indoors, as infection was believed to be carried in their hair. The streets and lanes were to be scavenged and flushed.

Elizabeth went further—infected houses were to be shut up for forty days, no swine were to be kept within the City walls, and Simon Kellwaye published (1593) a code of rules which should be observed by all inhabitants. The Queen herself retired to Windsor during epidemics, and protected herself thus: "a gallows was set up in the market-place of Windsor, to hang all such as should come there from London." No false feminine weakness for Queen Bess!

By this time the Liberties were much more crowded than the City itself. Freed from many of the restraints there enforced, outside the walls was a maze of dark and tortuous alleys, a paradise of jerry-building. Thus the old City became encircled by a fringe of all that was foul and unwholesome, and it was clear that many epidemics started in these outlying noisome slums. Elizabeth made gallant attempts to stem the evil; no new houses were to be built within three miles of the City walls, subletting was made a misdemeanor punishable by law, but all in vain. London has steadily gone on growing, according to some "a wen on the face of civilisation," and the end we see not yet. William Morris's

"Dream of London, small and white and clean,
The clear Thames bordered by its gardens green,"

seems more visionary than ever.

Elizabeth's efforts were so far unavailing, that some years after her death we find the City, formerly the residence of the better classes, falling into the fate of Canongate, Edinburgh; its mansions turned into tenements, its gardens and churchyards built upon. Meanwhile the suburbs of Westminster, Lambeth, Newington, and Stepney began to rise into importance,—the last being from the first and for many years a highly fashionable suburb—a description hardly applicable to the Stepney of to-day. The following approximate numbers will give an idea of the growth of London in Tudor and Stuart times. At the time of the Reformation the population was about 60,000; a few years after the accession of Elizabeth, 90,000; eight years before the Armada, 120,000, and five years after it 150,000. At her death in 1603 it numbered about a quarter of a million—that is to say, during her reign of forty-five years it increased two and a half times. In spite of the turmoil of the civil wars we find it has again nearly doubled itself in 1662, being nearly half a million.

The Stuart epoch is marked by three great outbursts of plague and its final extinction. These outbursts occurred in 1603, 1625, and 1665. The epidemic of 1603 did not affect London very greatly, and it is these three alone that we need stop to discuss.

The best account of the plague of 1603 will be found in Thomas Dekker's book, *The Wonderful Year 1603, showing London lying Sick of the Plague*. Beginning in the suburb of Stepney, it spread over the City and Liberties, destroying between March 10th and December 22nd over 33,000 persons. It coincided with grave changes in the State: Queen Elizabeth died a fortnight after the outbreak, and James was to make a triumphal entry into London; but a mightier monarch than he was already enthroned there, so the King stayed his course at Hatfield. "Every house," says Dekker, "lookt like St. Bartholomew's Hospital;" many that "would have been glad of a bed in an hospital, and dying in the open fields, have been buried like dogs. . . . Never let any man aske me what became of our phisitions in this massacre—they hid their syndical heads as well as the proudest. Galen could do no more than Sir Giles Goosecap;" and so on in the approved eulhuistic mode. The flight to the country seems to have infected the neighbourhood of London more than was usual, Croydon and Enfield being particularly visited.

This plague was the occasion of one of the earliest English medical writings on the disease. Thomas Lodge, novelist, poet, and physician, published his treatise during the fatal year. His best remembered work will probably be not his medical writings, but his novel, *Euphues' Golden Legacy*,—and that not because of its intrinsic merits, considerable though they be, but because his picture of Rosader and Rosalind and the forest world inspired Shakespeare to write his immortal *As you Like it*. How closely Shakespeare followed the story, and how enormously he lifted it by his genius, will be seen by any who compare the two.

As for his treatise on the plague, we may note that he was one of the first to raise his voice against the barbarity of shutting up the infected houses in the way usually adopted. "For in truth it is a great amazement, and no lesse horror, to separate the child from the father and mother, the husband from his wife. . . . For to speake the truth, one of the chiefest occasions of the deathe of such sicke folke (besides the danger of their disease) is the fright and feare they conceive when they see themselves voyde of all succour and, as it were, ravished out of the hands of their parents and friends, and committed to the trust of strangers."

For several years after this there was a slight annual outbreak; the playhouses were closed as soon as the mortality had reached a certain point, and reopened when the deaths fell to thirty a week. This gives us an idea of the way in which a certain endemic level of plague was tolerated and regarded as natural. But in 1625 the smouldering fires burst out again. The previous summer had been very hot and dry; the winter was mild. On February 25th an exceptionally high tide flooded the riverside parts of London, filling Westminster Hall "full three feet in water all over." It will not be regarded, I hope, as an extravagant suggestion that this tide washed up into the town excreta, contaminated with the plague virus, which the scanty flushings of the previous dry year had left on the mud-banks. Within a fortnight four deaths had occurred from plague, and the infection then spread in almost geometrical progression, culminating in 4463 deaths in the week ending August 18th, and then sinking down again, ended with the year. Allowing five days for incubation, and remembering that the third to the fifth day is the most commonly fatal, this places the deaths eight to ten days after the high tide, and we know from the bills of mortality the patients were buried within a fortnight of February 25th. So the suggestion has at least a colour of probability.

The total number of deaths in this epidemic was from 40 to 50 thousand. The literature is not extensive. Almost the only utterance of at all a professional nature was from the pen of one Stephen Bredwell, of Oxford, who obtained the L.R.C.P. in 1594. This work I have not personally consulted, for, according to Creighton, it is merely a shameless advertisement of "his 15. powders and 28. 6d. electuaries." But Dekker again wrote on this epidemic—a fact I have not seen referred to in the literature of the subject; his pamphlet is entitled *A Road for Runnawayes*, and is a castigation of the rich who sought refuge in flight, leaving the poor without a helper. "This, in the then unorganised state of charity, was undoubtedly a serious matter. 'How shall the lame and blinde and half-starved be fed? They had want to come to your gates; alas! they are barred against them.'" He further twists them with being unwelcome visitors: "The country-people stand there with halberds and pitchforks to keepe them out; . . . if they spy but a footman (not having a russet sute on, their own country livery) they cry, *Ame, charge their pike-staves before he comes near the length of a furlong; and stopping their noses, make signes he must be gone, there is no roome for him to revell in, let him packe.*" He goes on to tell how some Londoners

one Sunday morning essayed to walk across the fields to Kentish Town; but were seen by the worshippers in St. Pancras Church, who came out and drove them back to the town. He also remonstrates with those who conceal cases of plague to escape the restrictions, thinking to cheat the Almighty, but, as he quaintly hath it, "His arithmeticke brookes no crossing." Of the deserted state of London we get a vivid picture. "The walkes in Paul's are empty; the streetes in London too wide (here's no justling)." George Withers also tells us in his wearisome poem on the subject—*Britain's Remembrance*—

"The walkes are unfrequented, and the path
Late trodden bare, a grassie carpet hath."

This latter carries his view that the epidemic is a Divine judgment such particularly as to suggest it is due, among other factors, to—

"Some imperfections
In burgesses and their elections!"

The plague of 1656 was not so extensive, nevertheless 10,400 deaths were reported. Heberden tells us it began in Whitechapel. And now with one final outburst the plague was to leave our shores for ever. Let me tell the story of its beginning in the language of its greatest observer—Thomas Sydenham.

"After an extremely cold winter, and after a dry frost that lasted without intermission until spring, and which then unexpectedly broke up in the early part of the year 1665, peripneumonias, quinsies, and all such inflammatory diseases suddenly caused a great mortality. At the same time an epidemic appeared, which was wholly different from the continued fevers that prevailed during the preceding constitution." As to the progress of the epidemic we must turn elsewhere, for Sydenham joined in the flight to the country. The College of Physicians appointed special physicians who agreed to stay in London and grapple with the plague; among them we find Dr. Glisson, the distinguished Regius Professor of Physic at Cambridge, the well-known name of Paget, Dr. Wharton, Physician to St. Thomas's, Dr. Francis Bernard, afterwards Physician to St. Bartholomew's, and Dr. Hodges, who has left a good account in his *Loimologia* of the ordeal through which he passed. Another excellent description of the great plague is by Boghurst, the apothecary. This, the *Loimographia*, was left in MS., and first printed in 1804 by Dr. J. F. Payne. The most popular version is of course that by Defoe, one which will long live as literature, but untrustworthy for our purpose—for it is by no means the account of an eye-witness as it professes to be, Defoe being not more than five years old at the time. During the epidemic at Marseilles in 1720 there was a painful revival of interest in the subject, of which Defoe took advantage to secure many readers for his interesting novel. Such was the literary skill of Defoe that his fictions are clothed with what seems the sober veracity of history. It is untrustworthy, I say, for our purpose, for he undoubtedly follows Dekker's account of the earlier plagues of the century, and applies it to 1665. As a matter of fact, those in authority had profited by experience, and good order appears to have been kept, the bills of mortality produced regularly, and an abundant supply kept in the markets. Creighton says that the dead were buried with full ceremony and in coffins till the height of the epidemic in August and September. Then the bodies were brought in carloads and thrown in; in excavating for Broad Street Station, a stratum four feet down, and extending another eight to ten feet deep, was found which was full of uncoined skeletons. Still this was common in the 1603 and 1625 epidemics. I shall venture to go beyond Creighton on this point, for at the height of the epidemic we read in Evelyn's Diary, under the date of September 7th, "I went all along the City from Kent Street to St. James's, a dismal passage, and dangerous to see so many coffins exposed in the streets, now thin of people." Moreover we have no proof that the Broad Street pit does not date from 1603 or 1625.

The story of this epidemic is as an oft-told tale; my repetition of it shall be brief. At the close of 1665, two or three persons died suddenly in one family at Westminster; timorous neighbours moved into London and took the contagion with them. Long Acre was next attacked, and the infection spread through St. Giles's, down Holborn, and reached the City. Nevertheless the mortality did not attain double figures for the week till May 23rd, when fourteen died. Then it began to increase rapidly, reaching 112 in the week ending June 13th. It was at the beginning of this week that Pepys notes, "This day, much against my will, I did in Drury Lane see two or three houses marked with a red cross upon the doors, and 'Lord have mercy' writ there, which was a sad sight to me, being the first of the kind to my remembrance I ever saw. . . . Forced to buy some roll tobacco to smell and chew, which took away the apprehen-

sion." In passing I should remark that the eminent Diemerbroeck, who had experience of the plague in Holland in 1695, praised tobacco as a preventive. Hodges was uncertain as to its value; personally, he tells us, he is its professed enemy, placing his reliance on sack.

Ten days later Pepys tells us, "It struck me very deep this afternoon going with a hackney coach from my Lord Treasurer's down Holborne; the coachman I found drive easily and easily, at last stood still, and came down hardly able to stand, and told me that he was suddenly strucke very sicke and almost blinde, he could not see."

The mortality was now spreading by leaps and bounds, being 1082 in the week ending July 18th, 2010 a fortnight later; then increasing about 1000 a week, it reached its height in the week ending September 19th. In that awful week 7000 died in the City and Liberties, but if we include the suburbs Dr. Hodges tells us 12,000 was the total. By this time all who could fly had done so, the court had moved to Oxford, fires were burning in the streets, all was desolation. Says Pepys, "Grass grows all up and down White Hall Court, and nobody but poor wretches in the street." But the tide had turned, and next week saw a decrease of 2000. Orotcher was ushered in with a weekly death-rate from plague of 4370. Pepys writes under date of October 7th, "In the highway came close by the bearers with a corpse dead of the plague; but Lord! to see what custom is, that I am come to think almost nothing of." A week later the deaths fell to one half, and by this time we hear "that in Westminster is never a physician, and but one apothecary left, all being dead." The mortality remained at about a 1000 per week till the middle of November, when it rapidly fell again, December seeing the average rate rather above 200. General confidence was restored, and the people flocked back to town, and displayed a foolhardiness only equalled by their former panic, actually, Hodges tells us, "using beds in which people had just died, before the rooms were even cleansed from the stench of the diseased." But the plague had spent its force, and many of those attacked recovered; and none too soon, for during that year 68,596 plague deaths were registered without counting the suburbs of Stepney, Lambeth, and Newington. I like to turn to the picture of sturdy old Dr. Hodges going about his avocation at a time when Pepys says, "This disease [is] making us more cruel to one another than if we were dogs." He rose early and took the quantity of a nutmeg of the anti-pestilential electuary; then spent two or three hours in a large room examining patients; then breakfast, followed by professional visits till dinner-time, putting some proper thing on the coals and keeping a lozenge in his mouth all the time; he frankly tells us he kept his mind as composed as possible. He drank a glass of sack before dinner, and partook of easy and generous nourishment. He again visited till eight or nine at night, and "then concluded the evening at home by drinking to cheerfulness of my old favourite liquor, which encouraged sleep and an easie breathing through the pores all night." During the whole time, he tells us, he felt ill but twice.

The plague lingered throughout 1666, causing in all 1098 deaths, some 500 above its endemic level; in the first three weeks of December the deaths were two, four, and three, and never again rose from that point in London; a few deaths that it continued to appear in the bills of mortality till 1679, when the disease seems to have, as it were, finally flickered out. In the provinces, Cambridge, Eyam, and especially Colchester were severely affected in 1666; but that year saw the last of the disease in the provinces, except for a few cases at Peterborough in the first quarter of 1667. Thus plague left our shores for ever, and though there were rumours of its return at Bath in 1675, Newcastle in 1710, and London in 1799, these were but baseless reports. Some cases which could be taken for plague occurred after the disinterment of some bodies at Eyam, that Derbyshire village which had been so severely stricken in 1665-6, by infection brought from London in a box of clothes. In 1770 "putrid fever" prevailed there, of which seventeen died—all, it is significantly noted, with swellings in the neck and groin.

Europe did not become free till 1841, when, as Payne tells us, plague left it by its eastern gate, Constantinople; and Asia, at the present moment, is still suffering from its scourge, though but at isolated points.

Thus ends a brief recital of the devastations wrought by plague in England; a discussion of the causes which have led to its extinction must be reserved for a subsequent paper.

[NOTE.—In common with all who write on this subject, I am under many obligations to Dr. Creighton's *History of Epidemics in Great Britain*; but in every case I have attempted to consult the authority of contemporary writers. It is a pleasant duty to express my thanks to Dr. Norman Moore for much kind help.]

An Account of Two Patients Trephined for Head Injury at the Beckett Hospital, Barnsley.

By JOHN CURRIE, Resident Medical Officer.

CASE 1. Matthew D—, et. 22, miner, was admitted to the hospital on August 8th, 1895, suffering from injury to the head and side. While at work in the pit, he was knocked down by a fall of stones, which struck him on the left side of the head. On admission he complained chiefly of pain in the side. He was quite conscious; eyes were natural; there was no paralysis. There was tenderness on the left side of the head above the ear. On the afternoon of his admission he had what somewhat resembled an epileptic fit, no history of previous fits. There were two slight fits during the same night.

August 9th.—During the afternoon, patient suddenly became very violent, clenching his arm and drawing up his legs, and getting into a position of opisthotonus. All these attacks began with movements of the right arm and leg. There was noticed an external squint in the right eye. The attack commenced at 3.20 p.m., and lasted until 7 p.m., when chloroform was administered, but it returned when the effects of the anæsthetic passed off. At 10 p.m. patient was taken to the theatre and placed under the influence of chloroform, and a flap was raised on the left side, over the situation of the fissure of Rolando. No fracture was found, and the flap was replaced.

10th.—Patient is quieter; had two fits during the night.

17th.—Patient has had several slight attacks during the week, in all of which the movements began in the right arm. Yesterday evening he again became very violent, and chloroform had to be administered. There is extreme tenderness to pressure over the whole left side of the scalp. Wound is doing well.

22nd.—Patient had an attack lasting from 11.15 to 1.15; he was very violent, and CHCl_3 had again to be administered. He has been taking potass. bromid. and chloral, but the mixture makes him sick.

27th.—Has improved considerably since the last note. One slight fit last night. Gets up for a short time in the afternoon. September 4th.—Has kept fairly well since last note until this evening. At 8.30 p.m. he was seized with very acute pain in the head, which he referred to two points, one just above the highest part of the scar over the fissure of Rolando, and one $\frac{1}{2}$ inches behind and below the former. Pain was so severe that at times the patient seemed hardly conscious of what he was saying and doing—he made a great noise, and was at times violent. Chloroform was administered, and it was found necessary to keep him slightly anæsthetised during the night and next day.

5th.—He slept from 5 to 5 p.m., but on waking was as bad as ever, and at 9 p.m. a consultation was therefore called, at which trephining was decided upon. A semicircular incision was made rather nearer the vertex and a little further back than the former one, and a piece of bone the size of a shilling was removed, over the situation of the arm centre on the left side. No fracture or depressed bone was found. The dura mater was not opened.

7th.—Patient was a little noisier after the operation, but has been quiet since, but very sick.

22nd.—Patient remained well until 22nd, when he got excited by watching a bicycle parade, in which he was to have taken part. This morning he was depressed, and afterwards noisy, and made some attempts to go home. Has continued in this state all day. There has been no acute pain, but he has complained of a "rambling" in his head.

27th.—Patient was sent home. There is a small discharging sinus at posterior end of last incision.

About the middle of October he made his appearance at the hospital at 2 a.m., in one of his attacks, having walked four miles in a cap, coat, night-shirt, and stockings. On this occasion we did not take him in, but had him taken to the police-station, and the next day he was sent to the workhouse, and from there he went home.

November 8th.—He was readmitted on account of the sinus in connection with the second wound, which was still unhealed; but he was so intractable that he was sent to the workhouse on November 14th. From there he went home again.

We heard nothing more of him until early in this year, when we heard that he had attempted to commit suicide. He was on March 21st taken to the asylum.

On May 29th he was again trephined by Dr. Sinclair White, of Sheffield, whose account of his condition and the operation I now give with his permission.

"Had an epileptic fit on March 25th and again on April 10th. The sequence of muscles affected not observed. He feels seedy, and is unable to sleep well; has general headache. Vomits every few days; vomiting apparently not connected with gastric disturbances. Intelligence fair; muscular tremor in both hands; patellar reflex exaggerated on both sides; muscular tremor in soft hands; tongue tremulous; grip of left hand strongest (is right-handed). Says he feels weak in right arm and leg. Muscular co-ordination fair for coarse movements, but writing unsteady. Sight failing; V. right eye = $\frac{3}{8}$, left eye = $\frac{5}{8}$. Right ear, watch heard at one inch; left, at half an inch. Felt dizzy before the fits, but there was no distinct aura. Two sinuses one inch apart, and half an inch behind the left fissure of Rolando. Slight discharge and great tenderness around; scalp puffy. I removed about three square inches of his skull; but beyond thickening of the dura mater at the site of the old trephine opening, I found nothing distinctly pathological. The skull was unusually thick, but there was neither dead bone nor pus to be seen. I opened freely the dura mater and arachnoid, and a very copious discharge of cerebro-spinal fluid resulted, but the brain tissue appeared perfectly healthy and pulsated. Such being the case, I judged it inexpedient to incise the brain tissue. The operation will probably give him relief for a time at any rate."

September 4th, 1896.—I saw the patient this morning, who had been at liberty for eight weeks. So far he has had none of his old attacks, and feels very well.

This case is interesting, inasmuch as he, so far as can be discovered, was perfectly healthy before the accident on August 8th, 1895; the result of which was first of all convulsions, which pointed very strongly to an irritation in the left fissure of Rolando; then the subsidence of these fits and the development of what I suppose were really attacks of acute mania, and afterwards distinct suicidal mania. I shall watch the further progress of the case, and duly report in these columns any further developments of interest which may arise.

CASE 2.—Frederick T—, et. 16, was brought to the hospital on October 25th, 1895, at 3.40 a.m., suffering from a wound over the right frontal eminence. On admission patient was quite conscious. There was a horizontal wound $\frac{3}{4}$ inches in length on the right frontal eminence, the periosteum being divided and the bone bare beneath. On exploration with the finger the bone was felt to be fractured horizontally in two places, the fractures running parallel with one another and half an inch apart. The piece of bone between them was depressed a quarter of an inch. The wound was temporarily dressed. Whilst he was being washed and got ready for bed he had an epileptiform fit, which began on the left side and became general; it lasted several minutes. Another fit of the same kind occurred during the night, and a third at 11 a.m., whilst the surgeon was in the ward. At 4.30 p.m. patient was anæsthetised with CHCl_3 . An incision $\frac{1}{2}$ inches long was made from the middle of the upper edge of the original wound, at right angles to it. A piece of bone, equal in size to a shilling, was then removed just above the upper fracture, and the depressed portion easily elevated into position. There was only very slight hæmorrhage. The wound was sutured, and iodoform and alembroth gauze dressing applied. Patient was restless until 8 p.m., and was sick once. He slept all night.

26th.—Temperature rose to 99° last night; 98° this morning. Very sleepy.

31st.—Temperature reached 99.6° on 26th and 99.2° on 27th. It has not been above normal since. Wound was dressed on 29th; there was a small point of suppuration at the right corner of the wound; otherwise it was looking well. There has been no return of convulsions, and patient felt well.

November 13th.—Wound quite healed; he has had no pain, dizziness, nor convulsions. Has been up for last four days.

He was discharged on the 19th. On March 17th, 1896, the patient was readmitted. He had been at work in the pit for some weeks until this date, when he received a kick from a horse on the forehead. He was brought to the hospital sitting up in a dog-cart; and he walked into the receiving room with a little help.

He seemed somewhat dazed, but was able to stand alone for about two minutes; he then fell and had a convulsion, affecting principally the right side, after which he was unconscious. Mr. Jeffery was sent for, and on examination the patient was found to have a scalp wound about two inches long over the left frontal eminence; it was almost vertical, and the bone beneath was fractured and depressed. There were more convulsions between the time of his admission and the operation; in the intervals he was in a semi-comatose condition.

Operation.—At 7.30 p.m. he was anæsthetised with chloroform.

The wound was enlarged upwards, and the condition of the bone examined. It was found to be irregularly fractured, and the depressed portion had penetrated the dura mater and lacerated the brain. A portion of bone equal in size to a shilling was removed from the upper and inner side of the wound, and the depressed portion elevated without difficulty; there was free bleeding, which ceased directly the elevation was complete. The wound was well irrigated with carbolic lotion, sutured, and dressed. The operation, which was well borne, lasted thirty minutes.

18th.—There has been no sickness. Temperature after the operation was 98.8°. No return of convulsions; patient quite conscious and comfortable.

19th.—Passed a good night; he was sitting up in bed asking for bread and butter at breakfast time. No pain. Temperature normal.

21st.—Wound dressed; is looking very well. Temperature is normal.

24th.—Wound quite healed; stitches were removed.

April 3rd.—Recovery continued uninterrupted; there has been no return of convulsions, and no headache. Patient was discharged to-day.

June 1st.—Patient was seen a few days ago. He looks and feels well, and thinks he will give up working at coal mining. The account of this patient is interesting, inasmuch as within the space of twenty-one weeks he received two very grave injuries to the head, for each of which he had to be trephined, and from each of which he recovered without a bad symptom. Such a case I venture to think is unique.

I am much indebted to Dr. Horne and Mr. Jeffery for allowing me to publish an account of these two cases.

Notes.

We desire to call attention to the Mid-session Address to the Abernethian Society, which will be delivered on January 14th by an old Bart.'s man, Dr. E. G. Browne. Under the title of "A Chapter in the History of Cannabis Indica," Dr. Browne proposes to discuss the rise, organisation, and achievements of the notorious Assassins of Alamont, who gave that drug so sinister an introduction to Western Asia in the thirteenth century.

This is a subject which Dr. Browne has made peculiarly his own. Leaving the Hospital in 1887, Dr. Browne spent a year in Persia, and has since published his experiences there in book form, *A Year among the Persians*. Since his return to England he has held the post of University Lecturer in Persian at Cambridge.

The Arnold Gerstenberg Studentship in Moral Science, open to Cambridge men who have graduated with honours in Natural Science, has been divided between Mr. C. S. Myers, scholar of this Hospital, and Mr. Tansley. We congratulate Mr. Myers on his success, and hope to see his essay, which was on "Vitalism," published before long.

Dr. A. A. KANTHACK has been appointed Deputy Professor of Pathology at the University of Cambridge for one year in consequence of the illness of Professor Roy. We hear that this appointment will necessitate Dr. Kanthack's resignation of his Lectureship at St. Bartholomew's.

Dr. DONALD MACALISTER has been appointed a member of the General Board of Studies at Cambridge.

Mr. H. K. ANDERSON has been elected a member of the State Medicine Syndicate at Cambridge.

DR. THORNE THORNE, C.B., has been appointed Examiner for the D.P.H., Cambridge.

Mr. A. G. PENNY, M.A., has taken the degree of B.C. at Cambridge.

Dr. L. E. SHORE has been elected University Lecturer in Physiology at Cambridge, *vice* Dr. Sheridan Lea.

Mr. H. K. ANDERSON and Mr. A. Eichholz have been elected Demonstrators in Physiology at Cambridge.

Mr. W. E. MILES has been gazetted Surgeon-Lieutenant to the Volunteer Medical Staff Corps, *vice* Mr. H. J. Waring, resigned.

Dr. CHRISTOPHER ADDISON has been appointed Arthur Jackson Professor of Anatomy in the Sheffield School of Medicine.

Dr. F. E. BATTEN has been appointed Casualty Physician to the Hospital, *vice* Dr. Drysdale.

Dr. C. H. DRYSDALE has been appointed Assistant Physician to the Royal Hospital for Diseases of the Chest, City Road.

Mr. C. P. WHITE has taken the degrees of M.A., M.B., B.C., at Cambridge.

OUR London M.B. results are again most satisfactory, and we especially congratulate Mr. Emery upon his brilliant success. He takes the Scholarship and Gold Medal in both Medicine and Obstetric Medicine, and has Second Class Honours in Forensic Medicine. Thus in two consecutive years three of the Scholarships and four of the Medals awarded at this Examination have been secured by Bart.'s men—a result of which we feel justly proud. Four men passed in the first division and eleven in the second, whilst fourteen places in the Honours List were obtained by seven of our men. The results tabulated are as follows:

	1st Class Honours.	2nd Class Honours.	3rd Class Honours.
Medicine ...	1	1	1
Obstetric Medicine	2	2	3
Forensic Medicine	0	2	2

EQUALLY satisfactory was the Final Fellowship, eight out of ten of our candidates being successful.

We greatly regret that we are compelled to hold over till our next issue many interesting communications now in type.

Amalgamated Clubs.

BALANCE-SHEET, 1895-6.

Cr.	£	s.	d.	Dr.	£	s.	d.
By Members' Subscriptions	586	19	0	To Grants to Clubs:	20	8	6
.. Grant from Medical School	100	0	0	Rugby Football Club	13	9	7
.. Profit on the JOURNAL	95	8	2	Association Football Club	28	15	7
				Boxing Club	43	3	11
				Athletic Club	25	18	2
				Cricket Club	13	5	6
				Lawn Tennis Club	0	0	0
				Boating Club	5	0	0
				Shooting Club	13	7	0
				Swimming Club	163	8	3
				To Abernethian Society, 77 members at £1 1s.	80	17	0
				" Musical Society	20	0	0
				" Maintenance and Reserve Fund	518	1	11
					£782	7	2

Audited and found correct according to vouchers and bank pass book.

H. MORLEY FLETCHER.
PERCY FURNIVALL.
P. W. JAMES.

November 30th, 1896.

MAINTENANCE AND RESERVE FUND, 1895-6.

Cr.	£	s.	d.	Dr.	£	s.	d.
By Balance from 1894-5	250	16	7	To Stamps for cheques, &c.	0	8	5
" Funds as in General Account	518	1	11	" Subscriptions to Hare and Hounds	3	3	0
" Sale of Refreshments	9	1	1	" Special Grant to Swimming Club	2	0	0
" Fines for new Tickets	0	1	0	" Lamps and Oil	4	13	8
				" Appliances for ground, goal-posts, tennis nets, scoring box, ropes, &c.	62	16	3
				" Rent of ground	300	0	0
				" Rates, taxes, and water	49	4	2
				" Fairlead for draining	21	1	8
				" Printing	1	10	0
				" Wages of ground men and boy, coals, keep of horse, and sundries as in weekly book	114	9	1
				" Refreshments, luncheons to visiting teams, &c. &c.	8	18	0
				" Secretary's petty cash	9	0	0
					£577	4	9
				Balance at bank, October 1st, 1896	200	15	10
					£778	0	7

Audited and found correct according to vouchers and bank pass book.

H. MORLEY FLETCHER.
PERCY FURNIVALL.
P. W. JAMES.

November 30th, 1896.

ST. BARTHOLOMEW'S HOSPITAL RUGBY F.C.

ST. BART'S HOSPITAL v. CIVIL SERVICE.

Played at Winchmore Hill on October 10th. The result of this match was a win for Civil Service by one goal to one try. Bart's won the toss, and in the first half Bart's forwards rushed the ball down into Civil Service's "25," and a heel out from a scrum resulted in Scholberg scoring a try, which, however, was not converted. On crossing over Civil Service pressed and scored a try, which was converted. Bart's then played up and pressed Civil Service in their "25," but were unable to score again, and the match ended as above stated.

Team.—T. M. Body (back), S. Mason, T. A. Mayo, C. Dix, P. H. Scholberg (three-quarters), G. C. Marrack, C. J. Thomas, H. M. Cruddas, A. J. W. Wells, J. K. S. Fleming, C. H. D. Robbs, H. C. Adams, A. M. Amsler, A. L. Vaughan, H. Weeks.

ST. BART'S HOSPITAL v. EALING.

Played at Winchmore Hill on October 17th; the result being a win for Bart's by 2 goals 5 tries (25 points) to nil. Ealing kicked off, and for the first few minutes the game was in Bart's "25," off, and, however, relieved, kicking into touch close to their goal line. Body, however, relieved, kicking into touch close to their goal line. From the throw-out and a pass to Mason enabled him to score a try, which was not improved upon. Ealing then had a chance of equalising from a free kick in front of goal, the ball hitting the equalising from a free kick in front of goal, the ball hitting the post. A dribble by Robbs up to their line resulted in a try by Scholberg, which was converted by Fleming. In the second half Scholberg, which was converted by Fleming. On crossing over Robbs pressed continuously—Mayo, Marrack, and Scott scoring from scrums on their line. Shortly afterwards Marrack

Cr.	£	s.	d.	Dr.	£	s.	d.
By Members' Subscriptions	586	19	0	To Grants to Clubs:	20	8	6
.. Grant from Medical School	100	0	0	Rugby Football Club	13	9	7
.. Profit on the JOURNAL	95	8	2	Association Football Club	28	15	7
				Boxing Club	43	3	11
				Athletic Club	25	18	2
				Cricket Club	13	5	6
				Lawn Tennis Club	0	0	0
				Boating Club	5	0	0
				Shooting Club	13	7	0
				Swimming Club	163	8	3
				To Abernethian Society, 77 members at £1 1s.	80	17	0
				" Musical Society	20	0	0
				" Maintenance and Reserve Fund	518	1	11
					£782	7	2

Cr.	£	s.	d.	Dr.	£	s.	d.
By Balance from 1894-5	250	16	7	To Stamps for cheques, &c.	0	8	5
" Funds as in General Account	518	1	11	" Subscriptions to Hare and Hounds	3	3	0
" Sale of Refreshments	9	1	1	" Special Grant to Swimming Club	2	0	0
" Fines for new Tickets	0	1	0	" Lamps and Oil	4	13	8
				" Appliances for ground, goal-posts, tennis nets, scoring box, ropes, &c.	62	16	3
				" Rent of ground	300	0	0
				" Rates, taxes, and water	49	4	2
				" Fairlead for draining	21	1	8
				" Printing	1	10	0
				" Wages of ground men and boy, coals, keep of horse, and sundries as in weekly book	114	9	1
				" Refreshments, luncheons to visiting teams, &c. &c.	8	18	0
				" Secretary's petty cash	9	0	0
					£577	4	9
				Balance at bank, October 1st, 1896	200	15	10
					£778	0	7

scored a second try after a good run. Just before time Fleming scored and himself converted. The result was chiefly due to the great superiority of the Bart's forwards, though the outsiders played a good game in the first half until a heavy shower of rain made the ground slippery and the ball greasy.

Team.—T. M. Body (back), S. Mason, T. A. Mayo, C. Dix, P. H. Scholberg (three-quarters), A. Hawkins, G. C. Marrack (half-backs), H. M. Cruddas (capt.), J. K. S. Fleming, C. H. D. Robbs, H. C. Adams, A. M. Amsler, M. B. Scott, A. L. Vaughan, F. H. Noke.

ST. BART'S HOSPITAL v. WICKHAM PARK.

Played at Catford. The result was a loss for Bart's by two goals to one goal. Bart's played one short in the scrum, Vaughan being taken out to fill Marrack's place at half. Wickham Park kicked off, and at once passed and scored, the try being converted. Mayo then scored for us after a good run, the try being converted by Fleming. Wickham Park again scored and converted the game, ending as stated above.

Team.—T. M. Body, S. Mason, T. A. Mayo, C. Dix, P. H. Scholberg, A. Hawkins, A. L. Vaughan (half-backs), H. M. Cruddas (capt.), J. K. S. Fleming, C. H. D. Robbs, H. C. Adams, A. M. Amsler, M. B. Scott, P. H. Noke.

ST. BART'S HOSPITAL v. R.N.C.

Played at Greenwich on October 28th, the result being a win for us by 2 tries to nil. R.N.C. kicked off, and for some time the play was near our "25," but our forwards, who were working hard, gradually took the ball down into our opponents' "25," and after some loose dribbling, Robbs scored a try which was not improved upon. On crossing over Bart's forwards still held their

own, and, from a scrum Wells scored a try. The kick was a failure, and the game ended in a win for Bart's by 6 points to nil.

Team.—T. M. Body, S. Mason, T. A. Mayo, C. Dix, H. Falk (three-quarters), G. C. Marrack, J. C. Sale (half-backs), H. M. Cruddas, A. J. W. Wells, J. K. S. Fleming, C. H. D. Robbs, H. C. Adams, A. M. Amsler, M. B. Scott, A. L. Vaughan.

ST. BART'S HOSPITAL v. UPPER CLAPTON.

Played at Clapton on October 31st, the result being a win for us by 2 tries (6 points) to nil. Upper Clapton kicked off, and a very even game was played in the first half, neither side scoring. On crossing over our forwards played a good dribbling game, Robbs being especially prominent, scoring both tries, which were not improved upon. At full back Body played well, his kicking being excellent.

Team.—T. M. Body (back), S. Mason, C. Dix, T. A. Mayo, P. H. Scholberg, G. C. Marrack, J. C. Sale (half-backs), H. M. Cruddas, A. J. W. Wells, J. K. S. Fleming, C. H. D. Robbs, H. C. Adams, A. M. Amsler, M. B. Scott, A. L. Vaughan.

ST. BART'S HOSPITAL v. EAST SHEEN.

This match was scratched by mutual consent, as there was a county match being played at Richmond.

ST. BART'S HOSPITAL v. R.I.E.C.

Played at Cooper's Hill on November 7th. The result was a loss for us by 1 goal (5 points) to nil. Cooper's Hill kicked off and pressed; Marrack getting the ball passed to Scholberg, who ran along the touch line and punted over the heads of the opposing three-quarters, appeared likely to score, but the ball went into touch. Immediately after there was some excellent passing by our forwards then rushed the ball close to our line, and from a scrum Mitchell scored close to the corner flag. The try was converted. The rest of the first half and most of the second half was confined to forward play, Cooper's Hill showing up better in the tight scrummaging, and Bart's in the loose. Cooper's Hill three-quarters made several attempts to get through, but could not do so, owing to the good tackling of our forwards. Towards the close Bart's were several times dangerous, Robbs dribbling over their line, but failing to touch it down. The game ended, as stated, in a win for Cooper's Hill.

Team.—T. M. Body, S. Mason, T. A. Mayo, C. Dix, P. H. Scholberg (three-quarters), G. C. Marrack, J. C. Sale (half-backs), H. M. Cruddas, A. J. W. Wells, C. H. D. Robbs, H. C. Adams, A. M. Amsler, M. B. Scott, A. L. Vaughan, H. Weeks.

ST. BART'S HOSPITAL v. K.M.C.

Played at Sandhurst on November 14th. The result was a loss for us by 2 tries to 1. Bart's were not fully represented, but nevertheless played up well. In the first half Sandhurst were the first to score, the try being unconverted. Bart's then dribbled the ball into Sandhurst's "25," and some passing amongst the forwards enabled Scholberg to score right between the posts. The kick at goal was a failure. On crossing over, Sandhurst again scored, the tries being unconverted. Sandhurst then showed up well in the tight scrums, but in the loose Bart's more than held their own. Unfortunately, just before half-time Scholberg hurt his knee, and has been unable to play since then.

Team.—T. M. Body, S. Mason, T. A. Mayo, C. Dix, P. H. Scholberg (three-quarters), G. C. Marrack, A. Hawkins (half-backs), H. M. Cruddas, A. J. W. Wells, H. F. Bennett, C. H. D. Robbs, A. M. Amsler, M. B. Scott, A. L. Vaughan, H. Weeks (forwards).

ST. BART'S HOSPITAL v. MARLBOROUGH NOMADS.

Played at Surliton on November 21st, the result being a win for Bart's by 1 goal 5 tries to 1 goal. Bart's kicked off, and on the Nomads returning, the ball rebounded from the goal post and enabled the Nomads to score. The try was converted. Bart's then played up, and the three-quarters playing a brilliant game, we were enabled in the first half to more than equalise, Falk, Dix, and Fisher obtaining tries. Sale took the kicks, two of which were at difficult angles, and succeeded in converting one. On crossing over Bart's had it all their own way, Mason, Robbs, and Cruddas scoring tries. The kicks were unsuccessful, and thus we won by 20 points to 5.

Team.—T. M. Body, S. Mason, H. Falk, C. Dix, C. F. Fisher (three-quarters), G. C. Marrack, J. C. Sale (half-backs), H. M. Cruddas, A. J. W. Wells, W. F. Bennett, C. H. D. Robbs, H. C. Adams, A. M. Amsler, M. B. Scott, A. L. Vaughan.

ST. BART'S HOSPITAL v. CROYDON.

Played at Croydon on November 28th, Bart's suffering a severe defeat. The only thing to be said about this match is that Bart's were very weakly represented, and the team disorganised by men playing out of their places; and besides this, Marrack, who was playing three-quarters, was injured in the first ten minutes, and had to retire. Result was that we lost by 5 goals 1 try to nil.

Team.—T. A. Mayo (back), E. R. Risten, S. Mason, G. C. Marrack, H. Falk (three-quarters), A. Hawkins, J. C. Sale (half-backs), H. M. Cruddas, A. J. W. Wells, C. H. D. Robbs, H. C. Adams, A. M. Amsler, M. B. Scott, A. L. Vaughan, H. Weeks.

ASSOCIATION FOOTBALL CLUB.

RESULTS OF MATCHES.

Nov. 11 ... v. Proprietary School at Ealing	...	won	5-2
Nov. 14 ... v. Eastbourne	...	won	3-2
Nov. 14 ... v. Old Foresters II.	...	won	4-2
Nov. 18 ... v. City of London Sch. at Winchmore Hill	...	won	8-0
Nov. 21 ... v. Ealing	...	dn.	1-1
Nov. 21 ... v. Ealing Reserves	...	lost	3-5
Nov. 25 ... v. Casuals	...	lost	0-2
Nov. 25 ... v. Guy's Hospital II. at Honor Oak	...	won	2-0
Nov. 28 ... v. Barnes Incogniti	...	won	2-1
Dec. 5 ... v. Newbury	...	lost	2-4
Dec. 5 ... v. Tonbridge	...	lost	3-5

First team have this season played 10 matches; won 4, lost 3, drawn 3, scoring 29 goals to 22. Reserves played 13, won 8, lost 3, drawn 2, goals 43 to 32.

ST. BART'S HOSPITAL v. EASTBOURNE.

This match was played on November 14th at Eastbourne. There was a strong wind blowing which rather spoilt the game, especially as it also began to rain soon after the start, and continued till the end. Bart's won the toss and elected to play with the wind. Eastbourne kicked off and for a time had considerably the best of matters, and were only kept from scoring by the excellent defence of the Hospital backs and goal keeper. The Hospital, however, soon attacked the Eastbourne goal, but failed to score. Eastbourne then again attacked, and were awarded a penalty, from which they scored. Shortly afterwards they scored again off a free kick for "hands." This woke Bart's up a bit, and shortly before half-time Woodbridge scored. The score at half-time was Eastbourne 2, Bart's 1. After the interval the Hospital improved, Willett scoring after a good ineffectual attempt at length equalised, and a few minutes before time Robinson gave the Hospital the lead, and, after a good game, Bart's won by 3 goals to 2.

TEAMS.

St. Bart's.—E. H. B. Fox (goal); R. P. Brown, L. Orton (backs); A. H. Bostock, D. S. Gerrish, H. J. Pickering (half-backs); T. H. Talbot, C. A. Robinson (right wing), J. A. Willett (centre); E. W. Woodbridge, H. N. Marrett (left wing), (forwards).

Eastbourne.—H. Winchester (goal); H. J. Martin, J. Brown (backs); W. N. Willis, A. G. Topham, E. G. King (half-backs); W. Hartley, W. Hastings, P. C. Scott, J. W. Wright, B. Elliott (forwards).

After the match Dr. O'Brien Harding kindly entertained the Hospital team and some of the members of the Eastbourne Club to dinner.

ST. BART'S HOSPITAL v. EALING.

This match was played on November 21st, at Ealing, and resulted in a draw of 1 goal each. The Hospital were without the services of Willett and Whitaker. In the first half the game was rather in favour of the Hospital, but through bad shooting only one goal was scored.

In the second half the game was very even, each goal being attacked in turn. Ealing at length scored, thus equalising. After some more exciting play time was called, leaving the score 1-1. The goal for the Hospital was scored by Robinson.

Team.—E. H. B. Fox (goal); R. P. Brown, L. Orton (backs); H. J. Pickering, D. S. Gerrish, A. H. Bostock (half-backs); T. H. Talbot, C. A. Robinson (right wing), E. W. Woodbridge (centre), G. W. Stone, H. N. Marrett (left wing), (forwards).

ST. BART'S HOSPITAL v. CASUALS.

Played at Winchmore Hill, on November 25th. Both clubs were badly represented, Casuals only having ten men, two of whom were

substitutes. Casuals won the toss, and Bart.'s kicked off towards the pavilion. The game was slow and combination bad; although the Hospital had somewhat the best of it they failed to score.

Half-time arrived without either side having gained a point. In the second half Casuals had the best of matters, and scored twice.

Team.—C. Harland (goal); R. P. Brown, I. Orton (backs); H. J. Pickering, D. S. Gerrish, A. H. Bostock (half-backs); T. H. Talbot, I. H. Hughes (right), R. Waterhouse (centre), E. W. Woodbridge, H. N. Marrett (left), (forwards).

ST. BART'S HOSPITAL v. NEWBURY.

This match was played at Newbury on Saturday, December 5th, and resulted in the defeat of the Hospital by 4 goals to 2. Newbury won the toss and elected to play with the wind first. Bart.'s, who were without the services of Whitaker, Pickering, Robinson, and Marrett, kicked off, and Newbury at once attacked, and kept up the pressure for some time. Bart.'s forwards occasionally got away, but failed to get near enough to score. After about twenty minutes' play Newbury scored from a corner. Soon afterwards the home team again scored. Bart.'s then attacked with a little more vigour, and Gerrish scored with a good shot. Newbury replied with another goal, and at half-time the score stood 3-1 in favour of Newbury. After half-time the game was somewhat more even, though Newbury still continued to have the best of it, and scored another goal. About a quarter of an hour from time a good run and a pass across the goal, made by Talbot, ended in Woodbridge scoring. Nothing more was scored, though both sides tried hard, and the game ended as above. The slippery and somewhat rough state of the ground, combined with a ball which was not spherical, seemed to considerably bother the Hospital team.

Team.—E. H. B. Fox (goal); R. P. Brown, E. J. Deck (backs); M. G. Winder, D. S. Gerrish, A. H. Bostock (half-backs); T. H. Talbot, G. W. Stone, J. A. Willett, E. W. Woodbridge, A. Hay (forwards).

Ibernetian Society.



R. SINCLAIR GILLIES has been elected a President of the Society *vice* Mr. W. R. Stowe, resigned.

At a meeting on October 15th Mr. W. Langdon Brown read a paper on "The Extinction of Plague in England," of which a portion appears in this issue.

A new departure was tried with great success on October 22nd. Instead of the ordinary clinical evenings a series of short communications are given, at which members are requested to bring forward any subject at which they have worked, or which has fallen under their observation. Mr. L. B. Burnett read a short paper on "Ulcerative Colitis."

This disease was dealt with in its relations to—

1. Dysentery.
2. Renal disease.
3. Swine fever.

1. Under the first heading evidence was brought forward which tended to prove that the two diseases were distinctly related to one another. This evidence being—

(i) A series of eight cases occurred in epidemic form at the Southampton Infirmary, all of which showed typical symptoms of dysentery. Post-mortem examinations were made in two out of five fatal cases, and in both of them the lesion found was not that of dysentery, but that of ulcerative colitis, part of the intestine of one of them being in our museum as a specimen of the latter disease (No. 10872).

(ii) Ulceration was frequently found in the cases of chronic dysentery that occurred in the war between the northern and southern States of America (*vide Medical Report*). These irregular ulcers were not due to the separation of sloughs, and occurred in the same intestine with the follicular ulcers common to the disease, sometimes one and sometimes the other condition predominating. A reproduction of one of the plates in the *Report* was shown in confirmation of this point.

(iii) It is impossible to say that the origin of some of the most advanced cases of ulcerative colitis has not been follicular, from the fact that there is practically no mucous membrane left to show where the lesion may have started.

So that in conclusion he was inclined to think that the cases of ulcerative colitis were really sporadic cases of chronic dysentery

occurring under the modifying influences of good hygiene and a temperate climate.

2. Its connection with renal disease. This subject was dealt with owing to passing references made to a possible connection between the two conditions by Dr. Hale White in his original paper, and later by Dr. Tooth (in the *Path. Soc. Trans.*, p. 4). The conclusion was negative.

An abstract of Dr. Dickinson's article on "Albuminuric Ulceration of the Bowel" was given, the main points of which were that in this disease the following conditions were found:

- i. Very marked cardio-vascular changes.
- ii. The small intestine was most frequently affected.
- iii. The ulceration was always hæmorrhagic in origin.

Whereas in the twelve cases of ulcerative colitis in which the kidneys were affected, out of thirty-one cases collected (nineteen of which had already been published), only one case could be found in which there was any cardio-vascular change that could have been due to the accompanying renal condition.

Again, in the whole thirty-one cases there were only two showing signs of a hæmorrhagic origin. These were—

(i) Dr. Hale White's case with purpura, the kidneys being normal.

(ii) One under Sir Dyce Duckworth with myxœdema. The kidneys were slightly granular on the surface.

3. Its connection with swine fever. This was very briefly dealt with, and the conclusion was again negative.

Mr. Maxwell showed an interesting series of photographs illustrating some tropical diseases, including anæsthetic and tubercular leprosy, leucoderma, diseases due to filaria, ulceration following foot-biting and macroglossia. Mr. Toye showed the original case of myositis ossificans described by Virchow, accompanied by a short history of the case. Mr. Pigg exhibited a series of sections of diphtheritic broncho-pneumonia. Mr. Maxwell read a short paper on "Suppurative Cholangitis," Mr. W. L. Brown and Mr. Drury communicated notes of a case of hæmaturia due to Bilharzia, and exhibited specimens of the adult worm and the ova. At the close of the meeting specimens of fluorescent vibrios lent by Dr. Kanthack were exhibited.

At a meeting held on October 20th Dr. Morrison showed three rare cases of fetal malformation, and read his paper on "The Treatment of the Puerperal Uterus." In this he made a vigorous plea for systematic intra-uterine douching in all cases, claiming that in carefully conducted cases the risk was a negligible quantity. The subject was briskly discussed, and the Society is much indebted to Dr. Morrison for raising such an important point.

At a meeting held on November 5th Mr. D. W. Collings read a paper entitled "Diphtheria."

On November 12th the Society welcomed an old ex-President, Mr. Alban Doran, F.R.C.S., back to its meetings. It is unnecessary to give an abstract of his address on "The details of Ovariotomy, and disputed points in its after-treatment," as it will shortly appear *in extenso* in the pages of the *JOURNAL*.

Another meeting for short communications was held on November 19th, and was fully as successful as its predecessor. Dr. Kanthack brought forward a hitherto unpublished communication on "The Tæsoïe Fly Disease," showing that the disease was due to hæmatosæ in the blood of the affected animals transmitted by the fly. Animals in infected districts, if protected from the fly, escaped the disease. A new point of interest is that rather similar hæmatosæ have now been found in the blood of the English rat. Specimens of the infected blood were shown with the hæmatosæ in a high degree of activity. Mr. Worthington showed a case of xerosis of the cornea in a man aged thirty-five, and Mr. H. J. May contributed an account of the Radcliffe statistics immediately before and after the introduction of the antitoxin treatment. Mr. Maxwell showed the brain of a boy who died of a glioma in the cerebellum, and gave an account of the case. Dr. Kanthack and Mr. Strangeways Pigg showed some pathological specimens hardened by immersion in boiling water for a few minutes. By this process it is possible to obtain very good sections in less than half an hour from a fresh specimen. The President, Mr. J. W. Stephens, gave a demonstration of "The Serum Diagnosis of Typhoid Fever," and showed how the addition of one or two drops of blood from a suspected case to an emulsion of typhoid bacilli will assist in the diagnosis. Should the case be one of typhoid fever the emulsion will become clear from precipitation of the bacilli, which will be found to be killed by the serum.

At a meeting held on November 26th Dr. S. H. Habershon read a paper on "Accurate Diagnosis from Physical Signs," a valuable communication full of practical details, in which he clearly showed the importance of various minutæ of examination.

"The Therapeutical Value of Foods in Infantile Diarrhoea" was the subject of Dr. Cautley's paper read on December 6th, which contained a wealth of information on a subject much neglected despite its importance. This paper also will shortly be published in the *JOURNAL*.

The question of smoking at the meetings has again been raised, and rejected by a large majority.

Special attention is drawn to the Mid-Sessional Address to be delivered on January 14th by Dr. E. G. Browne on "A Chapter in the History of Cannabis Indica." Dr. Clave Shaw's paper on January 28th will be on "Wounds and Bruises in the Insane."

The Cambridge Graduates Club of St. Bartholomew's Hospital.



ON November 26th, at Frascati's Restaurant, the annual dinner of the above-mentioned club was held. The chair was taken by A. E. Shipley, Esq., M.A., Fellow of Christ's College, who proved himself in every way an admirable chairman.

The evening was without doubt a great success, the attendance indeed being "a record." Including guests, seventy-two sat down to dinner, this beating the previous record of last year by fourteen.

It was noted with pleasure that many new members were present, and it is earnestly hoped that next year those who were unable to come this time will make a point of attending, for only in this way can the object of the Club be furthered—namely, the bringing together of both Seniors and Juniors, with the advantages accruing to both from the opportunity of thus becoming personally acquainted. After dinner, the usual loyal toasts having been drunk, the chairman proposed the toast of the evening, "The Club." In the course of his speech, Mr. Shipley referred to the many prominent men whom the Hospital had given to Cambridge, including, among many others, the late Sir George Humphry, our much-loved Professor of Surgery. The speaker pointed out how beneficial was this intimate connection between the Hospital and the University, and he trusted that it might long continue.

The health of the guests, among whom we were glad to welcome many distinguished Oxford friends, was next proposed by Dr. Tooth, and responded to by Dr. Church and Dr. Kanthack. Dr. Tooth, in his speech, gave expression to the earnest hope of the Club that this would be the last occasion on which our distinguished Pathologist would be present as a guest. Next year it is hoped that he will be able to come as a member of the Club.

Dr. Norman Moore afterwards, with his usual eloquence and humour, proposed the toast of the chairman, a task which was peculiarly fitting for him, since it was he who, as Lecturer on Comparative Anatomy, had first introduced Mr. Shipley, when a student at the Hospital, to the study of that science in which he has since gained such distinction.

The chairman having responded, Mr. Wallis proposed in very kind terms the health of the secretaries, Dr. Morley Fletcher and Dr. Horton-Smith; and the latter having replied, the proceedings at Frascati's were brought to a close. No account of the dinner, however, would be complete without a word of thanks to Dr. West, Mr. Blandford, Mr. Myers, and Mr. Pollard, for the songs and music with which they so kindly varied the programme.

St. Bartholomew's Hospital Amateur Dramatic Club.

THE Annual General Meeting of the above Club was held in Mr. Cross's house on October 26th, when the following gentlemen were elected to form the committee for the ensuing year:

Stage Manager	...	Mr. John Boyan.
Assistant Stage Manager	...	Mr. J. Valerie.
Acting Manager	...	Mr. Harold Boulton.
Committee	...	Mr. J. Hobday.
	...	Mr. J. C. Powell.
	...	Mr. B. J. Collyer.
Auditor	...	Mr. Bice.

The report for the past year shows that in addition to the Christmas performance in the Great Hall, entertainments were

given at Brooke House Asylum, and at the two convalescent homes at Swanley, Kettlewell, and Parkwood.

The club was unable to give any nurses' entertainments last year, mainly owing to the dilapidated condition of the scenery in the inguest room.

A committee meeting was held afterwards, at which the following gentlemen were elected members of the club:

Mr. H. B. Meakin. Mr. A. F. C. Pollard. Mr. Leslie Morris. It was suggested that on the tickets for the Christmas entertainment it should be stated that the seats are not reserved, as on previous occasions visitors coming late had been disappointed by not finding reserved seats.

Note on Erysipelas.

By GODFREY LOWE, M.R.C.S., L.R.C.P.



THE effect of erysipelas on a sluggish wound is well known. As the attack dies away the raw surface becomes covered with healthy granulations, and healing rapidly occurs. A striking instance of this has lately occurred in my practice.

A maid-servant, aged 17, was arranging some clothes in front of a fire, when, by some means, the skirt of her print dress became ablaze. This occurred very early one morning in February. She rushed into the yard, where the flames, which by this time had attacked the whole of her back, were extinguished by a bucket of water being thrown over her by her energetic mistress. I mention these details because, considering the shock and the extent of the burn, it was the greatest wonder that the patient survived at all. The whole of the skin covering the backs of the thighs and buttocks as high as the waist, and over the scapulae and upper arms, was completely destroyed. The upper arms where the sleeves were rolled had especially suffered. The subsequent shock was extremely severe, the patient being completely collapsed; the pain of the parts which were burned in a lesser degree was so severe that constant doses of morphia (hypodermically) had to be given. Notwithstanding the difficulties of nursing—I having to do the whole of the dressings myself, accompanied by the fact that after the first two days the sphincter ani refused to act—it was a week before I could authorise the patient's removal to the hospital. She is still (October) an inmate of that institution, but the wounds are now nearly healed. A week after her admission to the hospital she was attacked by erysipelas—the temperature rose, and fluctuated between 103° and 104°, and the constitutional disturbance was very great. This, however, gave a marked impetus to the healing of the raw surfaces, which, since the separation of the sloughs, had appeared pale and flabby. Healing proceeded apace, and six weeks later another attack, this time not so severe, occurred; this again had a very marked effect on the healing surfaces. The patient has now quite recovered, the burnt surfaces are practically re-covered by skin and cicatricial tissue. No skin-grafting was done.

This case is remarkable in the first place for the fact that the patient survived the very severe shock of the extensive injuries, and the heroic means employed for extinguishing the flames; and secondly, for the healing over of such large surfaces without the need for skin-grafting. I am convinced that ordinary therapeutic applications would not have been sufficient to stimulate the growth of new tissue, and that the cicatrization was due to the excessive vascularisation and active tissue change which occurs in an attack of erysipelas.

I have thought this case worthy of report because I have heard of experiments whereby patients suffering from sluggish ulcers and wounds have been inoculated with pus from an erysipelatous wound, with the idea of promoting healing. I have heard also that extreme difficulty has been experienced in producing the desired effect, when pus and even the dressings from an infected wound have been placed upon the one it is desired to infect.

The Bahere Lodge, No. 2546.

AN Ordinary Meeting of the Lodge was held at Frascati's Restaurant on Tuesday, December 8th. Bro. Alfred Cooper, F.R.C.S. Eng., W.M., in the Chair. Drs. Horton-Smith, Gow, and Evans, with Messrs. Sloane and Perram, were admitted into Freemasonry; Bro. Hampton was advanced to the second degree, and Bro. Lance was raised to the third degree. Sixty members and visitors were present, of whom fifty afterwards dined together.

Appointments.

OLIVE, E. J. P., M.A., M.D. Cantab., F.R.C.S., appointed Honorary Surgeon to the Warneford Hospital, Leamington.

THOMPSON, H. E., M.B.Lond., M.R.C.S., L.R.C.P., appointed Junior House Surgeon to the Blackburn Infirmary.

DAVEY, ERNEST, M.R.C.S., L.R.C.P., appointed Medical Officer for the St. James's Third District of the Dover Union.

KINSEY, R. H., M.R.C.S.Eng., L.S.A., appointed Consulting Surgeon to the Bedford General Infirmary and Fever Hospital.

NASH, WALTER GIFFORD, F.R.C.S., appointed Surgeon to the Bedford General Infirmary, vice R. H. Kinsey, resigned.

SALMON, ALFRED L., M.R.C.S., L.S.A., appointed Medical Officer of the Workhouse and of the St. Clement District of the Truro Union.

BOYAN, J., M.R.C.S., L.R.C.P., appointed House Surgeon to the Western General Dispensary, Marylebone Road.

WINTER, E. S., M.R.C.S., L.R.C.P., appointed Assistant Medical Officer to the Grove Hall Asylum, Bow.

Examinations.

UNIVERSITY OF LONDON.—*M.B. Examination.*—1st Division.—M. W. Coleman, C. H. Drake, E. G. D. Drury, W. D'Este Emery. 2nd Division.—E. G. B. Adams, P. W. Brigstocke, A. R. J. Douglas, L. P. Huggins, J. Hussey, C. H. Langford, E. Pratt, G. B. Price, H. E. Thompson, A. B. Tucker, W. Wrangham.

HONOURS LIST.—*Medicine.*—1st Class.—Walter D'Este Emery, Scholarship and Gold Medal. 2nd Class.—L. P. Huggins. 3rd Class.—A. R. J. Douglas. *Obstetric Medicine.*—1st Class.—Walter D'Este Emery, Scholarship and Gold Medal, G. B. Price. 2nd Class.—M. W. Coleman, A. B. Tucker. 3rd Class.—A. R. J. Douglas, C. H. Drake, L. P. Huggins. *Forensic Medicine.*—2nd Class.—M. W. Coleman, Walter D'Este Emery. 3rd Class.—A. R. J. Douglas, A. B. Tucker.

COLLEGE OF SURGEONS.—*Final Fellowship.*—L. Giles, F. Grace, H. E. Harris, C. M. Hewer, J. F. Nall, A. E. H. Pinch, W. M. Willis. *First F.R.C.S.*—J. B. Christopherson, W. D. Harmer, H. Vaughan Pryce.

Obituaries.

WILLIAM FISHER FAVELL, M.R.C.S., J.P.

In our last issue we announced the death of Mr. W. F. Favell, of Sheffield. With the exception of the last eighteen months, during which time he has been confined to his room, Mr. Favell occupied for many years an active and leading position in Sheffield.

He was a man of fine presence, erect, tall, and well-proportioned, with strong, well-cut features. Perhaps the first and strongest impression one received from him was that he was a man of considerable breadth of character. And this was indeed the case. His judgment, tact, and sound knowledge of affairs obtained for him, both publicly and privately, a great influence in Sheffield and its neighbourhood. He was a good, warm, and cheerful man of manner, who was particularly endeared him to his patients. Children seem to have made an especial favourite of him.

Mr. Favell was born in 1832. The family had lived for many generations in Sheffield and the neighbouring midlands. A good number of the Favells had been members of the medical profession. Mr. Favell studied medicine first at the Sheffield Medical School, and then at St. Bartholomew's. After qualifying in 1853 he joined his father in practice in Sheffield.

In 1858 he was elected Surgeon to the Infirmary, and he held the

appointment for thirty-five years. Increasingly during this time he became a strong support to this institution, for, apart from his professional work, by his influence with wealthy patients, and in the town generally, he was able at various times to assist its funds.

As a surgeon Mr. Favell was a careful operator, and although in later times his practice did not allow him time to enter fully into the more recent developments of surgery, he was quite open-minded towards them, and was quite willing, when his colleagues desired it, to put them into practice. On his retirement in 1893 the Governors of the Infirmary decided to make some public recognition of his long and eminent services.

A sum of £940 was raised with the object of placing a portrait of Mr. Favell in the Board Room of the Infirmary. The presentation of the painting was made by the Duke of Norfolk at a meeting in the Cutlers' Hall; the meeting was an eloquent testimony to the position of Mr. Favell among the townsmen. At the time of his retirement also he was elected Consulting Surgeon to the Infirmary.

Mr. Favell took an active interest in professional affairs; he occupied the post of President of the Sheffield Medico-Chirurgical Society, and, at its meeting in Sheffield, was President of the Yorkshire Branch of the British Medical Association. In 1890 he was elected President of the Medical School, and became the recognised leader of the profession in Sheffield. He was very enthusiastic in support of the scheme for the amalgamation of the Firth College and the Medical School, and for their incorporation in the Victoria University. He was nominated as one of the Vice-Presidents of the proposed University College. In 1888, at an election, Mr. Favell was returned as a member of the Town Trustees. In 1890 his name was added to the Commission of the Peace; he was very regular in his attendance on the Bench.

He married in 1861, but two years later Mrs. Favell died, leaving one child, a daughter.

His funeral on November 3rd was largely attended by representatives from the various bodies with which he was connected, by his professional brethren, and by the public.

E. LAWSON PAWLETT.

We have, with a feeling of deep regret, to record the death of Mr. E. Lawson Pawlett at the Essex County Asylum, Brentwood, on October 18th, at the early age of twenty-four. As many of us know, he was warded in Matthew in the spring of this year for pleurisy; when he became convalescent he went to Brentwood to take the *locum* at the Asylum.

He regained much of his former health, but early in September he developed broncho-pneumonia, followed three weeks later by typhlitis, to which he succumbed.

Both among the members of the staff with whom he came in contact and his colleagues he was much esteemed, and his death was felt as a real loss by all who knew him.

The funeral took place at Brentwood on the 21st, the number of floral tributes being very large, many of them coming from his former colleagues.

Reviews.

BACTERIOLOGY AND INFECTIOUS DISEASES. CROOKSHANK. Fourth Edition. Lewis, London.

In reviewing a work of over 700 pages it is well to define one's standpoint. The beginner in bacteriology soon inquires, "What is the best book to read?" The physician who has a slight acquaintance with bacteriological procedure wishes to have a book to which he may refer on matters of current dispute. Let us, then, consider if the beginner and the physician can be recommended to purchase this book.

It is not uncommon for the beginner, who has washed frequently and passed many times through the flame with success, to find at last his fortune checked by the process of "flagella" staining. On page 90, eight methods or modifications for staining flagella are described without any comment or hint as to which is the most satisfactory. In describing Löwenstein's method we find the statement, "For some bacteria it is necessary to modify the solutions either by the addition of acetic or sulphuric acid, or by varying the quantity of soda solution," but no idea is given of the strength of these solutions. Also under Van Ermengem's method we find no mention of the strength of the solution of silver used. These to a beginner are surely fatal omissions. On page 105 we find a familiar picture, which we have always considered to be a picture of an unnecessary procedure (viz. inversion of the tube to be inoculated), whereas on page 108 we find the picture of a quite

adequate procedure, which justifies us in considering the former unnecessary. It is better not to confuse the beginner in this way, as he sooner or later inverts liquid cultures, much to everybody's discomfort.

We think the difficulty of making agar-agar plate cultivations is exaggerated. The method is a very important one, as, for instance, in making a rapid diagnosis of a suspected cholera case. Provided the beginner makes certain that there is no opacity in the melted agar, there should be no danger of inequalities in the plate, and with subsequent inversion of the plate a successful result can readily be obtained.

The method described for preparing nutrient gelatine is that of a meat infusion gelatine, but a meat decoction gelatine is more rapidly made, and equally good.

For preparing nutrient agar it is recommended to soak the agar in salt water overnight, but an equally efficient and more rapid method is to soak the agar in dilute acetic acid for twenty minutes, and it is quite unnecessary to filter the agar through flannel.

Rapidity of manufacture is often demanded, and simplicity must appeal especially to the beginner, and to those of whom there are still many, who have not been trained in laboratories. The busy practitioner need not possess an ice-pail or ice-cupboard (p. 100) in order to make excellent gelatine.

The elaborate instructions (they might suffice for a major surgical operation) given for making potato cultures would tend to confirm the beginner in his belief that he must always be sterilising something, frequently with the result that when the essential time comes for having an instrument sterile, it is forgotten, so much has already been expended in "ritual."

We have referred to the various pages in the index given under Gram's method, but nowhere have we found any statement as to the object of this special method, nor any classification of common bacteria, according as they do or do not stain in this way. Friedlander's bacillus, moreover, does not stain with Gram, though on page 235 this method is given. For page 296 in the index, under Weigert, we think 96 should be read.

We have selected such points as these for criticism, because they illustrate the difficulty of attempting in a general treatise what can be best done in a special practical work. Detail in a method is frequently of the greatest importance, and in bacteriology as in other kindred sciences, we consider it will be found best in books to separate "practical" from "theoretical" matter.

These points, however, may be considered of minor importance. Let us now consider the physician who is interested in bacteriological problems, and who may conduct investigations in his spare hours. Suppose he wishes to isolate typhoid bacilli from the viscera of a typhoid patient, or from the urine or stools during life. He is left completely in the dark as to how he should proceed, and certainly would not succeed in the case of the stools if he relied simply on his general knowledge of procedure. This, again, is an illustration of how in practical matters this work is deficient. No mention is made of Elsner's potato-gelatin method, though it is described in works published previously to this. Let us leave this practical matter aside, and consider now how the subject of typhoid fever and the typhoid bacillus is treated.

Typhoid fever is most inadequately dealt with in one and a half pages!

Of the infection of the bone-marrow, of the lungs, of the occurrence of the bacillus in post-typhoidal ulcerations and inflammatory lesions, we find no mention; nor will the physician be content when told on page 64, in a different chapter, that "an antitoxic serum has been obtained by Chantemesse." A treatise on bacteriology should provide an adequate explanation or discussion of the principles upon which such a serum treatment has been founded. To the bacillus four short pages are given, with two plates on page 344, which are in no way characteristic. In this brief description it wedged in the *Bacillus coli-communis*, and scant treatment it gives. It is not at all clearly pointed out that a *Bacillus coli* may receive all the "negative" reactions of typhoid so that not infrequently the common tests are of no use; but although an illustration of typhoid flagella after Frankel-Pfeiffer is given, there is none of the flagella of *B. coli*—an important omission, for it is now becoming recognised that this is the most certain difference between the two bacilli, viz. the number of flagella.

The whole question of *B. coli* is a complex one, and is practically left unconsidered. Its distribution, its occurrence in water, its hygienic importance, the large question of its varieties, are not so much as mentioned, not to speak of adequate discussion. Let us refer to a practical matter again. On page 148 we find Parrett's method for isolating typhoid bacilli from water described, and we

find the remarkable statement that "a few drops of the suspected water are added to the broth, and if it becomes turbid in a day or two the typhoid fever bacillus is present in the form of a pure culture." The sanitarian or physician who has taken a country house for the holiday ought surely to know that other bacteriologists use this method for separating pure cultures of *B. coli* or varieties of Proteus. Inadequate is too mild an expression to apply to this treatment of the detection of typhoid bacilli in water.

The questions of filtration, water analyses, the interpretations of the results of the latter, are at the present time matters of common interest. Filtration is not even alluded to; water analysis is imperfectly treated in four and a half pages; and we find that "the detection of *Bacillus coli-commune* may be taken to indicate probable contamination with human excreta," a statement which the most ardent supporters of this opinion would not now make without much qualification.

Let us pass to diphtheria, a subject to which the physician would naturally turn for a discussion of bacteriological views. On page 330 we find the statement that diphtheria bacilli are not found in the blood or in the internal organs. American, German, and English observers all agree that this statement is contrary to fact. What are the author's views about the *pseudo*-diphtheria bacillus? We have been unable to decide if he possesses any; in fact, we meet here, as in the case of typhoid, slight appreciation of the difficulties of the questions. It is not sufficient to say that Escherich maintained that the reaction of the bacilli to litmus broth was a distinguishing feature; not only do other observers contradict this; and our own experience goes to show that Escherich's position cannot be held; but first a definition of the *pseudo*-diphtheria bacillus should be given; and secondly, in order to understand the difficulty, the great variability of the diphtheria bacillus should be pointed out.

We have stated that filtration problems are not considered; we have pointed out practical deficiencies; and through some strange oversight, in an appendix where such objects as test-tube stands and desiccators are unnecessarily described, we find no mention of the Pasteur-Chamberland or Berkefeld filters.

In its treatment of typhoid fever and diphtheria, in our opinion the book is deficient. The same defect is noticeable in cholera, bacteriological questions belonging to which are even more difficult, and round which controversy has been fierce. But the same method is pursued, the isolated statements of various observers follow one another casually; there is no attempt at a critical appreciation of the controversy. Cunningham's work on the variability of the comma bacillus is not alluded to, Gruber's test, Pfeiffer's test, and Bordet's test *in vitro* are all absent; the subject is imperfectly understood.

But if these be deficiencies, there are still greater. In our opinion, laying aside these matters we have simply alluded to, the most conspicuous failure in the book is to be found in chapter v, where the subject of immunity, so complex and of such practical import, is gossiped about in six pages. We use the expression "gossiped" with intention, for in the *Nineteenth Century*, some years ago, the subject was similarly treated from the popular point of view, even at greater length than we find here, but quite as effectively.

It would have been well to omit the subject entirely, and ignore it as so much else in this work. We stated at the outset the standpoint from which we looked at this book.

The parts of the book that we have not considered have been what we may call the "veterinary diseases." If this work were reduced by a half to three quarters in size, we think it might be of value as an elementary work on infectious diseases in animals, discarding its present far too comprehensive title, though even here we have noticed in passing that the mortality from rabies previous to the Pasteur treatment is not mentioned, and NoCARD's important results on the value of tetanus antitoxin as a preventive treatment are ignored. We can only trust that the veterinarian's opinion of the book is not as unfavourable as our own.

A MANUAL OF INFECTIOUS DISEASES. By E. W. GOODALL, M.D., and J. W. WASHBOURN, M.D. London: H. K. Lewis, 1896. Demy 8vo., pp. 308, price 15s.

We looked forward with interest to the publication of this work. Such a book was needed, and, by two such authorities as Dr. Goodall and Dr. Washbourn, we felt that full justice would be done to the subject. Nor were our anticipations disappointed. The book throughout is thoroughly practical, and the subject—always an irksome one to medical students—is presented in a most attractive manner.

The book consists of twenty chapters, the first four of which are

devoted to general matters. Thus, in Chapter I, fever in general is discussed; and here, while commending the minor position that the authors assign to the temperature in fever, both in its treatment and as an explanation of the various symptoms met with, we could yet have wished for fuller remarks upon the known or suspected heat-regulating mechanism. Chapter II deals with contagion and infection, and contains a very considerable amount of bacteriological information, both theoretical and technical. Special praise, we think, is due for the thorough manner in which the bacteriological aspect of the subject has been approached. This is manifest not only in this chapter, but throughout the book, and again at the end, where in Appendix I are several formulæ for staining-solutions, while Appendix IV deals with the Report of the Medical Superintendents of the Antitoxic Serum of the Metropolitan Asylums Board on the use of antitoxic serum in the treatment of diphtheria. In addition, there are five capital plates of photographs illustrating the micro-organisms of diphtheria, influenza, typhoid fever, erysipelas, and anthrax. Chapter III is on disinfection, and describes the methods upon which most reliance may be placed.

Strong doubts are laid upon the germicidal value of sulphur dioxide; and here we note with satisfaction that three pounds of sulphur are stated to be required for every 1000 cubic feet of air space, instead of one pound, as usually given in treatises on Hygiene. Chapters IV and V should prove most useful to the beginner, the former describing, as it does with clearness, the several rashes simulating those of the specific fevers, while the latter is devoted to sore throat. The remaining fifteen chapters embrace the specific diseases—scarlatina, diphtheria, measles, rubella, smallpox, vaccinia, chicken-pox, whooping-cough, mumps, epidemic influenza, typhus, relapsing and enteric fevers, erysipelas, and anthrax. Their treatment in some instances seems to us somewhat scanty, more especially is this the case in typhoid fever; and here we must take exception to the stringent rule which the authors lay down as to the date of removal of the patient from his abode. To say that, on account of the risk of perforation, he is never to be removed to a hospital after the close of the first week of the disease may be ideal, but we fear the rule must often be infringed. The largest number of pages have been allowed to scarlet fever and diphtheria—to the former 53, to the latter 55 pp.; next come smallpox and vaccinia with 42 pp., while 40 pp. are devoted to enterica. We entirely agree with the attitude taken up by the writers upon the vexed question of the meaning of the word "croup" in relation to diphtheria.

The distribution of the rashes of the various fevers are well illustrated, and in a novel manner, by the introduction of diagrams, of which there are fifteen. There are several temperature charts, mostly taken from actual cases under the care of the authors. And, in addition to the two appendices above referred to, are two others; one deals with the rules of the Metropolitan Asylums Board relating to the removal of patients suffering from infectious diseases, while the other consists of a useful table showing the incubation periods and dates of eruption, &c., of the most common infectious diseases.

We have read the book with pleasure, and can with confidence recommend it to students, for whose use it was chiefly designed; thereby, however, by no means implying that its sphere of usefulness will be confined to them alone.

Correspondence.

To the Editor of St. Bartholomew's Hospital Journal.
THE NOMENCLATURE OF THE WARDS.

DEAR SIR,—Will you allow me to congratulate Mr. Howard Clarke upon his most interesting paper in the November issue of the JOURNAL on "The Nomenclature of some of the Wards"? Mr. Clarke has made a little slip in regard to the date of Stanley's birth. He was born the son of Edward, 3rd July, 1793. The error is a slight one, but it is in danger of being perpetuated, as in some of the authorities I consulted when writing a short account of this surgeon for the "Dictionary of National Biography" I found that year was wrongly given as 1792, and Mr. Clarke has no doubt been misled by them.

I am, yours very truly,
D'ARCY POWER.

105, Chandos Street, Cavendish Square, W.;
November 21st, 1896.

To the Editor of St. Bartholomew's Hospital Journal.

THE SEXUAL SENSE AND THE X RAYS.

DEAR SIR,—In January or February, 1896, it struck me that in the then recently discovered X rays, we had an explanation of the sexual sense of moths. Such a sense had long been suspected, but the medium by which it was conveyed has never been determined, because it seemed to penetrate such things as wooden boxes, and material through which neither light nor matter could pass. If then the female moth gives out these rays, it is possible that the male has organs of sensation capable of receiving these rays, perhaps situated on the antennæ.

This theory I had long intended putting to the test, but owing to the difficulty of obtaining time and material I have hitherto been unable to make the experiment.

If any readers of the ST. BARTHOLOMEW'S HOSPITAL JOURNAL have time and opportunity to make the experiment, I should be glad to hear of the result.

It would not be difficult to determine whether the female moths emanate rays which affect a photographic plate through material opaque to ordinary light.

There is one other point which struck me, and that is that the light of the glowworm was due to these rays emitted by the glowworm, and acting on some phosphorescent substance which the glowworm carries. This would, of course, indicate the evolution of the sexual sense from a sense acting through the X rays to a sense acting through light rays.

W. F. LLOYD.

December 2nd, 1896.

To the Editor of St. Bartholomew's Hospital Journal.

SISTER MAGDALEN FUND.

DEAR SIR,—During the past month the following donations have been received on behalf of Mrs. Boyce (late Sister Magdalen), who again asks me to express her sincerest thanks to her friends for their kind assistance.—Yours faithfully,

EDGAR WILLETT.

	£	s.	d.		£	s.	d.	
Amount already acknowledged	45	1	6	J. H. Manuel, Esq.	...	0	10	0
J. F. Steedman, Esq.	1	1	0	Miss Annie Brown	...	0	2	6
John Adams, Esq.	...	0	10	Miss Bristow	.....	0	2	6
P. H. Dunn, Esq.	...	0	10	Total	.....	£48	9	0
F. W. Strugnell, Esq.	0	10	6					

Births.

BAKER.—On November 28th, at 5, Giedlow Gardens, South Kensington, the wife of C. Ernest Baker, M.B.Cantab., F.R.C.S. Eng., of a daughter.

BURGESS.—On September 19th, at Wagga Wagga, N.S.W., the wife of T. W. Burgess, M.R.C.S., L.R.C.P., L.S.A., of a son (Thomas Whitley).

HOUGHTON.—On December 1st, at The Chalet, Lindfield, Sussex, the wife of Philip A. Houghton, of a daughter.

Marriage.

DE SEGUNDO—BASTOW.—On November 21st, at St. Bartholomew's the Great, Smithfield, by the Rev. Sir Borradaile Savory, Bart., Rector, assisted by the Rev. W. Hind, Charles Scupill de Segundo, M.B., B.S.Lond., to Gertrude Lucy, third daughter of the late T. W. Bastow, of Plymouth.

ACKNOWLEDGMENTS.—Guy's Hospital Gazette, St. Thomas's Hospital Gazette, St. George's Hospital Gazette, St. Mary's Hospital Gazette, Magazines of the London School of Medicine for Women and Royal Free Hospital, The Nursing Record, The Hospital, The Charity Record.

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NOTICE.

All Communications, Articles, Letters, Notices, or Books for review should be forwarded, accompanied by the name of the sender, to the Editor, ST. BARTHOLOMEW'S HOSPITAL JOURNAL, St. Bartholomew's Hospital, Smithfield, E.C., BEFORE THE 1ST OF EVERY MONTH.

The Annual Subscription to the Journal is 5s., including postage. Subscriptions should be sent to the MANAGER, W. E. SARGANT, M.R.C.S., at the Hospital.

All communications, financial or otherwise, relative to Advertisements ONLY, should be addressed to J. H. BOOTY, Advertisement Camvasser and Collector, 29, Wood Lane, Uxbridge Road, W.

A Cover for binding (black cloth boards with lettering and King Henry VIII Gateway in gilt) can be obtained (price 1s. post free) from MESSRS. ADLARD AND SON, Bartholomew Close. MESSRS. ADLARD have arranged to do the binding, with cut and sprinkled edges, at a cost of 1s. 6d., or carriage paid 2s. 3d.—cover included.

St. Bartholomew's Hospital Journal,

JANUARY 14th, 1897.

"Æquam mentem rebus in arduis
Servare mentem."—Horace, Book ii, Ode iii.

Pathological Jottings.

By A. A. KANTHACK, M.D., Lecturer on Pathology.

III.—FATTY DEGENERATION.

FATTY changes are observed in the tissues and organs in many diseases and under the most varied conditions. Although they are as a rule the effect of a general lesion, it is obvious that they themselves must produce disturbances and impairment of function, and may become the starting-point or cause of other lesions and morbid states. Before discussing the nature of fatty changes it will be advisable shortly to state the varieties of fatty changes as they are generally found in the body.

1. We may have first an accumulation of fat in situations where it normally exists, e.g. (a) in the panniculus adiposus;

(b) in the omental tissues; (c) in the epicardium; (d) in the bone-marrow; and (e) in the liver, where at certain periods after the ingestion of food fat is always found.

Such accumulation may be (1) temporary or transient, as, for instance, in the athlete who is "beefy" and out of training, and then it is hardly pathological; or it may be (2) permanent and lasting, when it is morbid. Thus in obesity or lipomatosis, to adhere to the modern language, there is always a considerable storage of fat in the subcutaneous and omental tissues, and the liver of a beer-drinker, especially of one devoted to German "Brau," is generally exceedingly fatty. The accumulation obviously must be due to one of two processes, or probably to both of them: either the supply of fat-forming material is excessive, and too much fat is formed by the cells; or the fat formed is not split up as quickly or completely as it ought to be, because the cells are badly nourished, exhausted, or impaired somehow. It is evident that when the accumulation has been carried to excess, or has been allowed to persist for a long time, gradually the functions of the fat-laden organ or tissues become impaired, and therefore, if the causes which in the first instance led to the fatty changes prevail, the combustion or splitting up of the deposited fat will also be impaired, so that the vicious circle is once more established:—impairment of the cell function leads to fat accumulation, the latter increases the impairment of the cell function, and so on. When we have said that the accumulation of fat is due either to over production of fat or to failure of combustion, or to both, we have merely suggested what is obvious, but we have not given an explanation of the process. We do not know why fat should be stored up in some people and not in others living under the same conditions, why obesity should be commoner amongst women than amongst men. Some people "run into fat" on any diet, and whatever they may do to keep their flesh down; others it is impossible to fatten anyhow. We do not understand the idiosyncrasies of the individuals, nor the relations which exist between sex and obesity, between reproductive activity, ovarian, uterine, or thyroid disease and obesity, nor do we understand the laws of heredity or inherited tendencies, and

theoretical explanations which are merely paraphrases do not advance matters one jot. If we say that the accumulation of fat is due to want of oxidation, does that tell us why in an active or otherwise healthy woman the menopause, or some uterine or ovarian disease, should produce lipomatosis? One can understand partly why alcohol should produce an accumulation of fat, because we know that it impairs oxidation, but what one cannot understand is why it should produce such accumulation only in some individuals.

We cannot, therefore, state in concise and definite terms the causes of fat accumulation; all we can do is to draw attention to some leading, or it may be predisposing factors. Amongst these we have (*a*) inherited or congenital tendencies; (*b*) certain habits of life, such as indolence and sedentary seclusion; (*c*) errors of diet; (*d*) chronic poisoning (*e.g.* alcohol); (*e*) sex, and diseases and morbid states of the reproductive organs in women; (*f*) morbid states of the liver, or pancreas (?), or thyroid gland (?).

The feature of a truly morbid accumulation of fat is its progressiveness, and that, as we have seen, is easily understood. So long as it is merely an exaggeration of ordinary physiological conditions, and due to errors in living, eating and drinking, it may be set right again by correcting these errors, if the uncontrollable tendencies or morbid states be absent.

2. Secondly, we may have an extension of fat into tissues which normally are free from fat.

Thus fat may appear (*a*) in the intermuscular tissue of the heart, spreading thither from the epicardial fat; (*b*) in the interstitial tissue of skeletal muscle; and (*c*) in the endocardial connective tissue.

In the fatty heart of an obese person we have first an accumulation of the epicardial fat, which then spreads between the muscle-fibres, especially of the right ventricle, and may extend until it reaches the connective tissue under the endocardium. These changes are most commonly observed in lipomatosis.

The condition just defined, and that previously described as fat accumulation, are generally included under the single term *infiltration*. The accumulation and the extension of fat along the interstitial tissue commonly occur together in the same organ, and in the same individual they may affect one organ alone, or all the organs and tissues capable of fatty changes; or fat accumulation may be so local as to produce a distinct tumour—a lipoma. In fatty accumulation the fat is, as a rule, collected in the cell in the shape of large drops or droplets, the nucleus being generally pushed to one side; the cell substance or protoplasm is sound, and after disappearance of the fat shows no defects.

3. We must now pass to the third process, *viz.* *fatty degeneration*. In fatty accumulation the fat is formed in the cell and stored up by it, but if the fat is formed at the

expense of the cell albumen the result is fatty degeneration. The cell substance then becomes obscured, and contains larger globules or numberless small granular droplets of fat, which may be so densely packed as to hide the nucleus of the cell or obscure the structure of the tissue. The cell protoplasm eventually is destroyed, so that on dissolving the fat out the cell would appear vacuolated. Fatty degeneration is, therefore, a destructive process, a metamorphosis. It is best studied in the cardiac and voluntary muscles, in the liver cells and renal epithelium, in the pus cells and nervous tissues.

The causes of fatty degeneration must be conditions which produce serious disturbance of the nutrition or vitality of the cells. Amongst these the principal are (*a*) changes in the blood and nutriment supplied to the cells, as, for instance, in diabetes and various forms of cachexia; (*b*) vital depression and asphyxia of the tissues, *e.g.* venous engorgement, inflammation, pressure, fever, and starvation; (*c*) local and general anæmia, *e.g.* hæmorrhages, leukæmia, pernicious anæmia, and carbon monoxide poisoning; (*d*) intoxications, which include (1) bacterial intoxications (infective fevers, such as diphtheria, pneumonia, &c.); (2) intoxications by chemical poisons, such as phosphorus, arsenic, carbolic acid, corrosive sublimate, and alcohol; (3) so-called auto-intoxications (*e.g.* acute yellow atrophy); (*e*) nervous lesions, which may lead to fatty degeneration in the muscles; (*f*) disuse of the muscles from whatever cause; and (*g*) fatty accumulation and infiltration.

The extent of the fatty degeneration varies with the condition producing it. Thus a local anæmia, circumscribed pressure, or a focal inflammation can only produce a limited area of degeneration. Given a general cause, certain organs are more predisposed than others—as, for instance, the liver, heart, and kidneys; but one organ may be affected while others escape, although the cause be a general one. Thus, in leukæmia, the heart shows the fatty degeneration more strikingly than other organs, or it may be the part solely affected. In a single organ the degeneration, again, may be general or focal. Thus, in the kidney, the cortex, as a rule, suffers alone, and often only the irregular and second convoluted tubules or the loops of Henle, although the cause be a general intoxication (*e.g.* diphtheria).

As to the process of degeneration in the cell our knowledge is a blank. Gautier's view is that, under physiological conditions, the cell passes through two phases: (*a*) one of hydrolysis, during which the protoplasm changes into urea and its allies, and the carbohydrates are converted into fat. This is followed by (*b*) the second phase of oxidation, during which the sugars partly disappear, partly change into fat, and eventually the fats are burnt up. Imperfect oxidation, therefore, would produce a change of the cell protoplasm into fat. Pavy, who holds that protoplasm is a glucoside, believes that through some ferment action the carbo-

hydrate nucleus is converted into a hydrocarbon. Both views are unsatisfactory; Pavy's because there is no certain evidence regarding the glucoside nature of protoplasm, and Gautier's because it belongs to the realm of pure theory.

An important point is that long-continued or excessive fatty accumulation will lead to fatty degeneration. We may observe this in the heart, pancreas, or liver. The fat, which has extended into, and accumulated in, the intermuscular substance, produces pressure on the muscular fibres, and thus impairs their nutrition, and the result is fatty degeneration. Similarly, a liver heavy with accumulated fat eventually degenerates, and in a fatty pancreas the glandular substance also becomes fatty, and finally may disappear altogether. This is due to two factors: (*a*) the fat accumulation reacts deleteriously on the vitality of the nobler structures; and (*b*) the agent which produced this accumulation is often a tissue poison (*e.g.* alcohol), which, causing first an accumulation of fat, will then continue to act on the already impaired tissues and advance the degeneration. Similarly, the continued consumption of carbohydrates must be harmful to liver cells already overloaded with fat.

We may now briefly study the fatty changes in the more important tissues or organs.

(1) *Heart*.—Here we may have (*a*) an accumulation of the epicardial fat, which may become so excessive as to almost surround the whole heart. (*b*) This fat may spread into the myocardium along the intermuscular tissue, and may there increase considerably and extend as far as the subendocardial tissue. (*c*) This accumulation of fat around and between the muscular substance of the heart may cause fatty degeneration of the muscular fibres themselves. (*d*) The degeneration of the myocardium may be primary, without there being any accumulation of the fat normally existing. It is then generally patchy, giving rise to the well-known "tabby-cat" striation, and the degenerated fibres appear granular and are obscured by innumerable minute droplets of fat, and lose all striation.

(2) *Voluntary Muscles*.—The changes observed in these structures are exactly analogous to those in the cardiac muscle.

(3) *Kidney*.—The fatty changes in the kidney are always degenerative, and they generally accompany other lesions, such as so-called parenchymatous or interstitial nephritis. Occasionally, however, they occur independently, for instance, as the result of phosphorus, arsenic, metallic or carbolic acid poisoning, or as the result of anæmia, diabetes, infective fevers, or circulatory disturbances. They may be diffuse or focal, and in either case are generally restricted to the cortex. When focal—as, *e.g.*, in diphtheria—the loops of Henle and second convoluted tubules are affected; when general the degeneration spreads also to the large convoluted tubules, the Malpighian bodies, and even the connective tissue. The fat droplets appear first

in the part of the cell nearest the membrana propria, then gradually they occupy the whole cell, and eventually the cell may break down completely and be cast off. Sometimes large globules of fat are found, considerably distending the cells.

(4) *Aorta*.—The branched cells of the intima are filled with innumerable droplets of fat, the nucleus being obscured, although itself often not degenerated. The fatty changes are best observed in certain stages of atheroma.

(5) *Nerves and Nervous Tracts*.—Fatty changes in nerves are easily recognised in so-called peripheral neuritis. The myelin sheath breaks up into globules and irregular masses of fat, which stain intensely black with osmic acid, and analogous changes may be observed in the cord in cases of degeneration, whether ascending or descending. The result of degeneration of the nerves controlling movement is of course impairment of muscular function, and this is accompanied by the fatty changes above alluded to. It may here be remarked that normal myelin does not stain black with Marchi's fluid (solution osmic acid in dilute Müller's fluid), although ordinary body fat (which is a neutral fat) does. The myelin has therefore been changed into fat.

(6) *Liver*.—Lastly, we come to a consideration of the fatty changes in the liver. Next to the heart they have been most completely studied in this organ. Generally a careful distinction is drawn between fatty infiltration and fatty degeneration. It will be seen that I have scrupulously avoided the term infiltration, because there is no evidence whatever that fat is ever infiltrated. It is formed normally under certain conditions in the liver, but how it is formed we do not know. It is presumably the function of the liver cells to manufacture fat, but what justification is there for calling the process an infiltration? The intestinal epithelium absorbs fat from the intestinal contents, and leucocytes and phagocytes take up fat granules from a degenerated area: these are the nearest approaches to an infiltration; it is, however, an ingestion, followed probably by assimilation and digestion. The fat appearing in the tissues under normal conditions, whether in the secreting mammary gland in the liver, or in the panniculus adiposus, has been produced by chemical action or by a fatty metamorphosis from the albuminous cell protoplasm, and that cannot be called an infiltration. In fact, the physiological secretion of milk depends on a true, though partial, fatty degeneration of the cells lining the alveoli.

Pathologists, as we have said, are in the habit of distinguishing between the fatty infiltration and degeneration in the liver, and their criteria are partly anatomical, partly morphological. Thus in fatty infiltration the globules are said to be large, and arranged either at the periphery of the liver acini, or centrally around the intra-acinous vein, or in the interstitial tissue between the acini; while in degeneration the droplets are said to be small, to cover the whole cell surface, and the metamorphosis is stated to be as

a rule general. It is asserted that in the former case the fat has been stored up in the cell, in the latter it has been formed at the expense of the cell substance. Most observers describe infiltration in obesity, nutmeg liver, phthisis, cirrhosis, and similar conditions on account of the anatomical distribution and morphological appearances of the fat. We can understand that in obesity, at least in the early stages, there would be an accumulation of fat without the cell suffering, the cell being over-active and forming fat from the material generally supplied in excess; but we cannot understand that a true accumulation or infiltration could occur in diseases in which the fat disappears from the subcutaneous and omental tissues, *i. e.* in wasting diseases. In them the fat must have been formed in the cell, and at the expense of the cell, whether the appearances are those of infiltration, or degeneration as generally described. In the obese person the liver cells, after forming an excess of fat, are capable of replacing the cell albumen which has been used up in the manufacture of fat, and only when they cease to do this degeneration will also appear. As Cohnheim puts it, the guiding rule of distinction between degeneration and infiltration, or, as I prefer to say, accumulation, is this: "does the fat occupy a cell with diminished or normal albuminous contents?" In the early stages of obesity there is merely an accumulation of fat in the "legitimate localities;" in the later stages this becomes excessive, and the fat extends beyond these localities, and as far as the liver is concerned, instead of being restricted to the periphery of the lobule occupies the whole of it, producing a large fatty liver. The accumulation of fat in this case is probably due to the two factors mentioned previously, *viz.* incomplete oxidation and excessive supply of the precursors of fat; it is not, to begin with, an atrophy, although eventually this also may follow in some of the organs (*e. g.* heart and liver). We must agree with Cohnheim that the fatty changes observed in the liver with anæmia, phthisis, cancer, &c., are all true fatty atrophies, whatever they may appear to be on histological rules laid down more or less arbitrarily. In phthisis the fat is often found in large drops at the periphery of the hepatic lobule, and many describe this as infiltration or accumulation without degeneration. They believe that the excessively fatty liver of absolutely emaciated consumptives is due to an infiltration with fat, which has been formed elsewhere during the process of wasting. How can it be? The fat must have been formed at the expense of the cell substance, and it remains *in situ* on account of diminished combustion. The fatty changes of starvation are also certainly atrophic.

Hence I can only regard as accumulation—or infiltration, to use the more familiar term—(a) the normal physiological storage of fat, (b) the transient accumulation in those of sedentary habits, and (c) all but the most advanced stages of obesity. All the other conditions

are atrophic, *i. e.* fatty degeneration. But that being so, as far as the liver is concerned, we must distinguish two varieties of fatty degeneration. (1) In one the destruction or disintegration of the cell albumen is rapid and excessive, so that the cells break down quickly,—as, for instance, in acute yellow atrophy, phosphorus and arsenic poisoning; (2) in the other the cell destruction is very slow, so that the fat formed at the expense of the cell substance has a chance of accumulating for a long time (*e. g.* phthisis, anæmia, cachexia). The local fatty changes in the liver are also atrophic, and may be produced by pressure of tumours or by the contraction of newly formed fibrous tissue. It is curious that Ribbert considers that the fatty changes in cirrhosis of the liver are generally due to infiltration. There can be hardly any doubt that they are atrophic, and some observers go even so far as to believe that the atrophy is the primary factor which stimulates the interstitial tissue to repair. "*Degenerate tissue, if not regenerated, is replaced by connective or fibrous tissue.*"

This brings us to the last point, *viz.* the determination of fatty changes. An accumulation may either disappear by oxidation and resorption on change of habits, or it may pass on to degeneration. Degeneration, especially if local, may be repaired by restitution of the tissue (*e. g.* in muscles and nerves), the fat granules being removed by phagocytosis or oxidation; or it may end in complete disintegration, death, and necrosis, and may then be replaced by fibrous tissue, *e. g.* sclerosis of voluntary muscle or of the nervous tracts in the cord, in accordance with the law expressed above.

I am glad to find that also on this subject of Fatty Changes I find myself almost completely in accord with Cohnheim. We must use the terms Infiltration and Degeneration critically, and if we apply physiological and biological facts, we must come to the conclusion that many of the ordinary criteria are arbitrary, and that the term Infiltration had better be abandoned altogether.

In my next article I shall discuss the subject of Amyloid Degeneration.

The Details of Ovariectomy and Disputed Points in After-Treatment.

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VARIOETOMY need no longer be discussed as was the custom between 1858 and 1878. Sir Spencer Wells, who had a larger share than any other surgeon in establishing it as a legitimate operation, gained his point by great attention to matters of detail. In this respect Wells's method remains the right method—the basis, in fact, of modern abdominal surgery, of which ovariectomy is the type. The merits

and demerits of each step in an operation, each instrument, each material for ligature, suture, and so forth, are to be discussed and reported, so that the evil—as in the case of the clamp—may be made clear as well as the good. On the other hand, we may dispense with all arguments, now superfluous, as to the justifiability of ovariectomy. When such arguments were needed, Wells and others wrote and acted in a manner which was right and necessary then, but not to be imitated by us who live and work, thanks to these authorities, under altered and improved conditions.

This evening I will briefly review ovariectomy as now practised. Of course, a complete sketch of the operation would require a short course of lectures, but I have selected without difficulty much that is suited for the consideration of the members of a society.

Diagnosis and after-treatment are inseparably bound up with our subject, especially after-treatment, the more so when we find how success is attained by the most opposite ways of managing the patient after she has left the operating table.

After all, diagnosis is only important, at present, in respect to exploration, which is, indeed, a diagnostic agent. An ordinary ovarian cyst, not too closely connected with the uterus, is very easy to detect; but complications may baffle the most experienced clinical observer. Thus menorrhagia in a woman aged about forty, with irregular semi-solid tumours of both ovaries, with short pedicles, may naturally lead the surgeon to suspect uterine myoma, especially if the uterine cavity be enlarged. Indeed, I have seen ovarian disease of this kind co-existent with fibroid disease of the uterus. An early exploratory incision is justifiable in almost any case of abdominal tumour, excepting for very self-evident uterine myomata which grow slowly and give no trouble, and for equally evident cases of malignant disease already extending beyond the limits of the primary growth.

Tapping should be discarded, except in cases of acute lung disease where the bulk of fluid seriously increases the dyspnoea, whilst the patient cannot at the time bear an operation. There are manifest objections to paracentesis. I recently made an exploratory incision in a patient whose abdomen was tensely distended with ascitic fluid. The uterus was fixed, and there were masses in Douglas's pouch. I was naturally inclined to believe that there were free papillomatous growths in the pelvis. But as the ascitic fluid escaped, a large cyst appeared, firmly bound down by adhesions. It rose from the pelvis and pushed up the pelvic peritoneum on the right side. On tapping it clear fluid escaped, but it was irremovably fixed by papillomatous growths to the pelvic viscera. Had I tapped instead of exploring, I might have wounded some gut adherent to the front of the cyst; and as the escape of fluid would have exposed the outline of the cyst, I should have been obliged to explore. In fact, tapping usually means two operations instead of one. It is just in the most doubtful cases that tapping is most dangerous. I have known the intestine to be wounded by a very good surgeon, and the puncture of a cystic uterine myoma mistaken for an ovarian cyst, has led sometimes to dangerous hæmorrhage, and sometimes to fatal results from damage to uterine sinus.

Infection and age are in themselves no bar to operation. Menstruation is sure to be taken into account by the operator. He will not go out of his way to operate during menstruation, for, amongst other objections, it is not possible to clean the patient thoroughly at the period. The dangers of operating when the catamenia are present have, however, been greatly exaggerated. "Psychical disturbance" is dreaded; but I find that the postponing of an operation because a period has set in prematurely often causes unusually severe disturbance, physical as well as mental. A "show" brought on prematurely, usually by the passage of the sound, is probably an indication of purely local changes confined to the endometrium. It must be remembered that hysterectomies undertaken during profuse show, sometimes truly catamenial, do not so far seem to fare worse than those performed when there is no such show. In ovariectomy no bleeding mucous cavity is opened. I admit that premature show, after ovariectomy, is often preceded by a rise of temperature. But I know from experience that there is usually no rise when ovariectomy has to be done during the true period.

The presence of other diseases makes ovariectomy complex rather than complicated. Phthisis when not very active is improved by the removal of the cyst, but irregular rises of temperature must be expected during convalescence. Acute bronchitis is a dangerous condition, and one of the few where paracentesis is allowable, at least when there is clear evidence that a large unilocular cyst fills the abdomen. The ovariectomy should be done as soon after recovery as possible. Chronic bronchitis is of necessity more or less serious. Certainly the tumour must be removed, for it aggravates the visceral disease; but some of such cases are likely to be lost. I refer to cases

with chronic pulmonary disease and ovarian tumour complicated by bad adhesions or suppuration. Care must be taken to strap the lower ribs after a tumour has been removed from a patient with bronchitis. The same precaution is advisable whenever very big all in old subjects. Albuminuria with visceral disease is serious, but when a large cyst or tumour exists, yet the patient feels quite well, and has a good appetite, the presence of a small amount of albumen in urine of a fair specific gravity, freshly secreted, means, I know, that the urinary tract suffers through the presence of the cyst. After its removal the albuminuria disappears. I have had three such cases last October. I cannot dwell on the long question of the relation of this purely mechanical albuminuria to the albuminuria of pregnancy. The latter ceases after the tumour, that is the fœtus and placenta, has come away. But eclampsia in cases of ovarian tumour is unknown. There is no ovarian nephritis like the nephritis of pregnancy I showed, however, in your *Hospital Reports* for 1878, how often the kidneys are unaccountably in ovarian disease.

Coming to treatment immediately before the operation, I may say that any rational manner of clearing the bowels is suitable for the patient. There are two irrational practices. One is the administration of purgatives within twenty-four hours before ovariectomy. Distressing tenesmus or troublesome and dangerous flatulence may ensue after the operation. Another is carelessness about scybala till within a day or two of the operation. This may allow large masses to remain after the passage of a fair collection of hardened feces when the final enema has been given.

Free scrubbing of the abdomen and careful disinfection of the umbilicus are always needed, and the pubes should be shaved on the night before the operation, if possible. A vaginal injection is then given, and vulvar hair washed with weak sublimate lotion.

Now we come to the operation itself. Full details would fill a small book, whilst as you are all more or less acquainted with general surgery, much would be superfluous in such a publication. I will dwell upon as much as we can reasonably consider.

Too many sponges and instruments are of course objectionable, and as Mr. Lockwood tells you, they increase the chances of sepsis. On the other hand, too few involve inconvenience. I have several times seen much trouble when only ten forceps and sponges were at hand. I use eight or ten of each, and find that number quite convenient.

Antiseptic precautions on the principles of Lister are, taken as a whole, advisable. I must once more refer to the limits of a paper, and I will content myself with saying that I still use carbolic acid, taking care, however, to squeeze all sponges before introducing them into the abdominal cavity. The operator should take off at least his coat, waistcoat, tie and collar, and wear a well-washed mackintosh apron. The waterproof sheet for the abdomen is not absolutely needed, and there is some danger that the adhesive material may be septic.

Let the surgeon when he takes up the scalpel remember general principles. There is no mystery about the abdominal wound as a wound, no glamour about silk-worm gut, no magic in drainage. The abdominal wound must be sufficiently long. Avoid the Continental practice of beginning with a four- or five-inch incision to remove even a self-evident thin-walled cyst. On the other hand, do not try feats of dexterity and "record beating," such as getting out a large cyst through a two-inch wound; never hesitate to enlarge the wound if necessary. Fear of stultification, the idea that it "looks so bad" to enlarge the wound, is a vicious principle. In July I removed a pair of colloids which completely filled the abdomen, through a three-inch incision. One cyst had burst already; the other, I admit, ruptured during extraction, but I knew that I should have to flush the peritoneum. The washing out proved just as easy as if the wound had been six inches long; indeed there was less trouble from prolapsing gut. I could see all the contents of the abdomen clearly, up to the under side of the liver. This is usually the case when the distended parietes collapse after the delivery of a large tumour. On the other hand, a relatively long wound is always needed when there is little or no distension of the abdomen, as resistance is great, so that it is hard to use the hand freely, and at the same time thick, healthy recti are easily bruised. Fixed tumours and swellings that suggest suppuration, especially pyosalpinx, require a long incision from the first. The surgeon, in determining the length of the wound, need not trouble about the hernia question. That must be taken into account when the wound is closed.

Hæmorrhage from the wound is to be stopped with pressure-forceps, which can be removed a few minutes afterwards. In taking off a forceps from a large vessel, torsion is advisable. Ligature involves not only waste of time but also needless handling of the tissues. The forceps should not be left on during the further part

of the operation, as their bows and handles are in the way and get fouled.

The abdomen being opened, the surgeon can ascertain the nature of the tumour. The most urgent question at this stage is what to do if an apparently irremovable malignant tumour be detected. An abdominal incision in a doubtful case is perfectly justifiable; tapping for diagnosis is dangerous and seldom throws any light on the case. Do not suppose that an incision is quite harmless when sarcoma or diffused papilloma is discovered. Such cases bear operation badly, but the worst is known, the worst being the death, soon after operation, of a patient bound to die soon. Fortunately we can never be sure of malignancy until the symptoms are more than pronounced. On April 17th, 1892, I operated, with qualms of conscience, on a young woman, aged 22. The abdomen measured over 47 inches in circumference, its tissues were oedematous, and the veins engorged. The fluid was evidently free; the uterus was fixed. The legs were much swollen; the patient was greatly emaciated. I made an incision, forty-five pints of dark brown fluid escaped, and papillomatous disease of the appendages was discovered. I succeeded in removing both. The patient is now alive. When a cyst is opened and found irremovable and full of malignant matter, it is best to let the cyst wall fall in, hemorrhage being checked by pressure. Fixing the malignant cyst to the lower angle of the wound and draining will usually be followed by fungous protrusion, infection of the abdominal wound, and terrible discomfort. I have seen several grim samples of the effects of this practice. On the other hand, it is not safe to suture the cyst wall over the aperture made to explore its contents, as malignant tissue will not heal, but is very likely to slough.

Let us turn from this gloomy subject and suppose that a removable cyst or tumour is discovered. Tapping and the separation of adhesions are now well understood. The rapid breaking-down of septa in a multilocular cyst only requires a little "nerve." The hand outside the abdomen must co-operate with the hand inside the cyst; the assistant should merely steady the cyst with a forceps placed on each side of the rent. But it the wall be repeatedly torn, or if the operator gets his hands through the back of the tumour into the peritoneal cavity and sees intestine prolapsing into the cyst, the state of things is in no way desperate, and with a little coolness the tumour may usually be made to slide out. The operator should immediately clamp the pedicle with a big pressure-forceps close to the tumour, as there is hemorrhage to check. One reason why Sir Spencer Wells had such relatively good results thirty years since is that he would boldly tear to rags the upper part of a big, soft, vascular, multilocular tumour, and deliver the lower part with rapidity, so that he got at the vessels quickly. Tumours allowed to grow big were common in those days. Until such a tumour is got out, the surgeon cannot secure the vessels.

Enucleation can only be understood after considerable experience in assistance at abdominal operations. A more teachable subject is the ligature of the pedicle. In all average, as well as in all broad pedicles, the outer border, including the ovarian vessels, should be tied separately. No. 3 silk (China twist) is best, unless the vessels be very big. This practice, introduced by Thornton twenty years ago, has probably saved dozens of lives at least. Penrose, of New York, goes further, and advocates separate ligature of the inner border also, that is to say, the tube and adjacent tissue are tied; the middle of the pedicle is left to take care of itself. No doubt, the first danger is slipping of the outer border, and the second danger is slipping of the inner border. I should shrink, however, from leaving the middle part unligatured, even when a normal ovary is removed for the relief of fibroid uterine disease.

Double transfixion of broad pedicles is not trustworthy. I have found that the first and second loops may loosen each other, or one may get cut through when the third is being tightened. Again, splitting of the pedicle is not rare; and three loops confuse the operator. I now adopt Penrose's practice of securing both borders when the pedicle is very broad, but in addition I transfix the middle of the pedicle, at one point only, with stouter silk (No. 4), and find the single transfixion sufficient. The ends of the silk must be made to lie accurately in the grooves already formed by the ligatures at the two borders. After enucleation of a burrowing cyst, the pedicle often shrinks to very small proportions. In other cases no true or anatomical pedicle exists, and all that can be done is to secure all bleeding vessels and to check oozing by pressure—a task not necessarily difficult.

Sloughing of the pedicle is almost unknown, though some operators leave it very long on the distal side of the ligature. I fully discussed this question in the *Hospital Reports* for 1877-8, and in the *Obstetrical Transactions* for 1893. As I observed in 1874, the

pedicle "is literally nursed by the warm peritoneum that surrounds it, and it lies in the human body, a marvellous heat-producing apparatus that keeps it in a regular temperature of about 100° F., which is more than any wool, poulter, or ingenious but complicated artificial instrument could do." In the abdominal wound the sutures are not in the same condition as the ligature round a pedicle. The sutures ought not to be tight, else they will cut or strangulate the tissues which anteriorly are on the surface of the body. The pedicle ligature should be tight, to make the distal or proximal tissues bulge as much as possible, so as to meet. They lie deep in the body, and lymph soon unites them.

China-twist silk is the safest material for ligature. No. 4 is the best size for a broad or medium pedicle; No. 3 for the outer border. Thin silk makes the best groove, but is apt to snap when being tied—a troublesome accident, as it involves more handling of the pedicle. Thick silk is objectionable for small pedicles, as are met with in cases when a small ovary follows to an ovarian tumour, is removed on suspicion, and is especially objectionable when the tissues of the pedicle are inflamed. Thick silk interferes with the bulging process, so the distal and proximal tissues do not lie well in contact. In one case where a silk ligature was discharged nine weeks after operation, the operator informed me that he "used too much silk, and silk of too great thickness—No. 5 braided—and used two ligatures."

The manner of applying the ligature being settled, what knot is best? I object to teaching the use of the Staffordshire knot; it savours too much of a feat; it can be done easily, no doubt, with a little exercise of dexterity, but it involves the passing of the loop over the tumour or over the stump of the pedicle, which under many circumstances is clumsy or even objectionable. The Thornton ligature is excellent; a loop of silk is passed through the pedicle and then cut. Then there are two pieces of silk. They are twisted once round each other on one side, then the ends of the one silk are tied round the inner or tube side of the pedicle. The ends of the other are tied in the groove made on the outer border by the separate ligature on the ovarian vessels. Nevertheless, there are some disadvantages in this ligature. It is more difficult in practice than it appears to be in theory. In pulling the second knot tight the first loop may be loosened if it has been loosely tied, or cut if firmly tied. Sometimes, too, the pedicle gets split. I always employ the knot introduced by Dr. Bantock, which I have seen in use several hundred times, and have found much the easiest kind to apply safely. The loop passed through the pedicle is not cut. One end of the silk is passed round the inner side of the pedicle and then through the loop. The two ends are drawn well parallel to each other firmly till the inner half of the pedicle is well lightened against the middle of the pedicle. During this manoeuvre care must be taken not to pull outwards, else the loop or the silk passing through it will be cut or badly frayed. Lastly, the two ends are tied firmly against the outer border in the groove, if there be one of the ligature round the ovarian vessels. This knot should never be tied against the anterior or posterior aspect of the pedicle. In securing a pedicle on the left side the ends are best tied on the inner side of the pedicle after the manoeuvres described above.

No doubt if the pedicle be very broad it is advisable to sew the edges over the raw surface. The importance of this precaution has, however, been much exaggerated, for as I know from having made in years past numerous post-mortems of patients who died after ovariotomy, a cap of clot forms on almost every pedicle—small or large, thick or thin, raw or sewn over.

Hence the danger of adhesion to thick or thin, raw or sewn over. Hence the danger of adhesion to intestines after the first few days because theoretically equal in all cases. Intestinal obstruction after ovariotomy is unfortunately not rare, but is seldom due to adhesion to the raw surface of the pedicle. Sir Spencer Wells's classical case, which most unfortunately led him to distrust the ligature and to persist in the use of the clamp for several years, was not an example of adhesion of bowel to the raw surface of the pedicle. The bowel encircled the pedicle, adhering to its sides, and the free surface was suppurating. At the operation the pedicle was found to be only one third of an inch thick, and it was considerably pulled about; indeed, the clamp and cautery were used unsuccessfully, and the operator transfixed and ligatured the mangled pedicle afterwards.

We must now do what must never be done in practice, we must hurry on to the end of the operation. Free oozing from purely parietal adhesions and from the pelvis may often be checked by simple pressure of sponges. A large flat sponge is placed in the sponges are packed in Douglas's pouch. Should the oozing be free, more than one sponge is advisable, as the aim is to ensure firm pressure for several minutes. The sutures being applied the sponges

are withdrawn, and if there be fair evidence that the oozing has stopped, no flushing or drainage will be needed. Remember that from the first the sponges must be pressed, not wiped, against the peritoneum and viscera. Wiping causes fresh oozing, as I know from observation in the days of strict "toilet of the peritoneum," as the sponging process was termed. Spencer Wells was misunderstood. That authority would mop up ordinary ovarian fluid thoroughly and close the wound with impunity, and we may do the same. But if the effused material be the least suspicious in any way, or if the oozing be very wide in area, and the patient appear already the worse, flushing is advisable. Hot water checks hemorrhage; it displaces clots, pieces of papilloma, and other solid as well as fluid matter. It is a great counteracter of shock, and assuredly acts like transfusion, some of the injected water being undoubtedly absorbed by the vessels. Whatever apparatus be used, make sure that the water runs in a full gentle stream. The aim is to flush out foreign bodies and fluid, so that a trickling stream is insufficient; besides, the water gets cold if poured in too slowly. Flushing is particularly needed when colloid matter has escaped into the peritoneum. Colloid cannot be well removed by sponges. Drainage of Douglas's pouch when colloid lies in it is dangerous, for that material cannot mount up the tube, but germs can get down to it. Now colloid is a first-class cultivating medium. So flush it out by all means, and put not your trust in drainage-tubes.

Yet the tube has its use. When the sponges left in the pelvis during the introduction of the suture have clearly failed to stop oozing, and when products of inflammation remain in the pelvis, the tube should be introduced. It is true that there are certain qualifications to this statement; I have closed the abdomen, for instance, with impunity, after removing two large suppurating tubes, the stump being touched with iodine. When a pedicle is unhealthy, either from inflammation, or infection with new growth, the tube may certainly irritate it, and hence we often hear of the casting up of a ligature through a drainage-tube hole. Drainage depends much on the merits of individual cases. To leave an untied suture in the parietes when the tube is inserted, and to tie it when the tube is removed, is a bad practice. The track is apt to suppurate, and the chance of healing by first intention has long passed when the ligature is tied.

(To be continued.)

The Therapeutic Value of Food in Infantile Diarrhea.

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A Paper read before the Abernethian Society on December 3rd, 1896.

DURING recent years a considerable amount of attention has been devoted to attempts to find a trustworthy and reliable antiseptic for the intestinal tract. Such drugs as naphthalin, beta-naphthol, benzo-naphthol, resorcin, salol, creosote, and others have been widely advertised and used for the treatment of various gastric and enteric disturbances. So much is this the case that it seems to me the value of food in the treatment does not receive the consideration which its importance merits. In a short paper it is not possible to put before you even a summary of the different intestinal disorders and the therapeutic value of various foods in such conditions, so I propose to limit the discussion to infantile diarrhea. Perhaps this may seem to you a trivial subject and one of slight moment; but if you remember that serious results often arise from the most trivial causes, and that the happiness of a whole household may depend on the regularity of an infant's bowels, you will admit my justification.

A baby is normally predisposed to diarrhea by its tendency to pass liquid or semi-liquid stools. This is partly due to the nature of its food, and partly dependent on physiological and anatomical factors. Moreover peristalsis is active, and the sphincter is not very powerful. The feces are not retained in the colon and rectum in the same way as in the adult, in whom time is allowed for the absorption of the watery constituents.

It is not necessary for my purpose to enter into the pathological conditions leading to enteric disturbance in infants. The majority of attacks of infantile diarrhea are dependent on the quality or the quantity of the food supply, and I only propose to consider the

nature of the food supply and the therapeutic treatment of the attack by alterations in the diet. There is not the least objection to the administration of a small dose of some simple purgative, such as castor oil or calomel, as a preliminary to dietetic treatment, and in many cases such a dose is of great advantage by clearing out irritant matters.

The therapeutic value of a food depends on three factors:

1. The composition of the particular food.
2. The assimilability of the food.
3. The physiological value of its component parts.

These three factors are liable to great variation. Thus the composition varies with the kind of food. The assimilability varies according to the food, its mode of preparation, the manner of administration, the composition of the digestive juices, the condition of the absorbing surfaces, and the idiosyncrasy of the individual. The physiological value depends, strictly speaking, on the composition; it is the sum of the physiological value of the component parts. The value to the individual varies, however, according to the requirements of that individual, and the conditions under which the food is administered. The requirements of the individual vary with the age, conditions of health or disease, and idiosyncrasy. All foods contain one or more of five proximate principles, namely, water, proteids, carbohydrates, fats, and salts. The therapeutic value of these proximate principles varies under different conditions of health and disease, in different individuals of the same age, and in the same individual at different ages. Let us take these principles in the order named.

Water we may regard as a pure compound of hydrogen and oxygen, disregarding for the moment the micro-organisms and salts it so commonly contains. Although water is not nutritious in the usual sense of the term, it is essential to life, and constitutes more than half the entire body weight. The physiological activity of a cell depends on a due supply of water. Abstract water from an amœba, and it enters into a condition of *dry rigor*, it becomes physiologically inactive. Proportionally to its weight the infant requires more water than the adult, the relationship of its body surface to the body weight being much greater than in the adult, and hence the loss of water by the skin more in proportion. The infant, therefore, feels the effects of loss of water more severely than the adult. The rapid wasting in infantile diarrhea is due to the rapid elimination of fluid by the alimentary tract, and to contract this it is generally advisable to permit the free administration of plain water or nutritious well-diluted fluids by the mouth.

Water is of use to digestion by diluting the food and enabling it to be more readily attacked by the digestive ferments, and to be more easily absorbed. It assists in the secretion of pepsin and hydrochloric acid. This acid is of very great value in preventing fermentative processes in the stomach. According to Bunge the quantity of free hydrochloric acid in the gastric juice of man exactly corresponds to the amount necessary to prevent the development of putrefactive organisms. In many lower animals the gastric juice is rich in acid, but contains no ferment. If the acid is absent or diminished in amount, the food may undergo putrefactive or fermentative changes in the stomach, and be then passed onwards through the pylorus in a condition liable to set up diarrhea. Any steps which you may take to ensure the proper digestion of the food in the stomach, will assist you to cure the diarrhea, and indeed I consider these steps the most important in the treatment.

I would here add a warning against the indiscriminate use of the antiseptic drugs. Many of them in small doses interfere with the activity of the digestive ferments, and in large doses may inhibit them entirely. Let me warn you, too, against the administration of opium in the early stages of an attack. The diarrhea is nature's means of eliminating the irritant matter or the poisonous products. Opium will often make the patient worse by delaying or stopping the process of elimination.

Water possesses still further value. It is an incentive to elimination by the kidneys and skin, and probably enables the organism to get rid of poisonous ptomaines and toxins which are formed by the putrefactive changes in the alimentary canal, and give rise to the profound symptoms in cholera infantum.

Water must be given warm or hot. Iced water is not indicated except in the presence of severe vomiting, and even then should be used with great caution, as infants do not stand cold well. The best treatment of severe vomiting in these cases is to wash out the stomach with warm water, using a funnel and soft long rubber tube; irritating products in the stomach are got rid of by this means.

All water given to an infant must be previously boiled. So many microbes are present in this fluid, some of which are pathogenic, that it is by no means the harmless drink temperance orators would have us believe.

Proteid.—It is hardly necessary to point out to this audience that proteid is the form in which nitrogen is assimilated by the organism, and that a due supply is necessary for the purposes of nutrition and growth. In proportion to its weight the infant requires more than the adult, because it has to provide for repair of tissue waste and the building up of new tissue. In both breast-fed and bottle-fed infants it is not uncommon for diarrhoea to be set up by too high a percentage of proteid in the food. The first results are generally colic and constipation, and then diarrhoea is induced by the irritation from retained matter. The therapeutic value of proteid in these cases is a negative one. Reduce the amount to what is suited to the digestive capacity of the child, and in nine cases out of ten you will cure the diarrhoea. It is impossible to fix exactly what percentage is suitable. For a very young infant 0.5 per cent. may be sufficient; for an older child 1 to 2 per cent. It is by no means rare to come across infants who can digest 3 to 4 per cent. without difficulty.

The best plan is to begin with a low percentage, and increase it according to the character of the stools and the progress of the child. The absence of small whitish curds from the stools is the best indication that the proteid in milk is properly digested. Infants at the breast often suffer from indigestion, colic, and constipation or diarrhoea, from the high percentage of proteid in the mother's milk. The best method to lower the percentage is to increase the length of the intervals between the nursings. The more frequent the suckling the higher is the percentage of proteid in the breast milk, the gland being stimulated to increased metabolism. In these infants the indigestion gives rise to constant crying, which the ignorant mother ascribes to hunger; she gives the child the breast whenever it cries, and rapidly makes it worse.

Active exercise is also of value in reducing the proportion of proteid, and it may be still further reduced by giving the infant, before it is put to the breast, a small quantity of plain boiled water, barley or oatmeal water, or lime water.

In the case of hand-fed infants it is a simple matter to reduce the percentage of proteid to a digestible minimum. The average amount in cow's milk is 3.75 to 4 per cent., and the milk can be diluted accordingly. From eight samples of London milk I obtained an average of 4.66 per cent. of proteid being calculated from the nitrogen estimated by Kjeldahl's process. The proportion of caseinogen to lactalbumin was as two to one.

Sometimes we meet with cases in which diarrhoea occurs whenever cow's milk is given. This may be due to a faulty condition of the cow or to its diet. The milk of cows fed on turnips, insect cake, or brewers' grains is very likely to cause diarrhoea. Or it may be that deleterious changes have taken place in the milk before delivery. Or perchance the child's diet has been trifled with to such an extent that it is marasmic, and hardly capable of digesting anything.

Under these circumstances it is allowable to give condensed milk. Let me not encourage you to resort to condensed milk as soon as you find evidence of gastro-intestinal disturbance. To do so implies ignorance of the art of dieting an infant, or the carelessness of inexperience. Practice leads me to assert very strongly that it is rare for a child to be unable to digest cow's milk, properly prepared and administered. Similarly let me try and persuade you that predigestion of the milk is not the *summum bonum* of infantile feeding, and the panacea for intestinal derangements.

The wide use of condensed milk is not an argument in its favour. More than half a million hundredweight is imported annually. Can we wonder that infantile mortality is enormous?

If after you have duly considered the nature of the diarrhoea, the milk supply, and the surroundings of the patient, you think it advisable to prescribe condensed milk, be careful to order a good brand, and do not leave the choice to the mother. I can recommend the Anglo-Swiss Milkmaid brand, the Nestlé brand, the Viking brand, and the well-known Nestlé's. Many varieties in the market are made from skimmed milk, and should not be used even in cases of diarrhoea.

When prescribing condensed milk pay attention to the following considerations. The composition of the different brands varies considerably, according as they are made from skimmed milk, whole milk, or milk with added cream. The same brand is liable to vary and not maintain its original composition. Do not use any kind without, at any rate, knowing its composition as stated on the label, or as given in one of the text-books which refer to it.

Always calculate the amount of dilution necessary to reduce the percentage of proteid to the required figure, and then note the proportion of fat and sugar in the resulting fluid.

Beware of cheap samples. Beware of too great dilution. Warn the mother against blown tins, and against keeping an opened tin in a hot or dirty room. In all cases regard the food as a temporary

expedient, and pass on to modified cow's milk slowly, but as soon as possible.

The advantages of condensed milk in diarrhoea are that it is a more or less nutritious food, in which the proteid can be reduced to low percentage, and the casein in it does not form large curds in the stomach. It is usually sweet and readily taken. It is very easily prepared. The evil effects are largely due to the degree of dilution generally practised. One teaspoonful to a bottle of water will make the mixture look like milk, and the child gets its stomach filled, but does not obtain much nourishment. If the fluid is mixed in proper proportions the child gets too much sugar, as a rule, and too little fat. Most condensed milks have a large amount of cane sugar added as a preservative. If nothing is added to the original milk before condensation, it resembles cow's milk when diluted with three to four times its weight of water. Remember it is not as cheap a food as cow's milk when it is given in proper amount. It is useful while travelling.

Fat.—This food and the carbohydrates are of value for the production of heat and the maintenance of the body temperature. Fat is of more value than the carbohydrates by virtue of its larger percentage of carbon, and smaller percentage of oxygen. Excess of fat may give rise to simple intestinal catarrh, and diarrhoea in such cases may be produced. It is an uncommon result. Human milk rarely contains too high a percentage of fat, and artificial mixtures almost invariably too little. It must be given with care to marasmic infants, or fatal diarrhoea may be induced. Only a small percentage should be allowed in the treatment of diarrhoea.

Carbohydrates are of value for the production of heat and as a source of muscular energy. The percentage varies within very small limits in human milk, and I have seen no cases of diarrhoea due to excess of lactose in breast milk. In artificial feeding an excessive amount is often given. Almost all condensed milks and patent foods contain a large amount, in the form of cane sugar, maltose, or starch. Excess of sugar may only lead to obesity, but it often induces intestinal catarrh, flatulence and offensive diarrhoea. These results are produced by fermentative changes in the sugar.

In the presence of diarrhoea the question may arise as to the variety of carbohydrate to be allowed. Cane sugar is split up in the intestine into dextrose and levulose, both of which are sources of glycogen. Lactose also undergoes inversion, and is not absorbed as such. A very large quantity of either of these sugars must be given by the mouth before traces are found in the urine. Both cane and milk sugar are secreted in the urine when injected subcutaneously in 10 per cent. solution (F. Voit). From the fact that lactose is the variety present in human milk, it is natural to suppose that it should be used in artificial feeding. On the other hand, experience shows that it can be replaced by cane sugar without injury. Any evil effects from the use of cane sugar in preference to lactose are due to excess. Being cheap, handy, and pleasant to the taste, there is every temptation to use too much. Cane sugar ferments less readily than milk-sugar.

Maltose is contra-indicated in the presence of diarrhoea, to which it often gives rise. The laxative properties of Mellin's Food are due to maltose.

Starchy foods may be given according to the age of the child. The amylolytic functions of the salivary glands and pancreas are very feeble in infants, and should not be unduly taxed. Starch requires considerably more digestive effort than either lactose or cane sugar. The granules vary to a great extent in the different foods containing starch, and are not all digested with the same degree of ease.

The starch in barley and oatmeal is more readily inverted by the saliva than that of wheat and rice. Barley water is useful in the presence of diarrhoea, but oatmeal water is contra-indicated on account of its slight laxative action. The former has a small advantage as a diluent of cow's milk in rendering the curds produced by acid or rennet somewhat finer, but much greater value is ascribed to it than is warranted by experiment. Rice water is of even more value than barley water in the presence of diarrhoea.

Salts are occasionally present in the milk of anæmic women to such an extent as to be injurious. Sodium chloride is normally present in the milk of all mammals. There is about six times as much in cow's milk as is present in human milk. It is not necessary to add salt to the former in artificial feeding, unless a cereal preparation is used as a diluent. Almost all vegetable products contain an excess of potassium salts, and sodium salts are often necessary to counteract their effects. Rice contains remarkably little potassium salts. The addition of salt to milk renders it a little less readily coagulable by rennet. Lime, phosphorus, and iron are all necessary, but there is no special indication for their use in the treatment of diarrhoea. A slight exception may be made in the case of iron, for an anæmic child is

more liable to such attacks and recovers less easily. It is best given in the form of organic compounds, as in the yolk of egg or raw meat juice.

Granting that you have a sound knowledge of the above facts and of the composition of the available foods, the question arises, how are you going to treat a simple case of diarrhoea? An attempt has been made to differentiate two groups of cases on a dietetic basis. One variety is due to albuminous decomposition. The symptoms are those of profound constitutional disturbance, such as is seen in cholera infantum. The stools are very offensive, and often contain mucus and blood, and sometimes epithelial flakes, such as are seen in true cholera. Laboratory research shows that micro-organisms produce more poisonous products when grown in albuminous or gelatinous media than in carbohydrates. In such cases carbohydrates lessen albuminous putrefaction in the intestine by producing lactic, acetic, butyric, and other organic acids, which exert a destructive action on the putrefactive bacteria. More probably their beneficial effect is due to the deprivation of the microbes of their favourite nutrient media, which have been eliminated by the diarrhoea, and are not replaced through the food supply.

In the other variety of diarrhoea the stools are acid and offensive, with a peculiar sour smell; and there is much flatus and intestinal colic. This kind of attack is generally due to acid fermentation of excessive carbohydrate food, and is readily cured by allowing only an albuminous diet for twenty-four hours, and then permitting only a small percentage of carbohydrate in the food, in some easily digestible and absorbable form, such as cane-sugar or rice water. Over-feeding is a common cause, the child being only relieved of the excess of food by an attack of diarrhoea.

The Methods of Investigation and Treatment.—In every case examine the diapers and note the character of the stools. Do not be content with the description of either the mother or nurse, however intelligent you may consider them. Note the colour, odour, reaction, presence or absence of curds, mucus, and blood. Inquire as to the number of motions in the twenty-four hours. Some infants normally have four actions daily during the first few months of life.

In the case of a breast-fed infant pay great attention to the frequency and regularity of feeding. After the second month of life the infant only requires the breast every three hours, seven feeds a day. Insist that the feeds are given regularly. If in spite of this the motions contain curds, take steps to diminish the amount of proteid in the mother's milk and, if necessary, have an estimation of the percentage presented made. Pay attention to the diet of the mother. Plenty of plain nutritious food is all that is necessary. Strange and made-up dishes, dinner parties, and irregularity in meals, are liable to be injurious. Anything that upsets the digestion of the mother is liable to interfere with the quality of the milk, and lead to digestive or intestinal disturbance in the child. Too much stout, ale, or beer in the mother's diet is sometimes the cause of infantile diarrhoea, especially if it is all "hard," or if taken last thing at night. Do not allow the child to suck at a dirty "Job's comforter," or even at a clean one, and insist that neither mother, nurse, nor visitors be permitted to put a finger in the child's mouth to keep it quiet or rub its gums. Nor should the child be allowed tastes of other foods than the breast milk.

If the child is hand-fed, inquire carefully into the amount of food given at each feed, the composition of the food, the number of feeds in the twenty-four hours, the intervals between the feeds, the temperature of the food when given, and the mechanism of administration.

If a bottle is used insist that it should be boat-shaped, as simple in construction as possible, easily cleaned, and having a soft rubber nipple which can be readily everted and scraped. Many cases can be cured by simply discontinuing the use of a dirty bottle with a long rubber tube, full of cracks containing sour decomposing milk.

Note how the milk is stored. It should be kept where there is no possibility of it absorbing foul odours, or getting contaminated in other ways. Find out how each feed is prepared, and how long it is prepared before it is given. Each feed should be prepared just before it is given, unless several are made at a time and sterilised in bottles plugged with clean cotton wool.

All these points may seem to you very trivial, but it is upon a careful investigation like this that your success will depend. What is the use of dietetic or drug treatment for any case as long as the exciting cause of the diarrhoea is in operation? I am often lost in amazement at the instructions given to the mothers of infants with diarrhoea, and perhaps even more commonly at the neglect to give any proper instructions. Almost every case of simple diarrhoea can be cured by attention to these trifling details. More severe and more prolonged attacks may require further treatment. Thus cholera

infantum can rarely if ever be cured by diet alone, and no one would be justified in relying entirely on such means.

Before concluding I must refer to a few special foods which are often of great value.

Egg-albumen can be prepared by shaking up the white of a new-laid egg with six to ten ounces of pure water. The addition of a pinch of salt is of value. It should be well shaken for five to ten minutes, and then strained through fine muslin to separate out the flakes of membrane. This is the most nutritious and the purest proteid food that I know of; it is practically devoid of micro-organisms when freshly prepared. It is also very digestible. It may be given alone or with the addition of sugar, condensed milk, cream, or some flavouring agent.

Raw meat juice is another valuable proteid food in a very digestible and assimilable form. It contains also a considerable amount of iron. From the nature of the food and the mode of preparation, it is generally far from sterile, and may, moreover, be the means of introducing the cysticercus of a tapeworm, though this is but a slight risk.

If iron is required I prefer to give the yolk of egg, which contains it in an even more assimilable form than the hæmoglobin of raw chronic diarrhoea. It is only necessary in the presence of anæmia and chronic diarrhoea.

Pasteurised, boiled, and sterilised milk have all much about the same value. They are rather indicated as preventives than as curative. Few cases recover by merely changing to such a diet. Raw milk should never be allowed for infants in towns. Sometimes it is urged that milk should be stopped entirely for some days, and in occasional cases it is advisable, the child in the meantime being fed on bland nutritious fluids, such as egg-albumen and barley or rice water, with the addition of small quantities of cream if desired.

I have not often found such a course of diet necessary, and as a rule would give in preference a very weak solution of cow's milk, say one in six of water with 5 per cent. of sugar, or weak condensed milk with egg-albumen and rice water. Some physicians are fond of weak gelatinous solutions, broths, soups, and beef-tea, but in my experience the benefit of these is doubtful, and their nutritive value small. Gelatinous foods are certainly contra-indicated in the presence of albuminous decomposition. Peptonised milk is not as a rule of much value, and at times gives rise to diarrhoea. At the moment I cannot recall a case which recovered by simply changing the diet to peptonised milk, and I remember several in which it was absolutely injurious or useless. If it does good, it is by remedying the condition on which I have laid so much stress, namely, it increases the digestibility of the food, and prevents the formation of masses of undigested casein.

A weak solution of cane sugar, and rice water is a very digestible and bland food, and contains little casein. Of stimulants, whisky is the best. It is the purest at a moderate price. It may be used freely in bad cases, but is not necessary in a simple attack.

In conclusion let me advise you to treat every case on its merits, and not to stick to any hard and fast rules, and apply such rules to rich and poor, to the well-nourished and the marasmic, and to the intelligent and the stupid, in the heat of a tropical climate and the cold of more northern regions. Bear in mind that almost all cases are due to errors in diet, and that on a suitable food the patient will rapidly recover. With rare and parsimonious investigation every case, and think no detail too trivial for even the greatest among us, if it leads to the recovery of a single life, or the relief of a single symptom.

Clinical Notes from a General Practice.

THE following are short notes of some interesting cases I have met with in general practice.

A CASE OF OSTEITIS DEFORMANS.—The two photographs, which were taken by Mr. Gordon Thomson, show very well the distinctive points of the disease, and there is no need here for me to detail each bone separately.

The family history is as follows.—Mother had rheumatism—one sister had four attacks of acute rheumatism; but the interesting point is that I believe a brother of my patient suffered from the above disease. I was always told that he suffered from an affection of the spinal column, and on the only occasion on which I saw him I noticed his head was shaped exactly like my patients, but I could

not go into his case as a doctor, as I was not asked. He died of "apoplexy."

Past history.—She had kept a small school for the last sixteen years of her life, suffered from monetary worries, and also had to look after the invalid sister referred to above. Ten years before her death she broke her right thigh at junction of upper and middle third. This united well with shortening. She died in January, 1892, of bronchitis, aggravated by the fixation of her chest. I got leave to examine the head.

Post-mortem.—Bone easily sawn through. When the skull-cap was taken off it was found to be in some places quite an inch thick, and the diploe was all but obliterated; the sutures were all obliterated, dura mater in places adherent, vessels of cortex congested; no hæmorrhage was discovered; no excess of fluid in the ventricles. The whole brain appeared rather soft.

Mr. Edgar Willett was kind enough to report on the piece of bone I sent him, and stated that it showed the usual characters of the disease, viz. generation, rarefaction, and alterations in the arrangement of the Haversian canals. The specimen is now in the Hospital museum.

The next is a case of myxœdema, and the photographs show her before and after the thyroid treatment.

Is married, æt. 49. Had a life of constant anxiety. Had four children and one miscarriage; not been well for years. Says swelling came on about six years ago. Previous to that she says she swelled an immense size, more especially in the stomach; this passed off.

Present condition.—Face typical; moles on arms and shoulders; no thyroid (?) felt; urine normal; heart normal; on inner side of left ankle has varicose eczema.

Family history.—Nothing marked.

Treatment.—She first took two tabloids, five-grain a day at first, but had to go back to one, as she noticed when taking two that she was "weak." She experienced tingling in the skin all over the body, and especially over the varicose eczema, which she says is decidedly better, but she is using tar ointment as well. On leaving off the ointment the eczema did not do so well. She commenced treatment on September 20th, 1894, and is continuing it now. She notices now, and also her friends, that she speaks more quickly, is more intelligent, bright, and energetic, and feels younger altogether. I believe she is now taking one tabloid daily.

The next is a case of mitral disease in a married lady æt. 36, and in whom profound hemiplegia occurred, and which passed off completely within eight hours.

Past history.—First seen October 27th, 1894. Has had heart disease for several years, no definite history of rheumatism, but when a girl used to have rheumatic pains. Has had three children, and went through her confinements easily except the last, when she had an infarct in the right lung, which set up pleural effusion, which was present at the above date, causing dullness up to angle of scapula on the right side with very faint breath-sounds. There was no shortness of breath, and she had just come up from the country, rather a long journey. On the evening of November 11th she became very ill, collapsed, cold clammy sweats all over head, and pulseless; breathing very rapid and laboured. Brandy was injected into each arm, and also strychnine.

Dr. Goodhart saw her soon after with me. Two and a half pints of clear serum were drawn off. All through the night she was in a most critical state, and during the night digitalin gr. 1.00 was injected. Next morning she was decidedly better.

November 16th.—Since last note the fluid in right chest has been increasing again, and this morning I was called at 8 a.m., and found her profoundly hemiplegic in left side, face, tongue, and limbs. Speech muffled and mental condition clear. The nurse said the present condition was noticed at 7.30 a.m., and at 11 a.m. I had a note from her husband to say that she could move her arms and legs, and when I saw her at 1 p.m. she moved left arm and leg easily, and facial muscles were rapidly recovering; tongue was protruded straight, and she could whistle and frown.

Drs. Gee and Goodhart saw her on the 18th, and agreed that the hemiplegia was due to embolism, and Dr. Gee mentioned that he had seen cases where hemiplegia had passed off as soon, and then gangrene had occurred at the extremities of one of the limbs. He mentioned also at the time that the fact of facial paralysis was no bar to the diagnosis of hysterical paralysis. The left wrist and fingers now only show the effects of brain irritation; the wrist is flexed and the fingers are hyper-extended. This condition is worse at times than at others.

November 19th.—One and three-quarter pints of clear serum were again drawn off.

November 23rd.—Mr. Walsham drew off one and a half pints of clear serum to-day. During the day she got much worse, breathing very quickly and vomiting incessantly; pulse very feeble. She was thought to be dying by Dr. Gee and myself, but the next morning she was quite comfortable, sitting up in bed and reading the paper. The rigidity of the wrist and fingers has passed off, and Dr. Gee says that probably this rigidity is hysterical. She is very nervous, and at times it is very difficult to say whether it is "nerves" or impending death.

On January 5th, 1895, she was very well indeed. There was no fluid, and she was walking down a long flight of stairs daily, and had not felt the hard winter very much. The rigidity of the left wrist came and went at times. Since this last note she has died. Some friends advised her to try homœopathy.

The fourth case shows transient delirium arriving two and a half hours after completion of labour, and passing off within twenty-four hours.

It occurred in a lady æt. 42, who was delivered at twelve o'clock in the morning, on April 20th, 1894, of a male child. The forceps were applied to the head on the perineum, chloroform being administered, but not to the surgical degree. After labour she was drenched with sublimate solution (1 in 3000). The same afternoon, about three p.m., she was delirious and very restless, throwing herself about the bed and tossing her arms about, and did not recognise people about her. This lasted about twenty-four hours, and gave way to bromide of potassium.

The next day she could not distinguish colours, such as pink and blue and white objects, and she said "things magnified first and then diminished." This condition soon passed off.

There was a cloud of albumen in the urine. Within a week after she was doing very well; no delirium and no colour-blindness.

July 8th.—I have a note to the effect that there is still a cloud of albumen.

December 12th.—Albumen still present.

I might mention also that the question of drink could be eliminated in this case.

The next is a case of pleural effusion in a boy, which is said to have been present a year.

This case was recognised quite accidentally, as the boy and two brothers had chicken-pox, and the mother mentioned that the boy had a very serious form of heart disease. On examining the heart I found the apex-beat outside the nipple line, and dullness at right base up to the angle of the scapula; the heart-sounds were clear. He was a delicate-looking boy æt. 7; sweats at night. The finger ends were markedly clubbed. His chief symptom was great shortness of breath on any slight exertion.

A hypodermic needle established the diagnosis, and the next day ten ounces of serum were drawn off. A week after the fluid had formed again apparently. There was dullness to angle of scapula and high up in axilla. Breath-sounds very faint, and vocal vibration felt over dull area. He was tapped again, but with no result.

He was put on iron and Sp. Æth Nit. and exercises night and morning to expand the lung, viz. inhaling a deep breath and then slowly expiring through the nose, keeping the mouth shut. About fourteen days after last note his right side moved whilst drawing a deep breath, and breath-sounds could be heard distinctly. To make a long story short he completely recovered, and has never been bothered with his chest since, and that is six years ago.

HAYDOCK WILBE.

[Excellent photographs of the case of osteitis deformans, and of the case of myxœdema, showing the effect of treatment with thyroid, were forwarded to us with this paper. We greatly regret that want of space precludes their reproduction here.—Ed.]

Notes.

In another column we publish an account of the Christmas Entertainment. Never before has a performance of the Amateur Dramatic Club met with such unanimous praise. The stage manager, Mr. Valerie, is indeed to be congratulated on the success of his efforts. Thanks are at the same time due to another old member of the Club, Mr. C. W. Emlyn, whose help, both at the rehearsals and

during the production of the piece, did much to ensure success.

* * *

DR. DONALD MACALISTER has been appointed Examiner in Medicine in the Victoria University.

* * *

MR. H. HOLMES, B.A., has taken the degrees of M.B. and B.C. in the University of Cambridge.

* * *

DR. J. B. HURRY, of Reading, has been elected a Vice-President of the Obstetrical Society.

* * *

DR. J. W. PICKERING, who holds the George Henry Lewes Studentship, has recently made a communication to the Royal Society upon some proteid-like bodies which he has succeeded in synthesising from some of the crystalline proteid derivatives. This is the nearest approach hitherto made towards the synthesising of proteid bodies, and marks an important advance in our knowledge of chemical physiology. The proteid-like colloid bodies which Dr. Pickering has succeeded in preparing give most of the colour reactions characteristic of proteids, and resemble very closely, in their properties, the so-called nuclealbumins.

* * *

EVERY medical man must have heard with gratification of the announcement made on New Year's Day of the elevation to the peerage of one of the most distinguished surgeons of his time—Sir Joseph Lister. This, the first occasion on which a peerage has been conferred upon a member of the medical profession, is no ordinary event. It makes one reflect seriously upon the meagreness of the honours to which members of our profession can attain as compared with other careers in life. Turning to the Medical Directory of 1896, we find that there are exactly ten medical baronets and sixty five knights, including military and civil knights, Commanders of the Bath, Knights Commanders of the Star of India, Knights Commanders of St. Michael and St. George, and Knights Bachelors. This is a truly meagre list of medical dignitaries out of a total number of medical men of 34,284, when compared with the number of peers, baronets, and knights included in the professions of the Law, Army, and the Church.

* * *

THREE LECTURES ON INTUSSUSCEPTION will be delivered in the theatre of the College of Surgeons on Monday, Wednesday, and Friday, February 8th, 10th, and 12th, at 5 o'clock each day, by Mr. D'Arcy Power (Hunterian Professor). Students of Medicine as well as members of the College are admitted to the lectures. We publish the syllabus in full:

LECTURE I.—Monday, February 8th. *The Minute Anatomy of Intussusception.*—Introduction.—Early changes in the intestine produced by intussusception.—Changes due to an experimental invagination in a cat compared with those occurring in a spontaneous

intussusception in a dog.—Causes of hæmorrhage in intussusception.—Intestinal changes in the later stages of acute intussusception.—Changes taking place in the intestines of adults as a result of intussusception. (a) acute; (b) chronic.—Changes associated with extirpation of the intestine.—The minute anatomy of the less usual forms of intussusception.—Conclusion.

LECTURE II.—Wednesday, February 10th. *The Pathology of Intussusception.*—Introduction. (i) Anatomical details connected with the ileo-cæcal angle.—The method of examination.—The mesentery and its length.—The ileo-cæcal folds and pouches: their varieties and importance.—The relative width of the ileum and colon at different ages.—The ileo-cæcal valve and its varieties. (ii) Physiological factors.—Results derived from experiments with irritants, purgatives, eserin, and barium chloride. Effects of experimental invaginations in animals.—The force of peristalsis. (iii) Pathological factors.—Spontaneous reduction and its causes.—Strangulation of the invaginated bowel and its mechanism.—The results of strangulation.—Gangrene: adhesions; necrosis; peritonitis.—Conclusions as to the cause of intussusception assisted by clinical data.

Lectures I and II will be illustrated by Lantern Slides.

LECTURE III.—Friday, February 12th. *The Treatment of Intussusception.*—Introduction.—Classification of Intussusception.—The conditions which influence its treatment. Review of the methods of treatment.—Importance of early treatment. (i) Treatment by irrigation.—The experiments of Mr. Mortimer and of Mr. Mole, their lessons and fallacies.—The capacity of the large intestine in children.—The uses and limits of treatment by irrigation.—The recurrence of intussusception after irrigation, its causes and prevention.—After-treatment. (ii) Treatment by abdominal section. (a) In reducible intussusception.—The management of simple cases and the dangers of the operation.—Recurrence after laparotomy.—Local paralysis of the bowel after reduction: its causes and treatment.—Complications of simple cases. (b) In irreducible intussusception.—Causes of surgical irreducibility: adhesions; moribund intestine; gangrene.—Palliative measures: Barker, Jessett, and Greig Smith's operation.—Halsted's method of lateral anastomosis.—Artificial anus.—Enterectomy.—Reasons for preferring the non-mechanical method in the treatment of intussusception.—Advantages of Maunsell's operation, and experimental invaginations successfully treated by it.—Conclusion.

* * *

We hope to give in our next issue a full description of the Martha Theatre, with all its newly acquired gorgeousness.

* * *

OUR friends at Guy's are to be congratulated upon their energy and enterprise. This month has witnessed the birth of a second magazine—the *Guyoscope*. This is not intended, as at first seems, to be a rival to the Guy's Gazette, but its originators announce that they will deal only with the lighter side of hospital life—"the unconsidered trifles." Two of the "examination questions" run as follows:

1. When did you buy a microscope? Where is it now? What was the number of the ticket?
2. Describe the collateral circulation of a hansom driving to catch a train at Euston after ligature of the Strand, London Bridge, and the Embankment.

We heartily wish them the success their enterprise deserves.

Amalgamated Clubs.

NEW MEMBERS.

S. H. Gibson.	T. A. Mayo.
R. J. Waugh.	E. W. Däll.
E. B. Smith.	D. C. O'C. Finigan.
H. Vaughan Pryce.	S. W. Gurl.
J. Strirling Hamilton.	J. M. Plews.
G. N. Gwyther.	A. S. Petrie.
F. D. Parbury.	J. O. Bennett.

ASSOCIATION FOOTBALL CLUB.

In the first round of the London Senior Cup we have drawn Old Carthusians. The tie will be played at Leyton on Saturday, January 23rd.

The following is the draw for the Hospital Cup:

1st Round.	
A	Charing Cross.....St. Bartholomew's.
B	Middlesex.....St. Mary's.
C	Guy's.....University.
D	London.....St. Thomas's.
Semi-final.	
E	Winner of D.....Winner of B.
F	Winner of A.....Winner of C.
Final.	
	Winner of E.....Winner of F.

Abernethian Society.

THE last meeting of the Winter Session was held on December 10th. Mr. Wroughton showed an interesting case of congenital absence of the radius in a child. Mr. Hewer read a paper entitled "Indications for Trephining." He enumerated a considerable number of cases which he had seen in which trephining was resorted to, dealing with the signs and symptoms which indicated such a course of proceeding in each case. In cases in which much violence is suspected, scalp wounds should be enlarged if necessary, and a thorough examination of the bone made.

The secretaries acknowledge with many thanks the donation from an old member of the Abernethian Society, Mr. R. Henslowe-Wellington, of twenty copies of old addresses and 'Proceedings' of the Society, viz.—

'Proceedings' from 1877 to 1889 inclusive. Addresses by Sir James Paget, Dr. Matthews Duncan, Mr. Henry Power, Mr. Pemberton, Mr. Butlin, Dr. Lauder Brunton, and Dr. Norman Moore, delivered between 1882 and 1889.

The following papers will be read during January:

January 21st, by Mr. W. T. Holmes Spicer, F.R.C.S., on "Eye Symptoms in General Diseases."

January 28th, by Dr. Claye Shaw, on "Bruises and Injuries in the Insane."

MID-SESSIONAL ADDRESS.

HERE was a good attendance, including members of the staff, the matron, and many nurses, to welcome Dr. E. G. Browne on January 14th. The junior staff, doubtless on account of their manifold duties, were but sparsely represented. The president, Mr. S. Gillies, introduced Dr. Browne, and called upon him to deliver his address on "A Chapter in the History of Cannabis Indica." The address fell in no way short of the high anticipations that had been formed. It was full of the charm which was expected from one who, as the president said, had wandered in the gardens of Shiraz, by the tomb of Hafiz, who had been among the lotus-eaters

himself. In answer to many inquiries we are glad to say that the address will shortly appear in full in the pages of the JOURNAL. Dr. Norman Moore, who proposed the vote of thanks, was in his happiest vein, and Mr. H. Williamson seconded in an appropriate speech. Dr. Browne, in replying, said there were many strange things in East and West, but to him the strangest of all was to find himself in the medical theatre at Bart's lecturing to Dr. Gee. And thus ended a very pleasant evening. We hope Dr. Browne will not allow another ten years to elapse before revisiting his old hospital.

St. Bartholomew's Hospital Amateur Dramatic Club.

ANNUAL CHRISTMAS ENTERTAINMENT.

THE fifteenth Christmas dramatic performance given by the members of the St. Bartholomew's Hospital Amateur Dramatic Club, took place upon Wednesday, Thursday, and Friday, January 6th, 7th, and 8th, 1897. The first performance was, as usual, witnessed chiefly by the patients of the hospital, and at the conclusion of the entertainment those members of the Amateur Dramatic Club who had taken part were hospitably entertained at supper by the President of the club, Mr. W. H. Cross.

On the evenings of the 7th and 8th the hall was filled to overflowing by an appreciative audience, composed of the governors, the members of the staff, their friends, and a large number of the hospital nurses and students.

The programme opened with the overture "Titus" (Mozart), efficiently rendered by the members of the Hospital Orchestral Society, which was followed by Lennox Home's farce, *Two Heads are Better than One*. This piece suffered from its somewhat antiquated construction, but was well rendered, and, thanks to the efforts of the members of the cast, it was well received by the audience. Mr. J. Hobday gave an admirably drawn character sketch of the senile Mr. Strange; while Mr. J. Valerie, as usual, caused roars of laughter by his excellent impersonation of the idiot, Sammy Maxwellton. Mr. B. J. Collyer contributed another of his most successful female impersonations as Ellen Strange. The character was never overdrawn, and was always kept within the bounds of refinement. The part of the elder Maxwellton was played by Mr. L. Morris, while Mr. A. Hawkins did well in the somewhat difficult part of Charles Conquest.

At the conclusion of the farce a short musical programme was contributed by the Musical Society.

The first number, a glee, "The Rustic Coquette," by Dr. Champneys, who also conducted it, was received with well-deserved applause.

Mr. P. Wood sang "Fill me, boy, as deep a draught" on Thursday, and on Friday gave "Oh! that we two were Maying," with "Tell her I love her so" as an encore. He has a fine voice and a sympathetic method, and scored one of the successes of the evening. Then followed another glee, "Full Fathom Five," by C. Wood, which met with a cordial reception; after which came the usual interval of fifteen minutes for refreshment.

The principal item of the programme which followed was a reproduction of Edward Rose's version of Anstey's well-known story, "Vice Versa," which met with such a marked success when first produced by the Amateur Dramatic Club six years ago.

The club had the advantage of the help of two old and tried members of the 1891 cast in their original parts.

Mr. John Valerie, as Dick Bullitude's Body, was thoroughly in his element, especially in the second act, when, as the unfortunate old gentleman who has come to school in place of his son, he narrowly escapes a severe flogging at the hands of the outraged schoolmaster. Mr. Brownlow, as Mr. Bullitude's Body, was also most humorous; the contrast in manner between the irascible father and the irrepresible schoolboy caused shouts of laughter. The sight of the punctilious old gentleman skipping about with the abandon of a boy of twelve convulsed every one.

Good as these old favourites were in the former presentation of the play, there is no doubt that they far exceeded themselves on this occasion.

The Eliza of Mr. Boulton, the Clegg of Mr. Tweedie, and the Shellack of Mr. Pollard were all meritorious performances.

It is not until the second act that many of the characters appear, and of these Mr. J. Hobday's Dr. Grimstone was quite first-class.

We have often commented upon Mr. Hobday's capacity as an actor, and we believe him to be one of the club's greatest acquisitions. He has always invested his characters with interest and played them with finish, but his Dr. Grimstone is the best thing he has done yet.

Of the crowd of schoolboys, who were individually and as a whole better than those in 1891, Dr. Meakin as Tipping was quite excellent. He looked and played his part most naturally.

Mr. Tweedie as Coggs, who is always in a scrape, raised his small part into an important position by his funny performance. Mr. Farley played extremely well as Chawner, and his representation of the part met with much praise.

Mr. P. B. Grenfell played Dulcie Grimstone. The part presents very great difficulties to a male representative, as can be readily understood when it is remembered that Dulcie is a child of fourteen. That Mr. Grenfell came successfully through this his first appearance on any stage, and that he looked very pretty, is no mean praise, and the thanks of the club are due to him and those other gentle-

men who sacrifice themselves to the art by taking upon themselves the enormous difficulties of female representation.

The orchestra gave a capital rendering of German's difficult "Gipsy Suite" between the acts.

Altogether this year's Christmas entertainment must be considered a thorough success.

Mr. Valerie is to be warmly congratulated on his stage management, for on him fell the entire responsibility of the production of the plays, owing to the fact that Mr. J. Boyan was compelled, on account of his professional duties, to relinquish his position as stage manager.

Mr. S. Pollard ably directed the musical portion of the programme, and Mr. H. Boulton officiated as acting manager.

Sir George Humphry.

MR. HOWARD MARSH has kindly forwarded us a copy of a letter written by Mr. Crosse, of Norwich, introducing Mr. Humphry to Sir James (then Mr.) Paget fifty-seven years ago. How true was Mr. Crosse's opinion, and how truly prophetic his letter, subsequent events have shown. In the certainty that it will be of great interest to our readers we reprint the letter in full. It runs thus:

Norwich;
Sept. 15/39.

DEAR SIR,
My excellent pupil, Mr. George Humphry, will enter at Bartholomew's. He is one of the right sort—a regular hard worker, and if health can be maintained he will do your school credit. I shall feel obliged by your giving him all the opportunities of improvement you can; a little of your direction and encouragement will be of much service to him.

I am, yours very truly,
J. G. CROSSE.

[The letter was addressed to "— Paget, Esq.,"]

The Bahere Lodge, No. 2546.

REGULAR meeting of the Bahere was held at Frascati's Restaurant, Oxford Street, W., on Tuesday, January 12th, 1897; W. Bro. Alfred Cooper, F.R.C.S.Eng., in the Chair. Dr. Lovell Drage and Dr. Eddowes were elected joining members of the Lodge. Bros. Owen Lankester, Horton Smith, Gow, Laming Evans, Sloane, Petrucci, and McLean were passed to the second degree, Bros. Kettleby and Newton were raised to the third degree, and Mr. G. V. Worthington was initiated into masonry. The treasurer, Bro. Reece, reported that the funds of the lodge had been sufficiently

flourishing to enable him to invest £300 in India three per cent.

Forty-nine brethren afterwards dined together, W. Bro. Sir Reginald Hanson, Bart., M.P., W. Bro. Col. Cooke, and W. Bro. Anderson Bates of Grimsby being amongst the guests.

Bound the Fountain.

By LINCOLN CRANBORNE.

THE Chronic has fled from the excitements of the country," remarked the Fresher. "I met him this morning in the Abernethian room, looking more cynical than ever."

"Cynicism is too often a cloak for ignorance," replied the Enthusiast, who had been ploughed in the M.B.

"Ah!" said the Chronic dramatically, having just arrived on the scene. "I was sorry to hear of your ill success, but 'tis as well not to rush through your exams.—experientia docet."

"Does it?" asked the Fresher, with an air of great innocence. "Yes, it does," replied the Chronic. "It teaches self-effacement; I understand you got through 'Bones,' which is a pity."

"It seems to me," said the Enthusiast, "that, progressing in the same direction as at present, boys will soon be coming up to the Hospital *before* they go to school! The sucking babe getting used to the smell of the dissecting room is even now quite a common if distressing sight."

"'Tis indeed true," agreed the Chronic, "that parents heedlessly throw their sons into London digs at a very early age, where the devouring landlady mothers them at a profit, and the excitements of London claim them as brothers."

"They can go into college," suggested the Fresher.

"They can," said the Enthusiast ominously.

"I am afraid," continued the Chronic, "that many a promising light in the medical world has been hopelessly 'snuffed' from this very cause."

"What, going into college?" asked the Fresher.

"Certainly not!" snapped the Chronic. "Going into other places."

"What would you propose as a safeguard?" inquired the Enthusiast.

"In the first place, more supervision," replied the Chronic. "I would place men up to the time they pass their Second under the same or similar regulations as those which govern Oxford or Cambridge colleges."

"Being hunted by proctors and bulldogs down Piccadilly would certainly be exciting," remarked the Fresher.

"But how would you distinguish the first or second year man?" demanded the Enthusiast.

"I should make it compulsory for every Fresher to go into college, or some similar institution, for at least two years," answered the Chronic.

"What about Cambridge men, and other important personages?" remarked the Fresher.

"I should make no distinction," said the Chronic loftily.

"There is quite enough already," exclaimed the Enthusiast.

"It is sad," sighed the Chronic after a pause, "to see chivalry and a spirit of adventure so in abeyance amongst medical students generally. There was a time, even within my memory, when the Lord Mayor's Show would not have passed without some demonstration—a sign of the presence of those estimable virtues already mentioned. I can still call to mind many acts of undoubted daring, many deeds done in the interest of some beautiful but squashed damsel—studentdom was loose in the City on the 9th of November, 1886. A pocket Gray and the Fountain hold sway ten years later."

"You are, then, a lover of roydism and so forth?" surmised the Fresher.

"My dear sir!" remonstrated his elder, "a man can be young without being a blackguard, and yet not ape the manners of a recluse."

"Some time ago," said the Enthusiast, "there was a murmur as of many rats running. I did hear something about a rat h—"

"Hush!" whispered the Chronic: "that is forgotten. Were not the rioters admonished and their names recorded in the unsepeakable book?"

"The honour of the Hospital must be upheld," said the Enthusiast; "and a gold medallist is of more value than the captain of the football team."

"Value is a purely relative term," replied the Chronic; "either gentleman you mention would be useless in the sphere of the other."

"I still maintain—" began the Enthusiast.

"Your unfortunate opinions," interrupted the Fresher. "But let us 'Cross.'"

St. Bartholomew's Hospital Photographic Society.

THE Annual Exhibition of the above Society was held in the School Smoking Room on Monday, December 14th, 1896. Upon this occasion the usual display of photographs, upon the walls of a room at other times given up

to the worship of quite another goddess than Art, was supplemented by an exhibition of lantern slides in the Anatomical Theatre, as well as by a demonstration of X rays by Dr. Lewis Jones. The growing interest excited by the application of this latest branch of photography to medical science rendered its introduction into the programme of the evening especially fitting, and the Society is fortunate in possessing, as one of its Vice-Presidents, so able an exponent of radiography as Dr. Jones. To an exceedingly appreciative audience Dr. Jones explained briefly and clearly the essential facts connected with X-ray work, and followed his remarks by a practical demonstration of considerable portions of the anatomy of a small patient provided from one of the wards, by the use of the luminous screen. Several lantern slides, which had been reproduced from Dr. Jones' negatives by Mr. F. G. Harvey, were then shown, to illustrate the types of "cases" in which the X-ray process had been successfully used for diagnostic purposes.

Mr. F. Womack, also a Vice-President of the Society, then threw upon the screen some very instructive pictures of astronomical subjects, those representing the recent solar eclipse being of great interest. Slides of a more general and miscellaneous character, including, however, some rather good landscape pictures, were then exhibited by Messrs. Harvey, J. L. Maxwell, and Klump.

Of the pictures exhibited in the Smoking Room, our criticisms may perhaps be pardonably guided by those of the *Amateur Photographer*, who "ought to know." We read there that "to Mr. J. Hussey must be awarded the palm for pictorial work. Some of his photographs, e.g. 'On the Edge of the Forest' and 'Seascapes,' were quite up to Fall Mall form, while one or two of his snap-shots of London streets left little to be desired either in regard to composition or technique. Mr. Mawer, F.G.S., made a good second with half a dozen exquisite little landscapes, the treatment of which displayed considerable artistic feeling." "Sunrise on Glencoe," a bromide enlargement by Mr. J. L. Maxwell, was a great success; for cloud and mist effects it certainly could with only rare good fortune be beaten. Were we inclined to be fastidious, however, we should suggest how much the picture might have been improved by suitable framing. Dr. Lewis Jones exhibited some fine carbon enlargements, and Messrs. Tatchell, Pearson, and Phillips also contributed very worthily to the series of larger pictures. Mr. Tatchell, in addition, showed an album of smaller attempts, some of which manifested exceedingly careful work.

So much for members' private work. To borrow from our contemporary again, "the feature of the exhibition was undoubtedly the fine collection of 'hospital case' studies contributed by the Society's hon. sec., Mr. T. J. Horder. Those who are familiar with the exigencies of ward work know the difficulties that attend bedside photography, but Mr. Horder has surmounted these with characteristic energy, and the museum at Bart.'s is accordingly the richer. Some sixty photographs of rare and curious cases have been made during the year, and the St. Bart.'s Hospital Photographic Society in consequence surely justifies its existence. It is to be hoped that the young blood of Bart.'s will carry on the work of the Society in equally able fashion when professional life calls from its

membership the present leaders of this 'linked ring'—Messrs. Coleman, J. P. Maxwell, J. L. Maxwell, Pearson, Drury, and the two hon. secs., Messrs. T. J. Horder and P. G. Harvey,—a hope which we join hands in heartily expressing.

For Diagnosis.

A JEWISH patient's ailments are thus described in a letter to the H. P.:

"He don't sleep day and night of his guts. He has a big fright, and faints. He sick too much, lastes, night he nearly died. I wrote this because I can't speak no English."

The following illustrates another "horrible malady."

"This is just how I am feeling, as what should support the bowels, has given way right up each side of the chest and stomach, and like as if all the springs and artery's had given way; I feel it right down my legs, and even to the bottom of my heels, and was very relax for four or five days, and seem as if something is twisted in my stomach and right down to my back aractum, and the back aractum is very delicate and dose not act well, and the food don't seem to go in the stomach or right direction, and gush's of wind comes up through the stomach almost choke me, and often vomit up my food after meals, and the trunk of my neck and back of my head pains me very much at times, and pains in the shin-bones, and legs swell, and sweat at night very much, and feel so weak and languish, and lose flesh."

Obituary.

WILLIAM BRUNSKILL.

MR. W. BRUNSKILL, of Staindrop, Darlington, died on November 27th, 1896. He was in practice at Staindrop for over sixty years. He received his medical education at St. Bartholomew's, and was a pupil of Abernethy. When a student Mr. Abernethy presented him with his portrait—an honour which he reserved for his most deserving pupils.

Appointments.

DAVEY, ERNEST LL., appointed Medical Officer to the Walmer District of the Eastry Union, and the Second Division of the St. James's Division of the Dover Union. Also appointed Medical Officer of Health to the Walmer Urban District Council, and Surgeon to the Walmer Castle Court of the Ancient Order of Foresters.

MARTIN A COOKE, M.R.C.S., L.R.C.P., L.S.A., to be Surgeon-Lieutenant in the 2nd V.B. Gloucester Regiment, to date December 2nd, 1896.

FERNIE, F. E., M.R.C.S., L.R.C.P., appointed Medical Officer for the Swynnerton District of the Stone Union.

FISHER, J. C., M.R.C.S., L.R.C.P., appointed House Surgeon to the Radcliffe Infirmary, Oxford.

NEWTON, LANCELOT, M.R.C.S.Eng., L.S.A., reappointed Medical Officer for the Sawtry District of the Huntingdon Union.

MITCHELL, A. M., M.B., B.C.Cantab., appointed Resident Medical Officer to Queen Charlotte's Lying-in Hospital.

PADWICK, J. C., M.R.C.S., L.R.C.P., appointed Junior House Surgeon to the Salop Infirmary, Shrewsbury.

WILLIAMS, C. W., M.R.C.S., L.R.C.P., L.S.A., appointed Surgeon to the Workhouse, and Medical Officer for the Smallburgh District of the Smallburgh Union.

HEDGES, J. A., appointed Medical Officer of Health to the Rural District of Eaton Bray.

BENNETT, WILLIAM EDWARD, F.R.C.S.Eng., has been appointed Resident Surgical Officer to the General Hospital, Birmingham, vice C. Leedham-Green.

Examinations.

FINAL M.B. CAMBRIDGE: *Medicine*.—G. A. Auden, R. F. Baird, W. I. Brown, L. K. Harrison, C. F. Lillie, H. Maturin, H. B. Milsome, I. R. Rawling, R. de S. Stawell, H. Williamson, H. W. P. Young, and H. C. T. Langdon.

FINAL M.B. CAMBRIDGE: *Surgery and Midwifery*.—A. E. Jeatreson, S. Verdon Roe, H. W. Sewell.

SECOND M.B. CAMBRIDGE: *Pharmaceutical Chemistry*.—R. T. Worthington.

SECOND M.B. CAMBRIDGE: *Anatomy and Physiology*.—W. E. Burnand, H. St. C. Elliott, W. W. Wingate-Saul.

FIRST M.B. CAMBRIDGE: *Chemistry and Physics*.—L. Orton and B. B. Sapwell.

M.D. LONDON.—E. M. Cuffe, S. E. Gill, J. H. Griffith, J. O. Harvey, W. E. Lee, C. H. Perram, E. W. Reichardt, W. Shears.

B.S. LONDON.—1st Division: E. G. D. Drury, J. H. Hugo. 2nd Division: A. R. J. Douglas, G. B. Price, A. R. H. Skey.

L.S.A. PRIMARY. *Materia Medica*: T. B. Haig. *Anatomy and Physiology*: C. S. Hawes, N. Walmisley. *Anatomy*: G. R. Lucas. *Physiology*: J. C. S. Dunn, T. M. Talbot.

Reviews.

DEFORMITIES. A Treatise on Orthopaedic Surgery intended for advanced students. By A. H. TUBBY, M.S., F.R.C.S. London: Macmillan and Co., 1896. Price 17s. net.

This book is based upon the author's experience in Orthopaedic Surgery for the past few years at the National Orthopaedic Hospital, the Evelina Hospital for Sick Children, and at the Westminster Hospital. In addition, the Orthopaedic Clinics on the Continent have been visited, and the methods of treatment carried on in these places observed. The author states that the object of the work is to give a succinct account of the present state of knowledge concerning deformities, and not to be a record of his own work. Having this object in view, he has made

free use of the writings of the acknowledged authorities on the subject, both in this country and abroad. In the main he has succeeded in his attempt, and a very instructive and practical volume has resulted. The book is divided into five sections, each one of which is subdivided into chapters. The first section deals with deformities of the spine; the second with deformities of the neck, chest, and upper extremities; the third with rachitis and its resulting deformities; the fourth with deformities of the lower extremity; and the fifth with ankylosis and the deformities which result from paralysis.

In the treatment of genu valgum, Tubby advocates the routine treatment by osteotomy, and does not recommend the use of the osteoclast; he quotes the saying, "The osteoclast should become an historical surgical reminiscence; whilst Macewen's chisel should be canonised as the ideal scientific corrector of bone deformities."

The chapter on congenital disease of the hip is very good, and gives a *résumé* of the present state of surgical knowledge on the subject. He advises the non-operative method of treatment in these cases, preferably by Paci's procedure; but if an operation is requisite in an advanced case he thinks that of Lorenz is the best, and most likely to be followed by a good result.

Numerous cases are reported in connection with the various subjects, most of them being taken from the author's case-books.

The book is illustrated by fifteen plates and 302 figures, 200 of which are original.

A HANDBOOK OF SURFACE ANATOMY AND LANDMARKS. By BERTRAM WINDLE, D.Sc., M.D., M.A. Revised and enlarged by T. Manners-Smith, M.A., M.R.C.S. Post 8vo. Pp. 143. Price 3s. 6d.

This book is intended for anatomical students in their first and second years, as a guide to that knowledge of human anatomy which can be gained without the use of the scalpel and forceps. The book fulfils to a great extent the purpose for which it has been written, and will no doubt prove of much use to the student of anatomy if it is used in connection with one of the manuals of dissection. As a rule "dissection guides" give too little surface anatomy, and on this account the student during his first and second years does not apply the knowledge gained by dissection to the acquirement of facts which will be of much use to him when learning surgery later. The authors are not quite constant in their surface markings; thus on page 53 they say that "the angle of Ludwig is opposite the lower border of the fifth dorsal vertebra" and on page 64 that "the trachea bifurcates at or just below the angle of Ludwig and opposite the fourth dorsal vertebra." Fortunately, however, there are few discrepancies of this kind.

Correspondence.

To the Editor of *St. Bartholomew's Hospital Journal*.
SISTER MAGDALEN FUND.

DEAR SIR,—On December 21st I received such a kind letter from Miss Lock (formerly Sister Darker), that I think your readers would like to see a copy of it: it runs thus:
"Station Hospital, Rawal Pindi, Punjab, India;
November 26th, 1896.

DEAR SIR,—I am very sorry to see by the Nursing Record of November 7 that dear old Sister Magdalen (Mrs. Boyce) is in money difficulties, and that her son is so ill as to be admitted to the Brompton Hospital. She and I were good friends, when I was "Sister Darker," for nearly five years, therefore I am anxious to help her now, and I enclose a draft for Rs. 200 (= £12 7s. 4d.) towards the fund which I understand you are collecting for her benefit. Please let me know if at any future time any further collection is being made. I should be very glad to subscribe if I am able to do so.—Believe me, dear sir, yours faithfully,
C. G. LOCK.

To EDGAR WILLETT, Esq.

In the list which you published in the December number there occurs a slight miss print, "J. H. Manuel, Esq." should be "J. H. Mann, Esq."—Yours faithfully,
EDGAR WILLETT.

	£	s.	d.
Amount already acknowledged	48	9	0
Miss Lock	12	7	4
Christmas gift from a Bart.'s Nurse (anon.) ...	1	0	0
Total	61	16	4

Births.

- DAVIES.—January 5th, at 23, Finsbury Square, the wife of Arthur Temple Davies, M.D. Cantab., F.R.C.P., of a daughter.
DRAGE.—December 15th, at Burleigh Mead, Hatfield, Herts, the wife of Lovell Drage, M.A., M.D. Oxon., of a daughter.
HEATH.—January 6th, at No. 3, Cavendish Place, Cavendish Square, W., the wife of Charles J. Heath, F.R.C.S., of a daughter.
ROGERS-TILLSTONE.—On December 28th, at Ditton, Maidstone, the wife of J. M. Rogers-Tillstone, M.R.C.S., L.R.C.P. Lond., of a daughter.
RUSHWORTH.—On January 4th, at Beechfield, Walton-on-Thames, the wife of Norman Rushworth, M.R.C.S., L.R.C.P., prematurely, of a daughter, who survived her birth only a few hours.
STANLEY.—January 4th, at Brabourne, Kent, the wife of Hubert Stanley, M.B. Cantab., M.R.C.S., L.R.C.P., of a son.

Marriage.

- BACA—VERANO.—On December 14th, at Mrs. Verano's residence, Gibraltar, B.P., by the Right Rev. G. Canilla, D.D., Bishop of Lysia, Vicar Apostolic of Gibraltar, Arthur Cajetan, eldest son of the late Joseph Baca, Esq., Knight Commander of the Royal Spanish Order of Isabella the Catholic, to Helene Victorina, youngest daughter of the late Manuel Verano, Esq.

Deaths.

- FLETCHER.—January 5th, at 98, Harley Street, W., Christine Ellsabeth (Betty), daughter of Herbert Morley and Ethel Frances Fletcher, aged nearly two years.
JALLAND.—January 8th, at Rolleston House, Newcastle, Robert Wallace Jalland, M.B., of Newcastle, and Assouan, Upper Egypt.

ACKNOWLEDGMENTS.—*Guy's Hospital Gazette*, *St. Thomas's Hospital Gazette*, *St. Mary's Hospital Gazette*, *The Gynoscope*, *The Student* (Edinburgh), *The Nursing Record*, *The Hospital*, *The Charity Record*.

St. Bartholomew's Hospital



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[PRICE SIXPENCE.]

NOTICE.

All Communications, Articles, Letters, Notices, or Books for review should be forwarded, accompanied by the name of the sender, to the Editor, ST. BARTHOLOMEW'S HOSPITAL JOURNAL, St. Bartholomew's Hospital, Smithfield, E.C., BEFORE THE 1ST OF EVERY MONTH.

The Annual Subscription to the Journal is 5s., including postage. Subscriptions should be sent to the MANAGER, W. F. SARGANT, M.R.C.S., at the Hospital.

All communications, financial or otherwise, relative to Advertisements ONLY, should be addressed to J. H. BOOBY, Advertisement Canvasser and Collector, 29, Wood Lane, Uxbridge Road, W.

A Cover for binding (black cloth boards with lettering and King Henry VIII Gateway in gilt) can be obtained (price rs. post free) from MESSRS. ADLARD AND SON, Bartholomew Close. MESSRS. ADLARD have arranged to do the binding, with cut and sprinkled edges, at a cost of 1s. 6d., or carriage paid 2s. 3d.—cover included.

St. Bartholomew's Hospital Journal,

FEBRUARY 14th, 1897.

"Æquam memento rebus in arduis
Servare mentem."—Horace, Book ii, Ode iii.

IT has been thought well that the ST. BARTHOLOMEW'S HOSPITAL JOURNAL should deal with a matter that is an every-day topic of conversation. What is a man's duty towards his hospital? Many consider that a man owes no duty towards his hospital beyond the payment of the regulation fees. Others maintain that he should subscribe to all the clubs of the hospital, become an active member of as many of them as he is physically able, join in every social movement set on foot by members of the hospital, and never be guilty of the, to them, unpardonable crime of pleading his professional work as an excuse for not attaining this high ideal.

Between these two extremes there are many intermediate views. The extremes may be wrong, but surely it cannot

be disputed that in signing his name as a student a man undertakes definite responsibility towards the hospital he has selected as his *alma mater*.

Had all men who have passed through our Hospital as students held themselves free from responsibility of this sort, and had they thought only of their own personal advancement, St. Bartholomew's would never have enjoyed the reputation it does. Hence men who qualify from Bart.'s now are reaping the value of the public spirit of their predecessors. In all fairness it must, then, be the duty of present Bart.'s men to preserve the reputation and credit of the Hospital, so that their successors may inherit with the name of "Bart.'s man" the same advantages which they have themselves enjoyed.

A man may fail in his duty either negatively or positively. He may go through his course thinking only of his own pleasure or advancement, and may in his whole connection with his hospital make no effort to add to its credit. On the other hand, he may be guilty of conduct which will bring actual discredit upon the school to which he is attached, or after leaving the hospital he may as a practitioner do harm to the reputation of the school he has left.

Thus we have three groups of men who fail in their duty,—those who do not interest themselves in the general welfare of the Hospital; those who, as students, bring discredit on their school; and those whose behaviour as practitioners causes the reputation of their training school to suffer.

Of the first class we have little to say. They, poor things, are perhaps not to blame. Their mentalizing power may be only just sufficient to carry them so far as the various examinations, and were they to devote any thought to the welfare of their hospital, they might occupy more time even than they do now in reaching their goal. We do not grudge them the undeserved reputation they obtain in the eyes of the world as "Bart.'s men." They doubtless need it, for though much literature may be compressed into their minds, their knowledge of the world is small, their capability of adapting themselves to varying circumstances less, and their tact a negligible quantity. With one more

remark we dismiss them. Strange as it may seem, these are the men most given to grumbling at the small amount of interest evidenced in their progress by the authorities, and the imperfections of their school. The second class is a large one, and at once divides itself into two subdivisions: those who, while doing all they can to support the prestige of the Hospital, are occasionally betrayed into actions which are the outcome rather of thoughtlessness than vice, and those who not only do nothing for, but actually detract from the Hospital credit. The former, we confess, are vastly more to our mind than the members of the second subdivision who err in regard to *both* portions of their duty.

Recently a man who may be regarded as a type of the first group of delinquents—the negative gentlemen—succeeded in distinguishing himself in the latter division of the active group. Letters from him appeared in the public press signed with his name *and* qualifications, and dated from the library of St. Bartholomew's Hospital, in which, aiming doubtless at inexpensive self-advertisement, he bragged of his connection with Bart.'s, expressed his opinion upon a matter of great importance to the Hospital, and enclosed a donation of one shilling to a public fund.

Now this gentleman is at perfect liberty to write to the public press as often as he likes, and to send shillings to any public fund he likes; but we would like to see his letter, his opinion, and his money dated from his own residence, and not from the library at Bart.'s.

Many in the outside world may be excused if they regard such a letter as emanating from some high authority at the Hospital, and consider the opinion therein contained as an expression of the public opinion in the Hospital.

It cannot be necessary to say more on such a point. Such an action must evoke, from all, the criticism, "bad form."

Of the third and last group of delinquents we see little, but unhappily we hear of them from time to time,—men who, while in the position of *locum tenens*, by carelessness and ill-behaviour prejudice the interests of the practice temporarily in their care; men who as hospital residents have from time to time been the means of closing the doors of hospital appointments to Bart.'s men, and men who avail themselves of the infinity of ways in which a practitioner may bring discredit upon his school and his profession.

Fortunately, owing to our predecessors, and the great number of men who at the present time are every day adding to the dignity and prestige of the hospital, there is but little fear of permanent harm resulting from the actions of the discreditable few. Still, public opinion might, if more vigorously expressed, do something to repress such men, and we leave our readers with the parting remark that there is a fountain in the square, which has before now been used as an educational method in such cases. New forms of treatment for all irregularities are constantly introduced,

and there is often true cause for fear lest in pursuing the new remedies we may inadvertently forget those that have proved themselves reliable through the "hoary days of antiquity."

A Teaching University for London.

MANY years have passed since the first proposals to reform the University of London, in the direction of giving it teaching as distinct from examining functions, were made. One of the earliest of these proposals arose in the University itself, when in 1864, Mr. Bompas proposed in Convocation that a special committee should be appointed to draw up suggestions for teaching by the University. These suggestions were drawn up, and sent to the Senate, only to meet with rejection. In 1878 Dr. Pyc-Smith moved in Convocation a series of resolutions having the same object; and in the same year the Report of the Annual Committee contained proposals for bringing teachers, examiners, and the Senate into closer relations with each other, and for promoting higher University teaching. These proposals were adopted by Convocation, but nothing came of them. In 1881 the subject was again referred to in the report of the Annual Committee, and a resolution affirming the desirability of establishing Boards of Studies to advise the Senate on matters connected with the details of examinations, and to form a medium between teachers and examiners, was passed. This resolution was re-affirmed in January, 1882.

Thus there was, fifteen years ago, a strong feeling amongst the graduates in favour of modification of the University in the direction of a closer association of teachers with the management of the examinations of the University. This is instructive and interesting when we bear in mind whence some of the opposition to the best scheme of reconstruction which has as yet been proposed comes—viz. from a considerable party in Convocation.

It was not until early in 1884 that an association for the promotion of a teaching University in London was founded, and brought to a head what had been so slowly developing. The scheme proposed by this association, now long ago superseded by the many others which followed it, has the merit of being the first elaborated proposal for carrying into effect so desirable a reform as that which has for fifteen years been the subject of consideration. Since this scheme was propounded there have been certainly fifteen other schemes, and some minor propositions directed to the same object—or an average of one per annum. At times the balance of opinion seemed to favour reconstruction of the present University, at others the advocates of the foundation of a second University appeared to predominate. There have been two Royal Commissions, a great mass of evidence

has been taken, and the often conflicting interests of different teaching and examining bodies have been considered and urged by those interested. At one time it seemed that no solution of the problem was possible; at others matters seemed to be on a fair way to settlement.

We feel it necessary to thus briefly refer to facts which are well known to many of our readers, for we wish to emphasise the fact that many years of careful thought and work have been devoted to this subject, and as yet no tangible result has followed. We have felt for the past two years, and still think, that the time for action must now be very near. Never before have the various bodies interested been so near to practical unanimity, and the matter is of so vast importance to students of medicine in London that we wish to do our little to urge for a prompt settlement. There is, moreover, an element of danger that, through apathy on the part of those interested in the students' welfare, the tactics of the few remaining opponents—for all schemes, however good, curiously have opponents—may prevail. It may, therefore, be interesting to our readers to learn what has taken place in this question since the date of our last article in December, 1895. It will be remembered that in November, 1895, the teachers in the Metropolitan Medical Schools met and unanimously passed the resolution:

"That the Government be requested to introduce, at an early date, a Bill similar to Lord Playfair's London University Commission Bill, 1895, appointing a Statutory Commission to carry out the recommendations of Lord Cowper's Commission; but with an added clause giving (in accordance with precedent Acts of similar tenor) to all institutions or persons directly affected by any Statute or Ordinance proposed by the Statutory Commission a right of appeal to the Privy Council for the disallowance or alteration thereof previous to such Ordinance being laid before Parliament for confirmation."

A resolution in precisely similar terms was shortly afterwards passed at a meeting of delegates of *all* the institutions and bodies interested, and a deputation attended at the Privy Council Office, and waited upon the Duke of Devonshire. It will be remembered that the Duke's reply was not very encouraging. He appeared to have an altogether disproportionate idea of the character of the opposition which a party in Convocation offered to the proposed Bill, as well as an entirely erroneous notion of the "rights of veto" said to lie with the members of Convocation under the existing charter of the University. Amongst other matters he suggested that the objects desired could be obtained better by charter than by an Act of Parliament appointing a Statutory Commission.

We understand that the delegates who formed the deputation to the Duke, immediately proceeded to draw up a statement with the object of giving his Grace further information upon the subject, and of removing the erroneous impressions which appeared to have influenced the reply.

This statement was sent to his Grace in December, 1895, and had, no doubt, its share in influencing the Government in their decision upon the matter. In this statement the objections to proceeding by way of charter were very forcibly put by the delegates in the following words:

"(a) A difficulty must, we think, inevitably arise in answering the question by whom such a charter is to be demanded, or to whom it should be granted. The Senate of the University of London is, we believe, the only body competent to apply for a charter affecting the University which they administer. But it appears that the Senate has no desire or intention of applying for any such Charter; it has, on the contrary, expressed its almost unanimous opinion in favour of the method of procedure *laid down in the Report*.

"(b) Secondly, such a charter must include, not merely important points of principle, but many complicated details and regulations necessarily required to bring the new organisation into working order. Any attempt to settle the terms of such a charter would involve the renewal of all those tedious and ineffectual negotiations on which the Senate and other bodies concerned were for a long time engaged, and the unsatisfactory issue of which has brought home to the minds of all the conviction that the question is one to be settled only by superior authority.

"(c) Thirdly, even were the Senate willing to make the necessary application, and for that purpose to assume the responsibility of framing a draft charter, to carry out what might be agreed on between themselves and the various bodies concerned, it is more than doubtful whether those other bodies would be willing to enter into such a treaty, or to commit the future success of the necessary reforms to so doubtful and precarious a venture.

"We submit, therefore, that the conclusion at which we have arrived on this point is fully justified by experience, as well as by the fact that the method of proceeding by way of Statutory Commission has been so repeatedly followed and approved by Parliament, as to have settled into a recognised course of procedure in cases similar to the present."

In June, 1896, the decision of the Government became known, when the Duke of Devonshire introduced into the House of Lords a Bill to appoint a Statutory Commission, similar to Lord Playfair's Bill of 1895, but with the added clause asked for by the deputation of delegates of the institutions concerned, giving a right of appeal to the Privy Council. Thus the whole of what was asked for by the institutions concerned, the Government was prepared to grant; and as both Liberal and Conservative Governments had introduced similar Bills, it seemed highly probable that, at last, some substantial progress would be made. But again opposition proved, at the end of a Parliamentary session, to be too strong. It will be remembered that throughout the period intervening between the

Report of Lord Cowper's Commission, and the substantial agreement of the institutions concerned, the attitude of King's College had been very doubtful, and it was not without very important reservations that King's eventually agreed to join with the other institutions in asking for an Act to appoint a Statutory Commission. When the Bill of last Session was introduced into the House of Lords, those interested in King's College pressed for an amendment introducing a clause into the Bill in regard to the special circumstances of King's College.

This amendment having been agreed to, the Bill passed the House of Lords, but when sent to the House of Commons there was no time even to introduce it in the few days which remained of the Parliamentary session, except as an unopposed measure. But it is an open secret that some friends of King's College were not altogether satisfied with the amendment agreed to in the House of Lords; and secondly, that some opposition was threatened on behalf of the unsatisfied party in Convocation. For these two reasons it was impossible to proceed further during last year.

The Parliamentary session of 1897 has begun, but as yet no sign of a Bill has appeared. We have been informed, however, that it is probable that the Government will re-introduce the Bill into the House of Lords, and the present danger is that opposition may again have the effect of compelling the postponement of legislation through pressure of business. We have heard rumours of a movement in favour of abandoning the Bill, and endeavouring to proceed by way of charter. This we are convinced would be an absolutely fatal proceeding, and we understand that at a meeting of the Committee of Graduates of the University recently held, this view was unanimously expressed in a resolution urging on the Government the introduction of a Bill without delay. We hear also that similar resolutions have been passed within the last week or two by several of the institutions concerned, including the Medical School of St. Bartholomew's Hospital.

This, we are informed, is the present position of affairs, and it behoves all those who desire a speedy and satisfactory solution to put their shoulders to the wheel, and to do all in their power to get an Act of Parliament passed during the present session.

Pathological Findings.

By A. A. KANTHAQK, M.D., Lecturer on Pathology.

IV. AMYLOID CHANGES.

BY amyloid changes we understand the appearance of curious deposits in certain tissue elements, which, when extensive, renders them not unlike boiled starch, and transform them into glassy or hyaline

masses. These deposits can be readily demonstrated by chemical reactions, of which the following are commonly used. (a) A solution of iodine stains the amyloid portions a deep mahogany brown, which, on addition of sulphuric acid, becomes bluish or violet. It was on account of this modified starch reaction that the name "amyloid" was given to this substance. It is, however, difficult to obtain the blue tint, and generally we have to stop short at the first part of the test, viz. the mahogany coloration. (b) Methyl violet stains the amyloid material red, leaving the other parts bluish or violet; the reaction is best marked if, after staining with methyl violet, the tissues be washed in water acidulated with hydrochloric or acetic acid. Gentian violet may also be used. It must be remembered that other substances, such as "colloid" and "hyaline," occasionally stain exactly like amyloid, so that we must not regard everything that reacts red with methyl violet as amyloid. According to Lubarsch, the methyl violet test is convincing—(a) wherever iodine or iodine-sulphuric acid gives a positive reaction; (b) in the absence of the iodine or iodine-sulphuric acid reaction wherever the substances which stain red with methyl violet optically, chemically, and topographically agree with genuine amyloid, or (c) appear under conditions which are generally associated with amyloid degeneration.

What is Amyloid?—Although by general consent considered a proteid, amyloid does not react like an ordinary albumen, and it is stated that it resists digestion. Recent observers, however, have asserted that in a finely divided condition it will undergo both peptic and tryptic digestion, and will dissolve on heating in water or alkalies. Its albuminoid nature even has been doubted, and it certainly has never been prepared in a pure form, so that we must confess that the chemistry of amyloid is still unknown.

Causes of Amyloid Changes.—(1) The commonest cause is chronic suppuration, and especially that accompanying tuberculosis and syphilis; but any form of chronic suppuration, if only chronic enough, may lead to amyloid changes. More especially may be mentioned chronic pulmonary phthisis, tubercular disease of the bones and joints, syphilitic bone disease, ulcerating cancers, varicose ulcers of the leg. (2) Tuberculosis and syphilis without concomitant suppuration may also lead to amyloid disease; so may (3) actinomycosis and leprosy, (4) Bright's disease, and (5) various forms of grave anæmia and cachexia. When syphilis is present it invariably shows itself as the tertiary or congenital form. However, the common cause to bear in mind is chronic suppuration. But if we review the various lesions with which amyloid changes may occur, we find that the common factors are (1) continual loss of albumen, producing chronic anæmia, or marked hydræmia; and (2) it appears, infective processes, or at least processes which are readily complicated by secondary infections, such as suppuration and ulceration. We have, however, but little

knowledge regarding the origin of the amyloid substance itself.

Birch-Hirschfeld has analysed 262 cases, and in these there were present—

	Times.
(1) Chronic tubercular disease of the lungs ...	140
(2) Pulmonary phthisis and bony tuberculosis...	21
(3) Pulmonary phthisis and intestinal tuberculosis ...	18
(4) Pulmonary phthisis and syphilis ...	2
(5) Bony tuberculosis alone ...	28
(6) Chronic suppuration of bone (non-tubercular) ...	4
(7) Syphilis (gummatous, especially in liver) ...	15
(8) Cancerous ulcers ...	5
(9) Varicose ulcers of leg ...	3
(10) Visceral suppuration ...	8
(11) Actinomycosis ...	1
(12) Noma ...	1
(13) Peritoneal tuberculosis... ..	4
(14) Chronic arthritis	1
(15) Suppurative cystitis and pyelitis ...	1
(16) Doubtful causes	10
	262

Localisation of Amyloid Changes.—In general amyloid disease we find that certain organs are more especially selected, and as a rule several of them are simultaneously affected. Particularly favoured are the liver, spleen, kidneys, supra-renal capsules, lymphatic glands, and intestinal mucosa, especially that of the large intestine. Thus in 269 cases Birch Hirschfeld found amyloid changes—

	Times.
In spleen alone	35
„ liver „	2
„ kidneys „	1
„ spleen, liver, and kidneys	142
„ spleen and kidney	77
„ spleen and liver	10
„ kidneys and liver	2

The spleen is, therefore, oftener affected than any other organ in the body.

Experimental Pathology.—Numerous attempts have been made to throw light upon the origin, nature, and distribution of amyloid changes by means of animal experiments. Most of them have been negative, but a few positive results have been recorded, and of these those of Czerny and Krawkow must be specially mentioned. The former kept up a chronic suppuration in dogs by means of turpentine and nitrate of silver injections, and found that the spleen and liver invariably showed amyloid changes; with rabbits, however, he was less successful. Examining the pus corpuscles and leucocytes he found that during the experiments they showed granules which stained dark brown with iodine, and turned blue on adding sulphuric acid. Czerny

assumes that this substance is pre-amyloid matter, which is carried by the leucocytes to the tissues, deposited there, and then changed into amyloid. Similarly, he found that during suppurative processes in man pre-amyloid substances appear in the leucocytes, so that he concludes that the precursors of amyloid are formed in the pus,—whether micro-organisms are present or not is immaterial; that they are diffused or distributed in the various organs and deposited there as true amyloid, and that this deposition shows itself first in the spleen. According to him, then, we have an infiltration of the tissues, and not a degeneration.

Krawkow repeatedly inoculated rabbits and other animals with pure cultures of the *Staphylococcus pyogenes aureus* until they showed marked wasting, and readily produced amyloid changes in their organs, which with them also began in the spleen, and in every detail agreed with what is observed in man, macroscopically or histologically. He believes that microbic infection is absolutely necessary. Numerous other observers, including myself, have failed in obtaining results similar to those of Czerny or Krawkow, and therefore, in the absence of confirmatory evidence, judgment must be suspended, for the few positive results obtained hitherto do not altogether outweigh the far more numerous negative ones.

How is the Amyloid Substance deposited in the Tissues?—

There exist two conflicting views: (1) either the amyloid is produced *in situ* by the cells from their albuminous constituents, or (2) it is formed in the blood and carried to the tissues; *i. e.* we are dealing either with a degeneration or an infiltration. Formerly it was believed that amyloid was formed in and by the cells, and then deposited from them by a process of infiltration into the intercellular tissues; but now it is generally believed that amyloid matter never appears in epithelial cells, but only in the interstitial tissue, although so good an observer as v. Recklinghausen still speaks of intercellular and intracellular infiltration. Wichmann considers it as established that it is exclusively the connective tissue which contains the amyloid, whether it be deposited there by a process of degeneration or infiltration. So far we cannot come to a decisive opinion, because experimental evidence assists us but little. If Czerny's observations be accepted, then indeed the amyloid change is an infiltration. On the other hand, neither Virchow nor any other observer has ever detected amyloid in the blood. It is undoubted that in the earliest stages the amyloid appears in the intercellular substance; but it is uncertain whether it develops *in situ* or passes out from the cells. Thus, with regard to the liver, it has been stated by some observers that the amyloid is deposited first in the hepatic cells; but others, and especially more recent observers, emphatically deny that these cells ever show amyloid changes, so that, according to the most recent investigations, it is held that amyloid changes never occur in (a) epithelium, (b) striped or

unstripped muscular tissue, or (c) leucocytes, but that the deposition is always an interstitial one, and that the tissue cells degenerate through pressure exerted by the amyloid tracts. Accordingly, then, so far as the liver is concerned, the epithelial cells are never amyloid, nor are they in the kidney or intestines; but it is almost certain that in the spleen amyloid changes may occur, not only in the reticulum, but also in the cells, which, however, are not epithelial. We see, therefore, that this question also must be left open.

All observers, however, are agreed that the amyloid changes during the earliest stages are most frequently observed in or along the capillaries and smallest arterioles. Their walls become swollen and their lumen narrowed: in the arterioles the amyloid matter is deposited in the middle coats, the muscular elements remaining intact, the material appearing in the connective tissue; and in the capillaries it is deposited in the interstitial substance of their walls. From there the amyloid change extends into the surrounding tissues, implicating, according to most observers, only the connective tissue; according to some, also the parenchyma cells, *i. e.* the hepatic cells if the liver be affected, the spleen pulp in case of the spleen, and the tubular epithelium in case of the kidney. If we subscribe to this latter view, then it is evident that an amyloid change is an infiltration rather than a degeneration. This is, however, a point hardly worth discussing, because the effect of the amyloid change must be cell degeneration and impairment of function. In the liver and kidney the epithelial cells outside the amyloid tracts always show marked fatty degeneration, and those within those tracts disappear altogether; and when vital organs are concerned the final results must be anæmia, hydræmia, marasmus and death. The amyloid matter not only presses on the cells, but also on the vessels, and this produces vascular obstruction, which, if arterial, still further impairs nutrition and function; and, if venous, may lead to œdema and dropsy. Thus in amyloid disease of the liver ascites due to portal obstruction is common; in amyloid disease of the kidney albuminuria is not uncommon.

Why the amyloid substance is first deposited in the middle coats and walls of the arterioles and capillaries we do not know; but there is no reason to believe that it is a primary degeneration of these parts, because we find the arterioles and capillaries affected only in those regions which are actually diseased, and not elsewhere; and it may also be remarked that when an amyloid change appears in the kidneys as the result of chronic nephritis, it is most marked and begins first in the kidneys.

Can an Amyloid Change, once in Progress, come to a Standstill and disappear? *i. e.* can amyloid substance, once formed, be reabsorbed? This is an important question which Litten attempted to answer experimentally by placing fragments of amyloid tissue in the peritoneal cavity of rabbits.

He obtained all the changes which generally appear on placing foreign bodies in the abdominal cavity, but what was left of the amyloid tissue no longer gave the methyl violet reaction. It is further known that wandering cells may ingest amyloid matter. Clinically, it appears, there is some evidence that occasionally an amyloid liver may diminish in size, and that an amyloid change may gradually vanish. It must, however, be remembered that the clinical diagnosis is by no means always certain. We may assume, then, on returning to Litten's experiments, that the cells which aggregate around a foreign body are capable of ingesting, dissolving, and removing amyloid matter, but further we cannot argue.

We may now briefly consider the amyloid processes in the chief organs.

(1) *Liver.*—(a) In the earliest stages they can be detected only on staining with methyl violet. Some lobules are quite free, but the affected ones show the changes in the intermediate zones. The amyloid is deposited along the capillary walls, compressing and pressing upon the liver cells, which themselves are not affected.

(b) In advanced stages the liver is enlarged and firm, smooth, and opalescent on section. The degeneration affects the central and intermediate portions of the acini. What is left of the liver cells must be looked for at the extreme periphery or the extreme centre of the lobule, and those at the periphery are almost always in a state of fatty degeneration. In the amyloid zone nothing is found of the cell outlines; the cells have vanished, or only the merest remnants are found.

(2) *Spleen.*—Here either the follicles (sago spleen) or the pulp (wavy spleen) become changed.

(a) *Wavy spleen:* the capillaries are surrounded by amyloid tracts which extend along the reticulum, gradually compressing the spleen cells, and pressing upon the follicles.

(b) *Sago spleen:* the reticulum of the follicles becomes amyloid, the follicles are large and transparent, and the lymphocytes eventually disappear altogether through pressure.

(3) *Kidneys.*—The amyloid changes are best observed in the cortex, but are present also in the medulla. In the cortex the glomeruli, membranæ propriæ, arteries, and capillaries are affected, and in the medulla the vessel walls and membranæ propriæ, but as stated by modern observers the renal epithelium never suffers. The glomeruli become enlarged and transparent, and are filled by amyloid capillary loops; the nuclei of the glomerular epithelium disappear.

(4) *Intestine.*—The amyloid changes are observed in the walls of the vessels of the villi, mucosa, and submucosa, and in the reticulum of the villi.

(5) *Lymphatic Glands.*—The reticulum becomes amyloid, and we obtain appearances resembling those described in the spleen.

Occasionally amyloid changes may appear locally, as in

the conjunctiva and in the connective tissue, or in tumours. These processes require no special discussion or description.

In my next article I shall consider the process of Acute Inflammation.

Bees and Medicine.

By JOHN GUTCH, M.A.

SOME apology is, perhaps, due to the readers of the JOURNAL from the writer of this article, for the subject is one that deals with the past, almost prehistoric times, whereas we of to-day are thinking mostly of the present or future. My reason for writing on such a subject is twofold: first, my great interest in bees; and secondly, the fact that medical men have, from the earliest ages, made the study of bees the theme of many writings. For these reasons I crave your indulgence whilst I put before you my gleanings from a selection of old authors on the subject. Amongst the early writers, including medicals and those not of the faculty, I may mention Pliny, Virgil, Hippocrates, Galen, Moufet, Androvandus, Warder, Moses Rusden, and others. Truly it is a subject, perhaps you will say, almost threadbare; it has been so often written about. Moufet, an English physician, mentioned above, who died about 1600, estimates the number of authors who wrote about bees before his time at five or six hundred; how great their number must be now I can only leave you to conjecture.

But I have said enough by way of introduction. So many are the healing virtues with which bees and honey are credited, that there are but few ills to which human nature is heir which, according to the ancients, were not curable by their use in one form or another. Some few of these virtues I will now mention. First, "the eating of honey gives long life and health;" surely, then, it must have been popular. "Yet honey was the symbol of death as gall is of life. Wherefore the ancients offered honey in sacrifice to the infernal dieties, for, because of pleasure, death creeps on us." It was known also as a cure for toothache, deafness, spots in the eyes, jaundice, gout, sciatica, dropsy, palsy, agues, distempered spleen, cough, difficulty in breathing, asthma, burns, for the healing of all wounds and ulcers, for the diminishing of fevers, as a remedy for baldness and as a hair-dye, as a slayer of lice and nits, as a diuretic and oxytoxic. Truly a goodly list, you must admit. Authorities did not, however, agree in those days any more than they do now, for Galen forbids honey to such as were hectic, had a fever or the jaundice, and young men. The same writer says, "Honey warms and clears all wounds and ulcers, attenuates and discuteth excrescences in any part of the body." It is very effectual to produce hair in baldness, he says; and Chares, a

physician about 1690, recommends the ashes of bees for this purpose. The same writer urges the use of "oil of honey distilled for quotidian agues, and for producing a smooth skin, diminishing heat in fevers, and quenching thirst."

"For exulcerated ears" Galen recommended "honey infused warm by itself, especially if they cast forth ill savour, as also for their singing and inflammations."

Bees drowned in honey are recommended for clearing the eyes, for staying vomiting, and as profitable for deafness. When used for clearing the eyes the eyes are to be anointed; but this caution is added, "First bind the party, for such is the violence of the medicine that he cannot otherwise patiently endure it; but the benefit is so forcible that in the third day it will make a clear sight."

Pliny most of all recommends honey which the bees gathered in dog-days, almost thirty days after the solstice, for, saith he, "After the rising of every star, especially the greater ones, or the rainbow, if flowers follow not, and there be a warm dew with the rays of the sun, medicines, not honey, are produced, heavenly gifts for the eyes, ulcers, and bowels."

Hippocrates says, "Honey mixed with other things nourisheth; but eaten alone attenuates rather than refresheth, for it provoketh urine and purgeth too much." Honey rubbed into the gums he recommends, "for it conduceth wonderfully to the generation, conservation, and whiteness of the teeth."

Celsus gives the following remedy:—"The bodies of bees taken newly from the combs and powdered and drunk with Dierretick wine, powerfully cures dropsy." Oxymel made of water, vinegar, and honey, is recommended "for driving away thick and gross humours, and as profitable for sciatica, falling sickness, and the gout, and as good also to gargarize with in a squimancey."

Oil of wax, a lengthy receipt for the preparation of which is given by Androvandus, is said "to help the palsy and sciatica, contracted nerves by anointing or drinking of it, to conserve the memory, confirm the brain, assuage the toothache, free the lungs from thick superfluities, to heal the cracks and chaps of the lips and paps, and hinder not the child from sucking, and for bringing forth the dead or living child."

"Wax," says Galen, "after a sort, holds a middle of things that heat, cool, moisten, and dry;" and both Dioscorides and Pliny prescribe it for internal ulcers of the bowel.

One more curious remedy I must mention before I conclude, and it surely is the strangest of all. Baths of honey are spoken of as being admirable for aches and strong itches. Remnant thus speaks of it:—"A friend of his had such a foul itch that he was like a leper, whom he thus cured. He took an empty wine cask, called a pipe, and took out one head, and made a liquor of water

and honey, making it pretty strong with the honey, and heating it as hot as he could endure to stand in it, and put it in the pipe and caused him to stand in it up to his neck a pretty while, and this he did three days, one after another, and he was recovered as clear as ever. If it be renewed with a little honey every day it will be better.

Such are a few of the curiosities of ancient therapeutics, and they will, I hope, prove as interesting to others as they have done to myself.

The Details of Ovariectomy and Disputed Points in After-Treatment.

By ALBAN DORAN, F.R.C.S., Surgeon to the Samaritan Free Hospital.

A Paper read before the Abernethian Society on November 12th, 1896.

(Continued from p. 55.)



WE are now back again to the abdominal wound, and must think a little about sutures. Altogether, silkworm gut is the best material, at least for the deep sutures. It was first used nearly twenty years ago by Dr. Bantock, at the Samaritan Hospital. I see that you approve of it here. Mr. Cripps has adopted it, and Mr. Lockwood finds that "it is quite unirritating, and owing to its physical properties has no capillarity." He states that "one or two boilings seem to have no effect on it," but I find that it is quite needless to boil the gut. It must always be soaked in cold water or antiseptic solution for at least twenty minutes before use, and it is good to keep it in lotion.

Catgut is necessary for deep, sunken sutures, continuous or interrupted. I use it when uniting the aponeurosis and muscle.

We must not allow hernia to develop, if we can avoid it. We cannot always avoid it, for this complication is the patient's fault in not a few cases. They often put aside belts far too soon. Do not be under the erroneous impression that the hernia always develops at the lower extremity of the wound. I have seen several bad hernie high up an ovariectomy cicatrix. Do not blame the material for this; that silkworm gut never gives trouble if not pulled too tight. Also beware of the value of new methods. At the Geneva Congress last September there was a long discussion on the closure of the abdomen. Every speaker reported the best results after the adoption of his *last* method; but Savory long ago noted the fallacy which underlies arguments of this kind. It is in the old operator, rather than in the new method, that the improvement usually lies. As regards the material for suture, we can see the truth at once. Silk may do well, silkworm gut may do well, and wire may do well. But the divergent practices of deep sutures, including all layers or sunken sutures of the deeper layers of the abdominal wall, come under the same argument. Beginners often handle the tissues too much and not too tenderly, so that sunken sutures in layers may involve great mauling about of muscle, aponeurosis, fat, and skin. If deep sutures only be used, they may be pulled too tightly. After some experience the operator handles tissues more gently; then he must discount the value of the method he rejects or adopts.

A single set of sutures passed through all the layers, including the rectus itself as well as its sheath, answers well in a wound of average depth. Several German precisions, after examining for years after operation many patients submitted to this method, make out no larger percentage of hernie than occur after opposite practices, nor can we feel sure how far any patient with a hernia of the rectus is marked, and in plump and fat subjects, it is always right to unite its edges with a continuous catgut suture, including the muscle on each side. On the other hand, this sunken catgut suture is advisable when the walls are very thin and damaged by long distension, as firm union of the atrophied structures is needed before the muscles regain their strength.

I consider that separate union of the peritonium is unnecessary in ovariectomy (it is otherwise in supra-vaginal hysterectomy). The deep suture passing through all layers will secure the peritonium perfectly if the needle be passed within a quarter of an inch of the cut edge of the serous membrane. This causes eversion and perfect apposition of the inner surfaces of the sutured peritonium. Within a few hours union begins quite unhindered by vomiting. Remember, however, that the edges of peritonium are everted. Do not, then, pass the needle too far from the border. This error was once common; I have seen the cut edges side by side lying level with the skin after the tying of the sutures. Thus the everted serous surfaces effectually prevent union of all the anterior layers; and when the sutures are removed there is a hernial pouch ready made.

The sutures must be pulled just tightly enough to bring the edges of the wound together, allowing for oedema. The conditions are quite different to what is seen in the pedicle, where the ligature must be pulled tightly. But you are all good general surgeons here, and so understand well enough about tying sutures. The knot should be tied somewhat to the side of the line of incision. A few superficial sutures including the fat are needed in fat subjects.

The wound being closed, all harm is shut out—though, maybe, some harm may be shut in. The dangers of the drainage-tube must be met by proper management of the drainage-tube; but when a wound is closed completely, and there is no tube, there is practically no danger of entry of infection. The days are gone when some surgeons turned spray on the dressings and skin when taking a look at the wound a week (or sometimes more) after the operation. Immediate dusting with iodoform is excellent. I apply alembroth gauze to the wound, as oozing and perspiration damp the dressing, and thus set free a disinfecting agent. Plain absorbent gauze may get foul if soaked, and stick to the wound, and then a drop of pus may often be found at the point of adhesion.

Pads are a question of dressing which you all understand. When the patient is very thin, or the abdomen very concave, it is best to strap over the pads. In a fat subject, or when the abdomen is convex, the straps must be applied first. I am a great believer in strapping, having seen bad results where it is not used. I also prefer a short, many-tailed binder to a bandage in one piece, or to a binder with very long tails. Short tails may be easily adjusted with safety-pins, according to local necessities or the patient's comfort; this I know from very long experience in after-treatment. Remember that the most superficial tails should come uppermost when there is no drainage-tube, as that arrangement insures the firmest pressure. When there is a tube in the lower part of the wound, the most superficial tails must come lowest, so that they can be undone during management of the tube without disturbing the rest of the binder.

We now come to that very complicated subject, after-treatment. I know of one excellent operator who always gives opium, and finds that the patients do best in every respect with that drug. Another, who can claim equally good results, is of opinion that opium is a curse to humanity, and never uses it in any form. Several successful operators insist on saline purgatives within three or four days after the operation, and use salines earlier as a panacea for all complications. Others find the patient does well if the bowels be left alone for a week. The diet question is even more complicated.

Now, it is not wonderful that so many varieties of treatment prove satisfactory. There is always more or less shock, but even weak patients may survive severe shock. Feeding by the mouth is usually not tolerated during shock, but it is sometimes borne, and injudicious early feeding may cause salutory though unintended vomiting. A patient may never vomit from the first yet do very badly otherwise, and it may be through faulty dieting, or it may not. In fact, recovery is the rule, and it is not always easy to distinguish recovery due to right therapeutics from recovery in spite of bad treatment. The ways of therapeutics are far more obscure than the paths of surgery!

There is no royal road to treatment. We must not frivolously say, as has been said, that it does not matter what the patient takes at first. We must be ready for special circumstances demanding modification of our line of treatment.

Yet no surgeon can dispense with a certain amount of routine—the sum of the experience of others, controlled by his own. What are known as "points of after-treatment" are specially suited for discussion.

Thus, as to position, it is altogether best that the patient should lie on her back. Bedsores is the chief danger of that position, but good nursing is a sufficient preventative against that complication. The position is said to hinder the escape of flatus and to allow of its accumulation in the stomach and transverse colon; but this assertion is questionable physiology, and the wearing of the rectal tube will counteract distension of the large

intestine. It is best to keep the patient quiet for a few days, and she can be more easily kept comfortable on her back than on one side; turning from side to side can never be allowed. The dangers of turning, of course, have been exaggerated, and sometimes it favours the escape of flatus.

As long as there is nausea, vomiting is to be promoted during the first twenty-four hours, especially when due to chloroform or flatulent distension of the stomach. The escape of air from a distended stomach always promotes the passage of flatus. Inhalation of a little vinegar on a piece of lint relieves the nausea of chloroform. Bicarbonate of soda in warm water is, in my experience, the best emetic.

Vomiting, when it sets in after the first two or three days, is always serious. The symptoms of sepsis and obstruction are well known to you. An attack of simple indigestion with vomiting is not always easy to distinguish from graver conditions, the pulse and temperature often rising in sickly dyspeptics. In these late vomiting cases it is good to take to emata, and hot alkaline solutions are needed to empty the stomach unless obstruction be the most evident feature, then the upper part of the alimentary tract is best left alone.

Feeding is a question of the highest interest. Ordinary beef-tea enemata answer best in children, in all feeble patients, in all cases over 40, and in all where the operation has been prolonged and severe. After simple operations robust young women do not require emata, unless there are signs of restlessness. I believe more than ever in beef-tea enemata; the application of the rectal tube before their administration encourages the downward passage of flatus, and the nourishment, without any disturbance of the stomach and small intestine, is particularly suited to the patient's condition.

I find that most cases get on very well without drugs, but I have seen so many do well with routine treatment by tincture of opium, sometimes m. xx in beef-tea enemata every six hours, that I cannot share in the prejudices of some surgeons against that drug. Great care must be taken to watch the patient when opium or morphine is given, especially as to excretion of urine and the retention of flatus; in the latter case belladonna should be added to the opiate. In a case of great nervous restlessness I gave 20 grains of trional and the patient slept within an hour afterwards; but in other cases I have found it absolutely inert.

When sickness has passed away, about two ounces of barley-water may be given every two hours, though it is best not to begin feeding by the mouth until flatus is passed, particularly in bad cases. Milk is not nearly so unsuitable as many authorities believe. A drachm of Liquor Calcis Saccharatus (not the simple Liquor Calcis) should be added to every pint of milk. Weak tea without milk or sugar may sometimes be taken as a drug when the patient's skin is dry, but always with caution, as it promotes flatulence.

No solid should be given till the bowels have acted. Beef tea sometimes causes the urine to become concentrated; in such cases farinaeous food is advisable, with mutton broth if the patient be weak.

You are in a good position here to understand the significance of temperature in relation to the pulse. Abdominal surgery has carried with it in the course of its development, a spirit of emulation which has led to great things, but has involved several evils, especially a love of record-breaking. Just as some operators boast that they can remove any tumour through a two or three-inch incision, others say that they have "no temperatures." I dwell on this kind of remark, because it covers a yet more pernicious idea not confined to specialists. This idea is, "Sepsis is a disease which has the peculiarity of killing other surgeons' cases; when I lose a case it is from purely accidental causes entirely unconnected with septic infection." Closely associated with this notion is the theory that high temperatures and rapid pulse mean sepsis.

Now, in sepsis, the temperature keeps at a high range, not phenomenally high, in company with a rapid pulse. When we further observe flatulent distension, retching, and restlessness, the diagnosis of septicæmia becomes as certain as diagnosis possibly can be. Towards the fatal termination the hands and feet become relatively cool, the cheeks deeply flushed, the respiration very shallow, the pulse so rapid as to be counted with difficulty, and the temperature stationary, if it does not fall a little. You all know this clinical fact, but too much stress has been laid on rising and falling of temperature, to the neglect of the pulse, in the after-treatment of abdominal section.

Assuredly no operator likes to see the temperature rise, and a rise must always put him in mind of septicæmia. But the mere height of the temperature means little. The above clinical sketch of

septicæmia is a mere commonplace to you. Unfortunately, specialists may confuse two conditions, such as—

9 a.m.: Temp. 103.8°; pulse 120,
1 p.m.: Temp. 104°; pulse 144,
9 p.m.: Temp. 102.8°; pulse over 150, very irregular;
and
9 a.m.: Temp. 103.5°; pulse 132,
1 p.m.: Temp. 103.4°; pulse 132,
9 p.m.: Temp. 104°; pulse 132, regular.

The first case implies a desperate condition. The second, if flatus passes well and there be no vomiting, is much less serious, and I have seen it on the third or fourth day after a severe operation, when metrorrhagia set in. In a fatal case of ovariectomy in a diabetic patient under my own care, the temperature rose steadily with the pulse till death. Flatus passed well, and even food was taken till within one hour of death. This was undoubtedly an instance of pure sepsis; some drops of fetid dermoid material had, I believe, escaped into the peritonium. The passage of flatus was especially significant; there was no obstruction. Nevertheless, in undoubted septicæmia the temperature, as a rule, tends to rise less rapidly than the pulse.

The causes other than septic of high temperature specially deserve consideration. Flatulence is decidedly one cause, and of that symptom more will be said. The appearance of uterine "show" is closely associated with rise of temperature. I have often seen this phenomenon. The extreme bacteriologists would say that the rise was due to sepsis; I do not deny that this theory may contain a germ of truth. Others speak of neurosis; I do not contradict them. Retained blood and relics of endometrium may involve slight septic absorption, especially from changes close behind a ligature involving a uterine cornu. Again, women decidedly suffer from nervous disturbance in association with menstruation, and the temperature rises under such conditions. Sadamina, in rheumatic subjects especially, cause a considerable rise.

Why do too early visits of friends so often cause rise of temperature? The antiseptic party would say that the patient rises to salute a friend, or twists round to talk to a friend,—adhesions are disturbed, and "focus" set loose. Yes, but restless patients after severe ovariectomies may struggle night after night, and sit bolt upright directly the nurse's back is turned, yet rise of temperature does not necessarily occur. Food may be swallowed in, but I have known of rises of temperature when the patient was closely watched by the nurse during the friend's visit, nor are these visitors so inordinately as some may suppose. On the other hand, abuses may occur in respect to forbidden diet inside the hospital, and it is not a rise of temperature that necessarily betrays this evil.

High temperature in the second or third week, without general symptoms, may be due to inflammation of a suture-track, or to parametritis if the stump of the pedicle. These complications are not rare when the operator is inexperienced or somewhat heavy-handed. In parametritis the severity of the local symptoms, with high temperature, and yet little general disturbance, may be compared with the absence of all local symptoms, coincident with high pulse and temperature and marked constitutional trouble so often seen in septicæmia.

In simple and well-managed cases, late high temperatures nearly always signify retention of scybala. When they come away a fall is almost invariable; but in weak subjects some exhaustion follows the evacuation, hence the pulse may rise, the temperature falling, and in very debilitated subjects even a further rise of temperature is observed. But in a few hours the clinical symptoms become favourable.

By phenomenal temperature most writers mean 105°, 6°, 7° or 8° without evidence of sepsis, obstruction, &c., and with ultimate recovery. As a rule, they can be explained. In one case, where the temperature nearly reached 106° on the fifth day, the patient informed us that she was subject to ague. In another, where I operated, the temperature rose to 104° during the third week, but the patient was phibetical. Both cases recovered after appropriate treatment. I cannot dwell on a case of hysterectomy (with the sero-need) where the temperature rose to 107° in the second week, and fell in a few hours after wet-packing. Nor can I pause long on a case of operation for ectopic gestation, where I was alarmed by a rise on the eighteenth day to 106°, after two rigors. There was practically no constitutional disturbance; quinine was given, and two days later the temperature was subnormal. I am not sure that ague might not account for this case; influenza is less probable, as the patient felt neither pain nor prostration, which are never absent in that disease, and are very severe when high fever is present.

Now the catamenia may certainly trouble the patient after ovariectomy, and I have said that menstrual blood in the uterus, weak after

a recent ovariectomy, might become septic. I have also said that neurosis is possible and probable, when I was dwelling on symptoms immediately after operation. At all events, a rise is often seen when the period is due a week or two after ovariectomy.

I fear that we cannot discuss at length the co-relation of peritonitis with sepsis or disturbances inside the gastro-intestinal tract. Not many years ago it was necessary to apologise for differing from the authors of text-books as to the clinical symptoms of peritonitis. Now I must almost make excuses for stating that I have once observed the sensational or ultra-acute type eighteen years ago, where the patient died of perforation of the small intestine ten days after ovariectomy. In another case of perforation, nine days after removal of a tubal sac, Blanc observed intense abdominal pain, distension, and acute dyspnoea. You know only too well the common subacute peritonitis of reality, which is "typhoid rather than septic," as we used to say. It is caused, we are told, by sepsis, or is absolutely correlated to and coincident with sepsis, or is caused by obstruction which first sets up peritonitis and then sepsis, or first produces sepsis and then engenders peritonitis. Leaving these deep pathological problems to Dr. Kanthack and other distinguished scientists, we must remember that more or less distinctly marked peritonitis with dull pain and rise of temperature certainly occurs after severe ovariectomies. The septic form is as dangerous as in pre-Listerian and aseptic days. Opening up the wound and irrigating usually kills the patient before the near period when she would have otherwise died in relative peace—the few reported recoveries of which I have heard seem to mean removal of obstruction caused by adhesions.

With great relief I come to a very practical subject—flatulence. Free passage of flatus from the rectum almost invariably signifies that the patient is not in any danger from any complication. Obstruction is not necessarily the cause of sepsis, as I have seen it absent in the case of diabetes already mentioned. But it makes septic, uræmic, and inflammatory symptoms worse, and when air can be made to pass these symptoms nearly always fall in severity or disappear altogether. Tympanitic distension during the third week or later, with no other unfavorable symptoms, is usually due to accumulation of scybala.

Having reviewed the more troublesome complications at some length, I may speak now of their treatment. The ice-cap is always advisable when the temperature keeps at 103° or rises higher; even hopeless septic cases are more comfortable when thus treated. Flatus passes easier when the cooling process brings comfort. In the neuroses—if they be neuroses—in association with metrorrhagia, the ice-cap is beneficial. Of all treatment, however, I say once more that ensuring the passage of flatus is the most imperative. It leads on to a special question—the opening of the bowels. Firstly, nutrient enemata must be continued when flatus fails to pass, as food by the mouth aggravates the symptom, and so does starvation, whilst the enema promotes the passage of flatus and keeps the patient from exhaustion. When these means fail, an injection of over a pint of gruel with 2 drachms of oil of turpentine should be slowly and carefully injected. If scybala come away, so much the better. Twenty minims of Tinc. Belladonnæ may be given in beef-tea enemata every six or eight hours if the flatulence continues.

We prefer this method, at the Samaritan Hospital, to Lawson Tait's saline purgative practice, which we admit is of some value. Coming to the question of opening the bowels, I always find that the simple enema, a few hours after an injection of 4 ounces of oil, is the best agent, and it need not be given till the evening of the sixth day. When, however, the tongue is foul, and distinct evidence of irritation of the gastro-intestinal mucous membrane exists, I find that it is better to give a compound colocyth pill, or 2½ grains of the compound extract every six hours, till the bowels act. The patient will then be better able to eat. I find that colocyth pills and extract answer better in this respect than castor-oil (which patients dislike), liquorice powder, or saline purgatives.

The dressing of the wound at the end of the operation has been described. As a rule it may be left alone for a week. Do not sacrifice, however, the patient's comfort to that evil principle, "Let me boast that I never touch my dressings for a week." Sweated rashes in some patients give great discomfort, relieved by change of dressings, even on the third or fourth day. A few sutures should be removed on the ninth day; indeed, if there be any that are clearly cutting, they may be taken away on the eighth, as they hinder healing. It is not good, however, to remove all the sutures till the tenth day, or even later, as the cicatrix is very liable to stretch when only a week old.

I much prefer to continue the application of strapping for some time after the removal of the sutures, and firm bandaging is needed. For never forget that the danger of hernia is not from without but

from within. Flatulent distension is a steady, sure, and direct agent in stretching the cicatrix, so it must be met by direct support, and strapping affords such support most effectually.

I will say no more, indeed I have probably said too much, more than can be duly considered on this occasion. You can now understand why I have been obliged to leave out several important questions. I have selected such as I deem best suited for discussion. In many matters relating to clinical subjects, temperature, peritonitis, &c., as well as in operative details, it is I that look to you for instruction this evening.

Ovarian Tumour with Amenorrhœa, simulating Pregnancy.

A case for diagnosis, under the care of Dr. CHAMPNEYS.
From Notes by Mr. EDDISON.

MU—, æt. 38, a charwoman, was admitted to Martha Ward on October 14th, 1896, under the care of Dr. Champneys, suffering from pain in the neighbourhood of the stomach. Her family history was good, and she had never had any serious illness. She has had seven children, the youngest having been born dead in July, 1895, at the end of the eighth month, when she suffered considerably from post-partum hæmorrhage. She has also had two miscarriages at about the third month, the last occurring in January, 1893. Nineteen years ago she was married at the age of nineteen, and her husband is still alive.

Her catamenia began at the age of twenty-one, after she had weaned her first child, three months after this she had a second menstrual discharge, and "saw nothing more" till she had weaned her third child. After this her periods never occurred at less intervals than six weeks, but generally every two months, the flow lasting three days; her last period was towards the end of May, 1896.

Two years ago she first noticed pain in the epigastric region, and during the last nine months she has changed from a rather florid to a pale complexion. For the last four months the patient has had great pain in the epigastric and right iliac regions, with retching and vomiting in the morning, and often is unable to take food till midday. The pain has become worse in the last two months, and she has had vomiting after taking food at any time of the day. She has lost flesh since the middle of September, and has not been able to wear her clothes at all rightly round the waist. She has had no hæmatemesis nor melæna.

Her present condition is that of an anæmic and poorly nourished woman with a pale furrowed tongue. Her pulse is 76, regular and of small volume. Her temperature is normal. She has not much appetite, but sleeps well. Her bowels are open two or three times a day. Urine acid, no sugar nor albumen; lungs and heart healthy. On examination by Dr. Champneys—

P.H.—A rounded tumour reaches nearly to the costal arch. It is more prominent on the left than on the right; it is freely moveable beneath the abdominal walls, a wave of fluid is obtained over it; its consistency varies much in different parts, the prominent part on the left being elastic, whilst above and below this are hardened masses; nowhere is there fluctuation; no souffle, and no foetal heart can be heard. The breasts are quite inactive. **P.V.**—The cervix, which is to the left at the usual level, has been cleft as far as the vaginal reflexion; its texture is firm and the canal is closed. **B.M.**—The abdominal tumour seems to be entirely above the pelvis. The cervix was seized with a volsella and drawn down, the finger passed *per rectum* felt about one and a half inches above the os externum, apparently unexpanded; above this, slightly larger, being about the size of an unimpregnated uterus, is a body continuous with it, and closely attached to the right side of the tumour. Movement of the abdominal mass scarcely affects the cervix. **Per speculum** the vagina is not characteristically livid. The sound passes two and a half inches with its convexity forwards and to the right.

The diagnosis was now an ovarian tumour, with perhaps a gastritis. On October 26th Dr. Champneys saw the patient with Mr. Bruce Clarke, and as her general condition was much improved, it was determined to operate on October 30th. At the operation on this date the abdomen was opened by a vertical incision in the middle line about six inches in length. Some clear straw-coloured fluid came from the abdominal cavity. The tumour was now in view, and a Spencer-Wells trocar was inserted in it; a viscid opalescent fluid, at first of a whitish-yellow colour, but afterwards changing to brown

and to a greenish-brown, was drawn off. Part of the omentum was adherent to the wall of the tumour; this was ligatured and cut off. The tumour was semi-solid, and the opening having been enlarged, and the broad ligament on the right side having been ligatured and cut, was removed. The peritoneum was sewn over the stump with fine silk, the abdomen washed out with warm water, and the wound found on examining the stomach.

The wound was dressed with iodoform, cyanide disinfectant, and wool. Since the operation the patient has done extremely well; her temperature has not been above 100° F. On November 3rd she passed three motions without pain, and vomiting has been not troublesome.

Remarks by Dr. Champneys.—The first aspect of the case was naturally that of pregnancy. In favour of this there were practically two symptoms (amenorrhœa and vomiting) and one sign (the tumour). Against it were the shrivelled breasts, the firm cervix, and the excessive size of the tumour (nearly to the costal arch at the fifth month).

This excessive size was not due to fluid such as liquor amnii, for the tumour was firm on the whole, and the hard parts were not obscured by fluid. These were the points which excited my suspicions.

On further examination an endeavour was made to separate the uterus from the tumour by pulling the cervix down with a volsella. Although the top of the fundus could not be reached by the rectum, it was possible to feel above the situation of the cervix in the pregnant uterus, and to ascertain that the cervix did not expand into the tumour, though it was closely attached to it. The sound was then passed, and the diagnosis completed.

The stomach was inspected at the time of the operation (that is its anterior surface) and nothing found, but the pain and vomiting with increasing anæmia make it likely that a gastric ulcer was brewing, and that this was the cause of the fallacious amenorrhœa.

Palsy: a Sdollar.

By W. MAWER.

FOR many years I have associated in my thoughts with the word *Palsy* those tremblings of the limbs and other parts which are seen in paralysis agitans, disseminated sclerosis, and bulbar paralysis. I was recently surprised, however, by observing that in medical literature shaking was not an essential part of palsy. This led me to ask a number of people (outside the profession of medicine) what ideas they attached to the word. Almost invariably the answer began with something about shaking, quivering, trembling; so that I decided that the proper meaning of Palsy, at least in our time, was what is sometimes specially marked out as "shaking palsy," since many of those whose impressions I sought were well educated and intelligent folk. I was reassured by finding that if I had been in error all my life, I was, anyhow, supported by a great many estimable people! But, alas! my boy (who is only in his teens, and does not yet know how dictionaries are made) maintains that I must be wrong, because all the dictionaries are against me; nor would he accept as an argument the suggestion that possibly there was behind some far shelf in the Bodleian another dictionary which he had not consulted.

And dictionaries are truly marvellous things, as every luckless wight who has had need to go to them knows. Thus:

"PALSÝ: a disease wherein the body or some of its parts lose their motion, and sometimes their sensation, the causes being an impeded influx of the nervous spirits into the villi of the muscles."

And thus:

"Its cause is usually supposed to reside in the ventricles of the brain, or in the root of the spinal marrow."

Where motion only is lost,—

"These causes affect either the blood or muscles, the former by thickening that humour, so that it cannot rarefy."

Where sensation only is destroyed,—

"They may be all those things which so far thicken the animal spirits in the nerves arising below the cerebellum."

Traced through its etymology, as far as I have been able to see, *palsy* is simply synonymous with *paralysis*. From *παράλυσις* we get to the old French *paralytic*, or *palasié*, and to the middle English *palasie*, *palasye*, *palsye*, and *palsey*.

"There our Lord heled a man of the palsey, that lay 38 year."
Mandeville, 'Travels' (14 c.).

And wherever *palsy* occurs in the New Testament, the Greek is *παράλυσις*.

Though the dictionaries and etymology fail me, I can gather comfort from the use writers have made of the word. But not always, seeing that often we can only surmise their meaning.

"Doth beg the alms of palsied old."
Measure for Measure, iii, 1.

"This arm of mine,
Now prisoner to the palsy."—*Richard II*, ii, 3.

"And with a palsy-fumbling on his gorget."
Troilus and Cressida, i, 3.

"Palsied all our deed with doubt,
And all our word with woe."—*Matthew Arnold*.

"A poor, weak, palsy-stricken, churchyard thing."
Keats, 'Eve of St. Agnes.'

"The guts-gripping, ruptures, catarrhs, loads of gravel i' the back, lethargies, cold palsies, raw eyes, dirt-rotten livers, wheezing lungs, bladders full of imposthume, sciaticas, limekilns i' the palm, incurable bone-ache, and the rivelled fee-simple of the letter."—*Troilus and Cressida*, v, 1.

"The paralytic who can hold her cards,
But cannot play them, borrows a friend's hand
To deal and shuffle."—*Cooper, 'Task.'*

"Cured lameness, palsies, cancers."—*Tennyson, 'St. S. Stylites.'*

"Infancy,
Or old bedridden palsy."—*Tennyson, 'Aylmer's Friend.'*

"Palsy, death in life, and wretched age."
Tennyson, 'Lucretius.'

None of these examples help me, but I will quote some which do.

"Dick: Why dost thou quiver, man?
SAY: The palsy, and not fear, provokes me."
a King Henry VI, iv, 7.

"What drug can make a withered palsy cease to shake?"
Tennyson, 'Two Voices.'

"A universal shivering palsied every limb."
Barham, 'Ingoldsby Legends.'

"What you have spoke, I am content to think
The palsy shook your tongue to."
Beaumont and Fletcher, 'Maid's Tragedy,' 1, 2.

And—

"Nought shall it profit that the charming Fair,
Angelic, softest work of Heaven, draws near
To the cold shaking paralytic hand."—Prior, 'Solomon,' iii.

In Lincolnshire I have heard *Briza media* called palsy-grass, as well as trembling grass. The cowslip used to be known as palsywort, and is still so called in herbals, to indicate a virtue probably ascribed to it on account of the way its bells shake.

Notes.

MR. J. HOBDAV has taken the degrees of M.B. and B.C. in the University of Cambridge.

MR. J. M. WOOLLEY, who passed second into the Indian Medical Service, has maintained his position at Netley, being only one mark behind the first man. He has gained the Martin Memorial Prize for Medicine.

MR. J. H. HUGO passes out of Netley fifth, and has gained the Second Montefiore Prize for Surgery.

SURGEON-CAPTAIN ROBERT BIRD, M.D., M.S., F.R.C.S., D.P.H., has been appointed Examiner in Anatomy at the Calcutta University.

IN THE COMPETITION for the Army Medical Service recently held, Mr. C. II. Hopkins was second with 2207 marks.

MR. J. A. DREDGE has succeeded in passing into the Indian Medical Service at the examination recently held. He was fifth with 2574 marks. We understand that the competition was unusually severe on this occasion, for there were only seven vacancies, instead of as usual about fifteen, and the number of candidates was about the same as usual.

MR. D'ARCY POWER has been reappointed Examiner in Physiology in the University of Durham. Mr. D'Arcy Power has also been elected and admitted a Fellow of the Society of Antiquaries of London.

DR. J. H. DRYSDALE has been appointed Demonstrator of Pathology in the Medical School.

MR. T. STRANGEWAYS PIGG and Mr. C. P. White have been appointed Assistant Demonstrators of Pathology.

DR. J. CALVERI has been reappointed Demonstrator of Materia Medica and Pharmacy.

THE POST of Assistant Demonstrator of Materia Medica and Pharmacy is advertised as vacant. Applications to be sent in by March 8th.

THE MEDICAL SCHOOL COMMITTEE has decided to appoint an Assistant Curator of the Museum, and the post is advertised. Applications to be sent in by March 8th.

THIS MONTH we have to welcome yet another contemporary,—*The Middlesex Hospital Journal*. The whole style of this publication is excellent, and in this the first number the contents are well in keeping with the outside. We do not notice any statement as to the frequency with which succeeding numbers will appear, but whether fortnightly like "Guy's," monthly like ourselves, or tri-monthly like the "London," we sincerely wish them every success. It is interesting to note that until the appearance of this last child of hospital journalism the publications of all the London medical schools were called "Gazettes" with the exception of our own. Now there are two "Journals." With the exception of the *St. Mary's Hospital Gazette*, which is almost an exact reproduction, as regards style, of the *Guy's Hospital Gazette*, all the hospital magazines show a marked individuality. The form of the *Middlesex Hospital Journal* is rather suggestive of learned papers, deep thought, and general gravity. We venture to think that the Middlesex sporting editor must feel guilty of something akin to sacrilege in publishing sporting news in such a magazine.

WE NOTICE that Dr. A. E. Edwards, an old Bart.'s man, is President of the Leeward Islands branch of the British Medical Association.

W. LANGDON BROWN and G. A. Auden have taken degrees of M.B., B.C., and C. F. Lillie that of B.C. (Cambridge).

THE DEGREE of M.A. Cantab. (*honoris causa*) has been conferred on Dr. Kanthack.

R. J. NORMAN VOGAN, aged 11, is again a candidate (third application) at the coming May election for the Royal Medical Benevolent School at Epsom. He is the only child of the late James Norman Vogan, F.R.C.S., who was House Surgeon and Assistant Electrician at Bart.'s in 1884, and who afterwards practised at Ipswich till 1889, when he died, leaving his boy quite unprovided for. The child's mother had died in 1887. We sincerely hope that this candidature will be successful. The Rahere Lodge has promised its vote and the support of its members. Proxies will be received by Miss Vogan, Harpenden, Herts.

A VERY successful dance was recently given by the Bart.'s half-company of the Volunteer Medical Staff Corps. Up to the moment of going to press no success has attended our many efforts to get a satisfactory report; but we shall doubtless receive one in time for some subsequent issue.

Amalgamated Clubs.

HOCKEY CLUB.

THE above club, which was started last term, is getting on as well as a new club usually does. There has, of course, been some difficulty in arranging matches, as the club was started so late in the season. There were, however, two matches played last term, neither of which was won, but a fairly good show was made. A new secretary has been elected, as the original officer has the same post for the Cricket Club. Mr. Jeaffreson is the new one, and last week a match was played against Ealing, which resulted in a pleasant game being won by the visitors. There is plenty of keenness, and we see no reason why the club should not be a great success.

ST. BARTHOLOMEW'S HOSPITAL RUGBY F.C.

ST. BART.'S HOSPITAL v. KENSINGTON.

Played at Wood Lane on December 5th. Kensington kicked off, and Bennett returned, and found touch near Kensington's "25." The ground was in very bad condition, and thus spoilt good play. The game was a series of scrummages, in which Bart.'s had the best. Just before half-time Kensington scored a try, which was converted. On crossing over Bart.'s still held their own in the scrum, but were unable to score. Kensington then obtained another try, which was unconverted, the result being that we lost by 1 goal 1 try (8 points) to nil.

Team.—T. M. Body (back), H. Falk, S. Mason, T. A. Mayo, W. S. Danks (three-quarters), A. Hawkins, J. C. Sale (half-backs), H. M. Cruddas, A. J. W. Wells, W. F. Bennett, J. K. S. Fleming, C. H. D. Robbs, A. M. Amsler, M. B. Scott, A. Ll. Vaughan (forwards).

ST. BART.'S HOSPITAL v. O.M.T.'s.

This match was scratched, owing to North v. South.

ST. BART.'S HOSPITAL v. OLD LEYSIANS.

Played at Stamford Bridge on December 19th, and resulted in a win for Bart.'s by 3 tries to 2 tries. As we were very late in starting, the second half was played in semi-darkness. In the first half Mason scored a try, after a brilliant run. In the second half the Old Leysians scored twice; then Robbs, by good dribbling, scored twice for us, and so the game ended, as above stated, in a win for us by 9 points to 0.

Team.—T. M. Body (back), S. Mason, C. Dix, T. A. Mayo, H. Falk (three-quarters), A. Hawkins, J. C. Thomas (half-backs), H. M. Cruddas, A. J. W. Wells, W. F. Bennett, J. K. S. Fleming, C. H. D. Robbs, A. Ll. Vaughan, F. H. Noke, F. Weber (forwards).

ST. BART.'S HOSPITAL v. WICKHAM PARK.

Played at Winchmore Hill on January 9th. Result, a win for us by 1 goal to 1 try. The ground was in very bad condition, a part of it being under water; this rendered three-quarter play impossible. All through the game was of a scrambling nature. In the first half Wickham Park scored a try, which was not converted. On crossing over, Bart.'s played up, and Robbs, with a good dribble, scored, Randolph kicked a splendid goal. Nothing further was scored, so Bart.'s won by 5 points to 3 points.

Team.—T. A. Mayo (back), H. Falk, S. Mason, C. Dix, W. H. Randolph, G. C. Marrack, A. Hawkins (half-backs), H. M. Cruddas, A. J. W. Wells, J. K. S. Fleming, W. F. Bennett, C. H. D. Robbs, M. B. Scott, A. Ll. Vaughan, H. Weeks (forwards).

ST. BART.'S HOSPITAL v. LENOX.

Played at Winchmore Hill on January 16th. Bennett kicked off for Bart.'s, and the game was mostly confined to the forwards, the three-quarters not having much chance. Lennox were the first to score, the try being converted. Soon afterwards Mason, following up his own kick, scored a try, Randolph converting. Lennox scored again, the try being unconverted; but although Bart.'s played up well we were unable to equalise, the result being a defeat for Bart.'s by 8 points to 5 points.

Team.—T. M. Body (back), H. Falk, S. Mason, C. Dix, T. A. Mayo, A. Hawkins, W. H. Randolph (half-backs), H. M. Cruddas, A. J. W. Wells, W. F. Bennett, J. K. S. Fleming, C. H. D. Robbs, H. C. Adams, M. B. Scott, A. M. Amsler.

Owing to the frost our fixtures with Upper Clapton and the Harlequins were scratched.

ST. BART.'S HOSPITAL v. MARLBOROUGH NOMADS.

Played at Winchmore Hill on February 13th, and resulted in a defeat for us by 1 goal 2 tries to 1 goal. In this match Bart.'s forwards seemed to be utterly demoralised, the only redeeming point being a good piece of passing between Fleming and Robbs, which resulted in the latter gaining a try, which Randolph converted.

Team.—T. M. Body, II. Falk, T. A. Mayo, C. Dix, S. Mason (three-quarters), A. Hawkins, W. H. Randolph (half backs), H. M. Cruddas, A. J. W. Wells, W. F. Bennett, J. K. S. Fleming, C. H. D. Robbs, H. C. Adams, A. Ll. Vaughan, M. B. Scott (forwards).

ST. BART.'S HOSPITAL v. EAST SHEEN.

Played at Richmond on Wednesday, February 17th. East Sheen had a very strong team against us, but Bart.'s played well together, and were only beaten by 22 points to 14. In the first half Falk made a brilliant run, and scored right between the posts. The try was not converted. East Sheen scored once, the try being converted, and also dropped a goal. In the second half Mason intercepted a pass in our "25," and made a brilliant run the whole length of the ground, and scored. The try was not converted. The same player also scored another try, which Randolph converted. Fleming, after a good dribble, scored a fourth try for Bart.'s, which was not converted; and so the game ended in a defeat for Bart.'s by 3 goals 1 try and 1 dropped goal to 1 goal and 3 tries.

Team.—C. Dix, S. Mason, T. A. Mayo, G. C. Marrack, H. Falk, A. Hawkins, W. H. Randolph (half-backs), H. M. Cruddas, A. J. W. Wells, W. F. Bennett, J. K. S. Fleming, C. H. D. Robbs, A. M. Amsler, A. Ll. Vaughan, J. M. Plews (forwards).

ST. BART.'S HOSPITAL v. KING'S.

Played on Tuesday, February 9th. The result was a win for Bart.'s by 5 goals (1 dropped) to nil. Cruddas won the toss, and elected to play with the slight wind then prevailing. King's started the ball, and the kick was well returned. Scrum became the order of the game for a short time, in which Bart.'s had the advantage; the King's men, however, being quick with their feet, and especially at "picking up." Cox played a splendid and lucky game for King's at half. After about twenty minutes' play Hawkins dropped a neat goal for Bart.'s; soon after this the same player ran over the line and scored; this try was converted by Randolph, who must be congratulated on his place kicking, and Mason. The second half tries obtained by Hawkins, Cruddas, and Mason. The second half was similar to the first, scrums in which one side and then the other held the upper hand. When the ball was passed out to the three-quarters they invariably gained ground, at times passing the ball well from one side of the field to the other. Mason scored a grand try, running from our "25" line in fine style. King's played a much better game than the score would indicate. H. N. Clarke (Guy's) referee. Taylor (King's) and Hayes (Bart.'s) linesmen.

Team.—T. M. Body (back), S. Mason, C. Dix, T. A. Mayo, H. Falk (three-quarters), A. Hawkins, W. H. Randolph (half-backs), H. M. Cruddas (capt.), W. F. Bennett, J. K. S. Fleming, C. H. D. Robbs, H. C. Adams, A. Ll. Vaughan, M. B. Scott, A. M. Amsler (forwards).

INTER-HOSPITAL CUP.

First Round.—Charing Cross scratched to St. Bart.'s. Guy's beat Middlesex, 3 goals and 2 tries to nil. Second Round.—Guy's beat St. George's, 2 goals and 2 tries to nil. St. Bartholomew's beat King's, 5 goals (1 penalty) to nil. St. Thomas's beat Westminster, 7 goals and 4 tries to nil. St. Mary's beat London, 3 goals and 3 tries to nil. Semi-Final.—St. Bartholomew's v. Guy's (to be played Tuesday, February 23rd). St. Thomas's v. St. Mary's.

ASSOCIATION FOOTBALL CLUB.

RESULTS OF MATCHES.

Jan. 9	v. Sittingbourne	... lost ...	1-6
Jan. 13	v. Old Reptonians	... won ...	5-3
Jan. 16	v. Barnes Incogniti	... lost ...	2-4
Feb. 3	v. Proprietary Sch.	... won ...	5-3
Feb. 6	v. Ealing Reserves	... won ...	3-2

* Reserves.

ST. BART'S HOSPITAL v. SITTINGBOURNE.

Played at Sittingbourne on January 9th. Bart's were very weakly represented, especially forward. Brown won the toss, and the Hospital played down the slope in the first half. From the kick-off Sittingbourne immediately began to press, and soon scored a couple of goals. Owing to the weakness of the forwards the backs could not be relieved, and before long Sittingbourne were leading by 4-0. At length the forwards managed to get away, and Bostock scored our only goal. After the interval there was a slight improvement, but the Hospital failed to increase their score, whilst Sittingbourne added 2, thus winning by 6-1.

Team.—J. M. Langton (goal); R. P. Brown, L. E. Whitaker (backs); M. G. Winder, D. S. Gerrish, H. J. Pickering (half-backs); L. E. Hughes, E. Wethered (right); E. W. Woodbridge (centre); A. H. Bostock, H. N. Marrett (left).

ST. BART'S HOSPITAL v. OLD REPTONIANS.

Played at Winchmore Hill on January 19th. In the first half Bart's played towards the pavilion, and did most of the pressing. Robinson and Willett each scored in the first twenty minutes, then Old Reptonians made several attacks on our goal, and finally scored with a good shot. Robinson soon scored again for the Hospital, and at half-time the score was 3-1 in favour of Bart's. After half-time the Hospital team took matters rather easily, and though at first they continued to press, and Willett scored twice, towards the end Old Reptonians got the best of the exchanges. Before time was called Old Reptonians added 2 goals, and the game ended in a win for Bart's by 5-0.

Team.—W. C. F. Harland (goal); L. Orton, L. E. Whitaker (backs); A. H. Bostock, D. S. Gerrish, H. J. Pickering (half-backs); T. H. Talbot, C. A. Robinson, J. A. Willett, E. W. Woodbridge, and H. N. Marrett (forwards).

LONDON CUP TIE.

ST. BART'S HOSPITAL v. OLD CARTHUSIANS.

This tie was played on Wednesday, February 17th, at Leyton, after being postponed from January 23rd. The Hospital were unfortunately unable to play full strength, Robinson and Gerrish being the absentees, their places, however, being well filled by Stone and Orton. During the first half Bart's held their own, though the Old Boys had somewhat the best of the exchanges, being baffled, however, at the goal by Fox. Smith scored for our opponents after twenty minutes' play, after a scramble in front of goal. Stone retaliated shortly after with an excellent long shot amidst loud applause, leaving the score at half-time one goal all.

In the second half the superior skill and pace of the opponents' forwards began to tell, and Fox was kept very busy effecting some marvellous saves, much to the delight of the spectators. The ground was heavy, and our men seemed to show signs of fatigue, for G. O. Smith, who had hitherto been effectually shadowed by Pickering, now became very dangerous, and added another point soon after half-time, while Wreford-Brown and Buzzard followed suit during the last half-hour, the game thus ending in our defeat by 4 goals to 1.

The Hospital are to be congratulated on making such a good game with so powerful a combination, in spite of their not being in full strength. Fox was brilliant in goal, and averted a heavy defeat. Whitaker was the best back on the field, and Pickering, as usual, indefatigable, time after time checking Smith in his attempts to get through. The forwards worked very hard, and the insides were well together, Stone, perhaps, being the most conspicuous.

TEAMS.

St. Bart's.—E. H. B. Fox (goal); R. P. Brown, L. E. Whitaker (backs); L. Orton, H. J. Pickering, A. H. Bostock (half-backs); T. H. Talbot, G. W. Stone (right wing); J. A. Willett (centre); E. W. Woodbridge, H. N. Marrett (left wing).

Old Carthusians.—J. T. McGaw (goal); E. C. Bliss, E. Garnett (backs); C. B. Ward, C. Wreford-Brown, F. L. Fane (half-backs); R. R. Barwell, E. P. Buzzard (right wing); G. O. Smith (centre); C. D. Hewitt, E. M. Tringham (left wing), (forwards).

INTER-HOSPITAL CUP.

First Round.—Charing Cross scratched to St. Bartholomew's. Middlesex scratched to St. Mary's.

University scratched to Guy's.

London beat St. Thomas's, 4 goals to 3.

Semi-Final.—St. Bartholomew's v. Guy's (to be played on Wednesday, March 3rd).

St. Mary's v. London.

UNITED HOSPITAL HARE AND HOUNDS.

The annual inter-hospital contest will take place on Saturday, February 27th.

Abernethian Society.

At a meeting of the Society on Thursday, January 21st, Mr. W. T. Holmes Spicer, ex-President, read a paper on "Eye Symptoms in General Diseases," in which he emphasized the great help to be derived from the ophthalmoscope for diagnostic purposes. In addition to an interesting *résumé* of various eye symptoms in many diseases, the reader of the paper claimed that the Argyll-Robertson pupil is always a sign of old syphilis, and doubted whether so-called rheumatic iritis was really of rheumatic origin. It is never seen in acute rheumatism, and he was inclined to attribute it to gonorrhoea. A short discussion followed.

Dr. Claye Shaw is always willing to show his interest in the Society in a practical form, and few communications are more anticipated than his. Consequently there was a good attendance of members to welcome his arrival on January 28th. Dr. Shaw discoursed in his usual delightful fashion on things in general, and on "Wounds and Diseases in the Insane" in particular. The paper will appear in these pages at an early date.

The meeting of February 4th took place under the disadvantage of most inclement weather. Mr. Pigg showed a heart with numerous hemorrhages, prepared by the formalin method from a case of hæmophilia. Mr. R. Brembridge then read his paper on "Some Affections of the Vaso-motor System." After an abstract of the recent researches of Leonard Hill and Oliver on the effect of gravity on the circulation, and the compensation thereof effected by the vaso-motor system, he went on to show the exceedingly important practical bearing these theoretical considerations had upon the treatment of various conditions. He also put forward an ingenious theory as to the cause of post-influenza neuræsthesia, and its rational treatment by vaso-constrictors.

At a meeting of the Society on February 11th a case of syringomyelia with painless whitlows was shown by Mr. Brembridge. Mr. T. J. Horder then read his paper on "Glycosuria." He pointed out that the problem of glycosuria lay at the basis of any inquiry into carbohydrate metabolism. He gave an interesting abstract of the history of our knowledge of the disease, and stated the results of a series of observations conducted by himself on the effects of drugs on glycosuria. His conclusion on an exhaustive survey of the subject was that diabetes as a disease had no separate entity apart from its chief symptom, glycosuria.

The hon. secretaries beg to acknowledge with many thanks the receipt of a copy of an Abernethian Address from Mr.

R. Henslowe-Wellington, of Sutton Bridge. This address was delivered in 1876 by Mr. Benton, on "Nurses and Nursing," in which he advocated a system of things regarded to-day as the only possible. At the time of its utterance, however, it could have been little short of revolutionary, so far have we advanced since then. The secretaries venture to renew their appeal to old members for copies of Abernethian pamphlets, a complete series of which would form an interesting and most valuable collection.

The Rahere Lodge, No. 2546.

MEETING of the Rahere Lodge was held at Frascati's Restaurant, Oxford Street, W., on Tuesday, February 9th, 1897; Bro. Alfred Cooper, F.R.C.S. Eng., in the Chair. Bros. Horton-Smith, Owen Lankester, Laming Evans, Gow, and Sloane were admitted to the third degree in Freemasonry. Bro. Worthington was passed to the second degree, and Mr. Howard Marshall was initiated into masonry. The brethren afterwards dined together. A sum of ten guineas was voted to the Royal Medical Benevolent College, and one guinea to the Guy's Hospital Re-employment Fund.

Cases of Special Interest.

Rahere, bed 11.—Multiple sarcomata.
Rahere, bed 15.—Erythralmic goitre.
Colston, bed 19.—Anæmia.
Colston, bed 15.—Abdominal growth.
Colston, bed 6.—Chronic dysentery.
Matthew, bed 24.—Nephritis.
Matthew, bed 2.—Gout.
Luke, bed 10.—Paralysis.
Luke, bed 27.—Hemiplegia with epileptoid fits.
Mark, bed 13.—Central tumour.
Faith, bed 3.—Enlarged glands.
Faith, bed 3.—Raynaud's disease.
Faith, bed 5.—Optic atrophy with anæmia.
Faith, bed 10.—Alcoholic neuritis.
Faith, bed 11.—Splenic anæmia.
Hope, bed 3.—Hemiplegia after typhoid.
Hope, bed 4.—Heart disease, congenital.
Hope, bed 18.—Pseudo-membranous bronchitis.
John, bed 10.—Heart disease, congenital.
John, bed 18.—Bulbar paralysis.
John, bed 20.—Alcoholic neuritis.

Congenital Abnormality of Ureter with Absence of Kidney.

By C. HAMILTON WHITEFORD, M.R.C.S., L.R.C.P.

FROM a patient æt. 65, who died of uræmia, the right kidney and ureter being distended with purulent urine, the bladder hypertrophied and sacculated. The bladder, ureters, and kidney were dissected out *en masse*. The left kidney was represented by a small fibrous mass, in size equal to half a chestnut. From this mass the left ureter, very thin-walled, and

distended to double its normal size by thin turbid yellow fluid, terminated in the highest part of the left seminal vesicle. There was no continuation of ureter to the bladder, nor was there any suggestion of an opening to be found on examination from within the bladder. The left supra-renal was normal. Mr. Lockwood, who has kindly examined the specimen, considers the abnormality a congenital one. There are two similar specimens in the Hospital museum. He says, "The ureter and the vesicula are both outgrowths from the lower end of the vas, or Wolffian duct, as it is there called. In this case the kidney duct has protruded from the vas in conjunction with the vesicula." The importance of ascertaining, prior to nephrectomy, the presence of a second kidney, with the further question of the second kidney being in working order, is well demonstrated by this case.

Appointments.

MITCHELL, A. M., M.B., B.C. Cantab., has been appointed Resident Medical Officer to Queen Charlotte's Lying-in Hospital, London.

POWELL, H. A., M.D., M.Ch. Oxon., L.R.C.P. Lond., M.R.C.S., F.R.C.S. Edin., has been appointed an Honorary Surgeon to the Royal Hants County Hospital.

PULLIN, B. GIBBES, L.R.C.P. Lond., M.R.C.S., L.S.A., has been appointed a surgeon to the Sidmouth Cottage Hospital.

GALE, F. W., M.R.C.S., L.R.C.P., L.S.A., has been appointed Public Vaccinator and Native Medical Officer for the Kaikoura District, New Zealand.

MORRISON, J., M.D. Lond., M.R.C.S., L.R.C.P., appointed Physician to the Farringdon General Dispensary.

CHRISTOPHERSON, J. B., M.B., B.C. Cantab., M.R.C.S., L.R.C.P., appointed Resident Medical Officer to the Evelina Hospital for Children.

POYNDER, F. C., M.B., B.Ch. Oxon., M.R.C.S., L.R.C.P., appointed House Surgeon to the West London Hospital.

BROCK, J., M.R.C.S., L.R.C.P., appointed Resident Medical Officer to the Beckett Hospital, Barnsley.

STEPHENS, J. W. W., M.B., B.C. Cantab., appointed Assistant Bacteriologist to the Government in India.

EVANS, HERBERT, M.B. Oxon., M.R.C.S. Eng., appointed *pro tem* Medical Officer of Health to the Seaford Urban Sanitary District.

ISAAC, MATTHEW WM. STUART, M.R.C.S., L.R.C.P. Lond., appointed Third Assistant Medical Officer to the Wadley Asylum of the West Riding County Council.

WOOD, T. OUTERSON, M.D., F.R.C.P. Edin., M.R.C.P. Lond., appointed Consulting Physician to the St. George's and St. James's Dispensary, King Street, Regent Street, W.

Examinations.

FINAL M.R.C.S. AND L.R.C.P.—The following having passed all parts of the final examination have been admitted to the diploma of M.R.C.S. and L.R.C.P., viz.:—G. E. Dodson, R. S. C. Edleston, R. R. Thomas, J. B. Hughes, H. C. T. Langdon, W. J. Harding, C. C. Guinness, J. H. Wood, R. H. Brownridge, N. H. Harris, W. H. F. Oxley, N. Buendia, R. E. W. Jennings, W. J. Richards, H. G. Berry, W. F. Evans, S. Roach, J. Torrance, G. S. Haynes.

D.P.H. COMJOINT BOARD.—W. B. Jones, H. T. Parker, and J. S. Richards have taken this diploma.

PRELIMINARY SCIENCE, LONDON UNIVERSITY.—*Entire Examination*.—V. G. Ward. *Chemistry and Physics*.—H. A. Kellond-Knight, H. H. Raw, R. A. S. Sunderland, A. E. Thomas, E. S. Ellis, and F. H. Wood. *Biology*.—S. W. Milner, and P. H. Noke.

CONJOINT BOARD: FIVE YEARS' REGULATIONS.—*Chemistry and Physics*. A. M. Dalzell, S. de Carteret, A. B. Edwards, C. Fisher, A. L. B. Green, R. J. Hanbury, H. W. Pank, J. C. Sale, R. Thompson, J. H. West, H. Whitwell. *Practical Pharmacy*.—H. C. Adams, R. Bigg, F. S. E. Hewer, N. H. Joy, J. L. Morris, E. F. Palgrave, A. B. Pugh. *Elementary Biology*.—C. Dix, I. H. Fowler, H. P. Margetts, J. K. N. Marsh, J. C. Sale, A. E. Soden. *Anatomy and Physiology*.—T. W. Brown, H. Burrows, W. P. Dyer, H. W. Illius, J. W. Illius, G. J. A. Leclizio, J. O'Hea, G. H. Orton, R. Walker.

FOUR YEARS' REGULATIONS.—*Chemistry and Physics*.—F. R. Dudley. *Materia Medica*.—V. S. A. Bell. *Anatomy*.—E. F. Crabtree. *Physiology*.—W. M. James.

M.B. OXFORD.—J. C. Fisher, A. L. Ormerod.

INTERMEDIATE M.B. LONDON.—*Entire Examination: First Division*.—F. C. Borrow. *Excluding Physiology: Second Division*.—C. R. Brown, H. Burrows, W. H. Cazaly, J. M. Collins, W. S. Danko, E. P. H. Dudley, C. S. Frost, T. H. Gandy, J. S. Gayner, J. G. F. Hosken, S. A. Millen, A. J. W. Wells. *Physiology only: Second Division*.—H. D. Everington, R. Hatfield, H. A. Schöberg, S. R. Scott, L. A. Walker.

F.R.C.S. EDINBURGH.—A. H. Buck.

SOCIETY OF APOTHECARIES.—*Surgery*.—E. C. Corfield, F. Harvey. *Medicine, Forensic Medicine, and Midwifery*.—F. Harvey.

Obituary.

DR. JAMES ELLISON.

DR. JAMES ELLISON, surgeon and apothecary to Her Majesty's household at Windsor, died on January 31st last. He was in his eightieth year, having been born in India in 1817. He was essentially a practitioner of the old school, but was a well-educated and accomplished man, being not only an excellent linguist and clever artist, but also accomplished in sport and games of skill. He began his medical education, under the former apprenticeship system, as a pupil of Mr. Walker, of Peterborough, in 1834. After five years of pupillage under Mr. Walker, whose daughter he subsequently married in 1847, he entered as a student of St. Bartholomew's, and after a successful and distinguished career he qualified as M.R.C.S. and L.S.A. He then became House Surgeon to the Peterborough Infirmary, and subsequently studied for a time at Heidelberg, ultimately taking the M.D. degree of the University of London.

He then commenced practice in London, and subsequently went into partnership with Mr. H. Brown, of Windsor, then Surgeon Apothecary to Her Majesty's Household. In 1852, having settled at Windsor, he received his appointment to Her Majesty's household, which he held till the day of his death. He was highly popular and much respected in Windsor and the neighbourhood, taking interest in all local sports and games, and being at one time prominent in the Berkshire Regiment of Volunteers. The cause of death was malignant stricture of the œsophagus.

Correspondence.

To the Editor of St. Bartholomew's Hospital Journal.

INFANTILE DIARRHOEA.

DEAR SIR.—Will you allow me an opportunity of thanking Dr. Cautley for his paper on "Infantile Diarrhoea" in your current issue, more especially as a sequel to his most valuable paper on the "Artificial Rearing of Infants" in the number for October, 1895? which I have found of the greatest assistance, and have kept at hand

for constant reference. In his preface to the January paper Dr. Cautley urges the importance of the subject; this, I am sure, cannot be over-estimated. Both with one's poorer patients, and with the infants of the rich and the nurses in charge of them, the most constant supervision and the most minute attention to details are so essential that without these the children constantly go wrong. While appreciating Dr. Cautley's warning against the indiscriminate use of antiseptic drugs in infantile diarrhoea, and his insistence on improving the diet as a means to its relief, may I put in a plea, as an adjunct to improved food, for the value of, in some cases (generally the milder ones), small doses of Liq. Hydrarg. Perchlor.; in other cases (especially those with green stools and much flatulence) of small doses of salol every morning with a mixture containing soda, rhubarb, and peppermint during the day? I have found these drugs to hasten the improvement, and to give the improved diet a better chance, and in these cases time is of the utmost importance.

Yours faithfully,
LAURENCE A. WINTER.

Chartham, Canterbury;

January 31st, 1897.

To the Editor of St. Bartholomew's Hospital Journal.
SISTER MAGDALEN FUND.

	£	s.	d.
Amount already acknowledged	61	16	4
Dr. Lush (Weymouth)	0	10	0
Total	62	6	10

EDGAR WILLET.

Births.

GRAY.—On January 16th, at Wadhams Lodge, Faling, the wife of John Alfred Gray, M.B., of a son.

KENNINGTON.—On January 13th, at Burden Park, Tonbridge, the wife of Edgar Kennington, M.R.C.S., Wisbech, of a daughter.

STYAN.—On January 22nd, at 2, Chapel Place, Rainsgate, the wife of T. G. Styan, M.A., M.D. Cantab., of a son.

TAIT.—On January 27th, at 48, Highbury Park, the wife of Edward Sabine Tait, M.D., of a daughter.

Marriages.

ACKLAND—MACROBY.—On February 13th, at St. Stephen's Church, Westbourne Park, W., by the Rev. J. H. Ellison, M.A., Vicar of Windsor and Chaplain to the Queen, assisted by the Rev. J. Hallward, M.A., and the Rev. W. M. Snow, M.A. Robert Craig Ackland, M.R.C.S., L.R.C.P., third son of the late Robert Ackland, Esq., of Exeter, to Ruth Kathleen, youngest daughter of Edmund Macroby, Q.C., of 19, Pembroke Square, W., and Duncairn, co. Antrim, and granddaughter of the late Mr. Justice Manisty.

HENSLEY—LOW.—On February 24th, at the Priory Church, St. Bartholomew the Great, by the Rev. Sir Borodale Savory, Bart., Philip John Hensley, M.D., F.R.C.P., of 4, Henrietta Street, Cavendish Square, to Marie, eldest daughter of Maximilian Low, Esq., late of Park Road, Haverstock Hill. At home, Thursdays in May.

Deaths.

LLOYD-WILLIAMS.—On December 14th, 1896, at Vronheulog, Corwen, Humphrey Lloyd-Williams, M.R.C.S., L.S.A., 51 years of age.

STOCKER.—On January 31st, at Weedon, Ethel Gwendolen, beloved daughter of Edward and Ethel Stocker, aged 3 years.

ACKNOWLEDGMENTS.—*Guy's Hospital Gazette*, *St. George's Hospital Gazette*, *St. Thomas's Hospital Gazette*, *St. Mary's Hospital Gazette*, *The Middlesex Hospital Journal*, *The Gyroscope*, *The Student (Edinburgh)*, *The Nursing Record*, *The Charity Record*, *The Hospital*.

St. Bartholomew's Hospital



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NOTICE.

All Communications, Articles, Letters, Notices, or Books for review should be forwarded, accompanied by the name of the sender, to the Editor, ST. BARTHOLOMEW'S HOSPITAL JOURNAL, St. Bartholomew's Hospital, Smithfield, E.C., BEFORE THE 1ST OF EVERY MONTH.

The Annual Subscription to the Journal is 5s., including postage. Subscriptions should be sent to the MANAGER, W. E. SARGANT, M.R.C.S., at the Hospital.

All communications, financial or otherwise, relative to Advertisements ONLY, should be addressed to J. H. ROOPE, Advertisement Camvasser and Collector, 29, Wood Lane, Uxbridge Road, W.

A Cover for binding (black cloth boards with lettering and King Henry VIII Gateway in gilt) can be obtained (price 1s. post free) from MESSRS. ADLARD AND SON, Bartholomew Close. MESSRS. ADLARD have arranged to do the binding, with cut and sprinkled edges, at a cost of 1s. 6d., or carriage paid 2s. 3d.—cover included.

St. Bartholomew's Hospital Journal,

MARCH 14th, 1897.

"Æquum memento rebus in arduis
Servare mentem."—*Horace*, Book ii, Ode iii.

A Chapter from the History of Cannabis India.

Being the Mid-Sessional Address delivered before the
Abernethian Society, January 14th, 1897.

By E. G. BROWNE, M.A., M.B.,

Fellow of Pembroke College, Cambridge; University Lecturer in Persian.



HAVE described the subject on which I propose to speak to you to-night as "a chapter from the history of cannabis indica." Before I go further I wish, in order to prevent misconception or disappointment, to offer a few words of explanation and apology. When your Society honoured me by an invitation to deliver this address, I felt that, highly as I esteemed this honour, I ought to decline. I felt that it was impossible for me, who have abandoned medical studies for nearly ten years, to speak profitably on any medical topic to you, who are actively pursuing

these studies, and drawing knowledge of them from the fountain-head. Even if I remembered all that I knew of medicine ten years ago, it would in no small measure, no doubt, be obsolete; for Science advances quickly, and those who cease to yield to this exacting mistress a whole-hearted devotion are soon left far behind. Moreover I have always considered that it is in the medical schools that the best, clearest, and most lucid exposition is to be found; nay, it is in the medical schools that I have listened to some of the finest and most eloquent discourses which it has been my privilege to hear. Therefore I feared that, even if I could find a subject worthy of your attention, I should not be able to deal with it in the manner to which you are accustomed, and which you have a right to expect.

However I was urged to accept, and my own inclination lay in that direction, for I was glad to have an excuse for revisiting the hospital where I spent three such profitable and pleasant years, and to which I am indebted for so many valuable lessons susceptible of a far wider application than the actual practice of medicine. I therefore consented to deliver this address; but having done so, I found no small difficulty in selecting a subject. You would naturally suppose that a year spent in Persia by one possessing at once medical qualifications and a competent knowledge of the language, must have supplied plenty of interesting experiences. It did so,—experiences sometimes pleasant, sometimes the reverse; and amongst them one in which I hope that none of you will ever participate; I mean the rapidity with which a theoretical or book knowledge of medicine will evaporate when not confirmed and fixed by practical experience.

And so I ran over in my mind a variety of subjects, without finding one which appeared satisfactory.—one, I mean, on which it seemed likely that I could tell you anything which you might care to hear and about which you could not derive better information from other sources. I thought, for instance, of telling you something about the practice of your Persian colleagues; but then it seemed to me that if you wished to know about the simple and primitive theories which underlie their very ineffectual, or, to speak more correctly, very dangerous and harmful methods of treatment, you would prefer to seek that knowledge directly from the works of Hippocrates and Galen, or from Avicenna, their interpreter to the East. One of the most harmless methods of treatment to which they resort is to write texts from the Qur'an in ink on the inside of a cup, fill it up with water, and administer the meetings of the *Majlis-i-Sikhat*, or Board of Public Health, at the *Dar-ul-Funun*, or University of Tehran, in which, thanks to the kindness of the late Shah's French physician, Dr. Tholozan, I was privileged to take part; and I remembered listening, as we partook of the excellent tea flavoured with orange juice, without which no Persian function is complete, to a communication from a Persian doctor on the death-rate of the country, and the mortality caused by each of the principal diseases which prevail in it. This seemed to me a more hopeful subject, until I remembered that it had transpired from subsequent inquiries that the statistics incorporated in this plausible report were derived, not, as might be supposed, from the medical practitioners resident in the different districts, but from those whose humble duty it was to wash and prepare for burial the corpses of the dead.

Lastly, I considered my own slight and unwilling essays in the practice of medicine amongst the Persians, and perceived that here also I had no material worth laying before you,—hardly even a suggestion to offer to any of you who may intend to practise in the East, unless it be to emphasise the importance of familiarising your-

selves as far as possible with the actual handling of drugs, and learning to rely on the simplest, the most portable, and the most durable.

And while thus thinking of drugs there came into my mind the recollection of one particular drug, with which (though it is, I believe, not largely used) I first became acquainted here in this hospital, which even then aroused my interest to such an extent that I made trial of its effects on myself (and, I may add, I have very little desire to repeat the experiment), and which met me again more than once in the course of my travels. The drug to which I refer, Cannabis Indica, or Indian hemp, appears to have been known in Persia in very early times, since, as students of the ancient scriptures of the Zoroastrians assert, allusion is made to it in the Avesta. Since, however, it is there mentioned in connection with drugs employed to produce abortion, I am not sure how far this identification can be regarded as certain; at any rate, there seems reason to believe that in the eleventh and twelfth centuries of our era its properties were but little known in the Mohammedan East. At the present day it is extensively used there, not as a therapeutic agent, but as the inspirer of the wildest pantheistic speculations, the most disordered metaphysical phantasies, and the most incredible visions and ecstasies. It is known generally as *hashish*—an Arabic word originally meaning cut grass or dried herbs,—or by its Persian name, *bang*. Besides this there are special preparations known by special names, such as *chars*, *barah*, and *hubb-i-nishat*, or "pills of delight," of which preparations the first is smoked, the last two eaten. When smoked the *chars* is generally placed in the centre of the tobacco-charge of a *qalyan*, *naqqali*, or water-pipe, the whole being overlaid with kindled charcoal. At present, as I am informed by one of my Persian friends, the method most fashionable amongst the dervishes of Tehran is to employ the *hubb-i-nishat*, or "trumpet of unity." A small piece of paper or cardboard is rolled up into the shape of a funnel, of the smaller end is placed in the mouth. A piece of *chars*, laid on the lighted end of a cigarette, is then held under the larger end of the funnel, and the smoke of the burning hemp is thus inhaled. The effects of the drug are produced much more rapidly when it is smoked than when it is eaten. Subjectively it produces an extraordinary dislocation of the ideas of time, space, and personality. You do not know where or when or who—I had almost said how many—you are. A minute seems an hour, or an hour a minute. You feel that within you are two or more personalities—a Dr. Jekyll and Mr. Hyde, as it were—commingled, yet each striving to express itself. Or it seems that all those present in the assembly are in reality animated by one spirit, and that the barriers of personality and individuality are, in some inexplicable way, broken down. It is this sensation or illusion which is specially craved after by the dervishes, who find therein a foretaste of that Nirvana, or Absorption into the Universal Spirit, which is the aim of their pantheistic mysticism to attain; and this is the "unity" alluded to in the name of the *hubb-i-nishat* of which I have spoken. Sometimes, however, the subjective effects of the drug are terrifying rather than pleasing. Common objects—a beetle, a mouse, or a dog—inspire unreasoning fear, or, as it is asserted, there are actual hallucinations. Oftener, perhaps, the effects are ludicrous: one leg seems to be longer than the other, so that it appears impossible to walk, at any rate without leaning against a wall or some similar support; or it seems to the victim that his nose has grown to an inordinate length; or he feels an uncontrollable desire to crawl into his boots, or to do something equally absurd. Persian artists are said to employ the drug in order to give greater vividness and clearness to the mental pictures which they wish to transfer to their canvases, indeed, as though existing externally, whatever is in their minds. If this be so, one can only regret that their powers of portraying what they see are not commensurate with their opportunities, for certainly the most lenient critic could hardly describe their paintings as lifelike.

If *hashish* has its painters, it has also its poets. The great Hafiz of Shiraz, who flourished in the fourteenth century, hymns its virtues in an ode beginning—

"Alaya tuti-yi-guya-yi asrar,
Mabada khaliyat shakkar bi minqar."

"O Parrot, discoursing of mysteries, may thy beak never want for sugar."

Allusion is also made to it in the great mystical poem of Jalal'ud-Din-Rumi, who lived a century before Hafiz; and he reckons its use a disgrace, like the use of wine, for he says:

"Nang-i-bang u kharr bar khud mi-nihi,
Ta dami az khawsthan tu va-rahi."

"Thou takest upon thyself the disgrace of *bang* and wine in order that thou may'st for a moment obtain deliverance from self."

However, I must not indulge in further digressions. The point on which I here wish to insist is that Indian hemp has been familiar to the Persians as a narcotic since the end of the thirteenth century, but that during the two preceding centuries the knowledge and use of it were apparently confined to a few,—in fact, to certain members of the secret society, or rather sect, of the Assassins, who derived their name, now associated with murder in general, from the use which they made of the drug *hashish*.

Here I may observe that the etymology of the word "assassin" was not established without a great deal of discussion and conjecture. Casanova, ignoring its Oriental origin, proposed to connect it with the Teutonic word *saxa*, or *saxa*, "a knife." Gábelin would have derived it from the Persian *shah-i-shah*—"King of kings," which is not good Persian in the first place, and is quite irrelevant in the second. Others asserted that the original form was *Hasaniyyun*, or followers of Hasan, i. e. Hasan-i-Sabbah, the founder of the order. It was reserved for the great French Orientalist, Silvestre de Sacy, to prove beyond question that it was derived from the Arabic plural *Hashishiyun*, meaning "the hashish people" or eaters of Indian hemp.

The sect, it is true, was more often called in the East by other names, such as *Malahida*, "the heretics," *Batinyya*, "the esoterics," or *Isma'ilyya*, the "Isma'ilis"; but they are also styled by contemporary writers *Hashishiyun* or *Hashishiyun*, while the term *Sahib'ul-hashish*, "the guardian" or "keeper of the hashish," also occurs, and is applied, if my memory serves me aright, to the Grand Master of the Syrian branch of the sect, variously corrupted into *Assassini*, *Assessini*, *Assissini*, and *Heissessini*; while the Greek form is *assanoi*, and nearest of all to the original stands the *hashishin* of Rabbi Benjamin of Tudela.

Before I proceed further I wish to lay some emphasis on the evil reputation which still attaches to the Indian hemp in the East, especially in Persia, and which I am disposed to attribute, not so much to the actual ill effects which it produces on its votaries (though such are by no means lacking) as to its sinister relations in history. There is little odium attaching to the use of narcotics in Asia, and a Persian gentleman at a picnic or after a dinner-party will call for and smoke his opium pipe without shame or sense of wrong-doing. But it is quite otherwise with Indian hemp. Its votaries seldom admit their indulgence in it; seldom take it save in private, or in the company of those like-minded with themselves; seldom even call it by its proper name, but rather allude to it as "Master Seyyid," (*Apa-yi-Seyyid*), from a fancied resemblance between its green colour and the green turbans worn by reputed descendants of the Prophet; or "the parrot which discourses of mysteries" (*Tuti-yi-guya-yi asrar*); or simply "the mystery" (*Asrar*). The habitual use of *hashish* is indeed, so far as I have been able to judge, far more degrading, if not more deleterious, than the opium habit; but I do not think that this is sufficient to account for the fact which I have just mentioned. In the East, as a rule, degrading habits are condoned far more readily than heresy; and it is, as I think, because of its intimate connection with one of the most formidable heresies which have ever disturbed the peace of the Mohammedan East that the drug is thus spoken of, or rather hinted at, with bated breath.

What, then, was this sect which enjoyed so evil a reputation, and which played so important a part in the history of Persia and Syria during the eleventh, twelfth, and thirteenth centuries? What was its connection with the drug *hashish*, and in what way did it employ that drug as a political agent—as the physical basis, if I may so express myself, of the far-reaching terror which it inspired?

Before I can answer these questions I fear that I shall be compelled to trouble you with a certain amount of Mohammedan theology, which I will endeavour to reduce to a minimum.

You are probably aware that the Mohammedans are divided into two great sects, the Sunnis and the Shi'a. The Persians belong almost exclusively to the latter sect, while in all other Mohammedan countries the former enormously preponderates. The differences between the two, which are the cause of a deep and lasting mutual hatred, appear at first sight to hinge merely on personal questions connected with the appointment of the Prophet's successors. In reality, however, they lie much deeper, in ancient racial instincts and traditions. It is the democratic principle of election, on grounds of personal merit and fitness, against the monarchical principle of hereditary succession. To the Persians, habituated from ancient time to monarchical institutions, and accustomed to regard their kings as beings of another order, almost as divine, the idea of popular election in a matter so important as the choice of a Supreme Pontiff of the Faith was revolting in the highest degree. They therefore refused

to recognise the *Khalifas*, caliphs, or vicegerents of the Prophet elected by the Sunnis, whom I will venture to term the democratic party, but instead transferred their allegiance to Imams belonging exclusively to the Prophetic family. These Imams received a veneration; indeed, in some cases an adoration—far transcending the respect shown by the orthodox Sunnis to their Caliphs. The caliph for its guidance; the Imam was immaculate, of the seed of the Prophet, divinely appointed, divinely inspired, the accredited interpreter and completer of holy writ,—in the eyes of the more extreme partisans of the Shi'ite doctrine an actual incarnation of the Universal Reason, or Divine Emanation. To recognise him, and having recognised him to yield him the most implicit obedience, even when his commands appeared to contravene the letter of the law, was, in the opinion of the Shi'ites, the chief duty of man. "He who dies," say they, "without having recognised the Imam of his time, dies the death of the heathen."

Now, though all the Shi'ites agreed as to principles, this unanimity did not, unfortunately, extend to details, and they gradually split up into a number of sects, of which the most important were the "*Sect of the Seven*," with which we are here concerned, and the "*Sect of the Twelve*," which is at the present time the national religion of Persia. The manner in which the former broke away from the latter was as follows. The sixth Imam, Jafar-i-Sadiq, first named his eldest son Isma'il to succeed him. Unfortunately, Isma'il was, literally, but metaphorically, *Wine* means pride and self-will, not the juice of the grape, *fasting* typifies renunciation of false doctrine, and so forth." Thus arose the germ of that method of allegorical or symbolical interpretation of the sacred text which, under the name of *ta'wi*, played so great a part in the development of this sect of Isma'il, the seventh Imam, or "Sect of the Seven." Nor did the death of Isma'il, which took place shortly afterwards, put a stop to the development of the sect, who asserted that, seven being the perfect number, it was quite natural that this should be the number of the Imams. Nevertheless it is probable that the "Sect of the Seven," far inferior both in importance and numbers to the "Sect of the Twelve," would gradually have died out altogether, or at any rate dwindled into complete insignificance, had it not been for an external influence which invested it with a new and formidable character.

This impulse originated from a Persian, 'Abdu'llah, the son of Meymun the oculist, whose patriotic soul was galled by the spiritual and temporal dominion exercised by the Arabs over his country. To destroy this dominion, and to restore the Persian influence, and something at least of the old Persian doctrines, became his one ambition and desire. He clearly perceived, however, that the power of the Arabs lay in their religion, and must be attacked through it; and that their religion was by this time so firmly rooted that no overt attack on it could possibly succeed, the more so because, in Mohammedan law, apostasy is punished with death. Finally, he devised a bold and original scheme which I cannot better describe than in the words of Dozy, the historian of the Moors in Spain:—"To bind together in one single confraternity the vanquished and their conquerors; to unite in one same secret society, wherein there should be several grades of initiation, the freethinkers and bigots of every sect; to make use of the believers to bring about a reign of the unbelievers, and of the conquerors to overthrow the empire which themselves had founded; to form a party, numerous, compact, and schooled to implicit obedience, which when the moment was come would give the throne, if not to himself, at least to his descendants;—such was the idea of 'Abdu'llah b. Meymun, an idea which, wild and audacious as it seemed, he realised by means of surprising tact, incomparable skill, and a profound knowledge of the human heart." To put this scheme into execution he needed only the power and the fulcrum. The former was supplied by a rich compatriot named Zeydan, who furnished him with the vast sum of two million gold *dirhams*; the latter he found in the Isma'il sect. His selection of this sect is not difficult to explain. The Shi'ites were obviously better suited to his purpose than the Sunnis, both because of their antagonism to the recognised caliphs, and because of their strong hold on Persian sympathies. And as between the "Sect of the Seven," or Isma'ilis, and the "Sect of the Twelve," the doctrine of allegorical and symbolical interpreta-

tion (called *ta'wil*) which prevailed amongst the former rendered them the fitter instrument for his purpose.

Time does not allow me to trace as fully as I should like the history of this movement in its earlier stages, and I will only say that 'Abdu'llah's daring plan succeeded beyond all reasonable expectation; that early in the tenth century his grandson succeeded, by means of a forged pedigree, in persuading his adherents that he himself was the true Imam, fourth in descent from Isma'il; that, taking the title of Mahdi (equivalent to "Saviour" or "Messiah"), he crossed over into Africa and founded the dynasty of Fatimid Caliphs, which soon adding Egypt to its possessions, reigned in great splendour for two centuries ere it was overthrown by Saladdin.

A few words must be said, however, about the methods employed by 'Abdu'llah for the propagation of his doctrines and the extension of his organisation, because these methods were also employed by the Assassins, who, as will shortly appear, were merely a particular school of Isma'ilis which had added a system of physical terrorism to the system of moralisation devised by 'Abdu'llah. To carry on his propaganda, 'Abdu'llah chose astute missionaries, or *da'is*, well versed in the doctrines of the different sects, Mohammedan and non-Mohammedan, from which he intended to draw his proselytes. For the guidance of these missionaries—men wholly devoted to his interests, on whose tact, discretion, and obedience he could entirely rely—he drew up an elaborate code of instructions, which has fortunately been preserved to us by two Arabian writers, Maqrizi, the historian, and Noweyri, the biographer. These instructions are too long to quote, but in substance they are as follows:—The missionary having selected his field of operations must first endeavour to attract attention by affecting an exaggerated but hypocritical piety, and must strive in every possible way to please, conciliate, and win the hearts of those with whom he is brought in contact, and to establish a reputation for devoutness, benevolence, and learning. When he has succeeded in winning the sympathy and confidence of his neighbours, he must endeavour to beguile them into conversation on religious matters, hinting that religion is a hidden science, ignored or misunderstood by the majority of mankind; and that if the Mohammedans did but know what degree of knowledge God, by His special favour, had bestowed on the Imams, no diversity of opinion could exist among them.

Should the *da'i* by these means succeed in exciting the curiosity and attracting the interest of his hearer, he proceeds a step further, and, feeling his way very cautiously, hints that an outward observance of prayer, fasting, and other ordinances of religion is of little use unless their inner significance be understood. If he finds his listeners anxious to know more, he propounds to them such questions as the following:

"Why did God take seven days to create the world when He could just as easily have created it in one moment?"

"What, in reality, are the torments of hell? How can it be true that the skins of the damned will be changed into a fresh skin, in order that this fresh skin, which has not participated in their sins, may be submitted to the tortures of hell?"

"Why are there seven heavens, seven earths, and seven verses in the opening chapter of the Qur'an? and why are there twelve months in the year, and twelve mystical groups of letters prefixed to certain chapters of the sacred book?"

"Why are there twelve dorsal and seven cervical vertebrae?"

"Why are there ten digits on the hands and the same number on the feet? And why do four out of each group of five digits consist of three phalanges, while the fifth comprises only two?"

"Why has the head the shape of the letter *mim*, the two hands that of the *ha*, the belly that of *mim*, and the two legs that of a *dal*, so that the whole body forms, as it were, a written book of which the interpretation is the name *Muhammad*?"

"Why does the human form resemble an *alf* when erect, a *lam* when kneeling, and a *ha* when prostrated, which three letters spell *ilah*, God?"

It would be easy to multiply the number of these questions, but these, I think, are a sufficient sample. The object of them is to convince the neophyte that there exists a secret science or philosophy of religion possessed only by the Imam and his accredited agents, of whom the *da'i* is one. Should the inquirer desire to know more, he had to take a solemn oath of allegiance to the unseen Imam at the hands of the *da'i*, which bound him body and soul to the Isma'ilis; and woe betide him if he should then attempt to kick over the traces! If his curiosity was quenched by what he now heard, and he had no further appetite for esoteric doctrine, the wisest thing he could do was to keep quiet, pay without grumbling the "Imam's money" demanded from him by the *da'i*, and, above all, abstain from divulging what had been communicated to him, or speaking ill of the sect into which he

had been admitted. If, on the other hand, he showed aptitude and desire for further instruction, the *da'i* would gradually lead him up through the seven (afterwards nine) degrees of initiation to a point where every shred of Mohammedan belief would have been discarded, and where he would regard God as a transcendental essence working in the universe through His five emanations, the Universal Reason, the Universal Soul, Primordial Matter, Space, and Time; the prophets as cunning rationalists, whose ordinances were designed to bind men to them, to inculcate habits of obedience and self-control, and to prepare them for the reception of the philosophic truths imparted, in the first instance only to a few specially favoured individuals; and the form of religion outwardly professed as a matter of perfect indifference.

During the eleventh century, however, a certain slackening had become apparent in the Isma'ili propaganda, and their missionaries were no longer so active or so ubiquitous as had hitherto been the case. The times were evil for them and for all Shi'ites; for the Seljuqs—Turks, and as such staunch champions of orthodox and strenuous routers out of heresy—ruled Persia and Asia Minor, and held the Caliph of Baghdad, as it were, in the hollow of their hand. About this time there were at the University of Nishapur three young men, friends and fellow-students, each of whom was destined to attain fame. One, under the title of Nizamul Mulik, became in after years a great and able statesman, and was prime minister to two successive kings of the Seljuq dynasty, Alp Arslan and Malikshah. The second was 'Omar-i-Khayyam, the poet-astronomer, whom in our day the genius of Fitzgerald has raised in England to the position of the best known and most appreciated of Persian poets. The third was Hasan-i-Sabbah, afterwards the founder and first Grand Master of the order of the Assassins.

These three young students made acquaintance at the lectures of the Imam Muwaffaq, one of the most learned men in Khurasan, whose reputation for holiness was such that it was currently believed that all who studied the Qur'an and traditions under him would attain to wealth and fortune. One day Hasan-i-Sabbah, alluding to this popular belief, proposed to his two fellow-students that they should enter into an agreement, binding him of the three who should first attain fortune to share it with the others, and not engross it himself. To this proposal they agreed.

Years rolled by, and the Nizamul Mulik became prime minister. 'Omar-i-Khayyam first came to him to claim the fulfilment of their youthful compact. He was cordially received by his old friend, who at once offered to present him to the Sultan, and obtain for him an appointment at the court. This offer, however, 'Omar-i-Khayyam declined, saying, "The greatest favour you can do me is to let me live in retirement, where, under your protection, I may occupy myself in amassing the riches of learning, and in praying for your long life." When the Nizamul-Mulik perceived that he spoke in sincerity, and not out of mere politeness, he acceded to his request, and assigned him a yearly stipend of 1200 gold *misqals*, so that he was enabled to devote himself entirely to the scientific and literary pursuits which he wisely preferred to the danger and disquiet of a political career, and to achieve the highest renown both as an astronomer and a poet.

Shortly afterwards Hasan-i-Sabbah in his turn came to claim the fulfilment of the compact. Being ambitious, he eagerly accepted the Nizamul-Mulik's offer of a presentation to the Sultan Malikshah, who conceived a very high opinion of his abilities, and made him his chamberlain. Unfortunately he was of a restless and intriguing disposition, and endeavoured to bring about the downfall of his old friend and patron, in the hope that he himself might become prime minister. This plan, however, turned against himself, and he was compelled to flee in disgrace from the court.

He first went to Isfahan, where he took refuge in the house of one of his acquaintance named Abul-Fazl. One day, brooding over his fall, he exclaimed, "Had I but two faithful friends on whom I could reckon, I would overthrow this Turk and this peasant" (meaning the Sultan and his minister). Abul-Fazl, supposing him to be deranged, surreptitiously mingled with his food certain herbs and drugs reputed efficacious in curing such disorders of the brain. Hasan, perceiving this, was greatly annoyed, and departed to Rey, where he foregathered with certain missionaries or *da'is* of the Isma'ili sect. Hitherto he had been a Shi'ite of the Sect of the Twelve, but he now eagerly enrolled himself amongst the initiates of the Isma'ili, or Sect of the Seven, and forthwith set out for Cairo, the capital of the Fatimid caliphs and the centre of the Isma'ili cult. Here he was well received; but after a while his wilful and intriguing disposition again involved him in trouble, and he returned to Persia, determined to inaugurate, in the name of the Fatimid caliph, an enterprise of his own, which was afterwards known as "the New Propaganda."

Hard by the southern shore of the Caspian Sea, not far from Qazvin, stood (and even now stands, though in a ruined condition) a mountain fortress called Alamut, which name in the Daylami tongue signifies "the Eagle's teaching." Near this Hasan established himself, and, proceeding in the manner which I have already described when speaking of the Isma'ili missionaries, soon succeeded in winning a number of proselytes amongst the garrison of the fortress. The ground being thus prepared, he appeared one day before the gates in pilgrim garb, and prayed the governor to grant him for meditation and worship so much ground within the fortress as an ox-hide would enclose. The governor, not having enjoyed the benefit of a classical education, was ignorant of the ancient ruse practised by Dido on King Iarbas, and now meditated by Hasan, and he acceded to the request. Hasan, as you will already have conjectured, cut the ox-hide into narrow strips, joined them together, and encircled the whole castle, which the governor was obliged to surrender in accordance with his promise. Such, at least, is the more picturesque version of the seizure of Alamut given in the *Tarikh-i-Gusaidi*; in other, possibly more veracious, accounts there is mention of gold and of force, but none of the ox's hide. Be this as it may, on the night of Wednesday, September 4th, 1090, Hasan obtained possession of this stronghold; and it was noted as an odd coincidence by the curious in such matters that the sum of the numerical values of the letters composing the name of the fortress, Alamut, gave the year of the *hijra* (A.H. 489) in which the seizure was effected.

The acquisition of Alamut as a base of operations by Hasan-i-Sabbah marks the beginning of the political power of the Assassins. Gradually, by dint of similar stratagems, they gained possession of a number of other mountain strongholds in Persia, and later in Syria also. Looked at on the map their territories appear insignificant, but, as we shall see, their power was not to be measured by the extent of their domains.

It is the organisation of this sinister fraternity which I wish to describe to you, and I must deal very briefly with their history. The Persian branch flourished from A.D. 1090 (the date of the seizure of Alamut) until 1256, when the floodgates of Mongol invasion were opened, and Ruknu'd-Din, eighth and last Grand Master of the Persian Assassins, surrendered, and was put to death by the redoubtable Hulaku Khan, who was also the destroyer of the 'Abbasid caliphate. After the capitulation of Alamut, the other strongholds—more than fifty in number, it is said—fell one by one. The garrisons were put to death, and the books—all, at least, which savoured of heresy—were burned, so that it is only by a fortunate chance that some few have been preserved to us.

The power of the Syrian branch really began with the seizure of Baneas in A.D. 1120, but the sect endures there even to this day, though since the end of the thirteenth century it has been comparatively innocuous. Except for a short period in the latter half of the twelfth century, the Syrian Assassins owed allegiance to the Persian mother sect until its extirpation, but for a while the redoubtable Sheykh Sinan, who was responsible for the sudden death of many a bold crusader, and from whom even the great Saladin was not ashamed to ask assistance, shook off this allegiance, and exercised supreme power in the Lebanon. I wish I had time to tell you more of the doings of this remarkable man—how he struck terror into the heart of Saladin; how he compassed the murder of Conrad, Marquis of Montferrat, at his instigation, or, as some assert, at the instigation of Richard Cœur-de-Lion; how he trained carrier pigeons to bring him news from distant places, whereby he was enabled to persuade his followers of his miraculous powers by exhibitions of apparent clairvoyance, such as answering the letters addressed to him without opening or reading them. All these things, and many more, are recorded by his admiring biographer, Abu Firas, who lived rather more than a century later. The Isma'ilis are not in the habit of exposing their books to profane eyes, and this biography would probably have remained unknown to us had it not been that in 1809 the Isma'ilis, who in these latter days have been more sinned against than sinning, were attacked by a rival sect, the Nusayris, in their fortress of Mas'af, and that a copy of this work formed part of the loot. It afterwards passed into European hands, and has been published with a French translation and introduction by Stanislas Guyard in the *Journal Asiatique* for 1877.

So much for the history of the Assassins: now as to their organisation. Grades of initiation already existed, as we have seen, in the old Isma'ili system, but Hasan-i-Sabbah gave to them a much greater development and definiteness. At the head of the order stood the *Da'i'u'd-du'at*, or Grand Master, commonly called the *Sheykhul-Jebel*, or chief of the mountain. The word *Sheykh* means "an old man," "an elder," as well as "a chief"; and the Crusaders, understanding

it in the former sense, translated the title as "the Old Man of the Mountain," or simply "the Old One" (*le Vieux*). Next to "the old one" in this infamous hierarchy came the Grand Priors (*Da'i-i-Kabir*), who chiefly directed alike the propaganda and the vengeance of the order. In the third grade came the *Da'is*, or actual missionaries, who travelled far and wide to regulate the affairs and renew the strength of the fraternity. All these grades were pretty fully initiated into the secret religious—or rather irreligious—doctrines to which I have already alluded.

Of the lower grades, the *Rafiqs*, or "companions," were partly initiated, while the *Lasigs*, or "adherents," comprised the common herd of those who submitted without comprehension, whether from conviction or coercion, to the sway of "the Old One."

I have purposely left till the last the sixth of these seven grades—that of the *Feda'is*, or "devoted ones"—which was at once the most original, the most characteristic, and the most terrible feature of the order, as remodelled by Hasan-i-Sabbah—the ministers of its vengeance, the cause of the far-reaching terror which it inspired—a terror which made kings quake in their palaces, and hushed the peevish anathemas of outraged orthodoxy. And here I will call to my aid the great Venetian traveller of the thirteenth century, and let him tell you about these destroying angels of "the Old One."

"The Old Man," says he, "was called in their language Aloadin. He had caused a certain valley between two mountains to be enclosed, and had turned it into a garden, the largest and most beautiful that ever was seen, filled with every variety of fruit. In it were well-erected pavilions and palaces, the most elegant that can be imagined, all covered with gilding and exquisite painting. And there were runnels, too, flowing freely with wine and milk and honey and water, and numbers of ladies, and of the most beautiful damsels in the world, who could play on all manner of instruments, and sing most sweetly, and dance in a manner that was most charming to behold.

"The old man desired to make his people believe that this was actually Paradise. So he fashioned it after the description that Mahomet gave of his Paradise,—to wit, that it should be a beautiful garden (uniting with conduits of wine and milk and honey and water, and full of lovely women for the delectation of all its inmates. And, sure enough, the Saracens of those parts believed that it was Paradise."

"Now no man was allowed to enter the garden save those whom he intended to be his *Ashishin*. There was a fortress at the entrance of the garden strong enough to resist all the world, and there was no other way to get in. He kept at his court a number of the youths of the country, from twelve to twenty years of age, such as had a taste for soldiering, and to these he used to tell tales about Paradise, just as Mahomet had been wont to do; and they believed in him, just as the Saracens believe in Mahomet. Then he would introduce them into his garden, some four or six or ten at a time, having made them drink a certain potion which cast them into a deep sleep, and then causing them to be lifted and carried in. So when they awoke they found themselves in the garden.

"When, therefore, they awoke, and found themselves in a place so charming, they deemed that it was Paradise in very truth. And the ladies and damsels dallied with them to their heart's content, so that they had what young men would have; and with their own good-will would they never have quitted the place.

"Now this Prince, whom we call the Old One, kept his court in grand and noble style, and made those simple hill folks about him believe firmly that he was a great prophet. And when he wanted one of his *Ashishin* to send on any mission, he would cause that potion whereof I spoke to be given to one of the youths in the garden, and then had him carried into his palace. So when the young man awoke he found himself in the castle, and no longer in that Paradise, whereof he was not over-well pleased. He was then conducted to the Old Man's presence, and bowed before him with great veneration, as believing himself to be in the presence of a true prophet. The prince would then ask whence he came, and he would reply that he came from Paradise, and that it was exactly such as Mahomet had described it in the law. This, of course, gave the others, who stood by, and who had not been admitted, the greatest desire to enter therein. So when the Old Man would have any prince slain he would say to such a youth, 'Go thou and slay So-and-so, and when thou returnest my angels shall bear thee into Paradise. And shouldst thou die, nonetheless even so will I send my angels to carry thee back into paradise. So he caused them to believe, and thus there was no order of his that they would not affront any peril to execute, for the great desire that they had to get back into that Paradise of his. And in this manner the Old One got his people to murder any one whom he desired to get rid of. Thus, too, the great dread that he inspired all princes wital made them become

his tributaries, in order that he might abide at peace and amity with them."

Now you will, of course, have guessed that the mysterious potion of which Marco Polo speaks was nothing else than a preparation of Indian hemp or *hashish*; and it is worth noticing that only those to whom it was administered—*i. e.* the *Feda'is*—are called by him *Ashishin*, or Assassins. Thus, as I have already remarked, Assassin (*or Hashish*) really means a taker of *hashish*; but since the takers of *hashish* in the Isma'ili order were also the instruments of its vengeance, the term assassin came to be regarded as equivalent to murderer.

There is another point of some importance which comes out very clearly in Marco Polo's description. When it was first proposed to connect the word assassin with the drug *hashish*, it was objected that the habitual use of it produced not merely lethargy, but a mental condition bordering on idiocy; and that "the Old One" would hardly have entrusted lethargic idiots with the very difficult and delicate handling of an important assassination. No mad "running amuck" in Malay fashion would have served the purposes of "the Old One's" vengeance, for steady nerves and a clear head are needed by him who would strike down a sultan, a statesman, or a soldier surrounded by his retainers. But this objection is at once removed by Marco Polo's testimony. Only twice—once on entering, and once on leaving the "Old One's" paradise—did the *Feda'is* drink the mysterious draught, designed not to inspire mad frenzy, but to rivet the chains of super-

stitions credulity and blind obedience. For obedience was the essential quality of a *Feda'i*—obedience blind, unreasoning, complete. How far it was carried you may judge from the following anecdote, preserved to us by Fra Pippino and Marino Sanuto:—When, during a period of truce, Henry, Count of Champagne (titular King of Jerusalem), was on a visit to the Old Man of Syria, one day, as they walked together, they saw some lads in white sitting on the top of a high tower. The sheykh, turning to the Count, asked if he had any subjects as obedient as his own; and without waiting for a reply, made a sign to two of the boys, who immediately leaped from the tower and were killed on the spot.

But obedience and disregard of death were not the only qualities required from the *Feda'is*. Though kept in ignorance of the secret doctrines of the order, and encouraged to believe in a gross and sensual Paradise, they were carefully trained in the use of arms, in endurance, in the art of disguise, and even in foreign—including European—languages. The Assassins sent to kill Conrad, Marquis of Montferrat, were sufficiently conversant with the Frankish language and customs to pass as Christian monks during the six months which they spent in the Crusaders' camp, awaiting an opportunity for the accomplishment of their deadly errand. That the *Feda'is* seldom survived their victims need scarcely be remarked; but so great an honour was it deemed, and so sure a road to Paradise, to perish in one of "the Old One's" quests, that we read of Isma'ili mothers who wept, not because their sons had perished at the hands of their victim's friends, but because they had returned alive, deprived of the crown of martyrdom.

You are now in a position to understand the terror inspired by the Assassins, and also the evil repute which still attaches to *hashish* in Persia. While "the Old One" sat in quasi-religious retirement at Alamut, putting black marks against the names of those who had the misfortune to incur his resentment, his deadly messengers went forth to strike down the proscribed,—the prince in his palace, the priest in his mosque, or the peasant in his cottage. If one *Feda'i* failed, another was sent. If he fell, more followed him.

Blood was not always shed where threats were deemed sufficient. Saladin, advancing against "the Old One" of Syria, awoke one morning in his tent to find a dagger stuck in the ground beside him, to which was attached a note advising him to desist. If he valued his life—advice which he was not slow to follow. Malik Shah, the Seljuq, received a similar warning, couched in these terms:—"But for the kindly feeling which we entertain towards the Sultan, his soft flesh would have received the dagger more easily than the hard earth."

The first victim of the Assassins was, curiously enough, "the Old One's" former fellow-student and college friend, the Nizamul Mulik, who was stabbed by a *Feda'i* disguised as a Sufi monk at Nehavand in A.D. 1092.

Time fails me to enumerate the notables who, in the course of the next century and a half, fell beneath the daggers of the *Feda'is*. The following brief list of the most illustrious will give you some idea of their deadly activity:—

A.D. 1092. The Nizamul-Mulik.

1102. The Prince of Homs, in the chief mosque of that city.

1113. Mawduf, Prince of Mossoul, in the chief mosque of Damascus.

- A.D. 1114. The prime minister of Sultan Sanjar and his great-uncle.
 1116. The Prince of Maragha at Baghdad, in the presence of the King of Persia.
 1121. The chief minister of Egypt at Cairo.
 1126. The Prince of Mossoul and Aleppo, in the chief mosque of the former city.
 1127. Another prime minister of Sultan Sanjar the Seljuq.
 1129. El-Amir hi'llah, Caliph of Egypt.
 1131. The Prince of Damascus.
 1134. The son of the above.
 1135 and 1138. Two more caliphs and a Seljuq Prince.
 1149. Raymond, Count of Tripoli.
 1191. Qizil Arslan, Prince of Azarbaijan.
 1192. Conrad of Montferrat.
 1217. Oghulmish, Prince of Hamadan.

Attempts were also made on the lives of Saladdin and Prince Edward of England.

These, of course, were only the most prominent princes and statesmen who fell victims to the Assassins, but no class was secure, and the clergy in particular were obliged to keep a civil tongue in their heads when they spoke of the Old One, or they were likely to find half a yard of cold steel in their entrails.

There was a certain theological professor who was in the habit of cursing the Malahida, or Assassins of Alamut, whenever he had occasion to mention them or hear them mentioned. One day there appeared in his class a young student of theology (so, at least, his appearance and manners proclaimed him), whose exemplary attention and diligence from the first attracted the professor's notice and approval. When, therefore, this model student one day requested a private interview with his teacher, his request was at once granted. No sooner were they alone than the quasi-student, who was in reality a Feda'i in disguise, produced from beneath his cloak a dagger and a purse of gold. "You merit this," said he, holding the dagger before the astonished professor, "for the disconcerting mention you have repeatedly made of us and our master; but I am authorised to offer you this instead" (holding out the bag of gold) "if you will undertake not to be guilty of similar offences in future." The professor was not long in arriving at a decision; and when, in after days, his friends would inquire of him at times why he had altogether desisted from his maledictions on the Assassins, he would reply, with some humour, that he had been convinced, by arguments both *weighty* and *trenchant*, that he was in the wrong.

The last assassination by Feda'is took place at Bombay in 1850, when four recalcitrant Isma'ilis (or Khojas, as they are there called) were staked to death for refusing to pay tribute to Agha Khan, the lineal descendant of the fourth Grand Master of the Assassins of Alamut. The murderers were tried before Sir Erskine Perry, and four of them were condemned to death. Then followed a civil suit, touching the rights of Agha Khan to receive this tribute, and it was established by Sir Joseph Arnold, after a most careful sifting of evidence, that Agha Khan was indeed the living representative of the terrible "Old Man of the Mountain." No longer terrible, his sons, enriched by the tribute of £20,000 a year) to which their right was established in an English court of law, live in affluence at Bombay, where they are known as "the Persian princes," and are celebrated for their devotion to the turf, and their excellent stud of horses. Their love of sport is equalled by their hospitality, of which the Prince of Wales partook during his visit to India. Strange indeed are the vicissitudes of fortune. Seven centuries had elapsed since an English prince had been brought into relations with a Grand Master of the Isma'ilis of Alamut, and how great the contrast between the two occasions!

I conclude, as I began, with an apology. I have, I fear, added nothing to your professional knowledge. At most I can only hope to have shown you that if there is romance in history, there is also romance in the *Materia Medica*.

My First Appointment.

ONE of the most amusing, and at the same time, to me, most interesting events in my life has been my competition for the appointment I now hold. I do not give my name or the name of the

appointment, except in strict privacy to the editor, for obvious reasons.

About three months ago I qualified full M.R.C.S., L.R.C.P., and for the first week or so remained under the impression that my fortune was already made, and that my financial prospects were at last secure. I was advised to apply for the appointment of Junior House Surgeon to one of the smaller London hospitals. My mind rebelled rather at the idea of accepting a *junior* appointment, but I was told that it was the customary thing even for *good* men to hold a junior appointment before taking a senior one.

The first step was the drawing up of an application and the collection of testimonials. The application was a work of art. I described the whole of my career from the day I registered till my final examination, laying stress upon every detail that I thought would influence the electors to the appointment. When finished I blushed to read it through, but hoped the staff of the hospital would believe it all. Then came the question of testimonials. I applied to all the members of the Bart's staff under whom I had worked, leaving with them, in accordance with what I understood to be the custom, one of my visiting cards, with the name of the appointment I hoped for written upon it. The succeeding posts brought me a miscellaneous collection. The majority of the staff seemed to regard me as already a "Sir James Paget." How strange that I should have been in ignorance of my true worth, or of their opinion so long. I was, amongst other things, "a steady worker," "a highly intelligent and painstaking student," "eager to learn," and they all concurred in stating that I was "peculiarly well qualified to fill the post of Junior House Surgeon to the ——— Hospital." I proudly read them over again and again, and then committed them, with my application, to the care of the printer, who in due time delivered to me the delightful little bundles—each testimonial, as well as the application, being printed on a separate sheet of paper, and the whole being clipped together in so neat a way that I could hardly imagine defeat possible. Surely no one could be so well fitted for the appointment as myself.

In accordance with the advice of a knowing friend, I posted the applications and testimonials to each member of the staff, so that they would arrive on Saturday evening. I was told that arriving on Saturday evening they were sure to be read on Sunday morning, while time hung heavily on the reader's hands. Were I to post them, I was told, on any other day, the recipient would be too busy to give them more than a cursory glance.

About this time I happened to be shown some of the corresponding documents sent in by my rivals for the post, and realised with a somewhat unpleasant shock that several others had somehow managed to obtain testimonials almost as good as mine. This saddened me, and although I was surprised to think that anyone except myself should have

the effrontery to use such eulogistic testimonials, I determined to redouble my efforts.

On the Monday morning, therefore, arrayed in my best frock coat, and in every way regardlessly got up, I hired a "hansom" (at half-a-crown an hour) and drove round to the houses of the different members of the staff. In order to run my quarry to earth I chose the morning consulting hours, and hoped that the brevity of my visits would neutralise the effect of calling at an hour when "time was money."

I find there is much variety in the method of receiving a candidate.

There is the irritable man with his "Why ever do you come and worry me?" manner, who treats you as if you were trying to borrow money; and the man who turns up his eyes and implies that you are suggesting something not in accordance with his honour and general rectitude. There is the "charming" man, whose manner and remarks tend to make you leave his consulting room feeling that you have his vote in your pocket already. He, by the way, is generally the man of little individuality, and whose vote is all but certain to go with the majority. Some men carefully catechise you upon every detail of your past history, as if they were writing the clinical notes of a case; others seem to take no interest in you at all, and appear to be thoroughly bored by any detail you happen to thrust upon them. Lastly, there are some who carefully listen to all you have to say, and perhaps jot down notes on the back of your card, at the same time asking questions from time to time. They behave towards you as if they appreciated the unpleasant nature of your task, bid you good-bye in a pleasant manner, and wish you success, assuring you that they will remember all you have told them, and consider it carefully, but clearly explaining to you that they intend to vote for the man they consider best suited for the post.

These are the men whose fairness and straightforwardness make you still more anxious to get the post, and with whom you hope to be brought most in contact should you get it. Touting for votes must be an unpleasant and ungenial task to every man, but there are some electors who succeed wonderfully in minimising the unpleasantness. One hears of some candidates who *ask* for the vote and press for a direct answer, "Yes" or "No." This is obviously an indelicat proceeding, and essentially irrational in view of the fact that at the time the question is put there may still be many candidates whom the elector has not yet even seen.

Having called upon those who elect, the next step is to endeavour to persuade those who are backing you, and who have given you testimonials, to write privately to those men whom they know on the electors' list. One such letter is said to be worth fifty testimonials, however gushing, and well it should be, since, presumably, such a letter will be an

honest opinion upon your suitability for the work, and would not be written unless the writer wished to back you strongly.

Testimonials are often weird effusions. Some men have a stereotyped formula which is used indiscriminately for all who apply for support, and occasions have been known when two men applying for the same post have presented verbally identical testimonials from the same writer. No wonder testimonials are often taken *cum grano*, and no wonder that so much higher a value is attached to a private letter.

One's efforts having at last been expended, it remains but to kill time until the publication of the "select" list. This is often drawn up by the medical committee, and is then generally endorsed, as it stands, by the lay committee some days later. The candidates who are "selected" are requested to appear on this occasion, and are generally summoned in rotation to the board room to be interviewed by the chairman and others of the lay committee. This stage of the proceedings is not without its humorous side. Strange are the questions which suggest themselves to a lay mind when electing a medical man, and it is sometimes difficult for the candidate to avoid a smiling answer, serious as the occasion is.

Lastly, the successful candidate is again called in, and is formally appointed. This last interview over, the newly-made House Surgeon leaves the room and tries to remember how many bets on the result he has lost, and how many drinks he has promised to stand.

On Wounds and Bruises in the Insane.

A Paper read before the Abernethian Society, January 28th, 1897.

By T. CLAYE SHAW, M.D., F.R.C.P.

MR. PRESIDENT AND GENTLEMEN.—The subject I have chosen for this evening's discussion is what would, I suppose, be called a "practical subject"—a term that commends itself to a great many people who think that they are then in the presence of something definite and tangible, of measurable quantity, unobscured by the cloudy vapourings of theoretical abstractions. Just as the "practical man" is always held up to admiration, so is the man of speculation—the mere student—despised, much in the same way as we see in trade advertisements that So-and-so is a "practical tailor," or a "practical sweep." Heaven save us from gentlemen of pure theory in such departments! A *hypothetical* fit, e.g., that because a man's shoulders are a certain width his legs should be of a corresponding length, would not always ensure a costume suitable for a church parade. Worst of all would perhaps be the man who offered to extract your molar on hypothesis!

It is just the same cry in present discussion about the education for the Services—mathematics and abstract research do not win battles, say they. Will they not? Look at Moltke and the war of 1870!

It is often objected to men who go in for the higher examinations that they are not "practical men," but if you wait a little you will find that these are just the ones who actually turn out to be the best "practical men" in the end. Some departments of our art and science are more distinctly "practical" than others, e.g. anatomy;

but there is none the less room for imagination here, and some of the greatest anatomists have been men whose recognitions of anatomical likenesses and disparities were truly brilliant generalisations, of absolute poetic flash, the inspiration of which has eventuated in work of a most beneficial character, but so simple as to be within the reach of any "practical man." We admire the brilliant operator, the accurate diagnostician, the lucid demonstrator of physical phenomena; but we should extend our regard and sympathy to the thinker, to the theoriser, to the speculator; to the man who, asking himself what *ought* to be and what *might* be, as taste hits upon what is—his blind gropings availing him to reach a foundation to which less ardent natures may venture, and upon which they may make themselves noticed, and may flap their wings with a derived blatancy. You will ask, "What is the meaning of this exordium?" It is really an *excuse* for myself and an apology to you. An excuse to myself because in the previous communications that I have had the honour to give before this Society I have been occupied with more or less theoretical considerations; and an apology to you for asking your indulgence whilst I treat of a subject which sounds very commonplace—of which every one knows a certain amount, and out of which there is apparently not much to be got. It is the subject of the "practical man" (which often means merely the "man in practice"), and admits of plain statement, as it is the result of very ordinary observation. It is not because it is a very humble subject that I bring it before you, but rather because it is so plain and manifest an object that, without experience, it seems impossible to run the ship upon it; and yet there are pitfalls and shoals connected with it that only long experience can guard against. Mental philosophy and mental physiology, like minute brain anatomy and physiology, are to a large extent speculative and unfinished: but they are full of interest; the consideration of them involves us in problems that have a most widening and edifying effect on our own mental grasp; we feel, after mastering a chapter of Herbert Spencer or the theory of the "categorical imperative" of Kant, that we are better men, that the atmosphere of many things is cleared, that our grasp is strengthened, and that we are better able to assume the practical—that the level to which we ascend seems an easy medium to us, though full of frantic endeavour to the man who has never soared beyond what is for the moment easy to understand.

You have a right to expect that I should, if possible, take you into these transcendental regions, and therefore I must apologise for taking to-night a lower level, and discussing the apparently commonplace subject of "Wounds and Bruises in the Insane."

Why in the insane? Is there any difference between a wound or a bruise in the insane and in the sane? Yes, there may be. To begin with, we may say that, like the fly in amber—

"The thing we know is neither rich nor rare,
The wonder is how the dickens it got there."

The sane man can nearly always give you the history of his condition, the insane man either cannot, or will not, or dare not—you must judge for yourselves; and you have to reckon with other people—the attendants—who are often responsible for these marks. Until you are brought face to face with the fact that the brute must tell its own tale you may not have thought it worth while to study the evolution of it. It seems such a simple thing; there is first the blue or red mark, then the change of colour, and finally the clearing up. But why is this change of colour, and how does it evolve? Is it necessary that the usual order be observed, and can we say exactly, "This is a bruise of such and such an age"—"it must have been done so many days ago"—"it is necessarily the result of violence"? We shall see that it is not always possible to say these things, and that even though the markings and colours may be there, there need not have been violence of any kind used at all!

Which came first, art or science? Art. People made useful things and pre-empted things before they knew anything more about them than that they wanted them; often, indeed, science destroys art; the most useful thing is not always the most artistic. Art has in it a natural element of emotion. Science evolves what we may call an artificial emotion, more resembling pride at the overcoming an obstacle than the natural effervescent pleasure that the beauty of flowing lines evokes. The natural abandon of a wild foaming cataract is more attractive than the slow smoothness of a canal; the wild gyrations of a fanatic dancer are more infective than the scientific pirouettes of the trained ballerina. Science, on the other hand, brings within reach possibilities undreamt of in art, and these in turn may have a derived beauty; practically we might say that science is the enclosure of art within law, the substitution of a different tone of emotion; and the artistic man becomes, in fact, the scientific man that we started by

abusing. We may, then, have the practical man who does a thing well because he has some natural aptitude for it—the born artist, whether it be in sculpture or even in making sausages, the practical man—the acquired artist—who is so because of his scientific training; and we may have both the artist and scientific man who are not practical men—the former refusing to be fettered in his natural inclinations, and the latter incapable of carrying out the results he has arrived at. These two groups form the *impossible* element of society; let me give you an instance. I will show you how insanely may cause an artist, a veritable creation arising from an insane state. I have a patient a member of our profession who spends his time in making curiosities of a most extraordinary character; he has developed possibilities of artistic combination never known to exist in him before his attack. He is now a sculptor, and will hack a lump of chalk into beautiful shapes, though he never learnt modelling; he makes musical instruments of a peculiar creation out of apparently impossible materials (given, e.g., the backs of old hair-brushes and the twine from old packages, he will make a playable fiddle; give him some old box-lids, the iron heels from a workman's old boots, and a broken slate from the roof, he will construct a billiard table). In a race of savages he would be the artificer royal, but to us he is a mere curiosity, useless; besides, he does just what he is self-prompted to do, in his own way, often the longest and most round-about, and refuses to be trammelled by laws of work; he is an artist, and does things for his own pleasure—there is no altruism, nothing for the good of others. When he has done a thing and has gratified his own impulse he destroys it. As a mere artist he is like wild nature—interesting but useless; could he be made amenable to scientific training he might become a "practical man." The impossible scientific man is, as a rule, not *strictly* scientific. He spends his time in making theories, but he does not consider sufficiently his facts. His theory, then, is a failure, it fails in accord with the fact, or it leads to nothing. As the "artist" requires restraint and wing-clipping, the impossible scientist requires expansion; one is as useless as the other.

There are, then, two kinds of practical men; there is the one who begins at the wrong end—who does a thing (perhaps very well) from custom and practice without knowing very precisely why he does it,—and there is the one who is reasoning first and practical afterwards: it is from this point of view that I regard you as practical men, tempering your art with science.

The insane are more liable to injuries than almost any other class of people; they are quarrelsome and irritating, and try human patience almost past endurance; it is therefore easily imagined that, in spite of all our endeavours to inculcate forbearance and "hands off" on the part of attendants, there still must occur many instances of violence of a greater or less extent. As a rule, great credit is due to attendants for the way in which they put up with the insults, abuse, and violence often displayed towards them; but knowing the results and the penal clauses of the Lunacy Acts if they are found using violence, it is not surprising that they deny these imputations if they possibly can wriggle out of them, and so it becomes requisite in the interest of the patient and for your own safety to see whether present appearances correspond with explanations given. Then, again, insane persons are often very weak on their legs, and fall about the rooms in which they have to sleep because of their noise or restlessness; the injuries and bruises so resulting are often of a serious nature, and inasmuch as they can tell you nothing themselves you may be dependent for your information upon what you can gather from your own experience. Another point: lunatics will often bring charges of violence against innocent persons, and you may have to check the account given by what you see. The importance attached to wounds or bruising is seen by the rules hung up in every asylum that any appearance of these is to be immediately reported, so that the earliest opportunity may be taken of investigating the circumstances. The class most liable to injury (the general paralytics) is just the one where the patient is least able to say anything about it, and the only indication of anything having occurred, or of there being anything wrong, is the silent voice of the bruise.

Some people go as far as to expect every mark and bruise to be accounted for. In this I think they err; injuries must happen when no one is there—during the night, for instance, and it is impossible for the attendant always to say how or when it occurred. To oblige a man to be ready with an explanation is to train him up in deceit and lying, and may end in making him prove too much, and thus needlessly incriminate himself or others.

The worst of it is that we may have injuries of a serious nature without external bruising of any kind. What then is to direct us in the case of a patient too incoherent to say anything? In the absence of evidence we find post mortem a condition of things quite un-

expected. I remember once (many years ago) a female patient seemed drooping, and was put to bed. Upon asking the nurse about her no particular reason was given for placing her in bed, but I proceeded to examine her, and on placing my hand on the chest was rather horrified to find that it more resembled a bag of broken bones than anything else. I hesitate to say how many, but I should think that there must have been a dozen or twenty loose pieces of bone there; there was no bruising at all, and of course no one could give any history of scuffling or violence. Fortunately for all of us the woman got well—made an *unbroken* recovery,—but I was never able to clear up how the injuries occurred.

On the other hand, there are conditions which look as if the patient had been subjected to the greatest violence where it can be shown that he has not been touched. It happened that in one asylum the doctor was going round when he saw a very extensive bruising in the blue and greenish stage on the outer part of the leg and thigh of a patient. Nothing would satisfy him that violence had not been used, and notwithstanding his protestations of innocence the attendant in charge had to leave; but after all it was nothing more than a condition of purpura, which one sometimes sees take a localised form in some of the cases of dementia where the nutrition is bad, and there is reason to believe that vegetables have been inadequately represented in the diet. Such a state is apt to occur in the people who are fed on mince-meat unless care is taken in the food mixture. The gums get spongy and bleed easily, and ecchymoses will form over the body, and may even occur internally. I think that it is more especially among insane women that this condition occurs than in men, and for this reason, that women often throw the vegetables away unobserved, they have fads or delusions about them. In ordinary life we learn to see women rejecting this or that vegetable because it makes them too fat or too something or other; but these people have other resources of diet to which women kept in asylums have no access, and so they supply the necessary potash in other ways. I think that food faddists are found more in women than in men generally; vegetarians, quaker oats, Denger's food, all owe their popularity to the love for change of the fair sex,—there must be a fashion in foods as well as in hats. Had man been alone, life would simply have been a *monotony of beef*. "Always advertise in the *Queen*," I believe, a good trade maxim, and accounts for the enormous size of that periodical.

In the absence of bruise we are sometimes guided to an existing injury by the presence of a *deformity*. I know at the present moment of a case of broken jaw which was not correctly estimated for three weeks after its occurrence; there was no external bruise, not the least mark, only a little swelling, and this was taken for a gum-boil. I have little doubt, from an examination of all the circumstances of this case, that no violence ever was used, either purposely or accidentally, but that it was due to a trophic lesion. These trophic lesions are very frequent in the insane, and are, I believe, due to some devitalised condition of blood, some lower stage of the life of the blood—a katabolic process that would, *if the blood were sensitive*, cause actual pain or unpleasantness. You know our scientific fad is "degeneration;" if we can't explain a process, either in morals or manners or structure, we are apt to term it a "degeneration." "Genius" (which we don't understand) is a *neurotic* process; the extremely "nervous" person is "neurotic;" the individual who seems insensible to pain is (morally and physically) a *lower* creation. Certain it is that though they do not stand "disease," in the ordinary use of the term, well, the insane do appear to suffer less from injuries than others do. I suppose it is because there is little or no nerve shock. Some time ago I sent a male patient to work at pulling up potatoes. One would have thought this a harmless occupation enough, for it does not occur to everybody to choke himself with potato stalks, but unfortunately I had not reckoned with the force of the katabolic impulse in ingenuity to find means to gratify itself; it so happened that a heavy cart laden with potatoes, and weighing in all nearly *two tons*, passed by this man; in a moment he threw himself under the wheel, and the cart passed over his chest from right to left. We naturally expected that the bones would have been pulverised as if they had been in the grip of a box-constrictor; but fortunately the earth was rather soft, and beyond the probable fracture of a rib, as shown by a little surgical emphysema, there was no damage done. The patient left a cast of himself in the potato ridges, and was rather pale from some degree of shock, but in a short time he was all right, and left the asylum cured, though we did not add this peculiar method of treatment to the stock of remedies in the surgery. I show you here a string of beads and a crucifix which a patient swallowed, and kept in his oesophagus for several hours, until I happened to find it there, with little apparent discom-

fort. Some people will swallow anything, especially in the matter of religious creeds. The attendant said that he seemed not to have taken his breakfast quite as well as usual, but the "Ave Marias" and "Paternosters" remained in their soft surroundings without producing discomfort to the patient, who said that he had balked the devil in a very efficient manner.

In a very suggestive chapter by Prof. Titchener, of Cornell, it is argued that pleasantness and unpleasantness are closely mixed up with the degree of metabolism going on at the moment; that, in fact, pleasantness means growth, and unpleasantness destruction. We know so little of these processes in the insane, beyond that they are considerably changed, that it is difficult to imagine what the affective state of an insane person is, but it does seem certain that the feeling of pain is often absent, or that the thought of it does not occur; and this may explain the pronounced way in which a lunatic will commit acts of violence upon himself, and the extraordinary way in which wounds heal in some cases. There are, of course, numbers of insane people whose affective state, healing powers, &c., are no different from other people's, but looking at profound lesions, such as one finds in the impulsive stuporous states, the condition of tissue as regards its power of healing must be much altered. Even in ordinary states of close attention, and in ecstasy, injuries may pass unhealed; like the priests of Baal, who cut themselves with knives till the blood gushed forth. If we notice the peculiar vascular condition in ecstatic and stuporous states of the capillary circulation, and the ready way in which slight pressure shows itself—as the common phrase goes, "he easily bruises"—we must own that there are conditions favorable or otherwise to the development of bruises and subsequent changes that at present we know little about. Hence the difficulty of applying ordinary rules to the conditions of the insane. Take especially the case of the epileptics. All in asylum practice are familiar with the very rapid manner in which wounds heal in them, the anabolic condition of body, the strength and size of the bones, &c.—"I do not say in all, but in those who show most markedly the 'epileptic temperament,' as it is called. If I, as a surgeon, had to choose a favorable subject for operation I would take an epileptic,—they think little of wounds and bruises, being so used to them, and a fortunate thing it is that this condition exists; for of all the miserable victims of disease they are most to be pitied, seeing the terrible way in which they get knocked about. There is no class that so frequently, by sudden outbursts of violence, has to be so forcibly restrained, and yet the epileptic ward is just the one in which the fewest serious casualties (*i.e.* in their results) occur. Compare this with the ward containing general paralytics; here the difference is remarkable, it is hardly possible to touch them without leaving a mark, and it is in the treatment of this class that you require the most experienced and careful attendants. Trophic lesions are here most conspicuous, the general paralytics suffer from what one may term *local gangrenes*. Tissue breaks down and becomes sloughy, even without pressure, so that it becomes often almost an impossibility to nurse a patient through his illness without the formation of what are called *bedsores*—true bedsores they are not in every case; they come in places where there is no pressure from lying—in isolated areas where there has been no irritation from urine, and they heal either very slowly or not at all.

Let us now take the subject of bruises and the marks resulting from them more particularly. Every one thinks that he knows all about a bruise, but when the simple question is put, "How long has that bruise lasted?" or "Where was the injury done?" it is not always easy to reply. A good deal depends on the *situation* of the injury, whether over a bone that is superficially or deeply seated, or in a part over a cavity like the abdomen; in the insane the majority of bruises will be found about the chest or upon the arms ("he must have fallen about in his room," says the attendant) or over the eye, which according to the attendant he is peculiarly apt to strike against the edge of the table.

With the view of getting, if possible, a few correct data, I, some three years ago, asked my friends Dr. Addison and Dr. Meakin to undertake the compilation and watch the development of upwards of one hundred cases of bruises as they occurred in different parts. The question arose then: a man complained of having been "punched about" (as he expressed it), but as he was very insane and was walking about, and as the attendant said there had been no scuffling, I, rather stupidly and against my usual custom and teaching, did not have the man examined. The man showed his skin to his friends when they visited him shortly after, and, no doubt of it, he was extensively bruised about the abdomen and legs. He said that on a certain day he had been "knocked about," but the attendants stoutly denied this, and said that for two or three nights previously the man had been very restless, and had "punched and pinched" himself (a

thing that some old stagers in asylums will do at times on purpose to get the attendants into trouble). Finally the question arose as to the probable date of the injuries as judged by the colour of the bruises and their situation, and it was to get, if possible, some accurate and reliable information on this point that I asked my two friends to carefully record some observations. Among other results a curious one was that they thereby earned the sobriquet of the "bruisers," for when they had daily to visit wards with which they were not perhaps connected, the patients would exclaim, "Here comes the bruiser," reminding one of the old lines—

"Their noses into others' business poke,
And out of seriousness they make a joke."

We thus obtained a series of observations of a very accurate nature, and I must say that the table has been of very great use. The usual text-book information on this simple subject is loose and ill-defined; we wanted, if possible, accuracy, but the results show that there is a considerable margin to be allowed, and that at times we find it impossible to do more than state a belief.

It is a little curious that the life-history of a bruise is that of a passage in a definite way through the colour spectrum. It begins with violet or indigo, and passes through blue into green, yellowish green, yellow, orange, to final disappearance—just in the order of the spectrum. If we wish to be poetical we might say that white light is the pure unimpaired beam, but that it can be *heavied* by being forcibly made to go through a prism. The colours of the spectrum are *heavied light*—an idea which I beg to present to Mr. Austin. The red or violet we can understand, but why the play of colours? It is, I believe, not a very unusual thing in the East End, or in the fanciful description of prize-fights in the sporting papers, to speak of the artificial production of the rainbow, and of making the victim see stars (which, of course, are of different colours); and we might fairly extend the simile, for as in nature the rainbow betokens unsettled weather, so is it in life the sign not only of storms that have been, but of reactions to come, of unsettled weather, perhaps in the law courts. The rainbow at night may be the shepherd's delight (there is always pleasure to some people in a "row" or a "rag"), but the rainbow in the morning is the shepherd's warning, the sign of settlements to be adjusted. As the original bow in the heavens was the sign that there will no more be a flood to destroy the earth, so is the gradual development of the spectrum around Arriet's eye the token of remorse after the flood of tears, the signal held out that such destructive acts shall not be done again, that the regular seasons of harmonious succession in married life shall be uninterrupted carried on in good resolution. Man, however, follows nature, and so it happens that from time to time the sign has to be repeated, so as to show probably that the promise has not been forgotten.

The spectrum is usually represented as a straight line with the red colouring at one end and the violet at the other; the red end, produced by the lowest number of oscillations per second, is as far as possible away from the violet rays, which are produced by almost double the number of oscillations (like the octave of a fundamental note), so that though red and violet are the most spatially distinct colours of the spectrum, yet they are not the most different of all colour sensations, as we might think from their colour position.

Colour sensation and brightness sensation are diametrical opposites; in the one (colour sense) the maximal differences of vibration rate produce similar subjective effects (i. e. red and violet), whilst in the other (brightness) the extremes of luminous intensity correspond to opposite sensations, black and white, between which the whole series of brightness sensations is arranged in continuous progression. It must have struck you as curious that though a bruise is at first almost black or violet or purple (which is a compound of red and violet) the colour should be produced by the combination of rays at opposite ends of the spectrum. The fact is that if we attempt to construct a geometrical diagram for colour sensations on the basis of their subjective peculiarities we must substitute for the straight line a curve; its two ends must approximate to indicate the subjective similarity of red and violet. We choose a circle as the simplest line of the description required; then all the saturated colours may be arranged round its periphery, but as the colours of the solar spectrum leave a gap between red and violet we must fill up the series by introducing purple. The first effect of a bruise is, then, a red or purple discoloration, and it passes in a certain order through the scale of colours from the violet towards the lowest end of the spectrum, becoming bluish green, then green, then yellow-green, until it finally disappears as yellow or an orange stain.

To what are these effects due? Why is there any play of colours at all, and what is their significance? They must be due to changes in the blood extravasated by the injury. Some of these changes are

probably the result of decomposition with products which have a different colouring; others are due to mixture of blood products with katabolic forms of the actual tissue injured. If we take a small quantity of blood that has been freshly drawn, and gradually dilute it with water, we obtain something very like the play of colours of the spectrum. At first there is the red or purple tint, and as we gradually dilute the colour becomes greenish, then yellowish green, finally yellow, until it finally disappears altogether from excessive dilution; but this is just the play of colours that we have in a bruise! I suppose that as the first effect of a bruise we have rupture of small vessels and effusion of blood more or less rapidly, showing itself as the black or violet discoloration that we note so early; then comes a process of clotting, and absorption of some of the fluid constituents, together with a change or degeneration in what is left; then probably a process of gradual dilution by the surrounding fluids of the tissues, until finally all is washed away and no trace is left. There are, I believe, "artists in eyes"—people who point you up if unfortunately you have to appear in public whilst this process of slow reparation is going on. Such painters will tell you how differently their art has to be exercised according to the stage of the complaint. If called in early a pure white must be used to neutralize the black, and at the best a greyish appearance is produced which does not show much by candle light, though rather distinct under the electric rays; during the remaining days orange, red, and purple pigments follow in regular succession, one side of the spectrum coming in to supply the deficiencies of the other. What secrets of the effects of debauchery and late hours could these face-painters tell! I understand that bacchanals prefer a greenish tinted light at their banquet, because in the presence of this light the red complexion assumes more of a paleness; and we know how (or at least we are told) some fair creatures are not presentable in the morning until the yellowness and little purple bruising of the previous night's congestion have been obscured under the artfully arranged colour decoration of the face-artist. The purple stains of the winebibber, the yellow skin of the keeper of late hours, the blotches of the dyspeptic, are merely POLITE SOCIETY-BRUISES of a less violent, but none the less real character than the more pronounced marks of an actual conflict, and therefore a practical knowledge of the method of combining the colours of the *society-spectrum* is essential to the people of fashion. Only too happy would they be to fling away their paint-pots, but the constant war with healthy conditions has left its bruises, and these must be obliterated. It is no more possible for fashion to conceal its slow bruising than it is for the quick murderer to slay without leaving his silent sign. This striving to put oneself in accord with nature is common enough in the insane, especially the women. The hair should be glossy, so in the absence of "eukeirogenon" they purloin the mutton fat; or pretend to be constipated, so as to get some castor oil—they boil down their stockings, so as to get the red dye out of the county mark, because that is their only substitute for rouge; and they elevate common whitening to the dignity of poudre de riz! And all because bruising and blotching must be hidden up.

I do not know exactly why savages paint themselves, especially when going out to fight, but I think that it is probably because they wish to obscure the demoralising effect of wounds and bruises. It is said that scarlet is the chosen colour of our soldiers because the exciting effect of the flow of blood is not then so clearly seen as on the background of another colour. If in this respect folk of our day resemble savages shall we regard it as a retrogression? Max Nordau would say "yes;" but if the desire is to avoid offending others we can scarcely view it as such, even though it does resemble the acts of an inferior race.

I need scarcely say that some variation in the oncoming of the colouring of a bruise is due to the locality, more especially according to the proximity to bone; and also a good deal depends upon the state of health of the patient at the time. If, as is averred, the bones of the insane are peculiarly liable to fracture (and of this there is no doubt in some cases, though I do not think it is as general as is supposed), there is every *a priori* reason that the soft tissues should be in a degenerated condition and very liable to bruise; but though this may be the case it does not appear to affect the rate of bruising particularly—the change of colour appears to go on much the same. An analysis of my cases shows that out of 111 bruises 70 appeared the next day, or about 64 per cent.; 27 appeared on the same day, or nearly 25 per cent.; 15 appeared two days later, or 13 per cent.; 3 appeared three days later, and 6 appeared from one to six hours later; 25 per cent. same day, 64 per cent. next day, 13 per cent. two days, 2 per cent. three days, a few from one to six hours.

As regards the disappearance of the bruises there is great difference: 1. very slight, on the arm in an epileptic, disappeared in one

day, 14 in four days, 13 in six days, 13 in eight days, 4 lasted eleven days, 1 lasted eighteen days, 3 lasted twenty-two days, 1 lasted thirty-four days, and 1 lasted thirty-nine days—this was a bruise on the eye in a person aged fifty-six years not epileptic, so that generally it appears that 50 per cent. disappeared in six to nine days or about a week, and that in some of the few instances where it lasted much longer there was nothing particular about either the age, the position, or the bodily condition of the patient to account for it, e. g. in 4 cases that lasted twenty-five days 1 was a woman only forty years old, and the bruise was on the arm. The actual numbers were—

14 in 4 days	3 in 14 days
8 " 5 "	7 " 15 "
13 " 6 "	5 " 16 "
3 " 7 "	1 " 18 "
13 " 8 "	3 " 22 "
10 " 9 "	4 " 25 "
7 " 10 "	1 " 27 "
4 " 11 "	1 " 34 "
5 " 12 "	1 " 39 " (5 weeks)
2 " 13 "	

As regards the appearance of the colours at different stages the following is the result of the analysis:

Blue-black and purple-red are far the most common up to the second and third day, after that they do not appear in the list at all. Greenish yellow does not appear at all before the end of the second day, and is most common from the fourth to the sixth day.

Green-red (compounded of blue, yellow, and red) is common about the second to fourth day, and does not appear after the seventh day. Green-blue is commonest on second day, and was not seen after the fifth day.

Yellow-blue was most seen at the end of the first day, and was noticed as late as ninth day.

Green in two cases appeared on the same day, and there was no other colour; it was most frequent about the second day, but was not seen after the ninth day.

Yellow was most distinctly the parting colour, most frequent at the fourth and fifth days, and even, as we have seen, up to five weeks. In no case did it appear before the fourth day.

To sum up, we may say that mixtures of red and violet are rarely seen (pure) after the third day; that green comes on (mixed with the above) about the second or third day, that the mixed green and yellow begins about the third day and lasts to about the sixth or seventh, and that the pure yellow is always the last.

If a person shows much purple or red in the bruising we may fairly say that the injury was done within the last four days. If it is yellow red or greenish yellow, then it has been done about four or five days, and if yellow that it has certainly not been done within four days.

There is a common phrase used when speaking of deep-seated bruises, viz. that "it has been a long time in coming out." It seems to be here implied that the extravasations which were at first for some reason only in the deeper tissues, gradually approach the outer surface. I have some doubts as to the truth that a violent blow may be given which will cause deep-seated extravasation, and yet leave the surface uncoloured. A short time ago, when making a post-mortem on an elderly person who had died from chronic brain wasting, we found an extensive laceration and effusion of blood in the recti muscles of the abdomen just in front of the bladder, but there was no external bruising of any kind. I believe that in a case like this rupture was due to intrinsic causes in the muscle itself, and I can scarcely think that an external injury can cause deep-seated bruising without showing marks on the skin, though here I reserve the possibility that a distended viscus like a full bladder, or a soft organ like the liver or kidney, might be torn, and show extensive extravasation without much external skin appearance. We must remember that in deep-seated bruising and extravasation there will be a certain amount of swelling, and possibly some tension of the skin over it, and that in this way in a degenerated subject the appearances of a secondary bruising might be caused in the superficial tissues, or that in the very rare cases where a yellow colour is seen in the skin, and afterwards evidence is found of a deep lesion in the muscles or viscera, the skin staining may possibly be due to the presence of some of the degenerated products which are being carried away through the superficial vessels.

But whenever I see a bruise in an insane person I expect to find that there has been external violence, and it is not very often that we are unsuccessful in finding it, though we may be (and doubtless are) often deceived as to the manner in which it was really caused. It does very occasionally happen that the external appearances of a

bruise do exactly indicate what has happened. I remember on one occasion seeing the wards of a key accurately photographed on a patient's face. A nurse had either lost her temper under very irritating circumstances, or else was frightened by a violent patient, and struck the latter in the face with her bunch of keys. The picture of a key was exactly reproduced; and one may see the very shape of a finger or thumb reproduced on the skin of the upper arm in obstinate or resistive patients who have to be led about or held whilst being dressed. But on the whole, and all things considered, there is wonderfully little tell-tale marking of the skin among even large numbers of this very worrying class of patients.

One of the first things we try to teach those who are in immediate contact with the insane is, "Hands off!" It should be written in prominent letters in every ward. More is done by judicious sound-blows, i. e. words, than by fist-blows, but occasionally patients have differences with each other; they forget Dr. Watts's advice that "their little hands were never made to tear each other's eyes;" and then they must be forcibly parted.

I have carefully looked up the physiology and spectral analysis of blood, but I have not found anything to help us in the investigation of bruise colouring.

And now, gentlemen, I feel that I have trespassed a long time on your forbearance, and I must confess that I have been somewhat discursive, and have not kept strictly to the text in what I have said. I do not pretend to have exhausted the subject, but I hope that I may have succeeded in drawing your attention to a little closer examination of a very homely subject; it is, at any rate, one of great importance to us who are engaged in the practical day to day intercourse with a very special class of patients.

Notes.

DR. JAMESON D. HURRY has been elected as Secretary of the Reading Pathological Society. This society, which was founded in 1841, has recently issued a volume of its 'Transactions,' to which Dr. Hurry has contributed a sketch of the history of the society since its foundation.

DR. H. MORLEY FLETCHER has been elected Assistant Demonstrator of Materia Medica and Pharmacy vice Dr. H. M. Bowman, deceased.

MR. T. S. PIGG has been elected Assistant Curator of the museum.

MR. W. D'E. EMERY has been nominated to the Treasurer's Research Studentship for the ensuing year, in succession to Mr. J. W. W. Stephens.

THE HICHENS PRIZE has been awarded to A. Gordon Ede.

DR. HORTON SMITH has been appointed Assistant Demonstrator of Practical Medicine, vice Dr. F. W. Andrewes.

DR. LAUDER BRUNTON will deliver one of the general addresses at the forthcoming International Medical Congress at Moscow.

MR. C. F. LILLIE has been appointed Assistant Demonstrator of Pathology, vice Mr. C. P. White.

WE HEAR with much regret that Mr. Butlin has resigned the Lecturership on Surgery, which he has held for the past winter session.

Mr. W. J. WALSHAM has been appointed Examiner in Surgery to the Conjoint Board, in succession to Mr. Marsh.

Dr. F. W. ANDREWS has been appointed Lecturer on Pathology and Pathologist to the Hospital in succession to Dr. Kanthack.

Mr. C. P. WHITE, whose appointment as an Assistant Demonstrator of Pathology we announced last month, has been appointed Pathologist to the General Hospital, Birmingham.

Messrs. R. DE S. STAWELL, H. W. P. YOUNG, and L. B. RAWLING have been admitted to the degrees of M.B. and B.C. of Cambridge, and Mr. W. G. Richards has been admitted to the M.B. degree.

Mr. W. ROYDEN has been presented with a silver revolving breakfast dish, by the members of the Ambulance Class which he conducted during the winter at Burgh St. Margarets, near Great Yarmouth.

Dr. JAMES ELLISON, for many years Surgeon to H.M. Household at Windsor, whose death we recorded in February, has left personal estate valued at £13,486.

Amalgamated Clubs.

It has been decided by the School Committee, on the recommendation of the Finance Committee of the Amalgamated Clubs, and sanctioned by a general meeting of the Amalgamated Clubs, to alter the subscription for life membership to full students to eight guineas instead of six as formerly, to University students to six guineas as before. It has also been decided to require all students entering the Hospital to become members of the Amalgamated Clubs. It is hoped by this means to put the finances of the clubs on a sound footing, the necessity for alteration being brought about by a diminished entry in October, and also by the fact that one quarter of those who entered did not join the Clubs.

CRICKET.

The following cricket matches have been arranged for the ensuing season:

Date.	Opponents.	Place.	Time.
Sat., May 8	Stoics	Winchmore Hill	11.30
" 15	Richmond	Richmond	"
Mon. " 26	Hornsey	Hornsey	"
Thurs. " 27	Crystal Palace	Crystal Palace	"
Sat. " 29	Kensington Park	Wormwood Scrubs	"
" June 5	Past v. Present	Winchmore Hill	"
" " 12	R.I.E.C.	Cooper's Hill	"
" " 26	M.C.C.	Winchmore Hill	"
Wed. " July 3	Henley	Henley	"
Sat. " " 7	Hornsey	Winchmore Hill	"
Sat. " " 10	Surbiton	Surbiton	"
Wed. " " 14	Ealing	Ealing	"
Sat. " " 24	Marlborough Blues	Winchmore Hill	"
Tues. " " 27	Hampstead	Hampstead	"

Date.	Opponents.	Place.	Time.
Wed. May 5	Royal School of Science	Winchmore Hill	2.0
Sat. " 8	St. Ann's Heath	Virginia Water	11.30
" " 15	Banstead Asylum	Banstead	"
Wed. " 19	London Hospital 2nd XI	Winchmore Hill	2.0
Sat. " 22	St. Paul's School 2nd XI	Kensington	"
Wed. " 26	Guy's Hospital 2nd XI	Honor Oak	"
Sat. " 29	Univ. C.S. Old Boys C.C.	Winchmore Hill	"
Wed. June 2	Winchmore Hill C.C.	"	"
Sat. " 5	St. John's School	Leatherhead	12.0
Wed. " 9	Merchant Taylors School	Winchmore Hill	2.0
Sat. " 12	Mill Hill School	Mill Hill	"
Sat. " 10	Maidenhead C.C.	Maidenhead	"
Wed. " 23	St. Mary's Hos. 2nd XI	Winchmore Hill	"
Wed. " 30	Banstead Asylum	Banstead	11.30
Sat. July 3	Barnet 2nd XI	Winchmore Hill	2.0
Wed. " 7	London Hospital	Edmonton	"
Sat. " 10	Berkhamsted School	Berkhamsted	"
Wed. " 13	University College Sch.	Winchmore Hill	"
Sat. " 17	Guy's Hospital 2nd XI	"	"
Wed. " 21	Winchmore Hill C.C.	"	"
Sat. " 24	Blackheath School	Blackheath	"
Wed. " 28	St. Thomas's Hospital	Winchmore Hill	"
Sat. " 31	Ealing 2nd XI	Ealing	"

The attention of all Old Bart.'s men is called to the Past v. Present fixtures on June 5th.

HOCKEY CLUB.

FIXTURES.

Match already played February 6th, v. Ealing, at Winchmore, lost by 3-0.
 March 6th, v. Epping, scratched. Epping could not raise a team.
 March 13th, v. Ealing II, at Richmond.
 March 20th, v. West Kent II, at Winchmore.
 March 27th, v. Southgate II, at Winchmore.
 April 3rd, v. Putney and Richmond II, at Winchmore.

ASSOCIATION FOOTBALL CLUB.

RESULTS OF MATCHES.

Feb. 10 ... v. Civil Service	at Winchmore Hill...	lost ... 2-5
" " v. *St. Mary's Hos. II	at Wimbledon	lost ... 0-2
Feb. 13 ... v. Newbury	at Newbury	won ... 4-1
Feb. 16 ... v. *Forest School	at Walthamstow	won ... 3-2
Feb. 17 ... v. *Berkhamsted S.	at Berkhamsted	won ... 5-0
Feb. 20 ... v. *Old Foresters II	at Walthamstow	won ... 3-2
Feb. 24 ... v. *St. John's Coll. Oxf.	at Winchmore Hill...	drn. ... 1-1
Mar. 6 ... v. Civil Service	at Chiswick	drn. ... 1-1
" " v. *Tonbridge	at Tonbridge	lost ... 1-4

*** 2nd XI. Matches.**

ST. BART'S HOSPITAL v. CIVIL SERVICE.

This match was played on Wednesday, February 10th, at Winchmore Hill. Soon after the kick-off Civil Service began to press, and quickly scored. Bart.'s, however, woke up a bit, and the game became more even, but Civil Service were not to be denied, and again scored. Bart.'s attacked strongly, and after several attempts by the forwards Woodbridge scored. At half-time the score stood 2-1 in favour of Civil Service. On restarting play was fairly even, and Willett soon equalised. After this the Hospital seemed unable to withstand the determined attacks of their opponents, and 3 more goals were registered, the game ending in a win for Civil Service by 5-2.

Team.—R. H. Sankey (goal); R. P. Brown, L. E. Whitaker (backs); L. Orton, A. H. Bostock, H. J. Pickering (half-backs); T. H. Talbot, E. Wethered, J. A. Willett, E. W. Woodbridge, H. N. Marrett (forwards).

ST. BART'S HOSPITAL v. NEWBURY.

Played on February 13th at Newbury. Bart.'s won the toss, and Newbury kicked off. After some even play, in which each goal was several times in danger, Newbury managed to score. After this Bart.'s did most of the pressing, but no further point was scored before half-time, though the Newbury goal-keeper had to use his hands several times. After the interval Bart.'s had all the best of the exchanges. Stone scored our first goal, Pickering almost

immediately putting on a second with a fine shot from half-back. Stone and Waterhouse each scored before the whistle blew, and the game ended in a win for the Hospital by 4-1.

Team.—R. H. Sankey (goal); R. P. Brown, L. E. Whitaker (backs); A. H. Bostock, H. J. Pickering, M. G. Winder (half-backs); T. H. Talbot, G. W. Stone, R. Waterhouse, E. W. Woodbridge, H. N. Marrett (forwards).

ST. BART'S HOSPITAL v. CIVIL SERVICE.

Played at Chiswick Park on Saturday, March 6th. Bart.'s won the toss, and Civil Service kicked off. The exchanges were at first very even. After about twenty minutes the Hospital got the upper hand, but failed to score. Civil Service, however, got away and scored first. Nothing more was scored in the first half, though Bart.'s repeatedly shot all round the goal. In the second half Willett almost immediately equalised through a mistake by the Civil Service goal-keeper. Even play followed and nothing more was scored, the game ending in a draw 1-1.

Team.—E. H. B. Fox (goal); R. P. Brown, L. E. Whitaker (backs); A. H. Bostock, D. S. Gerrish, H. J. Pickering (half-backs); T. H. Talbot, C. A. Robinson, J. A. Willett, E. W. Woodbridge, G. W. Stone (forwards).

INTER-HOSPITAL CUP—SEMI-FINAL.

ST. BART'S v. GUY'S.

Played on Monday, March 8th, at Leyton. The day and ground were both favourable; Bart.'s were without Robinson. For the first ten minutes Guy's had the best of the exchanges, but Bart.'s soon reversed matters, and at the end of twenty minutes Woodbridge was able to score a soft goal through a mistake by Guy's goal-keeper. Guy's persevered, and ten minutes later Hughes equalised. Manby had a good opening for Guy's, but Langton rushed out and saved; Hughes took the return and shot over. At half-time the score was "one all." Eight minutes from the resumption of play Whitcomb scored for Guy's from a centre by Manby. Bart.'s tried hard to get on terms, and were very unlucky in not scoring. Willett and Marrett hit the posts, and a good shot from Stone was only just saved. Guy's thus won by 2-1, and meet London in the Final.

TEAMS.

Guy's.—M. H. Barker (goal); R. W. Robson, E. A. Loughurst (backs); R. W. Hall, J. G. MacAlpin, A. E. Crosby (half-backs); P. S. Mandy, M. H. Thornley (right wing); A. Hughes (centre); L. Humphry, C. F. Whitcomb (left wing) (forwards).
Bart.'s.—J. M. Langton (goal); R. P. Brown, L. E. Whitaker (backs); A. H. Bostock, D. S. Gerrish, H. J. Pickering (half-backs); T. H. Talbot, C. W. Stone (right wing); J. A. Willett (centre); E. W. Woodbridge, H. N. Marrett (left wing) (forwards).

Final.—GUY'S beat LONDON.

United Hospitals Bare and Hounds.

THE Inter-Hospital contest was a walk over for Guy's, as they alone put a full team into the field, St. Bart's, St. Mary's, and Charing Cross being represented by one man each. We understand that a Bart.'s team (5) had been got together, but that they could not be spared from the Rugby team to train for the event. A Ten Mile Sealed Handicap was run, with the following result:

Finish.	Name and Club.	Start.	Time.	Result
		M. S.	M. S.	of H'cap.
1	W. L. Baker, Guy's	...	63 27	...
2	R. M. Barron, Guy's	...	64 9	...
3	M. A. Smith, Charing Cross	...	64 45	...
4	A. F. Page, Bart's	...	66 27	...
5	F. E. Fremantle, Guy's	...	67 36	...
6	H. W. Bruce, Guy's	...	69 58	...

Also ran: J. F. Robinson, Guy's, 8 min., and G. E. Mould, St. Mary's, 10 min.

United Hospitals Athletic Club.

Mr. H. C. Woodyatt, of University College, has been elected captain, and Mr. S. Mason, St. Bart.'s, secretary for 1897. The Inter-Hospital contest will take place on Saturday, July 10th.

Matches are being arranged with the L.A.C., Cambridge, Edinburgh, and Dublin Universities. It is hoped that hospital cricket and tennis fixtures will not clash with the Inter-Hospital sports this year. We hear that Mr. W. Vincent Wood, President of the Cambridge Athletic Club, is coming up to Bart.'s next term; he will be a useful addition in the mile and three mile events.

Abernethian Society.

THE high average of attendance at the Society's meetings this session was more than maintained on February 18th, when Dr. F. W. Andrews read his paper on "Vaccination and its Results," which was at once a lucid exposition and a destructive criticism; an exposition of the grounds for our faith in vaccination, and a criticism of the Minority Report of the Royal Commission. The paper will shortly appear in the JOURNAL, for members to reflect upon at their leisure. In the discussion which followed, Mr. Pettinson, an old member, dealt with some of the difficulties of vaccination he had experienced on board emigrant ships in tropical regions.

The third meeting for discussions, held on February 25th, was fully as successful as its predecessors. Dr. Crowley showed a case, believed to be one of gouty parotitis, which afforded good material for discussion. Mr. Langdon Brown showed a case of Friedreich's disease, or so-called hereditary ataxy, in a boy aged seven, one of a family of five, of which three are affected.

Mr. Parfitt demonstrated (for Dr. Kanthack) the method now employed in the hospital for the serum diagnosis of typhoid fever, and started a short discussion on its practical value.

Mr. Rowland explained the precautions which should be observed in the diagnosis of intra-thoracic conditions by the aid of the Röntgen rays. He clearly showed that several published results were attributable to neglect of these precautions.

Mr. Stack, in an entertaining paper, introduced a discussion on "Specialism in General Practice;" the discussion hardly maintained the high level of the introductory paper.

Mr. J. P. Maxwell, Mr. Strangeways Pigg, and Mr. J. L. Maxwell also showed specimens from various interesting cases. One of Mr. Pigg's was from a case of extra-uterine gestation in a primipara aged nineteen.

The subject of adenoids is always one of interest and practical importance, and the Society is under great obligations to Dr. Crowley for the admirable report of 200 cases presented at the meeting of March 4th. Of his 325 cases he had been able to trace out 205 and follow the results of operative treatment. The paper embodied a most valuable piece of clinical work, which we certainly hope to see published ere long. A good discussion followed, in which the merits of the respective anaesthetics and methods of operation were hotly canvassed.

The last ordinary meeting of the Society for the

Session was held on Thursday, March 11th, when some of the vexed questions concerning "Antiseptics in Midwifery" were again mooted. Mr. J. K. Murphy, in a vigorous and carefully considered paper, opposed routine douching, especially when intra-uterine. He held that this was only interfering with nature's methods. A valuable portion of his paper related to a series of 1000 cases under his care in the External Department of the Rotunda Hospital, and to the "kit" devised by himself for use in cases requiring obstetrical operations. A lively discussion followed, in which Dr. Morison strenuously defended the practice of intra-uterine douches.

If contested elections be a sign of vitality, then the Abernethian Society is alive indeed. The annual election on March 18th was signalled by a contest for every office. Considerably over 300 votes were registered, and a keen interest in the management of the Society was displayed in quarters quite unsuspected of such enthusiasm. It is much to be hoped that members will not allow this enthusiasm to cease with the contest. At 9.30 the scrutineers returned with the result of the poll, and the President declared the following gentlemen duly elected for the ensuing Session:

Presidents: Mr. HUSSEY and Mr. LANGDON BROWN.

Vice-Presidents: Mr. HORDER and Mr. A. L. ORMEROD.

Hon. Secretaries: Mr. HEWER and Mr. THURSFIELD.

Additional Committeemen: Mr. TALBOT and Mr. J. S. WILLIAMSON.

During the counting of the votes the subjoined report of the outgoing Committee was presented to and adopted by the meeting.

In presenting their annual report your Committee congratulate you on the conclusion of a successful Session. The average attendance at the ordinary meetings of the Society has greatly increased, being 38, while at each of the three addresses the attendance has exceeded 100.

Since the annual general election one change has occurred among the officers, Mr. Sinclair Gillies, M.B., having been unanimously elected President, to fill the vacancy caused by the resignation of Mr. W. R. Stowe.

At the suggestion of Dr. Kanthack, a slight alteration has been made in the arrangements for clinical evenings. At each of these meetings short communications on subjects clinical and pathological have been made, in addition to the ordinary features of a clinical evening. Your Committee desire to express their thanks to Dr. Kanthack for much kind help in connection with this arrangement, to the success of which he has additionally contributed by communicating some of his unpublished researches.

Your Committee decided to make the Midsummer meeting in some form a celebration of the Jenner Centenary, and at their request Dr. Gee delivered an address on "The Conflict of Medicine with the Small-Pox."

Mr. Howard Marsh opened the 102nd Session of the Society's proceedings on October 8th, 1896, with an address on "The Abernethian Society in its relations to the Hospital and Medical School." The Mid-Sessional Address on January 14th, 1897, was delivered by a former member of the Hospital, Dr. E. G. Browne, Fellow of Pembroke College, Cambridge. He chose as his subject "A Chapter in the History of Cannabis Indica."

As to the ordinary meetings, in deference to the expressed wish of many members, your Committee have attempted to get junior members of the Society to contribute papers, with but partial success. They wish to point out, therefore, that the scanty contributions from junior members is due to unwillingness on the part of such members to read papers, rather than to unwillingness on the part of the Committee to invite them.

The seventeen ordinary meetings have been thus divided. Papers have been read on fourteen evenings: of these two have been by members of the teaching staff, three by members of the junior staff, and six by former members of the teaching and junior staffs; three have been read by students. The remaining three evenings have been devoted to clinical and pathological discussions.

By arrangement with the editor of the Hospital JOURNAL, eight of the papers and addresses either have been or are about to be published in its pages. The falling off in entrance fees has rendered it necessary for the Committee to stop, for a time at any rate, the publication of separate reprints. They regret this necessity as it entails the temporary abandonment of their predecessors' scheme of publishing a volume of Abernethian pamphlets.

It is, in fact, only on turning to the financial position of the Society that your Committee have any unsatisfactory report to make. The falling off in the entry of students this session has naturally led to diminished receipts in entrance fees, the main source of income. Against this, they have had to face expenses in no wise diminished. They wish to point out, however, that the deficit is really due to liabilities incurred prior to this financial year.

Sir Astley Cooper.

DR. R. HENSLOWE WELLINGTON, of Wisbech, has very kindly supplied us with a copy of an autograph letter written by Sir Astley Cooper before he obtained his baronetcy. The letter was folded and stuck down, as was customary in the pre-envelope days, with a black wafer. No one can but admire the general straightforwardness of the letter, with its definite and precise statements. The letter is as follows:

Mr. Astley Cooper presents his compliments to Mrs. J—, and informs her that the result of his examination of Miss J— is as follows:

There is no disease of ye joint of ye Collar Bone, but merely a relaxation of ye Ligaments which permits the Bone to rise from— *socket.

The Collar Bone is curbed forwards.

The Ribs on ye right side are more than usually prominent, so as to throw ye bosom on that side forwards, but there is no disease in these bones, excepting weakness, which allows of their form being changed.

The Spine is very slightly incurvated in ye shape of ye italic S.

The cause producing these defects is deficiency of Air and Exercise and inadequate Nourishment and want of regulation of ye bowels.

The means of affording relief and preventing an increase of ye deformity are,

First. To encourage exercise in walking, dancing, and on Horseback—changing the Pommel of ye Saddle daily.

Secondly. Avoiding all constrained positions for any length of time, as in writing, driving, or working.

Thirdly. The back should be washed every morning with tepid Water containing Salt in ye proportion of one ounce of salt to one pint of water, and it should then be rubbed with a coarse towell—Heat 95.

Fourthly. The diet should be nutritious, viz. an egg with

* Black wafer.

ye breakfast, cold meat between breakfast and dinner, meat before pudding at dinner, a glass of port wine after it.

Fifthly. The Bowells must be carefully regulated by giving 5 Grains of Rhubarb at night.

Sixth. Braces should be worn over ye Shoulders.

(Here was a roughly-drawn diagram illustrating the kind of braces required to draw the shoulders back.)

Seventh. An inclined plane will be useful, used for twenty minutes twice per day.

SPRING GARDENS.

Appointments.

ANDERSON, J. SEWELL, M.R.C.S.Eng., L.R.C.P.Lond., appointed Resident Assistant Medical Officer to the Hull Corporation Asylum.

DAVEY, E. L., appointed Medical Officer for the Walmer District of the Easty Union, *vice* R. S. Davey, M.D.St.And.

FOULERTON, A. G. R., F.R.C.S., appointed Pathologist to the Chelsea Hospital for Women.

WHITE, C. P., F.R.C.S., appointed Pathologist to the General Hospital, Birmingham.

PULLEN, RALPH S. McD., M.R.C.S., L.R.C.P., appointed Surgeon to the Provident Institution of the Royal Albert Hospital, Devonport, and Honorary Anaesthetist to the South Devon and East Cornwall Hospital, Plymouth.

WRANGHAM, J. M., M.B., B.C.(Camb.), appointed Fourth Assistant Medical Officer to the Wadley Asylum, Sheffield.

DRUITT, A. E., M.R.C.S., L.R.C.P., appointed Assistant Medical Officer to the Chelsea Infirmary.

HARRIS, N. H., M.R.C.S., L.R.C.P., appointed Junior Resident Medical Officer to the Stoke Newington Dispensary.

GURNEY, ALEX. C., M.B.(Lond.), M.R.C.S., L.R.C.P., appointed Senior House Surgeon to the Blackburn and East Lancashire Infirmary.

LOWNE, B. T., M.D.(Durh.), F.R.C.S., appointed Medical Officer for the Third Sanitary District of the Hartley-Witney Union.

ROBBS, E. C., B.Sc(Lond.), M.B.(Camb.), M.R.C.S., appointed Medical Officer in the Workhouse of the Gravesend and Milton Union.

MARSHALL, HOWARD, M.B., B.C.Camb., has been appointed Medical Officer for the No. 3 Sanitary District (Bexhill) of the Battle Union.

Surgeon-Captain HUGH RAYNER, M.B., is transferred from the Grenadier Guards, to which he was appointed April 14th, 1886, to the Royal Horse Guards, February 13th.

LANGDON, H. C. T., M.R.C.S., L.R.C.P., appointed House Surgeon to the Hastings, St. Leonards, and East Sussex Hospital.

HAYNES, G. S., M.R.C.S., L.R.C.P., appointed House Surgeon to the Belgrave Hospital for Children.

MAY, II. J., M.B., B.C.(Camb.), appointed House Surgeon to the Royal Surrey County Hospital, Guildford.

NETTLE, WILLIAM, M.R.C.S.Eng., L.S.A., reappointed Medical Officer of Health to the Liskeard Town Council.

PRICE, F. E., M.R.C.S., L.R.C.P., appointed House Surgeon to the West London Hospital.

FLAVELLE, J. M., M.R.C.S., L.R.C.P., appointed House Physician to the West London Hospital.

HARRISON, L. K., M.R.C.S., L.R.C.P., appointed Assistant House Physician to the Metropolitan Hospital.

Prizes.

JUNIOR PRACTICAL ANATOMY, 1897.

1. Elmslie, R. C. Treasurer's Prize.
2. Read, W. R. Certificate of Merit.
3. Love, H. "
4. Gröne, F. "
5. Raw, H. H. "
6. Slade, H. J. "
7. White, F. N. "
8. Worthington, R. T. "
9. Ladell, F. W. J. "
10. Thomas, A. E. "

SENIOR PRACTICAL ANATOMY, 1897.

1. Compton, A. T. Foster Prize.
2. Williamson, J. S. Certificate of Merit.
3. Lister, A. E. "
4. Winder, M. G. "
5. Ridout, C. A. S. "
6. Pridham, A. T. "
7. Tweedie, A. R. "
8. Whitaker, K. H. R. "
9. Newman, J. C. "
10. Seagrove, G. M. "

HARVEY PRIZE, 1897.

Awarded to Williamson, J. S.
Certificates to Lister, A. E.; Ridout, C. H. S.

HICHENS PRIZE, 1897.

Awarded to A. Gordon Ede.

Examinations.

FIRST CONJOINT.—*Chemistry and Physics.*—A. M. Dalzell, S. de Carteret, A. B. Edwards, C. Fisher, A. L. B. Green, H. W. Pank, J. C. Sale, R. Thompson, J. A. West, H. Whitwell, S. R. Dudley.

FIRST CONJOINT.—*Pharmacy.*—H. C. Adams, R. Bigg, E. S. E. Hewer, N. H. Joy, J. L. Morris, E. F. Palgrave, A. B. Pugh, and V. S. A. Bell.

FIRST CONJOINT.—*Biology*.—C. DIX, T. H. Fowler, H. P. Margetts, J. K. N. Marsh, J. C. Sale, A. E. Soden.

SECOND CONJOINT.—*Anatomy and Physiology*.—T. W. Brown, H. Burrows, W. P. Dyer, H. W. Ilius, J. W. Illius, G. J. A. Leclezio, J. O'Hea, G. H. Horton, R. Walker.

SECOND CONJOINT.—*Anatomy*.—F. F. Crabtree.

SECOND CONJOINT.—*Physiology*.—W. M. JAMES.

PRIMARY L.S.A.—*Biology*.—C. F. Bluett. *Materia Medica*.—G. R. Lucas, C. C. Morgan. *Anatomy*.—T. P. Allen, C. Fisher, J. E. Griffith, D. Jeaffreson, T. Young. *Physiology*.—T. P. Allen, C. Fisher, W. H. Goodchild, J. E. Griffith, D. Jeaffreson, T. Young.

Obituary.

OLIVER PEMBERTON, F.R.C.S.

We regret that we have to record the death of Mr. Oliver Pemberton, Coroner to the City of Birmingham, and Consulting Surgeon to the General Hospital. He died on March 7th at Whitacre, near Birmingham, after a short illness, at the age of seventy-two. Mr. Pemberton was the son of a Birmingham manufacturer, and was born in 1825. He was educated at King Edward's School, and at the age of seventeen began his medical career as apprentice to Mr. D. W. Crampton, one of the surgeons of the General Hospital. Shortly afterwards he entered as a student of St. Bartholomew's, pursuing his studies under such distinguished teachers as Lawrence, Stanley, and Burrows. He became a Member of the Royal College of Surgeons in 1847. After qualification he returned to Birmingham, and became Surgeon's Assistant to the General Hospital. In 1852 he was elected Honorary Surgeon to the General Hospital, a position which he held for forty-one years, till 1891, when he was elected coroner. He was throughout this time a very active teacher in the Birmingham Medical School, holding from 1853 to 1858 the Professorship of Anatomy at Queen's College. From 1867 to 1892 he was one of the Professors of Surgery. In 1878 he became a Fellow of the Royal College of Surgeons, and in 1885 was elected to the Council of the College, a position which he held up to the time of his death.

In addition to holding the position of coroner, he was at his death J. P. to the County of Warwick, Consulting Surgeon to the Skin and Lock Hospital, Birmingham, and ex-President and Emeritus Professor of Surgery to Mason's College. Amongst his writings are *Clinical Illustrations of Cancer*, published in 1867, the *History, Pathology, and Treatment of Melanosis*, 1858; *Excision of the Knee-joint*, 1859. He gave the Address on Surgery at the Birmingham meeting of the British Medical Association in 1872, and in 1884 he delivered the Ingleby Lecture on "The Operative and General Treatment of Cancer in the Female Breast." He contributed, moreover, many papers on surgical topics to the *Lancet* and *Medico-Chirurgical Transactions*. In 1894, he gave the Bradshaw Lecture on "The Influence and

Authority of Professor Syme in Surgical Science." In October, 1889, the Abenethian Society of our School had the pleasure of hearing from him an introductory address on "The Progress of Surgery—a Retrospect of Forty Years," an address teeming with useful information and interesting personal anecdotes of the most distinguished surgeons of the time. Mr. Pemberton was a most ardent admirer of Sir James Paget, of Professor Syme, of Sir William Laurence, and of Sir William Savory.

Mr. Pemberton married in 1851 the daughter of Mr. Daniel W. Harvey, M.P., and leaves his widow two sons and three daughters.

On going to press we regret to hear of the death, on March 13th, of Mrs. Pemberton, the widow of Mr. Oliver Pemberton, in her seventieth year.

Reviews.

STUDENTS' MEDICAL DICTIONARY. By GEORGE M. GOULD, A.M., M.D. 8vo. Price 14s. London: H. K. Lewis. Tenth Edition.

This excellent work needs little introduction from us. The present edition has been to a great extent re-written and enlarged. The definitions are clearly and succinctly given, and should be of great assistance to anyone beginning the study of medicine, or of its more specialised branches. In some respects the book is more than a simple dictionary. Several useful tables are given, not the least useful of them, in the present state of nosology, being a "table of eponymic diseases." The difficult matter of pronunciation has been treated with fair success, but many of the methods of pronunciation given are rather those in use on the other side of the Atlantic than those we are accustomed to hear in the London medical schools. We commend the book to those who require a Medical Dictionary, and feel confident that they will find all they need in the work before us.

Births.

BENJAMIN.—On March 27th, at the Old Hall, Dorrington, Shrewsbury, the wife of J. K. Kinsman Benjamin, M.R.C.S., L.R.C.P., of a son.

DOVE.—On February 15th, at Stapleton Hall Road, Stroud Green, the wife of Percy W. Dove, M.B.Lond., M.R.C.S., L.R.C.P., of a daughter.

ECCLES.—On March 25th, at 124, Harley Street, the wife of W. McAdam Eccles, M.S., F.R.C.S., of a son.

MOORE.—March 5th, at 37, Lee Road, Blackheath, the wife of Edward James Moore, M.A., B.M., B.C.L.Oxon, of a son.

NEWINGTON.—On the 9th March, at The Grange, Edenbridge, Kent, the wife of Charles W. H. Newington, M.R.C.S., L.S.A.; L.R.C.P., of a son.

NIAS.—March 8th, at 5, Rosary Gardens, South Kensington, the wife of J. B. Nias, M.D., of a daughter.

Deaths.

PEMBERTON.—March 7th, at his residence, the Quarry House, Over Whitacre, Warwickshire, Oliver Pemberton, F.R.C.S., J.P., Coroner for the city of Birmingham, in his 72nd year.

PEMBERTON.—On the 13th March, at the Quarry House, Over Whitacre, Warwickshire, Anna, widow of the late Oliver Pemberton, F.R.C.S., J.P., Coroner for the city of Birmingham, and only child of the late Daniel Whittle Harvey, M.P. for Colchester, and Chief Commissioner of Police for the City of London, in her 70th year.

ACKNOWLEDGMENTS.—*Guy's Hospital Gazette*, *St. George's Hospital Gazette*, *St. Thomas's Hospital Gazette*, *St. Mary's Hospital Gazette*, *The Gyroscope*, *The Student* (Edinburgh), *The Nursing Record*, *The Charity Record*, *The Hospital*.

St. Bartholomew's Hospital



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NOTICE.

All Communications, Articles, Letters, Notices, or Books for review should be forwarded, accompanied by the name of the sender, to the Editor, ST. BARTHOLOMEW'S HOSPITAL JOURNAL, St. Bartholomew's Hospital, Smithfield, E.C., BEFORE THE 1ST OF EVERY MONTH.

The Annual Subscription to the Journal is 5s., including postage. Subscriptions should be sent to the MANAGER, W. E. SARGANT, M.R.C.S., at the Hospital.

All communications, financial or otherwise, relative to Advertisements ONLY, should be addressed to J. H. BOOTY, Advertisement Cameraman and Collector, 29, Wood Lane, Uxbridge Road, W.

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St. Bartholomew's Hospital Journal,

APRIL 14th, 1897.

"Æquam memento rebus in arduis
Servare mentem."—Horace, Book ii, Ode iii.

Some Chapters on Pneumothorax.

By SAMUEL WEST, M.D.

I. THE PHYSIOLOGICAL CONSEQUENCES OF PERFORATION OF THE LUNG.

AS soon as the air has gained access to the pleura the elasticity of the lung comes into play and leads to its collapse. Whether the elasticity of the lung is alone sufficient, as is often stated, to produce complete collapse or not is a question which is of more theoretical than practical importance in pneumothorax; for in most cases, in the early stages, the air enters the pleura on inspiration with greater ease than it can escape on expiration, and thus there is added to the forces tending to

produce complete collapse of the lung the compression of it during expiration. The result is that in a very short time the lung becomes completely collapsed and airless.

If the lung be free from adhesions it lies shrunken about its root and flattened against the vertebrae. If, however, there be adhesions it will contract in an irregular fashion. If the adhesions are at the apex, as they commonly are, the contraction of the lung takes place in a more upward direction. If the adhesions be in front, along the sternum, the lung may be flattened sideways and lie like a pancake between the sternum and the spine. In such a case as this the heart and mediastinum may be fixed in their usual place, and no displacement of organs occur. When the adhesions are limited the lung in the corresponding part may be drawn out into a long band, which I have seen stretch across the pleura and be some inches in length.

These adhesions and the peculiarities of contraction of the lung to which they lead it is important to bear in mind, as they may explain some of the irregular physical signs occasionally met with.

The effect of the collapse of the lung on the affected side is to render it absolutely useless for the purposes of respiration.

Displacement of organs.—The heart and mediastinum are firmly fixed to the spine behind and but loosely attached to the sternum in front, so that they are capable of considerable displacement, much as a door swings on its hinges. The mediastinum occupies its usual place in the middle line because of the elasticity of the two lungs which balance it on either side. If then the elastic traction of one lung be abolished, as it is in pneumothorax, that of the other side, being unopposed, comes into play and drags the heart and mediastinum over on to the sound side. This displacement is the necessary consequence of pneumothorax if the mediastinum be free to move, and it can only be absent under two conditions—first, when the mediastinum is fixed by adhesions; or secondly, when the other lung has also lost its elasticity or power of retraction.

Although, as Douglas Powell showed, elastic contractility