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St. Bartholomew's Hospital Journal,

OCTOBER 14th, 1898.

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

WITH the October number it is customary to announce a fact which may be gleaned by reading the title-page, namely, that a new volume has begun. For we recognise that October is indeed the dawn of the year, and are not deceived by the conventions of the almanack. Readers of J. K. Stephen will remember how admirably he expresses this idea in his swan song, "Quo Musa Tendis:"

"For I take it the end of the Long Vacation
. . . . . .
Is really the season, by light of reason,
Which ought and does to the wise appear
The Dawn of the Year.

"Years die in July, and are dead till September;
By the first of October the New Year's born,
It's a sturdy infant in mid-December,
And reaches its prime some April morn;
Hot and weary in June, it must perish soon,
It's working too hard; it will break: but *here*
Is the Dawn of the Year.

"So back to work in the London streets,
Or college courts, or clamorous schools;
We have tasted and dwelt on the passing sweets
Of sunlit leisure: resume your tools,
Get back to your labours, my excellent neighbours,
And greet with a spirit that work can cheer
The Dawn of the Year."

It is customary also with many of our contemporaries to proffer much good advice to the freshmen on this occasion. We will refrain, however, knowing full well that no man ever benefited by second-hand experience, and confine ourselves to extending them a hearty welcome to Bart.'s.

The first of October sees not only the inroad of new students, but the induction of a new Junior Staff. And to those who have just come on as juniors we offer congratulations mingled with sympathy, regarding them as less favoured than those who begin their duties in April. The latter have the advantage of being able to live out of the Hospital during the summer months, while those who are non-resident now have, in spite of delays from fog and rain, to find their way to the surgery promptly at nine o'clock. And the value of having every Sunday free from work is obviously not the same in winter as in summer. Then when the present junior becomes senior in the summer months he still finds himself at a disadvantage. The beds at his disposal are seriously curtailed for three out of his six months' residence during the annual closing of one of the wings, and the routine of the wards is somewhat disturbed by the constant changes resulting from the well-earned holidays of his "chief," his sisters and dressers or clerks, while he must toil on with but brief respite.

These grievances seem to us to press more hardly on the House Surgeons than on the House Physicians. For the latter are appointed every six months, and whether a man comes on in April or October is largely the fortune of war. But the House Surgeons are nominated annually, and the one that secures the senior nomination comes on in October, and experiences the hardships we have enumerated. His junior appears to us to be the more fortunately situated of the two.

We have no remedy to suggest, we only indicate drawbacks existing at present which are apparently inevitable. And the value of the resident appointments at Bart.'s is so great that men who come on may be justly considered fortunate, whether they do so in April or October.

On Diagnosis.

A Clinical Lecture on the Diagnosis of Intra-cranial Abscess and of Acute General Septic Peritonitis.

By HENRY T. BUTLIN, F.R.C.S., D.C.L., Surgeon to the Hospital.

[NOTE.—*We much regret that the heading to the second lecture on the Diagnosis of Intra-cranial Abscess and of Acute General Septic Peritonitis was inadvertently omitted in our last issue. The result was that the opening sentence of the second lecture lost its meaning, as it referred to the reasons for associating two such different diseases together.*]

ON THE IMPORTANCE OF SINGLE SYMPTOMS.—PART II.

Acute General Septic Peritonitis.

GENTLEMEN,—In the first part of this lecture I excused myself for having placed together two such different diseases as intra-cranial abscess and acute septic peritonitis on the pretext, not only that single symptoms are vastly important in the diagnosis of both, but that the pulse, which is in danger of absolute neglect in the surgical wards, must be closely watched if intra-cranial abscess and septic peritonitis are to be diagnosed sufficiently early to be treated successfully by surgery. I own I am more than satisfied to be able to show how important the pulse may be in diagnosis for the very reason that so little attention is paid to it in the surgical wards; and, for another good reason, the ease with which the necessary observations can be made. There is no question of acquiring skill in the use of some special instrument, and of making a mistake in what is seen or heard; there is, therefore, no excuse for omission of the taking of the pulse. In all cases of this kind, however, it must not only be taken, but it must be taken frequently, and must be recorded with the temperature, so that the two can be compared.

During the time I was Surgical Registrar to the Hospital I took a great interest in the cases of acute peritonitis which it was my lot to register, partly on account of the danger of the disease, partly on account of the difficulty there appeared to be in making the diagnosis in its early stages. My interest in the subject has naturally grown rather than diminished, on account of the urgent necessity of an early diagnosis in these days when surgery is prepared to deal with torn and perforated stomach and intestines, and with the various other causes which give rise to septic peritonitis.

I believe that some, if not a great deal, of the difficulty of early diagnosis depends on the uncertainty which prevails on—

What is meant by the term Peritonitis.

Under the general term Peritonitis we are in the habit of including inflammations of the peritoneum, acute and chronic, septic and aseptic (if there be inflammations which are aseptic), limited and general, and even conditions which are only occasionally associated with inflammation, such as peritoneal tubercle.

The variety of peritonitis of which I am going to speak is septic peritonitis, such as occurs from the escape of the contents of the stomach and intestines into the peritoneal cavity; such as commonly occurred in former times after operations on the abdomen, from the use of dirty fingers, instruments, and sponges. It is an acute inflammation, generally very acute and rapid in its course, almost invariably fatal if treated expectantly. I am not quite sure whether I ought to call it *general*, although it very often is so within a short time of its commencement. But it may begin at a certain definite place in the abdominal cavity, and thence spread rapidly to every other place. Examples of this may be seen in perforating ulcers of the stomach and intestines, where the escape of the contents of the alimentary canal is not too rapid.

Again, I am sure that some of the difficulty in the diagnosis of acute septic peritonitis depends on an imperfect conception of the morbid anatomy of the disease. The same symptoms and the same grouping of symptoms are not present throughout an attack of acute peritonitis. A study of the—

Pathology of the Disease

is essential to a thorough appreciation of the symptoms which it may—and will—present at different periods of its course. Some of the symptoms which are set down as very important are certainly very important when they are present, but they occur too late to be of service when the success of an operation is to depend on an early recognition of the nature of the disease.

Picture to yourselves what happens when septic material is gradually introduced or even rapidly run into a certain part of the peritoneal cavity,—for instance, as the result of a rupture of the intestine in a healthy person, or from the sudden giving way of a gastric ulcer which has been long quiescent. The assaulted peritoneum instantly becomes reddened from congestion; a thin lymph is poured out in the course of the first few hours, which sticks the coils of intestine together just as cream or butter might do. The material which is extravasated may contain gas, which usually rises to the upper surface behind the abdominal wall. Gas is also developed from the decomposition produced by the presence of pathogenic organisms. As the disease advances the coils of intestine become more firmly fixed together. Their coats are thickened. Peristaltic movement is impeded, and finally prevented. The lumen is filled fuller and fuller by the stagnating contents, from which gases are given off. The inflammation invades the wall of the abdomen, which becomes thickened, sodden, and œdematous if the patient lives sufficiently long.

Now think for a moment what symptoms will be produced by such conditions, and when they are likely to occur. The sudden extravasation of the contents of the canal causes almost invariably shock, sometimes very severe shock; and this is rapidly succeeded by fever, so that within two or three hours of the accident the reaction or fever may be marked. The abdomen is not swollen, unless it was so before the extravasation took place. It is almost invariably painful and very tender. And as movement or alternate pressure and relaxation over the affected part occasions pain, that part of the abdominal wall is kept still during respiration. If the whole of the abdomen is already affected, the whole abdominal wall is kept very still. As the disease advances the abdomen becomes swollen and tympanitic from the formation of gas in the intestines, and perhaps from free gas between the coils and in front of them. Thus the liver dulness may be no longer demonstrable. The coils of intestine are fixed, hence the movements of the intestine in the abdomen are no longer observed. The natural consequences of stagnation of the contents of the intestines are apparent in constipation and vomiting. The wall of the abdomen in the later stages of the inflammation is not merely fixed by muscular spasm, but is often thickened and rigid, and sometimes even œdematous from infiltration of its layers. At this time the patient usually lies on the back with the legs drawn up to relieve the intra-abdominal tension; the face becomes elongated, the cheeks hollow, and the eyes sunken.

In considering these symptoms and their relation to the events of the inflammation, it is obvious that some symptoms will be present from the beginning, while others will not be noticed until the disease has existed for many hours, or even for several days. Their relative value will therefore depend not only or even so much on their individual weight when they are present, as on the frequency or constancy with which they are present at a very early period of the disease; and I shall have to direct your attention to two symptoms particularly in this relation, the mobility of the abdomen and the rapidity of the pulse. But before I do so, in order to maintain the order of examination, which was almost lost sight of in the first part of this lecture, let us consider the

General Aspect of the Patient.

In the classical descriptions of peritonitis you find him lying on his back, with the legs drawn up, and with the Hippocratic face the long sunken face I have just spoken of. In truth, if you are called in to a case of commencing peritonitis, you must not expect this posture and appearance. They belong to a later stage. It is far more probable that the patient is very restless, and may move about in bed, and change his position more than once as you approach him. Some of you may have seen a young woman who was admitted in the later part of last year with what proved to be a perforated gastric ulcer. When I first saw her several hours after the accident she was very restless, and cried out constantly with pain. She had not the Hippocratic face; but, on the other hand, she looked desperately ill. Indeed, I have never seen a patient with peritonitis, in any stage of the disease, who did not look very ill.

The History

is often very important, but it is so different in different cases that it is difficult to speak of it in general terms.

You will, however, naturally ask whether the onset of the attack was sudden, and whether there have been previous abdominal attacks. You will inquire what food was taken for some hours before the attack began, for history of injury, for past symptoms of affection of the liver and stomach, of the kidneys, of the bladder, of the intestinal canal (particularly in these days of the appendix), of the uterus and its appendages. You will also carefully inquire where the pain began, for the seat of the first pain may serve to direct you to the cause of an attack of peritonitis.

The history of the food taken is sometimes as curious as it is valuable. Some years ago I was summoned to one of the suburbs to an old lady who was thought to be suffering from intestinal obstruction and peritonitis. She was in great pain, and when I inquired into her history I found that on the day preceding the attack she had tasted cucumber for the first time in her life, and was so enamoured of the seductive fruit that she ate nearly twelve small cucumbers. We took measures to clear her of the undigested mass, and she rapidly recovered.

Now for the—

Characters of the Disease;

in other words, the symptoms, which you will, for this disease, divide into *general* and *local*.

The *general* symptoms are for the most part those belonging to acute inflammation, with a small coated tongue, which is sometimes dry and brown, vomiting and constipation, and restlessness (at first). But if I placed these symptoms in the order of their value in all cases I should give the foremost place to the pulse. The temperature, instead of being raised, as it ought reasonably to be, may be normal or even subnormal. True, it is generally high at some period of the disease. The tongue may vary in size and in appearance. There may be no vomiting, no marked constipation (as yet); and the restless stage may be

passed. But the pulse is always quick. And in the earliest stages the pulse is rapidly increasing in rapidity; it runs up to 120, and often much quicker: it is quick whether the temperature is high or low, and it remains quick. It is not like the pulse of intra-cranial abscess, very variable in its rate; it is much more constant, always tending to grow quicker; it may vary in hardness and softness, in fulness and in other qualities, but it is always rapid.

Quickness of the pulse, taken alone, would be a very untrustworthy symptom of a grave disease, the pulse of excitable people is so easily set running. Fear, pain, apprehension, will send the pulse up twenty or more beats in the minute. It is, therefore, not nearly so weighty a symptom by itself as an abnormally slow pulse. At the very beginning of an attack of suspected peritonitis the pulse should be taken at frequent intervals. You want to know, not only whether it is quick, but whether it remains quick, and whether it is growing quicker. In the case of the young woman of whom I have just spoken there was very great difficulty in determining whether she was really suffering from grave mischief or not. She had been seen about two hours before I saw her by one of my colleagues, who thought there was not then sufficient evidence of serious mischief to justify an exploration. She appeared to be in great pain, and the upper part of the abdomen was kept very quiet. She was moving restlessly in bed, sometimes throwing herself from side to side. She looked very ill, and her pulse was over 100. But she was an excitable person, and very frightened about herself, which might account for the quickness of the pulse. And persons with colic are often very restless, and look dreadfully ill while the colic lasts. Before opening the abdomen I determined to try the experiment of an injection of morphia. It would allay her pain and agitation; and if the quickness of the pulse was due to her excitement, it ought certainly to cause the pulse to fall. At the end of an hour I came again to see her; found that she was free from pain, quiet, inclined to doze; but that her pulse, so far from being less frequent, was ten beats quicker than it had been. This decided me to operate, when commencing peritonitis from a perforated gastric ulcer was discovered.

The *local* symptoms are pain, tenderness, and impaired mobility of the abdominal wall; localised induration or fulness, with tenderness at that particular part; swelling and tympanites; presence of free fluid and gas in the abdomen; rigidity of the wall of the abdomen, and fixation of the intestinal coils. But, again, the first place must be assigned to the symptoms which are constant in the earlier stages of the disease, and, to my mind, in the following order:—(1) impaired mobility of the wall of the abdomen; (2) tenderness; (3) pain. Occasionally there are cases of acute peritonitis, in which the patient seems to suffer no pain, but they are rare. Tenderness is, I believe, always present, and so is impaired mobility of the abdominal wall.

Before you touch the abdomen of a patient with suspected peritonitis, take the pulse and look at the tongue. Then have the clothes gently moved off the abdomen and watch it, but do not touch the surface. Notice whether it moves in respiration, and whether the movement is as free as it is in health. If you are not sure, bid the patient fetch a deep breath. The attempt to do so may cause him to cry out, and will certainly bring into relief the impaired mobility of the abdominal wall. It may not be still all over, but it is very still over the part where the peritonitis is, and where it is advancing. Whether this impairment of mobility is due to reflex tonic spasm of the abdominal muscles, or to a distinct effort to keep the part still on account of the discomfort of alternate pressure and relaxation, I do not know. Experimenting on myself I find that it is possible to keep the muscles of the abdomen very quiet by a modification of the breathing, and I believe the first impairment of mobility is the result of this kind of effort, and that the muscles soon become habituated to the forced stiffening of them. For more than twenty years I have given attention to this early symptom of acute peritonitis, and I cannot recall a single case in which it was not present. Within the last few weeks I have had a woman die under my care, in whom I suspected that there might possibly be acute peritonitis after an abdominal operation, although the wall of the abdomen was freely moveable. She had a papillomatous cyst, or rather cysts, of the right ovary and broad ligament, which were removed on the 2nd of August. She was incessantly sick after the operation, the temperature rose to 101° to 102°, the pulse to 126 to 140, and remained about the same until she died on the 7th. The constant sickness, the high temperature and pulse made me suspicious that she might be suffering from a septic peritonitis. But the autopsy proved that the peritoneum was absolutely free from inflammation.

If I were to set down the symptoms of acute septic peritonitis in a tabular form, I should do so in the following manner:

General.	Local.
Quick pulse, with tendency to grow quicker.	Impaired mobility of abdomen.
Restlessness, with later supine posture.	Tenderness.
	Pain.
Raised temperature, which may become subnormal.	Localised induration or fulness.
Small coated tongue.	Swelling and tympanites.
Vomiting.	Free fluid or gas.
Constipation.	Rigidity of abdomen and fixation of coils of intestine.

For such is the order of their constancy, and therefore to some extent of their relative value. I cannot imagine a case of acute septic peritonitis without a quick pulse and impaired mobility of the abdominal wall, unless there is some other condition sufficiently powerful to prevent the pulse from quickening as it ought to do.

Examination of other Parts

is often very important, particularly of the rectum, and of the uterus and vagina. Distinct swelling may be found in the rectum, and extreme tenderness at the seat of the swelling. And it is possible, as my colleague Mr. Lockwood thinks, that the taking of the temperature in the rectum may discover a rise of temperature which is not apparent in the mouth or the axilla. I do not know how far the rectal temperature will prove of service in the diagnosis of acute peritonitis in the future. I am testing it now, and have found it higher than the temperature of the mouth; but in one case it was not higher than about 99°.

The Diagnosis

generally requires to be made between peritonitis and enteritis, between peritonitis and the results of injury in which there is no septic peritonitis; and even between peritonitis and colic. And, of course, the question may arise, after an abdominal operation, whether the patient is suffering from peritonitis or not. Space will not permit me to enter into a detailed description of the differences in the symptoms of these very different conditions. I can only say that I believe a combination of the three symptoms, quick (and generally quickening) pulse, impaired mobility of the abdominal wall, and tenderness, is essential to the diagnosis of peritonitis in an early stage, and that they are all three present within three or four hours of the onset of the inflammation.

Errors of Diagnosis.

A large book might be written on this heading alone, but I shall content myself with giving two personal examples, which showed me that the great threefold combination may occur in other conditions than peritonitis, although they ought never to be absent in a case of peritonitis. Curiously, both examples occurred also in the practice of my colleague, Dr. Gee. Rather more than a year ago he transferred to my care one afternoon a man who was not only supposed to be suffering from acute peritonitis, but was thought certainly to have free gas in the abdomen. His abdomen was distended, tense, and extremely tympanitic. The liver dulness was concealed by tympanites. The wall of the abdomen did not move; it was very tender, and the patient was extremely ill, with a small and rapid pulse. Immediate operation was indicated, and I made a small opening, through which no gas escaped. The peritoneum was perfectly healthy, but all the contents were thrust forward by a large soft tumour at the back, so that intestine was pushed in between the liver and the wall of the abdomen. The tumour afterwards proved to be a burst aneurism of the abdominal aorta.

Within a few months of that time I was called to see a young man in the north of London, who had been seen on two or more occasions by Dr. Gee, and I was told that it was a case for operation. I found the patient very ill; very quick pulse, raised temperature, distended abdomen, tender, painful, and tympanitic. I had no hesitation in diagnosing peritonitis, or in exploring the abdomen. But, again, I found a large tumour at the back of the abdomen, with a healthy peritoneum. In this instance the tumour was a large post-peritoneal abscess. I think Dr. Gee had profited more from the first case than I had done; for I asked the doctor in attendance afterwards whether Dr. Gee had not also diagnosed peritonitis. To which he replied, "No, he did not say that; he said the patient had the symptoms of peritonitis." However that might be, we were agreed that the case was one for an exploratory opening. And that leads me to advise that in every case in which the threefold combination of symptoms is present, and there is reason to suspect peritonitis, the doubt should be cleared up by a very small incision through the abdominal wall. I have often availed myself of this method, particularly in cases of injury to the abdomen, on the principle that, generally speaking, the sooner the diagnosis of this variety of peritonitis is made, the better the chance of discovering and remedying the cause, and the better the chance of the patient.

On the Good Effect which Goat's Milk occasionally has in Marasmus.

By W. P. HERRINGHAM, M.D., F.R.C.P.

MANY years ago, when I was Casualty Physician, a woman brought me a miserable skeleton of a baby some weeks old, which had been brought up on artificial food, and which had constant sickness and diarrhœa. Judging it to be curable by judicious feeding, I altered the diet in various ways, but found that do what I would, and though I was confident the mother obeyed orders, I could not improve the condition of the child. I cannot lay hands upon the notes of the case, but I have no doubt that I tried all the usual variations of milk, cream, whey, and raw meat juice. Yet the baby did not die, though how it lived seemed incomprehensible, but remained as it was at first, a living skeleton. After some two or three months had been thus spent I one day suggested goat's milk. The mother found a goat in her neighbourhood, and gave the milk. The result was most surprising. The child throve from that day, and in a few weeks was as fine a baby as might be seen.

This case made a strong impression upon me, and I determined, if I saw a similar case, to try the same treatment.

In February, 1898, a boy, R. W—, aged eight weeks, was admitted under me at the Paddington Green Children's Hospital. He was suckled for two weeks, when the mother's milk failed, and since then had been given boiled cow's milk and barley water with regularity, under the direction of one of my colleagues. He, however, did not thrive, and during the last two weeks had been vomiting and wasting, and two weeks before admission weighed only 7 lbs.

I found it a case of marasmus, with no perceptible lesion of any organs, and dieted it first on peptonised milk, then on raw meat juice, then on the "cream-milk" mentioned by Dr. Cautley in the *Lancet* of 1896, then on ass's milk, then on raw meat juice, cream, and bread jelly, but with no good result. On April 4th the child weighed 7½ lbs.—exactly its weight when first admitted. It had not had diarrhœa, but it had vomited constantly with all the above diets. The former case had been in my mind for some little time, but I thought it better to try other diets which are recommended by the faculty before I experimented with a milk which for children with delicate digestions is not. I now gave goat's milk, and nothing else. The result was surprising. The vomiting diminished directly, and soon stopped; the weight on April 13th was 8¼ lbs., and on April 20th 8¾ lbs., and the child was evidently thriving and progressing rapidly. But on the 27th he was seized with some acute febrile attack, which we believed to be measles, as several cases had broken out in the hospital, and died in twenty-four hours with a temperature of 104·2° F. The post-mortem revealed no visceral lesion; the stomach and intestines especially were quite natural.

Although the end was so disappointing, yet I and others who saw the child were quite convinced that the disease of which he died was a fresh malady, having no relation to the original digestive disorder, and were equally confident that the latter had been overcome by goat's milk when the other diets given had failed.

The two cases had this in common, that both seemed able to hold on to life, and yet unable to grow or thrive. Both were marked by vomiting and extreme emaciation, but in the last there was no diarrhœa, and in the first the diarrhœa which at one time existed was never dangerous, and was soon allayed. There was evident inability to assimilate, but there was little irritation of the alimentary canal.

I cannot explain why goat's milk should have succeeded. Cheadle states that it is richer in cream than cow's milk, but that the casein, which is in almost the same proportion as in cow's milk, coagulates like that in heavy masses. As an example of the mistakes made by ignorant doctors, he says, "I have seen a delicate little infant, with a stomach whose powers were utterly unequal to digesting the coarse heavy curd of cow's milk, which set up vomiting and purging, forthwith put on goat's milk." Yet I think I shall try it again if I see occasion.

The Microscopic Diagnosis of Tuberculosis.

By A. A. KANTHACK, M.A., M.D., F.R.C.P., Fellow of King's College, Professor of Pathology in the University of Cambridge.

MR. BUTLIN, in his delightful lecture "On Diagnosis,"* rightly says that the pathologists "may discover what they certainly ought not to do." This is true, and the reason is that the art of diagnosis, as practised by the pathologist, is as difficult to acquire as the same art practised by the clinical surgeon and physician. It is not, however, my intention to discuss this matter here, especially since all who are acquainted with my own views know that I agree with Mr. Butlin's statement that special instruments and methods should be employed as aids to diagnosis in every case in which it is possible to take advantage of them, and also with his recommendation to take nothing for granted. Moreover quite recently I have fully expressed my views on the meaning and purpose of clinical pathology. Mr. Butlin, however, mentions an interesting point in his lecture by way of illustrating his argument. He writes that in one case tubercle bacilli were found in the purulent urine of a lady. They were never found on any subsequent occasion, and the lady made an excellent recovery, and remains well to the present time, so that it is difficult to believe she was suffering from tubercle in the kidney. But if not, where, he asks, did the tubercle bacilli come from on that one occasion on which they were discovered by a competent bacteriologist?

Now it is quite possible that I was this "competent bacteriologist." If so, while appreciating the compliment paid me by Mr. Butlin, I hasten to explain the difficulty, if not the error. If some one else was the "competent bacteriologist," this explanation may be of use to him and other "competent bacteriologists."

I ask, "Were those bacilli really tubercle bacilli?" I remember a case similar to the one Mr. Butlin mentions, where in the urine, also of a lady, bacilli giving the staining reactions of tubercle bacilli, and resembling them morphologically, were found by a learned friend of mine, who, however, was not a "competent bacteriologist." I refused to regard them as true tubercle bacilli, and in my opinion they were so-called smegma bacilli, or, to use a better name, pseudo-tubercle bacilli. Using careful and critical methods of staining in that case, I never obtained bacilli staining like tubercle bacilli, although a large number of observations were made.

This is a matter of great importance. We know now that there are bacilli which resemble the tubercle bacillus morphologically, as well as in staining reactions, just as there are

* This JOURNAL, vol. v, No. 12.

bacilli resembling in those respects the diphtheria bacillus. Scepticism is therefore necessary. Such pseudo-tubercle bacilli may be found in the bladder, urethra, vagina, rectum, and elsewhere. They may be found even in the sputum. Pappenheim (*Berliner klin. Wochenschr.*, 1898, No. 37) describes a case where in the purulent sputum masses of red bacilli were demonstrated by Gabbet's method; yet post-mortem tuberculosis could be excluded. In the same journal (1898, No. 11, p. 246) A. Fränkel had previously drawn attention to the occasional presence of pseudo-tubercle (smegma) bacilli in purulent sputum.

It is therefore necessary in the microscopic and bacterioscopic diagnosis of tuberculosis to use proper and careful methods, for we must remember that, as Bienstock and Gottstein (*Fortschritte der Medicin*, 1886, Nos. 6 and 8) have shown, many bacteria, when grown on fat-containing media or on media artificially impregnated with fat, acquire staining properties similar to those of the tubercle bacilli. Now in many kinds of sputa, especially those which are purulent, fat or myelin is found in large quantities, and the same is true of many other purulent discharges, especially when there is a necrotic or gangrenous tissue lesion at the bottom of the mischief. I can confirm Fränkel's observations from my own experience, and am therefore becoming more critical as I grow older. In milk and butter, where, of course, much fat is present, pseudo-tubercle bacilli are frequently found; and, as shown by Lydia Rabinowitsch, mistakes have been made by several observers who condemned butter, as containing tubercle bacilli, on insufficient evidence (*Zeitschrift für Hygiene*, vol. xxvi, p. 90).

I shall not enter into the whole question of the pseudo-tubercle bacillus here. What my readers will desire to know is this: *can we in future rely at all upon the microscopical diagnosis of tuberculosis?* Of course we can, if we proceed with care.

(*a*) Methods like Gabbet's method, where two or three different processes are condensed into one, should be avoided, and instead the ordinary Ziehl-Neelsen method (carbol-fuchsin) should be used.

(*b*) If the discharge or sputum is not purulent or necrotic, but merely mucous or muco-purulent, there is practically no danger of falling into the error of mistaking pseudo-bacilli for true ones.

(*c*) Where the sputum or discharge contains fat, fatty acids, or myelin, special care is required. With Fränkel (*Berliner klin. Wochenschrift*, 1898, No. 40) I agree that Honsell's method of differentiating between the two forms of bacilli is the best.

Honsell's method.— Having stained a film in carbol-fuchsin by the ordinary method, examine it (mounted in water); and if red bacilli, resembling tubercle bacilli, are found, place the film for ten minutes in 3 per cent. HCl alcohol. Then wash in water, and counter-stain with an alcoholic solution of methylene blue (which must not be saturated). If the bacilli, previously red, now disappear, then in all probability we were dealing with pseudo-tubercle (smegma) bacilli.

(*d*) In all doubtful cases, and always when tuberculosis of the kidney or bladder is suspected, guinea-pigs also should be inoculated. These subsequently must be worked up in the recognised manner, *i. e.* tubercles and tubercle bacilli must be demonstrated histologically.

(*e*) Never neglect the clinical evidence, *pro* or *con*.

I trust that these brief remarks may prove useful to some readers of our JOURNAL. The question raised by Mr. Butlin proves once more that there must be constant reciprocal appeal from clinical observation to pathological investigation, and *vice versâ*. The two at all times must act and react upon one another. I cannot do better than conclude by quoting the practical and sound words of advice which Mr. Butlin addressed to his audience, "The kind of scepticism which is most useful is that which declines to take anything for granted."

Clubs from a Practitioner's Point of View.

HAVING recently settled down in practice in a large manufacturing town where medical clubs and medical aid societies are in a flourishing condition (though not more so than in towns of similar population, for I have made inquiries on this point), it seemed to me interesting and instructive to inquire into the working of these institutions; for they have a very close connection with the medical profession, a connection which does not come under one's notice during the time that one is at the hospital.

In our student days we form our ideals of the medical profession from our teachers, men justly occupying the highest places in the profession, who for this very reason are not brought face to face with the conditions of club work; and not till one gets into general practice, the lot of the majority who qualify, does one see to a greater or less extent this aspect of the medical profession.

To assert that all club work is degrading, and the man who undertakes it is therefore of the nature of an outcast, is merely to betray one's ignorance. The evils lie not in the existence, but in the abuse of clubs.

A club ought to be looked upon as a form of charity,—that is to say, people who are not able to pay a reasonable fee, and yet are not in sufficiently straitened circumstances to seek free advice, should by paying a reduced amount regularly receive proper medical attendance in time of sickness. That the actual state of things is far from this conception will readily be admitted, the financial and not

the philanthropic success of these societies being considered the more important.

The aims of many of the large benefit societies are very similar,—such, for instance, as the Oddfellows and Foresters; and it will be seen that they are essentially of the nature of an insurance in which medical attendance plays a secondary part. Briefly, they may be said to be threefold: an allowance during sickness, a sum at death varying with the weekly amount paid, and medical attendance during sickness. That they offer great advantages to the working man is clear, and provided they were limited to the right class of persons, and a fair remuneration given for the work done, few medical men would complain. On these two points I shall have something to say later. Other societies have still more extensive aims, such as the National Deposit Friendly Society. This society among its other inducements holds out the prospect of old age pensions, or a sum realisable at some fixed age. Space forbids my entering into the working of this society; the arrangements are complicated but of great interest, and I merely bring it forward to illustrate this principle of insurance.

I have recently been told of another society, a burial society, which, besides supplying medical aid to its members, gives them an interment when the services of the medical attendant are no more required. My informant was so indignant at being asked to be the medical officer of such a society that he did not trouble to go into its details.

Another form of medical assistance that may be mentioned are those small clubs called "slates," or "corks," which the *habitués* of a public-house form among themselves, paying to the publican who acts as treasurer a weekly sum, and appointing a qualified practitioner to attend them in time of illness. It is customary for these clubs to terminate at the end of each year, when any surplus is divided among the members that is left after the payment of the medical man and of sick benefit.

Mention may be made of clubs organised by some enterprising layman, who makes it a business to tout for people to join his club, and pays a doctor a certain fixed sum for each member, keeping a percentage for his own trouble. All that can be said in favour of this system is that a few persons may be persuaded to join who might otherwise obtain medicine and advice free of cost at some public institution. The better societies safeguard their interests by only admitting male members between certain ages—eighteen to forty-five are the usual limits,—and then only after an examination to show that they are not chronic invalids. As, however, the greater number of members that a society has on its books the better is its financial state as a rule, the question of wage limit is ignored.

To show what powerful organisations these societies may become, and how sound their financial state can be, the Manchester Unity of Oddfellows may be cited as an example. Its members are said to number hundreds of thousands, with lodges in all parts of the world, most if not all being self-supporting; I am told that the mother lodge has a capital of several millions, and could pay all possible claims at any time.

This absence of wage limit bears heavily on the medical man by allowing people to join who could well afford to pay a reasonable fee, and by allowing members of the society, who by a turn of fortune's wheel are in a better position than when they first joined, to retain their memberships. Further, these people have no hesitation in accepting the services of the club doctor in time of sickness, and hope to earn a reputation for generosity by not declaring on sick benefit, knowing full well that the opinion of their fellow-members would be strongly against them if they did. This is a grievance keenly felt, and one which I have heard practitioners bitterly complain about.

Another grievance, and one that at first sight is apt to be overlooked, is that the practitioner who undertakes club work has no voice on the committee of the society for which he is working, and often is completely at the mercy of men who are unlettered and in many ways his inferiors.

A very difficult question to settle is what ought to be considered a fair remuneration for contract work; the number of members in the society, the admission of women and children as members, the amount of work that the medical attendant may be called upon to do, the distances which he may have to go, and the matter of dispensing have all to be considered. That in many cases it is much too low must be admitted; also that undue competition and unfair attempts at lowering prices—measures that cannot be too strongly deprecated—are in a way responsible for the present state of affairs. The sum of five shillings per annum for each member has been suggested as a minimum; whatever the amount be, it should be one that has been agreed upon and rigidly adhered to by all the medical men in that particular district. Many of the lodges of the Oddfellows and Foresters pay their medical officers five shillings per annum for each member, and for this he gives advice and medicine. This amount, I have been told, may be considered a reasonable remuneration, and one that works well in practice. In some localities there is often a modification of this: for instance, the medical attendant will receive four shillings and sevenpence per annum for each member, the remaining fivepence being given to some chemist who agrees to supply all medicines for members of the society. I am told that this works out to about three farthings for each bottle of medicine.

Many societies and clubs give their medical attendants much less than the above rate; one penny per week for each member is not at all an uncommon allowance; sums even as low as two shillings and sixpence per annum are offered and accepted. These figures speak for themselves, and I leave my readers to draw their own conclusions.

I have mentioned what seems to me to be the most glaring evils of this contract work. There are many others, but I do not propose to weary my readers by going into them in detail. For those who are interested the following points will form food for reflection:—The medical examination of members before admission into the society; the advisability or the reverse of forming clubs for women and children, and if advisable, the rate of payment at which they should be taken; the signing of certificates in time of sickness; the dealing with malingerers.

Every one is agreed that a wage limit ought to be established above which medical attendance should not be obtained at wholesale prices. What should this wage limit be? That it does not depend alone on what a man earns is clear; the number of persons dependent on him (*e.g.* a married man with a family is clearly in a worse position than a single man with no ties), the state of the trade in which he works, and the natural disinclination for people to make public their earnings, have all to be considered. These points have all been raised by working men with whom I have discussed the subject; one man who was earning nearly three pounds a week assured me that this was only so because the trade happened to be good, while in winter-time he was frequently out of work for weeks at a stretch; another man objected to making known his earnings, and considered that a fixed wage limit was not practicable for this reason.

Many of these objections could and have been overcome by taking the wage limit at not what a man earns, but what he has to pay for house rent; this, however, is not altogether satisfactory, and many objections could be urged against it. Probably no one definite rule could be made that would apply to every one, but the difficulty could be overcome by the investigation of each case on its own merits by a committee. And this suggests the remedy for another grievance, for on all committees of management the interests of the medical officer ought to be represented.

Having pointed out some of the glaring evils of contract work, and the remedies that have from time to time been suggested, it only remains to show how they might be carried out. It has been proposed to make a fervid appeal to the General Medical Council to lay restrictions on practitioners who do contract work, but it is doubtful whether such a matter is within their province, and the likelihood of their undertaking such a task is too remote to be speculated upon.

Another suggestion is that the heads of the profession should make a definite pronouncement on the question, and bring professional opinion to bear on the medical officers of benefit societies. Little, however, can be expected from such a course; the first step has to be taken by general practitioners themselves, and this first step has been shown to be local combination; what may develop after this is immaterial at present. Local combination appears an easy matter at first sight, but the united action of a number of people, even for their own interests, means the absolute sinking of all individual differences, and this is difficult to bring about. At Eastbourne, Lincoln, and elsewhere meetings of the local practitioners have taken place, and attempts been made to grapple with the abuses of contract work. That these are efforts in the right direction, and have met with a large measure of success, nobody can doubt; even if not successful at first, they tend to produce unity of aim and to pave the way for future efforts.

Notes.

WHEN William Hogarth was thirty-nine years old he enriched the charity of St. Bartholomew's Hospital by the two pictures on the staircase of the Great Hall which are so familiar to us. His reputation as a painter of great originality, but in quite another direction than that of depicting historical or religious subjects, was already assured him. But, as with not a few great men, his desired line of recognition and the line the public took were not the same. Goethe at one time fancied he would be known more for his researches into optics than for his literary productions; Rosetti considered he would live as a poet when his attempts at the pictorial on canvas were forgotten; it is even said that Socrates had a lurking belief that his merits in a certain branch of medicine outweighed his additions to philosophy. What happens in these cases is doubtful; apparently either the demand the public makes is too strong to be denied, or after all the individual makes but a poor judge of the particular quality of his genius. Any way, the results which seem sometimes second-rate to the producer often stand first with his judges. Hogarth's ambition at one time was to make a name as a painter of the order that results in such pictures as those upon the staircase of the Great Hall; but the public had it otherwise.

* * *

"BEFORE I had done anything of much consequence in this walk," he says, speaking of the style of painting that had brought him notoriety, "I entertained somes hopes of succeeding in what the puffers in books call the great style of history painting; so that, without having had a stroke of this grand business before, I quitted small portraits and familiar conversations, and with a smile at my own temerity commenced history painter, and on a great staircase at St. Bartholomew's Hospital painted two Scripture stories, the 'Pool of Bethesda' and the 'Good Samaritan,' with figures seven feet high. These I presented to the charity, and thought they might serve as a specimen to show that were there an inclination in England for encouraging historical pictures, such a first essay might prove the painting them more easily attainable than is generally imagined. But as

religion, the great promoter of this style in other countries, rejected it in England, I was unwilling to sink into a portrait manufacturer; and, still ambitious of being singular, dropped all expectations of advantage from that source, and returned to the pursuit of my former dealings with the public at large." And who shall say the great student of the human face failed to achieve his "ambition"?

* * *

ALL this by way of preface. Just recently the Hospital authorities have had the two paintings cleaned, with results that can only be appreciated by personal inspection and study, but which are such as to call for our thanks and congratulations to the promoters of the idea. The addition (for such it really seems) of several points of interest in the scenes, as imagined by the artist, will be found for themselves by all whose previous acquaintance with the pictures was made through a deposit of a hundred and fifty years of dust and soot.

* * *

IN the "Good Samaritan" we seem to see the artist's attempt to depict the self-righteous priest as a veritable whitened sepulchre, and a feature quite lost before is the abject grovelling figure of the poor wretch who turns aside from his path to kneel at the feet of the scornful ecclesiastic. The Levite's rapt attention to his scroll contrasts with the casual glance he bestowed upon the suffering man. The wounded dog in the foreground becomes a more piteous spectacle of devotion and faithfulness.

* * *

"THE Pool of Bethesda" gains even more by the renovation, perhaps because it is rather more badly lighted than its companion. Only to mention a couple of details that are brought out more clearly: the friendless waiter for the angel that stirs the waters is demonstrating the nature of his long infirmity to the Great Physician; the woman whose costly litter is being borne by slaves who chafe at the delay occasioned by Christ's compassion for the poorer patient, and whose high birth is proclaimed by her bejewelled neck and limbs, has no infirmity to demonstrate at all; whence we may assume the artist's genius considered it—as indeed is not unlikely, remembering his close study of human disabilities—a paralysis of purely functional character. The study and enjoyment of these masterpieces of Hogarth's in their new aspect will doubtless cause many of us to raise the high estimate we have of the genius of our neighbour—Hogarth was born in Bartholomew Close,—as well as feel proud to be the possessors of such genuine works of art.

* * *

THE South Wing is now reopened. In another column an account of the alterations will be found.

* * *

IT has been suggested that it would be a useful innovation if Bart.'s men who are changing their address would notify this fact to the JOURNAL. By this medium they will be enabled to keep in touch with their old friends. We propose to start a column for this purpose, and shall be glad to receive notice of any recent changes of address.

* * *

THE Queen has approved of the following admissions to be Surgeon-Lieutenants in the Indian Medical Service:—H. B. Meakin, H. Boulton, and H. J. R. Twigg.

* * *

WE regret to announce the death of Surgeon William Godfrey Peck, R.N., which occurred at Malta on July 28th. He received his appointment as surgeon in November, 1894.

* * *

WE have also to announce with regret the sudden death from sunstroke of Surgeon-Captain Archibald William Forbes Russell, I.M.S., which occurred on June 21st at Bareilly, Bengal. He joined the service in 1874, and was promoted Surgeon-Captain last year.

* * *

Two nominations without examination for the Royal Army Medical Corps were offered to men of this School last month by the Secretary of State for War. Mr. H. K. Palmer and Mr. H. V. B. Wroughton were proposed, and are now at Netley.

* * *

THE farewell dinner of the outgoing Junior Staff was held on September 30th, and was pronounced a decided success. Mr. H. Williamson took the chair. After the loyal toasts Mr. R. de S. Stawell proposed the traditional toast of "Confusion to our successors," to which Mr. Thursfield responded with all due humility. The chairman then proposed the health of "The Nursing Staff" in a speech of expansive benevolence, while Mr. Douglas efficiently undertook the delicate task of replying. Mr. Langdon Brown gave the toast of "The Warden and Mrs. Calvert," which was followed by that of the Chairman and the Secretaries (Mr. Langdon Brown and Mr. A. Granville). The evening concluded with an enthusiastic rendering of "Auld Lang Syne."

Amalgamated Clubs.

RUGBY UNION FOOTBALL CLUB.

NEVER before has the Rugby season presented such rosy prospects; it began on October 5th with the trial game at Winchmore Hill. The new men are a very promising lot; the three-quarter line will be stronger than it has been for years, and at half we shall take a lot of beating. Carroll showed very good form. The forward team at present is the same as last year with the exception of our last season's captain, Bennett, who is out of his year. Our losses from last year are, indeed, heavy ones, Bennett and Mason. We shall sorely miss the giant strength of our last year's captain and Mason's speed. It is unfortunate that the match with Sandhurst, one of the pleasantest fixtures of the season, had to be cancelled.

OFFICERS.

President.—A. H. Bowlby, Esq., F.R.C.S.
Captain 1st XV.—A. J. W. Wells.
Vice-Captain.—C. H. D. Robbs.
Captain 2nd XV.—H. W. Pank.
Secretary.—H. C. Adams.
Committee.—T. M. Body, T. A. Mayo, C. Dix, J. A. West, A. O. Neill, L. R. Tosswill, A. M. Amsler.

FIXTURES—1898.

First XV.		*Club.*	*Ground.*
October	8th.	R.M.C.	Sandhurst.
,,	15th.	Civil Service	Winchmore Hill.
,,	22nd.	Park House	Winchmore Hill.
,,	26th.	R.N.C.	Greenwich.
November	2nd.	East Sheen	Richmond.
,,	5th.	R.I.E.C.	Cooper's Hill.
,,	9th.	R.M.A.	Woolwich.
,,	12th.	Upper Clapton	Winchmore Hill.
,,	19th.	Lennox	Stamford Bridge.
,,	26th.	Bedford	Bedford.
December	3rd.	Old Leysians	Crystal Palace.
,,	10th.	Croydon	Croydon.
,,	17th.	Old Merchant Taylors	Richmond.

Second XV.		*Club.*	*Ground.*
October	15th.	Civil Service 2nd	Richmond.
,,	22nd.	University College School	Away.
November	5th.	Old Charltonians	Charlton.
,,	9th.	St. Mary's Hospital 2nd	Away.
,,	12th.	Upper Clapton 2nd	Clapton.
,,	16th.	Merchant Taylors	Winchmore Hill.
,,	26th.	Guy's 2nd	Winchmore Hill.
December	3rd.	St. Thomas's Hospital 2nd	Away.
,,	14th.	St. Mary's Hospital 2nd	Winchmore Hill.

ASSOCIATION FOOTBALL CLUB.

OFFICERS.

President.—W. H. H. Jessop, Esq., F.R.C.S.
Captain.—J. A. Willett.
Vice-Captain.—A. H. Bostock.
Secretary.—H. N. Marrett.
Captain and Secretary 2nd XI.—C. H. Turner.
Committee.—L. E. Whitaker, L. Orton, H. J. Pickering, V. G. Ward, E. H. Scholefield, H. H. Butcher, A. R. Tweedie.

FIXTURES—1898.

		Club.	*Ground.*
Wed., Oct.	5th.	Practice Match	Winchmore Hill.
Sat.	,, 8th.	Cheshunt	Cheshunt.
Wed.	,, 12th.	Dorking	Dorking.
Sat.	,, 15th.	Harrow Athletic	Harrow.
Wed.	,, 19th.	Ealing	Ealing.
Sat.	,, 22nd.	R.M.A.	Woolwich.
Wed.	,, 26th.	Barnes	Barnes.
Sat.	,, 29th.	Old Cranleighans	Winchmore Hill.
Wed., Nov.	2nd.	Richmond	Richmond.
Sat.	,, 5th.	Fox's Team	Winchmore Hill.
Sat.	,, 12th.	Ipswich	Ipswich.

LAWN TENNIS CLUB.

INTER-HOSPITAL CHALLENGE CUP.

First Round.

St. Bartholomew's beat Guy's Hospital by 10 matches to 2.
Singles.—S. Bousfield beat F. G. Cross (Guy's), 6—1, 6—1.
J. K. Marsh beat E. L. Kelsey (Guy's), 6—2, 6—1.
V. Bell beat P. O. Mandy (Guy's), 6—3, 6—1.
C. Pennefather beat H. R. Lacey (Guy's), 6—3, 6—4.
J. Stirling Hamilton lost to M. C. Wetherall (Guy's), 1—6, 6—4, 2—6.
C. H. Barnes beat G. T. Willan (Guy's), 6—3, 6—4.
Doubles.—Bousfield and Marsh—
beat Cross and Kelsey (Guy's), 6—2, 6—0.
beat Mandy and Lacey (Guy's), 6—4, 6—3.
Bell and Pennefather—
lost to Mandy and Lacey (Guy's), 3—6, 1—6.
beat Wetherell and Willan (Guy's), 6—2, 6—3.
Hamilton and Barnes—
beat Wetherell and Willan (Guy's), 6—2, 6—2.
beat Cross and Kelsey (Guy's), 7—5, 6—4.

Second Round.

St. Bartholomew's beat University Hospital by 8 matches to 4.
Singles.—Bousfield beat F. G. Bennett (V.), 6—2, 4—6, 6—3.
Marsh beat C. T. Fox (V.), 1—6, 6—2, 6—0.
Bell lost to R. A. Rose (V.), 4—6, 2—6.
Pennefather beat R. F. Barwell (V.), 6—3, 6—3.
Hamilton beat W. L. Scott (V.), 8—6, 6—2.
Barnes lost to A. B. Cubley (V.), 3—6, 6—4, 1—6.
Doubles.—Bousfield and Marsh—
lost to Bennett and Fox (V.), 6—8, 2—6.
beat Rose and Cubley (V.), 6—3, 6—3.
Bell and Barnes—
beat Rose and Cubley (V.), 6—1, 4—6, 6—2.
beat Barwell and Scott (V.), 6—1, 6—1.
Pennefather and Hamilton—
beat Barwell and Scott (V.), 6—1, 6—3.
lost to Bennett and Fox (V.), 6—1, 5—7, 1—6.

Final.

London beat St. Bartholomew's Hospital by 8 matches to 5.
Singles.—Bousfield lost to J. H. Philbrick (L.), 6—2, 3—6, 2—6.
Marsh beat C. F. Enthoven (L.), 7—5, 6—4.
Bell lost to C. C. Simson (L.), 4—6, 0—6.
Barnes lost to A. E. Gilmore (L.), 5—7, 4—6.
Pennefather beat R. Norman (L.), 6—0, 7—5.
Hamilton beat A. R. Brenan (L.), 6—4, 6—3.
Doubles.—Bousfield and Marsh—
lost to Philbrick and Enthoven (L.), 2—6, 1—6.
beat Norman and Brenan (L.), 4—6, 6—3, 8—6.
Bell and Barnes—
lost to Simson and Gilmore (L.), 6—1, 6—8, 0—6.
lost to Philbrick and Enthoven (L.), 2—6, 2—6.
Pennefather and Hamilton—
beat Norman and Brenan (L.), 6—4, 4—6, 6—3.
lost to Simson and Gilmore (L.), 2—6, 9—7, 1—6.
lost to Philbrick and Enthoven (L.), 1—6, 5—7.

Last year was the first time we held the Cup, and it is disappointing to have lost it so soon, especially after getting into the final round.

Old Students' Dinner.

THE Old Students' Dinner was held in the Great Hall on Tuesday, October 4th, and the proceedings were very successful. One hundred and thirty-two stated they were coming, and of these no less than 129 turned up, thus affording the Secretary a pleasant surprise. The arrangement of the hall was an improvement on previous years, the tables being closer together, so that the speeches were better heard. Sir William Turner took the chair, and after the toast of the Queen, he proposed the health of "The Hospital and School." He told his hearers how Sir James Paget had been one of the formative influences in his life, and excited applause by saying that the best dissection of the cervical plexus he had ever seen was one made by the Treasurer, Sir Trevor Lawrence, when he was a medical student. Sir Dyce Duckworth proposed the toast of "The Army, the Navy, and Reserve Forces," coupled with the names of the Director-General of the Army and Inspector-General of the Navy. The former, in his reply, recorded the interesting fact that there had been no septic case during the last Indian campaign, indicating what an enormous difference Listerian methods had wrought in the battle-field. The latter, Sir H. F. Norbury, K.C.B., is himself a Bart.'s man. Dr. Norman Moore, who was in his best vein, proposed the health of "The Distinguished Visitors," among them being Sir Frederick Abel and Professor Ray Lankester, the latter of whom replied. The toast of "The Chairman and the Secretary (Mr. Bruce Clarke)" was then drunk, after which an adjournment was made to the Library, where coffee was served.

Abernethian Society.

Founded 1795. Winter Session, 1898-9.

COMMITTEE OF MANAGEMENT.

Presidents:—Mr. T. J. Horder, Mr. J. H. Thursfield.
Vice-Presidents:—Mr. E. S. E. Hewer, Mr. R. de S. Stawell.
Treasurer:—Mr. A. Willett, F.R.C.S.
Hon. Secretaries:—Mr. H. D. Everington, Mr. W. T. Rowe.
Additional Committeemen:—Mr. W. Morley Fletcher, Mr. F. Grönc.

This Society, composed of the Teachers and Students of the Hospital, holds its Meetings in the Abernethian Room every Thursday Evening, at 8 o'clock precisely, during the Winter Session, for the Reading and Discussion of Papers on Subjects of Medical Science or Practice, and for the Exhibition of Clinical Cases and Pathological Specimens.

LIST OF PAPERS TO BE READ BEFORE THE SOCIETY.

1898.	*Author's Name.*	*Subject of Paper.*
July 7,—	Prof. Kanthack.....	The Science and Art of Medicine.
Oct. 6,—	Sir Thomas Smith, F.R.C.S.	Reminiscences.
„ 13,—	Dr. W. Jobson Horne	The Early Diagnosis of Phthisis (illustrated by Lantern Slides).
„ 20,—	Mr. A. M. Mitchell, F.R.C.S.	The Treatment of the Peritoneum after Septic Infection.
„ 27,—	Mr. J. K. Murphy, M.B. ...	The Treatment of Hæmorrhage in Pregnancy.
Nov. 3,—	.....	Discussions, Clinical and Pathological.*
„ 10,—	Mr. E. W. Roughton, F.R.C.S.	The Surgical Treatment of Chronic Otorrhœa.
„ 17,—	Mr. E. B. Waggett, M.B.	The Surgery of the Accessory Sinuses of the Nose.
„ 24,—	Dr. F. E. Batten	The Muscle-spindle under Normal and Pathological Conditions.
Dec. 1,—	Dr. Lewis Jones.	The Therapeutic Uses of Electricity.
„ 8,—	Mr. F. C. Wallis, F.R.C.S.	The Treatment of certain Simple Fractures by Operation.
1899.		
Jan. 12,—	Mr. James Berry, F.R.C.S.	Dressers and Dressing.
„ 19,—	Mr. H. Williamson, M.R.C.S.	Some Complications following Abdominal Operations.
„ 26,—	.....	Discussions, Clinical and Pathological.*
Feb. 2,—	Dr. Bryce Collyer	Observations made during the Smallpox Epidemic in Gloucester, 1896.
„ 9,—	Mr. T. Littler-Jones, M.R.C.S.	Some Notes on the Plague.
„ 16,—	Mr. J. H. Thursfield, M.B.	Concerning Pleurisy.
„ 23,—	.....	Discussions, Clinical and Pathological.*
Mar. 2,—	Dr. F. W. Andrewes.....	The Causation of Summer Diarrhœa.
„ 9,—	Mr. M. W. Coleman, M.B.	Tuberculin.
„ 16,—	.....	Annual General Meeting.

* At these meetings short communications may be made to the Society, with or without illustrative cases or pathological specimens. At all meetings members are invited to show cases of interest.

INAUGURAL ADDRESS.

The Inaugural Address was delivered on Thursday evening, the 6th inst., by Sir Thomas Smith to a crowded audience in the Anatomical Theatre, consisting of some 500 people, including a large number of the Nursing Staff.

Mr. Thursfield, the President, occupied the chair, and opened the proceedings with an appropriate speech.

The subject chosen by the lecturer was "Reminiscences." Sir Thomas gave his hearers his earliest impressions on his entrance to the Hospital about fifty years ago, and traced from those comparatively remote times the improvements that had taken place both in the Hospital itself and in those responsible for the proper administration of the same.

When Sir Thomas first became a student at St. Bartholomew's the conclusion he drew from what he heard was that the good old days had passed away, and that "his lot had fallen on evil times." This same idea pervaded the whole Hospital, but nevertheless it was not the correct way in which to approach surgery. Too much stress was laid on the dicta of the preceding generation, but it was to be remembered that surgery has no fixed and immutable principles.

Sir Thomas related how members of the staff of the Hospital had been elected in former days, and referred to the obtaining of diplomas under the two and a half years' system. The introduction of asepsis into modern surgery, and of chloroform as a general anæsthetic (and no longer an after-dinner amusement), were also touched upon. The address was interspersed here and there with amusing anecdotes and remarks, which elicited rounds of applause, and a most interesting and admirable lecture was brought to an end by a few kindly words of advice to the younger members of the medical profession.

A vote of thanks to Sir Thomas Smith was proposed by Sir Dyce Duckworth, who hoped that the address would be printed, so that besides the large audience who had heard him that night, that larger audience of Old Bart.'s men might read those words of admirable common sense. We also hope to be able to print the address *in extenso* in our next issue.

Mr. Bowlby in a short speech seconded the proposal, and referred to Sir Thomas's share in that progress of surgery of which the latter had spoken.

A burst of applause followed these remarks, and at the termination of the meeting the company adjourned to the Library for refreshments.

The Rahere Lodge, No. 2546.

A MEETING of this Lodge was held at Frascati's Restaurant, W., on Tuesday, the 11th inst., at 5 o'clock p.m., W. Bro. Burns, P.P.G.D., Surrey, in the chair. Bros. Carnall and Hoyland were raised to the third degree. Bros. Briggs, J. Stewart Mackintosh, jun., Heath, Keats, Brewerton, and Harold Burrows were passed to the second degree, and Mr. C. A. Coventon, of St. Leonard's-on-Sea, was balloted for and elected a member of the Lodge. Two communications were read from United Grand Lodge, and at the instigation of the W.M. the Deputy Master for the time being of the Sancta Maria Lodge, No. 2682, which is connected with St. Mary's Hospital, was elected an honorary member of the Rahere Lodge. About fifty brethren afterwards dined together.

The Alterations in the South Wing.

THE South Wing of the Hospital has undergone extensive repairs and additions this summer, the work extending over a period of nearly three months.

Order is once more restored from the chaos, and it will be clear to every one that great improvements have been effected in the furniture, warming, and ventilation of the wards, in the refreshing colour and good quality of the paint, and in the measures introduced for precautions against fire.

To go more into detail, the wards and staircases have been painted a light green, with a dark green dado. The paint (supplied by Blundell, Spence, and Co.) dries with a hard enamel-like surface, and has a very clean, fresh look.

Every ward is supplied with four sets of heating coils (two in each half-ward), which can be regulated by a key. A ventilator opens directly behind them, in communication with the outer air, which is thus warmed before passing into the ward.

The mantelpieces remain unaltered, except for their coat of green paint, but the wide fireplaces are a thing of the past. They are superseded now by square tiled stoves of a shaded green colour, toning with the walls, and standing well forward in a fireplace lined with light orange-brown encaustic tiles.

The stoves are made by Doulton, and have an open grate, so that the cheerful effect of firelight is not absent, as the word "stove" might imply.

There is every reason to think that they will prove to be more heat-giving, cleaner, and more economical of coal and labour than their predecessors.

Each ward kitchen has been fitted with a new cooking range of improved pattern, having an oven and boiler of good capacity.

This, the "Express" stove, as it is called, is proving very successful for the usual invalid cooking carried on day and night in the wards.

Iron bedsteads, painted white, fitted with wire frames and hair mattresses, have replaced the old sacking bedsteads and flock beds, much to the advantage of the sick, and also of the nursing staff, to whom the shaking up of the flock beds was no light task.

New lockers, with flap forming a bed-table, have been supplied throughout the block—a vast improvement on the old scrubbed lockers with their detached boards.

On the report and recommendation of Commander Wells, R.N., a complete installation of apparatus for protection from fire is being carried out not only in the South Wing, but through the Hospital generally. In the South Wing the installation is nearly complete. The Sisters' rooms have been rendered fireproof by the removal of the woodwork and the substitution of red perforated Bridgwater brick walls.

The wooden doors of the lift have been replaced by iron trellis-work gates, supplied by the Bostwick Gate Co.

On each landing stand six pails of water and a "corridor fire-pump," each ward also containing one of the latter. The pails and pumps are from the firm of Shand and Mason.

When completed the fire-calls will ring up the M.F.B. Station in Whitecross Street, and the employment of a permanent fireman is at present under consideration.

From the above sketch it is clear that many wise and important alterations have been made, and though they have yet to stand the test of time, the cold weather, and practical wear and tear, it is more than probable that they will justify their introduction.

The New Museum Specimens.

AS we go to press the additions made during the year 1898 may still be seen on show in the centre table of the Museum. A descriptive list, compiled by the Curator and Assistant Curator, Drs. Andrewes and Morley Fletcher, has also been issued. From the introductory remarks of this list we learn that the formalin and glycerine method of preservation, having given such satisfaction last year, is now adopted as a matter of routine. The authors also tell us that a "Student's Cabinet" of microscopic preparations illustrating medical and surgical pathology is one of the new departures. "Mere rarities and curiosities" are, we are glad to learn, excluded from this cabinet; we trust the Curators' hope will be fulfilled, and that the cabinet may prove of considerable educational value.

The Museum work of the twelve months is thus tabulated in the Curators' account:

Old specimens remounted	110
New specimens added	105
Casts added	10
Photographs added	22
Drawings „	13
Microscopic specimens added	43

A preliminary note is added of two valuable donations—a large collection of calculi given by Sir Robert Craven, and a collection of microscopic preparations made by the late Dr. Edward Palmer, Lincoln, presented by his widow.

Among the new specimens the following seem to us worthy of special notice:

Skull-cap from a case of acromegaly, with lower jaw, clavicle, hand and foot, and other bones from the same case (P. Furnivall, Esq.).

Vertical section through knee-joint, showing changes of Charcot's disease (R. H. Nicholson, Esq.).

A heart showing enormous dilatation of the left auricle, associated with mitral disease; the auricle is larger than the whole of the rest of the heart together (T. H. Woodfield, Esq.).

Multiple aneurisms of aorta; this is a marvellous specimen, showing three large aneurisms, each containing blood-clot in varied amount. The atheromatous changes in the vessel walls are well preserved, and the specimen admirably dissected. It must be quite unique of its kind (J. G. Forbes, Esq.).

Glanders; specimens of pleura, lung, nose, and jaw, from the case in this Hospital last year. The specimens make an excellent set, showing the typical lesions of the disease.

Carcinoma of root of lung; a beautiful specimen of root-cancer, shown in section, with the accompanying changes in neighbouring organs; a very valuable addition to the Museum.

Epithelioma of œsophagus ulcerating into aorta, which had caused death by hæmatemesis.

Ruptured varicose vein of œsophagus, which also led to fatal bleeding.

Hæmorrhagic infarction of the jejunum—another remarkable specimen, and probably very rare. The clinical history, as we remember it, was equally exceptional. The patient had been treated for an attack of hæmatemesis two years previously, but had neither then, nor when examined a month before death, shown any other signs of cirrhosis of the liver. He was suddenly taken with symptoms of acute intestinal obstruction, and four days later died immediately after a second copious hæmorrhage. Post-mortem: blocking of the gut by infarction following thrombosis of a branch of the superior mesenteric vein was found; the liver was markedly cirrhotic.

Sarcomatous cysts of liver, showing breaking-down new growth, with hæmorrhage into the cavities thus formed. The formalin preserves the colours of such specimens as this in a most satisfactory way.

We are glad to recognise some old friends that have already attracted attention in the post-mortem room. Such are a hæmorrhagic supra-renal body from an infant, a rare specimen of glio-sarcoma of spinal cord, and a marked case of congenital syphilitic cirrhosis of the liver.

A set of specimens illustrating an uncommon form of colloid carcinoma of the breast and secondary growths in sternum and skull are well mounted, and are familiar to us through the Pathological Society's 'Transactions' (Dr. W. d'Este Emery).

The photographs, we regret to note, though they are good, are considerably fewer in number than of late years.

In the Teratological Section the most interesting specimen is one of macrodactyly from a boy of thirteen years (Robert Jones, Esq.).

The Curators are much to be congratulated upon the admirable set of specimens they have prepared and mounted, and those who have not yet seen them should do so before they are "shelved" in the various sections of the Museum.

St. Bartholomew's Hospital Photographic Society.

AT a meeting held on October 14th the following officers were elected:—*President*, Dr. Lewis Jones; *Vice-Presidents*, Dr. Calvert and Mr. T. J. Horder; *Committee*, Messrs. Gandy, Gask, and Tatchell; *Hon. Sec.*, Mr. R. T. Cooke. The date of the Annual Winter Exhibition was fixed for the afternoon of November 30th. Pictures will be hung in the Electrical Department rooms, and there will be a lantern demonstration in the Anatomical Theatre. Former members of the Society are invited to lend exhibits, and it is hoped that any freshers who are interested in photography will communicate with the Secretary in order to become members of the Society.

The Physiological Laboratory.

THE Physiological Laboratory before the vacation and after it are two different things, as anyone who was acquainted with its somewhat barren appearance two months ago may prove for himself by an even casual inspection to-day. The room has altered its character almost past recognition, the utmost economy of space being now taken advantage of by the erection of seven transversely placed benches, topped by stout oak slabs, and fitted with all the requisite materials for practical work. At the far end of the room is an eighth bench, raised above the rest, and utilised for purposes of demonstration, being

backed by a platform some three feet high, and a commodious blackboard running nearly the whole breadth of the room. An electric motor supplies energy for two shafts fixed upon the first couple of benches, allowing some fifteen students to work at machines and recording apparatus. An hydraulic motor also supplies the demonstrator with similar means of using the familiar drum upon the end table in view of the whole class. Accommodation is now possible for some eighty students at a time, and this number was exceeded by five last week. The gas and water arrangements have been remodelled, and in the centre of the room the heating coil acts as a fixed table from which to work the lantern used to demonstrate spectra, photo-micrograms, &c.

The Physiological Department has waited long for these improved conditions, but the alterations have resulted in a room which we are sure will give great satisfaction. The arrangements made for purposes of demonstrating to the class are, we should think, not to be equalled elsewhere in London. Already we have heard sundry regrets from senior men that the days of their physiology tuition are no more. The alterations are a great gain to the Medical School of St. Bartholomew's.

Junior Staff Appointments.

THE following appointments have been made, dating from October 1st:

HOUSE PHYSICIAN TO—

	Senior.	Junior.
Dr. Church	E. F. Palgrave, M.R.C.S., L.R.C.P.	H. W. Henshaw, M.R.C.S., L.R.C.P.
Dr. Gee	H. Thursfield, M.A., M.B., B.Ch.(Oxon.), M.R.C.S., L.R.C.P.	J. H. Churchill, M.R.C.S., L.R.C.P.
Sir D. Duckworth	R. H. Bremridge, B.A. (Oxon.), B.Sc.(Lond.), M.R.C.S., L.R.C.P.	C. V. Knight, M.R.C.S., L.R.C.P.
Dr. Hensley	S. Bousfield, B.A. (Cantab.), M.R.C.S., L.R.C.P.	R. W. Jameson, M.R.C.S., L.R.C.P.
Dr. Brunton	J. E. Sandilands, B.A., M.D., B.C.(Cantab.), M.R.C.S., L.R.C.P.	Clive Riviere, M.B. (Lond.), M.R.C.S., L.R.C.P.

HOUSE SURGEON TO—

Mr. Willett	L. B. Rawling, B.A., M.B., B.C.(Cantab.), M.R.C.S., L.R.C.P.	M. A. Cholmeley, M.R.C.S., L.R.C.P.
Mr. Langton	J. L. Maxwell, M.B. (Lond.), M.R.C.S., L.R.C.P.	T. Litler Jones, M.R.C.S., L.R.C.P.
Mr. Marsh	R. D. Parker, B.A., M.B., B.C.(Cantab.), M.R.C.S., L.R.C.P.	C. G. Watson, M.R.C.S., L.R.C.P.
Mr. Butlin	H. Mundy, M.R.C.S., L.R.C.P.	W. T. Rowe, M.R.C.S., L.R.C.P.
Mr. Walsham	S. P. Huggins, M.B. (Lond.), M.R.C.S., L.R.C.P.	P. Wood, M.R.C.S., L.R.C.P.

OPHTHALMIC HOUSE SURGEON.—E. C. Morland, M.B., B.Sc. (Lond.), M.R.C.S., L.R.C.P.

INTERN MIDWIFERY ASSISTANT.—A. R. J. Douglas, M.B., B.S. (Lond.), M.R.C.S., L.R.C.P.

EXTERN MIDWIFERY ASSISTANT.—A. E. Naish, B.A.(Cantab.), M.R.C.S., L.R.C.P.

RESIDENT ANÆSTHETISTS:

Senior.	Junior.
B. Collyer, M.D.(Lond.), M.R.C.S., L.R.C.P.	A. Granville, M.R.C.S., L.R.C.P.

Award of Entrance Scholarships.

Senior Scholarship in Biology and Physiology, value £75.—L. J. Picton, B.A.(Oxon.).

Senior Scholarship in Chemistry and Physics, value £75.—Not awarded.

Junior Scholarship in Chemistry, Physics, and Biology, value £150.—J. Burfield, C. C. Robinson, equal.

Preliminary Scientific Exhibition in Chemistry, Physics, and Biology, value £50.—A. F. Forster.

Jeaffreson Exhibition.—T. Jeaffreson Faulder, B.A.(Cantab.).

Shuter Scholarship.—F. C. Shrubsall, B.A.(Cantab.).

We offer congratulations to the scholars who have begun their careers at Bart.'s under such favorable auspices. Three of them can hardly be termed Freshmen, as they have been members of the Preliminary Scientific Class—C. C. Robinson, J. Burfield, and A. F. Forster. C. C. Robinson obtained second-class honours in zoology and third-class honours in chemistry. J. Burfield was awarded second-class honours in chemistry.

L. J. Picton, B.A., of Merton College, Oxford, has just returned from the Zoological Station at Naples, where he occupied the Oxford University table. He has recently published a paper embodying his researches in the *Quarterly Journal of Microscopical Science*, entitled "The Heart Body of Chætopods." He obtained high honours in the Final School of Natural Science at Oxford.

F. C. Shrubsall, B.A., of Clare College, Cambridge, obtained a first class in the Natural Sciences Tripos, and has since published various papers on craniology.

T. Jeaffreson Faulder, B.A., is also a member of Clare College; he obtained a first class in the Classical Tripos at Cambridge, and was senior scholar and prizeman of his College.

Clinical Lectures during the Present Session.

Medicine.	*Surgery.*
Oct. 14.—Dr. Church.	Oct. 12.—Mr. Willett.
,, 21.—Dr. Gee.	,, 19.—Mr. Willett.
,, 28.—Sir Dyce Duckworth.	,, 26.—Mr. Langton.
Nov. 4.—Dr. Hensley.	Nov. 2.—Mr. Langton.
,, 11.—Dr. Brunton.	,, 9.—Mr. Langton.
,, 18.—Dr. Church.	,, 16.—Mr. Butlin.
,, 25.—Dr. Gee.	,, 23.—Mr. Butlin.
Dec. 2.—Sir Dyce Duckworth.	,, 30.—Mr. Walsham.
,, 9.—Dr. Hensley.	Dec. 7.—Mr. Walsham.
,, 16.—Dr. Brunton.	,, 14.—Mr. Walsham.

St. Bartholomew's Hospital Students' Christian Association.

Oct. 6th.—H. W. Oldham, Esq. (London Secretary, Medical Prayer Union).
,, 14th.—Annual Meeting.
,, 20th.—Com. Dawson, R.N.
,, 25th.—Missionary Meeting.
Nov. 3rd.—Dr. H. Soltau (Bible Reading).
,, 10th.—A. Carless, Esq., F.R.C.S. (Senior Assistant Surgeon at King's College Hospital).
,, 17th.—A. G. Frazer, Esq., B.A. (Travelling Secretary, Student Volunteer Missionary Union).
,, 24th.—Captain Arde Browne.
Dec. 1st.—Rev. F. A. Pring, M.R.C.S., L.R.C.P. (St. Bart.'s) (Bible Reading).
,, 8th.—G. T. Manley, Esq., M.A. (Fellow of Christ's College, Cambridge).

Reviews.

ELEMENTS OF HISTOLOGY, by E. KLEIN, M.D., F.R.S., and J. S. EDKINS, M.A., M.B. Revised and enlarged edition. (London: Cassell and Co. Price 7s. 6d.)

From 1889 to 1898 is a far cry in most branches of medical science, and histology is no exception in this case. The new edition of the work before us is all the more welcome in that we have awaited it so patiently. At its first appearance in 1883 it deservedly won a position as a most reliable *résumé* of our knowledge of the subject. The 1889 edition made that position still more secure. It is only of late that we must confess to having experienced a temporary lukewarmness in our recommendation of the book to inquiring students,—a change of front we attribute to the appearance of other and more modern works which were able to avail themselves of advances made in the subject during the past decade. This our lukewarmness, however, was always mingled with that regret which often attends a change of old friends for new. To-day we gladly return to our former allegiance, for we know no other text-book of histology we would rather see in the student's hand.

Marked throughout by that careful and studied mastery of the subject which Dr. Klein's own epoch-marking additions to histology have made familiar to us, we congratulate him upon the new features of this last edition of his work. Dr. Edkins is now associated with Dr. Klein as joint author, and he is responsible for the chapters, re-written and extended, dealing with the bulb and brain. Our knowledge of the minute structure of the bulb, pons, and crura renders this no easy task, but Dr. Edkins has produced a description which we feel confident will greatly assist the student. The text is elucidated by a series of photomicrograms which should tend to throw some light into what usually remains, when all is said and done, but a dim corner of the student's mind. These illustrations vary somewhat in value, but are for the most part admirable. In estimating their worth we must bear in mind the difficulty of the subject, but not less the fact that the satisfactory study of the histology of any complex region by means of transverse sections is always the last thing the student teaches himself. We welcome most heartily this attempt to wean him from the study of purely diagrammatic representations; it should tend to counteract that rooted prejudice which so often handicaps him,—that the authors of such diagrams draw upon a lively imagination, and portray structures as they were never seen by mortal eye. The photogram must cut this ground from under him effectually, with the result (let us hope) of sending him to his microscope instead of to his diagram. The same effort is successfully carried out in other parts of the book. Specially good are the photograms of injected bile canaliculi and blood-vessels, corneal corpuscles, and nerve fibrillæ, injected lung, organ of Jacobson, blood cells showing phagocytosis, and oxyphile granules and (in another section, that falls to Dr. Edkins' pen, the alimentary canal) taste-buds, salivary glands, and mucous membrane of large intestine. In this connection a word of praise is due to Messrs. Pringle and Norman for their careful and finished photomicrographic work, and one of thanks to the publishers for supplying a better quality of paper, which takes the photographic impressions excellently, and by no means causes the type to suffer.

Sections largely revised or added, and which greatly enhance the value of the book, are those dealing with Boveri and Heidenhain's observations upon the minute structure of the cell; karyomitosis, with a good epitome of the labours of van Beneden, Schleicher, Rabl, and Flemming; Golgi's discoveries in connection with the neuron and its collaterals; and Kölliker and Kühne's description of the muscle-spindle, that as yet so little studied histological element, which bids fair to throw some light upon our knowledge of the sensory phenomena of voluntary muscle. Kölliker's diagram is reproduced in this connection. Chap. xxii, upon General Considerations as to the Anatomy and Nature of the Nervous System, is a valuable addition. Incidentally we notice that the authors continue to give precedence to Rollett's views of the structure of striped muscle. In all such vexed questions we consider science best served by as close an adherence to actually observed phenomena as possible, and certainly Rollett's descriptions possess this merit; other views as yet wander dangerously far into the region of pure theory. The chapters on the lymphatic system, so many facts concerning which we owe originally to Dr. Klein's own investigations, still remain the most complete account we possess of this branch of histology.

Our grumbles are but few. We should have liked to see a rather fuller account of the varieties of leucocytes in the blood, with (for instance) a table of percentages in an average normal blood-count. Clinical blood examination has become of such great importance in so many diseases that fixed ideas as to the cellular constitution of the blood in health can hardly be introduced too early in the student's curriculum. The photograms illustrating sections of the spinal cord at different levels, which for beauty of reproduction we have never seen equalled, suffer a little from the fact that they have not been reduced to the same scale; as a result, the section through the dorsal region appears somewhat *larger* than that through the cervical. A more frequent note as to the extent of magnification in the illustrations would be useful. But these are trivial matters compared with the great merits the book possesses. We can most heartily recommend it to all who need a reliable, complete, and carefully prepared manual of histology.

HEALTH LOSS AND GAIN, by M. A. CHREIMAN. (London: The Robman Publishing Company, Shaftesbury Avenue, 1898.)

This is a most extraordinary work. Out of the bewildering verbiage, the involved style, and the manifold snippets of quotations, one idea stands out—a plea for the more definite and extended practice of preventive medicine. Not from the pen of a medical man, it is by one who evidently has a high and, we hope, not misplaced opinion of the medical profession. The author refers to his "troublesome practicality." He need have no anxiety on that score, for more impracticable proposals than many which he makes in these pages we have seldom met with.

Picture a daily paper devoted to the science of preventive medicine; what an enormous fortune could thus be comfortably dispersed in a fortnight! Imagine "gymnasia which would *never* be in full swing without the presence of many medical men watching pulse, veins, respiration, pallor and flushing, tremor and perspiration"! Consider the profession undertaking such a duty as this: "You would perforce save hospitality from the deterioration of competitive and intemperate display, with its complicated accessories, and so abolish its worries and abundantly enhance its physical and mental refreshments;" and when a medical man has mastered these minor branches of preventive medicine, it is suggested that he should preach on the enormity of the sin of grumbling! Why, we have actually met with fully qualified members of the profession who occasionally indulged in a mild grumble on their own account. No, "troublesome practicality" is hardly the key-note of this book.

A medical protectorate of health may be Utopian, though desirable, but some of the forms which Mr. Chreiman is anxious for it to assume would amount to a medical inquisition.

We are sorry if we appear harsh in our estimate, for the author has evidently gone far afield in search of material. For instance, he quotes from Dr. Robert Bridges, "Notes from the Casualty Department," which so enlivened the Reports of this Hospital some years ago; and he gives a *bon mot* of Sir James Paget, which to us is quite new. "You may depend upon it," said Sir James, when asked to explain the difference in type of respiration in the two sexes, "that people breathe over the seat of their affections; women breathe over the heart, and men breathe over the stomach." We are sorry, moreover, for undoubtedly the main idea, that in more extended preventive medicine lies medical progress, is quite sound. Nevertheless, despite this and the many unconscious sallies of humour which illuminate its pages, this is one of those books "which it is pleasant and even helpful not to have read."

A MANUAL OF SURGERY FOR STUDENTS AND PRACTITIONERS, by WILLIAM ROSE, M.B., F.R.C.S., and ALBERT CARLESS, M.S., F.R.C.S. (London: Baillière, Tindall, and Cox, 1898. Price 21s.)

This manual, dedicated to Lord Lister, and written by two surgeons whose names are guarantees for sound and conscientious work, aims at filling a distinct gap in our educational series. The large works on surgery are too large for the student or general practitioner, the ordinary text-books for examinations are too small. The authors' aim, therefore, has been "to present the facts of surgical science in a concise and succinct form, so as to satisfy the student, even of those (*sic*) who are preparing for the higher examinations. At the same time the requirements of the general practitioner have not been overlooked." Throughout the authors have evidently felt the limitations of space rather severely. And in this connection we have a suggestion to make. Pathology has advanced at such pace of recent years that it is impossible to treat of it satisfactorily in a text-book of general surgery. In this work, for instance, we find that of rather more than a thousand pages, 132 are devoted to the discussion of inflammation, sepsis, and infection. Now really this seems beside the mark; no one thinks of including anatomy and physiology in a text-book of surgery or medicine, and we suggest that the time has come when

both for economy of space and efficiency of treatment the discussion of pathological questions should be relegated to special books on the subject. The space thus gained could be devoted to more practical considerations, and readers could be referred to the proper sources of information on pathology. Had this somewhat revolutionary method been followed in the work before us its value would have been considerably enhanced; but even as it is, it forms a text-book which we can cordially recommend to those in search of a concise and yet fairly full résumé of the present position of surgery.

OUTLINES OF PRACTICAL SURGERY, by WALTER G. SPENCER, M.B., M.S., F.R.C.S. (London: Baillière, Tindall, and Cox, 1898. Price 12s. 6d.)

This work forms an excellent pendant to the *Manual of Surgery* we have received from the same publishers. It is limited to practical subjects, as the title indicates, and a perusal of the book will prove that the treatment of those subjects is practical also. The directions given are brief, but as a rule lucid; sometimes, however, it appears to us that clearness has been sacrificed to brevity of description, and that a student might in consequence be rather puzzled. Such instances, however, are exceptional. The book has 109 illustrations, many of them admirable, and the style and printing of the volume are worthy of praise.

PRACTICAL ORGANIC CHEMISTRY, by S. RIDEAL, D.Sc.(Lond.), F.I.C., F.C.S. Second edition. (London: H. K. Lewis. Price 2s. 6d.)

This useful little manual has now passed into a second edition. Descriptions of several organic substances which have recently been included in the schedules for various examinations, and a few other compounds of general interest, have been added. Alterations brought about by the new edition of the 'British Pharmacopœia' have been added where necessary.

Examinations.

UNIVERSITY OF DURHAM.—*M.D. for Practitioners of 15 years' standing.*—S. S. Hoyland, M.R.C.S., L.S.A. *M.B., B.S.*—H. G. Harris, M.R.C.S., L.R.C.P.

SOCIETY OF APOTHECARIES.—*Anatomy and Physiology.*—L. C. Ferguson. *Physiology only.*—D. H. H. Moses, H. H. Serpell.

Pathological Department of the Journal.

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

	s.	d.
Ordinary examination, Bacteriological or Pathological, such as tumour, membrane, or sputum	2	6
Ordinary (qualitative) urine examination	2	6

Any further report will be charged at a special rate. If a mounted specimen be desired an extra charge of 1s. will be made. If a telegraphic report be 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 J. Russell, 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.

Appointments.

BROWN, W. LANGDON, M.A., M.B., B.C.(Cantab.), appointed House Surgeon to the Metropolitan Hospital.

* * *

CORFIELD, CARRUTHERS, M.R.C.S., L.R.C.P., L.S.A., appointed Surgeon to the Tooting Lodge of the Independent Order of Odd Fellows.

* * *

CROWLEY, R. H., M.D.(Lond.), appointed Honorary Physician to the Bradford Royal Infirmary.

* * *

FLEMING, J. K. S., M.R.C.S., L.R.C.P., appointed House Physician to the Metropolitan Hospital.

* * *

GILES, L. T., M.A., M.B., B.C.(Cantab.), F.R.C.S., appointed Assistant Surgeon to the Children's Hospital, Sheffield.

* * *

HEMMING, J. J., M.R.C.S., L.S.A., appointed District Medical Officer for Margate.

* * *

LEGG, T. P., M.B.(Lond.), F.R.C.S., appointed Senior Resident Medical Officer to the Royal Free Hospital, London.

* * *

NICHOLSON, G. B., B.A.(Cantab.), M.R.C.S., L.R.C.P., appointed Junior House Physician to the West London Hospital.

* * *

PATERSON, HERBERT J., M.A., M.B.(Cantab.), F.R.C.S.(Eng.), appointed Assistant Medical Officer to the Hospital of St. Francis, 145, New Kent Road, S.E.

* * *

ROBINSON, C.A., M.B., B.C.(Cantab.), appointed Senior House Surgeon to the Royal Hospital, Portsmouth.

* * *

SMITH, S. F., M.B.(Lond.), M.R.C.S., L.R.C.P., appointed Surgeon to P. and O. Steamer Shanghai.

* * *

STEPHENS, J. W. W., M.A., M.B., B.C.(Cantab.), appointed a member of the Commission to investigate the mode of dissemination of malaria.

* * *

STRICKLAND, C., L.R.C.P., L.R.C.S.(Edin.), appointed Staff Surgeon to H.M.S. Medea.

* * *

TURNER, P. E., M.B., B.S.(Dunelm), M.R.C.S., L.R.C.P., appointed House Surgeon to the Kent County Ophthalmic Hospital, Maidstone.

* * *

YELD, R. A., M.A., M.B., B.C.(Cantab.), appointed Assistant House Physician to the Metropolitan Hospital.

Births.

ACKLAND.—On the 3rd inst., at 33, Lansdowne Road, W., the wife of R. C. Ackland, M.R.C.S., L.R.C.P., of a daughter.

ADAMS.—September 20th, at 180, Aldersgate Street, E.C., the wife of John Adams, F.R.C.S., of a daughter.

DINGLEY.—September 24th, at 11, Upper Woburn Place, W.C., the wife of Allen Dingley, F.R.C.S., of a daughter.

SAUNDERS.—On August 13th, at The Limes, Grimston, King's Lynn, the wife of Allen Lindsey Saunders, M.R.C.S., L.R.C.P., of a son.

Death.

ARBOUIN.—On the 5th October, at Sunnymead, Southborough, Kent, Margaret Arbouin, widow of the late Samuel Arbouin, and last surviving daughter of the late John Abernethy, F.R.S.

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

St. Bartholomew's Hospital Journal.

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St. Bartholomew's Hospital Journal,

NOVEMBER 14th, 1898.

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

AT first sight it is a matter for surprise that at the close of a century so materialistic in many of its tendencies we should find ourselves surrounded by Christian Scientists, Peculiar People, and Faith-healers of all sorts on the one side, and by blatant quacks and charlatans on the other. And yet on looking at the matter a little more closely some of that surprise vanishes.

There is a good story told of Sir William Gull when at the height of his fame. Dining one evening, in the company of some medical men, and among them Dr. Martin, then Physician to this Hospital, he declared that some amount of quackery was essential to success in medicine. "It is an example of the old saying," he averred, "*Plebs vult decipi.*" The host asked for a terse English equivalent. "Oh, that's easy enough," said Dr. Martin quickly; "the public like to be Gulled." And disregarding the joke at Sir William's expense, there is much of truth in the old maxim.

Plebs vult decipi. They like to hear dogmatic statements concerning the unknown; they crave for definite prophecies on matters where nothing is certain. This is precisely what they get from Faith-healers and quacks, and this is what an honest medical man can so seldom give.

As Professor Kanthack has recently reminded us, "medicine is passing from an empirical system to a science." While it was purely empirical its practitioners could adopt the airs of a magician, at once mystifying and convincing with a portentously grave shake of the head. The modern medical man who takes the scientific standpoint makes his appeal to reason—an appeal always distasteful and generally disregarded. His very honesty leads him to confess ignorance, thus putting him at a disadvantage with the quack, to whom nothing is unknown. So that the vulgar turn with relief from the cautiously qualified words of the former to the absolute self-confidence and unbounded promises of the latter. The medical man of to-day often shows his own scepticism for drugs; he cannot be surprised that patients therefore turn to nostrums which, it is declared, "have never been known to fail." So that we ourselves are in part to blame, for descanting in the presence of laymen on our ignorance of natural law, till the lay mind is apt to forget that if we know little, he knows less.

Mystery-mongers and quacks, though apparently so widely different, really appeal to one and the same instinct—unreasoning faith. And they make their appeal in very much the same terms, as the following quotation from the text-book of the Christian Scientists, entitled "Science and Health," will show:—"Working out the rules of science in practice, the author has restored health in cases of both acute and chronic disease, and in their severest forms. Secretions have been changed, the structure has been renewed, shortened limbs have been elongated, cicatrised joints have been made supple, and carious bones have been restored to healthy conditions. What is called the lost substance of lungs has been restored, and healthy organisa-

tions have been established even where disease was organic instead of functional."

Such sentences bring the Christian Scientist into line at once with the Munyons, the Holloways, and the pink pill vendors of the day. And what shall we say of this extract from the same precious "text-book"?—"When there are fewer doctors, and less thought is given to sanitary subjects, there will be better constitutions and less disease. In old times who ever heard of dyspepsia, cerebro-spinal meningitis, hay fever, and rose cold?" Such talk would be humorous were it not so dangerous to the community. And again we read that cleanliness is merely a pernicious medical fad!

An able writer in the *Daily Chronicle* has recently called attention to an aspect of the question which is worth consideration. He says: "The peculiar danger in entrusting the care of the sick to women, it seems to me, lurks in the hankering of women after some unreasoning form of faith. For many years it was a faith in priests, then it was a faith in fashionable physicians, nowadays more often than not it is a faith in quack medicines. But within the past week we have seen that there is a still more extraordinary form of faith besetting women which is likely to make them a greater danger in the sick-room than ever. I refer, of course, to the "Christian Science" superstition. The believers in this cult and the priests who administer its rites are—notoriously—women. That was bound to be so *a priori*. For the cult appeals at once to two of the strongest instincts in woman—her instinct for religious mysticism and her dislike of all positive, experimental science."

Of the more nauseous aspects of "Christian Science" we need not speak here. Some of them are now *sub judice*, and it will be a matter for inquiry how a man possessed of sufficient mental calibre to write a book like 'Illumination,' the late Harold Frederic, came under its influence. Meanwhile we may note that a disbelief in the reality of pain is apparently consistent with a very firm conviction in the reality of money.

Plebs vult decipi. And while this frame of mind endures every form of impostor, whether Christian Scientist, homœopath, or advertising quack, will assuredly have his reward.

Reminiscences.

Being the Introductory Address to the 104th Session of the Abernethian Society, delivered on October 6th, 1898,

By Sir THOMAS SMITH, Bart., F.R.C.S., Consulting Surgeon to the Hospital.

MR. 'PRESIDENT, Ladies and Gentlemen,—Though I have the honour of addressing you at an introductory meeting of the Abernethian Society and its friends, I am told that I need say little or nothing to induce you to become members, since Dr. Calvert has already by his persuasive eloquence gathered into the Abernethian fold all but those who are swayed by invincible prejudice, and where he has failed I am little likely to succeed.

Though I cannot promise that at the ordinary meetings of the Society you will have the special attraction which the presence of ladies lends to our gathering to night, yet I venture to say this much: I can assure you that in attending the meetings of the Abernethian Society you will gain solid information, you will thereby take a more intelligent interest in your Hospital work, and you may acquire a facility in expressing your thoughts in words, and gain some experience in public speaking, an acquirement you will find of great advantage both in professional and social life.

I have been informed that the subject most likely to be of general interest would be some account of my recollections of this Hospital and the doings there in the early years of my connection with it. My friend who gave me this advice no doubt had in view the time of life at which I have arrived,—a time when one is only too apt to indulge in reminiscences, and too often to the discomfort of one's hearers; it has been named the time of anecdotage, an epoch in a man's life immediately preceding the onset of dotage. I am prevented from relating many experiences which would vividly illustrate the contrast between the past and present, by the consideration that they would involve personal reference to individuals, who, though long since passed away, may have friends or relations to whom my remarks might cause annoyance.

The lapse of nearly fifty years has wrought great changes even in an ancient foundation like St. Bartholomew's, which is slow to move, and which reckons its life not by years, but by centuries.

My first impressions, as derived from what I gathered at the time I entered in 1850 from the talk of the Hospital, was that I had fallen on evil days, that the good old days had passed never to return—the days of Pott, Abernethy, and Vincent,—that those were the times to have lived in. I heard tales of their unrivalled skill and almost superhuman knowledge, and laments that we should never see their like again. And this spirit seemed to me to pervade the Hospital, which was in a scientific sense given over to the worship of its ancestry. Even up to comparatively late times the cult had not died out, as evidenced by the public utterances of the late Professor Humphry, who on festive occasions within this Hospital was wont to give vent to his feelings in the impressive inquiry, "Where are the giants of the past?" which, we may take it, was not a genuine inquiry as to their exact locality, but an indication that in his search for giants among his contemporaries he had been unsuccessful, and had discovered nothing but pigmies.

I am certain that at the time of which I speak the progress of surgery was hindered, as it was much more in ancient times, by a superstitious veneration for bygone authority, and that advancement in knowledge was delayed by the belief that the dicta of our more immediate ancestors comprised the last words that could be said on too many problems in surgery. The principles of surgery were considered to be settled and unalterable, whatever the practice might be, and any innovation which did not square with these principles was theoretically condemned, and I think it was the influence of this feeling which prevented our late much-revered colleague Sir William Savory from ever heartily accepting the theory or adopting the practice of the antiseptic system.

One has lived to see that the then principles of surgery were not a fixed quantity, and I am almost inclined to say (not as a reproach) that it has even now no fixed principles, but that discoveries may be made in the future which will modify our views of the past, and that it will be a hindrance to the progress of knowledge in our art if it is assumed that the so-called principles of surgery are unalterable.

I trust that you will not imagine that I in any way under-estimate the skill, or wish to disparage the attainments or reputation of past generations of surgeons, for I gratefully acknowledge the debt we owe to them. But they lived in their day, and their skill and eminence in their walk in life must be weighed against that of their contemporaries, the men of their own generation, and not estimated by comparison with the attainments of a succeeding generation.

The last half-century has witnessed great changes in our Hospital, in its administration, in the School, in the Staff, in the nursing, and lastly in the patients; and these changes, in my humble opinion, have all been for the better. I can only briefly refer to some. As regards the Hospital buildings, they were black with age, sooty-black, as black as St. Paul's Cathedral. There were two lofty stone arches connecting the adjacent wings, one at the Little Britain gate, and the other at the corner of Mr. Cross's residence. The third floors were little better than garrets. There was a pump in the middle of the Square, where tradition said (and I believe with truth) that a former apothecary performed his daily ablutions in the early morning, unconscious of impropriety, and unembarrassed by the

thought that the primitive simplicity of his proceedings would ever be the subjects of remark at an introductory meeting of the Abernethian Society. The present surgery had not been built, and of course the present School buildings did not exist. There was a public thoroughfare through the Hospital from the Little Britain gate to a gate which no longer exists, but which stood where the present library now stands; this latter was a very serious nuisance, and it was closed, I believe, with kind connivance of the City authorities.

In 1850 the permanent Staff consisted of twelve—three surgeons, three physicians, three assistant surgeons, three assistant physicians; there was one obstetric physician who was not on the permanent Staff, was not elected by the Governors at large, and whose subordinate position was emphasised on public occasions by his having to sit at the Hospital dinners below the Staff. A resident apothecary, who still lives, Mr. Wood, discharged the duties now undertaken by five house physicians and two casualty physicians, as well as the superintendence of the apothecaries' shop—sufficiently onerous duties, you will allow. You will be glad to know that he still lives, and is in the enjoyment of good health and a well-earned pension. There has been a large and gradually increasing addition to the Staff in later years, and the number of the present Staff, senior and junior, as compared with the past, has increased from sixteen to forty-seven.

It may be interesting here to notice the method of succession to appointments on the permanent Staff which was in force almost up to the time I entered. On the surgical side a system of apprenticeship had existed, and no one was appointed who had not served as an apprentice to one of the surgeons. For this privilege he paid a fee of four or five hundred guineas, and in return he was exempt from fees for Hospital practice; he often lived with his master, was supposed to receive instruction, and had more than a chance of succession to an appointment on the Staff. In Mr. Stephen Paget's excellent life of John Hunter you may find recorded that it was this system that prevented Hunter from seeking a Staff appointment at this Hospital. On the medical side the custom existed of electing none but graduates of Oxford or Cambridge, and this tradition continues to have some force even in the present day. Dr. Baly and Dr. Kirkes were, I believe, the first physicians appointed having medical degrees other than those of the two older Universities. There was a very strong opposition on the part of the Hospital executive to their election, and very largely on this account, and they owed their success in no small degree to the powerful advocacy of the *Times* newspaper. On the surgical side Mr. Lloyd and Mr. Paget were, I think, the first to break down the monopoly of Hospital apprentices. The results of these four elections and the advance of public opinion gradually put an end to these obnoxious restrictions, and the system became obsolete, as it deserved to do, though it is possible that at some period of the Hospital's history it had its advantages, which are not apparent to us now.

I am told that in more remote times vacancies in the Staff were occasionally filled up in a still more objectionable manner. For elections were made sometimes on a royal mandate, or on what was equivalent to a royal mandate, a letter from the Sovereign to the Governors written on behalf of the candidate, recommending him for election. Mr. Cross has kindly searched the Hospital journals, and has been so good as to furnish me with extracts showing that at a certain period in the history of the Hospital it was no unusual thing for the reigning Sovereign to intervene in elections to the Staff. Six elections were made in this manner, the first being Harvey, on whose behalf James I applied for the reversion of the office of physician. I will read the extract from the Hospital Journal.

"*25th February*, 1608.—This day Mr. William Harvey Doctor of Physic made suit for the reversion of the office of the Physician of this house when the same shall be next void and brought the King's Majesty his letter directed to the Governors of this House in his behalf and shewed forth a testimony of his proficiency for the same place under the hand of Mr. Doctor Adkynson President of the College of the Physicians and also other doctors of the ancients of the said College. It is granted at the contemplation of His Majesty's letter that the said Mr. Harvey shall have the said office next after the decease or other departure of Mr. Doctor Wylkenson who now holds the same with the yearly fee and duties thereunto belonging, so that then he be not found to be otherwise employed, that may let or hinder the charge of the same office which belongeth hereunto."

"*14th October*, 1609.—This day Mr. William Harvey Doctor of Physic is admitted to the office of the Physician of this Hospital, which Mr. Doctor Wylkenson deceased late held, according to a former grant to him made, and the charge of the said office hath been read unto him."

Charles II recommended three, Prince Rupert one, and James II three. It is interesting to see that Charles II and Prince Rupert both recommended a candidate for the same vacancy. Moreover the Prince recommended the King's surgeon. Perhaps you will not be surprised to hear that the King's nominee won the day.

"*5th March*, 1666.—Whereas by the death of Thomas Woodall late one of the Surgeons of this Hospital that place being now void; and upon reading His Majesty's letter on behalf of *George Horsnayle*: and also Horsnayle's petition: and like wise upon reading the letter from His Highness Prince Rupert on behalf of *Antony Choqueny* His Majesty's Surgeon in ordinary and like wise the said Prince's Surgeon as also the said Choqueny his petition being read; and further Thomas Page Thomas Seele and Edward Cockrayne Surgeons presenting their several petitions for the said place which were all like wise read; this Court did then proceed and put the said persons severally to election by hands which of them should be admitted into the said place during the pleasure of this Court; the same place by the greatest number of hands happened upon the said George Horsnayle; it is thereupon thought fit and ordered that the said George Horsnayle shall be Surgeon to this Hospital in the room of the said Thomas Woodall and to have the salary and perquisites belonging thereunto during the pleasure of this Court; and his Charge was now read unto him."

"*20th November*, 1678.—Upon the suit of Frances Bernard and Nathaniel Hodges Doctors in Physic for the Assistant Physician's place of this Hospital now void by the death of Doctor Arthur Dacres and the Court having read their petitions and also a letter recommendary from His Majesty on behalf of the said *Doctor Bernard*, And being severally put to the Court the election fell by a general and unanimous choice upon Dr. Bernard. It is there upon ordered that the said Dr. Bernard shall be the Assistant Physician to this Hospital in the room of the said Doctor Dacres to hold and enjoy the same with all rights profits privileges and advantages thereunto belonging in as full and ample manner as the said Doctor Dacres did hold and enjoy the said place. And his Charge was now read unto him."

"*16th September*, 1682.—Whereas upon the death of Sir John Micklethwaite late Physician to this Hospital the said place being vacant, And upon reading His Majesty's letter of recommendation on the behalf of *Doctor Edward Browne* and likewise the said Doctor's petition And also of a letter of recommendation from the Elects of the College of Physicians for and in behalf of Doctor Samuel Collins and Doctor Charles Goodall the said persons being severally put to the vote the election fell by a general and a unanimous voice upon Doctor Edward Browne. It is thereupon ordered that the said Doctor Edward Browne shall be Physician to this Hospital in the room and place of the said Sir John Micklethwaite deceased. To hold and enjoy the same with all the right and privileges profits and advantages thereunto belonging in as full and ample manner as the said Sir John Micklethwaite did hold and enjoy the same place. And his Charge was read unto him."

The following entry is of interest, as it refers to a time when all the hospitals were under the management of Royal Commissioners:

"*20th August*, 1686.—At a meeting of the Commissioners appointed by His Majesty's Letters Patent for Government of the several Hospitals of this City."

"This day Thomas Gunter Citizen and Barber Surgeon of London being recommended to this Court from the Governors of St. Bartholomew's Hospital is admitted one of the Surgeons of the said Hospital in the room of Henry Boone deceased to have exercise and enjoy the said place with the salary and benefits thereunto due and belonging during the pleasure of this Court."

The following curious entry suggests that the Commissioners occasionally had qualms concerning the suitability of their own nominees:

"*17th November*, 1687.—At a meeting of the Commissioners appointed by His Majesty's letters Patent for government of the Hospitals of this City.

"This day Timothy Sutton Surgeon being recommended to this Court by letter from His Majesty is by this Court admitted Surgeon Assistant in the Hospital of Saint Bartholomew in the room of Robert Stevens who was this day admitted one of the Surgeons of the said Hospital to have hold exercise and enjoy the said place during the pleasure of this Court.

"Timothy Sutton Assistant Surgeon was appointed by the Governors to be careful in the business that shall be assigned him."

The College of Physicians also possesses certain rights which enable it to nominate two of their Fellows on the occurrence of a vacancy on the medical staff. But this nomination, though always

made, has been but once acted on. The following extract will explain how this right has been acquired:

"Dr. Baldwin Hamy, by deed, dated 13th May, 1672, gave certain lands in Essex to the College of Physicians in London, upon trust, that when there should be a vacancy in the office of physicians to the Hospitals of Saint Bartholomew, Christ's or Saint Thomas, the said College should choose two persons to supply such vacancy, who should be fellows of the College and doctors of physic, whose names should be sent to the governors of the hospital where the vacancy should be, and, in case the governors of such hospital should choose one of such two persons to be physicians there, a yearly sum of £40 should be given to such physician chosen for Saint Bartholomew; a yearly sum of £30 to such physician if chosen for Saint Thomas, and a yearly sum of £10 if chosen for Christ church; to be paid by the Treasurer of the college half-yearly. And he declared, that the then doctors of the three Hospitals should receive no advantage by his deed; and, until a new election should be made of other doctors in form aforesaid, the said college in the interim should have the whole benefit of the rents and profits of the premises."

It has been the practice—and it is still—upon a vacancy in the office of physician to the Hospital, to send notice thereof to the College of Physicians, with a reference to the above grant. The College have generally named two Fellows of their own body; the only instance in which either of the Fellows so named was elected by the Governors was that of Dr. Salusbury Cade, elected Physician October 14th, 1708. With reference to this election it is recorded in the Hospital journal that "Doctor Salusbury Cade after he was elected Physician to this Hospital, did promise and declare, that he would accept of Forty Pounds per Annum from the College of Physicians, London (the guift of Doctor Baldwin Hamy deceased) in lieu of the Salary paid by this Hospital."

At the present day the College of Physicians are wont to nominate two of their most senior Fellows, lest by any possible contingency their nomination should be accepted, and thus they wilfully deprive themselves of the pleasure they might derive by contributing £40 per annum to the honorarium of one of the physicians to this Hospital.

Mr. Lawrence, Mr. Stanley, Mr. Lloyd, Mr. Skey, Mr. Wormald, and Mr. Paget, of whom but one survives, formed the surgical staff in 1850 and for some years after. They had all been Hospital apprentices, with the exceptions of Mr. Paget and Mr. Lloyd. After the remarks I have made on this objectionable system of apprenticeship you may be surprised to learn that Mr. Paget was my master, and that I was myself a Hospital apprentice, though not on the terms that I have before mentioned. It was on my master's part an act of disinterested kindness and pure friendship, for which I am ever grateful, and which leaves me under an obligation which I can never repay. I was the last of the race of apprentices, and by the time I came forward as a candidate for an assistant surgeoncy the whole system had become obsolete, and the very existence of apprenticeship had been forgotten.

In half a century the social manners and customs of the whole community have undergone no inconsiderable change, and a change on the whole for the better. How great the change has been in the upper classes you may learn in a most interesting book recently published, called *Collections and Recollections*. In reference to this change I dare say that it has been no greater in the social life of our own profession than in that of the clergy, the legal profession, the army, and other classes. But as regards ourselves the change has been in the direction of improvement in manners, in greater temperance in use of stimulants, and in the employment of what one may call less forcible language. In my younger days there still lingered in London a few of our own profession, survivals of a ruder age, a bygone generation, who, without the redeeming characteristics of their predecessors, imitated and exaggerated, and endeavoured to perpetuate their faults and failings. Such as these adopted a roughness of manner towards patients, and a coarseness of language which even at that time were the subjects of unfavorable criticism, and would now no longer be tolerate.

If you want to know something of the social life of the lower sort of medical students in times gone by, you can find it described in *Pickwick* or in Albert Smith's work, who was himself a medical student; and though these descriptions are caricatures, yet I am afraid they may have a small but a solid basis of truth. The manners and customs of medical students have undergone such a change that I claim for these gentlemen now a higher standard of morality and propriety, and a far greater devotion to work than any class similarly situated. So far as I am capable of judging, even among the more disreputable minority, there is a great improvement in this respect, and rational amusement, athletic exercises, and out-door sports have largely displaced carousing and drunken orgies. But fifty years since there was neither football, tennis, hockey, nor golf, and the superfluous physical energy of young men was apt to display itself in many objectionable ways. There always were and there always will be among us, as there are in all professions, certain fellows of the baser sort, without principle, and destitute of a sense of moral responsibility. One such will serve as an illustration. I had forgotten his existence until I met him a few years since on a steamboat. He introduced himself to me as a student of former years when I was a Demonstrator of Anatomy. He had been practising without a diploma, having never qualified. After a few preliminary remarks he addressed me as follows:—"Ah! Mr. Smith, we were sad wild dogs when we were young, were we not?" (this, I regret to say, greatly to the delight of my son who was present). Having thus broken the ice, and claimed, and to his own satisfaction established, a companionship with me in his youthful indiscretions, he asked for the loan of fifty pounds to enable him to obtain a diploma. Through the help of friends he was able to present himself at more than one examining board, but failed to get qualified, and the last I heard of him was that he had destroyed his identity by changing his name, and had purchased the diploma of a deceased member of the College of Surgeons. He announced this in the following terms to one who had befriended him; after thanking him for his kindness the letter continued, "You will be glad to learn that I have at last succeeded in purchasing the diploma of a deceased medical man." And I have no doubt that the fact that its original possessor had no further need for it was to his mind a sufficient justification for the step he had taken. You must not suppose this culprit to be a fair specimen of a medical student of former days, but rather an example of the very lowest type of student; and it may be that such an one as this is not so blameworthy as would at first appear, but rather that he suffers from a congenital deficiency, and is born without moral principle, just as another may be born without fingers or toes.

There were in my time many—and very many—who led exemplary lives and worked steadily, and are now honoured members of our profession. Some worked wisely, some not wisely, but too hard. I call to mind in this connection a friend of my own, a good fellow he was, whose whole waking hours were devoted to study. He took so little sleep that at last Nature took her revenge on him, and night after night he would fall asleep at his work, waking only in the early morning to find his head gently resting on the open pages of Quain's *Anatomy* or on those of Ellis's *Anatomy*, which he so dearly loved. This occurred night after night, until, driven to desperation, he threatened to blow his brains out; but from this unhappy fate he was rescued by the timely intervention of his landlady, and it was in this wise:—To aid him in his work he surreptitiously carried to his lodgings certain objects which more properly should have adorned the dissecting rooms, and these he kept—some up the chimney, and others in a stone jar in spirit. It being necessary to change the spirit and to assort and reject some of his treasures, he chose the dead of the night for his ghastly work, and cautiously opening his bedroom window, he poured the fluid contents of his jar into the back yard of the house, shut down the window, and retired to bed. You will allow this was a well-arranged plan, and carried out with becoming caution; but unfortunately a lady of the household had selected the same evening for meeting the object of her affections in the same back yard. I will not enter into painful details, but I will only remark that if the fire of true love could be quenched by any material catastrophe, it must have burnt very low in the breasts of those lovers at their parting that night. My friend went to bed all unconscious of the situation, but remained so only until next morning, when there came to him a fearful awakening to the horrors of his position in the person and presence of his indignant landlady, who was only pacified by a humble apology, a new dress for her daughter, and a promise of a reformation as regarded his habits of work.

I believe, though I do not know, that social life within the Hospital has undergone a change in late years. The migration from east to west has been steadily going on with increasing rapidity, leaving the City almost deserted as a place of residence, and times have changed since the College of Physicians was in Newgate Street and Mr. Lawrence lived in Warwick Lane; but in the nearer past the Treasurer lived within the walls of the Hospital, and a small but pleasant social circle was formed by the residents in the immediate neighbourhood.

As a young man I greatly appreciated the hospitality of the then Treasurer, who in winter-time gave a dance once a fortnight. There were other residents also to whose kindness I was indebted for much innocent enjoyment. Mrs Wood, the apothecary's wife, in addition to other entertainments, at that time used to give an informal

dance in the apothecary's shop on New Year's Eve, the proceedings being terminated by a sprat supper, the sprats being cooked in what we may call the ball-room. It had a stone floor, and was furnished with the appliances of an apothecary's shop; it is now, I think, the waiting-room. I mention these things as an illustration of the innocent pleasures of a passing and nearly passed generation, when our tastes and habits were simple and uncorrupted by West-end associations. I scarcely think that the most vivid imagination here could picture to itself a repetition or continuance of these frivolities under the patronage of our present Resident Staff, yet before my day such things must not have been unusual, for I received from Sir William Savory the tradition that a certain lady, then resident in the Hospital, danced the polka exquisitely. In a recent work of fiction by a popular author the matron of a London hospital is described as opening a ball in the operating theatre, giving her hand to the senior surgeon for the first dance. This hospital is not obscurely indicated in the scene described. Whatever hospital the author had in view, I have no hesitation in saying, without fear of contradiction, that our honoured Matron, since her connection with this Hospital, has never danced in the operating theatre.

As another example of the homely and simple way in which our predecessors lived in times past, I may mention that I have heard the late Sir William Lawrence relate that Mr. and Mrs. Abernethy, when they went to the theatre, walked there, sat in the pit, and walked back to Bedford Row, generally purchasing their supper (in the shape of a lobster) on their way home. Can you conceive one of our senior medical officers walking home from the pit of a theatre with a lobster under one arm and her ladyship on the other?

In 1850 the teaching Staff, excluding lecturers, was limited to two demonstrators and one tutor who coached for the London University, and having in view the subject to be taught and the nature of the examinations I think they were enough. The Staff has now increased to forty-five, and having in view the number of subjects to be taught and the nature of the examinations, I think they are none too many. The subjects taught in those days were, for the College, Anatomy and Surgery, for the Apothecaries' Hall, Medicine, Midwifery, Physiology, Botany, Chemistry, and Toxicology, a formidable list; but for these last named it was usual to go outside the Hospital for instruction to Mr. Power, an excellent teacher, who held his classes at Exeter Hall. He had a great reputation, and he deserved it. His pupils read no books, but took notes of his lectures, and learned the notes by heart, and once a week or more often he examined his class *vivâ voce*. He is reported to have said he could pass any intelligent cabman in six months if the cabman would give his mind to it, and I believe he could.

Two years and a half was the ordinary time occupied in qualifying for both examinations, and it was sufficient for a student of average ability. Twice the time is now required, and it is none too long. The examination lasted one hour, and it was *vivâ voce;* it was a practical one in a thorough sense, and if a man had attended to his hospital work diligently he could pass in surgery, nor was it necessary to read a book on the subject,—at least I can speak from personal experience, for I never read a book on this subject until after I was qualified.

There being no junior appointments in the School but the demonstratorships of £50 a year, for some time one's only source of income consisted in coaching for the College of Surgeons; and as there were but ten examiners who held lifelong appointments, one got to know pretty surely the questions likely to be asked, and also the stock of questions belonging to each examiner. Those were halcyon days for both grinders and the ground, and I speak gratefully of the then existing state of affairs. It provided me and many of my contemporaries with the necessaries of life, and for a time this was my sole means of subsistence.

Considerable thought and ingenuity had to be expended in getting some of the weaker vessels through, and the crucial test of one's skill was in passing a married man; and the triumph was in passing a married man with a family, such an one I call to mind, who after many failures went through the College literally on his knees. After more than one rejection he determined to try a last chance. It was obvious he could not pass on his merits, and that he could not satisfy the critical faculties of his examiners. It was therefore settled that after doing his best in the examination, before he left the room he should make a strong appeal to their mercy and philanthropy on the score of his wife and family. This he did, throwing himself on his knees and refusing to rise until he received some indication of a favourable answer. He passed and went into practice, and met with but a very moderate success. Poor fellow! he has since died in straitened circumstances.

At the time I am speaking of there was yet another device for passing the College examination: it was by means of what was called a special court. A certain number of candidates for examination by paying extra fees could procure this special court. An extra meeting of the court of examiners was held to accommodate these gentlemen; the court of course received the extra fees, and I am not aware that candidates were generally rejected on these occasions. This method was expensive, but not seriously so, and the money was well laid out. There was a halo of glory about the announcement in the daily papers that at a special court So-and-so had been admitted a member of the Royal College of Surgeons. The public, reading the announcement, would think better of a man admitted at a special court than at an ordinary court, and would conclude he was no ordinary creature, and in this conclusion they would not be far wrong.

I will read to you an extract from the code of instructions to be observed by those preparing for examination, taken from Albert Smith's *Medical Student*:

"1. Previously to going up take some pills and get your hair cut. This not only clears your faculties, but improves your appearance.

"2. Do not drink too much stout before you go in, with the idea that it will give you pluck. It renders you very valiant for half an hour, and then muddles your notions with indescribable confusion (in this state the processes on the bones and the shapes of certain crystals become very difficult to determine).

"3. Put your rings and chains in your pockets, and if possible mount a pair of spectacles. Should you wear stand-up collars, turn them down; it gives you an intelligent and hard-working appearance.

"4. On taking your place at the table, to gain time drop your spectacles, and feign to be intensely frightened. One of the examiners will then rise to give you a tumbler of water, which you may with good effect rattle tremulously against your teeth.

"5. Should things appear to be going against you, get up a hectic cough, and look acutely miserable—which you will probably do without trying.

"6. When you have passed, say you were complimented by the Courts," and so on.

You must not imagine that two and a half years spent in London was all the medical education men received at that time. Every one of these students had served an apprenticeship to a medical man before coming up. They had attended midwifery, dispensed medicines, could write prescriptions with facility, had charge of patients, and very many possessed a good practical knowledge of their profession. They came to London chiefly to learn anatomy and physiology, to attend lectures, to see the practice at the London hospitals, and to obtain a diploma. The whole process was called "walking the hospitals." This conventional expression too often accurately defined the process by which men were supposed to gain a knowledge of the treatment of disease. The idler sort walked round the wards with the surgeon of the week in large numbers,—in such numbers that not more than a tenth of the number could see or hear anything; they walked into the out-patient room, stood behind the assistant surgeon's chair, whispered to one another, and after a time walked out again. They never missed an opportunity of seeing an operation; indeed, the operating theatre was generally crowded. There was but one operating theatre, and it was sufficient for the needs of that day, and one regular operating day when the whole surgical staff attended. The occurrence of an operation for an accident or some surgical emergency on any other day than Saturday at once interrupted all other work on the surgical side of the Hospital, and every one gleefully rushed to the theatre as a pleasant diversion from the monotony of a lecture or dissecting-room work.

The method of clinical teaching at this time was entirely different from that pursued at the present day; indeed, I cannot remember that I was ever called upon by my surgeon to make a diagnosis or suggest a treatment, nor can I call to mind that others were tested in this way. It was much less personal, and almost exclusively by lectures; there were but two demonstrators in the School—in the dissecting-rooms. But I think I may say that now-a-days in the wards all the senior Staff are demonstrators, while in the out-patient rooms the assistant physicians and assistant surgeons act in the same capacity.

This is not the time or place to refer particularly to the vast improvements that have taken place in surgical proceedings in the last half-century, but one cannot look back at the past without the deepest regret when one thinks of the lives that were lost through want of knowledge. Many here will appreciate the drawbacks to success that attended the practice of a surgeon who was also a lecturer on pathology, and who freely handled morbid specimens fresh from the pathological theatre, and who had for an assistant a

demonstrator of anatomy, in the days when the dissecting-room was not as it is now. Such was Mr. Paget, and such was your humble servant. Nor were we exceptions in the matter of septicism; all were alike, some less and some more surgically uncleanly. The more scientific a surgeon, and the more earnest in the pursuit of knowledge, the more likely was he to carry mischief to his patient, and for obvious reason. Though doubtless the mortality after operations was much larger in those days, it was not so great as you would imagine. Operations also were comparatively seldom performed, and a large number that are now matters of common practice were impossible, and were not even attempted. In looking back on those days one is chiefly struck by the slowness of wounds to heal, the abundant suppuration, and the constitutional disturbance that followed operations. We were, however, spared one cause of anxiety that haunts one now-a-days; there were no thermometers, and therefore no ascertainable temperatures, and we were in blissful ignorance of impending calamities.

Among the wonders of a wonderful century Wallace has rightly included Lister's antiseptic treatment, and we take a pleasure in honouring Lord Lister with all honours, and take an honest pride in claiming him as an Englishman, though it has been a surprise to some that he was not a Scotchman—and the belief of others that he is of that nationality which includes so many eminent men. But it was in Scotland that the antiseptic system was born, and it was the exceptional unhealthiness of a Glasgow hospital that led to its conception. Had Lister been connected with a more sanitary institution, or perhaps with a London hospital, the antiseptic system might even now have been undiscovered.

If one were asked what is the greatest and most far-reaching change that has come over the Hospital in its social aspect within the last fifty years, I think that answer would be—the introduction of educated ladies into every department that has to do with the treatment of patients. The emancipation of women, as it is called, while of great advantage to the community at large, has especially benefited St. Bartholomew's and other hospitals. Nursing the sick has been raised from the position of a menial and despised occupation, to be undertaken only by infirm and broken-down women, to the dignity of an honorable and honoured profession, to which young, gentle, and educated women are proud to devote their lives: but with a certain reservation, to which I will subsequently refer.

You scarcely need to be reminded that Miss Nightingale was the pioneer in this movement; it was she who at the time of the Crimean war startled the proprieties and conventionalities of society by going to the seat of war and undertaking the duties of a nurse; it was she who finally overcame all prejudice and opened the nursing profession to ladies, to the great advantage of all concerned. Of all professions and occupations which are now open to women there is none which, to my mind, is more suited to their peculiar capacities, and in which they are more useful to the community, than that of nursing. Nor does it altogether preclude their fulfilling that more responsible and higher duty of womanhood assigned to them by nature. They are bound by no irrevocable vows to their profession, but should a favorable opportunity occur, and they are minded to change their state, they can embrace that opportunity, and, with the matron's leave, perhaps something more concrete than an opportunity. It perhaps is greatly to be regretted that no proper nursing home exists at this Hospital, that there is no suitable building for the accommodation of nurses; and it is said that the delay which has occurred in providing a comfortable home has compelled some to seek for themselves a home elsewhere, and has rendered others less indisposed to listen to pressing invitations to abandon their profession.

The presence of educated and refined women in every department of the Hospital where the sick are tended is an incalculable advantage not only to the patients, but also to those who minister to the sick in other capacities than that of nursing—I mean the medical staff and the students. It has exercised a refining influence on their morals, their manners, and their conversation; and I speak thus of what I know, and bear witness to what I have seen.

The introduction of chloroform as an anæsthetic for operations took place a short time before I entered, and at first, before its risks were appreciated, it was not infrequently used as a plaything in other than surgical circles; and, indeed, it was administered even to ladies in drawing-rooms and after dinner. However, the occurrence of certain minor catastrophes soon put an end to its use in general society and at social gatherings, and limited its employment to legitimate purposes. Even at hospitals some little time elapsed before the risks attendant on its administration were recognised, and in this Hospital no special administrator was appointed until the year 1852. Meantime the duty was assigned to the house surgeon or dresser of the patient. I well remember the first fatal case, when there came a rude awakening from a fancied security from all risks to a knowledge of the attendant danger. There was, of course, an inquest; and when the unfortunate dresser who had administered the anæsthetic was asked by the coroner how he would recognise that any one was completely under the influence of chloroform, he replied in his agitation, "When the patient has ceased to breathe." One of the earliest, and as I now know the most responsible of my duties as a young man—and a very young man—was the occasional administration of chloroform, and I little knew the responsibility I was incurring. At that time in all London there was but one recognised administrator—Dr. Snow, and one seemed sufficient for the requirements of the day.

With the spread of education to all classes the prejudice that existed against hospitals among the poor has entirely disappeared, and they no longer regard a hospital as a place where they cut you up—a common expression in past times. The difficulty now-a-days is to keep them out of a hospital, and this applies especially to those whose social position scarcely justifies them in availing themselves of hospital treatment. In former times it was no uncommon thing for a patient to refuse consent, even to an urgent operation which offered the only hope of recovery, and thus lives were lost which might have been saved; but except in the case of Polish Jews, this now rarely occurs. Necessary operations are submitted to without a murmur; indeed, when in extremity, patients exhibit an almost blind confidence in operative measures as able to save life under any circumstances.

And now I have nearly done with the past, but in taking leave of it I venture to quote the words of one who lived in the very distant past, and was reckoned a wise man: "Say not thou what is the cause that the former days were better than these, for thou dost not inquire wisely concerning this;" and indeed we will not, we cannot say of our times, our Hospital, our profession, that the former days were better than these: they were not nearly so good. There has been a steady improvement in manners and morals, an advance in intellectual attainments and scientific discoveries, and most notably a leap forward in medical knowledge, and, indeed, in all knowledge that conduces to the preservation and comfort of life.

And if we ask ourselves, What of the future? to what may we look forward? I would venture to answer, look back at the progress in the near past, and be thankful that the retrospect gives a sure and certain promise of a better future. It is to men and women of your generation that the future belongs, and it will be what you make it for yourselves and others in respect of advance in knowledge, in refinement of morals, and in all that concerns the welfare of the general community.

On Diagnosis.

A Clinical Lecture on the Diagnosis of the Common Form of Cancer of the Breast.

By HENRY T. BUTLIN, F.R.C.S., D.C.L., Surgeon to the Hospital.

No Help from Special Instruments.

GENTLEMEN,—In order to illustrate the application of the rules which were laid down in the first of these lectures, I propose to take the diagnosis of the common form in which cancer of the breast appears; and for several reasons. First, for the importance of the subject; second, because rarely a week passes but there are one or more cases in my consulting-room or wards; and again, because there are no special instruments or methods on which we can fall back in the making of the diagnosis, unless it be that now and again a portion of a tumour is removed for microscopical examination before a large operation is decided on. Otherwise we are no better off in respect to this diagnosis than former generations of surgeons.

I have used the expression "common form in which cancer of the breast appears." For at first it was in my mind to deliver a lecture on the diagnosis of tumours of the breast; but that was too large a subject. Then I thought it should be on cancer of the breast; but when I came to deal with it, I found that would be more than I could put into a clinical lecture. So I determined to limit the subject to the diagnosis of those cases in which the disease appears in the form of *a definite lump* in one or other part of the breast.

Importance of a Knowledge of Pathology.

You can scarcely believe how much assistance is derived in most cases from a good knowledge of the pathology of the disease, and of those for which it may be mistaken. For instance, here it is proper to keep in mind that a carcinoma of the breast, even when it takes the form of a definite lump, is not encapsuled, but is essentially an alteration of a portion of the mammary gland, from which it is not separable. Although it is first formed in the glandular epithelium, it tends to spread beyond the gland along the lines of fibrous tissue, particularly along those bands which are called suspensory, and which attach the gland to the integument in front and to the pectoral fascia behind. And as it contracts and tightens these fibrous bands, it draws the skin gently down towards the tumour, and produces the dimpling of which I shall presently have to speak. If the tumour lies beneath the nipple it produces a similar effect on the milk-ducts, and so causes retraction of the nipple. Extending backwards, it slowly fastens the tumour to the pectoral fascia. The lymphatic vessels sooner or later contain what we may for the moment call the "juice" of the cancer, which is thus carried into the axillary glands, or to those above the lesser pectoral muscle, or to both, and then to the glands above the clavicle in the posterior triangle of the neck. But, in addition, this "juice" may ooze back into the lymphatics of the skin, and be here and there arrested, and form the centres of little lumps and plaques of cancer. These and the primary tumour involve the skin, often to a large extent, and ulceration may take place, the base and sides of which are hollowed out in the substance of the cancerous growth. Of the further course of the disease it is not needful now to take note, for you have for the present quite enough for the purpose of this lecture.

Diseases which may and Diseases which ought not to be mistaken for Carcinoma.

Were I to ask what diseases are likely to be mistaken for carcinoma, I feel sure I should be told sarcoma and adeno-fibroma. But this is so far from being correct that I feel sure I may say that no person who is at all skilled in the diagnosis of tumours of the breast would be likely to mistake either a sarcoma or an adeno-fibroma for carcinoma. The diseases which are almost always mistaken are simple cysts and collections of cysts, and certain indurations, which are sometimes fibrous, sometimes of mixed structure, but often of somewhat uncertain pathology. I should add to these, from my later experience, tubercle, for I have met with three instances in which tubercle of the breast was mistaken for malignant disease, and in two of the three amputation of the breast was performed in the full belief that the disease was carcinoma.

Supposing now a person brought or sent to you with a tumour of the breast, you take the points of the case according to the scheme which was laid down in the introduction to these lectures. First, the

General Aspect of the Patient,

and the age; knowing, in respect to age, that carcinoma is very much more common after forty years of age, and that it is only very rarely seen in women under thirty, and practically never in women under twenty years of age.

You notice whether the patient looks well or ill. Do not expect to see a cachectic or even delicate-looking person. When the disease is in an early stage the patient may look just as well as any woman of her age, and may fully bear out the observation of my old master, Sir James Paget, that many cancerous patients "are, for their age, in a full average of general good health." If a patient looks very ill, and the disease is in an early stage, you must search for the cause of the ill-health in some other condition than the cancer for which you are consulted. Of course, a woman may be, and often is, temporarily out of health from the distress occasioned by the mere presence of the tumour. But that is only a passing condition, very different from permanent ill-health.

Social position appears to have no influence on the occurrence of cancer of the breast. But a very large majority of the patients are married women or widows.

The History

of the case will probably be very different, in one respect, from what you would expect. The general impression seems to be that the breast is painful for some time before the tumour is discovered, and that the attention of the patient is first called to the disease by pain. So far from this being the case, I believe the very large majority of cancerous tumours of the breast are discovered quite by accident. When the hospital patients used to tell me this I thought that they were very unobservant, or that they were not telling me the truth. But the same history is repeated to me so frequently by educated persons at the present time, that there can be no question that it is correct. Yet the tumour is in many cases as large as a large walnut or a Tangerine orange.

In some instances there is a distinct history of injury preceding the occurrence of the disease. One lady told

me she was watching a game of tennis, when she was struck sharply on the breast by the tennis ball. The breast was severely bruised, and as the bruise disappeared the cancer tumour seemed to take its place. The history of previous inflammation or suppuration in the same breast is thought to have a certain value in the diagnosis of the case.

The absence of a family history of cancer is of little importance. Nor is the occurrence of cancer in one member of the family of serious import. But if cancer has occurred in several members of the family, especially on one side (the father's or the mother's), that makes the probability of cancer greater.

Examination of the Breast.

Mr. Bryant recommends that for this purpose both breasts should be exposed, and the patient should be placed in a good light. You may carry this out in hospital practice, but you will find it very difficult to do so on patients who consult you, generally for the first time. It is often at first difficult to obtain a proper examination of the affected breast. But with a little persuasion and gentleness you will be able to examine both sides separately, and to compare them sufficiently for your purpose. Their relative size and position on the chest wall are compared. You search first with the eye for any actual prominence, for plaques or nodules in the skin, for any depression, however slight, for enlarged and full vessels, and particularly for any alteration in the condition of the nipple, retraction, either complete or partial. From what has been said of the pathology of the disease, you will appreciate the value of dimpling of the skin. This may not be apparent until an attempt is made to draw the skin up off the surface of the tumour; it can easily be raised, except at the central part, where the dimpling becomes pronounced. In a doubtful case its importance as a sign of cancer can scarcely be too highly estimated. It is not so sure a sign of cancer as the plaques in the skin; but it is often more useful because it is an early sign.

Of retraction of the nipple, I would point out that it takes place when the tumour involves the milk-ducts. Also that the nipple may be retracted without any apparent cause. Sometimes it is always so, and only on one side. And I have seen a lady in whom the retraction of the nipple came on gradually about the climacteric, much to her own alarm and that of her doctor. She was brought to me for an opinion, and I failed to find any tumour or cause for the retraction. She was afterwards seen by Sir James Paget, who told me that he had seen several similar cases, and that the retraction in them had no serious significance.

After looking, you feel the breast. And you must be careful not to MAKE a tumour by the way in which you make your examination. If a part of a normal breast is taken up between the thumb and fingers, there seems always to be an induration there. But press the breast back against the wall of the chest, and the tumour vanishes. You would scarcely think it possible that a medical man of any experience should imagine the presence of a tumour where there is none. But I have seen at least six patients who had been advised to have the breast removed for cancerous tumours which had absolutely no existence. The tumour, of whatever kind, should be clearly felt between the integument in front and the wall of the chest behind; the ribs can be easily felt through the normal breast. A cancerous lump is almost invariably hard, often very hard, nodular, continuous with the mammary gland, moveable, perhaps freely moveable, but only with the part of the gland in which it lies, seldom painful, and seldom even tender.

These physical characters, which are so easily perceived in a thin patient, are very difficult to make out in a very stout person, especially when the tumour is deep-seated in the breast, and is covered by a thick layer of fat. The induration and nodular surface may be quite obscured.

Naturally, on the examination of the breast follows the

Examination of other Parts.

And first of the axilla and intervening tissues. In the examination of these parts bear in mind that the normal breast extends round towards the axilla in a kind of spur, which passes over the border of the pectoral muscle and feels to the fingers like a broad knotty cord or skein of cords. This is frequently mistaken for enlarged lymphatics, and is thought to be a sign of cancer. It is but a part of the normal breast. The axillary glands are generally enlarged within a few months of the first discovery of the disease, and may be felt much earlier than this. Unfortunately they may be present, but not perceptible to the touch. This is especially the case in stout patients. The best way of finding them is to feel deeply from the apex of the axilla down along the wall of the chest, when they can be often felt rolling between the fingers and the ribs. The examination of the glands is of the greatest importance. Whether they are large or small, whether they move freely or are fixed, they are always hard. In cases in which the symptoms presented by the primary disease are very doubtful, so that you may be in two minds between cyst and cancer, the hard fixed glands in the axilla tell the tale of cancer to a certainty. And of one thing you may be sure; at an operation you are certain to discover many more diseased glands than you could feel before it.

Prominence of the pectoral muscle and fulness of the infra-clavicular regions probably indicate affection of the glands; and the lower part of the posterior triangle of the neck must be carefully searched for glandular enlargement.

Every part, from the breast up to the posterior triangle of the neck, should be carefully compared with the corresponding parts on the other side. I cannot think why this is so often neglected. The actual clue to a difficult diagnosis may lie in the parts on the other side of the body. A lady was suffering from a tumour of the left breast of very suspicious nature. I could not make up my mind whether it was cancer or a cyst enclosed in thickened mammary gland. But in the other breast, which she believed to be healthy, I discovered two similar lumps of the nature of which there could be no doubt; and these led to the correct diagnosis of the suspected tumour. So, too, I have several times seen patients with a tumour in the breast which did not feel to be cancerous, but with enlargement of the glands in the axilla, which had cast suspicion on the primary affection of the breast. But in the other axilla were precisely similar glands, so that the importance of the glandular enlargement was completely discounted.

In every case of suspected mammary cancer the examination should include a general survey of the body, so far as this can be managed. The condition of the liver and lungs especially needs to be known, for these are the parts in which secondary growths are by far most likely to occur, although they are very rarely affected at the period during which the diagnosis is still in question. The more complete such an examination in a difficult case, I am sure the better. If it is not needed for the making of the diagnosis, it may have a great deal to do with the question of operation.

The Diagnosis

may sometimes be made by the direct or positive method. The symptoms are so clear that they can scarcely by possibility belong to any other kind of tumour than cancer. A hard, nodular tumour in one breast, of about two or three months' duration, continuous with the mammary gland, becoming adherent to the skin, so that it is deeply drawn in over the tumour, or associated with retraction of the nipple, in a woman between fifty and sixty years of age, is almost certain to be a carcinoma. And the probability is greater, if there is an absence of pain and almost of tenderness, if the tumour was observed in the first instance by accident, and if there are enlarged and hard glands in the axilla. It is difficult to understand how such a tumour could be other than a cancer.

But in many cases the diagnosis can only be made indirectly. For a cancer of the breast may be covered by a layer of adipose tissue, which may quite conceal its hardness and knotty surface. It may be deep-seated, and so produce no dimpling of the skin or retraction of the nipple. And there may be no perceptible glands in the axilla. To distinguish it from a cyst may be impossible. Deep-seated cysts in large breasts seldom fluctuate, and are often scarcely perceptibly elastic. An induration of the breast which is not cancerous may be precisely like a carcinoma; for, after all, a carcinoma is but a special induration of a portion of the mammary gland. And I have seen two cases of tubercle of the breast which were so precisely like carcinoma in every respect that the possibility of tubercle never entered my mind.

To help you in these difficult cases, bear in mind that the chances are you will never, in the whole course of a long experience of surgery, meet with more than one case in which tubercle of the breast resembles cancer; probably not with one case. And if you do make the mistake no harm is done, for the best treatment for tubercle is the free removal of the disease. Even an incision into the tumour will not always help you under these circumstances. Some years ago I diagnosed carcinoma of the breast and glands in a lady just over forty years of age. Before removing it I cut into the tumour, and thought that it was cancer. And after the operation I cut out a piece of the growth for microscopical examination, and even then thought it to be cancer. Had it not been for the microscopical examination I should never have known, to this day, that the tumour was tubercle, not cancer.

Indurations, unless they are such as are likely to become cancerous, are rarely single. You will generally find more than one of them in the affected breast, and both breasts commonly contain them. So far as I know, they are not associated with dimpling of the skin, or with retraction of the nipple, unless they are acute and about to suppurate, in which case they are not likely to be mistaken for cancer. These indurations are more often painful than are the cancerous tumours.

Last, a cyst usually offers a sense of elasticity which does not belong to carcinoma. There is not infrequently a history of variation of size, and of pain with a sudden increase of its size. The glands are often enlarged in such cases, but they do not feel like cancerous glands. And again, cysts are rarely, if ever, associated with dimpling of the skin.

In going over the diagnosis of a tumour with my class I observe a certain formula in my questions:

Is the tumour fluid or solid? if solid,

Is it inflammatory or non-inflammatory? if the latter,

Is it an infective tumour (tubercle or syphilis) or a true tumour? if the latter,

Is it innocent or malignant?

After excluding one by one all but the malignant tumour, the positive reasons for believing it to be malignant are drawn up in form, and put as forcibly as possible.

So far as the doctrine of chances is concerned, a solitary tumour of the breast in a woman over five-and forty years of age is infinitely more likely to be carcinoma than any other disease.

The Confirmation of the Diagnosis.

We are accustomed in this Hospital to confirm the diagnosis in every instance in which there is the least doubt by an incision into the tumour before the operation is proceeded with. The rule is a wise one, and has saved us

from many mistakes, and from the performance of larger operations than are necessary. Even this precaution will not always help an inexperienced operator, and I have sometimes been astonished at the confidence which is reposed in it by the members of my class, and have wondered how far any one of them, acting alone and on his sole responsibility, would be able to decide on the nature of a disease felt or dimly seen through an incision. I do not know whether any work on surgery would help you much in this matter; for it seems to be assumed by most writers that the nature of a tumour is instantly evident when it has been opened. It certainly is so if the disease is a cyst, but not otherwise. In fact, we who are constantly engaged in operating are sometimes still in doubt after a tumour has been cut into. I have told you how I once thought tubercle was cancer, and I am not sure I might not make the mistake again. We generally recognise the cancerous nature of the disease by the manner in which the tumour cuts—hard and crisp, by the absence of capsule, and by the slight drawing in of the surrounding tissues, by its opaque and rather yellowish surface, which is more often concave than bulging into the incision, and by the presence of more decided yellowish spots or patches on the cut surface of the section. Several times of late years, where an incision has left me still in doubt, I have cut out a portion of the tumour for microscopical examination, closed the wound, and amputated at the end of a week or ten days if the disease proved to be carcinoma. Let me say that the knife with which the exploratory incision is made should not be used during the operation; for although it is extremely difficult to inoculate cancer, even in an individual who has it, it is well not to run even a remote chance of doing so.

Of the desirability of this preliminary incision I have seen more than one excellent proof. Many years ago, when I was constantly engaged in examining tumours which had been removed by other people, an old pupil of the Hospital sent me a breast which he and his senior partner had removed for cancer. They sent it to me just as it had been removed. Before cutting into the tumour I felt it, and thought that it contained fluid. I then cut into it, when lo! a quantity of clear fluid ran out, and the "cancer" disappeared. I was shocked at the time to think so needless a mutilation had been practised for the cure of a simple cyst, and I wrote to the operator telling him what had been found, and advising him in future to make an incision into a tumour before he began to remove it, as we do frequently here at the Hospital. At the same time I advised that he should keep his own counsel, as the mischief had been done, and there was no means of remedying it; that he should not even tell his partner, who did not operate himself, and the knowledge of the mistake was not likely to be useful to him. I also told my friend that he would certainly achieve a reputation, which he would not deserve, for curing cancer of the breast by operation. This, I am grieved to say, has come quite true; for not long ago I met the senior partner, and asked him whether he remembered this woman, and whether she was yet alive. On which he rubbed his hands and said, "Of course I do. She is perfectly well, and the cancer has never returned, although it is many years since the operation was performed."

Dentistry for Medical Men.

By R. C. ACKLAND, M.R.C.S., L.R.C.P., L.D.S.Eng.,
Assistant Dental Surgeon to the Hospital.

I. TEMPORARY RELIEF OF TOOTHACHE.

THE general practitioner is often called upon to relieve toothache whilst treating his patient for a more primary and more serious trouble. In these days more often than not he can obtain the services of a dental surgeon. For those patients in treating whom from one cause or another it is desirable to do nothing of a permanent or orthodox nature, it is perhaps useful for him to possess some simple and convenient means of arresting pain. Such patients may include the highly nervous, patients suffering from some systemic disease, as acute phthisis, heart affection, delirium, &c. Women during pregnancy—at which time they seem particularly liable to toothache—will often seek relief from their medical man rather than face the dentist's chair. There are, no doubt, many others for whom he may wish to find relief with as little disturbance to his patient as possible. Medical men in the country districts and the army or navy are often requested to extract a tooth, which, perhaps, by the application of a simple remedy ready to hand, might be saved until the more expert treatment of a dental surgeon could be had.

Before trying to heal toothache in this way he will first have to carefully determine from which of the two great stereotyped causes of toothache the pain is derived. Toothache, as far as the medical man is concerned, is practically always due to one of two distinct causes:

1. Inflammation of the pulp.
2. Inflammation of the periosteum.

As these two troubles require quite different treatment, it is of the greatest importance to determine which of these conditions is present.

1. *Inflammation of the pulp.* When caries has once penetrated the enamel it is liable to cause more or less inflammation of the pulp. The advance of the caries itself may do this, but more often the immediate cause is food or liquids which get into the cavity, and which may either mechanically, chemically, or thermically cause irritation of the pulp.

Search the cavity or cavities of the side of the mouth complained of by probing with an ordinary silver surgical probe bent to the required shape, to see if the mechanical irritation of the probe's point will reproduce or increase the pain. To test the cavity further, apply rather hot or rather cold water on a pellet of cotton wool to see if thermal change affects it.

Treatment.—First syringe and well wash out the cavity or cavities with a solution of carbolic acid in water (1 in 40), to remove the mechanical or chemical irritants as far as it be possible. Now take two pieces of cotton wool and prepare them as follows:—The first, a mere shred, soak in carbolic and water (1 in 20); the second and larger—of a size so as to nearly fill the cavity when slightly compressed—soak in ordinary surgical collodion. Then dry out the cavity with a piece of cotton wool, using an ordinary pair of dressing forceps, and immediately insert the shred of cotton wool in carbolic, followed as quickly by the larger pellet of collodion wool. Should the shape of the cavity be against its retaining this temporary stopping, try and use a surface of an adjoining tooth to help to keep it in. The collodion precipitates in the meshes of the cotton, and will soon form a temporary stopping, which, although not of course preventing further decay, will generally tide the patient over for a time without further pain. If there be more than one sensitive cavity, put a temporary stopping in each.

2. *Inflammation of the peridental membrane and periosteum.*—This is generally a result of the death of the tooth following on the further development of the foregoing pulpitis. It is generally very easy to diagnose, as the slightest pressure on the affected tooth causes pain, and tenderness of the gum over the root or roots is always present.

Treatment.—In its mild form it is best treated by drying the gum and painting on a liniment made up as follows:

Liniment. iodi Tinct. aconiti	...	...	...	āā ʒj.
Chloroformi	...	...	...	ɱx.

In this form it is sometimes associated with pulpitis, in which case treat the pulp first and paint on the liniment after. In a later stage, but before suppuration has taken place, inject into the periosteum three or four minims of a 1 per cent. solution of cocaine, freshly made with distilled water, or failing cocaine, use distilled water only. Hold the point of the needle obliquely against the side of the tooth, so as to guide it into the interval between the root and the alveolar bone. In the suppurative and abscess stages poppy-head fomentations held hot in the mouth is generally effective. It is best made by taking two ounces of poppy-heads and boiling them in a pint of water sufficiently to evaporate it to half a pint in volume, straining off the liquid and using it hot. Leeches, with or without a tube, can be applied if the patient will undergo the treatment. If an abscess be present, it should be drained if possible.

A great deal of relief is often given by general treatment, such as with calomel, &c.

Some Experiences of Plague Duty in India.

By W. NETTERVILLE BARRON.

IN November of last year, while engaged in waiting for "something to turn up," I heard that the Indian Government were in need of a number of medical men to combat the plague which has during the last three years caused such wide-spread distress in Western India. Together with several others I offered my services, and was duly certified by their own physician as fit to face the somewhat exaggerated dangers of an Indian climate.

I was not the only Bart.'s man who sailed in the "Caledonia." There were others who shared that dubious honour, but of them I need not speak; let them tell their own tales in their own way.

I must, however, say a few words about poor Selby, and his untimely death soon after reaching our destination. He was one of my cabin companions on the voyage, as he had been one of my colleagues when we were both "clerking" for Sir Dyce Duckworth. A more thorough, straightforward, and honest character I have never met. Conscientiousness marked his every action, and throughout the voyage and during the short time he lived in India I am confident that there was not one among us who did not feel a profound respect for our unfortunate friend. His death at Poona came as a severe shock to us all, and gave many of the more light-hearted "pause" by serving as a reminder that we were after all a little nearer the "beyond" than when we sat and smoked cigarettes round the fountain in the square.

Life on board was comparatively uneventful—for some of us at any rate. At last we entered the beautiful harbour of Bombay, which is a very different thing from the harbour of beautiful Bombay, because the latter is much too modern, and, like Hamlet's father, its "offences smell to heaven." Having paid a native exactly fifteen times too much to drive me to the Great Western Hotel, and having afterwards strolled round the town and presented myself with others to the Secretary-to-the-Surgeon-General-with-the-Government-of-Bombay, a gentleman who was much more affable than his title might lead you to suppose—having done all this, I began to feel that I was on the verge of making history. Alas for human conceit! I quickly found that such was not the case, unless, indeed, some one undertakes the task of writing an exhaustive treatise upon the plague. Most of us stayed about ten days in Bombay, during which we went about sight-seeing. But no one need be alarmed; I do not intend to write an Eastern Baedeker, nor a history of the Presidency.

There was an M.P. on board, not unconnected with the wine trade. He is undoubtedly the proper person to undertake such a task, more especially as he remained for quite a month in India. We had all, I imagine, some difficulty in

obtaining servants, as plague doctors are not exactly the kind of masters desired by the timid Goanese, who form such a large proportion of the servant class in that portion of the peninsula. I eventually succeeded in acquiring, for the modest sum of Rs. 18 a month, what might be supposed to answer to the term "trusty henchman," but who called himself Gabriel Paul Pereira, and was, I believe, a general of division in the Portuguese Indian army. He was rapidly nearing the sere and yellow leaf of his life, but his step was as firm and his carriage erect as when he led his victorious forces against imaginary foes in little Goa.

On leaving Bombay I went to Nasik, a small and sacred town close to Deolali, which is the chief camp for troops on their first arrival from the home stations. I only stopped at Nasik for a few days, but during that time became acquainted with one or two somewhat unusual individuals. If I were asked what particular novelty struck me most at the beginning of my visit, I should unhesitatingly answer, "Pride of race," as evinced by the average Anglo-Indian. Pride of race sounds rather a nice sort of sentiment, doesn't it? And so it is when kept within reasonable limits; but, alas! the limits in India tend towards the elastic. Perhaps it is the heat, perhaps the as often as not desolate surroundings; or perhaps it is a greatly increased sense of responsibility, which finds its expression in a domineering manner. Unfortunately, so long as the large majority of natives remain grossly ignorant and superstitious, just so long must the Englishman remain overbearing. Were he not so the British raj would be quickly added to that long list of dynasties which have at various times ruled this perplexed country, but which are now little more than memories.

As yet I had seen very little plague—a few cases in Bombay, and a few in camp at Nasik, where the newness of everything had been so interesting that a mere disease seemed entirely superfluous.

I left Nasik to become a railway inspector at Munmar or Manmad, a junction on the G.I.P.R., draining the traffic from nearly every part of India. It was a fairly responsible post, but the work was of a deadly monotonous type, consisting in the inspection of trains for real or suspected plague, and the imposing of quarantine on whomsoever I thought fit.

Now I do not wish to malign the native subordinate officials. They frequently do their work admirably, and make the most perfect clerks, but their notions on bribery and corruption are, to say the least, a little lax. "If you are willing to pay me Rs. 5 to let you go through, and I am willing to take it, where is the harm?" Where indeed? And yet in this very bribery and corruption lies the whole *crux* of the situation. If reliable men were to be had in sufficient numbers, then plague might be comparatively easily stamped out; but they are not to be had, and so it spreads, helped on its devastating course by the very men who may shortly become its victims. Munmar is populated by railway officials of various sizes, grades, and descriptions—from the executive engineer to the stoker, all ticketed and in their proper order. The most inflexible laws rule this order, and woe betide any luckless individual who makes a mistake in it. These social amenities are, however, interesting locally, but dull reading to the world at large, and on that account I will not bore you with what happened when two dogs belonging to different owners of unequal grade fell out, or what Mrs. X. said of Mrs. L. when the latter * * * *

During my first stay at Munmar I lived in what is known as the Dâk, or Travellers' Bungalow, which is a sort of glorified shed built by the Government for such wanderers as myself.

There is a species of bird called the Dâk Bungalow hen, which stands very high on the leg, and is possessed of both remarkable sprinting and staying powers. These, being coupled with great dodging ability, render the fowl extremely difficult to capture; so difficult, indeed, that dinner is often delayed by the absurd prejudice of the bird to being handled. When cooked they are very indigestible.

Of the fauna, the goat is far the most common. By the servants it is occasionally called mutton, and, when served with mint sauce, lamb; but these, I believe, are, scientifically speaking, sub-varieties.

I had not been at Munmar very long before I discovered that my own immediate ancestors were a subject of curious interest to some of the natives. Did I offend them, then my grandmother suffered in her reputation to a considerable extent, while if my conduct was pleasing the dear old lady was correspondingly popular. Natives usually express their sentiments in a somewhat eccentric manner; and here is a story in point.

Soon after I arrived at Satara, where I went on account of my health, one of my clerks remarked to me, "Sir, there is, I think, a certain concomitance between the exterior and the interior of a man." Having expressed myself as in agreement with him, he continued, "Now you, sir, while you have a *repulsive* countenance, have a most kind heart." I must add in my own vindication that he meant "stern," and not "repulsive," although it has since been suggested that he probably meant both.

When I had been about two months at Munmar I received a telegram to proceed at once to Malegaon, thirty miles up country, in order to look after a Dr. B—, one of my fellow-passengers, who had through ill-luck contracted the plague. On my arrival I found my patient very ill indeed, so that I almost despaired of pulling him through; and had it not been for the invaluable aid I received from Mrs. S—, a young married lady, who, with the consent of her husband, offered to act as nurse, and afterwards from a young lady member of the Zenana Mission, I do not know what I could have done. Lieutenants C— and M— also sat up at night and gave great assistance, so that between us all we cheated the gentleman with the scythe, and Dr. B— is now, I believe, a house physician at Guy's. "More power to his elbow!"

My health rather broke down at Malegaon, and a bad attack of jungle fever eventually laid me flat, so that I in my turn had to be nursed. Back I was carried to Munmar, and there so pampered and looked after that it was with many a regret I was at length ordered to Satara.

After I had recovered from the fever I was inoculated with Professor Haffkine's preventive serum. I had been already given the chance in Bombay, but had refused. *Experientia docet*, and now I am all in favour of inoculation, but it ought to be done at least once a year. I have been requested not to try and say anything scientific, and so I won't attempt to argue the *pros* and *cons.* of inoculation, but I must say that in my opinion there are many *pros* and very few *cons.* Natives generally hold just the opposite view. Many maintain that it renders them impotent, or that leprosy results, or that their arms will drop off, or that in six months their livers will rot out, and will then be sent as a present to the Queen.

(*To be continued.*)

Notes.

THE Harveian Oration was delivered before the Royal College of Physicians on October 18th by Sir Dyce Duckworth. The subject chosen was "The Influence of Character and Right Judgment in Medicine."

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DR. LAUDER BRUNTON opened the Session of the York Medical Society last month by a timely address on "Exercise and Over-exercise."

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MR. LANGTON has been re-elected President of the Clinical Society of London.

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IN connection with the Royal Institute of Public Health, Sir R. Thorne Thorne delivered the first Harben Lecture on "The Administrative Control of Tuberculosis" on November 2nd, at 5 p.m. The subsequent lectures will be given on November 9th and 16th.

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THE Lettsomian Lectures will be delivered before the Medical Society of London by Dr. Samuel West on February 6th and 20th, and March 6th, 1899, at 8.30 p.m. Dr. West has announced as his subject, "Some of the Clinical Aspects of Granular Kidney."

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THE Annual Oration will be delivered before the same Society on May 15th, 1899, by Mr. Alban Doran.

MR. LIONEL J. PICTON, recently elected Senior Entrance Scholar in Science, has been awarded the Welsh Prize in the University of Oxford for drawings illustrative of human anatomy.

* * *

MR. V. H. BLACKMAN has been elected Fellow of St. John's College, Cambridge.

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MR. J. J. BOVAN has obtained the first place in the recent examination for the Navy Medical Service.

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SURGEON-LIEUTENANT JOSIAH OLDFIELD, of the 1st Essex R.V.C., has obtained his certificate of proficiency.

* * *

IN our announcement of the death of Surgeon-Captain A. W. F. Russell, I.M.S., an unfortunate mistake was made. He joined the service in 1894, not 1874 as reported. The deceased officer was in his thirtieth year.

* * *

THE Twenty-third Annual Dinner of the Cambridge Graduates' Club of St. Bartholomew's Hospital will be held at Frascati's Restaurant on Thursday, November 24th, at 6.45 for 7 p.m. Dr. Howard Tooth will take the chair. Applications for tickets should be addressed to one of the honorary secretaries, Dr. Morley Fletcher and Dr. Horton Smith.

* * *

THE entry for the year 1898–9 is 189, divided as follows:

Full entries	100
Special entries for Lectures or Hospital Practice and Preliminary Scientific ...	89
Total ...	189

Below are the entries for the past seven years:

Year.	Full.	Special, including Preliminary Scientific Class.	Total.
1892 ...	112 ...	38 ..	150
1893 ...	95 ...	61 ...	156
1894 ...	119 ...	74 ...	193
1895 ..	105 ...	82 ...	187
1896 ...	84 ...	81 ...	165
1897 ...	97 ...	91 ...	188
1898 ...	100 ...	89 ...	189

This year's entry at Bart.'s is easily the highest at any London Medical School, and is only surpassed in any English school by the University of Cambridge, which records 127 entries.

* * *

ON November 1st a meeting of representatives of the chess clubs of some of the hospitals was held to consider the question of an inter-hospital competition. The meeting

was not considered sufficiently representative to draw up a completely digested and authoritative scheme. We are requested to ask some chess enthusiast from this Hospital to attend a meeting at 8 p.m. on Thursday, December 1st, at Dr. Fred. J. Smith's house, 4, Christopher Street, Finsbury Square, to further consider suggestions and to arrange details.

Amalgamated Clubs.

A MEETING of the above was held on Wednesday, October 19th. Mr. Furnivall kindly took the chair. Messrs. C. G. Watson and H. J. Pickering having resigned the Secretaryships of the past year, the following were elected Secretaries for the year 1898–9:—Mr. L. E. Whitaker, Senior; Mr. A. R. Tweedie, Junior.

RUGBY UNION FOOTBALL CLUB.

ST. BART.'S *v.* CIVIL SERVICE.

Played at Winchmore Hill on October 15th. This was our first match of the season, Sandhurst having scratched on the previous Saturday. The result was a draw, each side scoring a goal and a try (8 points).

St. Bart.'s lost the toss, and for the first ten minutes had the worst of the game. A long kick by Gillies found touch in the opposite "25," and smart passing among our outsides resulted in James crossing the line near the corner, whence he made his way behind the posts. Unfortunately, however, the ball was held just as he was about to put it down, and a five-yard scrummage took the place of an apparently certain try. From a scrummage on our "25" line a couple of Service players broke away, ran straight through our three-quarter line, and scored in a good position, a goal resulting. Immediately afterwards Mayo scored for us, taking the ball at full speed from a throw-out from touch. The kick at goal failed.

After half-time Civil Service scored an unconverted try, getting the ball from a line-out. The Hospital pressed for some time, and James again crossed the line, but again he was held up. Shortly before the end Wells dribbled over and touched the ball down very smartly, and O'Neill brought the scores level by placing a goal.

Bart.'s had rather the better of the play, and were unlucky not to win. James missed one try by taking things too easily, not knowing that any one was near him. The second time he got over the line he fell with the ball on his arm, and not on the ground. On the whole the three-quarter line appeared very promising, the passing at times being very smart. Carroll worked very hard at half, and passed well, but his partner, Wilson, seemed to stand too close to the scrummage, and was often tackled before he could get the ball away to the three-quarters. The Hospital forwards were the better in the tight scrummages, but want more dash in the open. They are liable to let an opponent run through their midst, each man waiting for some one else to do the tackling, or else not tackling low enough. Team:

St. Bart.'s.—T. M. Body (back); James, Rosten, T. A. Mayo, J. M. Plews (three-quarters); Carroll, Wilson (halves); A. J. W. Wells (captain); H. C. Adams, C. H. D. Robbs, A. M. Amsler, J. A. West, A. O'Neill, L. R. Tosswill, Wilson (forwards).

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

Played at Greenwich on October 26th. R.N.C. won by 3 goals (15 points) to 2 tries (6 points).

St. Bart.'s at first appeared stronger forward, and frequently got the ball out to the three-quarters, but one or two good opportunities were lost from a wing three-quarter overrunning his "centre." A quarter of an hour from the start, however, Adams picked the ball up in the loose and passed to O'Neill, who ran in behind the posts. The kick at goal failed. The R.N.C. forwards were the better in the loose, and began to get the ball more often in the scrummages. Several times they looked about to score, and ultimately broke away from a line-out near the halfway line, and scored after some clever passing, the try being converted.

After half-time Bart.'s pressed for the first few minutes, and R.N.C. had to touch down. James got within a few yards of the line, but was held, and R.N.C. relieved by dribbling almost the whole length of the ground, James just saving. Some scrummages took place in our "25," and the ball was dribbled over our line, and a second goal resulted. A third goal was scored shortly after from an intercepted pass. Ash injured his ankle, and had to leave the field, Dix taking his place at half, and Wells going three-quarter. Dix made a good opening for Plews, who got in behind the posts, but O'Neill again failed at goal. R.N.C. almost scored again in the last minute, but lost the ball.

For the greater part of the game St. Bart.'s were beaten forward. R.N.C. played with much more dash, and gained much ground by loose rushes. Our halves and three-quarters were fair, sometimes passing well, but not always strong in defence. Nedwill at back kicked well, though a little slow sometimes in fielding the ball. Team:

St. Bart.'s.—Nedwill (back); James, Gillies, Dix, Wakley (three-quarters); Ash, Wilson (halves); A. J. W. Wells (captain); H. C. Adams, C. H. D. Robbs, A. M. Amsler, J. A. West, A. O'Neill, J. M. Plews, Levick (forwards).

ST. BART.'S *v.* PARK HOUSE.

Played at Winchmore Hill on October 22nd. Park House won the toss. Wells kicked off for St. Bart.'s against the wind, and the ball was returned to the halfway. Loose, scrambling play followed. Plews, getting hold of the ball, made a good run and passed to Robbs, who got over, but the try was disallowed, a scrummage being formed five yards from our opponents' line. Loose play followed, when Evens, the Park House back, dropped a goal. Further play until half-time was very loose, each side pressing alternately. At half-time Park House led by 4 points.

On resuming, play was still of a scrambling nature. Neel scored a try for Park House, which Milne converted. After this St. Bart.'s woke up for a short time. Body, making a good run along the line, passed to Robbs, who scored between the posts. O'Neill converted. Just before this Tosswill retired hurt. Nothing more was scored by either side. Final scores:—Park House, 1 goal, 1 dropped goal (9 points); St. Bart.'s, 1 goal (5 points).

Body at back played a good game. The three-quarters also played a fair game. Mayo put in a lot of good work. James had very few chances, but of these he took full advantage. Carroll and Ash at half played a good game.

Of the forwards, Tosswill and Plews played well. Robbs showed well in the open; but, taking the forwards as a whole, they were a very slack lot, very much out of condition, and did not seem to be able to use their weight effectually. At times they showed great energy, and carried everything before them, but the burst soon died away. No doubt they will show great improvement when they are more together and in better condition. Teams:

Park House.—A. S. Evens (back); Hills, Milne, Neel, Boyd (three-quarters); McColm, Keell (halves); Chubb, Ramsay, Collard, Reading, Cunis, Budds, Morris, and Hoyle (forwards).

St. Bart.'s.—T. M Body (back); T. A. Mayo, W. H. James, L. Rosten, J. Wakley (three-quarters); F. R. Carroll, H. B. Ash (half-backs); A. J. W. Wells (captain); C. H. D. Robbs, H. C. Adams, A. M. Amsler, A. O'Neill, L. R. Tosswill, J. A. West, J. M. Plews (forwards).

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

Played at Cooper's Hill on October 24th. This match resulted in a win for the Hospital by 1 try (obtained by James) to *nil*. The game throughout was very keenly contested; the forwards showed to a much greater advantage than hitherto this season. Body at back played a grand game. Team:

St. Bart.'s.—T. M. Body (back); T. A. Mayo, J. B. Gillies, H. W. James, E. W. Price (three-quarters); E. S. Ward, M. N. Wilson (halves); C. H. D. Robbs, H. C. Adams, A. M. Amsler, A. O'Neill, J. A. West, J. M. Plews, H. T. Wilson, F. Harvey (forwards).

ASSOCIATION FOOTBALL CLUB.

ST. BART.'S *v.* CHESHUNT.

Played at Cheshunt on October 9th. This match was the first of the season, and resulted in a defeat by 2 goals to *nil*. The Hospital were unable to put their full strength in the field. The ground was hard from the recent dry weather, and the game was consequently very fast. The home forwards made excellent use of their pace, and gave our halves considerable trouble. Orton and Fowler played a good defensive game at back. The Hospital forwards, however, lacked combination.

J. R. Barwell scored the two goals for Cheshunt. Considering this was the first match of the season, and that our side was weak, the team are to be congratulated on not being beaten more easily. Teams:

Cheshunt.—W. Bain (goal); C. Raincock, J. F. Jull (backs); W. J. Shephard, B. Horley, G. H. Tapsfield (backs); I. Crickner, F. Ellis, O. H. P. Cox, J. R. Barwell, W. T. Barwell (forwards).

St. Bart.'s.—H. H. Butcher (goal); T. H. Fowler, L. Orton (backs); E. H. Scholefield, A. H. Bostock, G. W. Miller (halves); H. N. Marrett, J. A. Willett, C. O'Brien, V. G. Ward, G. Orton (forwards).

ST. BART.'S *v.* DORKING.

Played at Dorking on October 12th. This match resulted in an easy win for the Hospital by 5 goals to 1. St. Bart.'s kicked off downhill with a slight wind against them, and play soon became very energetic, each goal being visited in turn. By some pretty combination of the inside forwards Ward put the ball into the net by a good long shot shortly before half-time.

At the interval St. Bart.'s was leading by 1 goal to *nil*. On changing ends play was chiefly confined to the opponents' half, Butcher in goal being scarcely troubled at all. Shortly after the restart Bates, who had been playing a most energetic game, headed the ball through. The remaining three goals followed in quick succession, the Dorking goal-keeper allowing a weak shot from Ward to pass him, Fowler scoring from a long shot, and the fifth goal being scored by Miller from a *mêlée* in goal.

For the Hospital Ward and Bates were the best of the forwards, whilst Fowler played an excellent game at back. Team:

St. Bart.'s.—H. H. Butcher (goal); T. H. Fowler, L. Orton (backs); F. E. Tayler, A. H. Bostock, T. N. Farncombe (half-backs); H. N. Marrett, V. G. Ward, T. Bates, G. W. Miller, F. S. Lister (forwards).

ST. BART.'S *v.* HARROW ATHLETIC.

Played at the Recreation Ground, Harrow, on October 15th. This match was played in a fine drizzling rain before a moderate but enthusiastic attendance, and ended in a win for the Hospital by 2 goals to *nil*. Owing to the greasy condition of the ground good play was out of the question, and a somewhat desultory game ensued, it being impossible to obtain anything like control of the ball. Shortly before the interval O'Brien put the ball into the net, giving St. Bart.'s the lead by 1 goal to *nil*.

On changing ends play was more or less of a give-and-take character, each goal being visited in turn. The Hospital had to continue this portion of the game with only ten men, owing to Hartley being *hors de combat* from a bad kick. However, St. Bart.'s were able to add another goal to their credit from a shot by Willett. Team:

St. Bart.'s.—H. H. Butcher (goal); T. H. Fowler, L. Orton (backs); E. H. Scholefield, A. H. Bostock, T. Bates (halves); H. N. Marrett, J. A. Willett, C. O'Brien, V. G. Ward, H. D. Hartley (forwards).

ST. BART.'S *v.* EALING.

This match, fixed for October 19th, was scratched owing to the ground being unfit to play on.

ST. BART.'S *v.* R.M.A., WOOLWICH.

Played at Woolwich on October 22nd. This match resulted in a bad defeat for St. Bart.'s by 4 goals to 2. The Hospital started the game, playing downhill with a slight wind behind them, and some very fast play ensued. The home forwards made some very good rushes, one of which resulted in the ball being put through the Hospital goal out of Butcher's reach. From a combined run of the St. Bart.'s forwards Thomas obtained possession and beat our opponents' custodian, thus scoring the first point for the Hospital. Before half-time, however, the Academy had added another goal to their score.

On restarting Willett secured a second for the Hospital from a long shot. R.M.A., playing downhill, were much too fast for us, and scored twice in quick succession. Their victory we may perhaps account for chiefly by their amount of dash and energy.

St. Bart.'s lost several good opportunities of scoring through the forwards not shooting often or quickly enough. Orton and Fowler played a very energetic game at back. Bates and Bostock were good at half, and Ward was the best of the forwards. Team:

St. Bart.'s.—H. H. Butcher (goal); T. H. Fowler, L. Orton (backs); E. H. Scholefield, A. H. Bostock, N. E. Waterfield (halves); H. N. Marrett, J. A. Willett, H. E. Thomas, V. G. Ward, C. O'Brien (forwards).

ST. BART.'S *v.* BARNES.

This match, fixed for October 26th, was scratched owing to our opponents being unable to raise a team.

BOXING CLUB.

The Boxing Club has now reopened, and will continue during the Winter Session. The rooms, which are situated under the Schools of St. Bartholomew's the Great, in Red Lion Passage, Bartholomew Close, are open on Mondays, Wednesdays, and Fridays from 4.30 to 6.30 p.m.

On Friday afternoons Alec Roberts attends and gives instruction in boxing; on Monday and Wednesday afternoons new members are helped by the older members of the Club.

Besides boxing, the Club possesses two punching balls, dumb-bells, clubs, &c., all of which will be useful to men who wish to keep in training for football, &c.

The Hon. Secretaries will be very pleased to direct any new members to the rooms, which are not very easily found.

J. C. S. DUNN,
G. E. CATHCART, } *Hon. Secs.*

Abernethian Society.

ON October 13th, in the Anatomical Theatre, Dr. W. Jobson Horne read a paper before the Society on "The Early Diagnosis of Phthisis;" Mr. Horder, President, took the Chair. The chief point insisted upon was the examination of the larynx at an early stage, when to a competent observer certain conditions were to be recognised whereby a diagnosis of pulmonary tuberculosis could be established.

The signs might be classed as follows:—(1) changes in the sensibility of the mucous membrane of the pharynx and epiglottis, either hyperæsthesia or the reverse; (2) changes in the blood-supply (anæmia occurred in 50 per cent. of cases); (3) changes in vocal function; (4) impaired movement of the cords; (5) some œdema.

A series of excellent micro-photographs were thrown upon the screen by the aid of the lantern, and showed the disease in progress in the ventricular bands beneath the mucous membrane.

At a meeting held on Thursday, October 20th, Mr. Thursfield occupied the Chair. A case of pseudo-hypertrophic muscular paralysis was shown by Mr. Rousfield. The patient was a boy æt. 14, a brother two years his senior being similarly affected. Mr. Mitchell then read a paper upon "The Treatment of the Peritoneum after Septic Infection." The lecture resolved itself into the arguments chiefly against irrigation as a means of cleansing the membrane in operation cases. Sponging, on the other hand, was the treatment advocated by Mr. Mitchell. Three series of charts were produced in support of this line of procedure, showing how fatal had been the result after washing out, and how eminently satisfactory after sponging only. A lively discussion followed, various views being taken by the different speakers as to this important practical point.

On October 27th, Mr. Horder in the Chair, a clinical evening was held, when several cases of interest were shown, and when Dr. Garrod made a short communication to the Society on the subject of alcaptonuria. The substance present in the urine in these rare cases reduced Fehling's solution readily, but was not sugar, nor did it give the other common tests for that body. The condition was first described by Bédeker in 1859. Dr. Garrod showed specimens of urine containing the peculiar substance.

At a meeting on November 3rd, Mr. Thursfield, President, being in the Chair, Mr. J. K. Murphy read a paper "On the Treatment of Hæmorrhage in Pregnancy." He divided his subject into three parts, viz.: (1) hæmorrhage occurring in abortion; (2) hæmorrhage after the seventh month; and (3) after labour. Incomplete and inevitable abortion were considered in the first division. Mr. Murphy deprecating the use of ergot before the uterus was empty, and advising the use of expression, the blunt curette, or plugging. The proof of emptiness lay in the cessation of bleeding. With regard to the second division, it was noticeable that Mr. Murphy recommended, under certain conditions, the practice of plugging the vagina,

holding that the tension produced would in time control the hæmorrhage by pressure on the uterine arteries.

A good discussion followed the paper, in which Dr. Morrison, Mr. Williamson, and others took part. Mr. Williamson could not advise the curette in incomplete abortion. Dr. Morrison recommended the administration of opium and ergot in the early treatment of threatened abortion, and was opposed to the use of Champetier de Ribes' bag as a means of bringing on labour in the later stages of pregnancy. An os which would admit of its introduction would permit of bipolar version, which he preferred.

The Rahere Lodge, No. 2546.

THE work of the Lodge has increased so rapidly that it was found necessary to hold an Emergency Meeting at the Restaurant Frascati on Tuesday, November 8th, W. Bro. T. G. A. Burns, the W.M., being in the chair. Bro. A. M. Jackson, M.D.Oxon., W.M. of the Douglas Lodge, Maidstone, was elected a joining member. Messrs. C. A. Coventon, A. B. Tucker, John Gay, and J. H. Griffiths were duly elected members of the Lodge, and were afterwards initiated into Freemasonry, and Dr. C. H. Roberts was elected a member. Bros. Folliott, Christopherson, Mackintosh, Briggs, and Keats were raised to the third degree. The brethren and their guests, to the number of thirty-five, afterwards dined together.

Appointments.

CORY, C. G., M.R.C.S., L.R.C.P., appointed Medical Officer and Public Vaccinator to the Seventh District of the Newmarket Union.

* * *

DRAKE, D. J., M.R.C.S., L.R.C.P., appointed Ship's Surgeon to the Union Steamship German.

* * *

HEPBURN, M. L., M.D., B.S.(Lond.), F.R.C.S.(Eng.), appointed an Assistant Surgeon to the Lowestoft Hospital.

* * *

LEWIS, F. H., B.A., M.B., B.C.(Cantab.), M.R.C.S., L.R.C.P., appointed Non-resident House Surgeon to the London Throat Hospital, Great Portland Street, W.

* * *

MATTHEWS, E. A. C., M.B., B.C.(Cantab.), M.R.C.S., L.R.C.P., appointed Junior House Surgeon to the Royal South Hants Infirmary, Southampton.

* * *

MCLEAN, W. W. L., M.R.C.S., L.R.C.P., appointed Ship's Surgeon to the Royal Mail Packet Severn.

* * *

PEARSON, MAURICE G., M.B., B.Sc., F.R.C.S., appointed Assistant Railway Medical Officer, Cape Government Railway, De Aar, Cape Colony.

* * *

PRATT, ELDON, M.B.(Lond.), M.R.C.S., L.R.C.P., appointed House Surgeon to the Cardiff Infirmary.

* * *

SHEWELL, H. W. B., M.B., B.C.(Cantab.), appointed Surgeon to H.M.S. Rodney.

* * *

WHINCUP, F., M.R.C.S., L.R.C.P., appointed Junior House Surgeon to the South Devon and East Cornwall Hospital.

* * *

WILLIAMSON, H., B.A.(Cantab.), M.R.C.S., L.R.C.P., appointed Resident Medical Officer to Queen Charlotte's Hospital, London, W.

Examinations.

CONJOINT BOARD.—*Chemistry.*—G. H. Adam, R. M. Im Thurn, A. S. Williams. *Practical Pharmacy.*—A. H. Bateman, H. B. Butler, N. A. W. Conolly, R. T. Cooke, E. W. Dall, W. P. Dyer, N. Lipscomb, A. S. Petrie, E. F. Rose, H. E. Scoones, H. Bond. *Elementary Physiology (Four Years' Regulations)*—R. Cope. *Anatomy and Physiology.*—A. L. B. Green, H. E. Flint, S. de Carteret, C. L. C. Owen, C. D. A. Dowman, J. A. West, E. E. Young, N. Leonard, H. F. Bodoel-Roberts, H. H. Butcher, C. Dix, T. M. Body, H. H. Raw, H. Whitwell, E. W. Price, W. P. Miles, L. M. Morris, W. J. G. Johnson, R. Cope (four years' regulations).

Final Examination.—The following have passed all the subjects, and have received Diplomas: W. S. Darby, D. Cannan, E. N. Berryman, E. H. Scholefield, G. C. Marrack, T. W. Letchworth, T. A. Mayo, C. J. Thomas, S. P. Pollard, J. Johnston, A. C. Jordan, A. E. Carsberg, A. F. Page, C. P. Burd, R. E. H. Woodforde, P. W. Rowland, F. R. Eddison, J. R. Evans.

Changes of Address.

DR. OSWALD BROWNE, from 43, Bedford Square, to 7, Upper Wimpole Street, W.

DR. W. T. GARDNER, from 11, Branksome Terrace, to Fair Seat, Poole Road, Bournemouth.

MR. R. G. HOGARTH, from Salisbury, to 60, The Ropewalk, Nottingham.

DR. H. LEWIS JONES, from 9, Upper Wimpole Street, to 61, Wimpole Street.

DR. C. P. WHITE, from General Hospital, Birmingham, to 30, Hyde Park Road, Leeds.

Births.

ATTLEE.—October 8th, at 58, Brook Street, London, W., the wife of John Attlee, M.D., of a daughter.

WINTER.—On October 25th, at Chartham, near Canterbury, the wife of Laurence A. Winter, M.R.C.S.(Eng.), L.R.C.P.(Lond.), of a son.

Marriage.

ELLIOT—MCCREERY.—On October 27th, at St. Luke's Church, West Norwood, Ernest E. Elliot, M.R.C.S., L.R.C.P., son of Lieut.-Col. J. Elliot, to Maud K. J. McCreery, eldest daughter of the late Surg.-Major James McCreery, A.M.D., and of Mrs. McCreery, 39, Perrein Road, Tulse Hill, S.W.

Death.

WYATT.—On November 7th, at his residence, Clissolds, Shelley Road, Worthing, William Thomas Wyatt, M.A., M.D.(Oxon.), aged 45.

ACKNOWLEDGMENTS.—*St. Thomas's Hospital Gazette, London Hospital Gazette, Nursing Record, The Student, "M. R. I.," St. Mary's Hospital Gazette, Middlesex Hospital Gazette, The Hospital.*

St. Bartholomew's Hospital Journal.

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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, *Advertising Agent, 29, Wood Lane, Uxbridge Road, W.*

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St. Bartholomew's Hospital Journal,

DECEMBER 14th, 1898.

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

BEFORE we go to press again an event full of interest for all concerned in the life of a large hospital will have come and gone. The provisions made for the patients' comfort and enjoyment at Christmas-time are very varied. Sundry indulgences inseparable from the idea of an English Christmas are allowed to creep into the usually sober diet sheets, and tax the wisdom of the house physician and sister not a little in the selection of fit cases for their consumption. A thoughtful laxity has even permitted the solace of a pipe in the Square to such as deem enjoyment of *any* sort impossible without it. There are evergreens and berries and decorations and Christmas-trees and brain-pies filled with toys galore. All this is lawful and right—indeed, is in great measure kindly superintended by the steward on the Hospital's behalf.

The other element that completes the cup of the patients' happiness, however, is that constituted by the many forms of entertainment in the wards. Upon the manner of these the authorities exercise a jealous outlook, to the extent, in fact, of yearly proclaiming an official veto upon anything of the kind. Pianos and such like "big pieces of music" are rigidly forbidden. But hitherto the resources of the Junior Staff have not been limited, nor has their ardour been easily damped. Violins and other stringed instruments, and a certain hybrid piano-harmonium that, when judiciously stuffed with cotton wool, can be made to do the work of a piano fairly well, are called into requisition as accompaniments to the human voice. Pierrot troupes, and "bigaphone" bands, and human menageries, and magic lanterns, and conjuring performances swell the list of past years.

We are emboldened to plead for some leniency on the part of the House Committee in this respect. We have seen the genuine pleasure the performances yield; we also know by experience the trouble and care expended by the Resident Staff in the selection of suitable forms of entertainment. That the sick folk are disturbed by these things we regard as a fiction. Our double wards are admirably fitted for preventing this; for the tactful sister, having fully endorsed the steward's annual warning against permitting entertainments, straightway proceeds to arrange the beds so that any patients who are acutely ill may be where few, if any, sounds can reach them. We often heard laments from those whose condition seemed to need this safeguard; we never heard complaints from those who were allowed to join in the festivities. Moreover there are more convalescent patients in the Hospital at Christmas than at any other time of year. The request to "stay in over Christmas" seldom goes unheeded, especially in the case of children, and those whose home is anywhere they happen to be at the time their "home" is asked about. (The suggestion we have sometimes heard, that children are admitted especially *for* Christmas,—that there are such things as "nice Christmas boys," for instance, is, of course, a myth.) A sister's knowledge of her patient's home

circumstances is often a wonderful thing,—as thorough as the physician's knowledge of his bodily distress.

The result of all this care and discrimination is a great feast of happiness for the men and women, and the keen delight of the children,—who, that is a child no longer, can gauge it? Desirable as it is to stop short of the possibility of measuring a patient's enjoyment by the amount of febrile reaction, it will be allowed that the traditional toast we so often drink, "Health and Ease to Poor Patients," may quite reasonably include the desire that a glad and festive time will mark Christmas, 1898, for the Hospital inmates. We expect it will, for things will probably be as they have been. On the one hand, the Junior Staff will vie with each other in their preparations, the Nursing Staff will lend their welcome assistance, and the patients will put red letters against the days. On the other hand, when all is over, the Committee will sit in censure upon such unwise methods of amusement as must have been adopted if the *Evening Satellite* speak truth, various people will be cross-questioned, the bills of mortality for the week will be tremblingly consulted, and found with a sigh of relief to be much the same as for any other week, and the grave seniors will disperse with a sense of duty done, to forget it all until after Christmas, 1899. Let not the cynic laugh; it is but a case of the struggle evolving a custom that survives because it is fittest. No Christmas festivities would make the season a dismal time; but festivities that are not kept within appropriate limits are none the less to be deplored.

Primary Tuberculosis of the Nasal Cavities.

Being the Abstract of a Clinical Lecture delivered at St. Bartholomew's Hospital,

By W. J. WALSHAM, F.R.C.S., Surgeon and Lecturer on Surgery to the Hospital.

PRIMARY tuberculous disease of the nasal cavities would appear to be rare. Little or nothing is said about it even in the larger works on surgery. Indeed, by some rhinologists of repute its existence has been denied. That it does occur, however, has been conclusively shown by the cases published by Herzog, Demme, Schaeffer, Ruault, and Michelsohn; and that it is not so rare as has been assumed is further demonstrated by the fact that during the last few years I have seen at least five cases in which I think there could be no doubt of the tuberculous condition being primary. As a secondary affection to lupus of the ala nasi, upper lip, or cheek, it is probably familiar to most surgeons, though secondary invasion of the nasal cavities in this way is by no means, as far as my experience goes, common. The same may be said of it as a secondary affection to tuberculosis of the palate, pharynx, larynx, or lungs. It would appear, therefore, that the nasal mucous membrane has a decided immunity to the tubercle bacillus. Indeed, one of its functions would seem to be the removal or destruction of deleterious particles (amongst which may be placed the tubercle bacillus), and the consequent prevention of their gaining access to the upper respiratory passages.

When the interior of the nose is attacked it is nearly always the anterior part, and perhaps most usually the anterior part of the septum. The reason for this may be that the mucous membrane in this situation is more liable to abrasion or injury, and thus to inoculation with the bacillus. In a case reported by Jurasz * the infection was clearly carried by the left thumb, the skin of which was the seat of tuberculous ulceration. A further explanation of the occurrence of the disease at the anterior part of the septum may possibly be found in the fact that at this spot is situated the rudiment of the organ of Jacobson. Here the tissues, as is the case with other rudimentary structures, may, I think, be reasonably assumed to be less stable than elsewhere, and hence may more readily succumb to the attacks of the bacillus. Moreover to a low resisting power of the tissues in this situation has been attributed the slow destruction of the tissues and perforation of the septum (simple perforating ulcer) that not infrequently occurs here.

Although tubercular disease has a predilection for the anterior end of the septum, and perhaps less frequently for the anterior end of the inferior turbinal body, other parts may be attacked, as the middle turbinal body, the floor of the nose, and in rare instances the osseous septum.

Primary tuberculosis of the nose may assume one of two forms. Either (1) an outgrowth or heaping up of granulation tissue, the *hyperplastic variety;* or (2) a condition in which ulceration occurs, so to speak, commensurately with it or so closely follows, that very little increase in tissue formation is noticeable, and almost from the first the disease assumes the form of an *ulceration*. In these respects its behaviour is similar to what we are all familiar with in the case of epithelioma, which may appear either as a cauliflower-like mass, or as an ulcer almost from the commencement of the disease. As in epithelioma, moreover, the increased tissue formation and ulcerative process is frequently combined. In the cases which have come under my personal observation, in six the disease was of the hyperplastic variety, the patient suffering from nasal obstruction. In two there was little if any new growth, but the characteristic ulceration was present. Two of my patients were women, the others were men or boys.

Symptoms.—At first there may be no symptoms. Later, stuffiness in one or both nostrils or more or less complete obstruction, according to the size of the growth, was the chief symptoms in my cases of the hyperplastic form. As in some of the cases reported there has been an occasional

* 'Die Krankheiten der obern Luftwege,' Heidelberg, 1891, p. 2.

escape of a drop or two of blood, in a few a severe epistaxis. In the ulcerative variety a watery muco-purulent or slightly blood-stained discharge, with at times a fœtid odour, has been observed combined with more or less obstruction when the disease has taken the mixed form. On inspecting the nasal chambers after the adherent greenish-yellow crusts have been removed in the *hyperplastic* variety, an irregular reddish-grey, soft, friable, vascular, and granulation-like swelling is discovered. It bleeds when touched with a probe, but not as a rule profusely; at least such is my experience, but free bleeding is said to have occurred. The mucous membrane around is not thickened, but may be studded with one or more similar tumours of a smaller size, or may present in the neighbourhood of the growth a shallow ulcer. In my own cases the growth had obtained a large size, and completely blocked both nasal passages. The septum presented a large perforation, but there was no dead bone discoverable, and the hard palate was not affected. In one of the cases the growth had invaded the right lateral cartilage, and had led to some localised bulging of the nose on that side. In none of my other cases was there any external deformity except in one in which the nose had become saddle-shaped, but there was some doubt in this instance if the disease was primarily nasal.

In my own cases of the *ulcerative* form, there was over the anterior end of the left inferior turbinal body a greyish irregular ulcer which had more or less destroyed the anterior third of the turbinal body, and involved the contiguous mucous membrane covering the outer wall of the nose. The edges of the ulcer were slightly if at all raised, and somewhat irregular in outline, and the surrounding mucous membrane was healthy. In one case, on probing the base of the ulcer, which was covered with an ashy grey slough, some exposed bone was discovered.

Diagnosis.—1. The *hyperplastic* form may readily be mistaken for sarcoma. Indeed, one of my cases was sent to me under the supposition that it was a recurrent sarcoma. A growth had been removed by the intra-nasal method, and the patient informed by a provincial rhinologist that she had only six months to live. This form might also possibly be mistaken for a gumma, or for an impacted foreign body surrounded by granulation tissue, or even for a papilloma the softer varieties of which may bear some resemblance to a tuberculous granuloma.

In the early stages of a malignant growth the symptoms and signs may be so similar that it may be impossible to make a diagnosis with any degree of certainty without watching the patient for some time. The removal of a portion of the growth and submitting it to microscopical and bacteriological investigation may be of material assistance, but cannot be absolutely relied on, as the microscopical examination may reveal little more than the presence of granulation like tissue; and the bacillus, even though the growth is tubercular, may not be discovered. Some forms of malignant growth in the nose are exceedingly slow in their progress. Too much reliance, therefore, cannot be placed on the rate of growth. In the later stages, that is when ulceration of a malignant growth has occurred, the more vascular appearance of a sarcoma, its purplish-red colour, its greater tendency to bleed, and the history of violent attacks of epistaxis, will point to its malignant nature. But even then a microscopical examination and a search for the tubercle bacillus should not be omitted for the purpose of confirming the diagnosis.

In carcinoma, disintegration of the tissues takes place with great rapidity, and soon involves the deeper structures. The margins of the ulcer, in place of being soft, are hard, sinuous, raised, and irregular.

From a gumma before it is broken down there should not be much difficulty in distinguishing a tuberculous granuloma, since in the early stages the surface of a gumma is smooth and unbroken; whereas in the tuberculous granuloma, except perhaps in the very early stage, the tumour is granular and friable. The administration, moreover, of a few doses of iodide of potassium will, as a rule, rapidly clear up a gummatous swelling.

From such affections as nævus, angiomata, and soft papillomata there should be little or no difficulty in distinguishing a tuberculous affection if ordinary care be taken.

The hyperplastic form of tuberculous disease, when attacking the inferior or middle turbinal bodies, may not only be mistaken for a malignant growth or gumma, but for hypertrophic rhinitis. As a rule, however, the smooth surface of the enlarged turbinals would be sufficient to prevent such a mistake. But in the so-called papillary form of hypertrophy an error might possibly occur.

2. The *ulcerative* form is most likely to be mistaken for syphilitic ulceration, possibly for breaking-down carcinoma.

In syphilitic ulceration the tissue destruction is generally more extensive and deeper, and on probing, necrosed bone will, as a rule, be felt. The ulcer is deeply excavated. Its edges are irregular, overlaying, and ragged, surrounded by a bright shining areola. Whereas in tuberculous ulceration the destruction of the tissues is less extensive and not so deep, and no necrosed bone is as a rule felt. The ulcer is generally irregular or oval in shape; its sides are level with the surrounding mucous membrane, or very slightly raised; its floor is whitish or yellowish grey, or it may be covered with caseating nodules or crusts. The surrounding membrane is probably healthy, and there is no bright shining areola.

It has been affirmed that in syphilis, should perforation occur, it is more often the osseous part of the septum that is involved. It is a question, however, if such is really the case. A point of distinction which has been made much of, therefore, that tubercle involves the cartilaginous, syphilis the osseous part of the septum, must not be too much

relied upon. A fact to which I myself attach more importance is the frequency with which perforation of the hard palate occurs in conjunction with syphilitic perforation of the septum. I have met with it so frequently during the seventeen years I had charge of out-patients, that I feel sure that it is a very common accompaniment of syphilitic perforation, and I know of no case in which primary tuberculous perforation of the septum has led to a perforation of the hard palate.

So far I have only called attention to the diagnostic appearances of the two conditions. Frequently there are concomitant signs of syphilis, such as gummatous swellings over the nasal bones, the cranial bones, or elsewhere, or scarring of the palate or pharynx, or other evidences of syphilis present or past which will confirm the local appearances.

In malignant ulceration the extension is rapid; the edges are sinuous in outline, everted and indurated, and its base covered by a sanious discharge, through which irregular fungating masses of granulations may be seen projecting. Profuse attacks of epistaxis have probably occurred.

Glandular enlargement in the neck may occur in both malignant and in tuberculous ulceration; in the former, of course, as secondary to the primary nasal trouble; in the latter either as a part of the tuberculous dyscrasia, or perhaps as secondary to the nasal tubercle. There was not, however, any glandular enlargement in any of the cases of nasal tubercle that have come under my own observation.

Prognosis.—The prognosis as far as life is concerned appears to be good, since cases have been reported in which the disease has existed many years without dissemination having occurred, or neighbouring parts having become involved. On the other hand, however, the primary trouble has rapidly terminated in tuberculous meningitis or in tuberculosis of the larynx or lungs, and external disturbance of the palate and neighbouring parts has been known to occur. The risk of the tubercle spreading along the lachrymal canal to the lachrymal sac, and thence to the conjunctiva, must not be lost sight of. I have seen this condition threatened as evidenced by some obstruction of the duct, but the further spread of the mischief was prevented by the thorough scraping at the entrance of the duct in the inferior meatus.

As regards a complete cure the prognosis is much less favourable, as relapses after the apparent complete extinction of the disease are very common. In most of my own cases there has been one or more relapses, except in the case in which the tuberculous granuloma of the septum was widely removed with the knife. In this case so far there has been no return of the disease.

Treatment.—In the early stages of the disease and in slight cases an attempt may fairly be made to cure the disease by thorough scraping with Grunwald's curettes, and the subsequent application of the galvano cautery or lactic acid; but to ensure, as far as this can be done, complete eradication of the disease the more radical operation should be undertaken,—that is, the nasal cavity should be laid freely open, and the disease as far as possible completely cut away with the knife. In a case under my care some twelve months ago in the hospital I split the nose in the middle line, turned the nasal bones outwards, and in this way obtained a thorough exposure of the neoplasm, which was confined to the anterior two thirds of the septum. The growth was then extirpated, together with a wide margin of healthy septum. Care was of course taken not to injure the upper margin of the cartilaginous septum, since as long as this remains intact there is little or no risk, as far as I know, of the nose falling in. After the removal of the growth the nasal bones were carefully replaced, and the skin wound *equally* and accurately united with horsehair sutures: the resulting scar was hardly perceptible. I have no doubt in my mind that, except in slight and early cases, some such exposure and thorough removal holds out the best prospect of success, both as regards a local relapse and prevention of tuberculous dissemination. Unfortunately, however, it is difficult to convince patients in the earlier stages of the disease of the necessity of what appears to them a formidable procedure. They are apt to elect the less radical intranasal method. In two other of my cases I am sure that the radical removal of the disease was very strongly indicated, but both patients absolutely refused to give me a free hand. One is still under treatment, and is apparently nearly cured; the other has had several relapses after intranasal scraping. I have not seen her since the last operation. From the condition of her nose when last seen I should think another relapse is likely to occur.

The Surgical Treatment of Chronic Otorrhœa.

A Paper read before the Abernethian Society, November 10th, 1898,

By EDMUND W. KOUGHTON, B.S.Lond., F.R.C.S., Surgeon to the Royal Free Hospital, and Surgeon in charge of the Throat and Ear Department.

PROBABLY there are but few serious diseases which are more common, and at the same time more often neglected, than chronic otorrhœa. Many patients of the poorer class do not seek treatment unless the otorrhœa is attended by deafness or other symptoms which interfere with their occupation; and many parents, whose children have discharge from the ears, regard the condition as a natural one, or as one not worth the time and trouble to get it cured.

Nevertheless there are a large number of cases of otorrhœa who seek relief at our hospitals, and I think it must be admitted that some of them do not obtain the full benefit which surgery is able to confer on them. This is, no doubt, chiefly because they do not carry out the treatment prescribed, but to some extent it is because the nature of the morbid condition and the principles of treatment are not always sufficiently appreciated.

Twenty years ago the majority of practitioners were content to accept the ancient dictum that there were two classes of diseases of the ear, those that could be cured by syringing, and those that could not be cured at all. The latter class included most cases of chronic otorrhœa. During recent years the progress of surgery has taken chronic otorrhœa out of the list of incurable affections and placed it amongst the list of diseases amenable to operative measures conducted on well-recognised surgical principles.

It is well to remember that most cases of otorrhœa begin as an attack of acute otitis media, and that the discharge persists and becomes chronic because the primary disease is inadequately treated, or not treated at all. It is not within the scope of the present paper to discuss the treatment of acute otitis media, but there is one point to which I wish to refer briefly. It is the question of opening the mastoid antrum in acute or subacute cases. Most surgeons are agreed that when there are undoubted signs of suppuration within the mastoid, early opening and drainage are advisable. There are cases, however, in which the mastoid antrum and cells are involved in the suppurative process and yet there is no mastoid pain or tenderness, because there is no actual retention of pus under pressure or tension. These cases require careful consideration because they are difficult to diagnose, and they are very prone to lapse into chronicity. If we find that pus reappears very quickly after cleansing and drying the middle ear by syringing through the meatus and inflating through the Eustachian tube, we may infer that it is not simply secreted by the tympanic mucosa, but that it comes from the mastoid antrum and cells. This suspicion is strengthened if we find a slight bulging or dip of the postero-superior wall of the meatus near the membrane, and an increase of temperature of the posterior wall of the meatus over that of the anterior.

Under such circumstances the mastoid process should be explored. The result may of course be negative, in which case we can close our incision and no harm will be done. If, however, we find pus, its evacuation and drainage will greatly expedite the termination of the case.

Space will not permit me to enter further into what may be called the preventive treatment of chronic otorrhœa, but I will briefly refer to the conditions which lead to a continuance of the discharge, for unless these conditions are understood our treatment will be neither scientific nor successful.

As I have already said, some cases of simple acute tympanic inflammation become chronic because they are untreated. In such cases we may hope for a cure by the use of the ordinary antiseptic remedies applied through the external meatus.

In others we find that the condition is maintained by some constitutional dyscrasia, such as syphilis, tuberculosis, anæmia, &c., or by some disease of the nose or naso-pharynx. Such cases will recover under the influence of tonics and other internal remedies, and removal of adenoid vegetations and other morbid conditions of the upper air passages.

Not unfrequently the persistence of the disease leads to, and is itself maintained by, the presence of granulations, polypi, caries of the ossicles, or of the bony walls of the tympanum. These conditions can often be remedied by appropriate treatment conducted through the external meatus. These I shall not enter into, as they would lead me too far afield.

In a large number of cases the inflammatory process has involved the tympanic attic, the mastoid antrum and cells, filling these cavities with septic masses of pus, granulation tissue, and cholesteatoma, and leading to caries and absorption of the osseous tissue. Here the morbid condition is out of reach of any treatment conducted through the meatus, and can only be attacked by the operation of mastoidectomy.

Since 1892 I have performed this operation just on fifty times for patients suffering from an otherwise incurable otorrhœa. The following remarks are based chiefly on a study of the notes of these cases.

Let us consider in the first place the indications for mastoidectomy; in other words, when should we advise this operation?

Briefly it may be stated that if we fail to cure a case of chronic otorrhœa after three months' treatment through the external meatus, we should advise operation. Further it may be added that in cases where there are definite indications of involvement of the mastoid antrum ordinary aural treatment will be a waste of time, and the sooner mastoidectomy is performed the better.

In the next place, what do we hope to obtain by operation? We seek to cure the discharge and to free the patient from the danger of intra-cranial diseases which a sufferer from otorrhœa may at any moment fall a victim to. It must be clearly understood that the co-existent deafness will not be relieved, but at the same time one can promise that any hearing power the affected ear may have will not be destroyed.

Before describing the operation of mastoidectomy it may be well to recall to mind some points in the anatomy of the parts concerned. The mastoid antrum is a roughly spherical cavity about a quarter of an inch in diameter, which communicates with the upper and posterior part of the tympanic cavity by means of a passage known as the "iter." The mastoid antrum is present at birth, and must be carefully distinguished from the mastoid cells which open into it, and which are developed later in life. It is not situated in the mastoid process, but in the base of the petrous portion. Its depth from the surface varies from three fifths to three quarters of an inch. The roof of the antrum (tegmen antri) is continuous with the roof of the tympanum (tegmen tympani), and is formed by that portion of the base of the middle fossa of the skull which lies immediately outside the prominence of the superior semicircular canal.

The "iter" or passage of communication between the antrum and the tympanum lodges the short process of the incus. The inner wall of this passage is separated from the external horizontal semicircular canal by a thin plate of very dense bone. The canal for the facial nerve runs downwards and backwards in very close relation with the inner wall and floor of the iter near its opening into the tympanum. The mastoid antrum is most accessible from the surface through a small area known as the supra-meatal triangle.

This triangle is bounded above by the posterior root of the zygoma, below and in front by the postero-superior quadrant of the orifice of the external auditory meatus, and behind by an imaginary vertical line passing through the posterior margin of the meatus.

The bone intervening between the supra-meatal triangle and the antrum varies in character; sometimes it is diploic, like the bone between the compact plates of the vault of the skull; sometimes pneumatic, *i. e.* hollowed out by air-cells; and sometimes it is sclerotic, or composed of dense ivory-like bone. The last condition is often found in cases of chronic otorrhœa.

Preparation of the Patient.—On the night before the operation half the head should be shaved and the skin scrubbed with soap and water, followed by the use of turpentine or ether to remove the fat. The external ear and meatus is cleansed with 1 in 1000 biniodide solution, and the scalp mopped over with a 1 in 500 solution of biniodide in 75 per cent. spirit. A compress of 1 in 2000 biniodide is then applied to the part, and left there until the patient is anæsthetised.

The anæsthetic I prefer is the A.C.E. mixture.

Operation.—The auricle is drawn forward, and a curved incision is made from the apex of the mastoid process passing upwards an eighth of an inch behind the attachment of the auricle to a point vertically above the meatus. All the soft parts, including the periosteum, are severed. With a periosteal elevator the auricle and the tissues in front of the incision are separated from the bone and pushed forward. The skin lining the meatus is detached on all sides as far down the bony canal as possible, and displaced forwards with the auricle. Several vessels require ligature at this stage. A strip of sterilised calico bandage is then passed through the meatus and out of the wound, its two ends tied together and used as a retractor to draw the external ear and cutaneous meatus well forward.

The osseous meatus and the bone behind and above it are then exposed to view as freely as in the dried skull, and the position of the supra-meatal triangle is easily defined.

The next stage of the operation consists in opening the antrum by perforating the bone through the supra-meatal triangle. There is much difference of opinion amongst surgeons as to what is the most suitable instrument to use for this purpose. Some use a trephine, others a gouge, and others a hammer and chisel. I have discarded these instruments in favour of drills and burrs similar to those used by dentists, and have been well satisfied with them. Others have used dentists' drills and have found them unsatisfactory. I think the reason of this is that the drills and burrs they use are too large for the motive power with which they propel them. I find that the ordinary dental engine worked with the foot is not sufficiently powerful, but that the small electro-motor supplied for the purpose by Mr. Schall, the electrician, gives plenty of power. The handpiece which carries the drills is connected to the electro-motor by an ordinary flexible cable, which, however, must differ from that generally used by dentists in two respects. Firstly, there must be an insulation, so that the current cannot pass to earth from the motor through the patient or operator; and secondly, there

must be an arrangement so that in the event of the drill suddenly becoming arrested by a hard piece of bone the motor can overrun without breaking the cable.

The drilling is commenced with a fissure burr one sixteenth inch in diameter. This penetrates the compact tissue quickly and easily. When the hole has reached the depth of three sixteenths of an inch it is enlarged laterally by a circular swaying motion of the hand, whilst the point of the instrument remains steady. The fissure burr is then changed for a rose-headed burr, which is used to enlarge the opening to five sixteenths of an inch in diameter.

In this manner the opening is gradually deepened until the mastoid antrum is reached, but at the same time that the hole is deepened the adjacent portion of the posterior bony wall of the meatus is removed, so that the cylindrical hole becomes a deep groove. The antrum is easily recognised when reached by means of a bent probe passed through the iter into the tympanum. The height of the antrum varies somewhat, especially in reference to the level of the floor of the middle fossa. Several times I have found the floor of the middle fossa below the level of the posterior root of the zygoma, and have consequently penetrated into it, but I have never penetrated the dura mater.

Another important anatomical relation to be considered in this stage of the operation is the lateral sinus. Lake, from a series of investigations, has found that the lateral sinus groove reaches forwards to a variable extent, so that in some cases it comes within the line of fire from the supra-meatal triangle to the antrum; in others it comes near the line, whilst in a third class it is well behind it and out of harm's way. I have several times exposed the sinus, but have never penetrated into it.

The next stage of the operation consists in removal of the outer wall of the iter or passage leading from the antrum to the tympanum. In doing this one must remember that the external semicircular canal and the canal for the facial nerve are in very close relation with the inner wall of the iter. These structures must be protected by inserting the bent end of a probe into the passage whilst the outer wall is burred away. The long process of the incus is now usually encountered lying in the iter. With a bent probe or hook the ossicle is removed. The malleus is then sought for in the upper part of the tympanum, and removed in a similar manner. To complete the exposure of the upper part of the tympanum or attic it is usually necessary to remove a portion of the outer wall of the latter. This is done by inserting a small rose-headed burr into the cavity of the attic, and making it cut its way outwards.

The antrum, iter, and tympanum are now thoroughly scraped, all granulation tissue, inspissated pus, &c., being removed. The hæmorrhage is from time to time arrested by strips of antiseptic gauze; when the latter is withdrawn the walls of the cavity, especially the antrum, are carefully examined with a fine probe to discover any cells or recesses leading off from them. If such are found they are laid open, and their walls smoothed down with the burr, so that the external meatus, tympanum, attic, antrum, and mastoid cells are made into one large smooth-walled cavity. Some boracic lotion is then injected through a Eustachian catheter, so as to wash out any septic matter lurking in the Eustachian tube.

When I am not satisfied that I have been able to remove all septic granulations or carious bone as thoroughly as I could wish, I complete the disinfection with pure carbolic acid applied on a small piece of wool held with forceps. I then slit the back of the cutaneous meatus longitudinally in its whole length, and stitch it into the wound so as to apply it as closely as its size will permit to the posterior part of the newly made bony cavity. The latter is then packed with iodoform and glycerine gauze introduced through the meatus, and the mastoid incision is sewn up. Finally, an ordinary antiseptic dressing is applied.

After-treatment.—I usually perform the first dressing after forty-eight hours. It is not safe to leave it for a week, as one does in an ordinary aseptic operation, on account of the difficulty and uncertainty of rendering such a complicated bony cavity thoroughly aseptic.

If the case is progressively satisfactory, and there is no pain or rise of temperature, the second dressing may be left for two or three days. The stitches are removed from the mastoid incision after eight days, and the meatus is plugged with gauze daily until there is no further exudation. It is extremely important that the plugging should be introduced right into the tympanum and antrum, and not simply laid in the meatus. In some of my cases in which the dresser has failed to introduce the gauze plug beyond the limits of the cutaneous meatus the latter has contracted at its internal extremity to a minute aperture, and has led to retention of discharge and decomposition.

One great difficulty in the subsequent treatment of these cases is that they require careful supervision for about three months after the operation, and it is impossible to keep them in hospital for that length of time, and when once they have returned to their usual unsanitary surroundings there is considerable risk of the bony cavity becoming septic before it is quite healed. When the patient is unable to attend daily for treatment I give him a solution of boracic alcohol, grs. xl ad ʒj, to drop into the ear night and morning.

Results.—We must consider the results of this operation under the following heads:

Cure of discharge.
Hearing power.
Immunity from cerebral complications.
Injury to facial nerve and consequent paralysis.
Mortality.

Cure of Discharge.—From the patient's point of view this is the object most aimed at. It must be admitted that we do not always completely succeed in attaining this end. In the majority of my cases when discharged from the hospital there has still been a very slight exudation, just sufficient to prevent one from saying that it is entirely cured. When these cases leave the hospital one very often loses sight of them, more especially if they are free from trouble. They do not as a rule come to see one with the simple object of reporting that they are well. Nevertheless I have seen a sufficient number of these cases at a subsequent period, when they have turned up on account of some other ailment, to be able to say that in a good number the discharge ceases entirely. More precisely I cannot speak.

In a certain number a very small amount of mucous or muco-purulent discharge persists, but it is in such small quantity that it is scarcely a source of annoyance to the patient. It must be remembered that the tympanic cavity is no longer covered with a protecting membrana tympani, and that any mucous membrane which remains, being subject to the irritation of air, dust, &c., is very likely to pour out a certain amount of secretion.

Hearing Power.—It must be understood that this operation is not undertaken with the object of improving the hearing. As a general rule these patients are very deaf in the affected ear before the operation, and remain in the same condition afterwards. As a rule a watch is only heard on contact. In none of my cases has the hearing been made any worse, but this is not saying much. In a few cases, however, the hearing has been distinctly improved, a watch being audible as far as three inches, and loud conversation being easily understood.

Immunity from Cerebral Complications.—It is here, I take it, that the patient gains most, although this is the result that he appreciates least, and at the same time it is a result which is most difficult to prove one has obtained. In none of my cases has any cerebral complication supervened, yet it must be at once admitted that their number is so small that the statement is of no value. It is quite possible, even probable, that none of them would have succumbed to cerebral disease if they had not been operated on.

It cannot, however, be denied that a patient whose tympanum and accessory cavities have been converted into one large scar-lined space is in far less danger of cerebral trouble than one whose attic, antrum, and mastoid cells are full of pus and pyogenic bacteria, which may at any moment be shut off from the external meatus, and seek an exit into the cranial cavity.

Injury to facial nerve, &c.—In two of my cases the antrum and mastoid cells had been eroded and expanded to such an extent that a portion of the outer wall of the aq. Fallopii was destroyed, and the nerve laid bare to the extent of about a quarter of an inch. In these the face twitched several times while the cavity in the bone was being cleaned out, and slight facial paralysis ensued; but it was only of temporary duration, and completely disappeared in a few weeks.

In one case, however, on which my house surgeon operated under my supervision, complete facial paralysis on the affected side was noticed as soon as the patient recovered from the anæsthetic. In this case partial recovery ensued, but when the patient left the hospital she was still unable to close the eye completely, and I expect she will always have a certain amount of facial paralysis. Nevertheless she was pleased with the result of the operation, as her discharge was cured and her hearing distinctly improved.

Mortality.—As far as I know all my cases are still alive. It may, therefore, be safely concluded that none of them died directly or indirectly from the operation.

My series of cases is not sufficiently large to enable me to say what is the mortality of the operation, but it may safely be concluded the danger of the operation itself is very small.

A study of these cases leads me to the following conclusions:

(*a*) The operation is justifiable and advisable in all cases of chronic otorrhœa which have resisted treatment through the external meatus for three months.

(*b*) It is practically devoid of danger to life.

(*c*) The facial nerve is subjected to risk of damage, and particular care to avoid it must be exercised.

(*d*) The hearing power is never diminished, sometimes improved, but usually unaltered.

(*e*) The discharge is always diminished, frequently cured.

(*f*) The risk of subsequent intra-cranial disease is reduced to a minimum.

Some Experiences of Plague Duty in India.

By W. NETTERVILLE BARRON.

(*Concluded from p. 29.*)

EVICTION, with consequent segregation and quarantine, led, however, to our most serious differences of opinion. One night at Munmar, when I was comfortably asleep, I was aroused by a total stranger, who was armed to the teeth and accompanied by an escort of two sepoys similarly equipped. He informed me that perhaps I had better get up, as serious rioting was going on in an adjacent village, which had already resulted in the death of one doctor and a perfectly inoffensive pleader. I rose with the feeling that the hospital square presented undoubted advantages in the way of a peaceful life, for there, except for keeping a wary eye on the surgical registrar, or avoiding a demonstrator of anatomy, troubles might be classed as minor. Having seen my belligerent friend off to the scene of the fray, I settled down to an anxious night, as I was not at all sure my own particular camp would not be fired with a patriotic enthusiasm to shake off the yoke of the foreigner. Dr. G—, I.M.S. at Sinnar, had to fly for his life. Luckily he had a fleet horse, but as it was he lost all his kit, which was either burned or stolen. Again, at Malegaon we had a "how d'ye do" which might have been very serious, but which, fortunately for us, only resulted in our being pelted with carrots and otherwise freely insulted. It was at Malegaon, too, that I was informed one evening that all the doctors and all the nurses in Bombay had been murdered, and that my best plan would be to beat a dignified retreat; in fact, to go without being pushed. Not seeing any advantage in this plan, and disbelieving the report, I remained where I was, and nothing happened. I was, I regret to say, out of the Bombay row, but Winter was well in it, and so was Guyon Richards, who, if report speaks truly, performed prodigies of valour, and left his mark on more than one Mussulmany pate.

Low caste Hindoos are generally dirty, low class Mussulmans are always so. This may be taken as a rough rule to go by, of course remembering that my experience is strictly confined to the Bombay Presidency. It is this terrible dirt which so materially assists the spread of plague. Their mud huts, accommodating as they do many too many persons, are frequently in an indescribable state of filth, while a rooted aversion to fresh air adds another factor in favour of the ubiquitous microbe. Cow-dung is used universally as flooring, and in many instances as walling too. Even Europeans have their verandahs floored with cow-dung, the surface of which is repeatedly renewed by women, who spread it flat with their hands. It is not nearly so unpleasant as it sounds, and when dry is quite inoffensive.

Having left Satara, which is a semi-fashionable hill station, much frequented in the rainy season, I went down south to Hubli. Here I met Leumann and Winter, both suffering from overwork, as the plague was raging fiercely, and they were miserably understaffed, a fact which we could never get the Government to appreciate; and, indeed, they did not seem to have the men.

I had not been long at Hubli, where I was principally engaged on inoculation work, before I had to go off to Gadag, a smaller town nearer the Mysore border. Although there was no plague there, there was plenty of cholera—nearly twenty cases a day. I am not sure which is the worse, but on the whole I prefer the plague. It was while I was at Gadag that I had the satisfaction, if that is the proper term to use, of discovering what was perhaps the worst plague-infected village in the whole of India, and with a description of that village I will close this article.

Hire-Handigol ("hire" is the Canarese for "great") is one of two adjacent villages in the southern Mahratta country, about nine miles from Gadag, and off the main road. Its normal population is between 500 and 1000, all of whom eke out a precarious existence by cultivating the black cotton soil of the neighbourhood. It lies at the foot of a small hill, which rises abruptly from the dead level of the surrounding plain. A little less than half a mile away a small river or nullah wends its sluggish course to form one of the countless tributaries of the mighty and sacred Krishna. Few trees exist near this dreary spot, the only vegetation, excepting the various crops of jaivari, bajari, cotton, &c., being some stunted palms growing at the edge of the nullah, and affording shelter for a few flocks of seven-sisters or an occasional resting-place for the inevitable crow.

Having learned that all was not quite right in the village, I proceeded from Gadag accompanied by Mr. Vincent, Assistant District Superintendent of Police, and Mr Bharade, District Deputy Collector, the latter a Brahmin gentleman of considerable local importance. I had been informed that cholera was raging in the two villages, but suspecting the truth of this assertion, I, in consultation with the two gentlemen named above, thought it advisable to see for myself. To within a mile of Hire-Handigol we travelled in dumnies (a kind of closed cart drawn by two bullocks), and then on foot ascended the small hill previously mentioned. As far as the eye could reach, the lone and level plain stretched far away, save where the Dumble range broke the even monotony of the landscape. Hire-

Handigol lay immediately at our feet, seemingly a village of the dead, for we could see no signs of life in its irregular streets, nor was there any smoke rising from the numerous and closely crowded mud and stone huts. A little way down the scarp of the hill a flock of vultures were disputing together, while close by two or three gaunt and evil-looking pariahs were engaged in devouring something or other, only desisting to growl threateningly on our approach. Quickly descending we neared the village, only to be greeted by the most awful and insinuating smell; so bad was it that I, who thought myself inured to such things, instinctively clapped my handkerchief to my nose, while Bharade took long and copious sniffs at a ball of naphthaline which he always carried with him. The smell persisted, but we soon had other matters still more gruesome to distract our attention. For presently I stumbled over a human skull, and then another, and then several strewn here and there with other remains, as also the clothing in which the dead had been cast out. Now the full significance of the vultures and pariahs came over us, until with a shudder we turned away to complete our unsavoury task. Passing into the village itself, we were met by some Sepoys whom we had sent on in the early morning in anticipation of any trouble. A few frightened villagers also appeared; from one of them we managed to extract some sufficiently melancholy information. The pestilence, he said, had begun about six or eight weeks previously; at first it did not result in more than one or two deaths daily, but quickly gathering force it made its presence felt in no half-hearted manner. The miserable people fell ill, and died in tens and twenties; many fled, but many also remained, only to serve as fresh victims to the rapacity of their terrible visitor. During the previous ten days about one hundred had perished, including the patel or village headman. This, in a population when we arrived of a little over 300, serves to illustrate what plague can do when it is so minded. I was further informed that at the time there were between thirty and forty persons lying ill in their huts. We at once proceeded on a systematic inspection of the whole village. Never will I forget that ghastly procession. Leading the way and flanked by two Sepoys walked the acting patel, then we came, and after us a motley and terrified crowd of inhabitants, many of whom had already the plague in them. Hut after hut I entered—pitch-dark, loathsome, and stinking hovels. The dead and dying lay in all directions, hardly a corner but had its stricken occupant. In one, I remember, I stumbled over a dead baby in the doorway, and falling forward, only saved myself from going full length by my outstretched hands impinging against its dying mother's prostrate form. Some of the scenes were too revolting to appear in print, but those of you who have met with a really bad case of general paralysis in the third stage will understand what I mean. Frequently I had to rush out of the germ-laden atmosphere gasping for breath, although I smoked cigarettes persistently throughout my inspection. Most of the cases were of the bubonic type; several, however, were not, and I saw two or three at least who showed extensive hæmorrhages. Some died when I was looking at them,—partly, I am sure, from fright, as in the endeavour to sit up or get out of the way the heart failed to bear the sudden and extra strain, with an immediately fatal result. The mortality had been so high that there had been no time to burn or bury the dead, hence the gruesome sights we had seen outside the village.

There is, I believe, a ludicrous side to nearly everything, and even these horrors proved no exception to this rule. Whenever I came out of an infected hut I simply remarked "Plague," for the benefit of a recording clerk. Its effect was most profound, especially on Bharade, who had before then never been intimately in contact with infection. He visibly paled and retired a few steps, muttering in a mixture of Hindustani and English; while Vincent, who possessed a remarkable fund of medical knowledge, pretended to find various malignant microbes upon his own and Bharade's person. These microbes at last got so large, nearly an inch long, that Bharade began to see the joke, and finally smiled in I-would-I-were-out-of-it kind of way.

So much for Hire-Handigol. The necessary measures were taken, and shortly I believe the epidemic was stayed. Too late; Southern India had become already infected, and now it is as bad there as it ever was further north.

Case of Severe Poisoning by Antidiphtheritic Serum.

By J. D. RAWLINGS, M.B.Lond., formerly House Physician, St. Bartholomew's Hospital.

DR. HERRINGHAM, in his article on "The Serum Treatment of Diphtheria" in *Allbutt's System of Medicine*, says: — "In some cases the injection of serum is followed by a rash, erythematous or urticarious, upon the skin. In a few cases there is itching, but it has no other ill effect, and it passes off sometimes within a few hours, sometimes within a few days. Less often we have never seen it—there is pain and swelling in some of the joints, which is also transient."

Messrs. Burroughs and Wellcome, in the printed directions which they supply with their serum, state in capital letters, "The serum can do no harm, so may be used freely." The above statements are quite in accordance with my own small experience of antitoxin rashes, due either to antidiphtheritic serum or to tuberculin. I was therefore considerably taken aback when a single injection of antitoxin in one of my cases was followed by an illness far more severe than the diphtheria for which it was given. Such cases are, I hope, sufficiently rare to justify the publication of such a one in detail.

G. H—, æt. 8, male. Family history and past history unimportant. History of present condition, related by the father, who is a medical man spending his holiday in Dorking:—Patient was quite well until September 21st, when he was "not quite himself." Morning temperature 99° F. Was kept at home.

September 22nd.—Was apparently well again, but the morning temperature was again 99° F. Spent the morning bicycling.

September 23rd.—Complained of slight sore throat, and was first seen by me. Morning temperature 99·6°, rising during the day to 102·8° in the evening. Neither pulse nor respiration rate was increased out of proportion to the temperature. Tongue very slightly furred; fauces red and somewhat swollen; mucus in the pharynx. On each tonsil was a single patch, the colour of wet wash-leather, about the size of a silver penny. No exudation on soft palate. Very slight enlargement of glands at left angle of jaw; none on the right side. A careful systematic examination of the boy revealed no other physical signs of disease anywhere. There was no albumen in the urine. A swab taken from the throat had upon it a small fragment of membrane, and Dr. Drysdale subsequently reported that the swab contained many diphtheria bacilli. A minimum dose (7 c.c.) of Burroughs and Wellcome's serum was injected deeply into the right buttock. The serum had been kept for two months in a very cold dark cellar, and was quite clear. The skin was washed with soap and water before the injection. Every part of the syringe had been boiled since it was last used. No covering was applied to the puncture.

September 24th.—Temperature normal in the morning, but rose to 100° F. in the evening. Fauces unaltered.

September 25th.—Temperature was normal in the morning, and remained so until October 2nd. The membrane had entirely disappeared on September 28th, and the redness of the fauces was diminishing. From the beginning the fauces were swabbed twice daily with glycerine and perchloride of mercury 1 in 1000. By the end of September patient was regarded as quite convalescent, and was going out a little each day.

September 30th.—A few diphtheria bacilli were found in a swab from the throat.

On October 2nd, on returning from his walk, his temperature was found to be 99°.

October 3rd.—Temperature 99·2° in the morning, and 100° in the evening. There was a slight increase in the glandular enlargement, and some tenderness at the left angle of the jaw. The appearance of the fauces was unaltered. There was a slightly raised patch of erythema, about two inches in diameter, surrounding the seat of the antitoxin injection on the right buttock.

October 4th.—Temperature 101° to 102°; pulse in the evening 120; respiration 24. No physical signs in the chest either now or at any future time. There was a blotchy erythema over the lower extremities and lower part of the back, which increased during the day. The skin was intensely irritable, and as well as the morbilliform rash there was a good deal of urticaria, to which the boy is liable. The fauces were redder than they had been, and there was again some slight swelling.

October 5th.—Temperature 100·2° to 102·2°; pulse 120 to 132; respiration 24. Fauces better than yesterday. Marked glandular enlargement and tenderness at angle of jaw. The rash is spreading up the back. In many places it is markedly circinate. It shows no preference for the flexures of the joints, being, indeed, quite absent from the popliteal spaces. It is very profuse on the arms and hands. There is one isolated patch over the left mastoid process. The face is clear. Very slight injection of conjunctivæ, and some swelling of nasal mucous membrane. Tongue scarcely furred. Appetite very poor. Bowels open. No headache. Lungs *nil*. Faint hæmic murmur at apex of heart.

October 6th.—9 a.m., child looks and feels better. Temperature 99°; pulse 120, good volume and tension. Apical heart murmur has disappeared. Throat as at last note. The rash has extended to the top of the back, and is quite confluent on the lower parts of the legs. Was very restless till 1 a.m. this morning, when he had half a drachm of "bromidia," and afterwards slept well; some constipation. 9 p.m., temperature 103°; pulse 132. Child very peevish, and complains bitterly of itching everywhere, and of pain in arms, legs, and hands; this is so severe that he cannot be moved without crying out. The pain is not specially in the joints, and the latter are not swollen. The pruritus is most severe on the soles of the feet. The face is now covered with a blotchy, slightly raised erythema, which is not circinate. The skin is slightly puffy everywhere. Tongue slightly furred. Constipation has not yet yielded to treatment. Heart, lungs, and abdomen normal. There has been no rigor. Complains of slight pain above pubes, but the bladder is empty. Sponged for a quarter of an hour, during which temperature fell to 102°, and subsequently to 101·5°, and patient seemed more comfortable; but there was no fall in pulse rate.

October 7th.—Temperature 103·6° to 102·8°: pulse 120; respiration 24. Had four or five hours' sleep, and took food well in the night, but has been refusing it to-day. Is slightly brighter than yesterday. Pain much diminished. Rash has faded markedly on trunk and limbs, but not on face. Injection of conjunctivæ very marked. The condition of the eyes, throat, nose, and skin of face is very like that of measles. Urine contains a trace of albumen. In the evening the case was seen by Dr. Barlow, who had no doubt that the symptoms were due to antitoxin, and gave a favorable prognosis.

October 8th.—Temperature 99·8° all day; pulse 110 to 100; face flushed, but there is nothing that can be recognised as a definite rash. Everywhere else the rash has disappeared, leaving little or no pigmentation.

From now all the remaining symptoms rapidly abated. The temperature was subnormal on the morning of the 9th, and there was no return of fever. No bacilli were found in a swab sent to the Pathological Laboratory on October 12th.

From the point of view of the general practitioner, at least, it is a very important fact that antitoxin *may* cause an illness so severe that the patient's life appears to be in danger. In this particular case the father of the child (himself a medical man) was fully convinced that the patient was going to die; and although so gloomy a view was never to my mind justified, one could not but feel extremely anxious on October 7th, when the morning temperature was 103·6°, the pulse 120, and the child beginning to refuse his food, in spite of the fact that the rash was disappearing. Very striking points in the case are the unusual severity of the pains in the limbs and the fact that the pain was not specially in the joints, nor were the joints swollen. Knowing the history of the case, the diagnosis was simple enough; but had one seen the case for the first time on October 7th, it might well have been mistaken for measles, the chief diagnostic point being that the rash was fully out on the face and fading on the rest of the body. From a septic process it was distinguished by the length of the incubation period. Why is it that illnesses caused by the injection of serums have definite incubation periods? The ordinarily accepted explanation of the incubation period of zymotic diseases does not apply to serum fevers where no micro-organisms are introduced.

Case of Alleged Self-inflicted Skin Affection.

Read at joint meeting of the West Somerset, and Dorset and Hants branches of the B. M. A. at Yeovil, October 18th, 1898.

By MARK R. TAYLOR.

THE patient is a lady of about 40, unmarried, and of no occupation. She has suffered from the eruption for four or five years. I first saw her two and a half years ago, when she complained of a painful affection of the skin on the right wrist. A patch of skin about 2 to 3 inches long by ½ to 1 inch broad over the back of the wrist was discoloured, the colour running from pink at the edges to dark purple inside, while in the centre was a shallow ulcer. There were shallow sunken scars on the left wrist, and one or two ulcers more or less healed on the right. Some months later the eruption appeared higher up the arm, and by degrees covered the whole of the front of the elbow-joint, where a considerable amount of ulceration took place. Then the upper part of the left chest and forehead were attacked.

About this time severe neuralgia "in the back of the eye" came on; the patient had been accustomed to suffer from this previously to my attending her, and he relieved by hypodermic injections of water. This treatment I continued at intervals. Soon after the neuralgia came on the rash appeared just over the left eye, invading the eyebrow. About this time I began to suspect its origin. The front of the right upper arm was then attacked by the rash. I asked Dr. Cave, of Crewkerne, to see her with me, and two days previous to his coming I covered the part affected with lint and strong strapping, so as to take in a margin of an inch all round. When we saw the patient we found a fresh outbreak on the surface beyond the lint, leaving a clear gap corresponding to the inch interval, while the new rash followed the edge of the lint. Dr. Cave was of the same opinion as myself as to the origin of the rash. The eyebrow was then again affected, and the neuralgia demanded more and more frequent injections of morphia; consequently I gave injections of plain water, when she required any, for a period of a year, which were uniformly successful, giving generally twelve, and in one case fifteen hours' sound sleep.

About four months ago the patient had an attack of hysterical aphonia, which, however, soon cleared up on the use of a battery. The rash then appeared over the trachea, and extended down the sternum. I drew a line of caustic round this, said the rash could not spread over it, nor did it. The rash then began again a few inches below the angle of the left jaw, and spread from the clavicle to the edge of the sterno-mastoid, and down the arm as far as the insertion

of the deltoid. I again used the caustic, but my patient had found out it was common caustic I used, and expressed a doubt as to how much it would now stop the spreading. In consequence, in a couple of days the rash had jumped over the line, and there were patches formed between the latter and the border of the axilla. The surface affected was ten inches by six inches in its longest diameters.

The rash appears as follows: for about twenty-four hours stinging pain is felt at some point, the skin then gets pink and by degrees purplish, followed later on by desquamation in slight cases, or blistering and ulceration in the more severe.

My reasons for believing the rash to be self-inflicted are—

(1) The rash has never appeared on any spot that cannot be easily got at.

(2) The character of the rash, which resembles none that I can find described.

(3) The way the rash spread round the edge of the lint.

(4) The way the rash jumped the caustic line.

(5) The rash follows no definite course with regard to body surfaces or nerve distribution.

(6) The neurotic character of the patient.

With regard to the treatment, I think I may say I have tried everything that ever does good in skin affections, but with no success. When any ulceration or raw surfaces appear, I give her dressings of iodoform and eucalyptus ointment, strong enough to make her a very unpleasant companion; but she has used this for months without appearing to mind. As to the cause I am inclined to believe some vesicant is used, but have never been able to trace anything microscopically or otherwise. Unfortunately, family circumstances prevent my getting her to undergo Weir-Mitchell treatment or any strict watching, while the sympathy of her family effectually stops any aid I might expect from them.

Since writing the above the patient has been away for a month, and has come back with severe ulceration of the skin over the left elbow, which I am afraid will cause enough cicatrisation to interfere with the movement of the joint. This ulceration took place before she consulted a doctor, who at my suggestion covered up the arm securely, with the result that the rash spread no more.

Since her return I have, at Dr. S. West's suggestion, painted the places as soon as they showed or became painful with collodion. This effectually prevented any further progress towards ulceration. I have also retained the dressings in place with starched bandages, and the rash has appeared at the edges of, or in any gap in the bandage.

I have also learnt that five-and-twenty years ago the patient had an hysterical knee-joint, which was cured by an anæsthetic.

I have thought the case worth reporting, owing to the large area over which the rash spreads, the great pain and discomfort the patient must suffer, and the long time that the disease has lasted.

South Petherton, Somerset.

A Case of Dislocation of the Head of the Femur into the Perinæum.

By G. S. HAYNES, M.R.C.S., L.R.C.P., late Acting House Surgeon, West Kent General Hospital.

A YOUTH æt. 18 years was admitted to the West Kent General Hospital, Maidstone, on October 3rd, 1898, with the following history:

He was playing football, and whilst running quickly with a long stride after the ball was pushed over and fell heavily. On attempting to rise he experienced great pain in the right hip-joint, and found he was unable to bring his legs together.

On examination the right thigh was found to be completely abducted, flexed, and everted, forming a right angle with the trunk. The head of the femur was felt in the perinæum behind the scrotum, and there was a very marked depression over the normal situation of the great trochanter.

An unsuccessful attempt to reduce the dislocation by manipulation was made, so chloroform was administered.

The thigh was then flexed on the abdomen, so that the knee nearly touched the chest wall, then adducted, internally rotated, and extended, with the result that the head of the bone suddenly and easily slipped back into the acetabulum.

I am indebted to Mr. A. H. B. Hallowes, surgeon to the hospital, who reduced the dislocation, for his permission to publish this note.

Notes.

THE 34th volume of the 'St. Bartholomew's Hospital Reports' will appear early in January next, under the joint editorship of DR. NORMAN MOORE and MR. D'ARCY POWER. It will contain papers by Sir Thomas Smith, Mr. Henry Power, Mr. Marsh, Mr. Butlin, Mr. Walsham, and other members of the medical and surgical staff. The subscription list is not worthy of the large hospital whose practice and progress it is the business of the Reports to record, nor is it enough to maintain the Reports at the highest level of excellence. It is hoped, therefore, that intending subscribers will send in their names without delay to the librarian, Mr. P. F. Madden. The subscription price for each volume remains at 6s., the price to non-subscribers being 8s. 6d.

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SIR DYCE DUCKWORTH has retired from his position as examiner for the Navy Medical Service, a post which he has held for eight years.

* * *

THE Mid-Sessional Address will be delivered before the Abernethian Society on Thursday, January 12th, 1899, by Mr. Berry. He has chosen as the title "Dressers and Dressing." This is a subject which Mr. Berry has made peculiarly his own; the *genus* "Dresser," all the varieties and the habitats thereof have been carefully studied by him, and it is rumoured that he has several unique examples in his extensive collection. Mr. Berry may be sure of an audience and a hearty welcome.

* * *

MR. PERCY FURNIVALL has been elected assistant surgeon to St. Mark's Hospital.

* * *

MR. WILLETT has kindly pointed out an oversight in our note of the October issue referring to the recent cleaning of the Hogarth pictures. We suggested the possibility that the wealthy lady who forms a prominent figure in the "Pool of Bethesda" suffered from a functional paralysis. On close inspection, however, one distinctly sees upon her skin the typical character and distribution of the eruption of psoriasis. It is interesting, therefore, to note in passing that Hogarth represents two distinct forms of the (ancient) genus *Lepra* in this picture. We wish to thank Mr. Willett for his correction, and would point the obvious lesson that our readers should avail themselves of a sunny day to get an adequate view of the paintings.

* * *

MR. H. WILLIAMSON has taken the degrees of M.A., M.B., B.C. at the University of Cambridge.

* * *

IN the innocent days of childhood a familiar form of playing card gave a warning as to the drawbacks to the life of a medical man. The picture represented a weary

mortal, attired in airy night garments, with candle in hand, answering a night call at his door. Below were the words "Who would be a doctor?"

Readers of this JOURNAL decided that, in spite of the many known hardships, they would enter the profession. They were soon met by a quite unexpected difficulty. As students they have all been oppressed with the overwhelming amount of medical literature, and notwithstanding sturdy efforts to master all branches of their profession, even the best have found it utterly impossible to digest even a tithe of the works published. A glance through the advertising columns of the journals fills one with nothing short of dismay. Every branch of medicine and surgery is being minutely investigated, and the results published. Small subjects, which a few years ago were exhausted in five or six pages of the standard text-book, are now treated by bulky volumes which almost make the student feel the futility of striving. A recent number of the *British Medical Journal* contained advertisements of many such books. One writer devotes 440 pages of crown octavo to "Tests and Studies of the Ocular Muscles." Another discusses through 240 pages of royal octavo the "Ferment Treatment of Cancer and Tuberculosis," and a third investigator requires no less than 926 pages of royal octavo to record what is known about the "Traumatic Separation of the Epiphyses." Numerous other examples could be quoted of bulky volumes dealing with recognised and well-defined branches of knowledge. But a recent publication simply overflows all known bounds, and devotes 965 pages of imperial octavo to the study of "Anomalies and Curiosities of Medicine."

* * *

SOLOMON of old complained that "of making books there is no end, and much study is a weariness of the flesh." If such a wise man in his day suffered, surely words fail to describe the sorrows of the poor medical student of to day. It has been said that "it is in literature as in finance, much paper and much poverty may co-exist." Can this apply to medical literature?

* * *

THE above had already been written when we received the first two issues of 'The Medical and Surgical Review of Reviews,' edited by Nathan Boyd, M.D. This is a praiseworthy attempt to cope with the enormous mass of medical literature by abstracting it and presenting it in a form capable of being assimilated by the busy general practitioner. At present the scheme is somewhat tentative, but when it is in full working order it should prove of considerable value. Those contributions to the literature of the month which are deemed most important form a series of leading articles, and are followed by a comprehensive series of brief abstracts. The annual subscription has now been fixed at one guinea, and the magazine appears monthly.

OUT of five Gold Medals awarded at the recent London M.B., four have been given to two Bartholomew's men, Mr. T. J. Horder and Mr. J. P. Maxwell. We congratulate them heartily upon their success. The former has received a Medal in each of the three subjects of the Honours Examination—a record performance since 1881,—the latter the Scholarship and Medal in Obstetric Medicine.

* * *

As this is the sixth successive year in which the Scholarship in Obstetric Medicine with its accompanying Gold Medal has fallen to us, it is interesting to recall those who have brought such credit to the School. 1893—H. O. Davies. 1894—W. E. Lee. 1895—S. Gillies. 1896—W. d'Este Emery. 1897—E. J. Toye.

* * *

The following is the list of Honours:

UNIVERSITY OF LONDON.—*M.B. Honours Examination · Medicine.*—Gold Medal, T. J. Horder. *Obstetric Medicine.*—Scholarship and Gold Medal, J. P. Maxwell; Gold Medal, T. J. Horder. *Forensic Medicine.*—Gold Medal, T. J. Horder.

* * *

MR. H. G. READ has been reappointed an Assistant Dental Surgeon.

* * *

MR. A. GRANVILLE has been appointed Senior Assistant Anæsthetist, *vice* Dr. B. Collyer, resigned.

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MR. W. F. CROSS has been appointed Junior Assistant Anæsthetist.

* * *

WE learn that Dr. West has resigned the post of Physician to the Skin Department.

* * *

THE election of a Casualty Physician has been postponed for three months.

* * *

ON the evening of October 7th, 1898, at the Holborn Restaurant, George Street, Sydney—a name strongly reminiscent of the old days,—the first annual dinner of Bart.'s men resident in New South Wales was held. The chair was taken by Dr. Milford, a veteran whose Bart.'s days date back nearly fifty years, and who well remembers Sir George Burrowes and Sir William Lawrence. Dr. Jenkins filled the vice-chair. The toast list comprised three—the Queen, Bart.'s by Dr. Jenkins, absent friends by the chairman,—all drunk with much enthusiasm and amidst strong expressions of affection for the old School and its staff. Drs. Gudden, Hughes and Mr. Woodhouse by their singing contributed much to the success of a very pleasant evening. The latter gentleman rendered a song specially composed in honour of "Bart.'s."

Great credit is due to the Hon. Secretary, Dr. Mailler Kendall, for the method in which he managed and carried out the dinner—a function which will do much to bring

Bart.'s men together, and establish a salutary *esprit de corps* among them. The menu card was adorned with the Bart.'s shield, and a reproduction of the old Priory of St. Bartholomew. Below are the names of those present.

Drs. F. Milford, R. J. Allun, Thomas Pickburn, S. T. Knaggs (visitor, editor of *A. M. G.*), Fourness Barrington, Sinclair Gillies, H. Guy Warren, E. J. Jenkins, C. Dugwal Clark, T. Mailler Kendall, F. R. Woodhouse (guest), A. Maitland Gudden, S. H. Hughes, two Bart.'s men resident in New South Wales.

C. B. Pym and H. G. Wright were unavoidably absent.

Amalgamated Clubs.

CRICKET CLUB

At a General Meeting held in the Smoking Room on Wednesday, October 26th, Mr. E. F. Rose in the chair, the following gentlemen were elected to serve as officers for the ensuing season:

President.—Dr. Church.
Captain, First XI.—H. W. Pank.
Secretaries, First XI.—C. H. Turner, H. E. G. Boyle.
Captain and Secretary, Second XI.—C. H. Hawes.
Committee.—E. F. Rose, J. A. Willett, W. H. Randolph, J. C. Sale, H. E. Scoones, L. B. Bigg.

RUGBY FOOTBALL CLUB.

After the football match on November 30th, St. Bartholomew's Hospital *v.* the Hastings and St. Leonards Football Club, the Old Bart.'s doctors who practise in Hastings and its neighbourhood entertained for the sixth time the teams at a "high tea" at the Castle Hotel, Mr. T. H. Wadd in the chair.

The company, which numbered 130, included nine of the eleven "hosts," viz. Dr. Brodie (Battle), Mr. C. Christopherson, Mr. E. J. Deck, Mr. C. B. Gabb, Mr. L. Jowers, Dr. H. Marshall (Bexhill), Dr. Trollope, Mr. Wadd, and Dr. Scarlyn Wilson, Mr. C. A. Coventon and Mr. Perham Taylor being unable to attend. There were also present the Mayor of Hastings, the two teams, and a most representative gathering of the many sporting clubs of the town, who were invited to do honour to the old Hospital of St. Bartholomew.

After a substantial cold collation, which was done ample justice to, Mr. Wadd, who was very warmly cheered, proposed "Success to St. Bartholomew's Hospital Football Club." He congratulated the Hospital on its victory that afternoon (2 goals to 1), and then expressed his great pleasure in seeing once again a team from the Hospital, and said how glad he was to hobnob once more with men from his old school.

The toast was most warmly received, and the Vice-Captain (Mr. Bostock) replied. He said that they had, as they always did have at Hastings, a good game. Of course he was glad they had won. He regretted the absence of their Captain, who was not free to play in Wednesday matches. He hoped that the very kind wishes that had been expressed might help them in their Inter-Hospital Cup ties, and so uphold the reputation of the grand old Hospital to which they belonged. He most heartily thanked the Old Bart.'s doctors for their capital entertainment.

Dr. Scarlyn Wilson next gave "Success to the Local Club." This he supported in an amusing speech, which was well received. He coupled the toast with the Hastings Captain (Mr. G. Bond), whom he called the "Sirdar" of the local forces. He congratulated the club on its flourishing condition, its good form, its freedom from debt, its balance at the bank, and the largely increased attendance of the public at its matches.

Mr. G. Bond, who was also cheered, thanked the company, saying that the Bart.'s match was always looked forward to as one of the best of the season. He reminded the company that the club was the "runner up" last season for the Senior Sussex Cup, and this year they very much hoped to bring the cup home to Hastings.

In response to loud calls and much applause, the President of the Club (Mr. C. B. Gabb) rose and said that this tea party was always a red letter day in his calendar. He thanked them for the splendid reception they had given him as President of the Hastings and St. Leonards Football Club.

Mr. N. A. Hardwich next proposed the last of the three toasts allowed at this festival, "Our Hosts." This he did briefly and to the point, saying how much local football gained year by year from the hospitality of the Old Bart.'s doctors.

Dr. Trollope who replied received a very hearty greeting, and his remarks were much cheered. He said that he had been born too soon for football. When he was at the hospital (1856) there were no clubs. He supposed to-day the best team had won, and the game had been a spirited one. He was sure that the Hospital would always be able to send a doughty eleven to meet the local notables, and he was positive that they would invariably receive a hearty welcome.

The Bart.'s team had to leave by the 7.50 train, so the time was short; but in between the speeches a most capital entertainment was given. Mr. Wallis Arthur (comic) and Mr. Foxton Ferguson (bass) both came from London on purpose to sing, and their efforts were greatly appreciated. Mr. H. C. Willmott gave a reading from Rudyard Kipling, and Dr. Redmayne and Mr. Sorrell sang a duet. Grace was said by the Rev. F. W. Smythe, and the accompanist was Mr. H. Goss Custard, Mus.Bac.Oxon.

After "God Save the Queen" the Bart.'s men made a dash for the train. Both guests and hosts agreed that this tea and smoking concert in no way fell behind those given in previous years, the company being most enthusiastic and the whole affair successful in every way, and it goes to prove strongly that as each year adds to the number that divides the Old Bart.'s doctors from their student days, it in no way slackens their love and affection for the School and Hospital of St. Bartholomew.

ST. BART.'S (A) *v.* CIVIL SERVICE (A).

Played at Richmond on Saturday, October 15th, when the A team opened what promises to be a highly successful season by a win of 5 goals 3 tries (33 points) to *nil*.

Team.—C. L. Nedwill (back); H. W. Pank (captain), W. S. Danks, E. W. Price, C. S. Wakley (three-quarters); G. C. Marrack, H. B. Ash (halves); J. M. Plews, H. E. Stanger-Leathes, N. Maclaren, E. C. Hodgson, F. Harvey, H. M. Huggins, H. Mills, L. Arnould (forwards).

ST. BART.'S (A) *v.* UNIVERSITY COLLEGE.

Played at Acton on October 22nd, and won by 2 goals 6 tries (28 points) to *nil*.

Team.—C. L. Nedwill (back); H. W. Pank (captain), C. Dix, A. J. Spreckley, H. Slater (three-quarters); N. M. Wilson, H. S. Ward (halves); H. G. Boyle, F. Harvey, E. C. Hodgson, H. M. Huggins, H. T. Wilson, L. Arnould, E. G. D. Milsom, J. D. Riddle (forwards).

ST. BART.'S (A) *v.* UNIVERSITY COLLEGE SCHOOL.

Played at Winchmore on October 26th, resulting in an easy win for the Hospital by 5 goals 4 tries (37 points) to 1 goal 1 try (8 points).

Team.—C. O'Brien (back); H. W. Pank (captain), S. Mason, A. J. Spreckley, L. M. Rosten (three-quarters); E. C. Mackay, H. S. Ward (halves); H. G. Boyle, H. E. Stanger-Leathes, E. C. Hodgson, F. Harvey, H. M. Huggins, H. T. Wilson, L. Arnould, E. G. Milsom (forwards).

ST. BART.'S (A) *v.* OLD CHARLTONIANS.

In this match, on November 5th at Charlton, the A team met with their first reverse by 3 tries (9 points) to *nil*.

Team.—C. L. Nedwill (back); H. W. Pank (captain), C. Dix, E. W. Price, C. S. Wakley (three-quarters); E. C. Mackay, H. S. Ward (halves); J. M. Plews, H. G. Boyle, F. Harvey, H. E. Stanger-Leathes, E. C. Hodgson, L. Arnould, E. G. Milsom, L. M. Rosten (forwards).

ST. BART.'S (A) *v.* UPPER CLAPTON (A).

On November 12th, at Upper Clapton, a fast and even game ended in a win for Bart.'s by 1 goal (5 points) to *nil*. The try was obtained by M. B. Scott just at the corner flag, Pank converting by a magnificent kick.

Team.—H. W. Pank (captain) (back); W. H. Scott, L. M. Rosten, A. J. Spreckley, A. B. Slater (three-quarters); E. C. Mackay, H. S. Ward (halves); M. B. Scott, H. E. G. Boyle, H. E. Stanger-Leathes, N. Maclaren, E. C. Hodgson, H. M. Huggins, H. Mills, E. G. D. Milsom (forwards).

ST. BART.'S (A) *v.* MERCHANT TAYLORS' SCHOOL.

This match at Winchmore Hill resulted in a loss by 1 goal 3 tries (14 points) to 2 tries.

Team.—C. L. Nedwill (back); E. W. Price, L. M. Rosten, A. B. Slater, C. S. Wakley (three-quarters); W. H. Scott, E. C. Mackay (halves); H. E. Stanger-Leathes, N. Maclaren, E. C. Hodgson, R. Im Thurn, H. T. Wilson, W. L. Davies, H. M. Huggins, L. Arnould (forwards).

ST. BART.'S (A) *v.* LONDON IRISH (A).

This match took place in grand weather on the Irish ground at Herne Hill. Our opponents turned out to be a keen but unskilled team, and the game proved an easy win for the Hospital by 2 goals 5 tries (25 points) to *nil*.

Team.—A. B. Slater (back); H. W. Pank (captain), L. M. Rosten, G. C. Marrack, C. G. Martin (three-quarters); E. C. Mackay, N. M. Wilson (halves); M. B. Scott, F. Harvey, R. Im Thurn, E. C. Hodgson, H. H. Riddle, H. M. Huggins, H. Mills, L. Arnould (forwards).

ST. BART.'S (A) *v.* GUY'S (A).

This match was spoilt by the state of the ground, the game being played in the rain. A very even "scrum" game resulted. Guy's scored rather luckily just by the corner flag on the call "No side." No goal resulted, and the game ended in a win for Guy's by 1 try to *nil*.

Team.—A. B. Slater (back); H. W. Pank (captain), G. C. Marrack, L. M. Rosten, C. G. Martin (three-quarters); N. M. Wilson, E. C. Mackay (halves); M. B. Scott, H. E. G. Boyle, H. E. Stanger-Leathes, F. Harvey, G. M. Levick, R. Im Thurn, H. M. Huggins, E. G. D. Milsom (forwards).

RESULTS.

So far the results are as follows:—Played 8, won 5, lost 3; points for 135, points against 34.

ASSOCIATION FOOTBALL CLUB.

ST. BART.'S *v.* BARNES.

This match, fixed for Wednesday, October 26th, was unfortunately scratched by our opponents.

ST. BART.'S *v.* OLD CRANLEIGHANS.

This match was played at Winchmore Hill on Saturday, October 29th, and resulted in an easy win for the Hospital by 5 goals to love. Willett won the toss, and selected to play from the pavilion end. An energetic game ensued, both goals being visited in turn. The home forwards, however, broke away, and O'Brien scored the first point for Bart.'s. Almost immediately after, from a good run and pass by Ward, Willett was able to beat the opposing custodian with a low shot.

On changing ends the Hospital did very much as they liked. After some desultory play, O'Brien ran through the opposing backs and scored; the remaining two goals were got by Willett and O'Brien. For the Hospital, L. Orton and Bates were the best of the back division. Team:

H. H. Butcher (goal); T. H. Fowler, L. Orton (backs); E. H. Scholefield, A. H. Bostock, T. Bates (halves); H. N. Marrett, J. A. Willett, C. O'Brien, V. G. Ward, G. H. Orton (forwards).

ST. BART.'S *v.* RICHMOND.

This match was to have been decided on Wednesday, November 2nd, at Richmond; but, owing to our opponents being obliged to re-play a Cup tie, the match had to be scratched.

ST. BART.'S *v.* FOXES.

Played on Saturday, November 5th, at Winchmore Hill. Bart.'s were not playing their full strength, but the game resulted in a very easy win for the Hospital. Result: 8 goals to *nil*.

The game was not started till very late, owing to the late arrival of the referee. The home forwards, starting the game, soon got together, and G. H. Orton scored the first point for Bart.'s. Almost immediately Scholefield beat the Foxes' goal-keeper again with a splendid shot, which just dropped over his head, and shortly after Ward added another goal to our score.

At half-time the score was—Bart.'s, 3 goals; Foxes, *nil*. The latter half of this game was almost entirely confined to our opponents' quarter, Butcher, in goal, only touching the ball once. The remainder of the goals were scored by Ward (2) and Marrett (1). Team:

H. H. Butcher (goal); T. H. Fowler, L. Orton (backs); E. H. Scholefield, A. H. Bostock, C. H. Fernie (halves); H. N. Marrett, V. G. Ward, C. O'Brien, T. Bates, G. H. Orton (forwards).

ST. BART.'S *v.* IPSWICH.

This match was played at Ipswich on Saturday, November 12th, before a numerous attendance, and after an exciting and keenly contested game the result was a victory for the Hospital by 4 goals to 3. H. E. Thomas unfortunately missed his train, but Ipswich very kindly found us a substitute, who played a sound game throughout.

Shortly after the commencement of the game Ward and O'Brien broke away, and finishing up a good combined run, O'Brien put the ball into the net, thus scoring our first point. Ipswich made strenuous efforts to equalise, and a few minutes before half-time added a couple of goals in quick succession. At the interval the score was—Bart.'s, 1; Ipswich, 2.

In the second portion the Hospital were doing all they could to get on terms, and the opposing goal-keeper was continually being called on to save good shots from Ward, Willett, and Bostock. From a run by the home forwards the ball was taken down to our goal, and Gardiner, the inside right, scored a third point for Ipswich with a fast low shot, which it was impossible for Butcher to have saved. After this play was chiefly confined in front of the Ipswich goal; but the back division was equal to the attacks made by the Hospital until Ward, who had been playing a splendid game, beat the home custodian with a side shot. Shortly after Bostock put in a very hot shot, which unfortunately hit O'Brien on the head in the mouth of the goal, and the ball rebounded into play. The former, however, soon obtained possession again, and this time proved successful, thus equalising the score. Within a few minutes of time Marrett added the fourth goal. Team:

H. H. Butcher (goal); T. H. Fowler, L. Orton (backs); E. H. Scholefield, A. H. Bostock, T. Bates (halves); H. N. Marrett, J. A. Willett, C. O'Brien, V. G. Ward, A. N. Other (forwards).

ST. BART.'S *v.* REIGATE PRIORY.

In this match, played at Reigate on Saturday, November 19th, Bart.'s had by no means their full team, but the game terminated in a satisfactory win for us by a rather narrow margin of 1 goal to love. Our opponents, winning the toss, selected to play down the hill. O'Brien started the game for the Hospital, and the forwards, quickly getting together, attacked the Reigate goal vigorously, but, however, without success. In turn the opposing forwards broke away, but our back division was equal to the occasion, and Butcher brought off a splendid save from a good shot by the inside left.

At half-time neither side had scored, and the game continued to be keenly contested.

On resuming Reigate attacked vigorously, but failed to score. Orton, Turner, and Butcher were playing a very sound game. Within a few minutes from time being called the Hospital forwards rushed the goal-keeper, together with the ball, through into the net, thus securing our winning goal. Butcher was particularly conspicuous in goal for the brilliant way in which he saved. Team:

H. H. Butcher (goal); L. Orton, C. H. Turner (backs); E. H. Scholefield, T. Bates, N. E. Waterfield (halves); H. N. Marrett, J. A. Willett, C. O'Brien, V. G. Ward, G. H. Orton (forwards).

HOCKEY CLUB.

The following are the officers for the ensuing season:

President.—Dr. H. Morley Fletcher.
Captain.—D. Jeaffreson.
Secretary.—G. V. Bull.
Committee.—D. Jeaffreson, H. F. Parker, C. A. S. Ridout, A. H. Pollock.

A good list of matches has been arranged.

First Match.—*v.* EPPING.

After a good game we were defeated by 3—2.

Second Match.—*v.* STS. PETER AND PAUL'S, at Teddington.

A good and fast game resulted in a draw of 2 goals all. Towards the end of the first half the Saints scored. Soon after the interval Beckett scored for us, and shortly afterwards Ridout placed us ahead. Even play followed, and just before time the Saints rather luckily equalised. The forwards brought off some good combined runs, and all the backs played well.

Bart.'s Team.—H. F. Parker, D. Jeaffreson, T. H. Gaudy (backs); M. O. Boyd, A. H. Pollock, J. A. Nixon (half-backs); A. D. Edwards, A. Hallowes, G. V. Bull, H. Beckett, C. S. Ridout (forwards).

v. HITCHIN. At Hitchin, October 29th.

A pleasant game, despite the rain, resulted in a defeat by 6—3. The Hospital scored first through Beckett, but before half-time Hitchin had a lead of 2 goals. Early in the second half good passing among the forwards resulted in Hallowes and Wilmot scoring, thus making the scores equal. Then Hitchin put on 3 goals; and though the Hospital played up well, and were near scoring on several occasions, they could not get through. The game was more even than the score would seem to indicate. The forwards all played well, but the halves might with advantage keep closer up. Of the back division, Boyd and Jeaffreson were the best, while for Hitchin Lucas and the brothers Foster were best.

Bart.'s Team.—H. F. Parker, D. Jeaffreson, T. H. Gandy (backs); A. H. Pollock, M. O. Boyd, E. H. Hunt (half-backs); A. B. Edwards, A. Hallowes, H. Beckett, G. V. Bull, R. C. Wilmot (forwards).

v. KINGSTON GRAMMAR SCHOOL. November 2nd.

This ended in a severe defeat for the Hospital by 5—0. For us Coalbank and Boyd were in good form.

v. ROYAL OBSERVATORY. November 5th.

A well-contested game ended in defeat by 1—0. Observatory scored in the first half. In the second half the Hospital pressed, but one or two chances were lost owing to off-side.

Bart.'s Team.—D. Jeaffreson, E. P. Glenny, H. F. Parker, J. A. Nixon, H. B. Hill, C. S. Ridout, G. V. Bull, H. Beckett, A. Hallowes, A. B. Edwards.

"A" TEAM v. SOUTHGATE 3RD. November 12th.

In this match we found our opponents weaker than we expected, and won easily by 7—0. Goals by Beckett (5), Im Thurn, and Bull.

Bart.'s Team.—L. Gray, D. Jeaffreson, H. B. Hill, A. H. Pollock, M. O. Boyd, J. A. Nixon, A. B. Edwards, G. V. Bull, H. Beckett, R. Im Thurn, R. C. Wilmot.

LAWN TENNIS CLUB.

ST. BART.'S v. SOUTHGATE.

Played at Southgate on Saturday, May 14th, and won by Bart.'s by 5 matches to 4, 9 sets to 9, and 90 games to 94:

V. S. A. Bell and J. K. N. Marsh—
- beat C. B. Weir and F. C. Barry, 6—8, 6—4, 9—7.
- beat E. S. Rashleigh and W. C. Hayar, 6—4, 6—3.
- beat C. E. Barker and M. A. Ransome, 7—5 (retired).

J. Stirling-Hamilton and L. Orton—
- beat Weir and Barry, 6—4, 7—5.
- beat Rashleigh and Hayar, 8—6, 6—3.
- lost to Barker and Ransome, 3—6, 6—8.

S. Hey and C. Pennefather—
- lost to Weir and Barry, 3—6, 4—6.
- lost to Rashleigh and Hayar, 2—6, 2—6.
- lost to Barker and Ransome, 2—6, 1—6.

At the annual general meeting of the above Club, held on November 16th, the following officers were elected for the ensuing year:

Captain.—Mr. J. K. N. Marsh.
Senior Hon. Sec.—Mr. J. Stirling-Hamilton.
Junior Hon. Sec.—Mr. C. Pennefather.

The following gentlemen were elected on the Committee:
5th Year.—Mr. H. Burrou and Mr. G. V. Bull.
4th Year.—Mr. C. H. Barnes.
3rd Year.—Mr. H. N. Marret.
2nd Year.—Mr. F. E. Murray and Mr. H. Walker.
1st Year.—Mr. C. L. Nedwell.

SHOOTING CLUB.

At the annual general meeting, held on Wednesday, October 26th, the following officers were elected for 1899:

President.—H. J. Waring, Esq.
Vice-Presidents.—Howard Marsh, Esq., Henry G. Read, Esq., Dr. Edkins, E. W. Miles, Esq.
Captain.—R. J. Mollis.
Secretary.—C. R. V. Brown.
Committee.—W. R. Read, T. H. Gandy, A. C. Brown.

UNITED HOSPITALS RIFLE ASSOCIATION.

The annual general meeting of the United Hospitals Rifle Association will be held in the smoking-room of St. Bartholomew's Hospital on Wednesday, January 25th, 1899, at 5 p.m. It is hoped that members of the metropolitan hospitals interested in shooting will urge their clubs to join the Association in the coming year. The following hospitals have belonged to the Association for varying periods:—St. Thomas's, St. Bartholomew's, Guy's, St. Mary's, Charing Cross, St. George's, the London University College, and King's College; and it is to be hoped that some of these will rejoin the Association, as at the present time there are only four hospitals belonging to it.

At the general meeting each hospital in the Association has two votes for the election of officers for the year; also in matters concerning the alteration of such rules as may be deemed necessary for the welfare of the Association.

The Honorary Secretary will be pleased to receive entries of any hospitals not at present in the Association; also he will be pleased to forward to the Secretary of any Hospital Shooting Club a copy of the revised rules for 1898, and such other information concerning the Association as he may require.

WALTON R. READ,
Hon. Secretary.

St. Bartholomew's Hospital, E.C.

Abernethian Society.

ON Thursday, November 10th, at a meeting of the Society, Mr. Thursfield occupying the chair, Mr. E. W. Roughton read a paper on "The Surgical Treatment of Chronic Otorrhœa." This paper appears *in extenso* in our present issue.

On November 17th (Mr. Thursfield in the chair) a case of primary specific sore on the head was shown; also a case of multiple phlebolíths in varicose veins. Mr. Waggett then read a paper on "The Surgery of the Accessory Sinuses of the Nose." In his paper Mr. Waggett said that prominence of the frontal eminences was no criterion of the size of the sinuses, but the forward character of the upper buttress of the nose was better evidence. In speaking of mucous polypi, he said that gravity had much to do with their shape. As to treatment, permanent cleanliness and drainage were necessary. Perhaps it might be needful to extract a tooth; or drainage through the nose, after the method recommended by Luc, might be resorted to.

On November 24th, at a meeting of the Society, Mr. Thursfield being in the chair, Dr. Batten read a paper on "The Muscle Spindle under Normal and Pathological Conditions." At first the method of preparation of the muscle was described. The spindle occurred only in the skeletal muscles, not in the involuntary fibres. It was the sensory nerve termination in the muscle, and had an enormous nerve supply. After section of the anterior nerve-root the muscle atrophied, but the muscle spindle was left absolutely intact. The spindle did not atrophy in such diseases as progressive muscular atrophy and myopathy, but showed changes in tabes dorsalis. There were no spindles in the extrinsic muscles of the eye, but the "organs of Golgi" found there might be their equivalent. Some beautiful microphotographs were thrown upon the screen in illustration of the lecture.

An ordinary meeting of the Society was held on December 1st, Mr. Horder presiding. A case of primary syphilitic sore on the arm was shown, and also one of actinomycosis of the abdominal wall.

Dr. Lewis Jones read a paper on "The Therapeutic Uses of Electricity." At the commencement he made a strong plea for greater interest in the electrical department. The uses of electricity, he stated, could be divided into two great classes:—(1) *Local*, as in crutch paralysis or incontinence of urine. (2) *General*.—Rickets, anæmia, rheumatism, gout, mental failure after various illnesses. The use of electricity for relief of pain was strongly urged. In sciatica little could be done without it. A constant current battery should be used. Its vaso-motor action was very beneficial in bruises, sprains, &c., and in the treatment of chilblains the electrical foot-bath was highly recommended. Many cases of mild infantile paralysis were cured by it, and in severer forms much benefit was experienced. Electricity was used in surgery as a *destructive agent* for nævi, moles, superfluous hairs, &c. Its use for cystoscopic purposes and also as a galvano-cautery was touched on. A very interesting discussion followed. There was a good attendance of members.

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

THE Annual Dinner of the above-mentioned Club was held on Thursday, November 24th, at Frascati's Restaurant, Dr. Howard Tooth (St. John's) being in the Chair.

Between sixty and seventy members, with their guests, sat down to dinner. This was somewhat less than the number of those who had accepted invitations, but doubtless the unfavourable weather prevented many at the last minute from attending.

A most enjoyable evening was spent by all present. Indeed, there was only one matter of regret, and this was that the imminence of the Cambridge examinations had unfortunately kept away most of the musical talent of the Club. It is hoped, however, that this may be remedied in future years by holding the dinner rather earlier in the month.

After dinner, the Queen's health having been duly honoured, the Chairman proposed in happy terms the toast of the evening, viz. "Prosperity to our Club." He reminded us in the course of his speech that the Club was no longer in its earliest growth, it having in reality been founded as long ago as 1877 by the late Mr. Shuter. He dwelt also on the advantages which result to all the members from the existence of the Club, and proved, by the great increase which has taken place of late years in the numbers who attend the dinner, that these advantages are appreciated.

The toast was received with much applause.

Dr. Norman Moore next proposed the health of the Guests, who included amongst others such distinguished and familiar names as Sir Thomas Smith, Mr. Pearce Gould (Surgeon to Middlesex Hospital), the Warden, Dr. Andrewes, Mr. Waring, and last, but very far from least, Mr. Bowlby. In the course of a brilliant speech, full alike of wit, humour, and learning, Dr. Norman Moore touched upon in turn the chief characteristics of our visitors, pointing out particularly that, though they differed much among themselves, yet they all agreed alike in this—that they were no strangers to the Club. The toast was finally coupled with the names of Sir Thomas Smith and Dr. Calvert.

After a short interval, during which Mr. Jordan, accompanied by Dr. Gillespie, kindly played a violin solo,

Sir Thomas Smith rose to respond. He was received at once with that enthusiasm which his presence always evokes at every gathering of Bart.'s men, for, as Dr. Norman Moore truly said, "Kind and genial always, the more he has been honoured of late, the more genial he has become."

He was followed by Dr. Calvert, who, in the course of an appropriate speech, delighted his audience by revealing a deep and extensive knowledge of poetry. Indeed, not content with quoting at length from Shakespeare and Tennyson, he also laid Dante under contribution.

Dr. Lewis Jones then gave the health of the Chairman, to which Dr. Tooth responded.

Lastly, the Chairman proposed the toast of "The Secretaries," Dr. Morley Fletcher and Dr. Horton-Smith, and the latter having briefly replied, the proceedings were brought to a close.

The Month's Calendar.

[Secretaries of Clubs, &c., are requested to co-operate in making this list as complete as possible by forwarding notices of forthcoming events to the Editor.]

1898.
December 16th.—Sir Dyce Duckworth's and Mr. Marsh's duty.
" 17th.—Association F.C. *v.* Crouch End Vampires, at Winchmore Hill.
" 20th.—Dr. Hensley's and Mr. Butlin's duty.
" 21st.—Association F.C. *v.* Tunbridge Wells, at Tunbridge Wells.
" 23rd.—Dr. Lauder Brunton's and Mr. Walsham's duty.
" 27th.—Dr. Church's and Mr. Willett's duty.
" 30th.—Dr. Gee's and Mr. Langton's duty.

1899.
January 3rd.—Sir Dyce Duckworth's and Mr. Marsh's duty.
" 5th.—Christmas Entertainment by St. Bartholomew's A.D.C. Performance of "The Balloon" and "No. 1 round the Corner."
" 6th.—Dr. Hensley's and Mr. Marsh's duty.
" Second performance by A.D.C.
" 10th.—Dr. Lauder Brunton's and Mr. Walsham's duty.
" 12th.—Abernethian Society address at 8 p.m. Mr. James Berry on "Dressers and Dressing."
" 13th.—Dr. Church's and Mr. Willett's duty.
" 14th.—Association F.C. *v.* Cheshunt, at Winchmore Hill.

Review.

NASAL OBSTRUCTION: the Diagnosis of the Various Conditions causing it, and their Treatment, by W. J. WALSHAM, M.B., C.M.Aber., F.R.C.S.Eng., Surgeon and Lecturer on Surgery, St. Bartholomew's Hospital, &c. (London: Baillière, Tindall, and Cox, 1898. Demy 8vo, pp. 256. Thirty-four illustrations.)

The author of these pages may well refer to the diagnosis of nasal disease as "a department of practice to which students and general practitioners have not hitherto given much attention." The interior of the nose and the route to its accessory sinuses is to many students, and to not a few practitioners, a *terra incognita*—a region darker than darkest Africa.

The frequency of nasal obstruction, the grave consequences to which it may give rise when disregarded, the comparative ease with which an exact diagnosis can be arrived at by a systematic examination, and lastly, the evils that can be prevented and the relief afforded by appropriate treatment, suffice to render the subject deserving of further attention, and the work done by Mr. Walsham most welcome.

The first half of the book deals with the diagnosis of the condition. The method adopted is that of "working from the known to the unknown," "from the known condition of the parts to the unknown disease of which they are signs and symptoms." This of necessity involves some repetition, but the method is essentially clinical and thoroughly practical. One of the practical aids to exact diagnosis upon which we are glad to see stress laid is the use of the nasal probe. To the pitfalls and fallacies in diagnosis attention is drawn:

> Further, should some obstructive lesion connected with the turbinals be discovered, it must not be concluded that this is necessarily the sole cause of the obstruction; thus, an erection of the turbinals may depend upon adenoid vegetation in the vault of the pharynx, these growths being the real cause of the trouble; or, again, an enlargement of the middle turbinal or a polypus on that body may be associated with chronic purulent catarrh of one of the accessory sinuses. The naso-pharynx should therefore always be examined, and in some cases the accessory sinuses also.

The second half of the book is given up to the treatment of conditions causing obstruction. The operations for the

removal of nasal obstructions are fully described. The fascinating but questionable procedure of complete turbinectomy is justly criticised. The sections dealing with the correction of nasal deformities, coming from one who has had exceptional experience in this branch of artistic surgery, will command considerable attention.

It would seem ungracious and ungenerous to find fault. In a future edition plates illustrating the anatomy and pathology of the parts dealt with might be advantageously added, and if necessary some of the instruments figured might be omitted without detracting from the usefulness of the work. The strengths of the solutions of cocaine given for purposes of diagnosis are excessive, and the strength of the solution of eucaine mentioned for operative purposes is perhaps insufficient.

The satisfactory character of the whole book is due to the author being possessed not only of considerable experience in the subject, but also of many years' experience as a clinical teacher. The book is a clear presentment of the clinical facts which must be borne in mind by one studying the subject. Readers, therefore, who desire to be posted up in the general outlines of nasal obstruction, and, for that matter, of nasal surgery, cannot do better than read this volume.

Appointments.

BARFORD, P. C., M.B.(Lond.). M.R.C.S., L.R.C.P., appointed Surgeon to the P. & O. ss. Malta.

* * *

CORY, C. G., M.R.C.S., L.R.C.P., appointed Medical Officer and Public Vaccinator to the Seventh District of the Newmarket Union.

* * *

RAWLINGS, J. D., M.B.(Lond.), M.R.C.S., L.R.C.P., appointed Medical Officer and Public Vaccinator for the Northern District of the Dorking Union.

* * *

EVANS, E. LAMING, M.A., M.B.(Cantab.), appointed House Surgeon to the Royal Orthopædic Hospital.

* * *

EVANS, E. W. SPENCER, M.R.C.S., L.R.C.P., appointed Surgeon to the Orient ss. Oroya.

* * *

FURNIVALL, P., F.R.C.S., appointed Assistant Surgeon to St. Mark's Hospital.

* * *

GRAHAM, J. H. P., M.R.C.S., L.R.C.P., appointed Surgeon-Lieutenant to 4th V.B. the King's (Liverpool Regiment).

* * *

HOGARTH, R. G., F.R.C.S.Eng., appointed Surgeon to the Samaritan Hospital for Women, Nottingham.

* * *

MCLEAN, W. W. L., M.R.C.S., L.R.C.P., reappointed Temporary Plague Officer by the Indian Government.

* * *

WOODFORDE, R. E. H., M.R.C.S., L.R.C.P., appointed House Surgeon to the Huntingdon County Hospital.

Examinations.

UNIVERSITY OF CAMBRIDGE.—*Diploma of Public Health.*—A. G. Penny.

UNIVERSITY OF LONDON.—*M.B. Honours Examination: Medicine.*—Gold Medal, T. J. Horder. *Obstetric Medicine.*—Scholarship and Gold Medal, J. P. Maxwell; Gold Medal, T. J. Horder. *Forensic Medicine.*—Gold Medal, T. J. Horder.

M.B. Examination: First Division.—T. J. Horder. *Second Division.*—F. Brickwell, G. D. Freer, J. P. Maxwell, P. W. Rowland, H. A. Schölberg, G. P. Tayler.

ROYAL COLLEGE OF SURGEONS.—*Final Examination for Diploma of Fellow.*—W. Stuart Low, A. W. Ormond, A. J. Kodocanachi, G. H. Sowry, A. W. Sikes, Claude Worth. *First Examination for Diploma of Fellow.*—A. T. Compton, E. Laming Evans, E. H. Hunt, N. Maclaren, S. H. Modi, F. E. Murray, H. Walker, R. H. K. Whitaker, C. E. West.

SOCIETY OF APOTHECARIES.—*Final Examination: Midwifery.*—R. F. Ellery.

Changes of Address.

CORY, C. G., M.R.C.S., L.R.C.P., from Cambridge to Soham, Cambs.

GRAHAM, J. H. P., M.R.C.S., L.R.C.P., from New Brighton to West Derby, Liverpool.

HORNE, W. JOBSON, to 27, New Cavendish Street, Harley Street, W.

Birth.

HOOKER.—November 20th, at Cirencester, the wife of Charles P. Hooker, L.R.C.P., F.R.C.S.Ed., of a son.

Marriages.

BUTTAR—SYRETT.—On the 10th December, at St. Andrew's, Westminster, by the Rev. F. B. Woodman, Charles Buttar, M.D., of 2, Prince's Square, W., to Georgie Isabel, daughter of Ernest Syrett, of River House, Walton-on-Thames.

CHAPLIN—SETON-SMITH.—On November 17th, at St. Mary's, North-end, Arnold Chaplin, M.D., of Finsbury Square, to Joan, widow of the late Bruce Seton-Smith, of Richmond.

LOWE—JAMES.—On the 17th inst., at the Parish Church, Louth, by the Rev. Canon Wilde, M.A., Rector, assisted by the Rev. D. H. Ellis, B.D., LL.D., Mus. Bac., Vicar of St. Botolph's, Lincoln, Godfrey John Ralph Lowe, M.R.C.S., L.R.C.P., L.S.A., third son of Dr. G. M. Lowe, Lincoln, to Alice Maud Mary, youngest daughter of the late Thomas James, F.R.C.S., and Mrs. James Westgate, Louth.

Deaths.

CLARKE.—On November 24th, at 3, Chandos Street, Cavendish Square, Doris Litton, the infant daughter of Ernest and Kate Litton Clarke.

SMITH.—On November 12th, at Margate, Walter Woodbine Smith, Surg.-Captain, R.A.M.C., son of the late Deputy Surg.-General Charles E. Smith, of peritonitis after typhoid fever.

ACKNOWLEDGMENTS.—*Guy's Hospital Gazette, Nursing Record, St. George's Hospital Gazette, St. Thomas's Hospital Gazette, St. Mary's Hospital Gazette, London Hospital Gazette, The Stethoscope, M. R. I., Guyoscope, Medical and Surgical Review of Reviews, The Hospital.*

St. Bartholomew's Hospital Journal.

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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, *Advertising Agent, 29, Wood Lane, Uxbridge Road, W.*

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St. Bartholomew's Hospital Journal,

JANUARY 14th, 1899.

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

NO Bart.'s man can have been unmoved by the news of Professor Kanthack's death. Those who only knew of his achievements and reputation must have deplored the brilliant scientist, but those who came under his personal influence have in addition to mourn for one of exceptional force and attraction, a staunch friend. To all of them the news came with a deep sense of cruel loss. He has held so unique a position in the regard of all that it is only fitting that the JOURNAL of the Hospital, to whose fame he so conspicuously added, should attempt, in however inadequate a manner, to give expression to that sense of bereavement.

Alfredo Antunes Kanthack was born at Bahia in Brazil, on March 4th, 1863. He was the second son of Emilio Kanthack, who was at one time British Consul at Para in that country. He came to Europe in 1869, and went to school in Germany from 1871 to 1881. In this latter year he came to England, spending a few months at school in Liverpool. His school life gave little indication of the brilliant career which was to be. His intellectual powers were late in developing, though they subsequently matured rapidly.

His college life began in 1882, when he entered University College, Liverpool. He graduated B.A. at London in 1884, took the intermediate M.B. the next year, and the final B.Sc. in 1886, passing with honours on each occasion. In 1887 he became a student at this Hospital, and secured the diplomas of M.R.C.S. and L.R.C.P. In the following year he passed the final F.R.C.S. examination, and graduated M.B. and B.S. at London with honours in every subject, and the gold medal for obstetrics. Remembering his stern denunciation of the examination system in vogue in this country, it is interesting to recall how complete was his success in a department to which he attached so little importance.

It was when he went to Berlin in 1889 that he showed that his power of observing facts for himself was in no whit inferior to his power of acquiring the facts observed by others. Working under Virchow, Koch, and Krause, he speedily won a position for himself in the world of research. His admiration for Virchow was so well known, that we may quote from the *British Medical Journal* for December 31st, 1898, Professor Virchow's tribute to his memory. "I am deeply distressed to hear of the sudden death of my faithful friend Kanthack, whom I so recently saw when I was in England. I now bid him a last farewell. May English medicine never lack such men."

In 1890 he came on the junior staff of this Hospital as Midwifery Assistant under the late Dr. Matthews Duncan, in which capacity he won more golden opinions. It is a striking testimony to the position he already held in the scientific world that while still a member of the junior staff he was appointed one of the Commissioners to investigate

leprosy in India, its pathology and treatment. The Commission was elected jointly by the Royal College of Physicians, the Royal College of Surgeons, and the Executive Committee of the National Leprosy Fund.

His association with Cambridge dates from 1891; he went there on his return from India, as John Lucas Walker student. He became a Fellow Commoner of St. John's College, a foundation which has adopted the enlightened policy of preserving this distinction for the purpose of attracting such men within its walls rather than those for whom the grade was originally intended. Besides playing an important part in organising bacteriological work in the pathological laboratory, he devoted himself with zest to research work once more. Here began his important observations on the cells of the blood with relation to the problems of immunity. He also published a paper on Mycetoma, proving its close relation with actinomycosis.

In 1892 he returned to Liverpool, intending to practise as a physician. He took the M.D. of London and the M.R.C.P. He became Medical Tutor at the Royal Infirmary, and Demonstrator of Bacteriology in the Medical School. But his stay here was brief, and an opportunity more commensurate with his abilities was opened to him by the offer of the Lectureship in Pathology at this Hospital. The pathological department at once underwent a rapid development, and was consolidated by his further appointment as Lecturer in Bacteriology, Pathologist to the Hospital, and Curator of the Museum. Clinical pathology, a branch of the subject in which he was specially interested, was systematically studied in a way which, however far it fell short of his ideal, probably surpassed its practice at any other hospital or college in this country. He at once attracted the younger men to the subject, his classes were largely attended, and he evoked in them a spirit of research previously unknown. Enormous as were the labours thus involved, he still found time to pursue his researches. It was during this period that he published jointly with Mr. W. B. Hardy the important papers on Wandering Cells which aroused so much attention, the chief of which appeared in the 'Philosophical Transactions of the Royal Society.' To accomplish this, hurried journeys between London and Cambridge were necessary. The strain was too great, and he became an easy prey to typhoid fever during the summer of 1894. During his severe attack of this disease he was warded in Mark under Dr. Church. On his recovery he again threw himself most energetically into the life of the Hospital and the ever-growing work of his department. It was soon found necessary to assist him by the appointment of a demonstrator and two assistant demonstrators of pathology.

The continued illness of Professor Roy rendered the appointment of a deputy necessary at Cambridge in 1896. It was only natural that the university should turn to Dr. Kanthack; for a time he fulfilled the duties both at Bart.'s and Cambridge, but early in the next year he gave up his appointments here to reside in Cambridge. He was given the degree of M.A., *honoris causâ*, in the University, and was elected a Fellow of King's College and an F.R.C.P.

On the death of Professor Roy in the autumn of 1897 Dr. Kanthack's appointment as his successor was justly regarded as a certainty. It was now felt that he had a position worthy of him, and that he had the opportunity of developing that school of pathology which was a cherished ambition. But it was not to be. The work of organising the department had just been satisfactorily accomplished, students and those interested in research had gathered round him, when his health began to fail. He took a holiday, and returned to work in October. Very shortly, however, he became jaundiced, and had a severe attack of abdominal pain. The diagnosis was not long left in doubt. An abdominal tumour was detected, and it clearly was of a malignant nature. He rapidly became worse, and died on December 21st. The funeral service was held in King's College Chapel on Christmas Eve. No more impressive surroundings could be imagined for the last tributes to one of such brilliant achievement and promise, now untimely dead. The representative gathering on that occasion was but another indication of his place in the affection and esteem of all who knew him. Among the numerous wreaths were those from the Staff and Medical School of St. Bartholomew's Hospital. The interment took place at the Histon Road Cemetery. He leaves a widow, to whom the sympathies of all will go out.

This is not the time or place to attempt an estimate of his position in the scientific world. The sense of personal loss must be, for all of us, still too strong. But when that time comes we know that, short as his career has been, he will hold distinguished rank in the opinion of those best fitted to judge. Yet we must all feel that all he accomplished was but a fragment of what he could have done had not the amount of routine work and organisation which fell to his lot been so enormous. It was his fate that wherever he went he had all the labour of organisation, and very little of the gratification from the results thereof. Liverpool, Bart.'s, Cambridge, at each it was the same story. The list of his writings, which we publish, gives some idea of his untiring activity, but it gives no adequate conception of his stimulating influence on all around him. Says the writer in the *British Medical Journal*, "He seemed able to get work creditable to both master and pupil out of the most unpromising material." He certainly developed an enthusiasm for pathology in the most unexpected quarters. One of our correspondents says very truly that we "have lost a personal friend, who was never too busy to give advice, who knew exactly the needs of each, and who endeavoured to help them to the utmost extent of his power." All who have had occasion can confirm the literal accuracy of this description. Cosmopolitan in his training, wide in his interests, thorough in all that he did, we had trusted that he would raise up a great school of pathology in England. He meant to do it, and he would have done it. He will have successors, but who can fill his place? The loss is irreparable.

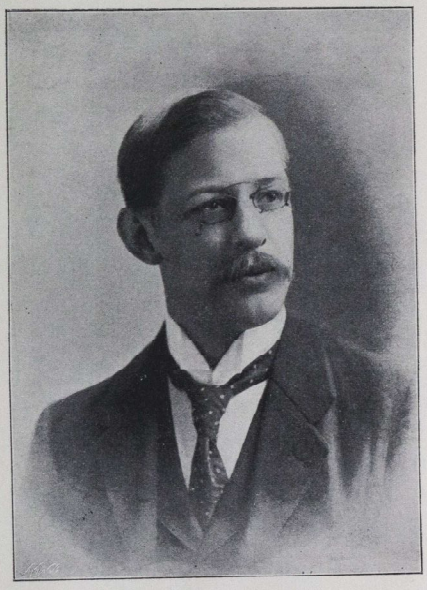
His public utterances marked him as an uncompromising reformer. From the chair of the Eighth Decennial Contemporary Club he spoke in no measured terms of the defects of the present system of medical education, and he returned to the attack in his Mid Sessional Address before the Abernethian Society on "The Science and Art of Medicine." All reformers tend to be rather one-sided in the presentation of their case, but no one can deny the cogency of his arguments.

The JOURNAL of the Amalgamated Clubs must not lose sight of the keen interest he displayed in the welfare of students, whether in sports or work. The President of the Abernethian Society has already publicly referred in eloquent terms to the prominent part he played in work of that society. This JOURNAL has lost one of its ablest and most ready contributors, and we do not forget that the very last article from his pen appeared in these pages. In every department his death causes a terrible gap.

It was a full life that he crowded into thirty-five short years. Ever unsparing of himself, he knew how to "scorn delights and live laborious days."

> "But the fair guerdon when we hope to find
> * * * * * *
> Comes the blind Fury with the abhorrèd shears,
> And slits the thin-spun life."

Great though his achievements, in his grave are buried yet fairer hopes. But not in vain did he labour. He lives still in the enthusiasms he has kindled.



A Bibliography of the late Professor Kanthack, M.D.

Compiled by CHARLES R. HEWITT, Assistant in Library, Royal College of Surgeons.

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THE Lumleian Lectures before the Royal College of Physicians will be delivered by Dr. Gee, on March 16th, 21st, and 23rd, at 5 p.m. The first lecture will be on the Causes and Forms of Bronchitis; the second on the Nature of Pulmonary Emphysema; and the third on the Nature of Asthma.

Dressers and Dressing.

Being the Mid-Sessional Address to the Abernethian Society, delivered on January 12th, 1899,

By JAMES BERRY, F.R.C.S.

MR. BERRY began by paying a tribute to the memory of his lamented friend Dr. Kanthack, and then said:

When your Committee paid me the compliment of asking me to deliver this Mid-Sessional Address I had to consider what subject I should choose. I looked through a list of the addresses that had been given by previous speakers on similar occasions, and was somewhat appalled by the learned and elaborate nature of the discourses that had been delivered. It seemed to me, however, that I might perhaps interest and amuse you if I chose some topic which could be dealt with in a somewhat lighter manner. It struck me then that there was one subject of which I had had at least a good deal of experience, and I chose "Dressers and Dressing."

Now this subject might be dealt with in various ways. I might deal with it, for example, historically, and speak of the origin of dressers, and their gradual evolution from the "cubs" of the last century—an inelegant term for dressers which I am sure that few would now consider appropriate. I propose, however, simply to speak to you of dressers as I know them and have known them, and to tell you a few stories about some of them.

Now a detailed classification of dressers seems to me difficult and unnecessary. I will merely divide them into two main classes, the perfect dressers—shall I say the large class of perfect dressers?—and the imperfect dressers; and we will hope that, in this Hospital at least, the latter class is a very small one.

The perfect dresser—how shall I describe him? Well, he is never late in the surgery or elsewhere. He does all the work that he has to do energetically and enthusiastically, and to the best of his ability. He takes every opportunity of seeing as much surgery as he can, and he endeavours, by reading up his cases, to understand them thoroughly. He never fails to write notes of his cases at the proper time, and he always writes good notes. He does not leave the Registrar's blue flags unattended to for more than, let us say, two or three days at the most. He does not forget to describe the pathological appearance of tumours or other morbid products that have been removed by operation, nor to make a note of the patient's condition upon his discharge from the hospital. He does not omit to copy out his post-mortem notes.

A perfect dresser also, when helping at an operation, does not drag ligatures over the edge of a bowl; nor does he, after he has carefully sterilised his hands, take off outside dressings or remove blankets, and then without further preparation of his hands proceed to help at an aseptic operation. He is kind and gentle to the patients. Perhaps some of my friends on the right (the sisters) would like me to add that a perfect dresser does not in bad weather enter a ward and leave his wet umbrella to drip on a polished floor—shall we say in Lawrence? Nor does he go into a ward to take notes on a case just at dinner-time—shall we say in Henry?

Such are some of the characteristics of the perfect dresser, but I need say no more; he is, of course, well known to all of us, and if I were asked to show examples of the perfect dresser I would merely reply—look around you in this theatre.

I come now to the small and doubtless insignificant class of imperfect dressers with whom we are naturally not so familiar. And here I feel that I am on somewhat delicate ground. Perhaps it is just as well for me that I am no longer your surgical registrar, and shall not have to morrow to encounter a crowd of indignant dressers, some of whose imperfections I now propose to describe. But lest anyone should feel anxious, let me say at once that in speaking of certain dressers I do not propose to mention their names. Nor do I propose to mention all the varieties of imperfect dresser with which I am acquainted. I shall merely allude to a few types that seem to me to justify the term imperfect, and to tell you a few stories about them.

I will begin with the pedantic or bumptious dresser. He is usually a very superior person, he knows more than any of the other dressers—or thinks he does; he certainly knows more than the house surgeon, more at any rate than the junior house surgeon, and he is anxious to show off the knowledge that he possesses. It is this kind of dresser who in the evening looks up some abstruse point in

surgery, and then next day innocently asks some question about it of his surgeon or house surgeon, apparently for the sake of obtaining information, but really to display his very superior knowledge of the subject. A minor form of pedantry is often met with in the case of dressers who persist in writing the word chloroform with the symbol $CHCl_3$. It may be said, doubtless, that there is in this case an abbreviation, and so a saving of the dresser's valuable time; but this is so slight that I am uncharitable enough to believe that the real reason is to display the dresser's knowledge of organic chemistry. Certainly a saving of time cannot be urged when ether is written $(C_2H_5)_2O$, as I have often seen it in the ward notes, and I remember on at least one occasion seeing the abbreviation CON_2H_4 used in place of the exceedingly long word "urea."

Then there is the *timid dresser*, who is so afraid of doing wrong, that he is apt to leave undone that which he certainly ought to have done. A certain house surgeon and his dresser were on duty one evening, and were sitting together in the former's room, when up came the box carrier to say that a man had just come into the surgery with a wound of the arm. The dresser went down to attend to it, and the house surgeon followed a few minutes later. What the latter then saw was this:—At the further end of the room the dresser was taking out a tooth from another patient or tying up a finger, or attending to some such trivial case. Seated on the chair by the door was the man with the wounded arm; across the wrist was a deep cut, which had severed the ulnar artery, and this was spouting away vigorously. The dresser, who was of a careful and cleanly disposition, not liking to see a mess on the floor, had placed there a large surgery bowl to catch the blood as it fell. "What on earth are you doing over there?" said the house surgeon, catching hold of the patient's arm, and immediately putting his thumb on the bleeding artery. "Why didn't you attend to this case first? Don't you see that the man is bleeding seriously?" "Oh yes," said the dresser, "but I thought that that case was too serious for me to attend to, and that I had better leave it for you!"

Sometimes the timidity of a dresser takes a more extreme form. A certain dresser was sent for to the surgery, and found a man with a dislocation of the jaw. The dresser was examining it, when the bone suddenly slipped back into its proper place. (I suppose it had only been partially dislocated.) The dresser was much frightened, and feared the wrath of the house surgeon for having reduced the dislocation without sending for him; so he thought that his best plan would be to try to reproduce the dislocation, and then say nothing about his having reduced it. He was busily engaged in this attempt when he was surprised by the house surgeon, to whom he promptly confessed what he had done.

Talking of the lower jaw reminds me of another type of dresser—the *rash dresser*, who is only too ready to undertake treatment that he had much better have left to the house surgeon. The rash dresser often affords an illustration of the saying that a little knowledge is a dangerous thing.

A late house surgeon once told a dresser to open a certain abscess of the front of the thigh; the dresser, of the bold type, took a knife and promptly drove it straight into the thigh to a depth of about four inches the house surgeon told me, but I think he must have exaggerated a little. The house surgeon, who knew where the femoral artery was, expected to be called upon to treat a punctured wound of that vessel, but fortunately no harm resulted; the dresser had just missed the artery.

Many years ago there lived near the Hospital a man who had had the misfortune to dislocate his lower jaw; the dislocation was reduced. Now I suppose I need hardly tell any one here that a jaw-bone that has once been dislocated is not unlikely to become dislocated again; and so it was with this poor man. His jaw frequently became dislocated, and as he was unable to reduce it himself he was in the habit of coming to the Hospital to have the bone put back into its place. Perhaps I ought to explain for the benefit of some of those present that when the jaw is dislocated the mouth remains wide open, and the patient is unable to speak. Now on one occasion this man came to the Hospital, as he had so often done before, with his mouth wide open, and pointing to it with his finger to explain that he wanted the dislocation reduced. He was received by the dresser on duty, who had probably never heard of a dislocated jaw, much less seen one. However, he looked at the man's mouth, and rapidly making a diagnosis, said to the patient, "Ah! I see what is the matter with you. I will soon relieve you of that. Sit down in that chair." He went to the other end of the room, procured the necessary implement, returned to the patient, and before the unfortunate man could realise what was happening the dresser had extracted a decayed molar which he had noticed there. I believe that the language which ensued was scarcely fit for publication.

The following story dates from the time when I was myself a house surgeon, and illustrates the tondness that some dressers have for the use of styptics. One evening when I was on duty I was busy putting up a fracture in the back ward of Rahere (Rahere in those days was a surgical, not a medical ward), when old Clark the box carrier arrived to say that there was a man in the surgery who had received an injury to the face, and who was bleeding from the mouth. I dispatched the dresser to the surgery, and followed a few minutes later when I had put up the fracture on which I was engaged. I shall never forget the sight that met my eyes when I reached the surgery. Seated in the surgery arm-chair was the unfortunate patient, his face all smeared with blood. Arranged around him on stools or on the floor were some half-dozen of the surgery bowls partly filled with blood and perchloride of iron, and mess generally. In the midst of them stood the dresser armed with a large brass syringe, busily engaged in squirting perchloride of iron into the patient's mouth. You can imagine what a horrible state the man's mouth and teeth were in. And when I came to look for the source of hæmorrhage, which after all was but trivial, I found that the man had broken his lower jaw, and that the bleeding was merely from the broken ends of the bone. It stopped directly the fragments were pressed into apposition.

A dresser once watched a hydrocele being tapped, and was much interested; in the afternoon he was on duty in the surgery when in came a man with—as the dresser thought—a similar swelling; he thought that the operation of tapping was such an easy one that it would be unnecessary to send for the house surgeon; so he made all preparations to do the operation himself, and was about to plunge a trocar into the swelling when one of the residents happened to pass by, and seeing what was going on, told the dresser to desist, as the case was not one of hydrocele at all, but of œdema of the scrotum and general dropsy.

There is also the *ignorant dresser*, the dresser who knows nothing, and who is fully aware that he knows nothing. Now I confess that I have a great liking for this class of dresser—the honest, ignorant dresser; after all we were all ignorant dressers ourselves at one time or another, and I suppose it is a feeling of sympathy which makes me like these dressers. Another reason why I like the ignorant dresser is that he is good raw material for teaching; the less he knows the more one is able to teach him. But here I must differentiate between the ignorant dresser who is anxious to learn, and the ignorant dresser who is not anxious to learn. It is of the former that I am speaking; for the latter I have no respect at all.

A dresser was once helping a house surgeon to tap a hydrocele, an operation which was quite new to him, and as he watched the clear yellow hydrocele fluid running away he turned to the house surgeon and said, "If you please, Mr. So-and-so, would you mind explaining to me *how the urine got there?*"

Lastly, I would mention the *thoughtless* and the *cruel* dresser, and with regard to the latter I may as well say at once that this is an exceedingly rare variety. In all my experience I have never met with more than one or two to whom this term might fairly be applied. Dressers often give much needless pain to their patients, but they do so thoughtlessly and unintentionally. The following illustrates the *thoughtless dresser*. A patient came to have a tooth out; the dresser, who had been instructed how to take out a tooth, put on the forceps, carefully pressed the blades firmly down, and then began rocking them about from side to side while the patient howled; then turning to the house surgeon, said, "Would you mind coming to see if these forceps are on properly?"

There is one kind of dresser that I have not mentioned, that belongs exclusively neither to the category of perfect nor to that of imperfect dressers, or rather belongs to both of them,—a kind of dresser of whom I have had, I suppose, more experience than anyone else in this hospital (except, in a sense, Dr. West). I mean the *lady dresser*.

A question that I am often asked is, what sort of dressers do the ladies at the Royal Free Hospital make? I am bound to say, after ten years' experience of them, that there is no essential difference between men and women as dressers. The women as a whole are perhaps rather more keen and enthusiastic over their work.

In one respect I am afraid I must give the palm to the ladies: they write more voluminous notes on their cases than do the dressers of the opposite sex. It is no uncommon occurrence for me to have to listen to half a page of notes about the family history of a case of, say, a broken leg or an abscess of the neck, and the most minute details of the past history do not escape their recording pens. They have, however, their little peculiarities. I doubt whether anyone but a Royal Free Hospital dresser would have done what one of my dressers there once did. She was a new dresser, and was going

round the wards with me, I think for the first time. She had a new case, and proceeded to read out her notes. I very soon stopped and corrected her; she went on a little further, and I then stopped her again and asked her some question that she could not answer; this happened three or four times, and I am afraid I teased her rather unmercifully with my questions. Probably my dressers at the Royal Free Hospital would tell you that I tease them a good deal. Well, perhaps I do; I think it is good for them to be teased about their cases; they remember them better. Well, this particular dresser at last could stand it no longer, so she laid the notes down on the bed, stepped back a foot or two, folded her arms and glared at me! I wondered what was going to happen next, and feared there was going to be a scene; however, I soothed her down somewhat, and she finished her notes. I believe the truth is that she was really exceedingly nervous and frightened at the ordeal through which she was being made to pass in the presence of her fellow-students; I am glad to be able to add that she subsequently became a most excellent dresser.

Much might be said on the subject of note-taking. As, however, on a recent occasion in this theatre I spoke to you at some length on the subject of note-taking, and gave several examples of curious notes, I shall not say much more about notes to-night. I should like, however, to read to you some notes which probably many of you have not heard, and which illustrate the curious way in which a dresser will sometimes in taking notes lose all sense of proportion. He is apt to omit the important points of a case, or to envelop them in an overwhelming mass of unnecessary and mostly irrelevant detail. These notes some of you have probably seen already, as they were published a few years ago in the HOSPITAL JOURNAL by one of the house surgeons, who discovered them in his wards, and thought they ought to be put on record. These are the notes:

C. W. æt. 53 was admitted into — Ward on 2nd Nov. under the care of Mr. —. She is a widow for 20 years and has four children. She has a Pott's fracture of left leg.

History The fracture occurred on Nov. 2nd and was caused by falling down stairs. It was very painful when admitted; she could not stand on her foot. Had rheumatism and swelling of joints, being treated at this hospital for it. Also been subject to fits for 10 years. Has had spots on her face for about six weeks before this accident. Fissure in bowels after childbirth, underwent operation scarlet fever when about 12.

Family history. Father had rheumatism. Mother had fits Father also had sciatica Eldest daughter had fits; is dead. Father and mother both consumptive. Father died of chest disease. Mother died in a fit.

Condition on admission Rather collapsed. Appetite always bad, bowels always regular. Pain in pit of stomach. Had injury to chest about 3 weeks ago. Complains of pain in side, when she tries to rise, referable to injury of chest.

Patient is suffering from Pott's fracture.

Nov. 11th. Rheumatism bad, not much sleep ankle bad. Appetite bad. Tongue furred. Leg pains. It is up in suspensory splint.

Temp. 97·8 going down.

17 The leg was dressed yesterday Still a little painful. Patient complains of very little pain

24. The leg was put in plaister yesterday. House surgeon says it's getting on wonderfully well Slept last night for a few hours, most sleep she has had right off. Appetite never very good.

Bowels have been tolerably regular but have not been open now for nearly three days.

Temp. below normal. Patient does some sewing. Urine normal

Mistakes in grammar are not very uncommon in dressers' notes. There was once a house surgeon who rejoiced in the possession of a round, jolly, somewhat red face, and hair that he would probably have described by the term auburn. One of his dressers proceeded to read out an account of a suppurating wound in these terms:—"The wound was dressed by the house surgeon looking very red and angry."

There was once a dresser who gravely recorded in his notes that "Mr. Willett, under the influence of an anæsthetic, proceeded to perform an osteotomy." Now we all have the highest opinion of Mr. Willett's skill as an osteotomist, but I doubt whether, under the circumstances mentioned, even he would have been able to do the operation with benefit to the patient.

I have mentioned, when speaking of the pedantic dresser, that dressers sometimes have an exalted opinion of their own knowledge, but the respect which they show to themselves is but slight when compared with the respect that is usually paid to them by the patients. To the patients the dresser is always *the doctor*, and he is usually treated by them with the greatest respect and deference. I cannot refrain from telling you a little story *apropos* of this. One of the surgeons of this hospital was going round his wards one afternoon with a dozen or so of students. A certain case had just come in. The surgeon described the chief points of the case to the students, and laid some stress upon some one symptom which was a little peculiar. Then he turned to the first student and said, "Now, So-and-so, you have heard all about this case, what do you say? Would you recommend that any operation be done upon it?" The student, who did not know in the least whether it was a suitable case for operation or not, but thought that he ought to say something, answered boldly "No." The surgeon then turned to the next student and asked his opinion. This individual, also not knowing what answer to give, but evidently thinking that the first man was a good lead, also said "No." Then the question went all round the class, and everybody agreed with the first two. "Well," said the surgeon, "you are all wrong, for I am going to operate." "No, you ain't," said a voice from the bed; "'ere's fifteen doctors say it ain't a case for operation, and I ain't goin' to let you operate on me!" And the patient got up and went out of the hospital. History relates that a few weeks later he was discovered in another ward, having re-entered the hospital to have the operation done after all.

And now, ladies and gentlemen, I see that I have already taken up so much of the time allotted to me that I must bring my anecdotes to an end.

[In conclusion, Mr. Berry offered a few words of advice as to the mode in which he thought that dressers could perform their duties with most advantage to themselves, and recommended them above all to cultivate habits of observation, to take every opportunity of seeing as many cases as possible, and to endeavour *during their dresserships* to learn as much as possible about each case both by reading and by frequent visits to the museum.]

Some Rectal Diseases.

By F. C. WALLIS, M.B., F.R.C.S., Surgeon to the Metropolitan Hospital and Assistant Surgeon to Charing Cross and St. Mark's Hospitals.

V. The Treatment of Fistulæ.

A FISTULA is a sinus, discharging pus, the surface of which is lined with granulation tissue; around this is a varying amount of fibrous tissue, the amount depending upon the length of existence of the fistula. But, unlike sinuses in other parts, a fistula, owing to its position, to the constant action of the surrounding muscles, and the possible fæcal infection, is never allowed to remain at rest for any length of time, and consequently rarely heals without some operative help.

To say that no case of fistula gets well without an operation would be incorrect, and probably most surgeons have had experience of cases of undoubted fistula which have healed after the introduction of a probe, or some such mild counter-irritant has been used. But these are rare exceptions, and must not be taken into consideration when the question of treatment arises.

Palliative treatment in these cases is most unsatisfactory, and I had almost written unsurgical. But the idiosyncrasies of patients occasionally necessitate that some measure or other short of a "cutting operation" shall be resorted to.

Success has followed when the external opening of the fistula has been dilated by a tent, and the track swabbed out with strong carbolic acid, iodine, or some other strong irritant. Solid nitrate of silver has been placed in the

sinus, and left there for some minutes, and then removed, or the sinus has been rubbed with solid copper sulphate.

Again, there is the treatment by an elastic ligature. This is introduced by a special instrument into the sinus, and then the end brought out through the bowel; both ends are clamped tight by a pewter clip, and the ligature gradually cuts its way out, thus performing in about a fortnight what is done with a knife in less than three seconds.

Such methods as the above are of course never resorted to unless there is some special reason. The best chance of success will be where the fistula is a recent one, and where there is only the one straight track.

When the fistula is of long standing, and is surrounded by a quantity of fibrous tissue, or when secondary sinuses lead off from the main one, any such treatment as suggested above is worse than useless.

Moreover, when any such palliative measure as the above is tried, it is as well that it should be under protest as far as the medical man is concerned, and no promise of a cure should be made.

Operations on fistula in ano vary from a simple straight incision to an operation of some magnitude, according to the nature of the fistula.

During the last eighteen months at St. Mark's Hospital I have in all suitable cases of simple complete fistula, after injecting some 4 per cent. solution of eucaine, operated in the out-patient department, the patient returning home afterwards. This has been done now a number of times, and the cases have all done well.

It is necessary in these cases to be somewhat careful in choosing the patient. He must be possessed of reasonable intelligence, and have some ideas as to cleanliness.

The patient is placed in the knee-elbow position, and after the eucaine injection a probe-pointed fistula director is passed into the external opening, and the finger in the rectum guides the point of the director to the internal opening. The director is passed through this, and then the handle of the director is depressed or elevated, as the case may be, until the point can be pushed out into the open, so that the whole length of the proposed incision is in view. A curved sharp-pointed bistoury is now passed along the groove of the director, and the whole track of the fistula is laid open.

The buttocks are kept widely separated, and the track carefully examined; any excessive fibrous tissue is removed, and overhanging edges are pared away. The incision is plugged rather firmly with cotton wool saturated with 1—500 perchloride. A good pad of wool and a firmly tied T-bandage complete the dressing. A printed slip of paper giving accurate instructions is handed to the patient, and he returns on the third or fourth day to be seen again at the hospital.

I was first induced to try the above plan because of the large number of cases which are always waiting for admission at St. Mark's Hospital. It was rather in fear and trembling that the first cases were undertaken, but the success has been so pronounced that I have thought it worth while to dwell on some of the details.

Whatever class of society a patient comes from, it may be that he is so circumstanced as to be unable to lie up for any length of time, and the above treatment is available in a certain number of such cases.

In the ordinary way a patient should have the bowels well acted upon some two days before, and an enema should be given on the morning of the operation. At the time of the operation, after general anæsthesia has been produced, the patient is placed *on the same side as the fistula*, and the upper buttock is held well apart by the assistant.

A director is passed into the external opening, and the finger in the bowel directs the probe to the internal opening; if this cannot be found, the point of the director should be pushed through the thinnest part of the mucous membrane, and then brought outside the bowel. The track is then laid open, all granulations are scraped away, and diligent search is made for any other sinuses which may burrow off from the main one. The existence of these is generally shown by small areas of deep-lying granulation tissue remaining after the main track has been scraped clean. A probe passed along these will indicate their direction and depth. These secondary sinuses should be in nearly every case laid freely open, otherwise the fistula is apt to recur. The exception to this rule is when a sinus runs parallel to the bowel, and extends well beyond the internal sphincter.

In such cases it is advisable to try everything short of laying the sinus open into the bowel, because of the possibility of fæcal incontinence as a permanent result.

As far as my own experience goes, I have so far avoided laying open such a sinus when secondary to the main fistula. Scraping away granulations, and careful plugging afterwards, has in the end been rewarded by the sinus being covered in by granulations.

Why not do this with any secondary sinus? it may reasonably be asked. The answer is that the one way is sure, and there is no risk; the other is not sure, and there is a chance of its not being successful. Moreover the length of time that this latter method takes is a serious consideration.

In more than 95 per cent. of cases of fistula the internal opening will be found between the sphincters, or at all events below the *internal* one. As long as the external sphincter alone is divided, and in one place only, there is no reason to fear that fæcal incontinence will take place. If, however, there are two internal openings—a rare occurrence,—and the sphincter at the time of operation is divided in two places, permanent weakening may follow. When the *internal* sphincter is divided temporary incontinence always occurs; but if the incision goes straight through the fibres of the muscle, by the time the wound has healed the power of the sphincter should have returned. If, however, the incision divides the muscle obliquely, it is likely that permanent incontinence may result in a greater or lesser degree.

It is difficult to imagine a more distressing condition than this one of fæcal incontinence, and any one who has seen a patient suffering in this way will not hesitate to agree that everything should be attempted before the risk of this possibility is run.

Internal fistulæ are made complete by an incision from without into the abscess cavity when it exists, and from this a director is passed down the sinus through the internal opening, and the remaining tissues divided in the manner described above.

If there is no definite collection of pus, a director with a bent probe-pointed end is passed into the internal opening, and the operator cuts down on the point, which is then pushed through, the operation being finished in the usual way.

Attempts have been made from time to time to get immediate union in cases of fistula, and some authors tell of a certain amount of success when this has been done.

My own experience is limited to three cases, the first of which was a failure, but the remaining two were so successful that I fully intend doing the operation more frequently in certain picked cases.

The fistula must consist of the one main track only if the operation is to meet with any success.

The following is a brief description of the operation which I performed in two of the cases mentioned above:—The patient being in the *lithotomy position*, the director is passed right through, and the point brought outside the anus in the usual manner. The internal opening is now incised for about half an inch outwards along the line of the director, and the director is pressed up against the end of the incision, thus placing the incision *behind* the director. This incision is now carefully sewn up with horsehair behind the director, and the process again repeated until all the incision inside the bowel is sewn up; the rest of the tissues are then divided, any fibrous track is cut away, *deep* kangaroo tendon sutures are passed across the floor of the fistula, and horsehair unites the skin edges. The whole length of the incision is painted with Whitehead's varnish, and dressed with some gauze and wool.

The bowels are confined for five or six days, and then acted on by oil enemata.

Both the cases that were successful left the hospital healed on the ninth day.

The difficulty has hitherto been to get the mucous membrane together, but if the above method is carried out this will be quite easy to accomplish. It is well worth trying; if success is attained, at least a fortnight is saved. If the attempt fails, the wound granulates up in the same time that it would take under ordinary circumstances.

Various opinions have been expressed by well-known physicians and surgeons as to the advisability of operating on phthisical patients suffering from fistula. The question is a most interesting one and also important, but it is not possible to discuss the matter in this paper.

When a patient who has obvious phthisis comes to me complaining of fistula, I always insist that a physician shall be seen; and when I know the result of his examination, I then decide what shall be done.

It is my rule to operate in most cases, except where rapid progress is being made by the disease in the lungs.

At first the external sinus only is laid open and the surrounding skin removed, the wound being packed in the ordinary way for a few days. After this the whole surface and skin edges are brushed over with *pure lactic acid* twice a week, otherwise the dressing is the same. When this external sinus has nearly healed, the track running into the bowel is laid open and treated in the same manner.

Progress is slow, but satisfactory in the end.

The patient *should not lie up* if it can be possibly avoided: and if general anæsthesia can be dispensed with, so much the better. I have carried out the above treatment in a certain number of cases in the out-patient department at St. Mark's, the incisions being made after injecting 4 per cent. eucaine. The patients have never laid up for more than a couple of days, and the results have been most satisfactory.

The after-treatment of fistula is usually quite simple. The dressings should not be disturbed until two to three days after the operation, when all plugging should be removed, the wound well washed and *lightly* plugged with cotton wool soaked in some antiseptic. This dressing and washing should be done twice in the twenty four hours, and any fæcal soiling should be at once dealt with.

Perchloride of mercury, carbolic acid, oxydol, sanitas, any or all of these and many others are used as lotions, and it is as well to ring the changes.

A wound sometimes gets tired, so to speak, of all lotions, and then they do surprisingly well for a few days with oxide of zinc, starch, and boric powders in equal parts, dusted on dry cotton wool, and applied lightly over the wound. Nitrate of silver is occasionally of the greatest service in accelerating the healing.

Bridging is the bugbear which has to be always carefully looked for and immediately dealt with, otherwise all the trouble will recur.

Any suspicious spots of flabby granulations, or pus areas which are not easily washed off in the ordinary way, should be carefully searched with a probe for any *bridging*, and when this occurs the bridge should be broken through by the probe, or even divided with a knife if necessary, and some packing placed at the bottom.

This bridging *may* be the result of inadequate packing, but it is more often caused by a deep layer of granulations

breaking down whilst the superficial layer is maintained, thus forming a sinus.

It is most important that this bridging should be constantly looked for, especially in deep fistulæ which are granulating up rapidly. (On the other hand, they are very apt to occur in the slow-healing fistulæ of phthisical patients.) If this is from any cause overlooked the fistula will recur, a result far from satisfactory to either of the parties concerned.

The last and most difficult part to heal is the incised bowel, and until this is thoroughly sound a patient should not be considered cured.

(*To be continued.*)

Dentistry for Medical Men.

By R. C. ACKLAND, M.R.C.S.Eng., L.R.C.P., L.D.S.,
Assistant Dental Surgeon to the Hospital.

II. HINTS ON THE EXTRACTION OF TEETH.

To find the offending tooth, probe all existing cavities so as to discover if there be an irritated or exposed pulp. The direct application of a drop or two of rather hot or rather cold water into the cavities suspected will often indicate the one in which the pulp is inflamed. Gently "tap" the teeth containing the cavities to see if the peridental membrane is inflamed. If the patient has a swelled face from a tooth, proceed to find the one which caused it. Observation and gentle pressure both outside the face and within the mouth will generally be found to localise the spot at which the swelling is most on the one hand, and the tenderness is greatest on the other. This will be found to be on the gum directly covering the root which caused it. Lastly, the indication of the patient as to the cause can be taken, but no great dependence can be put on this. The pain is by him naturally associated with what he considers to be his worst tooth, whilst it may possibly be caused by another tooth, the cavity of which, by its position, has not been discovered by the tongue, &c. In hospital practice this is especially the case, and on no account should the tooth indicated by the patient as the cause of his trouble be extracted until the operator has convinced himself that it is the cause, or chief cause, of the pain.

The position of the patient will depend on the tooth to be extracted being in the upper or lower jaw. If the tooth or root is one situated in the upper jaw, the patient should be seated somewhat higher than in an ordinary chair, and reclining back sufficiently to allow of the operator having the available light direct on the upper arch. When it is a lower tooth or root which is to be extracted, the position is reversed, and the patient is kept seated low and sitting upright, so that the light falls down on the lower arch. In both positions the head of the patient should be so placed that the operator can apply the necessary force to the best advantage, and in calculating this the heights of both patient and of operator must be considered.

The choice of instrument is of very great importance. Of the various patterns in dental forceps which a surgeon-dentist may use, few but the very simple in pattern are of any real value to the general practitioner, as constant practice in their use can only render them really effective. In extracting teeth which have but one root—such as the teeth of the incisor series and canines, or the single roots of the molar series or the bicuspids, which are treated as single-rooted teeth—the ordinary root forcep is used. The blades of this instrument are the same both for the upper and lower teeth. The shape of the handles, and the angle at which these handles join the blades, determines for which series of teeth or roots it was designed. As a general rule, the more the jaws or blades of the forcep are in a line with its handles, the easier, mechanically speaking, is it to perform the extraction, provided, of course, this straightness allows of the blades being adjusted to the root or tooth to be extracted. "The straight" forcep can be used for the upper four incisors and upper canine teeth or their roots. For the bicuspids and roots of upper molars, the protruding lower jaw prevents the use of the straight forcep. To reach these and to adjust the root-shaped blades to them, the handles of this forcep require a slight bend so as to pass into position free of the lower jaw and its teeth. The roots of the third molar, and often of the second, require a forcep with a more marked curve again. This instrument is often used for the wisdom-tooth itself; for when its crown is small, its roots are generally united in one conical mass, and they can be treated as a single root. The full upper molar forcep is only used when its crown is fully formed, and it lies well in the arch. With regard to the single-rooted teeth, and single roots of the molars in the lower jaw, the blades are so joined to the handles that the forcep escapes contact with the upper teeth. One such instrument can be used to extract any of these teeth or roots. There remains now, as far as the general practitioner is concerned, but to speak of the forceps necessary for the upper molars, more especially the first and second, and the lower molars, with again the exception that the third is generally treated as a single root, depending on its development. The normal upper molar has three roots, so arranged that the forcep designed for extracting it, as a whole, has an inner or lingual blade grooved for one of its roots, and an outer or buccal blade with two grooves separated by a point. This forcep could be used on either side of the mouth, did the shape of the handles allow of the blades being adapted to opposite teeth; consequently, for the upper molars, a right and a left forceps are necessary. The lower molar forcep has both of its blades grooved, and with a point between the grooves so arranged that, when the blades are closed to seize the tooth, the lateral aspects of its two roots are grasped simultaneously, whilst the point passes into the interval between. This instrument can be used symmetrically. The writer has tried to describe the smallest convenient set of forceps suitable for use by a medical practitioner. In all, seven pairs of forceps have been mentioned, and he considers that the general practitioner would be wiser in keeping to these simple patterns, and aim at being proficient in their use, rather than burden himself with the many special shapes which are to be obtained. When a molar tooth is very much broken down, it is better to use the root forcep applied to two of its roots in the upper, or to one of its roots in the lower jaw, because it is difficult to apply the full forcep when the walls of the tooth are very much broken down. The risk of breaking the tooth is immensely increased if the grooves, and more particularly the point between the grooves, are not in exact position. For instance, should the point which divides the grooves not pass between the roots, whether it be on the outer side of the upper molars or on either side of the lower molars, it will rest on a point of the crown or roots, at which point the full force in seizing the tooth will be spent. This will have a tendency to split rather than grip the tooth. A further result of such an accident is that the point will probably become everted, and in future use will tend to pass outside the thin edge of the alveolar plate rather than inside. The effect of this is often seen in hospital practice, where extraction with an instrument so damaged often leads to the tearing away of a strip of the alveolus with the tooth. On the other hand, the keen edge and the narrow blade of the root forcep can be guided more easily into its proper position between the gum and the root; when there it will offer much less resistance than the thicker, wider edges of the full forcep, and so with the same amount of force can be driven farther along the root surface to a safer position.

The application of the forcep, &c.—First clearly define the outline of the tooth or root to be extracted; if it be a root or a tooth with its walls very broken, allow for elasticity or inflammation, as the case may be, of the free edge of the gum if it be a root which is to be extracted; take too broad a grip rather than too narrow a one. It is better, in extracting a root, to force the blade through a little intervening layer of gum, and even alveolus, than to force the point of a blade into the top of the root. The forefinger and thumb of the operator's left hand should be used to hold back the cheek and tongue so that a clear view of the tooth can be obtained, and later they can help force the blades home on the tooth. Finally, perhaps, they can save it from slipping from between the beaks of the forcep, and perhaps getting into the larynx.

The operation of extraction.—Having obtained a firm hold on the tooth apply your force very gradually; increase it slowly so as to dislocate the tooth. Dislocation is generally more easily managed in an outward direction, but sometimes the alveolus may give more readily inwards; this is more particularly the case in the second and third lower molars, which have a much thicker buttress of bone on their outer side; and again occasional teeth in other positions are better dislocated in an inward direction because of their position in relation to the adjacent teeth. None of the movements of extraction should be jerky, and the force in dislocating the tooth should not be suddenly applied, as thereby the pain of the extraction is very much increased. In extracting a tooth great care should be given to only use the force necessary for its dislocation. Force used in excess of this only increases the risk of a fracture. A little practice will also demonstrate the importance of not hurrying too much.

Problems in Diagnosis.

UNDER this heading we hope to publish from time to time clinical notes of medical and surgical cases that offer scope for the exercise of our readers' diagnostic acumen. With this idea in view we shall divorce the clinical notes from the account of the post-mortem, or whatever sequel happens to settle the diagnosis of the case. The post-mortem notes of the following case, for instance, will be found on page 64 of this issue of the JOURNAL. We invite contributions to this column, and would suggest that it is not so much the weird and very rare disease that proves a useful problem, as a common disease that runs an atypical course and thus eludes diagnosis. We are aware that this is not an original feature of a hospital journal, for one of our contemporaries, the *St. Mary's Hospital Gazette,* has published an excellent series of such problems, but it appears to us a useful method of recording interesting cases.

David W—, æt. 44, gas foreman, was admitted to the Hospital on June 8th, suffering from pain in belly, swelling of it, and shortness of breath.

He was in usual health until May 25th, when he was seized with pain across upper part of abdomen whilst in act of stooping. The pain lasted two days, and was accompanied by much flatulence.

On May 26th patient noticed his urine to be of a red colour, due, he thought, to blood. This continued for three days only. On May 27th he was seen by a doctor, who told him his urine contained bile. Although the pain passed off, patient kept his bed by the doctor's advice. The bowels were freely open, and plenty of urine was passed. There had never been any swelling of legs or feet, and no enlargement of the abdomen had been noticed by the patient. For two or three years he had drunk alcohol freely. He had never been abroad, and denied syphilis.

On examination patient was a big heavy man, lying low in his bed, and breathing rather rapidly. There was some difficulty in sitting up in bed without first putting the feet to the ground, on account of the size of the abdomen. The cheeks showed bright red and dilated venules; no cyanosis or œdema of face. No enlarged glands or dilated veins in neck. The chest was rather barrel-shaped, but moved very fairly. Resonance was good everywhere except at right base in front, where dulness to percussion began at level of fifth rib. Air entry and breath-sounds good everywhere. The heart's impulse was not felt, but cardiac area of dulness and sounds were natural. Pulse natural. The abdomen was greatly and symmetrically distended as a whole, bulging forwards, and laterally in the flanks. The navel was moderately retracted. By contrast with the bulging forwards of the belly at the epigastrium, the sternum looked sunken. This epigastric protrusion formed the most prominent part of the whole belly, which was somewhat tense. The most resistent part, again, was the region between navel and ensiform. At the junction of these two areas of different resistance an ill-defined edge, as of the liver, was felt. A distinct fluid thrill was obtained between the two hands placed one on either side of the

epigastric swelling. The whole swelling seemed to pulsate synchronously with the heart-beat, but probably this was conducted from the aorta beneath. The percussion signs were as follows:—The region from pubes to navel, as well as both flanks, yielded good resonance. From the ensiform cartilage nearly down to the navel, and spreading laterally so as to cover an area the size of a saucer, the note was also resonant. Around the central resonant area, however, was dulness to percussion,—for a hand's breadth on either side, and for half a hand's breadth above and below. On percussing in the sitting posture the central resonant area was found to have shifted upwards, so that it only extended to halfway between ensiform and navel. Similarly, percussing with patient upon his side, the resonance merged with that present in the uppermost flank. This central resonant area was very marked; indeed, the note yielded by it deserved the name "amphoric." There was no thrill felt from flank to flank. On auscultation the swelling was dumb. The stomach-tube being passed carefully, the above conditions of resonance were not altered, nor was any change noticed when half a pint of water was passed through the tube. There was no œdema of legs or feet. Temperature on admission 100·6°. Urine sp. gr. 1020, acid, no albumen nor bile, much urates deposited.

June 15th.—Up till to-day condition has remained unchanged. Temperature rose to 101°—102° each evening, falling to normal in the morning. Thirst, dryness of mouth, and flatulence were the chief symptoms. Urine still free from bile, but contained a heavy cloud of albumen on June 9th, and always much urates. On night of 14th there was a slight rigor. At 3 p.m. to-day patient sat up suddenly in bed and cried out that he felt sharp pain in the belly. He eructated a quantity of gas and the pain passed off, leaving him, however, faint, blue, and collapsed, with cold extremities and small running pulse. He was given an ounce of brandy. At 3.40 he said he was better, there was no pain, but the general condition was still bad. At 4 he was given Tinct. Opii mxx, and brandy ʒss. The condition of the abdomen seemed quite unchanged. At 5.20 he complained again of severe abdominal pain, became suddenly very collapsed, and died five minutes after the onset of these graver symptoms.

Notes.

To the loss which this Hospital and the scientific world in general have sustained by the death of Professor Kanthack we have referred elsewhere. Our thanks are due to the editor of the *British Medical Journal* for his courtesy in lending the block of the excellent portrait which illustrates the article. We hope the bibliography of his writings which has been prepared by Mr. Charles Hewitt will prove a useful work of reference to our readers; it is certainly a monument to Professor Kanthack's devotion to science.

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DR. WEST is to deliver the Lettsomian Lectures before the Medical Society on February 6th and 20th, and March 6th, at 8.30 p.m., the subject being "Some of the Clinical Aspects of Granular Kidney." Any Bartholomew's man will be welcome, and can obtain a syllabus on application to Mr. Sargant at the Hospital, or Mr. Hall at the Medical Society's Rooms, 11, Chandos Street, W.

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ALL Bart.'s men will cordially congratulate Mr. Percy Furnivall on his appointment as Assistant Surgeon to the London Hospital; but our congratulations must be mingled with regret that it involves the loss to Bart.'s of one who has played such a prominent part in all departments of hospital life. He takes with him the good wishes of all with whom he has been associated here; and we can wish him nothing better than that he may be as successful in the future as he has been in the past.

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IN consequence of this appointment, a vacancy for a Demonstrator or an Assistant Demonstrator in Anatomy is advertised.

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DR. ORMEROD has been appointed Physician to the Skin Department.

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DR. SEVESTRE has been appointed Honorary Assistant Physician to the Leicester Infirmary.

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DR. D. A. GRESWELL has been appointed Examiner in Therapeutics at the University of Melbourne.

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DR. SINCLAIR GILLIES has been unanimously elected to the post of Assistant Physician to the Prince Alfred Hospital, Sydney, New South Wales.

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LAST month we had the pleasure of chronicling the success of Bart.'s men in the M.B. Examination at the London University. We can now add that Mr. J. P. Maxwell, who gained the Gold Medal in Obstetrics, has been awarded the Gold Medal at the B.S. Examination, and that Mr. J. A. O. Briggs and Mr. Hussey obtained marks qualifying for the Gold Medal at the M.D. examination.

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AT the request of the Charity Organisation Society, Dr. J. B. Hurry, of Reading, delivered a lecture at the Portman Rooms on December 7th, on "The Self-supporting Dispensary and District Nursing Association." The plan Dr. Hurry recommended is, in the main, the same as set forth in his book which was recently reviewed in these pages.

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MR. W. E. SARGANT has been elected Honorary Secretary for Cases to the British Medical Benevolent Fund.

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PROBABLY the last surviving attendant at John Abernethy's lectures has passed away in the person of Mr. George Hurst, J.P., of Bedford, who recently died within a few weeks of completing ninety-nine years of life. Mr. Hurst attended one of Abernethy's lectures in 1820, and so recently as last May, seventy-eight years after hearing it, contributed an account of the lecture to this JOURNAL.

Abernethian Society.

ON Thursday, December 8th, a general meeting of the Society was held, Mr. Horder, President, in the Chair.

On the motion of Messrs. Douglas and Rawling, the President directed the secretaries to call a special general meeting for the purpose of electing a Vice-President of the Society in place of Mr. E. S. F. Hewer, who was no longer resident in London.

A case of dry embolic gangrene of the leg was shown by Mr. Weaver, and a case of probable actinomycosis of abdominal wall by Mr. Watson.

Mr. Cammidge gave an interesting address on "The Tests for Proteids in Urine," illustrated by test-tube experiments. A synopsis of Mr. Cammidge's remarks will appear in our next issue. This meeting terminated the first half of the Session.

At a special general meeting, held on December 16th, Mr. A. R. J. Douglas was elected a Vice-President of the Society.

On Thursday, January 12th, the Mid-Sessional Address was delivered by James Berry, Esq., F.R.C.S., who took for his subject "Dressers and Dressing." Mr. T. J. Horder, President, occupied the Chair, and opened the meeting with the following remarks:—"My first duty this evening is a sad one. It is to endeavour to pay an unworthy tribute to the memory of one whose irretrievable loss we have had to deplore since last we met. I refer, of course, to the late Professor Kanthack. It is not as a true friend or as a brilliant teacher that I speak of him to-night, though he was both these; it is as one of the greatest helpers and one of the ablest members of the Abernethian Society. During the past ten years the work of the Society has been very closely connected with the various lines of pathological research to which Dr. Kanthack gave his energetic attention. It was the Abernethian Society that had the honour of hearing the first results of Dr. Kanthack's work upon Tetanus, which gained the Jacksonian Prize in 1895, and also of that upon Immunity, which now finds a permanent place in *Allbutt's System of Medicine*. The many pathological demonstrations given at our 'Clinical Evenings' were too numerous to receive individual mention; they and Professor Kanthack's interest in our Society were not even interrupted by his removal to Cambridge. Finally, only as late as last July, Professor Kanthack gave this Society as its Midsummer Address that stimulating call to further activity in the branch of medicine so peculiarly his own, which received so much attention as well outside as within this Hospital. Though none of us then dreamt it would prove such, it was a strangely appropriate last word and a fitting farewell from one who was himself for ever in the van of medical progress."

Mr. Berry's address, which was much appreciated by a large audience, is printed elsewhere in the JOURNAL. Some score or so of Mr. Berry's past and present dressers from the Royal Free Hospital, who had accepted the Committee's invitation to be present, listened in rapt attention. The Nursing Staff also attended.

Christmas in the Wards.

CHRISTMAS this year was a quieter festival than is usual. Owing to the fact that Christmas Day itself was a Sunday, some of the wards decided to hold their celebration on the Saturday, and the majority on the Monday; while Tuesday and even Thursday were devoted by the remainder to their entertainments. There were the usual conjurers and ventriloquists; and the other forms of entertainment were much the same as in former years. This year, however, a new feature was introduced in the "gramophone," which was much appreciated wherever it was heard.

The ward decorations were as usual in excellent taste, and involved a good deal of trouble and forethought on the part of the sisters and nursing staff. The general opinion of unbiassed visitors assigned as usual a very high, if not the first place, to Martha; while Luke, Kahere, and John among the medical wards, and President, Charity, and Lucas among the surgical were all much admired. Last, but not least, the best thanks of a very large portion of the Hospital must be given to Mr. Valerie, who sang, accompanied by Mr. Adams on the banjo, in no less than eight or nine different wards on Monday evening; scarcely any one, we are sure, can have realised the extent of his exertions or of his good nature.

The Christmas Entertainment.

THE Christmas Entertainment given for the nurses and resident staff took place on the evenings of Thursday and Friday, the 5th and 6th of January, being preceded as usual on the 4th by a dress rehearsal, which was witnessed by those patients who were well enough to attend. The entertainment consisted of two farces and the orchestral selections.

The first piece was a well-established favourite, *No. 1 round the Corner*, setting forth the troubles and trials of two impecunious bachelors in lodgings in their efforts to "raise the wind." The parts were taken by Messrs. Farley and Hawes, who most successfully surmounted the many difficulties inseparable from a play of this character. The frequent reference to that historical personage around whom Milton wrote his poem *Paradise Lost* seemed to us rather unnecessary. Still, we suppose the words were so in the book of the play.

The second piece was a three-act farce by G. Manville Fenn, entitled *The Balloon*, and when we mention that the two principal *rôles* were taken by Messrs. Hobday and Valerie, who were ably supported by the rest of the company, further criticism is unnecessary. Mr. Valerie, in the part of Mr. Aubrey Fitz-John, had a character sketch that suited him "down to the ground," and which he developed with that inimitable spirit which we are now so well accustomed to.

Mr. Hobday, as a medical man suffering from old heart trouble with recent complications, carried the entire sympathies of his audience with him; both in the pathetic and in the more vigorous passages he was excellent. His scene with Mr. Valerie describing the escape from the balloon was perhaps the most striking success of the evening.

The female element was ably represented by Messrs. Tweedie, Slade, Ward and Morris. Mr. Tweedie, as a designing widow, betrayed a suspicious knowledge of the subject. Mr. Slade and Mr. Ward represented the youth and beauty, Mr. Slade making one of the most fetching figures we remember to have seen on these boards. Mr. Morris played the difficult part of an elderly lady with marked success.

In the minor parts Mr. Crawford, as the doctor's boy, made a decided hit; and Mr. Gibson, as the doctor's *locum*, showed early promise of a successful professional career. Mr. Whitaker, as Captain Cameron, was effective.

The orchestra played several selections during the evening, and it was difficult to believe that their practice only began with the week. The entertainment ended at the reasonable hour of 10.15, but the interval at 7.45 seemed to us at least half an hour too early.

The Kahere Lodge, No. 2546.

AN ordinary meeting of the Kahere Lodge, No. 2546, was held at the Restaurant Frascati, Oxford Street, W., on Tuesday, December 13th, 1898; the W.M. Bro. T. G. A. Burns in the Chair. A vote of condolence with the family of the late Earl of Lathom was passed unanimously, Lord Lathom having been an honorary member of the Lodge; and the resignation of Bro. Nall was accepted with regret. Bro. Nall having become a permanent resident at Yorketown, South Australia. Bros. Howard, Marshall, Heath, Burrows, and Brewerton were raised to the third degree; Bros. Coventon, Griffiths, Gay, and Tucker were passed to the second degree, and Dr. C. H. Roberts was initiated into freemasonry. The Deputy Master, for the time being, of the Sancta Maria Lodge, No. 2682, was elected unanimously an honorary member of the Lodge. A small honorarium was voted out of the Lodge funds to Bro. Sargant for assistance rendered to the Secretary, and a sum of twenty guineas was granted at the suggestion of Bro. E. C. Cripps, in aid of the Royal Benevolent College at Epsom. Bro. West was appointed to act as charity steward, and it was decided, upon the motion of Bro. Pickett, that a sum of money should be placed in his hands for the relief of those in urgent distress. The members with their guests, to the number of thirty-five, afterwards dined together.

An ordinary meeting of the Kahere Lodge was held at Frascati's Restaurant, on Tuesday, January 10th, 1899; Bro. T. G. A. Burns, W.M., in the Chair. Bro. J. A. Rigge was elected a joining member,

and Messrs. F. H. Lewis, W. W. Kennedy, and Thomas Hood having been elected members were duly initiated into freemasonry. Bro. C. H. Roberts was passed to the second degree, and Bros. Coventon, Griffiths, and Gay were raised to the third degree. A sum of twenty guineas was voted from the Lodge funds in aid of the Royal Medical Benevolent College at Epsom. The brethren and their guests to the number of thirty-eight afterwards dined together.

Annual Bart.'s Dinner in Calcutta.

THE second Dinner of the Bart.'s men in Bengal was held at the United Service Club, Calcutta, on Monday evening, December 19th, 1898, and was an unqualified success. It had been intended to have it on St. Bartholomew's Day, but the weather in August (shade temperature 99°, moisture 100 per cent.) choked everybody off. Bart.'s men form a strong contingent just now, and there was a good muster; one man "running in" three hundred miles to attend. The following were present:—Colonel T. H. Hendley, C.I.E., I.M.S., in the chair, Drs. Nield, Cook and Pettifer, Major Pilgrim, and Captains Maynard, O'Kinealy, Oldham, and Bird, I.M.S. Major Ross, Captains A. F. and C. R. Stevens, I.M.S., and Dr. Humphrey were unable to come. A telegram was received from the two latter, who dined together the same evening amid the snowy peaks of Darjiling, conveying their best wishes and toasting the alma mater.

After dinner Colonel Hendley, in proposing the toast of the evening, gave some interesting reminiscences of his student days in the sixties, when Sir William Lawrence was Surgeon, and "Tom Smith" Assistant Surgeon to the Hospital. He commented on the greater number of Bart.'s men coming out to India every year, a very different state of affairs to that existing when he entered the service. He was then, and for nearly ten years afterwards, almost the only Bart.'s man in it. Now each year brings us some more chips of the old block, and the Annual Hospital Dinner in Calcutta promises therefore to be increasingly successful. In fact the other day a medical man in Calcutta said that Bart.'s men in India had been *sporadic*, were now *epidemic*, and that he supposed they would soon become *endemic*.

Reviews.

MANUAL OF OPHTHALMIC SURGERY AND MEDICINE, by WALTER H. H. JESSOP, M.A., M.B.(Cantab.), F.R.C.S., Ophthalmic Surgeon to St. Bartholomew's Hospital. (London: J. and A. Churchill. Price 9s. 6d.)

All Bartholomew's men who have had the privilege of studying ophthalmic work under Mr. Jessop have awaited the appearance of this volume with eagerness, in the anticipation that the clearness and precision which distinguish his oral teaching would also adorn his written words. And this anticipation we think they will find amply realised, in spite of the crippling limits to which Mr. Jessop has been restricted. The first three chapters are devoted to a description of the methods of examination employed in ophthalmic work, and so far as written directions can supply the want of actual demonstration are admirable in their conciseness and completeness. The conjunctiva, cornea, sclerotic, and iris have each in turn a chapter devoted to the diseases and injuries peculiar to them. There is in the chapter on the cornea one small theoretical point on which we should venture with some diffidence to disagree with Mr Jessop. He describes the ulceration which takes place in, *e.g.* exophthalmic goitre, as "a condition resulting from exposure of the cornea, owing to insufficient protection by the lids." But is this the whole story? There are many cases in which in debilitated subjects the corneæ are exposed by incomplete closure of the eyelids for weeks together without any ulceration, *e.g.* in the later stages of heart disease; further, we have lately seen a case of Graves' disease in which the proptosis was slight, and the corneæ completely covered during sleep, and yet ulceration of both corneæ occurred; nor in this case was the act of nictitation markedly infrequent. We feel sure that there is some further factor in the causation of this form of ulceration.

Glaucoma and cataract receive ample treatment, and there is an adequate account of the most usually accepted theories of the first of these diseases. But one of the features of the book is the elaborate account given of the operative treatment of strabismus, the minute directions given being quite sufficient to enable a careful practitioner to accomplish these small operations for himself.

An appendix contains a large number of useful formulæ, to which constant reference is made throughout the book; an account of the lenses usually employed in retraction work, and some general rules for eye operations. There is an excellent index, and the illustrations are exactly those that are required in a text-book; the only addition we should like to see being a plate showing a normal disc, and, as a contrast, an early stage of papillitis. The stage of papillitis shown opposite p. 186 would be easily recognised by a first-time clerk in the medical wards, and might well be replaced by a diagrammatic representation of an earlier condition.

On the whole Mr. Jessop's book is distinctly the best text-book on the subject which we remember to have seen, and his achievement encourages his readers to an eager anticipation of a larger work from the same source.

ESSAYS FOR STUDENTS, by STEPHEN PAGET, F.R.C.S., Surgeon to the West London Hospital, Surgeon to the Ear and Throat Department of the Middlesex Hospital. (London: Baillière, Tindall, and Cox, 1899.)

To our versatile and valuable friends, the students, are dedicated these essays, in the hope, the preface tells us, that they who have made use of books "that are complete and necessary" may yet care to read something "that is neither one nor the other." If the meaning of this is that any of us should be advised to read what is unnecessary and incomplete, we should hesitate indeed to follow such advice in the midst of the multitudinous necessities of student preparation. However, we can with a clear conscience urge students during the period of their clinical work to peruse books such as the one before us, for they form a healthy relaxation from dry-as-dust text-books, and give (especially this one) an insight into the incidents of private practice, advice, diagnosis, and prognosis which must be often incomplete. Therefore we must disagree with Mr. Paget if he infers the non-necessity and unavoidable incompleteness of such essays as his. We do not think any student fond of bedside work, who has read books necessary and complete, will grudge the time spent in reading this one, which is "neither one nor the other."

There are four essays, one on each of the subjects of Strangulated Hernia, Cancer of the Breast, Run-over Cases, and on Aural Surgery. The method employed consists in discussing the various clinical symptoms exampled by notes, a most valuable and convenient method of note-taking in private practice, useful for our own instruction in recording our experience, and very useful for those who have the opportunity and desire to make brief communications at medical societies. To take two examples of what we mean. Mr. Paget (page 13) says, "Vomiting is a more constant sign than pain or shock; yet it may not begin until the hernia has been some time strangulated; it may stop for many hours, though the work of strangulation is going steadily on." Then follow short notes of three cases bearing on this point in which vomiting nearly ceased for almost twelve hours before it recurred. On page 55 is a frank confession of a mistake (which few surgeons of experience have not made), Case 4: "I removed the lump freely. . . . . There was no evidence of cancer, only a small abscess with very thick walls." Four cases follow to illustrate the difficulties of differential diagnosis between mammary cancer and chronic abscess, and the necessity of exploratory incision before excision. We consider reading of this kind more impressive than the re-read text-book bearing on this subject.

Dealing *seriatim* with the first essay, the subjects considered are the history of the case—despite charity and hospitals the London poor seem to be still largely untrussed; the onset of strangulation; the questions of impulse, abdominal distension, contents of sac, and the tongue—we ourselves have seen tongues of all kinds, bad in good cases, good in bad, and can quite endorse, therefore, the author's advice, "Look at the case all round." There is an interesting paragraph on strangulated hernia in infancy. In the cases there quoted the question is asked, "Might not inversion have reduced the hernia in more than one of the 'six' cases?" We doubt it. We are glad to find Mr. Paget objecting to the rigorous routine after-treatment till the bowels have moved. Cases must be taken on their merits. There are also interesting notes on the other forms of hernia, which we will leave the reader to discover for himself. Our author is a little "down" on his house surgeons.

In the essay on Cancer of the Breast we find the best examples of private practice cases; the neurotic, alcoholic, hysteroid, "insane" symptoms in connection with these diseases (pp. 74—77), the personal elements, the idea of hateful mutilation, the memory of blows, the dislike of examination, anxiety, &c., are all what we meet with in a large practice. "One of them said her doctor had bruised the breast with his stethoscope."

That cancer of the breast is too often painless will be readily conceded,—only six weeks ago a patient walked into our consulting room with nearly a painless mass of ulcerating scirrhus. Can it be said that inflammation and injury are more than coincidences in the production of cancer of the breast? For our part we think not, and Mr. Paget's cases bear out this view. As regards operation, we are advised thoroughness, and methods which let us see what we are doing; and in this section students are talked to like adult surgeons, possibly for the best. As regards after-treatment we are here again glad to find rigour is discountenanced; we agree it adds to the troubles of mind and body, and think that tight and prolonged bandaging has no little to do with the stiff and painful shoulder-joints.

Turning to the "Run-over" cases, we have no hesitation in saying this essay is quite the best short account of these injuries that we know of. Emphasis is laid on the shock, and the possibility of simple muscular injury imitating the most serious visceral lesion,—"we cannot decipher the local injury through the general state of shock." Every practitioner must know of such anxious cases of pain, tenderness, vomiting, abdominal distension, rise of temperature occurring even after twenty hours, as are related on pages 80 and 81. The student, the cautious and non-sanguinophilous practitioner, will be pleased to find there is no necessity to do an exploratory operation in the majority of these cases, although in this matter we rather suspect Mr. Paget has tended somewhat to set up idols which he may himself demolish. There are two interesting cases of pain in the shoulder and neck, associated with injuries to the liver and spleen, which general practitioners will hail; especially interesting, also, are those of the cerebral origin of voracious hunger and thirst without glycosuria.

"The Elements of Aural Surgery" opens with a thoughtful history of the development of aural surgery from the times of Fallopius and Vesalius to the present time. In the examination of the external ear Brunton's otoscope is recommended, the use of the auscultation tube is advised, Weber's and Rinne's tests are duly considered and valued.

On page 126 will be found mention of bleeding from the external meatus not due to fractured base, the quite important fact for students to remember. The diseases of the middle ear are classified into—(1) Acute Inflammation and its consequences; (2) Chronic Catarrh and its consequences; (3) Adhesions in the Middle Ear and their consequences. For myringotomy chloroform is advised. "Not even the most liberal use of cocain will prevent it from being painful to the patient, and therefore difficult to the surgeon." Chronic catarrh receives its share of mention, but we leave its perusal as hopeless and as pessimistic as we began. The same may be said for tinnitus not due to wax, temporary inflammation or systemic disease; for them dilute hydrobromic acid is preferred to bromides, but no mention, however, is made of electrical treatment, probably advisedly; but we ourselves think it has a decided value, and so will those, we think, who may visit the Hospital's electrical department. Congenital and acquired deaf-mutism, the acquisition of lip-reading, are discussed and fairly presented to the student. The diseases of the nose and naso-pharynx are sensibly and properly valued, we learn something of acute catarrh, chronic hypertrophic and atrophic catarrh, polypi, and adenoids. In the paragraph on adenoids will be found Meyer's notes of his first case. Operation for adenoids is not considered "quite trivial," and six good rules of indications for operations are given, but to learn these, to learn the best position of the patient, the age, the kind of instrument, the anæsthetic, and much else that we have either not mentioned or merely glanced at, the student should get the book for himself, and we can assure him instruction and pleasant reading.

In such a wide range of important subjects it would be easy to criticise; we think what criticisms will come will probably be directed to the rather marked paucity of cases, to the title of the book, the absence of much precise mention of treatment (*e. g.* in chronic catarrh of the middle ear), and the use of such adjectives as "horrid" and "frightful." We think the description given (page 151) of MacEwen's supra-meatal triangle will be difficult for many to grasp, and we fail to see why in case 3, page 85, "the bubbling of air" only betokens tearing of the diaphragm or pleura. But these are small points, and the very drawing the attention to them indicates general excellence of the work.

Mr. Paget's style is lucid and conversational, and we might almost say it has a certain charm hereditary in its nature. We think the book invaluable both for its information and suggestion, and are puzzled to find so much condensed into 177 pages.

NINE MEDICAL SONGS. Words by J. BLUMFELD, G. H. RANSOME, and F. H.; the Music composed by C. N. CHADBORN. (To be obtained of the Librarian, St. George's Hospital, S.W. Price 2s. 6d., postage 3d.)

Messrs. Chadborn, Blumfeld, Ransome, and "F. H." are to be congratulated on turning out one of the smartest little books of songs seen for some time. Both the words and music are excellent, and of the nine songs there is not one which might be called even weak. Especially clever are *The Love-sick Bacillus* and *The Lament of the Large White Kidney*, while *To a Hospital Nurse* is a most dainty ditty, the music being well suited to the charming words. The book is extremely well got up, and its price ridiculously low. St. George's Hospital is to be congratulated on having given us such a production, and doubtless their Librarian (from whom copies may be obtained) will soon find it necessary to order a reprint of what, in our opinion, is the best book of medical songs ever published.

Correspondence.

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

REMINISCENCES.

SIR,—I have read Sir Thomas Smith's excellent *résumé* of the early incidents of our Hospital, an institution which has never failed since October, 1832, to interest me deeply, and to afford me much pleasure. The retrospect of course brings to mind, and as one grows older and older events of one's past life become more and more vividly remembered. I may truly say that the six or seven years I passed at the Hospital as pupil (one of the last apprentices of the Hospital as described by Sir Thomas) were the happiest of my life. I had the pleasure a fortnight since of accompanying Mr. Willett in his rounds, and I wish to record my great satisfaction at the improvements in every department. I conversed with several of the students whilst waiting for my cicerone, and I must confess that in the Square and in the dissecting room their demeanour was that of gentlemen, which was not too often the case in my day. I rejoice that the many improvements, I might say comforts, in the wards and outside have had a beneficial effect upon patients and pupils. My only regret in looking back on my own career is, that I and those who were my colleagues had not the same advantages. Let the pupils of the present day accept these words as my earnest desire for their future prosperity. It appears to me that year by year the competition becomes harder and harder.

I took up my pen to relate an anecdote, and have been led by the recollection of my recent pleasant visit to scribble I fear too much for the patience of your readers. Now for the anecdote. There are few who remember Paganini, the great musician who produced from a one-stringed violin many clever musical and other sounds. He applied to the then Mr. Lawrence to be allowed admission to the operating theatre, that he might hear the agonising cry of a patient under suffering. Upon being asked whether the request should be granted, I said on one condition, "that the man gives a musical entertainment in the anatomical theatre, and pays to the funds of the Hospital five shillings per head for every one attending." I remember the shrug of the shoulder of the professor, and the rapid turning on his heels and departure. So much for philanthropy!

I am, Mr. Editor, yours faithfully, R RARROW

St. John's Lodge, Ryde; *December 5th*, 1898.

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

THE LATE PROFESSOR KANTHACK.

SIR,—By the death of Professor Kanthack the world has lost a great worker and a brilliant teacher, one who, had he lived, would have gathered around him a school of pathologists similar to those schools associated with the names of Cohnheim and Virchow. More than this, all those who ever worked under him, or were brought into contact with him in any way, have lost a personal friend who was never too busy to give advice, who knew exactly the needs of each one, and who endeavoured to help them to the utmost extent of his power.

May I suggest, sir, that subscriptions be invited through the medium of the JOURNAL, and perhaps of other medical papers, for the purpose of founding a medal or prize with which Professor Kanthack's name may be associated, and which should be given periodically for some subject connected with pathological or bacteriological research?

CHARLES POWELL WHITE.

130, Hyde Park Road, Leeds; *December 25th*, 1898.

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

DEAR MR. EDITOR,—It was with the deepest regret, which will be felt alike by all of his friends and pupils in this country, that I read a telegram this morning announcing the death of Professor Kanthack.

Everybody who knew him has lost a friend, and those who were privileged to learn from him, a teacher and a master, whose methods and example they will spend their lives in following; and the more closely they do so the nearer will they come to extracting some of the most useful and valuable truths from nature. It is impossible to calculate the irreparable loss of his evenly balanced and penetrating mind to medical science.

I presume, sir, that some fitting memorial will be raised to him in the Hospital to which he was so attached, and I hope that Bart's men all over the world will be given an opportunity of participating and helping. Believe me, yours, &c.,

FRANK A. SMITH, M.B., B.S., Lieut. I.M.S.

Larulai, Baluchistan; *December 26th*, 1898.

Problems in Diagnosis.

(*See page 59.*)

ABSTRACT *of post-mortem notes.*—Hydatid cyst of liver; hæmorrhage into cyst; rupture of cyst.

On opening abdomen a great quantity of turbid reddish fluid escaped from it, in which floated many ruptured hydatid cysts of various sizes. Close under the abdominal wall lay the original cyst, stretching from the umbilicus upwards, and from one hypochondrium to the other. The parietal peritoneum was adherent to it at one spot on the right side, but only slightly. The cyst was covered by a false membrane for a large part of its extent. It was not adherent to any part of the alimentary canal, nor to the spleen, but the pancreas was adherent to its hinder surface. It sprang from the left lobe of the liver. The gas it contained was not derived from the stomach or intestines, for these were normal on being tested by water pressure; nor from the lung, for the cyst was not adherent to the diaphragm. The cyst wall was thin, its inner surface only slightly roughened. Its contents were a turbid mash of blood and other fluid, probably some of it purulent. The resultant colour and consistence resembled mashed strawberries and cream. Here and there varicose vessels projected into the cyst, some as large as horse-beans. The hæmorrhage was probably from one of these vessels. A great quantity of cysts of all sizes floated in the fluid. The liver, of which the right lobe only remained, with the cyst empty, weighed six pounds. The stomach was dilated, and pressed upon by the cyst. Microscopic examination of the varicose vessels showed only dilatation and thrombosis, no ingrowth of cysts.

Comment.—The interest of the case lies in the fact that the three most serious complications of hydatid cysts occurred in the same patient—suppuration, hæmorrhage, and rupture. The formation of free gas within the cyst, yielding the area of amphoric resonance, was the obscure point in diagnosis clinically. This must be a very uncommon occurrence.

Appointments.

BILL, J. F., M.B.(Lond.), M.R.C.S., L.R.C.P., appointed Assistant Medical Officer to the Lewisham Union Infirmary.

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BOUSFIELD, E. C., M.R.C.S., L.R.C.P., appointed Bacteriologist for the Parish of Camberwell.

* * *

CHASE, J., M.R.C.S., L.R.C.P., appointed Principal of the Tower House Retreat, Westgate-on-Sea.

* * *

CLARKE, F. A. H., M.R.C.S., L.R.C.P., appointed Assistant Medical Officer at the Beech Avenue Workhouse, Nottingham.

* * *

EDDISON, F. R., M.R.C.S., L.R.C.P., appointed House Surgeon to Addenbrooke's Hospital.

* * *

FOX, F. H. B., M.R.C.S., L.R.C.P., appointed Senior House Surgeon to the Royal South Hants Infirmary.

FURNIVALL, PERCY, F.R.C.S.Eng., appointed Assistant Surgeon to the London Hospital.

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GILLIES, SINCLAIR, M.D.(Lond.), M.R.C.S., L.R.C.P., appointed Assistant Physician to the Prince Alfred Hospital, Sydney, N.S.W.

* * *

GUTCH, J., M.A.(Cantab.), M.R.C.S., L.R.C.P., appointed House Surgeon to the Royal Hants County Hospital.

* * *

HAYNES, GEORGE SECRETAN, M.R.C.S., L.R.C.P., appointed House Physician to Addenbrooke's Hospital.

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NAISH, A. E., B.A.(Cantab.), M.R.C.S., L.R.C.P., appointed House Physician to the Children's Hospital, Great Ormond Street.

* * *

PATERSON, H. J., M.A., M.B.(Cantab.), F.R.C.S.(Eng.), appointed Registrar to the Lock Hospital, Dean Street, Soho.

* * *

ROWLAND, S. D., M.A.(Cantab.), M.R.C.S., L.R.C.P., appointed Assistant Bacteriologist at the Jenner Institute of Preventive Medicine.

* * *

SEVESTRE, R., M.D.(Cantab.), M.R.C.S., L.R.C.P., appointed Honorary Assistant Physician to the Leicester Infirmary.

* * *

TUNNICLIFFE, F. W., M.D., M.R.C.P., appointed an Assistant Physician for Out-patients to the Victoria Hospital for Children, Chelsea.

Examinations.

UNIVERSITY OF CAMBRIDGE.—*Third Examination: Part I.—Surgery and Midwifery.* H. F. Bassano, S. W. Curl, W. S. Darby, J. Gutch, O. Inchley, H. R. Mayo, F. A. Rose, E. Talbot. *Part II.—Medicine, &c.* C. H. Barnes, A. E. Carsberg, W. D. Harmer, A. C. Jordan, T. W. Letchworth, S. Pollard, E. P. Sewell, A. M. Ware.

UNIVERSITY OF LONDON.—*M.D. Examination.*—P. E. Adams, J. H. Bedman, *J. A. O. Briggs, E. G. D. Drury, J. W. Haines, A. Heath, *J. Hussey, Eldon Pratt, G. B. Price, E. J. Toye, W. D. Warde.

M.S. Examination.—J. S. Sloane.

B.S. Examination: First Division.—J. P. Maxwell (Medal).

Second Division.—J. L. Maxwell.

* Obtained marks qualifying for Gold Medal.

Births.

FORD.—On January 6th, at 47, Ladbroke Square, W., the wife of Frank C. Ford, M.B., of a son.

MASTERMAN.—On December 8th, at 3, Newnham Terrace, Cambridge, the wife of E. W. G. Masterman, F.R.C.S., F.R.G.S., of a daughter.

MAUND.—December 25th, at Brackley House, Newmarket, the wife of John H. Maund, M.R.C.S., L.R.C.P.(Lond.), of a son.

VERRALL.—December 17th, at 97, Montpelier Road, Brighton, the wife of T. Jenner Verrall, M.R.C.S., L.R.C.P., of a son.

Marriage.

WILLIS—THRING.—On January 5th, at St. Peter's, Bournemouth, by the Rev. R. M. Willis, M.A., assisted by the Rev. R. Knightley, M.A., Cyril Hamer Willis, M.R.C.S., L.R.C.P.Lond., younger son of the late M. M. Willis, of Beckenham, Kent, to Annie Bertha, youngest daughter of the late Robert Thring, of Winchester.

ACKNOWLEDGMENTS.—*Middlesex Hospital Gazette, Nursing Record, British Dental Journal, Guy's Hospital Gazette, The Student, London Hospital Gazette, The Hospital, Medical and Surgical Review of Reviews.*

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St. Bartholomew's Hospital Journal,

FEBRUARY 14th, 1899.

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

WHAT is the most satisfactory method of catering for the educational needs of post-graduates? The question is one of great importance, and is just now very much under discussion. Probably owing to the greater thoroughness of the medical student's curriculum on this side of the Atlantic, post-graduates in search of clinical instruction are not so numerous in England as in America, but there is a growing tendency amongst the younger generation of practitioners to spare some weeks out of their busy year in seeking to add to their professional knowledge by revisiting the metropolis.

Speaking broadly, the solution of the difficulty—for the problem is not a simple one—has been attempted in five ways, with varying success. Firstly, post-graduate vacation classes have been held at the large general hospitals; secondly, provision has been made for post-graduates by enabling them to enter to the teaching and practice of either of these hospitals on payment of a composition fee; thirdly, a number of these same hospitals have united, and tickets have been issued by means of which post-graduates may attend at all the hospitals so joining; fourthly, we have seen one of the smaller general hospitals, to which no medical school is attached, throwing open its wards and out-patient departments to post-graduates especially; and lastly, we have recently witnessed the formation of a "Policlinic," at which post-graduates are promised facilities for refreshing the blurred images of their student days, or for receiving new instruction upon any advances made in the science and art of their profession. Each of these schemes has its advantages, each its drawbacks; to judge these wisely, and decide which method is fittest, requires experience and consideration. We are encouraged to venture upon a few critical remarks by the great interest the matter has for many of the readers of the JOURNAL.

Let it be understood that it is the post-graduate who is already, or whose ultimate object is to become, a general practitioner that we are considering. The man who aims at special branches of medicine has his way clearly marked out; he takes a course at one or more of the special hospitals, or attends the *clinique* in that subject at well-known Continental centres. For the general practitioner, however, the case is very different; for him the work of a general hospital is not only necessary, it is eminently fitted to his needs; so much it seems necessary to grant at the outset. And this being so, though it is premature to judge of so young an effort, we cannot think the advantages offered by a policlinic—where there are no patients acutely ill, or being nursed, or being treated either medically or surgically for their diseases—will prove of much help in the matter.

Against the vacation classes at the general hospitals having attached medical schools has to be placed the great objection that they can never be adequate without throwing the routine medical students' curriculum out of gear,—a cala-

mity the authorities rightly view with much concern; and if the classes be not adequate they are a failure. Moreover the average English hospital patient has a more limited tolerance of examination than is the case on the Continent. But the former of these two objections is the weightier one, and is quite enough to prevent the system receiving more than scant encouragement from headquarters.

There is much to be said for the scheme whereby the post-graduate returns to the ordinary work of a general hospital, whether to one or several. Incidentally, however, we may remark that there seems nothing gained, but rather something lost, by attending more than one, provided that he large; we have often heard men express this opinion as the result of the "combined ticket" system. We regard this as the post-graduate's best means of using his time; medical, surgical, and gynæcological wards, operations, special departments, out-patient rooms,—here is all he requires. Here, too, he meets with tutors who know best how to utilise their material from long years of experience. We are fully aware of the objection,—it is, we believe, the only one,—some men make against this method; the disinclination to rub shoulders with the junior unqualified student. It cannot be justly urged that this prejudice is trivial, or that holding it condemns a man to being charged with considering himself no longer a student. The exigencies of general practice are far too great to let this very reasonable objection on the part of the post-graduate prevent us thinking highly of the spirit which induces him to return to hospital for the sake of his patients. Still, we cannot but hope that custom may so stale this system of post-graduate education that the above-named prejudice will die a natural death.

For such men as find this objection an insuperable one there remains the provision for post-graduates made at one or other of the general hospitals not possessing a medical school. Here our *sine quâ non* is secured,—a general hospital. Crowding out the ordinary medical student on the one hand, and mixing seniors and juniors on the other, are done away with. But, as against these advantages, we have the drawbacks that the *clinique* is of necessity limited, and the teachers men of less tutorial experience than might be met with nearer home.

In conclusion, then, we consider the return of the post-graduate to his *alma mater* is his best course; and for those who have been trained at smaller centres than the large metropolitan hospitals, special provision is made by the authorities of such schools. Short of actual classes which disturb the routine work, this provision is all that can be desired. As we began by saying, "there's aye a something;" but we do not think the "something" in this case so great a matter as it is in the others. It is but a prejudice, which we all of us should not only deplore, but do our best to uproot by honouring the qualified man who comes into our midst, and treating him as a colleague.

A Case of Spondylitis due to Osteo-arthritis.

A Clinical Lecture delivered on January 27th, 1899.

By Sir DYCE DUCKWORTH, M.D., LL.D.

I BRING before you to-day the case of a young man suffering from a severe form of rheumatoid or osteo-arthritis. You do not see many cases of this disease in our wards, because they are mostly of a chronic character, and their progress under treatment is always slow, sometimes hardly perceptible, so that we can seldom keep such patients here long enough for you to witness the improvement that is possible for many of them to secure. When you enter into practice, however, you will certainly have to recognise and treat this ailment, for it is common enough in all parts of the British Isles. You perhaps know that this disease is often called rheumatic gout. I mention this at once in order to warn you never to employ the term. The public use this designation, but if any of you should do so, I should believe that you had taken insufficient pains to make a diagnosis of the disease, or that you were ignorant of clinical medicine. Although the pathogeny of this disorder is not even now satisfactorily established, we know that it is not a result of the infecting material which causes true rheumatism, and we also know that it is not due to the conditions which set up true gout. It is, moreover, not a blend or hybrid of these two disorders. It is true that some forms of gout may induce deformities in joints closely resembling in many aspects those resulting from osteo-arthritis, and that thus you may sometimes find it difficult to be certain with which you have to do; but by a study of the whole patient, of his physical condition, history, and environment, you ought to arrive in most cases at a correct diagnosis of the case before you. It would be impossible for me here and now to enter into this large question, which, however, I treat at length in my systematic lectures. I am only concerned to-day to illustrate some of the main features of osteo-arthritis, and to direct your attention to the peculiarities which the patient I shall bring before you exhibits. I will, therefore, only lay down the chief points which enable us to differentiate this disease from rheumatism and gout. In the first place, heredity plays but a small part here. This is well marked in gout, and less observed in rheumatism. Osteo-arthritis is common in females, and so is rheumatism, while the reverse holds for gout. Poor living and depressing conditions, overwork and exposure count for much in osteo-arthritis, while high living and indulgence in strong drinks dispose to gout.

Rheumatism is not a disorder induced by any form of diet. Gout, you know, often begins in the feet and small joints, does not affect the heart, and is attended by moderate fever. Rheumatism attacks large and small joints, is very apt to involve the heart, and may be attended with high fever. In osteo-arthritis large and small joints may suffer, the pain is less severe, the heart is not affected, and there is generally only fever in acute accessions of the disease. Again, gout is a periodic disorder, but neither rheumatism nor osteo-arthritis have this quality. The latter is apt to be progressive, and to involve various joints slowly in succession. Lastly, while in gout we always meet with urichæmia, and sometimes with uratic deposits and progressive renal inadequacy, we find none of these peculiarities in rheumatism or osteo-arthritis. This latter term, by the way, is one of eleven which have been applied to the disorder we are considering to-day, and it has the merit of clearing the mind from any ideas of rheumatism or gout. Occasionally we meet with puzzling cases of this disease in which, owing to an acute onset, many joints are involved at the same time, with more fever than is commonly witnessed. The heart, however, remains unaffected, and sweating is little marked. We may for some time suspect that we have to deal with rheumatic fever. Such cases, however, do not yield to ordinary antirheumatic treatment, and their progress declares before long the true nature of the ailment. Moreover we find examples of this chiefly in young adults in whom true rheumatism is more likely to be met with. The history and condition of the patient I now bring before you is as follows:—

J. T—, æt. 27, admitted to Matthew Ward, January 19th, 1899. Invalided from the City Police Force in February, 1896. Always robust and healthy till four and a half years ago, when he suffered from shooting pain in the left hip and thigh. Four months later similar pains came in the right hip and thigh. (The first year of his service consisted of night duty.) An attack of bronchitis next occurred, and after this illness he observed that his chest "fell in," and any exertion with his arms caused pain between the shoulders. His shoulders came forward, and his back gradually became arched. His head and neck grew stiff. The pains were not worse at night. There have been aching and shooting pains in the spine, and creaking in the neck. This was his condition in February, 1896, when he was discharged from the police force. Since then the left knee and the right shoulder joints have become involved, and the spine has grown more immoveable.

He has been in St. George's Hospital, has undergone treatment at Bath, and had thirty-five Tallerman baths without any marked improvement.

The patient now stripped is manifestly, as you see, much crippled and deprived of spinal motility. He can rise up and walk stiffly, but cannot bend his spine so as to pick up anything off the ground. The head is thrown forward. He stands in the attitude of a gorilla, with his arms hanging forward, his shoulders bent, the spine flexed on the pelvis, and the legs apart. His progression is waddling. The thorax is flattened under the clavicles. The trunk moves as one piece. The various organs in the chest and abdomen are natural. The arteries at the wrist and temples are tortuous and thickened. The heart sounds are natural. The urine is also natural. He is over six feet in height, and we may be sure that his general physical state some years ago was satisfactory, or he could not have been accepted for the police service. His tongue is flabby, the appetite good, and the bowels act regularly.

On examining his head carefully we find slight movement of the atlo-occipital joint, but none in the atlo-axial. His palate is narrow and highly arched. The temporo-maxillary joints are free. The right shoulder-joint grates on movement, and rotation of the humerus is limited. The left one is affected in a less degree. The left femur cannot be perfectly rotated, and the right is also involved at the acetabulum. The left knee is puffy, the patella creaks on movement, and is enlarged and "lipped." Movement of it is painful. The right knee-joint is free. The right ankle is puffy, and is limited in its movements.

The spine is stiffened throughout, and rotation is impossible in its course.

His past history is void of interest. He was brought up in the country till the age of twenty, and never had any illnesses. There is no history of gonorrhœa or lues. His family history is excellent, and his parents lived to advanced age. No history of rheumatism or gout can be obtained.

I think we must take note of the fact that this man was kept for a year on night duty. This is always trying, and especially to young people. Older persons can better bear this perversion of physiological rhythm. Those who turn night into day are generally underslept. They are apt to become anæmic and to lose tone. You know that we never keep our night nurses on duty for more than three months at a time, and that is long enough. It is conceivable that we have in this man's history a cause of vital and nervous depression which may fairly explain the incidence of osteo-arthritis. Failing this, we are left in doubt as to the *vera causa*. I need add nothing to impress upon you the gravity of the condition into which this vigorous young fellow has fallen, crippled and helpless, deprived of almost all means of gaining his livelihood, and through no fault on his part.

It is disappointing to learn that, so far, no treatment has been of any avail for him. Nothing but a union infirmary or a hospital for incurables appears to lie before him. We must not, however, despair of affording some relief in this case, and I shall presently tell you what we propose to do for him.

Let me next say something respecting the nature and pathology of osteo-arthritis.

In its acute and polyarticular form osteo-arthritis is particularly apt to attack young adults, and such cases, as a rule, afford cause for more anxiety, and necessitate a graver prognosis than that form which is of slower onset, even if symmetrical as respects the joints, and which we see more

frequently after middle life. Such cases demand prompt and persistent treatment with all the best resources we can command, and the sooner the disorder is dealt with the better the outlook. The disease may make rapid progress, and spoil the career of young adults who may have the best prospects before them. The same may be said of gonorrhœal arthritis, which not seldom assumes a virulent form, and may lead to permanent crippling and incapacity for active pursuits in life.

The patient you have seen to-day illustrates, as I have said, one of the rarer conditions met with, viz. spondylitis. It is fortunate that this variety is rare, for it is one of the most grievous complications. The cervical and lumbar vertebræ are the parts of the spinal column most commonly involved, and the atlo-axial joint in particular. I show you here a preparation from the museum illustrating spondylitis affecting the lumbar vertebræ. This condition may induce severe radiating pain from compression of the spinal nerve-roots, cramps in the limbs, and even motor and sensory nerve changes. Grating in the neck may be an early indication of the onset of spondylitis. The spine and the jaw are usually affected late in the course of the disease. Atrophy of adjacent muscles, spasm, and great myotatic irritability may supervene in this disease. These changes are almost certainly due to reflex nervous influences, originating in severe peripheral irritation. There may possibly be neuritis, set up by direct implication of the nerves supplying neighbouring muscles, and so wasting of these may be sometimes thus explained.

The morbid anatomy of osteo-arthritis involves all the tissues composing the joint. The appearances vary according to the acuteness of the disease, the stage of it which we witness or finally discover at the necropsy. There may be early in the case hydrarthrosis. The synovial membrane is primarily involved, being red and thickened with hypertrophied vascular tufts. Later, the synovial fluid is absorbed, leaving this membrane thickened. Next, the articular cartilages soften and waste, becoming villous or fibroid. Then they are absorbed, so that the bone is laid bare. The semilunar cartilages may disappear from the knee, or may be transformed into bone. The cartilages may, by irregular hypertrophy, discharge their free cells into the cavities of the joints, or form club-shaped villi. Owing to friction these villi disappear, and the subjacent bone undergoes changes. The synovial fringes may form dendritic growths which may become cartilaginous, of which I show you here several specimens, and some of these may become detached as loose bodies in the joints. The proliferating cartilaginous elements tend to accumulate at the edge of the joint, causing what is termed "lipping." In this disease the outgrowth is an ecchondrosis. In gout a similar condition of "lipping" occurs at the edges of the bones, but this is due to exostosis. This fact was first proved by a former house physician of mine, Dr. Wynne. The bony changes are in part hypertrophic and in part atrophic. The ecchondrosis may ossify and form spicules which tend to lock the joint by false ankylosis. These are well seen in the hip and knee joints. They often become eburnated and polished by friction at points of contact. Layers of dense bone are formed which protect the delicate cancellous structure beneath. We do not meet with true ankylosis in rheumatoid arthritis. This is a peculiarity of gouty arthritis, and in this disease we sometimes meet with a true fusion of the bones, or synostosis. The ligaments are no less involved. Thus, the crucial ligaments may be absorbed, the ligamentum teres also, and sometimes the long head of the biceps disappears. The capsular ligaments and tendons of muscles are apt to be caught up in some of the adjacent tissue proliferations.

Although there is no true ankylosis, there may be great immobility of the affected parts as the final outcome. This is the case in the cervical spine of this man. The pain is often severe, accompanied with startings in the limbs, aggravated by the warmth of the bed, and by exposure to cold and damp. Suppuration never occurs at any stage of the disease.

Of the morbid process originating this malady we are as yet ignorant. We know that it may occur in joints which have previously been the seat of acute rheumatism, although we know that this disorder leaves behind it no recognisable changes in the joints. In the ancestry we often find a history of gout, though rarely a personal history of this disease. The female members of gouty families are apt to suffer from osteo-arthritis. But no such history comes in to explain the great frequency of the disorder in poor Irish and Scottish patients who live in the perpetual damp environment of the western coasts of these islands. Unwholesome dwellings, poor living, moist climate, overwork, prolific child-bearing and prolonged lactation, uterine disorders, menorrhagia, and the influence of the menopause have clearly much to do with the production of the disease in women, who present by far the majority of cases. But you may meet with examples in young children.

The theory which has commanded the widest acceptance as the cause of this disorder is that which ascribes it to the action of various depressing agencies upon the central nervous system, which lead to the disorganisation and faulty nutrition of the joints. Many facts point very plainly in this direction, especially those which indicate that there is a centre, possibly in the medulla oblongata, presiding over the nutrition of the joints. Whether the malady starts primarily from a fault in this centre, or whether it is itself acted upon by peripheral irritations from a distance in a reflex manner, is not yet determined. There are probably several varieties of disease included at present under the term osteo-arthritis.

I need hardly say that there are now claimants in the field for a microbic origin of this disease. They doubtless base their case on the analogies of gonorrhœal or pyæmic

varieties of arthritis. I have little doubt that some varieties of arthritis exist which own a septic origin, but I should hesitate to say that they were of the same nature as the disease we are concerned with to-day. In respect of arthritis as a generic term, we must recognise clinically many species of it. The ultimate outcome as presented in the *post-mortem* theatre may very inadequately tell us what precise process led up to it during life. That part of the work is to be done at the bedside, and our business, let us not forget it, is to check there, if we can, the flow of morbid material into the hands of the pathologist. This leads me now to speak of the treatment of osteo-arthritis.

Recognising it essentially as a disease of debility, we employ tonic and nutrient remedies. We seek to put the patient into a healthy environment as regards his dwelling and general hygiene. A dry house, on a dry soil, in a sunny position, is essential. The patient should be free from worry, care, and want. Good food of all kinds, not omitting meat, fats, and fresh vegetables, and some form of alcoholic drink, of which porter is probably the best, warm clothing, warm but airy rooms, and such outdoor exercise as can be taken daily, are advisable. Preparations of iron, iodine, and arsenic are of the highest value, together with cod-liver oil; and nux vomica may often be combined with these. Tincture of iodine has been given with benefit in cases of spondylitis. I shall employ it for this patient in ℿx doses. Quinine and potassium iodide are of much use. Locally, we may employ warm saline baths, anodyne liniments, iodine ointment, or Scott's dressing. Decolourised iodine solution is often useful for the finger-joints and wrists. Courses of baths at various spas are of unquestionable benefit, sulphurous and saline waters proving of especial efficacy. Profound joint changes demand more severe treatment by actual cautery, Pacquelin's cautery, or the thermic hammer. The hot air treatment is sometimes of great benefit. Hot sand in bags may be applied to the larger joints. The linimentum sinapis and the oleate of mercury may be of use in tedious cases. In this malady, above all, you have to remember Trousseau's famous *dictum*, and it was this:—"Chronic diseases require chronic therapeutics." Your treatment to do good must be carried on for months and years, and if it be, you will often succeed in greatly benefiting your patient; not otherwise.

For this man I shall order the syrup of iodide of iron in drachm doses, with ten minims of the tincture of iodine in pimento water thrice daily, also cod-liver oil in half-ounce doses twice daily. The actual cautery is to be applied on each side of the cervical spines. The affected joints are to be treated with iodine ointment. Movements of the head, neck, and back must be carried out daily. He will have the full diet of the hospital and a pint of porter daily. We shall hope for improvement, and I trust I may again bring him before you in a better condition than that in which you have seen him to-day.

Let me add that when he is anæsthetised by nitrous oxide gas for the purpose of applying the actual cautery we shall have the left knee forcibly moved, so as to break up adhesions and restore more free motility to it.

Some Complications following Abdominal Operations.

A Paper read before the Abernethian Society, January 19th, 1899,

By H. WILLIAMSON, M.A., M.B., B.C.Cantab.

WHEN asked by your secretaries to read a paper before this Society, I was much exercised in my mind as to what subject I should select.

Two qualities seemed to be highly desirable. First, that I should have had considerable personal experience of the conditions I proposed to discuss; and second, that it should be some question which afforded a fair field for argument and debate. Beyond this, I cherished the hope that perchance with much searching I might find some topic upon which I was qualified to yield instruction.

The subject I have finally selected is one of the greatest importance to every one here, for, no matter what branch of the profession you may practise, you are almost certain to have in your hands at some time or another cases upon which abdominal operations have been recently performed; and upon the treatment you adopt under these conditions will depend in all cases the comfort, and in not a few the life, of your patient. As far as I have gone in the practice of our profession I have seen no class of case in which it is more essential to recognise the efforts which nature makes towards recovery, and to judiciously aid these efforts, than in cases of severe abdominal operations.

During the eighteen months in which I was a member of the Resident Staff of this Hospital I had under my care nearly 100 cases in which the abdominal cavity was opened. These cases include almost every recognised abdominal operation. Of the course of these cases after operation I have kept notes, and upon the observations I have made on these, and the deductions I have drawn from them, my paper to-night is almost entirely based; but whatever value it may have is due to the teaching of those members of the staff under whom it has been my privilege to work, for it is entirely in the light of that teaching that I have been able to appreciate the significance and importance of the various conditions I shall have to describe.

It is a very Irish way of stating a fact when I tell you one of the most important details with regard to the successful after-treatment has to be attended to before the operation is performed.

It is not my intention to-night to go into modes of preparation of the patient for operation. The method of preparation in vogue at this Hospital, which is (or ought to be) known to every one of you, is admirable in all three essentials of cleansing the patient's skin, emptying the lower intestinal tract, and securing that condition of gastric contents which is beloved of anæsthetists.

But it is just as well to remind you that, supposing the operation to take place at two o'clock in the afternoon, after the early morning breakfast no solid food should be taken. Half a pint of beef-tea may be given about eleven o'clock, and should the operation promise to be one of unusual length or severity, or should the patient be feeble or nervous, it is advisable to administer half an ounce of brandy diluted with water an hour before the patient is put upon the table. I am fully convinced from my own experience of the value of the last proceeding.

On reviewing my cases I find that, excluding retention of urine, three complications have called for active treatment much more frequently than any others. These, arranging them in their chronological order, are:

1. Shock.
2. Vomiting.
3. Gaseous distension of intestines.

Let us now briefly consider each of these conditions.

1. *Shock.*—At the outset it is necessary that we should recognise two forms of shock.

(1) That which, for want of a better term, we call nervous shock.

(2) Shock due to excessive hæmorrhage.

Although in these two forms the general outline of treatment adopted is the same, there are important modifications which render the distinction necessary.

I need not describe to you the symptoms of a patient suffering from shock; the clinical picture is well known to you all. When this picture meets your eye, the first question you have to decide is this: Is there hæmorrhage going on at the present time from the wound, or from the slipping of a ligature or some pedicle inside? or is the condition merely the result of a cause which has ceased to act?

If you answer the first question in the affirmative you must apply the fundamental surgical rule, and remove the cause by securing the bleeding point. This is the only rational treatment, and if the shock be severe or increasing it is little less than criminal to apply to one's soul the soothing unction that "it is probably only a little oozing, and will soon stop." Moreover, in these cases where hæmorrhage is still going on, much of the treatment one ordinarily employs becomes absolutely dangerous. If, on the other hand, you have satisfied yourself that the bleeding has ceased, the treatment of shock resolves itself into the application of common-sense principles. There is, however, an intermediate class of case, in which it is extremely difficult with any certainty to give an answer to this all-important question. One case of this kind is very vividly impressed upon my mind.

A young Italian was operated upon by Mr. Butlin for the radical cure of an inguinal hernia; he was anæmic and very nervous, and although the operation was not a severe one he suffered considerably from shock immediately afterwards. From this, however, he rallied, and when I saw him at midnight his pulse was good, he was in no distress, and his condition appeared in every way satisfactory. At ten o'clock the next morning I was sent for to see him; I found him then cold, sweating, and very pale, the temperature was a little below normal, the pulse was 110, and of poor value. I suspected at once that recurrent hæmorrhage was the cause of his condition. I examined the wound, but found no hæmorrhage from that, and concluded that probably bleeding was occurring either from the pedicle of some omentum which had been removed, or from a torn vein in the mesentery. There was, however, no dulness in the flanks. Whilst I was engaged in elevating the foot of his bed Mr. Berry came into the ward, and I asked him to be good enough to see the case with me. He did so, and whilst I could not pin him down to an actual opinion, he so far agreed with me as to say that he thought I ought to let Mr. Butlin know of the man's condition. A few minutes later the patient began to complain of uneasiness about the region of the bladder, and made an unsuccessful attempt to pass his water. I percussed out the bladder, and found that it was distended; I then passed a catheter and drew off over two pints of urine. His pulse almost immediately commenced to improve, and the symptoms of shock gradually passed off without further treatment of any kind. This case illustrates extremely well the difficulty of diagnosis; the man presented every symptom of secondary hæmorrhage except one—dyspnœa with restlessness,—a symptom to which I attach considerable importance, and of which I shall speak later.

Fortunately, however, in actual practice these cases in which one is in grave doubt are rare, and in deciding what course of action to take one is guided very much by knowledge of what happened at the operation, and the condition left when the abdomen was closed.

The routine treatment of shock is known to you all; plenty of hot blankets and hot water bottles, elevation of the foot of the bed, hot cloths to the head, and if there be no hæmorrhage going on, brandy by the rectum and strychnine subcutaneously, are classical and invaluable remedies. But in addition to these, in the second class of case we are considering (*i. e.* that due to severe bleeding) infusion is perhaps the most valuable method of treatment we have at our disposal. Several forms of infusion have been recommended, and these must be briefly considered.

(*a*) *Auto-infusion.*—By this is meant bandaging the extremities tightly, so that more blood may be available for circulation through the head and trunk. This method has little to commend it. In the first place, considerable exposure of the patient is necessary in order to adjust the bandages, and a patient whose collapse is sufficiently severe to call for this procedure is little in a condition to stand it; and secondly, it is very doubtful whether the result aimed at is attained unless the bandages are bound so tightly as to be extremely painful.

(*b*) The injection of normal saline solution, either into the cellular tissue or into the veins. This method is extremely valuable in desperate cases. But I believe its chief value to lie in those cases in which the collapse occurs on the table, and the patient is under the anæsthetic. The remedy requires a surgical operation—a special apparatus; it is by no means easy always to find a vein, and when the vein has been found it is by no means easy always to get the saline solution to run in. But its value has been demonstrated beyond doubt. Personally, I have performed the operation four times, always in desperate cases, and I regret to state that in no case have I been able to avert the fatal termination.

(*c*) There is the method of transfusion, that is the infusion of blood into the patient from a second person. This possesses few advantages over the method just discussed, and possesses so many obvious disadvantages that it cannot be considered as a method of routine treatment.

(*d*) There is infusion by the rectum. This I believe to be far the most valuable and widely applicable method of all. When much blood has been lost absorption from the rectum occurs with remarkable rapidity, and I have often seen the patient's condition obviously improve as the absorption took place. Lately it has been my invariable custom when any patient leaves the table suffering from shock due to hæmorrhage to order a rectal injection to be given as soon as she is in bed, consisting of half an ounce of brandy and ten ounces of warm water. In some cases of severe bleeding I have given a second similar injection within half an hour without any being returned. Another advantage of this method of treatment is that it tends very much to lessen the thirst, which is one of the most distressing symptoms during the first twenty-four hours. I would, then, gentlemen, urge upon you in the very strongest manner the extreme value of copious rectal injections of warm water in this class of case.

Since the above was written I have seen a very remarkable instance of the absorptive power of the rectum under these circumstances. A woman suffering from placenta prævia was brought into Queen Charlotte's Hospital. By the time I had accomplished delivery she was in an extremely collapsed and almost pulseless condition from hæmorrhage. I treated her by rectal injections, and in the course of an hour she absorbed four and a half pints of saline solution. Her condition rapidly improved, and she made a good recovery.

I have already quoted a case in which what we may term secondary shock occurred; that is to say, shock coming on some hours after operation. This is an unusual occurrence, and is generally due either to secondary hæmorrhage or to septic peritonitis. In addition to the instance I have already quoted I have seen one other such case.

A young man was operated upon for radical cure of hernia; he did very well for a few hours, then he gradually became pale, his pulse became feeble, and he commenced to suffer from dyspnœa with restlessness. These symptoms progressed, and his condition became alarming. The surgeon was sent for; he diagnosed hæmorrhage, opened up the abdomen, and found that hæmorrhage was occurring from the pedicle left by the removal of some omentum.

I will ask you to contrast the two cases for a moment, and to notice the one symptom which was absent in the first case, but present in the second, was dyspnœa. I believe the importance of this symptom to be so great that I would lay it down as a rule that when you have a case of shock, with dyspnœa out of proportion to the severity of the other symptoms, the cause of the shock is probably hæmorrhage.

2. The second complication which commonly requires treatment is vomiting, and here again if we are to intelligently treat the symptom we must endeavour to recognise its cause. The form of vomiting which is met with earliest after operation is that due to the after effects of the anæsthetic. I have not been able to discover that the severity of the vomiting bears any definite relation to the particular anæsthetic used, but I am quite sure that the personal equation of the anæsthetist is a very important element.

There is one detail which I believe to be well worthy of consideration, and which is, I think, a little apt to be overlooked. I mean the way in which the patient is taken back to bed after operation. When she is lifted off the table there should be as little movement as possible, and the swinging motion so often imparted to the stretchers by enthusiastic porters should be carefully avoided.

The vomiting is especially apt to be prolonged in the case of nervous women, and in some of these cases a little judicious moral treatment is often of great value. If the vomiting persist for more than twelve or eighteen hours some other cause must be looked for.

One such cause is the presence of a Keith's drainage-tube. It is not at all an uncommon occurrence for vomiting to persist as long as the tube is left in position. I used to think that this probably depended upon mechanical irritation of some of the plexuses of the sympathetic nervous system by the end of the tube, but in discussing this point with Mr. Cripps he informs me that he has satisfied himself that it is much more often due to some slight mechanical compression of the intestine, producing for the time being a condition akin to strangulation; and in support of this view he was able to quote a case of his own in which small pieces of omentum became strangulated in the perforation holes in the end of a Keith's tube, and produced similar symptoms.

Amongst my series of cases there are three instances of this kind. In each of them the patient was greatly distressed by persistent vomiting; in each case this lasted for seventy-two hours, and although almost every remedy I have ever used was applied, they were absolutely without effect until the tube was removed; then the vomiting ceased of its own accord, and did not recur.

Before considering other forms of vomiting it may be well to review briefly the results of the treatment applied to the forms we have already described.

It is unnecessary to emphasise again the importance of attention to diet before the operation, but I must speak for a minute of the method of feeding after operation, for the administration of food too early is almost invariably followed by vomiting. The rule adopted in cases where collapse did not call for active treatment has been to give nothing at all for six hours after the operation; at the expiration of that period to give by the mouth one drachm of warm water every hour, but in the meantime if the patient complained much of thirst the mouth was sponged out with swabs of cotton wool wrapped round a pair of pressure forceps and dipped in water. If the administration of this drachm of water was not followed by vomiting the quantity was gradually increased, and twelve hours after the operation drachm doses of peptonised milk or beef-tea were substituted for the water: the quantity was then gradually increased until five or six ounces were taken at a time. I often found that on the morning after operation the patient begged for a little tea in place of the milk. I do not know of any theoretical objection, and in the many instances in which I consented I never found a practical one. I do not think it advisable to give solid food, excepting perhaps a little thin bread and butter or something of that kind, until the bowels have been opened, and as a rule the patient has little desire for it. That is the ideal treatment which has been aimed at, but in many cases it could not be carried out.

Treatment by drugs.—The drugs I have used have been hydrocyanic acid, bismuth, tincture of iodine, and oxalate of cerium; from none of these have I obtained any uniform result. I have thought that sometimes one drug has done good and sometimes another, but my confidence in them has passed away, and is numbered amongst the lost illusions of my youth. The same must be said of champagne; I have only used it three or four times, but in none of these cases did I observe any improvement follow its administration.

There is, however, one method of treatment upon which I place considerable reliance, and that is washing out the stomach. I believe the best way to do this is not by passing the stomach-tube, but simply allowing the patient to drink half a pint of tepid water. The results of this treatment have given me the greatest satisfaction. I do not for one moment claim that it proved successful in every case, but it did so in a good proportion of the instances in which I tried it. Sometimes the water was vomited again very shortly after it was taken, and with it considerable quantities of mucus were brought up; in other cases it was not vomited, but seemed to act by diluting the stomach contents, and enabling them to pass the pylorus. I have repeated this procedure two or three times at intervals of an hour. I have never seen any harm result from it.

There are two other causes of vomiting to which I shall have to draw your attention. These are—

(1) Due to gaseous distension of intestines.

(2) Due to septic peritonitis.

But as here vomiting is merely one symptom out of many, we will consider it when we discuss the general condition.

3. *Gaseous distension of the intestine.*—This condition, the "pseudo-ileus" of some older writers, merits our very closest attention; it is a very common condition, and a very distressing one. We can do much for it, and if we fail to recognise it the result may be disastrous.

It depends, then, upon a temporary paralysis of the intestinal muscle, and this I believe is generally brought about in one of two ways; either by the prolonged manipulation of the intestines, or by the injudicious use of morphia. The first cause is often an unavoidable one, the second is seldom so; in the great majority of these cases it is an irrational and injurious practice to inject morphia, though some surgeons make it almost a routine matter. I have given it in a few cases, and have almost invariably regretted doing so. Whatever temporary relief is given by the injection is paid for tenfold in subsequent discomfort. The pain is seldom severe, and when present is not a bad sign, for it often means intestinal peristalsis. I well know the temptation when the patient lies awake, complaining of pain in the back, and begs for something to put her to sleep. But if you yield you are often bringing upon yourself a sea of troubles. I do not for one moment say that morphia should never be used after abdominal operations; there are some cases in which I consider it thoroughly good treatment, but these cases are few and far between, and I cannot enter into a discussion of them to-night.

What, then, are the signs and symptoms of this paralysis of the bowel? Of course they vary in severity, but I will describe them to you as I saw them in a case a few months ago. It was a case of unusual severity, and I believe that I produced this unfortunate train of symptoms myself by injection of six minims of liquor morphinæ.

The patient was a young woman upon whom the operation of Cæsarean section had been performed on account of a contracted pelvis. After the operation she suffered considerable pain, and on that account the morphia was given. Twenty-four hours after the administration of the drug I was called up to see her. She looked very ill; the tongue was dry and furred; the temperature 101°. She lay upon her back with the legs drawn up, and was constantly retching and vomiting; the abdomen was distended, tympanitic, and rigid. I could not detect the slightest movement on respiration. She had passed no flatus since the operation; in fact, in every detail except one she presented the picture of septic peritonitis. But when I came to feel the pulse it was of good volume, and its rate only 105 to the minute. What I learnt from the pulse led me to believe that the symptoms were those of gaseous distension of the intestine rather than those of peritonitis, and the termination of the case proved this to be correct.

Let me draw your attention for a moment to the importance of the pulse in diagnosis. I believe it to be of far greater value than any other sign or symptom. In the instance I have just given you, had the pulse been running in character, and of the rate of 120 to the minute, I should have come to a very different conclusion, particularly if I had reason to believe that its rate was increasing. It is, in my opinion, the one point in diagnosis between this condition and septic peritonitis to which we must pin our faith; every other symptom may be present in either condition. You may have vomiting, distended motionless abdomen, the anxious expression, and the furred tongue; and yet, if the pulse be good and not frequent, you may give a good prognosis. If, on the other hand, the pulse be running and rapid, your prognosis must be of the gravest.

What will happen to these cases if we leave them alone? I do not know, and I most certainly do not intend to try. Mr. Lockwood is of opinion that many of the instances in which patients have died with the symptoms of peritonitis, and in which post mortem no signs of peritonitis could be discovered, belong to this class. And that the condition should prove fatal is easy of belief by any one who has seen the cases.

I said just now that in my opinion this train of symptoms was due to paralysis and distension of the bowel. I base that belief upon the fact that if we once relieve this condition the symptoms disappear; but I am prepared to go further than this, and to state that many of the similar symptoms which occur in septic peritonitis depend simply upon a similar condition of the intestines, which results from this cause; and that even in cases of septic peritonitis, if only you can overcome this by getting the bowels to act, many of the most distressing symptoms disappear. I will give my reasons for this statement later.

It is perfectly obvious that our treatment must be directed to one object—starting up again peristaltic movements, which shall expel their gaseous contents from the intestine. Let us consider by what means we may attain this.

Usually the first means adopted is simply to move the patient. Change of position is often a great help; and sometimes, by moving the patient from her back on to her side, peristalsis is commenced. But at the same time more vigorous measures must be taken. The rectal tube should be passed, for the reflex stimulation of intestine started in this way is often effectual. Strychnine should be given subcutaneously. It is well to start with doses of not less than five minims of the liquor strychninæ; this may be repeated every two hours until the desired result is obtained. Should these measures fail, the next thing to do is to give an enema. A very excellent one is composed of half an ounce of turpentine, half an ounce of castor oil, and ten ounces of thin gruel. The reason for making it up with gruel is that the oil and the turpentine do not mix well with water.

This often requires to be followed by soap and water enemata. But after all these efforts one is sometimes doomed to failure. If, then, you are reasonably sure that there is no mechanical obstruction to the bowel, the proper thing to do is to give purgatives by the mouth. Saline purgatives in frequently repeated doses sometimes answer excellently, but they often have to be aided by a dose of calomel, and in some cases by croton oil.

The above is simply an echo of the teaching of Mr. Lockwood, which he took some pains to drill into me when I was his house surgeon. Since that time I have had many opportunities of applying it, and I have become more and more convinced of its value.

I have often wondered why text-books—even text-books of abdominal surgery—are so singularly silent on this matter. It is a condition which, from the mere discomfort it occasions the patient, even if it were unattended by any danger, would merit a chapter to itself in such works. And one of my chief objects in reading this paper to-night is to draw your attention to it.

What exact relation this condition bears to septic peritonitis I will not attempt to define, nor will I go so far as to say that if left untreated the graver complication may ensue as a direct result. But I have often wondered whether it is not possible that some of the cases of peritonitis from infection by the *Bacillus coli communis* may not arise in this way; in other words, that although the abdominal cavity may be aseptic when it is closed up after the operation, it may subsequently become infected through the functionless, distended, sometimes damaged and bruised wall of the paralysed intestine.

In the first place, there can be no doubt that when in this condition the circulation in the intestinal wall is interfered with; and as a direct result of this the tissue resistance is diminished.

Secondly, the wall is stretched; it is thinner than it should be, and therefore more easily permeable.

Thirdly, there is a stasis of intestinal contents, with consequent decomposition and increase of bacteria.

Now there is no reasonable doubt that under some conditions—little understood at present—the *Bacillus coli communis* does pass through the intestinal wall. It seems to me a logical deduction to suppose that these are the very conditions under which it is most likely to do so.

If there be any truth in these deductions, we have then another and stronger reason for immediate active and energetic treatment; for this is only an attempt to bring the intestines back to their normal condition.

I said just now that I believe that many of the distressing symptoms of peritonitis are due not so much to toxæmia as to the paralysed state of the intestines. It is a very difficult matter to get an action of the bowels in septic peritonitis, but if this be accomplished a marked change occurs in the patient's condition.

I saw a very clear instance of this in the case of a woman who was operated upon in Martha last spring. The patient was over seventy years of age, and the operation was undertaken for the removal of a tumour which, when the abdomen was opened, proved to be a large solid ovarian. The operation was performed on April 20th. On the 30th the abdomen became distended, vomiting commenced, and the pulse-rate rose to 120 beats per minute.

The treatment I have outlined above was employed, the rectal tube passed, five-minim doses of strychnine injected, enemata given, saline purgatives and calomel administered by the mouth. As the result of this treatment the bowels were opened three times. From this time the woman's condition improved, the vomiting ceased, and she was able to retain small quantities of food.

But what I particularly wish to draw your attention to is the pulse: its rate fell to 110 beats per minute, and its volume improved. After this I felt quite certain that the case was not one of peritonitis; but within a few hours the abdomen again became distended, the vomiting returned, and the temperature and pulse-rate rose. The treatment was repeated, but without effect, and within a few hours the woman died.

No post-mortem examination was made, unfortunately, but I think there can be little doubt that the case was one of septic peritonitis. This view is supported by other circumstances. A few hours before this operation the theatre had been used for another case, in which, when the abdomen was opened, a malignant cyst was discovered; this ruptured during manipulation, and a large quantity of foul pus escaped into the abdominal cavity. Within twenty-four hours the woman died. Post mortem a large quantity of fluid was found in the abdomen, which fluid gave cultures of virulent streptococci. It is only reasonable to assume that our antiseptics were deficient in some respect, and that the disease was the result of direct infection.

I admit that one case is not sufficient to base a positive assertion upon, but at the same time it is so suggestive that I cannot refrain from quoting it.

There is another condition which is sometimes difficult to diagnose from simple distension, and that is a localised peritonitis. This, in my experience, is a rare complication of abdominal section, but one of such interest and importance that I hope to be allowed to read a paper on that subject before you at some future time, and for that reason I shall not touch upon it to-night. Lack of time in the preparation has also compelled me to pass over in silence many other interesting complications. I particularly regret that I have not been able to discuss parotitis, for a study of the cases which have occurred in this hospital during the last few years has convinced me that its cause is nearly always to be found in prolonged rectal feeding, and that subsequent alterations in the salivary glands have made them a suitable nidus for bacteria, the bacteria reaching them by their ducts.

In conclusion I will ask your forgiveness for the dogmatic manner in which I have spoken on some points, and for the crude and elementary way in which I have treated the whole question. My apology is that I make no claim of originality in those points upon which I have dogmatised, but have merely applied the results of my own experience to the teaching of others, and that crudeness and incompleteness are inevitable in one who, with only a small experience, ventures to generalise.

Notes on Some Tests for "Albumen" in Urine.

By P. J. CAMMIDGE, Treasurer's Research Student in Pathology.

A LARGE number of tests for proteids occurring pathologically in urine have been proposed, but as the majority of these also give reactions with substances other than proteids, great caution is necessary before it can be stated that a patient from whom a given sample of urine has been obtained is suffering from "albuminuria." This is especially true when only traces of albumen are present and the more delicate tests are employed. As a general rule, with but few exceptions, it may be stated that the more delicate the test the greater the liability to error.

Varieties of proteids.—Clinically the "*native*" *proteids*, serum-albumen and serum-globulin (paraglobulin), are not differentiated, and are classed together as "albumen." In normal urine they can only be detected by very delicate tests after concentration of large quantities of urine.(1) *Albumoses (proteoses) and peptones* are occasional abnormal constituents of urine, the former being much the more common. True peptone (in Kühne's sense) hardly ever occurs. All urines contain more or less *nucleo-proteid*. This is a mucin-like body derived from the cells of the urinary passages, and is referred to clinically as "mucus." It is not chemically a mucus, however, although its physical characters and some of its reactions resemble those of true mucus. It is much increased in inflammatory conditions of the urinary tract, especially in cystitis, and may separate as a gelatinous precipitate on standing. Nucleo-proteids are precipitated by vegetable acids (*e. g.* acetic and citric) and by dilute mineral acids, but are soluble in concentrated mineral acids. They are soluble in dilute alkalies, and the precipitation by acids is largely prevented by considerable amounts of salts in solution. All the tests for proteids in urine which need preliminary acidification of the urine, especially with vegetable acids, are liable to cause precipitation of the nucleo-proteids, which may then be mistaken for traces of "albumen." True *mucus* is said to be present in urine in small quantities.(2) Its reactions with acids are similar to those described for nucleo-proteids.

Collection of urine.—The tests for albumen are best performed on a twenty-four hours' sample, collected in a perfectly clean bottle, which is kept in a cool place and well corked between each addition of urine. If one sample only is obtainable, it should be taken about three hours after a meal, preferably in the evening. The morning urine is least likely to contain albumen.

Tests.—In this paper I only propose to deal with a few of the commoner tests, especially noting the sources of error and the precautions necessary to guard against them in each case.

1. *Heat.—Method.*—The suspected urine is placed in a test-tube, and the upper part of the liquid heated to boiling. If albumen be present a milky turbidity or dense cloud of coagulated proteid may appear in the heated zone.

Notes.—(*a*) *The temperature of coagulation* depends on various conditions, such as the degree of acidity of the urine, the amount of salts and urea present, and within certain limits the quantity and variety of "albumen" present. It varies from 55·6° to 82·2° C.(3)

(*b*) *Phosphates.*—All urines which become cloudy on heating do not contain albumen. Feebly acid, alkaline, or "neutral" urines may give a precipitate of insoluble earthy phosphates, which is like coagulated albumen in appearance, but is soluble in acids.

(*c*) *Carbonates.*—In the urine of vegetarians, and occasionally in other persons, a similar cloud of insoluble carbonates is formed. It disappears on the addition of a strong acid (*e. g.* nitric), with effervescence.

(*d*) *Albumen in alkaline urine.*—The normal acidity of urine is due to the presence of dihydrogen-sodium phosphates (NaH_2PO_4) in excess of the hydrogen disodium and trisodium phosphates (Na_2HPO_4 and Na_3PO_4). In alkaline urines the last two are in excess of the first, and on heating soluble compounds of albumen are formed, so that the precipitation of even considerable amounts of proteid may be prevented. The dihydrogen phosphate, on the other hand, forms an insoluble acid albuminate, which appears as a cloud or precipitate on heating.

(*e*) *Turbid urine—urates.*—The cold urine may be turbid from the presence of urates. They disappear with gentle heat. Turbidity from other causes, not disappearing on heating, may obscure the reaction of traces of albumen. To render the urine clear it should be filtered and the tests applied to the filtrate. Should simple filtration through absorbent paper be insufficient, the urine may be shaken with calcined magnesia or kieselguhr, and then filtered, or a few drops of sodium hydrate may be added, the urine left to stand half an hour or so (to allow the phosphate precipitate formed to separate out and carry with it the cause of the turbidity), and then filtered, acidified with a few drops of acetic or nitric acid, and boiled.

2. *Heat and acetic acid.—Method.*—(1) The usual way of applying the test at this hospital is to boil the upper part of a column of urine contained in a test-tube, and then add a few drops of acetic acid to the hot fluid; any precipitate which remains after the addition of the acid is regarded as albumen. (2) Another, and perhaps a better way is to boil, add one or two drops of acetic acid, boil again, and then add the acid up to ten or fifteen drops.

Notes.—(*a*) *Nucleo-proteids and mucus.*—The chief difficulty in this test arises from the nucleo-proteids and mucus. These bodies, if present in any amount, are readily precipitated by the acetic acid added, especially if the urine is poor in salts. Such a precipitate cannot, without the careful use of several other tests, be distinguished from traces of albumen. If ten or fifteen c.c. of urine be employed, and only one or two drops of acetic acid added, the "mucin bodies" are said not to be precipitated, hence the advantage of the second method described.

(*b*) *Delicacy.*—If the proper amount of acid for the particular urine under examination happens just to be hit upon, the test is very delicate, and very slight traces of albumen may be detected, but should too little or too much be added, considerable amounts of albumen may be overlooked.

(*c*) *Alkaline urine.*—The addition of the acid converts the alkaline reacting phosphates into acid phosphates, so that the albumen is no longer held in solution.

(*d*) *Phosphates.*—The phosphate cloud formed on heating disappears on the addition of acid.

3. *Heat and nitric acid.—Method.*—The upper part of a column of urine is heated to boiling, and nitric acid added drop by drop, shaking between each drop, until the urine is strongly acid in reaction. Albumen is shown by a cloud or turbidity.

Notes.—(*a*) *Amount of acid.*—Too much acid must not be added, never more than one tenth of the volume of the urine. Nor must the nitric acid be added before heating, or heat applied after the addition of the acid, for coagulated albumens are soluble in hot nitric acid.

(*b*) *Nucleo-proteids and mucus.*—These bodies are not so readily precipitated by nitric as by acetic acid, hence the liability to error from this source is not so great.

(*c*) *Uric acid* and its salts in "concentrated" urines form, on the addition of nitric acid, a powdery precipitate. There is no precipitate, however, from this cause if the urine is previously diluted with an equal volume of water.

(*d*) *Resin acids.*—After the internal or external use of turpentine, benzoin, balsam of copaiba, Peru, tolu, cubebs, storax, santal, resin acids occur in the urine. They are precipitated by nitric acid, but if the urine be cooled and alcohol (2 vols. of methylated spirit) added they are re-dissolved, while any albumen remains as an insoluble precipitate.

(*e*) *Biliverdin.*—Strongly bilious urines give a precipitate of bile salts, which, after cooling, may be distinguished from albumen by their solubility in alcohol.

(*f*) *Phosphates.*—The precipitate due to phosphates is soluble in nitric as in acetic acid.

(*g*) *Albumoses* give no precipitate while the solution is hot, but on cooling they appear as a haze, which disappears on reheating.

(*h*) *Peptones and alkaloids* are not precipitated.

4. *Heller's cold nitric acid test.—Method.*—A small quantity of concentrated brown nitric acid is placed at the bottom of a test-tube, and a layer of the suspected urine carefully run on to it. If albumen is present, a white ring appears *at* the surface of contact. When the urine only contains traces of albumen a faint haze, which may take half an hour to form, appears at the junction of the two fluids.

Notes.—(*a*) *Delicacy.*—This is not a very delicate test, and does not react with such small quantities of albumen as the heat and acetic or nitric acid tests. In order that small quantities may not be missed, it is necessary that the urine be carefully added to the acid, and not the acid to the urine, for the acid albumen arising from the reaction is re-dissolved unless it is formed in a strongly acid medium.

(*b*) *Nucleo-proteids and mucus.*—Even when the reaction at the surface of contact of the two fluids fails, a feeble ring may frequently be seen, 0·5 to 1 centimetre above the junction. This arises from nucleo-proteids and mucus. On diluting the urine with two or three volumes of water, and repeating the test, the haziness is not diminished, and may indeed be increased. On standing the precipitate slowly falls to the surface of contact, and may then be mistaken for the ring produced on standing by traces of albumen.

(*c*) *Uric acid and urates.*—In "concentrated" urines a crystalline precipitate of urea nitrate is apt to slowly form. It is obviously crystalline, and on repeating the test with diluted urine does not appear. Urates may give rise to a diffuse opacity in the urine which spreads downwards, and disappears on diluting or gently heating. It is more diffuse than the precipitate due to albumen, and is often of a brown colour.

(*d*) *Resin acids.*—After turpentine, copaiba, &c., a uniform turbidity may appear in the urine from the precipitation of resin acids. The precipitate is soluble in alcohol, and the urine has frequently a peculiar smell, which has been compared to the scent of violets. One of the Sisters of this hospital recently pointed out to me that after "polishing day" in the wards, when beeswax and turpentine has been freely used for the floors, the patient's urine may have this smell.

(*e*) *Albumoses* give a precipitate similar in appearance to that produced by albumen, but it disappears on heating.

(*f*) *Peptones and alkaloids* are not precipitated.

(*g*) *A play of colours* is often seen at the surface of contact. It does not indicate albumen, but arises from uro-rosein and other pigments in the urine.

5. *Roberts's brine test.—Method.*—A saturated solution of common salt is prepared and filtered, 5 per cent. of hydrochloric acid is then added to the clear filtrate. A few cubic centimetres of this reagent are placed in a test-tube, and an equal volume of urine floated on the top. Albumen gives a white ring at the surface of contact in the cold.

Notes.—(*a*) "*Mucus.*"—This test was introduced with the object of avoiding the precipitation of "mucus," it being supposed that in the presence of a large excess of salt the "mucus" would remain in solution.

(*b*) *Delicacy.*—This is a fairly delicate test, but does not react with such small traces of albumen as tests 2 and 3.

6. *Acetic acid and salt test.—Method.*—To 10 or 15 c.c. of urine, in a test-tube, about one sixth of its volume of a clear saturated solution of common salt is added, and the two mixed by shaking. The mixture is then acidified with one or two drops of acetic acid, and the upper part of the fluid boiled. In the presence of albumen a cloud of coagulated proteid appears in the hot part of the fluid, which, by boiling, is collected into large flocculi.

Notes.—(*a*) *Delicacy and nucleo-proteid reactions.*—This test is as sensitive as the ordinary heat and acetic acid test, but when performed in the manner described above does not readily cause precipitation of mucus and nucleo-proteids. It has the advantage that the reagents necessary are easily obtained, viz. salt and acetic acid (vinegar, which contains about 6 per cent. of acetic acid, may be used), and the boiling performed in a metal spoon over a candle. It is especially useful where only traces of albumen are to be demon-

strated. In the presence of much albumen a precipitate appears at once in the cold, but is increased by heating.

(*b*) *Sugar and urea.*—In testing for sugar and estimating urea in an albuminous urine the albumen must first be removed. This is readily done by boiling the urine with saturated salt solution and acetic acid as above, then filtering off the flocculent precipitate formed, and using the clear filtrate, due allowance for the necessary dilution being made in the urea estimation.

(*c*) *Albumoses* are precipitated, but dissolve on heating, to reappear on cooling. In a mixture of albumoses and albumen, the former may be shown by filtering the boiling fluid and examining the filtrate. This, if albumoses are present, becomes cloudy on cooling, but clears again on heating.

(*d*) *Resin acids* are precipitated, but on cooling are soluble in alcohol.

(*e*) *Uric acid* in "concentrated" urines may be slowly precipitated.

7. *Potassium ferrocyanide and acetic acid test.—Methods.*—(i) acetic acid (10 to 15 drops) is placed in a test-tube, and a 5 per cent. solution of potassium ferrocyanide (30 to 60 drops) added and well mixed with the acid; the suspected urine is then run in; (ii) 10 or 15 c.c. of urine are mixed with 5 to 6 c.c. of a 5 per cent. solution of potassium ferrocyanide, and then 5 to 10 drops of acetic acid added; (iii) 5 to 10 drops of acetic acid are mixed with 10 to 15 c.c. of a saturated solution of potassium ferrocyanide, and the urine carefully floated on to the top of the mixture. In methods (i) and (ii) a uniform cloudiness shows the presence of albumen, while in method (iii) a white ring forms at the surface of contact.

Notes.—(*a*) *Delicacy and reactions with nucleo-proteids.*—This test is very sensitive, and, when performed by the above methods, avoids more successfully than most other tests the reaction with mucus and nucleo-proteids. I prefer the contact method (iii), as a slight uniform turbidity, such as is given with traces of albumen by methods (i) and (ii), is difficult to detect, while the ring in (iii) is obvious even when extremely faint.

(*b*) *Albumoses* are precipitated, but disappear on heating. It is to be noted, however, that the potassium ferrocyanide solution itself, even when dilute, is decomposed by heat, giving a white precipitate, which on standing turns blue.

(*c*) *Phosphates, urates, alkaloids, and peptones* are not precipitated.

(*d*) *Resin acids* give a precipitate, which is soluble in alcohol.

8. *Salicyl-sulphonic acid.—Method.*—A few drops of a saturated solution of salicyl-sulphonic acid are added to the urine. As each drop falls it is surrounded by a cloud if albumen is present. On shaking the urine, a uniform white cloudiness is produced.

Notes.—(*a*) *Delicacy.*—With a fair amount of albumen (1 . 20,000) the precipitate is formed immediately, but with minute traces the turbidity may not become evident for two or three minutes. It is claimed that this test is intermediate in delicacy between the heat and acetic acid and Heller's test, but on standing its delicacy is such that 1 part of albumen in 100,000 is shown.(4)

(*b*) *Mucus and nucleo-proteids.*—MacWilliams, who introduced the reagent to the notice of the profession in Britain in 1891, claimed that it did not give a precipitate with any substance in normal urine.(5 I have lately had reason to suspect that the fain thaze obtained when salicyl-sulphonic acid is added to some apparently normal urine is due rather to nucleo-proteids than to albumen.

(*c*) *Albumoses and peptones* are precipitated (the latter only when the urine is saturated with ammonium sulphate). The precipitate disappears on heating, to reappear on cooling. The precipitate due to "native" albumens does not disappear with heat, but becomes flocculent.

(*d*) *Phosphates, urates, uric acid, bile, and drugs* (*e.g.* potassium iodide, alkaloids, &c.) are not precipitated.

(*e*) *Alkaline urines.*—Enough of the reagent must be added to give the urine a distinctly acid reaction, for the albumen precipitate is soluble in dilute alkalies.

ROUTINE EXAMINATION FOR ALBUMEN.

1. *Salicyl-sulphonic acid* is a good general test. It is simple, requires no special skill, and immediately shows the presence of an appreciable amount of albumen, while on standing very minute traces are demonstrated. The only source of error is the occasional cloudiness in normal urine from nucleo-proteids.

2. The *potassium ferrocyanide and acetic acid* test, used in the manner described, is a useful second test, and the difficulty with mucus and nucleo-proteids is largely avoided.

3. *Heller's cold nitric acid test* is also a useful confirmatory test when carefully performed; for although not very sensitive, it is fairly so, and the nucleo-proteid ring, one centimetre or so above the junction, is a useful indication.

The main difficulties arise in deciding on the presence or absence of traces of albumen, and then not one, but several tests must be employed and the results compared. Still in many cases it is extremely difficult even then to give a decided opinion and the following quotation from a letter in the *Lancet* of 1882 is as true now as when it was written:—"None of the tests for albumen in urine are quite satisfactory, and we still need a test which shall be cleanly, portable, cheap, and certain."

REFERENCES.

1. Schäfer, *Text-book of Physiology*, vol. i. p. 604.
2. Malfatti, *Wien. klin. Wochenschr.*, 1891, S. 433. Mörner, *Skandin. Arch. f. Physiol.*, 1895, S. 437.
3. Brunton and Power, *St. Bart. Hosp. Rep.*, 13, p. 283.
4. MacWilliams, *Brit. Med. Journ.*, April 18th, 1891.
5. *Ibid.*

Problems in Diagnosis.

THE diagnosis of the following case, as confirmed by post-mortem examination, we reserve until the March number of the JOURNAL. Meantime we invite our readers' suggested diagnosis on the points made out before death. Commentaries on the case should reach the Editor before March 1st.

Thomas R—, æt. 45, formerly ship's steward, was admitted to hospital on account of an attack of hæmatemesis on September 12th, 1896.

The attack had been preceded by one the day previously; on each occasion patient vomited about a pint of blood with clots. The day before the first attack patient noticed that his stools were black,—a thing he had never noticed before. Beyond the vomiting of blood he considered himself to be in very good health.

Patient gave the following history:—Lived at sea for sixteen years, but in England the past six years. Always enjoyed good health, and was considered a very strong man. Accustomed to take fair quantities of alcohol, chiefly whisky. No history of syphilis or malaria: had never had jaundice nor any swelling of legs. Only remembered one attack of epistaxis twelve months previously.

Condition on admission:—Blanched from loss of blood, but said colour was usually good. Pulse = 120, soft. A systolic heart murmur plainly heard, better at base than at apex. Temperature normal; constipated; no œdema; urine natural. Some epigastric tenderness, but no tumour felt in abdomen. Liver:—Nothing abnormal made out, nor any evidence of altered size. Spleen not palpable. Some large superficial veins over right pectoral muscles were said by patient to have been present since a sprained shoulder twenty years previously. Abdomen fat, but no signs of ascites. A few hæmorrhoids, which, however, never bled.

Discharged on September 26th without having developed fresh symptoms. Had regained natural colour, and seemed in excellent health.

Patient was seen for second time some nine months later, when he was noticed to be fatter, but complained of no ill-health, nor had any repetition of the hæmatemesis occurred.

He was seen again about February, 1898; he had become very stout, and had drunk malt liquors freely, as an exchange for the whisky, which he had been told was injurious to him when he was in hospital. There were no physical signs of disease to be made out at this time.

On June 22nd, 1898, patient became rather suddenly ill with nausea, tightness round chest and belly, and constipation. The following day he commenced to vomit frequently, in small quantities, and without any blood. The bowels were obstinately constipated, in spite of aperients and enemata given by the doctor; the abdominal pain became much worse. On the third day the vomiting continued, and about half a pint of blood appeared upon one occasion. The bowels were still obstructed, and the abdominal pain persisted. He was brought to the hospital in the evening, and was given a hypodermic injection of morphia, it being probable, from examination, that he was still losing blood internally. This suspicion was verified about twenty minutes after admission by the sudden vomiting of a large quantity of blood; the man died immediately afterwards.

Notes.

WE are sure that the letter which we publish in another column from Mr. Butlin, Mr. Bowlby, and Dr. Drysdale, relating to a testimonial to the late Professor Kanthack, will meet with a ready response from very many Bart.'s men. The *Cambridge Review* for January 19th contained a very sympathetic *in memoriam* notice by Dr. W. H. Gaskell, from which we quote a few paragraphs.

* * *

"IT is difficult to over-estimate the magnitude of the loss, which not only the University of Cambridge but English Pathology has sustained by the loss of Professor Kanthack.

"We who knew him well, and had seen what he had done here and at St. Bartholomew's Hospital, felt that he had a brilliant career before him, and that he would soon remove the reproach that this University had lagged behind the great German Universities in the race of pathological inquiry, and we looked forward to the time when Cambridge, never lacking able and enthusiastic students, would be proud of a school of pathology second to none. Kanthack had the enthusiasm, knowledge, and dogged perseverance needful to ensure success, and even to within a few hours of his death he contrived to think and work for the school he had already created in his mind.

"Alas for our hopes! by that fell disease, the discovery of the causation of which is the dream of the pathologist, that disease which he himself had investigated with some success, Kanthack has been taken from us at the early age of thirty-five, in the full vigour of his powers, and at the threshold of his life's work."

* * *

"NOT since Balfour died has Cambridge science suffered the loss of a professor so young and full of promise; the sense of calamity and personal sorrow for Kanthack's death recalls vividly the earlier loss I so well remember. Like Balfour, he would, if he had lived, have founded a great school; like Balfour, he leaves a void in the University it will be hard to fill, and among his friends a feeling of personal loss which will remain as long as life lasts."

* * *

MR. T. STRANGEWAYS PIGG, who was appointed to temporarily undertake the lectures in Pathology at Cambridge, has had the misfortune to contract enteric fever. He is now convalescent. At very short notice DR. J. H. Drysdale was called upon to give the course of lectures. The electors to the Chair of Pathology met on February 11th and elected Dr. G. Sims Woodhead to the vacant professorship.

* * *

DR. BATTEN has been appointed Pathologist to the National Hospital for the Paralysed and Epileptic, Queen Square.

* * *

MR. T. J. HORDER has been admitted a Member of the Royal College of Physicians.

* * *

MR. H. MUNDY and Mr. L. B. Rawling have been elected Assistant Demonstrators of Anatomy.

* * *

IN consequence of these appointments, Mr. Cholmeley becomes senior, and Mr. A. E. Carsberg junior house surgeon to Mr. Willett, while Mr. Rowe and Mr. Pollard become senior and junior house surgeons respectively to Mr. Butlin.

* * *

WE are requested to state that Mr. H. J. Paterson has resigned his position on the staff of the Hospital of St. Francis.

* * *

MR. F. H. MATURIN has taken the degrees of M.B. and B.C. at the University of Cambridge.

* * *

DR. W. J. COLLINS, ex-Chairman of the London County Council, has been appointed by the President of the Board of Agriculture to represent the Council on a Departmental Committee to inquire into the Diseases of Animals Act.

* * *

THE Parkes Memorial Medal in Hygiene at Netley was awarded to Mr. A. L. Scott, who passed out third with 4673 marks.

* * *

WE welcome the advent of yet one more club in our midst, to wit, the Chess Club. Though late in coming it should promise to be well supported, for there must be a number of Bart.'s men who indulge in the royal game, and who would be glad to meet in friendly contest. The Hon. Sec., Mr. P. Wood, will be pleased to hear of any such. We wish the club every success.

* * *

ANOTHER addition has been made to the list of our contemporaries by the publication of the *Broad Way*, or Westminster Hospital Gazette. The name is a suggestive one for a paper of such frivolous tendencies as this appears to be. Nevertheless we congratulate the editors on the enterprise they display.

Amalgamated Clubs.

RUGBY UNION FOOTBALL CLUB.

ST. BART.'S *v.* EAST SHEEN.

Played on Wednesday, November 2nd, resulting in a narrow defeat by a try to *nil*. The game was played in wretched weather, a high wind and rain discounting any accurate play. Losing the toss, we had to play with all the conditions against us, but managed to prevent our opponents from scoring.

In the second half we did most of the pressing, and Wells dribbled

over, but the wind carried the ball beyond the dead-ball line. At the very last moment of the game East Sheen scored a try, and snatched a somewhat lucky victory.

ST. BART.'S *v.* R.M.A.

Played at Woolwich on November 9th. We were defeated by 8 points to 3. There was very little to choose between the teams for some time after each side had pressed. One of our opponents' three-quarters gained a try between the posts, and this was converted. Soon after this we scored a try through the agency of Plews after a good run by James, the kick failing. After half-time our forwards fell off, and the Academy scored a penalty goal.

ST. BART.'S *v.* OLD MERCHANT TAYLORS.

Played on December 17th. We were unfortunate in having a weak team owing to the approach of vacation. We also had to play one short owing to a misunderstanding, and met with a severe defeat by 3 goals and 3 tries to 1 try. For the first quarter of an hour our seven forwards played remarkably well, quite holding our opponents, and once we nearly scored. Our opponents, warming to the game, then began to press, and, playing a strong attacking game, obtained three goals by half-time. In the second half they scored three times more. Our try was scored by James after a really brilliant run from our "25." On one or two other occasions we showed up well, a badly directed pass to Dix preventing a certain try. Altogether we were unlucky to be beaten by so wide a margin.

ST. BART.'S *v.* KENSINGTON.

Played at Wood Lane on January 14th. Wells kicked off for Bart.'s. Some good play was seen, the Hospital having rather the best of matters. Carroll, by a very lucky run, scored close to the posts; O'Neill failed to convert. Then Kensington scored, but failed to convert. Play of a very even character then took place, and half-time arrived without further score.

Soon after restarting Scowcroft scored wide for Kensington, but the try was not converted; and before long Dix put us on equal terms by obtaining a try wide out, O'Neill again failing with the place kick. About five minutes from the finish Scott unfortunately injured his leg, and Kensington scored twice in succession by Scowcroft, neither of the tries being converted. Final scores:—Bart.'s, 2 tries; Kensington, 4 tries.

Although we were beaten by two tries, the men showed good form. Had the team been at full strength the result would probably have been different. We missed Mayo and James from the three-quarter line sadly. O'Neill, Tosswill, Gillies, and Ash played well, Gillies putting in some fine pieces of work. Carroll, who was seen for the first time in the three-quarter line, did very well, his dodging being very good. Team:

A. B. Slatis (back); J. B. Gillies, F. R. Carroll, C. Dix, E. W. Price (three-quarter backs); B. N. Ash, W. H. Scott (half-backs); A. J. W. Wells (captain), C. H. D. Robbs, H. C. Adams, L. R. Tosswill, A. O'Neill, H. T. Wilson, J. M. Plews, R. Im. Thurn (forwards).

ASSOCIATION FOOTBALL CLUB.

So far the Hospital has had a very successful season, only losing two matches out of thirteen, all the remainder being won, and scoring fifty-four goals against fourteen. For the Hospital Ward has played a consistently good game, and the inside forwards have much improved in dash and accurate shooting. The team have been lucky in securing the services of Fowler at back to replace Whitaker, last year's captain. Butcher, in goal, is as good as ever. In the draw for the Hospital Cup we have been drawn against Middlesex, and if the team play up to their usual form we ought to have no difficulty in qualifying for the semi-final round.

DRAW FOR INTER-HOSPITAL CUP.

First Round.

A. University *v.* London.

Second Round.

B. Middlesex *v.* St. Bart.'s.
C. St. Mary's *v.* St. George's.
D. Winner of A. *v.* St. Thomas's.
E. Charing Cross *v.* Guy's.

Semi-final.

C. *v.* D.
E. *v.* B.

Final.

C. or D. *v.* E. or B.

ST. BART.'S *v.* WEYBRIDGE.

In this match, played at Weybridge on November 26th, Bart.'s won very easily by 6 goals to *nil*. Weybridge were only able to put their reserve team in the field against us, as their First XI were engaged in the Amateur Cup *v.* Old Malvernians. Goals were obtained by Willett (2), O'Brien (2), Ward (1), Marrett (1). Team:

H. H. Butcher (goal); T. H. Fowler, L. Orton (backs); E. H. Scholefield, A. H. Bostock, T. Bates (halves); H. N. Marrett, J. A. Willett, C. O'Brien, V. G. Ward, G. H. Orton (forwards).

ST. BART.'S *v.* HASTINGS AND ST. LEONARDS.

This match took place on November 30th on the Central Ground at Hastings before a very large attendance, the game ending in a win for the Hospital by 2 goals to 1. Bart.'s were without the services of Willett, but the vacancy was very ably filled by Whitaker at half.

A short time after the commencement of the game, from a *mêlée* in front of goal O'Brien headed the ball through, thus registering our first point. Nothing further, however, was scored before half-time.

On restarting the game, from a run by our left wing Lister put in a good shot, which the Hastings custodian failed to clear properly, and Ward and O'Brien, rushing up, charged the ball into the net. Shortly after the home team were awarded a penalty for a foul within the twelve yards' line, and were fortunate enough to score, Butcher having hard lines in not saving. For the Hospital, Orton and Fowler played a very good game at back, and Whitaker was excellent at half. B. Middleditch played well for Hastings. Team:

H. H. Butcher (goal); T. H. Fowler, L. Orton (backs); L. E. Whitaker, A. H. Bostock, T. Bates (halves); H. N. Marrett, V. G. Ward, H. E. Thomas, C. O'Brien, F. S. Lister (forwards).

Our match at Hastings is always looked forward to as quite one of our best matches in the season, it being invariably a keenly contested game; and the match this year was by no means an exception to the rule. It is highly satisfactory to be able to say that out of the six successive matches that have been played against Hastings and St. Leonards the Hospital team have not been beaten once.

After the match the Bart.'s team were very hospitably entertained at a high tea and an excellent smoking concert, arranged by Old Bart.'s men now in practice in Hastings and St. Leonards. A report of this will be found in our December number.

ST. BART.'S *v.* EASTBOURNE.

This match, which should have been played at Eastbourne on Wednesday, December 7th, was unfortunately scratched owing to the ground being unfit.

ST. BART.'S *v.* WEST KENT.

This match, played at Winchmore Hill on Saturday, December 10th, resulted in an easy victory for the Hospital by 8 goals to 1. Our opponents, winning the toss, selected to play from the Pavilion end. O'Brien started the game for the Hospital, and after some good passing among the inside forwards was able to score our first point. Shortly after, Willett, receiving the ball on the half-volley from a pass by Ward, beat the opposing custodian with an excellent shot; and a few minutes later, from a *mêlée* in front of goal, Orton put the ball into the net, thus securing our third goal.

After the interval Bart.'s had the game all their own way, and adding five more goals to their total, won a very one-sided game by 8 goals to 1. Goals for the Hospital were obtained by O'Brien (2), Willett (2), Ward (2), Orton (1), Marrett (1). Team:

F. N. White (goal); T. H. Fowler, C. H. Turner (backs); G. W. Miller, T. Bates, C. H. Fernie (halves); H. N. Marrett, J. A. Willett, C. O'Brien, V. G. Ward, G. H. Orton (forwards).

ST. BART.'S *v.* CROUCH END VAMPIRES.

In this match, played at Wood Green on Saturday, December 17th, our opponents were obliged to put only a weak team in the field against the Hospital owing to their First XI being engaged in the Cup tie. From start to finish Bart.'s had the game completely in their hands, and eventually won the game by 8 goals to *nil*, Butcher, in goal, scarcely touching the ball once. Ward (4), Willett (2), O'Brien (2), scored the goals for the Hospital. Team:

H. H. Butcher (goal); T. H. Fowler, C. H. Turner (backs); G. W. Miller, A. H. Bostock, C. H. Fernie (halves); H. N. Marrett, J. A. Willett, C. O'Brien, V. G. Ward, G. H. Orton (forwards).

ST. BART.'S *v.* CROUCH END VAMPIRES.

Played at Wood Green on January 21st in most unpropitious weather, the ground being inches deep in mud, and a heavy wind blowing. The Vampires had their full cup team out with one exception, while Bart.'s had three reserves in their back division,

Playing with the wind behind them the Hospital team had the best of the first half, but only managed to score once through Ward, while the Vampires also scored once. In the second half against the wind the Hospital were naturally on the defensive most of the time, but the forwards playing very well together made many attacks on the Vampires' goal, and just before the finish were rewarded, our second goal coming from Marrett from a hard low shot. No further scoring took place, and the Hospital won a meritorious victory by 2 goals to 1, this being their twelfth successive victory. The forwards all played excellently, and of the defence Thomas, Miller, and Turner were the best, while Butcher had no chance with the goal against us, and saved many other shots in his usual safe style. Team:

H. H. Butcher, T. H. Fowler, C. H. Turner, T. Bates, H. E. Thomas, G. W. Miller, H. N. Marrett, J. A. Willett, C. O'Brien, V. G. Ward and F. S. Lister.

INTER-HOSPITAL CUP.—SECOND ROUND.

ST. BART.'S HOSPITAL *v.* MIDDLESEX HOSPITAL.

Played Wednesday, February 1st. In this match, played at Winchmore Hill, Bart.'s won a very one-sided game by 5 goals to *nil*. The Hospital were not quite at their full strength, Thomas and Orton being absentees from the team, but their places were very ably filled by Masterman and Turner respectively. Willett losing the toss O'Brien started the game from the Pavilion end, and the Hospital forwards soon getting together, Ward and Lister broke away, transferring to O'Brien, who scored our first point with a good shot. A few minutes later Ward and Willett added two more goals to our score. At the interval Bart.'s were 3 goals, Middlesex Hospital *nil*. On restarting Bart.'s had the game all their own way, the efforts of the opposing forwards being completely frustrated by the combination of Fowler and Turner at back, Butcher in goal scarcely being called upon to defend.

Several good shots were saved by the opposing custodian from the inside forwards, until O'Brien was successful in adding two further points to our score in quick succession, the game ending as stated above.

H. H. Butcher (goal); T. H. Fowler, C. H. Turner (backs); A. H. Bostock, W. H. Masterman, T. Bates, H. N. Marrett, J. A. Willett, C. O'Brien, V. G. Ward, F. S. Lister (halves).

ST. BART.'S *v.* PEMBERTON.

Played Saturday, February 4th, at Wadham Lodge, Walthamstow, the ground being in a very unfavourable condition for accurate kicking and passing, owing to a severe thaw setting in after the recent frost. Willett lost the toss, and our opponents playing with the wind slightly in their favour soon tested Butcher with a hard shot, which was very cleverly got rid of. Shortly after Pemberton's left wing broke away and opened our opponents' score with a good side shot. On restarting the Hospital forwards after a combined run were rewarded with a goal from O'Brien. The remaining portion of this half of the game was confined to the Pemberton goal. The opposing left wing, in whom our adversaries placed most reliance for increasing their score, being completely nonplussed by the indefatigable tackling of Miller and Fowler. From a *mêlée* in front of goal Ward added our second point. A few minutes later Pemberton again scored, Butcher stopping a difficult shot, but being unable to clear in time was rushed through the goal. O'Brien retaliated for Bart.'s, adding the third goal to our score. At the interval Bart.'s 3, Pemberton 2. Before time was called, however, Pemberton scored again, the game ending in a draw.

H. H. Butcher (goal); T. H. Fowler, C. H. Turner (backs); G. W. Miller, T. Bates, N. E. Waterfield (halves); H. N. Marrett, J. A. Willett, C. O'Brien, V. G. Ward, R. Walker (forwards).

JUNIOR INTER-HOSPITAL ASSOCIATION CUP TIES.

Result of Draw.

A. St. Mary's *v.* St. Thomas's.
B. Middlesex *v.* London.

Byes—Guy's and St. Bart.'s.

To be played on or before February 18th on the ground of the first-mentioned.

C. St. Bart.'s *v.* winner of B.
D. Winner of A *v.* Guy's.

To be played on or before February 22nd on the ground of the first-mentioned.

Final.

Winner of C. *v.* winner of D.

To be played on or before March 8th on a neutral ground.

HOSPITAL GOLF HANDICAP.

First Round.

Dr Calvert beat C. G. Watson.

Second Round.

Dr. Calvert	beat	Dr. Drysdale.
H. J. Waring	,,	E. Willett.
R. C. Bailey	,,	R. Margetts.
E. J. Buttar	,,	R. C. Wilmot.
C. Murdoch	,,	A. A. Bowlby.
A. N. Weir	,,	J. Valerie.
Dr. Shore	,,	E. Hunt.
W. V. Wood	,,	R. Bigg.
F. W. Robertson	,,	E. Parbury.
H. Whitwell	,,	L. Bigg.
C. A. Anderson	,,	S. H. Gibson.
J. B. Gillies	,,	W. Almont.
F. I. Martin	,,	Dr. Andrewes.
P. Furnivall	,,	W. D. Harmer.
Howard Marsh	,,	L. Amsden.
H. W. Lance	,,	Dr. Morley Fletcher.

Third Round.

Dr. Calvert	*v.*	H. J. Waring (scratched).
E. J. Buttar	beat	R. C. Bailey.
A. N. Weir	,,	C. Murdoch.
Dr. Shore	,,	W. V. Wood.
H. Whitwell	,,	F. W. Robertson.
J. B. Gillies	,,	C. A. Anderson.
P. Furnivall	,,	E. L. Martin.
Howard Marsh	,,	H. W. Lance.

Fourth Round.

E. J. Buttar	beat	Dr. Calvert.
A. N. Weir	,,	Dr. Shore.
H. Whitwell	,,	J. B. Gillies.
P. Furnivall	,,	Howard Marsh.

Semi-Final.

A. N. Weir	to play	E. J. Buttar.
H. Whitwell	,,	P. Furnivall.

CHESS CLUB.

The Officers of the above club were elected at a representative meeting held for the purpose on February 6th. They are as follows:

President.—Mr. D'Arcy Power.

Vice-Presidents. Mr. H. W. Carson, Mr. T. J. Horder.

Hon. Sec.—Mr. Percival Wood.

Committee.—Messrs. Jameson, Letchwood, Mayo, White, Meaden, and Hertzeim.

Mr. Carson has kindly consented to act as referee to the club. The immediate object of the formation of the club has been to enable Bart.'s to join the Inter-Hospital Chess Club, recently started, in time to participate in the Annual Tournament this winter. Any members of the Amalgamated Clubs, therefore, who are interested in the game are invited to communicate with the Secretary as early as possible, so that a good team may represent Bart.'s at the Inter-Hospital encounter. The date of this will probably be fixed for the first week of March. Further notices will be published of arrangements connected with our own club as soon as these are fixed.

Abernethian Society.

ON Thursday, January 19th, a meeting of the Society was held, when Mr. Thursfield, president, occupied the chair. Mr. Williamson read a paper on "Some Complications following Abdominal Operations," which provoked a lengthy discussion. A full report will be found on page 69 of the JOURNAL.

On Thursday, January 26th, a "Clinical Evening" was held; Mr. Stawell, Vice-president, in the chair. Mr. J. L. Maxwell showed two microscopic specimens, one from the lung of a patient admitted to the Dulwich Infirmary for pneumonia, and dying about a month later with uræmia; the other from tumour of the breast.

Mr. Granville read notes of a case of death under anæsthesia.

The patient was a boy æt. 17. The heart before the administration appeared normal, and was found at the autopsy to be quite healthy. Gas and oxygen were given at first for twenty minutes; the patient was then allowed to come round, chloroform was then substituted, anæsthesia being induced in two minutes. This was maintained for five minutes, when it was found that symptoms of heart failure were presenting themselves. Strychnine and ether were injected, and artificial respiration was resorted to for two hours. In spite of everything that was done, including the injection of the above drugs also into the heart and electricity to the same organ, the patient succumbed.

An interesting case of osteo-arthritis, in which there was ankylosis of the spine, was shown by Mr. Bremridge. The patient was an ex-policeman, æt. 27. Other articulations were also involved in the disease.

Mr. Bremridge also showed a patient who had been suffering from appendicitis, and in whom glycosuria had commenced during his stay in the hospital. Mr. Cammidge made a communication respecting the examination of urine for blood. A specimen of carcinoma of the œsophagus occurring with phthisis was shown by Mr. Forbes.

On Thursday, February 2nd, a meeting was held, Mr. Douglas, vice-president, occupying the chair. Mr. F. C. Wallis read a paper on "The Treatment of Certain Simple Fractures by Operation." The lecturer referred to fracture of the patella, olecranon process of the ulna, Pott's fracture, and some fractures of the tibia and fibula. He urged that, provided strict asepsis was secured, there was no more danger in wiring fractures, such as the above, than in allowing them to remain simple fractures, and that the results were better and much time saved to the patient. He did not advocate wiring in all cases, *e.g.* in fracture of the olecranon with little separation. A patient was shown in whom a fracture of the tibia and fibula had been successfully treated by wiring.

On Thursday, February 9th, a meeting was held in the Anatomical Theatre, when Mr. Horder, president, occupied the chair.

Mr. Litler-Jones read a paper on "Some Notes on the Plague." Several lantern slides of photographs taken by the author were thrown upon the screen in illustration of an exceedingly interesting account of his practical work whilst on "plague duty."

Mr. Jameson, who had been a colleague of the lecturer's in India, spoke upon several of the points raised by Mr. Jones. Specimens of various organs infected by the plague bacillus were shown, those exhibiting the characteristic hæmorrhages being especially well preserved.

Memorial to the late Dr. Kanthack.

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

DEAR SIR,—The premature death of Dr. Kanthack has been so much felt by his numerous friends, that we have received letters from many quarters suggesting the propriety of raising a fund to commemorate his work. It is probably not generally known that, largely on account of his generous expenditure of money in his various researches, he had not been able during the few years in which he was in receipt of an adequate income to provide sufficiently for his widow.

It is therefore proposed to raise a fund, the interest of which shall be devoted to the use of Mrs. Kanthack during her life, whilst the capital amount can eventually be employed in founding some permanent memorial to the late Dr. Kanthack. All who desire to contribute to the fund are requested to send subscriptions to Dr. Drysdale, 25, Welbeck Street, London, W.

We remain, dear Sir,

Yours truly,

HENRY T. BUTLIN,
ANTHONY A. BOWLBY,
J. H. DRYSDALE.

February 13th, 1899.

The Rahere Lodge, No. 2546.

AN ordinary meeting of the Rahere Lodge, No. 2546, was held at Frascati's Restaurant on Tuesday, February 14th; W. Bro. T. G. A. Burns, W.M., in the Chair. Bro. Dr C. H. Roberts was raised to the third degree; Bros. Lewis, Kennedy, and Hood were passed to the second degree; Messrs. E. H. E. Stack and Sydney Cornish were elected members of the Lodge, and were afterwards initiated into freemasonry. A vote of one guinea was confirmed towards the maintenance of "Our Brother's Bed" in the Home for the Dying, and a sum of five guineas was entrusted to the W.M. and officers of the Lodge for the relief of any urgent case of distress which might arise. W. Bro. Burns was elected a steward to represent the Girls' School at the ensuing Masonic Festival; W. Bro. Izard to represent the Lodge at the Boys' Festival, and Bro. Coventon to represent the Lodge at the festival for the old people. A sum of ten guineas each was voted from the Lodge funds to each of the three charities. The members of the Lodge with their guests afterwards dined together to the number of forty.

The Month's Calendar.

[Secretaries of Clubs, &c., are requested to co-operate in making this list as complete as possible by forwarding notices of forthcoming events to the Editor.]

February 15th.—Clinical Lecture at 2.45, Mr. Langton.
" 16th.—Cup tie, *v.* St. Mary's Hospital Rugby F.C., at Richmond. Abernethian Society Address by Dr. Griffith, at 8 p.m., on "The Conduct of Labour in Private."
" 17th.—Clinical Lecture at 1 o'clock, Dr. Church. Dr. Church and Mr. Willett's duty.
" 18th.—Association F.C. *v.* Marlow, at Marlow.
" 21st.—Dr. Gee and Mr. Langton's duty.
" 22nd.—Clinical Lecture at 2.45, Mr. Butlin. Association F.C. *v.* Hampstead, at Winchmore Hill.
" 23rd.—Abernethian Society, Mr. Thursfield's paper, "Concerning Pleurisy."
" 24th.—Clinical Lecture at 1 o'clock, Dr. Gee. Sir Dyce Duckworth and Mr. Marsh's duty.
" 25th.—Rugby F.C. *v.* Rosslyn Park, at Richmond. Association F.C. *v.* West Kent, at Chislehurst.
" 28th.—Dr. Hensley and Mr. Butlin's duty. Rugby F.C. *v.* Upper Clapton, at Clapton.
March 1st.—Examination for Hichens Prize. Clinical Lecture at 2.45, Mr. Marsh. Association F.C. *v.* Emeritis, at Winchmore Hill.
" 2nd.—Abernethian Society, Dr. Andrewes' paper, "The Causation of Summer Diarrhœa."
" 3rd.—Clinical Lecture at 1 o'clock, Sir Dyce Duckworth. Dr. Brunton and Mr. Walsham's duty.
" 4th.—Rugby F.C. *v.* Marlborough Nomads, at Winchmore Hill. Association F.C. *v.* Pemberton, at Winchmore Hill.
" 7th.—Dr. Church and Mr. Willett's duty.
" 8th.—Clinical Lecture at 2.45, Mr. Marsh.
" 9th.—Abernethian Society, Mr. Coleman's paper, "Tuberculin."
" 10th.—Clinical Lecture at 1 o'clock, Dr. Hensley. Dr. Gee and Mr. Langton's duty.
" 11th.—Association F.C. *v.* Reigate Priory, at Reigate.
" 14th.—Sir Dyce Duckworth and Mr. Marsh's duty.
" 15th.—Clinical Lecture at 2.45, Mr. Marsh. Association F.C. *v.* Civil Service, at Winchmore Hill.
" 16th.—Abernethian Society Annual General Meeting, at 8 p.m.
" 17th.—Clinical Lecture at 1 o'clock, Dr. Brunton. Dr. Hensley and Mr. Butlin's duty.

Reviews.

MEDICAL DISEASES OF INFANCY AND CHILDHOOD, by DAWSON WILLIAMS, M.D. (London: Cassell and Co. 10s. 6d.)

The statement that "no matter where you are, half your practice will be among children," is a well-known "clinical aphorism" in this Hospital; and yet how few take it to heart in their student days! Indeed, it is not uncommon for a dresser or clerk to deliberately avoid juvenile patients. Sooner or later he repents, and then books of the type before us come to his aid. But not only to the once neglectful student are these pages of interest and use. They are penned by one of much clinical experience in the department of which he treats, and may with advantage be read by all. The style is attractive, and the author is not lacking in a sense of humour. In his remarks on methods of examination he advocates that the child be given the opportunity "to complete his examination of the physician, which, it must always be remembered, must be allowed to precede the examination of the patient by the physician." He pleads for the importance of his theme, for a quarter of the total population are under ten years of age, and the mortality among infants and children is enormous. Notwithstanding these facts, it is not uncommon to find the diseases of children made light of, and to hear the "therapeutics of the nursery" spoken of with a certain scorn. Most unjustifiably so, for it is a frequent observation that children react to treatment remarkably quickly.

Dr. Dawson Williams' experiences at Shadwell have evidently left him with a low estimate of the common sense and capacity of the average British mother—an estimate with which most medical officers of hospitals have only too much reason to agree.

Busy practitioners who have not the time to read such works as those of Eustace Smith or Ashby and Wright will find in this book full information combined with compactness of treatment. In this respect it marks a distinct advance. Such subjects as night terrors and pica receive due notice—just those subjects which so few books deal with, and which every practitioner soon has to face. Under the former head we notice, however, that the author apparently does not attach much importance to peripheral exciting causes, regarding it as a neurosis. Yet we would venture to suggest that adenoid vegetations will be found not uncommonly to be associated with night terrors, causing, as they so often do, a partial asphyxia in sleep.

The work has many excellent illustrations, and a few which cannot be so designated. In the latter category we should place the picture of adenoid vegetations on page 339, which really has most of the possible faults, in that it is both confusing and conveys very little idea of the actual location of the growths. But these are small points compared with the general sustained excellence of the book.

GUIDE TO THE CLINICAL EXAMINATION AND TREATMENT OF SICK CHILDREN, by JOHN THOMPSON, M.D., F.R.C.P.Edin. (Edinburgh: W. F. Clay and Co. 9s.)

Here is another indication of the attention which is now being paid to this important subject. It is indeed a change from the days, still remembered by many, when the only work on the diseases of children in English was one which actually entirely omitted mention of rickets, pre-eminently the English disease of children.

That the examination of children is fraught with difficulty is but too common an experience of all. The examination of the throat is of paramount importance, but it can only be accomplished by force. We may wish to call the ophthalmoscope to our aid in many a case where it is of the highest value, but before being able to do so a most exasperating half-hour will often be spent. As for the laryngoscope, it is out of the question except under an anæsthetic. We turn to the chest; though percussion may afford us frequent opportunities of hearing the "cracked-pot" sound, even that pleasure palls, and when we use the stethoscope our patient adds a rich crop of adventitious sounds.

The scope of this book is avowedly supplementary, being chiefly practical. It is abundantly illustrated by photographs, and within the limits the author has laid down for himself may be unhesitatingly recommended.

THE YEAR-BOOK OF TREATMENT FOR 1899: a Critical Review for Practitioners of Medicine and Surgery. (London: Cassell and Co.)

Once again we can praise this excellent compendium of the advances in treatment during the year. As this is almost precisely on the lines of the preceding volumes, we have little to add to what we have formerly said. Each section is undertaken by an expert in the particular branch treated of, and valuable discussions on methods still under trial will be found. The new tuberculin, Caley's fluid, and operations for angular curvature, to mention but a few points, are excellently summarised. Dr. Burton-Fanning contributes a new feature in his article on the open-air treatment of phthisis. Occasionally the "critical" side is hardly prominent enough. For instance, we should be sorry to think that Dr. H. P. Hawkins fully agrees with all Robin's detailed treatment of hæmatemesis. Some of it appears to us positively dangerous. And why did the editor allow Dr. Handfield-Jones to employ such a hideous word as "sizeable"? Besides, apart from the context, who can tell what it means?

GANT'S GUIDE TO THE EXAMINATIONS BY THE CONJOINT BOARD. Seventh edition, revised by WILLMOTT EVANS. (London: Baillière, Tindall, and Cox. 5s.)

Of this book we can only repeat what we have said of similar compilations—that if they are really necessary they form a heavy indictment of our present examination system. We should be sorry to be left in the hands of a practitioner who had only obtained his qualifications by the aid of such a "Baedeker" to the well-known building on the Embankment.

We have received from Messrs. Cassell and Co. *Letts's Medical Diary* for 1899. This well-known and useful little pocket-book can be obtained in cloth for 2s. 6d., or in French morocco for 3s. 6d. At the risk of being thought captious, we might suggest that in a compilation of this kind it ought not to be necessary to give instructions for administering a hypodermic injection. Also that, as far as this hospital is concerned, the hours of attendance given on p. 15 stand in need of revision.

We have also received the tenth edition of a *Syllabus of Materia Medica*, revised in accordance with the British Pharmacopœia, 1898, by Wm. Martindale (London: H. K. Lewis, 1s.), a *Pocket Medical Dictionary*, by George M. Gould, M.D. (same publishers, 2s. 6d.), and a *Dictionary of Hygiene*, by Kingzett and Homfray (Baillière & Co. 2s. 6d.).

New Productions.

WE have received a sample box of Messrs. Cadbury and Sons' specialities. Whether the article be their well known cocoa preparations, or the more dainty confectionery of which cocoa forms the chief basis, all Messrs. Cadbury's goods are without rival for their purity. It is well that the lay mind has for a long time come to the same conclusion; it shows that the public judgment may sometimes be trusted to lead straight. We recently came across an interesting historical account of the cocoa industry, published by this firm, and issued in a very readable form. Any of our readers who may meet with it need not throw it aside in disgust, therefore, as "merely another advertisement."

THE Distillers' Co., Limited, have forwarded us from Edinburgh a specimen of their Extract of Malt. We can recommend the preparation highly, having given it a trial with satisfactory results.

Correspondence.

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

"THE MICROSCOPIC DIAGNOSIS OF TUBERCULOSIS."

SIR,—In ST. BARTHOLOMEW'S HOSPITAL JOURNAL for October, 1898, Dr. Kanthack, in the course of an article on "The Microscopic Diagnosis of Tuberculosis," refers with disapproval to "Gabbett's method" of staining. May I venture to point out (as the person most concerned) that I have never dignified my little bit of technique by the title of a "method"? It is, as I wrote when I suggested it, merely a slight modification of the Ziehl-Neelsen method, introduced simply for the purpose of saving time. The principle is identical, the stain is the same, the decolourising agent is the same; I merely dissolve some blue in the sulphuric acid to avoid the trouble of

subsequent counter-staining. I am at a loss to understand how this can diminish the reliability of the method. It certainly does not affect the decolourising power of the acid, nor does it in any way render it difficult to estimate the degree to which decolourising has been carried, for in the Ziehl-Neelsen method this can only be ascertained after the specimen has been taken out of the acid and washed in water; and when this is done in the case of my modification all imperfectly decolourised parts show this red tinge quite clearly through the faint blue of the film, indicating that the preparation should be replaced in the acid. But a film of proper thinness can always be efficiently decolourised in a minute or two if the watch-glass is kept in motion as I recommend.

Dr. Kanthack refers to one published case in which sputum stained by "Gabbett's method" showed red bacilli, though tuberculosis could be excluded. The statement would have weight against the reliability of the process adopted if it could be shown that other methods would not have given similar results, or if we could be sure that the process was correctly carried out. It has long been known that "smegma bacilli" retain the red stain (like tubercle bacilli) after treatment with acid, and that immersion in alcohol is necessary for purposes of differentiation. As a matter of routine, I have always treated the cover-glass films with absolute alcohol after washing in water, and I have satisfied myself by experiment that the colour is thus removed from the "pseudo-tubercle bacilli." There seems to be no new principle involved in Honsell's method.

My only reason for troubling you with this note is that my simplification of the Ziehl-Neelsen method has been rather widely adopted, and it seems undesirable that it should be discarded without sufficient reason.

Yours faithfully,
HENRY S. GABBETT.

Eastbourne, *December 24th.*

P.S.—Since writing the above I have seen the announcement of the death of Professor Kanthack, an announcement which must cause the most profound regret to all who are interested in the progress of pathological science.

Examinations.

UNIVERSITY OF LONDON.

Intermediate M.B.

Entire Examination:

First Division.—H. W. James.

Second Division.—H. Love, A. E. Thomas.

Excluding Physiology:

Second Division.—A. M. Amsler, P. G. Harvey, H. H. Raw.

Physiology only:

First Division.—A. H. John, R. A. Lloyd, E. C. Mackay, A. S. Woodwark.

Second Division.—J. C. M. Bailey, J. S. Gayner, S. B. Green, C. H. D. Robbs, J. J. S. Scrase.

Preliminary Scientific Examination:

Chemistry and Physics.—A. R. Neligan, A. D. White.

Biology.—O. E. Lord, E. F. Travers.

CONJOINT BOARD.

Final M.R.C.S., L.R.C.P.

The following have received their diplomas:—G. A. W. Spear, J. H. Kemp, H. Vaughan-Pryce, H. F. Parker, E. P. Sewell, F. A. Rose, J. E. Manlove, H. J. Hutchens, C. H. Barnes, A. M. Ware, A. I. Vaughan, L. Jones, R. S. F. Hearn, F. G. Richards, G. N. Stephen, J. H. Rhodes, A. R. Kay, T. D. Dawson, W. J. McCoy, M. D. Wood, J. A. P. Barnes, L. A. Baiss.

Anatomy and Physiology.—H. M. H. Melhuish, W. V. Wood, A. K. H. Pollock, C. S. Woodwark, H. W. Pank, R. C. Elmslie, A. F. Van Dyk, R. J. Morris (old regulations).

Chemistry.—T. W. Chaff, L. B. Bigg, S. E. Crawford, M. Herzheim, H. M. Huggins, C. S. Kingston, E. Loverton-Spry, C. W. O'Brien.

Practical Pharmacy.—T. W. Chaff, H. H. Butcher, C. Dix, H. E. Flint, H. Goodman, L. M. Morris, C. L. C. Owen, P. H. Scholberg (old regulations).

Elementary Biology.—M. Herzheim, T. R. Couldrey, R. M. Im Thurn, P. J. Martin, A. R. Wade.

Appointments.

BATTEN, FREDERICK E., M.A., M.D.(Cantab.), M.R.C.P.(Lond.), appointed Pathologist to the National Hospital for the Paralysed and Epileptic, Queen Square, *vice* Dr. Risien Russell, appointed Assistant Physician.

* * *

BENNETT, H. C., M.B., M.R.C.S., L.R.C.P., appointed House Physician to the Sunderland Infirmary.

* * *

BURD, C. P., M.R.C.S., L.R.C.P., appointed Assistant House Surgeon to the Salop Infirmary, Shrewsbury.

* * *

FOULERTON, ALEXANDER G. R., F.R.C.S.(Eng.), appointed Bacteriologist to the Middlesex Hospital.

* * *

MANNING, H. C., M.R.C.S., L.R.C.P., appointed Assistant Medical Officer to the Somerset and Bath Asylum.

* * *

THOMPSON, H. E., M.B.(Lond.), M.R.C.S., L.R.C.P., appointed Resident Surgical Officer to the Birmingham and Midland Eye Hospital.

* * *

WINKFIELD, C. F., M.R.C.S., L.R.C.P., appointed Assistant House Surgeon to the Derbyshire Royal Infirmary.

Births.

FEGAN.—On January 16th, at Old Charlton, Kent, the wife of F. Ardra Fegan, M.R.C.S., L.R.C.P., L.S.A., of a son.

VALÉRIE.—On February 19th, at 21, St. Ann's Villas, Holland Park Avenue, W., the wife of J. Valérie, of a daughter.

WILSON.—On January 28th, at Malvern, Kenley, the wife of Norman O. Wilson, F.R.C.S., of a daughter.

Marriages.

DRU DRURY—WILKINSON.—On December 27th, 1898, at St. Bartholomew-the-Great, London, by the Rev. Canon Robinson, of Ripon, Edward Grey Dru Drury, M.D., R.S.Lond., eldest son of Edward Dru Drury, of Blackheath, to Jean Aytoun Wilkinson, youngest daughter of the late M. A. Eason Wilkinson, M.D., F.R.C.P., of Greenheys, Manchester, and Middlethorpe Hall, York.

MAURICE—MARSH.—On February 1st, at St. George's, Hanover Square, by the Rev. Albert Baillie, Rector of Rugby, the Rev. R. Armitage, Chaplain to the Forces, and the Rev. D. Anderson, Rector of the Parish, Captain Frederick Barton Maurice, the Sherwood Foresters, Derbyshire Regiment, eldest son of Major-General Maurice, C.B., to Margaret Helen, only daughter of Mr. Howard Marsh, of 30, Bruton Street, W.

ACKNOWLEDGMENTS.—*Guy's Hospital Gazette, London Hospital Gazette, Nursing Record, The Student, The Hospital, British Dental Journal, Medical and Surgical Review of Reviews, The Stethoscope, The Broad Way, St. Thomas's Hospital Gazette, St. George's Hospital Gazette,* "*R. M. I.*"

St. Bartholomew's Hospital Journal.

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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, *Advertising Agent, 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, 1899.

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

A WALK through the streets in the neighbourhood of Cavendish Square is likely to produce in the minds of the uninitiated a somewhat erroneous impression. The number of trim houses with brightly-polished door-plates would probably convey an exaggerated notion of the amount of consulting practice carried on in London. In former days, when the appointments in the medical schools were but few, when medical education was largely unorganised, or carried on by private enterprise, there were fewer inducements for men to stop in town than exist to-day. The increasing complexity of the training of the student has led to the creation of many appointments, which are regarded as "stepping-stones." But at the same time by this very system the average general practitioner is sent out so much better equipped, that he does not need to rely on the consultant's aid so frequently.

The supply has increased while the demand has rather diminished. By the energy and ability exerted on his teaching, the general practitioner is enabled to cope with more difficult cases, and is apt to call in the consultant to back up his opinion as well as in the expectation of receiving valuable assistance. This is hardly the type of case out of which the latter can gain much reputation.

It may of course be urged that there is so much more operative surgery done to-day than formerly that here, at least, the demand has largely increased. This is true, but now that every provincial town of any size has at least one F.R.C.S., probably many of the operations which would have been performed in town are now done in the country. It is true, however, that a man will often call in a surgeon to do an operation which he is quite competent to undertake himself, simply to safeguard his reputation. There is a risk in every operative procedure; if he does it himself, should anything go wrong the patient's friends will say at once, "Why was a 'specialist' not called in;" whereas, if the same mishap occurs to the surgeon they say, "Well, at any rate, we did the best we could." So much virtue is there in the environment of Cavendish Square.

We are led to the conclusion, then, that surgery offers a better opening in town than medicine. A young man can obtain surgical work by assisting a senior, or by performing operations for a lower fee. In medicine, on the other hand, these chances do not occur. Another factor may be pointed out. The surgeon does not suffer from the competition of the quack to the extent that the physician does. We certainly have heard of a quack who would tell a patient that one of his kidneys was diseased, and offer to do a nephrectomy. He then made a skin incision under an anæsthetic, stitched up the wound, and presented the patient with a sheep's kidney which he professed was the one he had removed. He did not fail to compare his statistics with those of others who performed nephrectomy! This may be mythical, it must certainly be rare. The results of surgery are patent, and can be understanded of the people.

The physician, on the other hand, is at a disadvantage with the quack who says that he has wrought marvellous cures. The diagnosis was as much the quack's as the cure. If he states he has exorcised Bright's disease, or healed a cavity in the lungs, who shall gainsay him? Such methods are scarcely applicable to a strangulated hernia or severe hæmorrhage.

Clinical Lecture on a Case of Ingravescent Coma.

By Dr. GEE.

Reported by T. J. HORDER, M.B., M.R.C.P.Lond.

GENTLEMEN, The case I wish to draw your attention to this morning is that of Robert H—, 58 years old, admitted to the hospital this month. I wish you to note his age, because he suffered from a disease of old age. When he was admitted, Mr Thursfield's note says: "He was quite conscious, but his speech was quite unintelligible, and he appeared to be talking nonsense. He had distinct weakness and loss of power in the right arm and leg, but no loss of power in the face or tongue. He understood perfectly what was said to him, and obeyed directions, but mumbled nonsense if he tried to speak." That was his condition, and I would draw your attention to three points: (1) the loss of power in the right arm and right leg; (2) the inability to speak, not due to any defect of intelligence, nor to delirium, nor to unconsciousness,—there is no doubt he was aphasic, using the wrong words, and making mistakes in them. He had, therefore, right hemiplegia and aphasia, but (3) was not unconscious. That triad of symptoms—right hemiplegia, aphasia, retention of consciousness—is usually indicative of some obstruction of the middle cerebral artery on the left side, producing immediately anæmia of the brain in this region, and going on to softening of the parts around. Being speechless the man was quite unable to tell how his disease came on, but he was seen to fall on a railway platform while standing. It therefore came on suddenly, and a hemiplegia coming on suddenly would cause him to fall. I ought to have added to the "triad," sudden onset in a state of health. Of course, he *may* have lost consciousness, but it had returned on coming to the hospital.

If I had seen him on admission I should have diagnosed obstruction of the middle cerebral artery. A systolic murmur, which he had at the apex of the heart, would have confirmed this opinion, suggesting mitral regurgitation, chronic endocarditis, and a possible source of embolism.

If a person suddenly falls like this it may be due to sudden paralysis occurring, or to sudden loss of consciousness—epileptic, apoplectic, or syncopal, or to sudden giddiness, as auditory vertigo.

Now for the course of this man's complaint. "He was put in the surgery ward, and during the night he became more unconscious, and the hemiplegia more marked. He was sick, and passed urine unconsciously. His pupils were small, but not pin-point, and both reacted to light, the right less readily than the left. He was sick many times on the second and third days of his admission. He was very fat. His pulse was 88, the artery hard, tortuous, and thickened. The heart's apex-beat was in the nipple line," and there was the systolic murmur noted above. "The lungs gave signs of much bronchitis. The bowels were open freely on the third day. The urine had sp. gr. 1022, was acid, and contained no albumin nor sugar." Then I saw him, on the third day of his disease, and the notes I then made were: "Right hemiplegia," obviously affecting not only the limbs but also the face and tongue, which pointed strongly to the right. He seemed to me to have a lateral deviation of the face to the left, not highly marked. He had no deviation of the eyes to the left. These deviations are easily understood if you remember they are the result of paralysis of movements on the right side of the body; the left side of the tongue pushed the organ to the right; if the movements of the face to the right are paralysed, the muscles on the left side draw the face to the left; so for conjugate deviation of the eyes, the unparalysed muscles drag the eyes to the left. He had all these evidences of paralysis of the right side of the body. "Aphasia:" one hesitated a little because his articulation was very defective. The two things often go together, but if the articulation be bad a patient may be talking perfect sense, you cannot be sure. But the defective articulation would be, again, due to paralysis. Still, at this time I believed he had aphasia, and when his articulation got better this was confirmed. "Coma incomplete but increasing:" the gradually diminishing consciousness was a very important point. "Rather frequent vomiting." The other conditions were "obesity; systolic apex murmur; arterial changes; no albumin in urine; ophthalmoscope, nothing abnormal."

The symptoms were therefore now added to and altered; right hemiplegia, aphasia, increasing coma. And at this time the important point was this ingravescent coma or ingravescent apoplexy. On account of this symptom,—this was the first time I saw him,—my opinion was that he had a hæmorrhage into the brain, for there is no more characteristic symptom of hæmorrhage into the brain than increasing coma coming on after bad headache, or vomiting, or paralysis, or all three. The time may be very short, half an hour or (as here) a day or two. If on these symptoms coma supervenes, coma stealing on the patient and getting deeper and deeper, there is no more characteristic symptom of hæmorrhage into the brain. Here the coma was late in coming on; the disease often

progresses much more rapidly; for instance, there is violent headache, or vomiting, then drowsiness in half an hour, and in an hour deep coma. But the sequence is just the same. Sometimes there is no hemiplegia at all, only pain in the head and vomiting; the patient may think himself quite well,—he is "subject to that sort of thing." To repeat; this ingravescent coma in a patient who was just before the subject of hemiplegia, vomiting, or headache,—nothing is more characteristic of hæmorrhage into the brain.

Just a word as to the most frequent seat of the hæmorrhage in these cases. It occurs in the same region as the softening I spoke of just now. But the branches of the middle cerebral artery which most usually give rise to the bleeding are the lenticulo-striate branches, supplying the anterior part of the internal capsule, and the lenticular nucleus; and one artery in particular, supplying the putamen or most external part of this lenticular nucleus, from its being so often affected, is called the artery of cerebral hæmorrhage. The hæmorrhage, more frequently than anywhere else, takes place into the anterior part of this putamen, or between it and the claustrum. Supposing a hæmorrhage to occur here, and go on and on, it does not require much bleeding to compress the internal capsule, especially its posterior part, so producing hemiplegia.

So much for the site of the hæmorrhage. Now for the other symptoms—heart, kidneys, &c. In a very large number of post-mortems we find contracting granular kidneys, and in at least two thirds or more there is considerable hypertrophy of the left ventricle—something, that is, of which there can be no doubt. Then arterial changes are found; atheroma, or peri-arteritis (arterio-sclerosis, arterio-capillary fibrosis) is a very frequent change. It is this change, probably, which accounts for the hypertrophy of the heart, this latter being secondary to the arterio-sclerosis, which is essentially of the same nature as the change taking place in the kidneys. Do not run away with the notion that we always find these changes, for we do not; there may be hypertrophy of the heart without granular kidneys, and *vice versâ*. What evidence had we of these changes in this patient? None at all. The urine had a good specific gravity and no albumin; it is not probable either that it contained any casts. So there was no evidence, so far, of granular kidneys. Nor was there any evidence of hypertrophy of the heart; there was no heaving impulse, though, being so fat, he *may* have had this condition. The arteries certainly felt a little rigid, but there was not much change in them.

Hitherto nothing was known of the patient's past history; we had to judge of the patient as we saw him. Soon afterwards, however, the friends came, and we were able to find out more. We learnt that he had had "many 'similar' attacks, the first about three years ago. He has had as many as three 'fits,' occurring in rapid succession, unconsciousness, foaming at the mouth, and struggling."—all characters of epileptic fits. "In the last of these, which occurred in September, 1898, he was found in the morning speechless, and remained so for several days; he had at that time, so far as can be ascertained, no hemiplegia. Since then he has been forgetful, and in some respects childish, but lately has appeared to be in excellent health. He had 'gout' a year ago."

This history looks like that of epilepsy, and no doubt it was. After the September fit there was no hemiplegia, but there was aphasia,—for several days. That is very common after epilepsy; the patient may be left aphasic or hemiplegic one, two, or three days; then the paralysis and aphasia disappear. If, therefore, we had known on admission all this, I should have hesitated to say the man was suffering from arterial obstruction, but should have thought him more likely to be epileptic. If so, the hemiplegia would disappear in two or three days. So with this history we should have taken a third view, though not when I saw him, because then there was the increasing coma. Epileptic coma comes on *instantly*, and is the first evidence of the disease. An ingravescent coma is no part of epilepsy. But this epilepsy is interesting because we naturally ask the question *why* the man became suddenly epileptic at fifty-five. The most likely explanation is diseased kidneys, though the urine did not show it; that is, the attacks were uræmic. Many people have terribly granular kidneys, yet no examination of the urine may show it. So I think a very likely explanation of these attacks is that they were uræmic. That last attack, I think, was much more likely to be due to arterial changes, culminating in the cerebral hæmorrhage, the portion of brain involved being impaired by those changes. Those changes, I did not mention, were the production of aneurysms, miliary or larger, so that I have no doubt whatever that he had a cerebral hæmorrhage connected with granular kidneys.

A few words as to the subsequent course of the case. The patient never became quite conscious, and on January 8th "the temperature began to rise, his breathing became much more rapid and laboured, and he developed a distressing and ineffectual cough;" this was on the morning of January 9th, the eighth day of the disease. When cases of cerebral hæmorrhage die, they always die in that way, not till the vital functions fail—circulation, respiration, and animal heat. This man's temperature began to rise,—always a bad sign in these cases—his respirations became more rapid and laboured, and he developed a bad cough, and his pulse rose. In cerebral hæmorrhage you always get congestion of all the internal viscera, and this explains the great liability of these patients to bronchitis. They may die almost more from their bronchitis than from anything. A friend of mine who has devoted a lifetime to the study of nervous diseases tells me he could diagnose a case of cerebral hæmorrhage by looking at the lungs, this

congested condition is so characteristic a feature. The note continues: "On the evening of January 9th he became quite suddenly very much worse, his pulse failing, and becoming almost imperceptible; at 1 a.m. he was quite unconscious, his respirations very shallow and rattling, and he died quietly about 4.30 a.m. on January 10th." I think something fresh had occurred,—rupture of the blood into the lateral ventricle, producing the sudden unconsciousness, and so putting an end to his life. Ventricular hæmorrhage often occurs much earlier than in him, and then instead of a few days the patient dies in a few hours.

Dentistry for Medical Men.

By R. C. ACKLAND, M.R.C.S., L.R.C.P., Assistant Dental Surgeon to the Hospital.

III. PAIN FOLLOWING THE EXTRACTION OF TEETH.

MORE or less pain from osteitis often follows the extraction of a tooth, however skilfully performed the operation may have been. To relieve this various remedies are in use; one of the following will generally be found effective.

Immediate pain will often yield to a solution of cocaine, 1 in 10 to 1 in 20, used on a pledget of cotton wool, and inserted into the socket as a plug. Hot carbolic and water, 1 in 40 to 1 in 60, held in the mouth is often effective in the place of the foregoing. A tampon of cotton wool soaked in the tincture of opium, or in camphorated phenol, will tend to relieve the pain. Two special preparations in use are the following:

1. A solution made up as follows:

℞	Chloroform, Alcohol, Tincture of aconite āā ...	100 parts.
	Morphine	1 part.

Mix.

2. An unguentum made up of—

℞	Menthol	45 grs.
	Coc. Hyd.	20 „
	Chlor. hydrat.	10 „
	Vaseline	35 „

Both are used on a piece of cotton wool, and are lightly inserted into the wound.

The latter of the two, the ointment, the writer has rarely found fail. Its effect is more lasting, the vaseline serving as a vehicle for the medicaments, which prevents their being put into solution by the saliva, the flow of which at such a time is often very copious. It can also be smeared on the surrounding gum

Persistent pain is more common when periodontitis or periostitis has been the reason for the extraction, the cause of this being the necessary bruising of the already inflamed socket, which tends for the time rather to aggravate than to relieve the inflammation. This is more likely to happen when much injury has been done to the alveolar bone.

When the patient is weakly or diseased, or should the extraction have necessitated a more than usual amount of laceration, sloughing of the gum and small exfoliations of bone may take place. This latter result is, no doubt, partially due to the fact that the recuperative power of the bone is small.

The above troubles are more apt to follow the extraction of a lower tooth because of *débris* of food, &c., more readily lodging in the wound. This is more especially the case when the tooth extracted is the second or third molar. The lower wisdom-tooth's socket is particularly apt to cause persistent pain, first of all because it cannot be so readily cleansed, and secondly, the extraction of this tooth often needs so very much force.

Of local treatments, poppy-head fomentation, made by boiling two ounces of poppy-heads in a pint of water until it has evaporated down to about half a pint in volume, is a time-honoured remedy. The hot liquid, obtained by straining off, should be held in the mouth; on no account should fomentations or poultices be put on the outside, as the result may be most disfiguring. A hot solution of carbolic acid in water—strength 1 in 40 to 1 in 60—syringed frequently and somewhat forcibly into the cavity seems to serve as well. A most effective result may be also obtained with a very hot solution of chloroform dissolved in spirit and water. This can be either syringed into the cavity or held in the mouth on the affected side.

When relief has been obtained by one of the foregoing remedies, further treatment should consist in keeping the wound as clean as possible by using an antiseptic mouth-wash of Condy's Fluid, carbolic acid and water 1 in 40 to 1 in 60, &c. Plugging the wound, except for a short time, such as to relieve the immediate pain of a severe extraction, should not be resorted to, as it impedes and may altogether prevent necessary drainage. Whenever it has been found necessary to use a plug of any kind, care should be taken to see it removed when its purpose is served.

Recourse may be had to internal treatment with such drugs as butyl chloral hydrate, phenacetin, antikamnia, or one of the preparations of opium.

When severe suppuration follows the extraction, or should the extraction have been necessitated for a patient who is otherwise weakly, small exfoliations with more or less persistent pain may take place during weeks, in which case little can be done except to frequently syringe the wound and to remove the pieces of bone as they loosen. Butyl chloral hydrate, in the form of five-grain cachets, will be found to be a very great sedative in such cases, when treating the pain which often accompanies the separation of each piece of bone.

The Muscle-spindle.

A Paper read before the Abernethian Society on November 24th, 1898,

By F. E. BATTEN, M.D.Cantab., M.R.C.P., Assistant Physician to the Hospital for Sick Children, Great Ormond Street, and Pathologist to the National Hospital for Paralysis and Epilepsy, Queen Square.

I FEEL that I owe an apology to the Society for introducing a subject so remote from the usual practical papers which are read before this Society, but my excuse must be that it is a subject which has considerably interested me, and it is with the hope that you also will take some interest in it that I venture to bring it before you this evening. I cannot but believe that it will in the future have considerable bearing upon the pathology of certain diseases of which at present we know comparatively very little. The importance of the organs I am about to describe has only recently been recognised, and chiefly through the work of Sherrington, and little has he done from the pathological point of view.

Before, however, commencing the description of the muscle spindle I wish to describe to you a simple method suggested by Sihler, by which the muscle-spindle can be teased out and minutely examined. The muscle, after removal from the body, is divided in a direction parallel to its fibres into pieces about the size of an ordinary lead pencil, and these are placed to soak in solution No. 1:

No. 1.—Acetic acid		1 part.
Glycerine		1 „
Chloral hydrate solution, 1 per cent., in distilled water...		6 parts.

After having been in this solution for twenty-four hours, the tissue becomes very much swollen up, and it is now removed and again further divided into pieces about the size of a 3—4 catheter; the tissue is again put into this solution for another twenty-four hours, after which the fluid is strained off and the tissue covered with pure glycerine, in which it is allowed to soak for twenty-four hours; from this it is removed and placed into solution No. 2 for ten to twelve days.

No. 2.—Ehrlich's hæmatoxylin		1 part.
Glycerine		1 „
Chloral hydrate sol., 1 per cent., in distilled water		6 parts.

After it is well stained it is again placed into pure glycerine, where it can remain indefinitely.

Small pieces of muscle are now taken and squeezed between two glass slides, and on holding the slide against the light the spindle can readily be seen stained dark blue in contrast to the surrounding red coloured muscle-fibre. The further teasing of the muscle-spindle is most readily performed by removing the upper slide and placing a coverslip over one end of the spindle, and stroking the spindle with the flat of the needle; all the surrounding muscle-fibre is thus removed, leaving the spindle isolated. It should be remembered that the nerves and vessels are also stained blue by this method, and it is not always easy to distinguish by the naked eye between a muscle-spindle and a vessel; under the low power of the microscope the question is easily settled, however. When the spindle is fully teased out it can either be mounted without further staining, in which case it is again pressed between two glass slides, and placed into a bowl of methylated spirit and allowed to harden for twenty-four hours; it is then placed into absolute alcohol, cleared in xylol, and mounted in Canada balsam; or, if it is desired to examine the spindle by other methods, it is placed into Müller's fluid till all the colour is discharged, and it may then be examined by any method desirable, and cut either in longitudinal or in transverse section. The spindle may be imbedded either in wax or celloidin; the former certainly has an advantage for serial sections in transverse direction, although for most purposes I think celloidin is preferable.

History.—I do not propose to enter into any detailed account of the various authors who have added to our knowledge of the muscle-spindle, but merely to give a brief record of those who have made notable advance in the subject.

In the year 1862 Kölliker first described the spindle in the muscle of the frog, and considered that they were muscle-fibres undergoing development, and to this view he adheres in his *Pathology* published in 1889, after he had studied them in rabbits and in man. In the same year Kühne added considerably to the description given by Kölliker, and introduced the name "muscle-spindle." He also regarded them as a stage in the development of muscle. Then followed a series of authors who regarded them as a pathological condition occurring in atrophied muscle, and even as late as 1890 one author still regards them as pathological. In 1888 Kerschner argued the sensory nature of the muscle-spindle, and suggested that their function might be connected with the sense of position. In the same year Cattaneo proved experimentally that the muscle-tendon organs of Golgi were connected with the posterior nerve-roots, but curiously enough he considers the muscle-spindle to be muscle in the course of development, following the view of Kölliker. In 1893 Ruffini first demonstrated the annulo-spiral nerve termination within the spindle, but it remained for Sherrington in 1894 to prove that the nerve-fibre of the spindle passes up in the posterior roots, and definitely to settle their sensory function.

The question may well be asked, what is the muscle-spindle? And in reply I would say it is a spindle-shaped body occurring in skeletal muscles, abundantly supplied with nerve-fibres, which can be traced into the posterior roots, and from which afferent impulses probably arise; or to put the answer more shortly, though possibly more incorrectly, it is the sensory nerve termination within the muscle.

The next question that may well be asked is, what proof is there of its sensory nature? And in reply to the question I would divide my answer into the following headings:

1. Physiological.
   - (*a*) Indirect, *i.e.* deductions.
     - (1) The abundant nerve-supply far above the number of muscle-fibres.
     - (2) The character of the sheath, resembling that of other sensory end-organs.
     - (3) The nature of the nerve termination, *i.e.* a nerve-fibre wound in a spiral round the muscle-fibre.
   - (*b*) Direct.
     - (1) The fact that after section of the anterior nerve-roots the corresponding muscle atrophies, leaving the spindle unaltered and the nerve intact.
2. Pathological.
   - (1) The fact that in acute and chronic disease of the cells of the anterior horn of the spinal cord, the muscle atrophies, leaving the muscle-spindle and its nerve-supply intact. This has been shown to be the case in progressive muscular atrophy, and in infantile paralysis.
   - (2) Although not definitely proved, it has been shown that certain changes occur within the spindle in the case of tabes dorsalis in man.

Function of the muscle-spindle.—Having therefore determined that the spindle is sensory in function, the question arises whether it can give rise to more than one form of sensation, and here one passes from the sure position of fact to the doubtful ground of theory.

We know that from muscle more than one form of sensation arises. Are all these served by one and the same terminal organ and nerve? There are within the spindle, nerves of most varying calibre, those supplying the equatorial region being of very large size, those supplying the pole being of smaller size, and the number of these nerves is enormous. Ruffini has shown in the cat that there are three forms of nerve termination within the spindle, none of which does he considers to be motor. I think, however, in spite of his recent assertion to the contrary, that it is not improbable that there is a motor termination within the spindle, though I myself have never been able definitely to prove it.

I think it therefore not improbable that the various forms of sensation are represented by various forms of nerve termination, although it has not yet been proved that such is the case.

DESCRIPTION OF THE MUSCLE-SPINDLES.

Distribution.—Muscle-spindles have been found in nearly all muscles of the body, but they are by no means evenly distributed. They are certainly numerous in the small muscles of the hand and in the biceps of the arm (the latter muscle I have used more often than any other one muscle). Forster states that they are frequent in the extrinsic muscle of the larynx. I have been unable to find them in the muscles of the eye, the extrinsic muscles of the tongue, or in the diaphragm; but my examination of these muscles has been by no means exhaustive. The above statement agrees with that of

other authors—Fraenkel, Millbacher, Kerschner, and Sherrington,—but with regard to the eye is at variance with the statement of Siemerling, who has described a spindle in an atrophied inferior rectus muscle of the eye; and, in regard to the tongue, is at variance with a statement of Forster's that they are to be found in the hinder part of the tongue.

Further, the muscle-spindles are more frequent in the belly of the muscle than near the tendon; but in relation to this statement it would seem to me that we should recognise in the muscle-spindle, in the musculo-tendon organ, and in the tendon organ, the gradual transition from the one organ into the other, and I would regard them not as distinct organs, but as variations of the same organs adapting themselves to the tissue in which they are situated, and in all probability serving the same function.

Age.—Muscle-spindles occur at all ages, from the fourth month of fœtal life onwards; this has been shown by Felix, Siemerling, and Christomanos and Strössner.

Size.—The size of a muscle-spindle varies considerably. One of the longest simple spindles I have found measured 11·7 mm., and the maximum breadth ·5 mm.; but an average size is from 2 mm. to 4 mm. in length, and ·15 mm. to ·4 mm. in breadth. It would seem to me that the size varies both with regard to age and to the length of the muscle, being longer in the adult than in the child, and in the longer muscles.

Frequency.—I have made no attempt to estimate the number of spindles in any given muscle, but an estimate has been made by Felix, who found seventy-nine in one biceps. They are, however, much more easily found in wasted muscle than in well-developed muscle, and more easily in the muscle of a child than in that of an adult; hence the muscle of a child dying of a wasting disease is a muscle in which it is easy to demonstrate the muscle-spindle.

Description.—The muscle-spindle is, as its name implies, spindle in shape, varying considerably in size. It is common to find several spindles in one plane of the muscles, and they are often found along the course of a nerve from which they receive their supply, and lie parallel to it. Spindles are sometimes found compounded of two simple spindles, but I have no teased specimen of more than two so compounded. Sherrington, however, describes a triple spindle, and Kerschner a quadruple. On the other hand, it is not uncommon to find one spindle joined at its end with another spindle, and that again may be joined to another; three in a row is the maximum number that I have found. In such a case each spindle receives its own nerve supply.

The relation which the muscle-spindle bears in position to the muscle-fibre also varies. Firstly, the muscle-spindle may lie wholly in muscular tissue, the muscle-fibre passing in at one end, and, after passing through the spindle, passing out at the other. Secondly, the spindle may lie partly in muscular tissue and partly in connective tissue. Thirdly, the muscle-spindle may lie wholly in the connective tissue, the contained muscle-fibre being independent of external muscle-fibres.

The essential portions of a muscle-spindle are—(1) the muscle-fibres, (2) the nerves and nerve-endings, (3) the sheath, (4) the blood-vessels, (5) the lymphatics and lymph spaces, (6) septa dividing the spindles into compartments.

The various parts will now be described in the above order.

The muscle-fibre.—One or more muscle-fibres enter one pole of a spindle; these fibres are smaller than the ordinary muscle-fibres, being about ·02 mm. in diameter (the average extra-fusal fibre measuring about ·06 mm.). The muscle-fibres are well striated, and their striation is generally slightly coarser than the extra-fusal fibres, ten striations occupying the same space as thirteen striations of the extra-fusal fibres. As the muscle-fibre or fibres pass towards the equatorial region of the spindle they become divided into many smaller fibres, some of these measuring only ·008 mm. At a certain point the muscle-fibre appears to lose its striation, and nuclei appear in the substance of the muscle-fibres. These nuclei gradually increase in number till they completely fill the muscle-fibre; then, after a short distance, they again become less numerous, and the muscle-fibre again resumes its striation. The nuclei are rounded, have a diameter of about ·006 mm., they stain well with hæmatoxylin, and generally occur about the equatorial region of the spindle.

In the equatorial region of the spindle the muscle-fibres usually lie to one side, as they do not completely fill the space, whereas at the proximal and distal ends the sheath closely envelops the muscle-fibres. The muscle-fibres, after passing through these changes in the equatorial region of the spindle, pass to the distal end, where they become joined again and pass out of the spindle. I do not believe that all fibres become so nucleated, for I have seen muscle-fibres pass through a spindle without losing their striation at any point. The number of muscle-fibres in a spindle varies according to the different regions seen in section.

Nerves and nerve-endings.—The nerve-supply is always abundant; as a rule, at least two nerves pass to a muscle-spindle, the one at the equatorial region, the other at the proximal or distal end. It is not uncommon, however, to find four nerves entering a spindle at various points, two or more arising from a common nerve-trunk.

The largest nerve-bundle usually enters the spindle at the equatorial region, and contains two or three fibres, the largest measuring ·008 mm. The nerve-bundles which enter toward the distal and proximal ends are generally composed of finer fibres, and sometimes of only a single fibre, having a diameter of ·004 mm. or less.

The nerve-terminations within the spindle have been described by Ruffini in the cat as of three varieties—the annulo-spiral, the flower-ending, and the plate-ending. In dogs the annulo-spiral termination is distinct, and the same is present in man, although one is unable to get the same regular contour to the spiral that one obtains in the dog. At the point where the spiral nerve-fibre winds round the muscle-fibre, there are numerous nuclei in its substance, those at either extremity tail off into a single row, whilst in the centre they form several rows, and completely interrupt the striation of the muscle-fibre. The exact nature of the other forms of nerve-termination I have been unable to define; one can trace the fine filament to the muscle, where they appear to lose themselves without any definite termination.

With regard to the number of nerve-fibres within a spindle, one may see at times eight to ten in section. As a rule they are more numerous in the equatorial region than at the distal or proximal ends, but they are abundant in both situations.

Nerve-sheath. Each nerve-bundle passing to a spindle has a definite nerve-sheath, composed of two or more layers. The nerve-bundle passing to the equatorial region of the spindle has usually a sheath composed of eight or more laminæ, whilst the nerves entering at the distal or proximal ends have a sheath containing two to three layers. The sheath of the nerve passes directly into the sheath of the spindle as the nerve enters.

Spindle-sheath.—The sheath of the spindle resembles that of the nerve, and, as has been pointed out by certain authors, has the appearance of an onion in cross section. The laminæ are extremely fine, and possess elongated nuclei at intervals. At the equatorial region these laminæ are numerous, an average number being eight to ten; at the distal and proximal ends of the spindle the number of laminæ become less, and eventually pass into the muscle-sheath. The characters of the sheath are best studied in cross section.

Blood-vessels.—The muscle-spindle is supplied with arteries and veins, which most frequently enter the spindle near the entrance of the central nerve, although vessels may be seen entering the spindle at various points.

Lymphatic and lymphatic spaces.—A lymph space is situated about the equatorial region of the spindle, and occupies about the middle one third of the spindle. In some of my specimens the space exists as such, whilst in others it is filled up by a granular material, which does not stain readily. Sherrington has been able to inject this space by injecting the lymphatics of the leg.

Septa.—Between the groups of muscle-fibres and nerves within the spindle, septa are often seen dividing the spindle into two or more parts; these septa are extremely fine, and pass into the sheath of the spindle.

Having then considered the normal muscle-spindle, one passes to its appearance under pathological conditions, and the first of them to be studied is infantile paralysis.

Infantile paralysis.—I have been able to examine the muscle from six cases of infantile paralysis; five of these were from museum specimens, and, having been preserved in spirit, could not be stained by Pal's method. In the sixth case I was able to obtain the arm fresh, and have been able to treat it by the methods above described. In all the cases the paralysis was of long standing. In four of the cases thirteen muscles were examined; all these muscles were considerably atrophied; some had apparently no normal muscle-fibres left, yet in all of these the muscle-spindles could be demonstrated, and the intra-fusal fibres were about the usual size. In the other two cases the whole substance of the muscle was replaced by fat, and in these two specimens I was unable to find any spindles (only small pieces of these muscles were obtainable). What is the condition of the nerves entering the muscle-spindle? In answer to this question, I was able to examine the muscles of case No. 6 by Pal's method, and it is found that not only the nerve entering the equatorial region of the spindle, but also the plexus of nerves towards the polar ends remain intact. The teased specimens give the same result, and also show that the striation of the intra-fusal fibres is well preserved. In regard to infantile paralysis, it would seem probable that the muscle-spindle remains absolutely intact, both in regard to the intra-fusal muscle-fibres and in regard to the contained nerves.

Passing then to the second condition in which the spindles have been examined, viz.:—

Tabes.—I have examined the muscles from three cases. In two of these I had only portions of the muscle, which were given to me after being in Müller's fluid for some time. These I examined by the usual methods, staining them with hæmatoxylin and by Pal's method; and, so far as the examination goes, it shows that the spindles are normal, both in regard to the intra-fusal muscle-fibres and the nerve-supply. With regard to the third case, I have been able to examine it with greater care. Spindles have been teased out in the usual manner from the rectus femoris, vastus internus, and biceps of the arm. So far as the shape of the spindle and the nerves entering it is concerned, no change can be seen. The spindle does not, however, stain so readily with hæmatoxylin as does the normal spindle, and especially the equatorial region, which, as a rule, stains very deeply. The intra-fusal nerve-fibres, however, stain well. The striation of the intra-fusal muscle-fibre is well preserved. Examining the specimens of a spindle cut in longitudinal section, stained by Marchi solution, one finds, situated in the muscular fibre in the same position as the round cells which have been above described, evidence of degeneration. If now one examines the section stained by Pal's method, in order to find out if any degeneration has occurred in the nerve-fibre passing to this spot, one finds that the nerve-fibre stains well, and shows no sign of degeneration. In a third specimen the same appearance is observable. It is difficult to prove that the above-described condition is truly pathological, but it is a condition which I have found in tabes, and not under any other circumstances. That changes should be found in the terminal organs, while the nerve lying between the ganglion cell and the terminal organ remains intact, seems to me not only a possible but a probable lesion, for it has been shown by Cattaneo that, after section of the whole nerve, changes take place in the nerve-termination within thirty-six to thirty-eight hours, while changes in the medullated portion of the nerve are extremely slow. So that in tabes, where one has a gradual degeneration taking place in the cells of the posterior ganglion, it is not unreasonable to suppose that changes take place at the extreme end of the neuron without any change being manifest in the nerve itself. With regard to the other nerve-endings within the spindle, I find no evidence of degeneration.

In the third condition, viz. *myopathy*, I have had the opportunity of examining the muscles from one case, and in this case the following muscles were examined:—Biceps (arm), pectoral major, pectoral minor, serratus, quadriceps, gluteus, and rectus abdominis. The sections have been prepared in the usual manner, except that there are no teased specimens. With regard to the condition of the spindle, it is remarkable, on examining the biceps, how numerous the spindles seem to be, as many as seventeen being found cut in one section. I have never found so many in any normal biceps, not even in the biceps from a boy of the same age who died of phthisis. It was such an appearance which gave rise to the idea that these spindles were pathological bodies occurring in wasting muscles. This apparent increase is not so noticeable in the other muscles examined. With regard to the nerve supply, it is found that the nerves to the spindle all stain well by Pal's method, and the arrangement of the nerve-fibres can be well studied. The striation of the muscle-fibre is well marked within the spindle. In many of the spindles the intra-fusal fibre is as large and often larger than the extra-fusal fibre; the same condition is met with in the muscles of young children. In myopathy, then, the muscle-spindle remains without alteration.

In the fourth condition, viz. *progressive muscular atrophy*, the condition of the muscle-spindle has been worked at by more than one author—viz. Pilliet, Blocq, and Marinesco and Forster,—and they agree that the spindle does not undergo alteration. Forster has further shown that the nerve to the spindle remains intact. I have had the opportunity of examining muscles from three cases of progressive muscular atrophy. In the teased specimens from these cases it is noticeable how the large nerve-fibre passing to the spindle stands out against the surrounding atrophied fibres in the nerve. The spindle itself remains unaltered, the nerve-fibres within the spindle are natural, and the intra-fusal fibres preserve their striation. My observations, then, would agree with the above authors, viz. that the muscle-spindle remains unaltered in progressive muscular atrophy.

Peripheral neuritis.—I have had the opportunity of examining the muscles from only one case of peripheral neuritis, and in this case the atrophy of the muscles examined is not extensive; therefore it is a case of no great value in regard to the condition of the spindle. Three muscles were examined—the extensors of the wrist, the supinator longus, and the extensor longus digitorum. On microscopical examination of the first two named muscles, very little change is noted in the muscular structure. In the extensor longus digitorum there is a considerable amount of fat, some fibres considerably atrophied, others normal in appearance and size. In the extensor longus digitorum a muscle-spindle is seen in the middle of a completely atrophied area; the walls and muscle fibres appear to be normal. sections from Marchi's solution show no change, and staining with Pal's method shows the nerve-fibres are normal. The other muscles stained in a similar manner also show the normal spindle. In the teased specimens the intra-fusal muscle-fibres preserve their striation, the extra-fusal muscle-fibres have in many fibres lost their striation, and have a granular appearance. So far as one may judge from this case, one may say that in peripheral neuritis the spindle and its nerve remain intact after the muscle has become extensively atrophied; this is not, however, in agreement with a statement of Gudden.

In conclusion, then, it has been proved that the muscle-spindle is the sensory end organ in the muscle. It has been shown that it is a spindle shaped body composed of a sheath resembling the Henle sheath of a nerve, within which are certain muscle bundles. These are extensively supplied by nerve-fibres which vary greatly in calibre and in mode of termination. It is shown, in the present paper, that in infantile paralysis the spindle remains absolutely normal, although the surrounding muscle-tissue undergoes complete atrophy. In tabes it has been shown that certain changes take place in the termination of the nerves, the general structure of the spindle remaining normal. In myopathy the spindle and its contained nerve are normal. In progressive muscular atrophy the spindle remains unaltered, and the same is probably true with regard to peripheral neuritis.

Many points yet remain to be worked out, and it is with the hope that some of you may take an interest in the subject that I have endeavoured to lay before you to-night, the knowledge we at present have of these bodies.

Extracts from a Text-book of Materia Medica of the Eighteenth Century.*

By CHARLES POWELL WHITE, M.A., M.B., F.R.C.S.

IN the year 1727 appeared a book with the following title:—"Materia Medica, or a new description of the virtues and effects of all drugs or simple medicines now in use. Where from their principles these virtues, both common and specific, are shown, with the preparations of each and prescriptions: As also judicious remarks are everywhere interspersed. Done from the Latin original of Dr. Paul Harman, late Professor of Botany at Leyden. To which is prefixed a general introduction containing a mechanical account of all medicines upon human bodies. Also critical observations are added to each simple thro' the whole, wherever it was found necessary. By Edward Strother, M.D. Coll. Med. Lond. Reg. Colleg. 1727." †

The book is chiefly interesting, as it is one of the first, if not *the* first to recommend that treatment should be founded on a rational as opposed to an empirical basis.

The language in which it is written is the high-flown language peculiar to the period, with many "slang words" interspersed—such as "'em" for "them," "can't," "won't," &c., &c. The book commences with the preface, which opens with a eulogy on Dr. Harman, in which the translator laments that his works have been lost in oblivion; so that we shall not be far wrong if we ascribe the original to the end of the seventeenth century. The sources from which the translation was compiled were the notes taken by two of Dr. Harman's pupils.

Numerous statements throughout the book show that the translator was a deep-thinking man, far in advance of the teaching of his own time. Thus he believes in founding treatment on a scientific basis; he does not believe in spontaneous generation, and he thinks it would be an excellent plan if physicians kept notes of all their cases and the results of treatment for the benefit of posterity.

Most of the preface is taken up with a defence of the rational as

* A paper read before the Leeds Students' Medical Society.

† The book was published in two volumes, of which, unfortunately, I only possess the first.

opposed to the empirical use of drugs. He says:—"I believe I am not mistaken if I affirm Dr. Harman to have been the first who attempted this method." And again:—"The true physician is he who has modelled his experience into a Rationale; such a man can never fail of success but where the parts are irrecoverable." He shows scant sympathy for those who do not agree with him, as the following sentence shows:—"Without this method our knowledge is a mere hearsay, and whoever knows not this method is no better than an old woman."

He then goes on to describe his method:—"The virtues of drugs depend on the texture or substantial form, on chymical principles, and on the mechanical affections jointly. Our senses make us masters of their tactile qualities, whether they be hard, soft, heavy, sonorous, coloured, sharp, pungent, bitter, fragrant, fetid, elastick, cohæsive, hot, cold, dry, moist, fixt, volatile, corrosive, thick, thin, cylindrical, pointed, cubical, quickly or slowly extricable, and such like, and our understanding enables us to draw consequences from the preceding heads."

Thus, in describing a plant, he first describes its taste, colour, texture, &c., and from these he deduces its composition—*i.e.* whether they contain volatile or fixed soils, or earth, &c. From this composition he deduces the qualities of the plant: thus, if it is fragrant, it contains volatile salts and oils, and is therefore cephalic and carminative. He illustrates his point by the following, which is a good example of the circuitous mode of reasoning which is found throughout the book:—"It would seem a paradox to affirm that paper was made by motion till we consider that from motion arises heat; from heat, vapours; from vapours, rain; from rain awat'ring the seeds; from wat'ring plants grow; from the plant of linseed is made thread; from thread, cloth; and from cloth paper."

In this preface he gives some very sound and useful advice. He warns men, and especially young men, against being satisfied with running the changes with a very few drugs. But later on he says:—"I have already spoke enough concerning the too narrow bounds of ingredients now used in the practice; there is a fault seemingly opposed to this, namely too pompous a manner in prescribing. This method, besides the loathing it gives patients has a real inconvenience following it that it never lets us into the secret of what agrees or disagrees and it never gives us an insight into the remedy that performs the cure."

After the preface comes "A general introduction containing a mechanical account of all medicines upon human bodies." This introduction consists in a survey of the different sciences in so far as is necessary for his purpose. It will be interesting to consider these different sciences separately.

I. Physics.

Matter is indestructible and immutable, and all bodies consist of the same matter.

The difference between solids and fluids is expressed thus:—"A solid body is that which has an unequal surface which touches in many points, and the more points they touch in, the more solid is that body reputed to be."

"A fluid body, that is a body which yields and gives ready way when touched, is a body composed of circular corpuscles and as circles are the measure of contact in other bodies, the more bodies recede from being circular, they touch in more points, so that fluids are reputed circular and solids cubical in their surfaces."

In these definitions he is evidently much confused between the bodies themselves and the molecules or corpuscles of which they are made up.

He then gives an account of the different and essential properties of matter, such as gravity and attraction, divisibility, mobility and motion, figurability, impenetrability, texture, and so on.

"Heat depends on motion, contact, attraction, and elasticity of bodies conjoined." "The utmost effects of heat is fire which arises from the most rapid motion of fit corpuscles among themselves."

He believes in the corpuscular theory of light, and makes rather a curious statement about colour:—"Whenever a body looses its taste and smell the colour of that body fades."

"Sound is a percussion of the air and its vibration which is so great as sometimes to shake wooden seats; for, as it is observed, organs will make the seats of churches to tremble."

II. Chemistry.

There are said to be four chemical principles or elements of which bodies are composed, viz. acids, oils, water, and earth, to which he adds salts (acids, fixed and volatile).

Acids are, of course, called by the old names, some of which have survived to the present day—such as spirits of nitre, oil of vitriol, spirits of salt.

He is very dogmatic about crystals:—"If salts unite with hexagonical prisms it is nitre; if into pyramids, it is sea salt; if into cubical prisms, it is salt gem; if into prismatical glebes, it is borax."

There is a curious association of ideas in the following account of evaporation:—"As liquids are not always homogeneal, some finer, more subtile, and moveable particles ascend and leave the more gross particles behind, which, having large surfaces, and but little solidity, do readily come into large contacts and cohere. This is the case of serum placed over a candle and of wine-drinkers to excess, their aqueous parts fly off leaving the blood viscid."

He recognises that there is a very small difference between fermentation and putrefaction, but says that he has not time to show what the difference is.

III. Physiology.

Animal heat is caused by the friction of blood in the blood-vessels. Nerves are tubes which convey the animal spirits to all parts of the body. He says:—"As the spirits are observed to be recruited by aromaticks and fetids, we conclude that the particles these contain are similar in their nature to our animal spirits circulating in our nerves."

The mind has a power to vibrate our solids or to benumb them, and "our spirits are detained at its nod as effectually as Iron is attracted by the load stone." Joy and all sudden passions hasten the circulation, and sorrow retards it.

IV. Pathology.

There is not much pathology to be gathered from this book. The following is the most interesting piece of information under this head. He is discussing the actions of medicines, and says: "Who is there, I pray, understands what a physician means when he tells any one that he finds a certain drugg to be an excellent remedy in a dropsy or consumption? But if he should add that consumptions, generally, proceed from sharp salts in the blood which, by their frequent circulation, shave off the very coats of the vessels and tear the lungs and occasion original consumptions; and this medicine, being smooth, flexile, and porous, it sheathes those salts and sticks to the sides of the vessels and lines them with a mucous matter and hinders those effects of astimulation and corrosion and so prevents a consumption; he would then make his meaning clear and determinate."

There is a curious account of a *post-mortem* examination on a gentleman who used as snuff a powdered herb called basil and who "dy'd of a phrenzy whose brain when it was opened was found to contain a nest of scorpions." Basil was said to produce scorpions, but the translator says that he does not believe it, for "nothing is generated but from its proper seeds."

I cannot offer any explanation as to what the "nest of scorpions" was unless it was some sort of tumour.

Melancholy results from a contraction in the nerves, preventing the animal spirits from flowing through them; and in delirium the nerves are too open. In madness the spirits are too nimble and furiously moved.

V. Pharmacology and Therapeutics.

Vinegar is said to cool the blood in the following way: "It is a known fact that acids do generally coagulate the blood. However there are some acid spirits so weak that they will not have this effect. This is the case with vinegar and its spirit for one ounce of vinegar does not contain above 18 grains of acid in it. As there are various degrees of coagulation vinegar then has no other effect upon our juices than to arrest the circulation a little and to cool us or, to speak in more modern terms, than gently to attract the oils in the blood by their points to enter into the pores of the flexile particles of these oils, to change their spherical figure into hemispheres and into cubical or other plainer surfaces, to encrease thereby the blood's cohaesion, to destroy the elasticity of its globules and thus to destroy its fluidity, and consequently its velocity, and therefore its attrition or heat, that is, to cool us as has already been said."

There is a long list of terms given to drugs according to their action, such as cephalicks, sarcoticks, anodynes, epuloticks, uterines, &c. The action of a blistering plaster he describes thus: "The emplastick medicines stick close to the skin and hinder perspiration and at the same time they contain salts which stimulate the fibres and attenuate the fluids within so that at last the fibres crack and spill their contents which are changed by motion into matter and this we call suppuration."

He recognises two distinct actions of drugs which act on secretory glands, one on the circulation, and the other on the gland itself. Thus, speaking of apium (parsley) he says: "It is diuretic because it sets the blood into motion by its volatile parts; and by its plentiful fixt salts it twinges the secretory ducts of the kidneys and serves as a lasting stimulus there to invite a copious secretion, which are two things required in promoting urine."

Here is a note on carminatives: "To be carminative is to expel wind, to do which we are to consider that whilst our juices ferment into bubbles and they, being of a tenacious character, don't readily crack wind swells us; and as volatile salts attenuate this matter and make them break the wind then readily escapes." Again, speaking of acorns or sweet-smelling flag, he says: "It is carminative inasmuch as the saline parts prick the bubbles giving colick pains and let out the wind they contain."

He explains the action of filix mas thus: "It is used as a specific against worms because of its sweet inveigling them to swallow it whom it kills afterwards by its acrimonious and astringent taste."

A purge acts thus: "The volatile particles vellicate and twitch the guts and put them in mind of their duty; that is it revives the peristaltick motion when languid and by the liquors softens the cohaesions of the faeces and their adhesions to the intestines are equally surmounted."

Some purges, such as elaterium, are only to be given to "strong" persons.

VI. Materia Medica.

The description of the drugs is divided into eighteen heads, of which this volume contains six, namely: Roots, herbs, fungi, barks, woods, seeds. In the list of plants we recognise many familiar names, such as jalap, ipecacuanha, tobacco, senna, valerian, &c.

Scattered throughout the descriptions are various aphorisms or axioms as he calls them. For example:—

"All aromaticks, or all plants which have tetrapetalous flowers and husks containing very small seeds are cephalick."

"Whatever relieves or prejudices the stomach is observed to have the same consequences on the womb."

"All diuretics in large doses are diaphoretick," &c.

An example of his method of deducing the action of drugs is this:

"Bardana, burdock. It is of a gently bitterish, sweetish, subacrid taste, but of no smell.

"It therefore consists of gentle fixt salts and some few volatile also, as also of some oleous particles.

"Its virtues are to be diaphoretic and diuretic from the salts it contains; and it is anodyne in the venereal disease because it contains oils."

"Althaea (marshmallow). Softens the salts that harden wounds and prick them into pains: It obtunds and envelops the acrimonious salts which occasion consumptions, ulcers of the kidneys or bladder. It glibs the passages in a fit of the stone, and thus eases the anguishes of these diseases."

Of jalap we are told that it was introduced in the year 1654. It is to be given as a powder to a dram in strong persons, in weaker to a scruple. Ipecacuanha was introduced between the original work and the translation. Dr. Strother has a foot-note about it.

"Ipecacuanha is an emetick and cathartick. It is said to be an astringent; but how comes it to be reputed an astringent when hardly one grain of it remains in the stomach after the first puke?"

Orris root used to be used as a powder to absorb discharges from carious bone. Dr. Strother says in a foot-note: "Our modern surgeons make use of dry cotton to absorb these moistures with success." This apparently means that cotton-wool was introduced as a surgical dressing about that time.

Of peony we are told that some gather it before the new moon, when the sun is in Aries, before sunrise. This is the only reference to astrology in the book, except one other, where a particular plant is to be gathered at the waxing of the moon.

Under petroselinum (garden parsley) we have the following: "Care must be taken how we administer it to such as are subject to epileptic disorders; for it raises nidorous fumes and flatus's which by reason of their nimble parts soon reach the brain and hurry on dangerous symptoms. Moreover it excites venery and all medicines which provoke venery are hurtful to epileptics, inasmuch as the seminal parts are membranous and so are the brain-covers and both are thereby stimulated."

It seems curious to us now-a-days to talk about flatus reaching the brain, and we do not recognise much resemblance between the structure of the meninges and the testicles.

Of melissa (bawm) we are told that it is "of a taste gently pungent, and bitterish joined to a stypticity, and of a scent gratefully aromatic." It should be gathered in the spring before it flowers, because when it flowers it smells like "bugs bruised."

Tobacco is said to be of a poisonous and narcotic scent. He says:—"It is plainly narcotick from its viscid and fattish taste and smell by which it invisicates the spirits and retards their motion: but it must be confessed, we find little reason to suppose it comforts the spirits, either from its acrimony or its smell or by any of its effects. It purges serum and vomits strongly."

"In the Iliac Passion the smoak of tobacco taken glyster-wise and blown forcibly into the intestines is the most efficacious remedy known. It may after some time be repeated if the first don't purge them."

In the plague there is

"No plant like Tobacco; it exceeds all others."

I will, before concluding, give one or two examples of prescriptions. With regard to prescribing, he makes note that it is sometimes advisable to consult the patient's palate, otherwise "they are not swallowed and are thrown away."

Here is an ointment for burns:—"For burns I always use the following ointment and order it to be in readiness for domestic use. I order Leaks, Hensdung and Hogslard to be made up and apply it on occasion."

To make a poultice for leprosy:—Take six rotten apples and press them through a sieve; add oil of roses 2 ounces, a little of woman's milk; make a cataplasm to be apply'd to the part in pain where there is a leprous swelling."

Here, lastly, is a prescription for rickets. It is rather curious after the author's warning against too pompous a method of prescribing:—"Take leaves of Scordium, common Wormwood, Camomile, the lesser Centaury, of Carduus benedictus, of Southernwood, Pennyroyal, white Horehound, wild Thyme, Mint, Sage, Rue, Ground pine, Germander, Motherwort, and Lily of the valley, St. John's Wort, Golden Rod, Saxifrage and Calamint. Let them all be fresh gathered and cut them small. To one handful of each add Hogslard 4 pounds; Mutton suet and Claret of each 2 pounds; let them macerate in a pot and then boil them to the consumption of their moisture: then strain and make an ointment, with which anoint the belly and hypochondres; and also the armpits in a ricketty child for a whole month twice a day. This is Sydenham's prescription and I have found it of very great use in the case mentioned."

There would be some difficulty about inducing a chemist to make up such a prescription at the present time.

I have endeavoured to give a selection from the most interesting pieces of this book. Many more examples might be given, but these are enough to show that, in spite of the limited scientific knowledge of the period, the author and translator made what use they could of it to found a rational system of therapeutics.

I will conclude with the following extract, with which the preface closes:—"To be serviceable to mankind Learning is preferable to Wit: This is fitter for conversation and light entertainment, but that for the Cabinet. Wit is too volatile to wait for events, but learning is the best introduction to a patient enquiry. The man of application is curious and grapples with difficulties readily, and unravels them with ease."

Notes.

MANY who are well acquainted with the writings of "Cavendish" are probably unaware that the greatest authority on whist was a Bart's man. Mr. Henry Jones, who died on February 10th, received his medical education at this Hospital, and qualified in 1852. He ceased to practise in 1869. It was in 1862 that he published his book on "The Laws and Principles of Whist," under his now familiar pseudonym.

* * *

MR. T. J. HORDER, M.B., has been elected a Casualty Physician, vice Dr. F. E. Batten.

* * *

WE have received from Mr. R. W. Hornabrook, M.D.,

an excellent report on the Dharwar Plague Hospital, Bombay Presidency. It is a capital piece of work, and is adorned by capital photographs, illustrating natives undergoing inoculation, the morning inspection, and the dressing of convalescent patients.

* * *

THE question is often raised as to the hour of the day at which most deliveries occur. Mr. Godfrey Lowe, in an interesting paper read before the Lincoln Medical Society, answers this question as follows: "My experience of confinements is that exactly 25 per cent. occur between midnight and 4 a.m.; 22 per cent. occur during the next four hours, *i. e.* from 4 to 8 p.m.; only 10 per cent. happen during the four hours between breakfast and lunch; and only 11 per cent. between lunch and tea. Between 4 p.m. and 8 p.m., however, we are very busy, because we have to attend 21 per cent. of our cases, but we have the consolation of knowing that when we come to our dinner about 8, that we have only 11 per cent. to attend between then and midnight."

* * *

So that it appears that while midwifery cases kindly refrain from interfering with the morning and afternoon rounds, the hardworked practitioner has to attend 47 per cent. of his cases during the hours when, both in his own interests and in those of his other patients, he had much better be in bed. Midwifery is indeed a thorn in the flesh of the general practitioner; it is worse paid and occupies more time than the rest of his routine work. He gets the discredit of any mishap that may occur, and, to crown it all, he frequently has to sacrifice his night's rest, on which his health and general well-being depend so much. It is no exaggeration to say that midwifery fees in general practice are grossly disproportionate to the time employed. Many a practitioner who charges five shillings for a visit considers himself lucky if he gets two guineas for a midwifery case. Yet compare the amount of time spent in the two instances!

* * *

DR. CALVERT has been appointed Joint Lecturer with Dr. Lauder Brunton in Materia Medica, Pharmacology, and Therapeutics.

* * *

MR. ALBAN DORAN delivered the Presidential Address before the Obstetrical Society on March 1st. He dealt with the advancement of gynæcological surgery during the past fifty years in a most interesting manner.

* * *

DR. GEE's first Lumleian lecture was delivered on March 16th. In this he took up the subject of "The Causes and Forms of Bronchitis." Incidentally he raised a curious etymological point. "Croupous pneumonia is what Polonius would have called a vile phrase. It is amusing to note how the lowland Scotch word 'croup' (the cognate English word for 'roup'), which signifies a certain kind of noise, has come to be applied to a morbid exudation—a perversion due to foreign pathologists who could not have known the meaning of the word they were using or abusing. And thus croup, having undergone this strange metamorphosis in the course of his travels abroad, comes back disguised to his native land, and we receive him with open arms. Such are English ways."

* * *

WE should welcome correspondence from students on subjects of general interest. This announcement is made because there appears to be an impression abroad that such would not be published. This, we need hardly say, is erroneous.

* * *

THE tale of students' gazettes is now made complete by the publication of the *Charing Cross Hospital Gazette*. We have just received the first number, and extend a welcome to our new contemporary. It is to appear every two months, and we wish it all success.

* * *

TWO courses of Operative Surgery for the Final F.R.C.S. will be held; one beginning on April 15th, the other on May 1st. Those who wish to join should send in their names to Morris at once.

* * *

A dance will be given by the United Hospital Rifle Association at Addison Hall, Kensington, on Friday, May 26th, 1899. Tickets, price five shillings, can be obtained from H. E. Weekes, 19, Sinclair Gardens, W. and St. Thomas's Hospital, or Walton R. Read, St. Bartholomew's Hospital.

Amalgamated Clubs.

RUGBY UNION FOOTBALL CLUB.

ST. BART.'S *v.* NORTHAMPTON.

This match was played at Northampton on February 4th. We were without our halves, Ash and Scott, and Mayo from the three-quarter line. The ground was very hard from the recent frost. The first half Bart.'s started with the wind, the game up to half-time being very good. On re-starting snow fell very thickly, the wind blowing so strong that it was almost impossible to face it. Northampton scored freely. The game was stopped before full time on account of the weather. Final score—Northampton, 29 points; Bart.'s, *nil*. Team:

T. M. Body (back); F. C. Gillies, James, Roslin, and Wells (three-quarter backs); Ward, Carroll (half-backs); Robbs, Adams, O'Neill, Tosswill, Wilson, Plews, Arnould, and West (forwards).

ST. BART.'S *v.* UPPER CLAPTON.

Played at Upper Clapton on February 18th. Bart.'s went down two short, with Body, Mayo, James, Ash, Scott, Adams, Tosswill, and Amsler away. Only one substitute could be obtained, so we played one short. A very good game resulted in Bart.'s being defeated by 2 tries to *nil*. Team.

Nedwill (back); Gillies, Walker, Wells, Roslin (three-quarter backs); Wilson, Carroll (half backs); Robbs, O'Neill, Wilson, Plews, MacLaren, Scott (forwards).

CUP TIES.

ST BART'S *v.* WESTMINSTER.

This match, originally fixed for January 27th, was postponed on account of frost until February 6th, when it was played at Richmond, Bart.'s winning by 2 goals and 6 tries to *nil*. Carroll, Gillies, and James, in the three-quarter line, played well, whilst amongst the forwards O'Neill, Tosswill, and Wilson were the most prominent. Team:

T. M. Body (back); T. A. Mayo, J. B. Gillies, H. W. James, F. R. Carroll (three quarter backs); B. N. Ash, W. H. Scott (half-backs); A. J. W. Wells (captain), C. H. D. Robbs, H. C. Adams, A. O'Neill, L. R. Tosswill, H. T. Wilson, J. M. Plews, J. A. West (forwards).

ST. BART.'S *v.* ST. MARY'S.

This tie was played at Richmond on February 16th, Mary's winning by 1 goal and 1 try (8 points) to *nil*. Mary's started. The return was poor, play settling down in Bart.'s territory. Mary's showed themselves superior in the scrums, the Bart.'s forwards playing very badly. Nothing was scored until nearly half-time, when Mary's obtained a try, which was converted. About fifteen minutes from the start Adams wrenched his knee, and was obliged to go off; he returned later, but was practically useless. During the second half Mary's scored 1 try, the final score being—Mary's, 1 goal and 1 try (8 points); Bart.'s, *nil*. Team:

T. M. Body (back); T. A. Mayo, J. B. Gillies, H. W. James, F. R. Carroll (three-quarter backs); B. N. Ash, W. H. Scott (half-backs); A. J. W. Wells (captain), C. H. D. Robbs, H. C. Adams, A. O'Neill, L. R. Tosswill, H. T. Wilson, J. M. Plews, A. M. Amsler (forwards).

ASSOCIATION FOOTBALL CLUB.

This year's record is a good one, and notwithstanding the fact that Bart.'s do not hold the Inter-Hospital Challenge Cup, yet there is no doubt in the minds of those Bart.'s men who saw the match against London Hospital, that with any luck they would have won it on the day's play. And while on the subject of the final tie, though it was confessedly bad weather—it was snowing hard—yet nearly two hundred London Hospital men went down to see their team play, and twenty at the very most went down from St. Bartholomew's Hospital. Nearly a hundred per cent. of the members of the Hospital are members of the Amalgamated Clubs, and so confessedly take interest in some branch of sport, and yet the largest school of medicine in London can only send twenty men against London Hospital's two hundred for the final of the Inter-Hospital Cup Tie. There are only three such during the whole year. Yet public spirit comes not by recrimination.

Certainly Willett is to be congratulated on having got such a good team together, for there were no less than five vacancies to be filled at the beginning of the year. The inside forwards, Willett, O'Brien, and Ward, are capable of excellent combination, and were it not for the old hereditary hospital failing, viz. weakness in front of goal, would do a lot of scoring, and as a matter of fact both O'Brien and Ward have scored twenty-eight goals each this season. The former has great command of the ball, and passes most accurately. The half-backs are undoubtedly the weak spot in the team, though Masterman has proved quite an acquisition, and shines most at centre, where his tackling and passing are both good. Bostock played a very good game against London Hospital, and Miller and Bates are both very hard-working though scarcely scientific players. Of the backs Orton is as good as ever, and it was very bad luck his falling ill in the last Cup tie, though Thomas took his place very ably. Fowler, who is new this year, is undoubtedly one of the best backs we have had up for some time, and if he can be a little quicker in getting rid of the ball, should be invaluable next year. Butcher, the goal-keeper, is good in everything but Cup ties, where—we are sure through nervousness—he has been lamentably bad.

With very few of the present team out of their year, the Hospital should certainly have as good a team as has been seen for some time next year.

ST. BART.'S HOSPITAL *v.* ROYAL VETERINARY COLLEGE.

This match was played on Wednesday, February 8th, in very unpropitious weather at Winchmore Hill, and resulted in a win for Bart.'s by 3 goals to *nil*. The Hospital were only able to put a very moderate team in the field, Willett, Fowler, Ward, and Thomas being absentees. L. Orton, whose first appearance it was in the team since the vacation, played a very sound game throughout.

Despite the fact that the ground in many parts was under water and that there was a steady downpour of rain which lasted till the close of the game, our opponents were very keen on trying conclusions. After the game had been only a short time in progress, Marrett scored for the Hospital from a good pass by G. H. Orton. No further scoring occurred before half-time.

On restarting the game after half-time, O'Brien broke away and beat the opposing custodian with a fast cross shot. Our opponents' forwards, whose attempts up to now had been completely foiled by the brilliant tackling of Bates and L. Orton, got away, but were pulled up by L. Orton, Butcher clearing the shot splendidly. A few minutes before time O'Brien further increased the Hospital score to three, the game ending as above. Team:

H. H. Butcher (goal); F. E. Taylor, L. Orton (backs); G. W. Miller, T. Bates, C. H. Fernie (half-backs); H. N. Marrett, G. H. Orton, C. O'Brien, R. Walker, F. S. Lister (forwards).

ST. BART.'S HOSPITAL *v.* EALING.

Played on Saturday, February 18th, at Mill Hill Park, before a large and enthusiastic attendance. The game, which was very fast and well contested throughout, ended in a draw of 2 goals to 2. Willett losing the toss, O'Brien kicked off against the sun, but with the wind slightly in our favour. After some desultory play, Bart.'s forwards settled down, and taking the ball up the field, O'Brien scored for the Hospital from some pretty passing among the insides. Bart.'s did not hold the advantage long, as the right wing of the Ealing forwards got clear away and scored, giving Butcher no chance of saving.

On resuming the game, which still continued very fast and spirited, the Hospital had the best of the exchanges, but were unable to break through the Ealing defence until shortly before time, from a good run and centre by Lister, Ward obtained possession and added the second goal. Unfortunately, however, Ealing soon equalised, and nothing further being added to either score the game ended in a draw. Team:

H. H. Butcher (goal); T. H. Fowler, L. Orton (backs); F. E. Taylor, H. E. Thomas, T. Bates (half-backs), H. N. Marrett, J. A. Willett, C. O'Brien, V. G. Ward, F. S. Lister (forwards).

2ND XI. INTER-HOSPITAL ASSOCIATION CUP.

This Cup, which was instituted last year, and which was won by Bart.'s, can now be seen on the library table. Mr. Jessop has kindly bought the Cup, as the subscriptions for the entries, out of which it is to be paid for, are not yet sufficient, there being only five entries last year. This year, however, six hospitals have entered, viz. Bart.'s, Thomas's, Guy's, Mary's, London, Middlesex.

2ND XI. INTER-HOSPITAL CUP TIE.

Semi-final.—BART.'S *v.* LONDON.

This match was played at Winchmore Hill on Tuesday, February 24th, and resulted in a win for Bart.'s by 3 goals to 1.

London kicked off, Bart.'s being one man short at the start, and after about ten minutes' play scored from the left wing. Nothing more was scored at half-time, though Bart.'s pressed most of the time. After half-time the Bart.'s forwards got together, and a goal soon resulted from a scrum in front of goal. Shortly after this Walker scored from a good shot; Bart.'s continued to press, London, thanks to the excellent defence, never being dangerous. Just before time Walker scored again, and Bart.'s qualified for the final by 3 goals to 1.

INTER-HOSPITAL ASSOCIATION CHALLENGE CUP.

Final Round.

ST. BARTHOLOMEW'S *v.* LONDON.

This final tie took place on Tuesday, 21st March, at Northumberland Park ground, at White Hart Lane, before a very large number of spectators, most of whom were supporters from London Hospital. The ground was ruled playable, though covered with snow, and O'Brien kicked off for the hospital at 3.20. A good run by the Bart.'s forwards was checked by Wilson, and the London forwards obtaining possession the game was taken into the Bart.'s quarter, a shot from Wilson ending, however, fruitlessly. Some good play followed, the inside forwards, well backed up by Masterman, continually looking like scoring, but the shots went wide. Shortly after Butcher was called upon to save, and conceded a corner, after which Ward obtained possession, and passing to O'Brien the latter sent to Marrett, who centred too far ahead, the ball being returned by Green, and Thwaites obtaining sent in a good shot which only just skimmed

the bar. The rest of the play till half-time was played in a thick snowstorm, in which the spectators could with great difficulty recognise the ball or players. Nothing, however, resulted, and when half-time sounded the score stood 0—0.

On resuming, the weather brightened a little, but the snow made sure play very difficult; still the ball travelling from end to end kept the teams going at a great rate. Fowler, Masterman, and Thomas were repeatedly in evidence, and stopped some very dangerous looking rushes from the London forwards. The Bart's. forwards, looking as if they were going through, did not manage to get any close shooting, though Ward and O'Brien both put in some good long shots, and once a very smart piece of hustling by Walker and Ward only just enabled Enthoven to get the ball behind, thus conceding a corner.

A few minutes later the London outside right obtained the ball, and running well down centred to G. P. Wilson, who shot, but Butcher returned—only, however, to let the inside right, Hutcheson, send the ball into the net, a shot which Butcher should have saved. An appeal for "off-side" was disallowed. From this point onward the London Hospital players had the best of the game, and should have scored twice, but the opportunities were not taken advantage of. One run only during the last ten minutes of the game by the Bart's. forwards looked dangerous, the halves and forwards struggling valiantly to avert defeat, but the whistle blew with the score remaining London 1, Bart's. 0. London Hospital retain the Cup for the second year in succession. Teams:

Bart's.—H. Butcher (goal); T. H. Fowler and H. E. Thomas (backs); A. H. Bostock, W. R. Masterman, J. W. Miller (half-backs); R. Walker, V. G. Ward, C. O'Brien, J. A. Willett (captain), H. N. Marrett (forwards).

London Hospital.—Enthoven (goal); A. P. Wilson and P. A. Green (backs); H. Fletcher (captain), H. Thwaites, B. Whitington (half backs); A. Jeffries, A. Hutcheson, G. P. Wilson, H. Walker, and E. W. Grogono (forwards).

Of the players the backs and halves were good, Masterman being especially so, and looking well after Wilson. Bostock played a good game. The forwards, especially Ward, O'Brien, and Willett, combined well considering the ground, and were certainly unfortunate in not scoring, though in justice it must be said that the London Hospital defence was of the very best. R. Walker was the weak spot, but he was playing out of place, and with, of course, a new partner. Lister was very much missed.

The game itself was a good one, keen from start to finish, and only in the last ten minutes did London show any superiority.

HOCKEY CLUB.

January 7th.—*v.* HITCHIN.

This return match was played at Winchmore Hill, and resulted in an easy win for the Hospital by 8—1. The visitors, however, were not at full strength.

January 21st.—*v.* CRYSTAL PALACE 2ND.

Played in the mud at the Palace. The Hospital played one short for most of the game, which was evenly contested, the Palace winning just before time was called. Result—Palace won by 4—3.

January 25th.—*v.* KINGSTON GRAMMAR SCHOOL.

An even game at Kingston resulted in a loss by 1—2. The Hospital scored through Pennefather in the first half, but in the second the School played up, and scoring twice, won as above.

February 4th.—"A" TEAM *v.* SOUTHGATE 3RD.

A scrambling game resulted in a win for the Hospital by 3—0.

Problems in Diagnosis.

SOLUTION TO "PROBLEM" IN LAST MONTH'S "JOURNAL."

P. M.—"Hobnailed" cirrhosis of liver. Thrombosis of portal vein and its branches, leading to infarction, with great engorgement of a portion of duodenum and occlusion of its lumen. Gastric and intestinal hæmorrhage. Enlarged spleen. Chronic interstitial nephritis. Ascites. Obesity.

The infarcted gut is preserved as "Museum specimen No. 1956 G."

Abernethian Society.

ON Thursday, Feb. 16th, Dr. Griffith addressed the Society on "Management of Labour in Private Practice." He insisted primarily on due consideration being shown to the patient. There were certain questions which a doctor attending a midwifery case would be asked: (1) What day the confinement should be expected? (2) When is the nurse to come? It was not a good thing to have a nurse in the house at all before labour if this could be managed, but in the country that was obviously difficult. The nurse should be engaged to hold herself in readiness a week before the event. In the choice of a room for the confinement any glaring insanitary defects should be avoided. The bed should be a narrow one. The necessary chemicals should be got in some time before the expected confinement. Ergole was the preparation of ergot which he recommended. An initial examination six weeks before labour should be urged upon the patient. Friends should be duly informed of any abnormality with regard to the labour.

After a formal vote of thanks the meeting terminated. There were present about 180 members.

On Thursday, Dec. 17th, a special general meeting was held, when Mr. F. C. Borrow was elected additional Committeeman, vice Dr. W. Morley Fletcher. Mr. Jameson's proposal that two chess boards should be placed in the Society's rooms was not adopted. An amendment proposed by Mr. Whitaker, that the question be left open until the Chess Club had been amalgamated with the other clubs, was carried.

On Feb. 23rd a meeting was held, Mr. Stawell, Vice-President, in the chair. Mr. Ball showed microscopic specimens of cystin found in the urine of a patient under his observation.

Mr. Thursfield read a paper "Concerning Pleurisy." He said that probably most cases, not all, were due to the tubercle bacillus. In *diagnosis* Mr. Thursfield laid most stress on (1) dulness, with characteristic distribution; (2) displacement of viscera. There was not sufficient stress attached to the frequency with which well-marked bronchial breathing and bronchophony occurred. He pointed out that hæmorrhagic pleurisy was not always due to malignant disease, many other causes giving it, *e. g.* tubercle, cirrhosis, aneurism, &c. In discussing treatment, Mr. Thursfield argued that tapping should not be left too late, as sudden death may occur. The more fluid withdrawn the better. Empyema was essentially an abscess, and the pleural cavity should be opened and the abscess cavity thoroughly drained. An interesting discussion followed.

An ordinary meeting of the Society was held on Thursday, March 2nd, Mr. T. J. Horder in the chair. Dr. Andrewes read a paper on "The Causation of Summer Diarrhœa." Summer diarrhœa was not a symptom, but a disease. Its mortality was eighteen times greater in the summer than in the winter. As ætiological factors were mentioned (*a*) age; (*b*) food; (*c*) earth temperature. It was due to the presence of the microbe *Bacillus enteritidis sporogenes*, as was discovered by Dr. Klein in 1895.

The spores of this bacillus were found in the stools; their resistance was extreme, almost the greatest known. The bacillus itself is found in cultivated soil and in sewage, in conjunction with the *Bacillus coli communis*.

A discussion followed, and Dr. Andrewes in his reply recommended calomel, opium, and castor oil as sheet anchors in the treatment.

An ordinary meeting was held on Thursday, April 9th, Mr. T. J. Horder, President, in the chair. The names of gentlemen nominated to act as officers of the Society for the ensuing year were read. Messrs. Maxwell and Morland were appointed Auditors of the Society's accounts for session 1898-9. Mr. Paterson demonstrated his apparatus for use in prolonged administration of nitrous oxide gas to induce prolonged anæsthesia in operations about the mouth.

Mr. Coleman then read his paper on "Tuberculin." He first of all gave a *resumé* of Koch's work, which resulted in the separation and formation of tuberculin, and described the methods by means of which the fluids known as TA, TO, and TR were produced. TR is that now used for clinical work. The conclusions he came to were that TR is harmless, and that it is beneficial in selected cases, but that its expense was a serious argument against its use; that as a diagnostic agent the old tuberculin was of undoubted use when applied to cattle, and was a valuable aid when applied to man.

An interesting discussion followed.

The poll for the election of officers took place on March 16th between 12.30 and 1.30; and the number of candidates for the various offices excited much interest in the contest. Almost an unprecedentedly large number of votes were registered. At the Annual General Meeting held in the evening the following were declared duly elected:

Presidents.—Mr. A. R. J. Douglas; Mr. L. B. Rawling.

Vice-Presidents.—Mr. W. T. Rowe; Mr. H. D. Everington.

Secretaries.—Mr. E. M. Niall, Mr. R. Bigg.

Additional Committeemen.—Mr. J. Corbin, Mr. E. C. Williams.

The Annual Report was then presented, and after some lively discussion, adopted. A copy of this report is appended.

COPY OF THE REPORT OF THE COMMITTEE ON THE SESSION 1898-9.

In presenting the Annual Report your Committee have much satisfaction in reviewing the record of attendance at the ordinary meetings of the Society during the past Session. The number of members present has reached the high average of 44. This, however, is in some measure due to the exceptionally large attendance of 220 members at one of the recent meetings. At the inaugural address delivered by Sir Thomas Smith in October, 1898, the total of the audience was estimated at 550.

The two mid-sessional addresses given by the late Professor Kanthack and Mr. Berry were both largely attended.

At the seventeen ordinary meetings of the Society, papers were read by three members of the Hospital Staff, by the Casualty Physicians, by two present and seven past members of the Resident Staff, and the three remaining meetings were devoted to clinical and pathological discussions

During the past year 100 members have joined the Society, but only £88 4*s.* has been paid in subscriptions; the remainder are delayed. There is a balance in the bank of £18 3*s.* 8*d.*

In conclusion, your Committee feel that reference should be made here to the great loss sustained by the Society in the death of Professor Kanthack, always an enthusiastic member and a sincere friend of the Society.

Volunteer Medical Staff Corps.

THE Third Annual Ball given by the St. Bartholomew's and St. Thomas's Hospital members of the above corps was held at the Queen's Hall, Langham Place, on the 8th ult. The guests included members of the Hospital and Nursing Staffs, and a most enjoyable evening was spent. The music was supplied by the band of the Royal Artillery. Some 200 guests sat down to supper. It is satisfactory to record that in addition to being a thoroughly successful function socially, the Committee are able to report a good financial result, a surplus of £4 18*s.* 1½*d.* being in the hands of the Treasurer.

At a committee meeting of the company, held on the 3rd inst., it was unanimously resolved that the entire surplus should be handed over to the fund now being raised for the memorial to the late Professor Kanthack in recognition not only of his great services to the profession, but also of the fact that, in spite of the many demands upon his time, he was able to devote a portion of his leisure hours to the duties of surgeon-lieutenant in the Cambridge University Volunteers.

Kanthack Memorial Fund.

THE following is the list of subscriptions to the Kanthack Memorial Fund received up to March 18th. We may remind those who wish to subscribe that the Hon. Secretary of the Fund is Dr. J. H. Drysdale, 25, Welbeck Street, W.

	£	*s.*	*d.*
Mrs. L. Andrews	5	5	0
James Berry, Esq., F.R.C.S.	3	3	0
Harrison Cripps, Esq., F.R.C.S.	2	2	0
H. J. May, Esq., M.B.	5	0	0
W. P. Herringham, Esq., M.D.	2	2	0
F. E. Ratten, Esq., M.D.	1	1	0
E. W. Willett, Esq., F.R.C.S.	5	5	0
W. S. Church, Esq., M.D.	10	10	0
H. G. Read, Esq., M.R.C.S., L.R.C.P.	1	1	0
Sir T. Smith, Bart.	10	10	0
Sir James Paget, Bart.	2	2	0
W. S. A. Griffith, Esq., M.D.	10	0	0
F. W. Andrewes, Esq., M.D.	5	5	0
D'Arcy Power, Esq., F.R.C.S.	2	2	0
H. W. Page, Esq., F.R.C.S.	5	5	0
H. M. Fletcher, Esq., M.D.	10	10	0
A. E. Garrod, Esq., M.D.	5	5	0
P. Furnivall, Esq., F.R.C.S.	5	5	0
C. P. White, Esq., F.R.C.S.	5	5	0
W. G. Heasman, Esq., M.R.C.S., L.R.C.P.	5	5	0
C. A. Ballance, Esq., F.R.C.S.	5	5	0
G. E. G. Metcalfe, Esq., L.R.C.P.	1	1	0
H. Rundle, Esq., F.R.C.S.	2	2	0
G. Saunders, Esq., M.D., C.B.	2	2	0

	£	s.	d.
D. R. P. Stephens, F.R.C.S.	1	1	0
Anonymous	10	0	0
L. Thorne-Thorne, Esq., M.D.	1	1	0
R. F. Jowers, Esq., F.R.C.S.	2	2	0
C. P. Handson, Esq., M.D.	1	1	0
F. D. Bennett, M.R.C.S., L.R.C.P.	1	1	0
E. W. Roughton, Esq., F.R.C.S.	1	1	0
A. McC. Weir, Esq., M.D.	1	1	0
W. D. Stone, Esq., M.D., F.R.C.S.	1	1	0
G. N. Stephen, Esq., M.R.C.S.	1	1	0
Surg.-Maj.-General R. W. Rice	10	10	0
H. A. Ballance, Esq., F.R.C.S.	1	1	0
L. C. Glover, Esq., M.D.	2	2	0
J. A. Ormerod, Esq., M.D.	3	3	0
Sir Felix Semon, Kt.	10	10	0
W. S.	1	1	0
W. P. Digby, Esq.	1	1	0
S. J. Ross, Esq., M.B.	1	0	0
W. H. Maidlow, Esq., M.D.	0	10	6
Surgeon W. J. Codrington, R.N.	0	10	0
W. G. Clark, Esq., F.R.C.S.	10	10	0
H. J. Capon, Esq., M.D.	1	1	0
H. B. Maingay, Esq., F.R.C.S.	1	1	0
H. Willoughby Gardner, Esq., M.D.	3	3	0
T. S. Stevenson, Esq., M.D.	2	2	0
H. Huxley, Esq., M.R.C.S., L.R.C.P.	5	0	0
G. R. Murray, Esq., M.D.	2	2	0
H. T. Butlin, Esq., D.C.L., F.R.C.S.	10	10	0
F. de Havilland Hall, Esq., M.D.	3	3	0
J. Westlake, Esq., Q.C.	5	0	0
J. A. Hayward, Esq., M.D.	5	5	0
A. E. Wynter, Esq., M.D.	2	2	0
J. H. Lightbody, Esq., M.D.	2	2	0
G. H. R. Holden, Esq., M.D.	1	1	0
Arthur Kuttner, Esq., M.D. (Berlin)	10	0	0
F. P. Weber, Esq., M.D.	2	2	0
T. M. Legge, Esq., M.D.	3	0	0
T. Lauder Brunton, Esq., M.D., F.R.S.	10	10	0
G. C. Taylor, Esq., M.B.	1	1	0
W. Langdon Brown, Esq., M.B.	1	1	0
Sidney Martin, Esq., M.D., F.R.S.	3	3	0
C. Butler, Esq., M.D.	5	5	0
A. W. Blackwell, Esq., M.D.	0	10	6
Lovell Drage, Esq., M.D.	5	0	0
Hon. G. Scott	2	2	0
Captain H. A. Berryman, R.A.M.C.	2	2	0
T. J. Horder, Esq., M.B.	1	1	0
Total	£267	11	0

Reviews.

THE RADICAL CURE OF HERNIA, HYDROCELE, AND VARICOCELE, by C. B. Lockwood, F.R.C.S. (Young J. Pentland, London and Edinburgh.)

IT IS only of recent years that the ruptured have begun to realise it is not necessary to pass through life handicapped by a truss; but the general public, and even the medical profession, have yet to learn that every case of hernia is not suitable for operation. It is with this important question that Chapter I in the book before us deals. We have never met with a clearer statement of the indications for, and the points which contra-indicate, operation than is here given.

We would particularly recommend to the reader's notice those sections which distinguish between the radical and palliative operation—that is to say, between those cases in which a permanent cure is aimed at, and those in which the operation is undertaken to enable the patient to wear a truss. A right understanding on this point will prevent much disappointment.

In our opinion, scarcely sufficient space is devoted to the consideration of hernia in childhood. The author says:—"in infancy and childhood ruptures usually get well if properly treated with a truss." This sentence, we believe, needs modification, for we are convinced that many of these supposed cures relapse in later life. We have recently seen two young women, both of whom suffered from rupture in childhood and were "cured" by wearing a truss, but in each case the hernia reappeared during their first pregnancy.

Chapter II deals with the many important details, other than the actual operation, which make for success.

These few pages are specially worthy of attention, for they afford an instance of that thoroughness and care in the preliminaries which is one of the highest developments of modern surgery. Every detail is the result of a process of evolution, and the completed picture as given to us in these pages represents the highest point which the development has yet reached.

May we, as the result of our own experience, suggest one detail? Discomfort, and in many cases actual pain, is saved, if the precaution be taken of having the pubes shaved some hours before dressing. No matter how carefully the shaving may be performed, a number of superficial cuts and abrasions occur; these in their recent state, when irritated by the strong lotions, make the dressing a painful process. But if a few hours be allowed to elapse, not only does the dressing become almost painless, but the liability to eczema is diminished.

The next five chapters are devoted to the operation for inguinal hernia and the conditions which may complicate it. The operation is one which the author's experience has led him to regard as the best—a modification of the method of Bassini. The description is clear, and its value is enhanced by illustrations showing the different steps. The question of the advisability of operation during pregnancy is only slightly touched upon. The author has performed it twice with success. From an observation of four cases during labour, we have formed the opinion that reducible inguinal and femoral hernia are unlikely to suffer—the pregnant uterus acting as a natural pad in keeping the intestines out of the way. The same conditions could not, however, hold in the case of an irreducible hernia. The straining and powerful voluntary contractions of abdominal muscles which occur during the second stage of labour, also are liable to act prejudicially upon a recent wound. Would not the considerations point to the conclusion that whilst an irreducible hernia should be operated upon during pregnancy, a reducible one should be left alone until the pregnancy has terminated?

The statistical table on page 166 is a matter for sincere congratulation.

The more difficult and obscure subject of femoral hernia is next entered upon. The anatomy of its radical cure is described more clearly than in any account we have previously read. The procedure recommended for closing the hernial aperture is the author's own creation of suturing Hey's ligament to Cooper's. The remaining chapters of the book deal with ventral and umbilical hernia, and the radical cure of hydrocele and varicocele.

The radical cure of hernia has, of recent years, become one of the most frequently performed of surgical operations, and Mr. Lockwood has rendered the medical profession a service in publishing a manual so practical in character and so graphic in detail as the volume before us.

The book is essentially a record of personal experience and observation; it contains a minimum of theory and a maximum of fact, and the facts given are of such a kind as will prove most useful to the surgeon.

Any work from the author's pen we expect to be a model in clearness of diction, carefulness of expression, and in accuracy. These three qualities are possessed in a high degree by this work. But we confess to a rather unholy joy when we find Mr. Lockwood tripping in such expressions as "The presence of blood-clot within the abdomen causes pain by setting up *a kind of* chronic peritonitis;" and, "it (*i. e.* the size of the testicle) certainly did not alter so long as the youth was under observation; on the contrary *it seemed to grow a little bigger*."

SANATORIA FOR CONSUMPTIVES, by F. RUFENACHT WALTERS, M.D., M.R.C.P. (London: Swan, Sonnenschein and Co. 10s. 6d. net.)

This is an extremely useful work, dealing in detail with all the consumptive sanatoria of any size or importance in France, Germany, Norway, Russia, Switzerland, the United States, and British Colonies. For reasons which the author lamentingly states in his preface, but a few pages are necessary for such institutions existing in England, for England is practically destitute of any suitable provision for consumptive patients of the middle class. The English sanatoria consist of three small institutions, together capable of receiving twenty patients only. Others are, it is true, in course of erection, but these are still upon the same small scale. Dr. Walters makes an eloquent appeal for more home accommodation in this respect, and his remarks are given additional weight by an introduction to his book contributed by Sir Richard Douglas Powell. The last-mentioned authority points out, amongst other advantages, that "lessons in self-management are learned by those who sojourn for a time in such sanatoria; habits of self-discipline and attention to hygienic laws are acquired which are of much importance to those afflicted with consumption, and which have a favourable influence upon prophylaxis; and these persons when they pass again into the general community become centres of instruction in domestic hygiene."

More important even than these advantages seems to us to be the fact that so many middle-class patients either cannot afford to seek their sanatorium treatment abroad, or refuse to leave their friends and country for a possible cure a thousand miles away from them. Now that there is a reaction against advising every patient condemned to phthisis to fly abroad for treatment, and it is found that even in England and Scotland suitable places exist for the purpose, some enterprise in the matter of building sanatoria would probably reap its reward. We fear that the mere advantages gained by the uninfected community will not act as a stimulus here more than in other directions. The efforts of the Society for the Prevention of Tuberculosis, however, might well act along this line among others.

Many useful hints are given in the book as to the choice of a suitable sanatorium, and the description of the various institutions, with their advantages and disadvantages, will make the work of great assistance to consultants and others needing such help in advising their consumptive patients.

POSOLOGICAL TABLES, ETC., by WM. CRAIG, M.D., C.M., F.R.S.E. (Edinburgh: E. and S. Livingstone, 1s. net.)

This is a useful work, so far as the table of doses is concerned, and the appendix on poisons and their antidotes can be recommended. But the indexes of diseases with their most important remedies are useless, it not positively dangerous. We quote one extract:—

CANCER: *Locally*—Hemlock, poppy heads, permanganate of potassium, carbolic acid, belladonna, opium, chlorinated soda lotion.

Internally—Opiates.

Therapeutics do not lend themselves to this form of treatment in tables, and the sooner students realise this the sooner publishers will cease to supply what we must regard as an undesirable article.

Correspondence.

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

NEW ZEALAND EXPERIENCES.

SIR,—You were kind enough, Mr. Editor—or was it your predecessor?—to express a wish that I would give the readers of your JOURNAL—our JOURNAL—an account of my experiences in New Zealand. I am afraid that New Zealand experiences are quite as commonplace and uninteresting as those that occur in general practice in England. Besides, I am like Uriah Heep, such a very 'umble individual that it hardly seems worth trying to record anything. However, I can only do my best, and therefore send you the results of my observations in tabular form, suited for gentlemen preparing for their examinations:—

	Times.
Been to see people	1350
Been asked what was the matter	4000
Told	50
Did not know	2000
Romanced about it	1950
Major operations	0
Minor operations	25
Successful	25
Had acute arthritis following dysentery	1
Want to have it again	0
Asked out to tea, &c., in order to get free advice	9
Went	0
Going again	0
Given chloroform	7
Going to give it again	0
Given ether	27
Given valuable advice	1350
Been thanked for it	12
Asked to consultation	15
Advice taken	0
Gave to South Sea Missions	5/–
Gave for a dog	£1
Cash in hand	0

Yours, &c.,
F. W. GAIE.

Kaikoura, New Zealand.

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

POST-GRADUATE STUDY.

SIR,—Will you permit me to make a few comments on your temperate—and for the most part—fair article on post-graduate tuition?

Besides that which you cite as the only objection to mixing graduates and undergraduates together for purposes of instruction, there are others. And, so far from being prejudices likely to die, as you say, a natural death, they are real and reasonable objections which are intensified by actual experience of post-graduate tuition.

The post-graduate has no objection to "rubbing shoulders" with the undergraduate, but, when meeting him in an ordinary medical school, courtesy and a sense of justice compel the medical man to stand behind the student, in other words, often to see and learn

nothing himself. This objection is insuperable, and one analogous to it has compelled us, at the West London, to reluctantly refuse to admit any more ladies to the general post-graduate classes. We found the ladies modestly unwilling to press to the front, and the gentlemen equally resolved to "behave as sich." I hope you would not regard this as a "prejudice" for which a speedy "natural death" was desirable.

Secondly, post-graduate tuition is essentially different from under-graduate. It should be far less dogmatic and more conversational, more deferential, and less influenced by the examinations which dominate undergraduate teaching.

You may be correct, at least in some instances, in suggesting that the teachers at a special post-graduate school would be less experienced in general tuition than, *e.g.*, the staff of St. Bartholomew's; but what is wanted is *special* experience. Dr Darley Hartley, of Cape Town, a very able man of large experience as a post-graduate, recently described two members of the staff of one of the London hospitals which has no school, "As having mastered, more than anyone else he had met, the art of utilising the out-patient department for post-graduate teaching."

And now, on the other hand. I would ask you. Have not the staff of a great school like St. Bartholomew's quite enough to do without doubling their duties by undertaking post-graduate tuition?

In a general hospital with an active and zealous staff the material furnished by 150 beds is, for practical purposes, no more limited than in a hospital of 700 beds. The fewer the beds the more careful are the staff about the cases they admit into them. In these days in an active London hospital of 150 beds, on an average thirty operations are performed per week in the theatre. What post-graduate with surgical inclinations can find time and energy to watch more? Further, he has often opportunities of assisting, and can nearly always find a place in the circle next the operator. He does not require an astronomical telescope to make out whether the field of operation is the pharynx or the pelvis.

The hospital in which I have gained that practical experience of post-graduate tuition which emboldens me to address you on the subject is the West London. The staff on the surgical side, including the ophthalmic surgeon, the three house surgeons, and the four anæsthetists, numbers fourteen. Ten of these fourteen are St. Bartholomew's men. If, therefore, your JOURNAL exists, as I believe it does, in the interests of the students past and present of St. Bartholomew's, the West London Post-Graduate School has no small claim on you for justice, or even for sympathy and support.

I remain, Sir, your obedient servant,

C. B. KEETLEY,

Surgeon to the West London Hospital: formerly Assistant Demonstrator of Anatomy at St. Bartholomew's.

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

SOME COMPLICATIONS FOLLOWING ABDOMINAL OPERATIONS.

SIR, I have read with great interest in the ST. BARTHOLOMEW'S HOSPITAL JOURNAL of February last the paper by Mr Williamson on "Some Complications following Abdominal Operations." Like him, I have had a large number of laparotomies under my care. I have a firm belief in the efficiency of intra-venous saline injections, to which I am in the habit of adding 1 oz. of brandy and 5 minims of liq. strychninæ. Where the abdomen is not drained (and every year drainage is employed less), it has been in some cases filled with hot saline solution, thus converting the peritoneal cavity for the time being into an internal hot-water bag. This fluid is not of much immediate use to the patient for circulatory purposes, and may, therefore, have to be supplemented by intra-venous injection. If the peritoneum is filled with saline solution it cannot secrete any large amount into its cavity, which in one case appeared to be the immediate cause of death in a patient a few hours after operation for a ruptured tubal pregnancy. The woman was fairly well after the operation, but at the end of four hours she collapsed and died. I opened the abdomen at once, to satisfy myself that there was no hæmorrhage, and found the peritoneum distended with quarts of peritoneal fluid. Filling the abdomen with saline solution possibly also tends to prevent adhesions. The injection of warm water *per rectum* as a "thirst enema" is most useful. I have a strong suspicion that many of the so-called "nutrient enemata" act largely by supplying the patient with fluid. Another advantage of supplying the patient with large quantities of fluid is that it stimulates renal secretion, and so enables the patient, if infected, to excrete large doses of poison. I have recently operated on a ruptured tubal pregnancy in which the extravasated blood was infected, probably from the rectum. I filled the peritoneum with 5½ pints of hot saline solution, and injected 8½ pints with 1 oz. of brandy intravenously. The patient excreted large quantities of urine, and was thus saved from a fatal septicæmia.

With Mr. Williamson, the more abdominal cases I see the more am I convinced of the importance of the pulse as a danger-signal. It is not easy to convince nurses that a rising pulse, with a temperature slightly raised or even falling, is a cause for any anxiety. Morphia, by relieving pain and slowing the pulse, masks but does not prevent the poisoning process, which the surgeon is then apt to appreciate too late.

I am, yours faithfully,

C. HAMILTON WHITEFORD.

5, Sussex Terrace, Plymouth.

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

ABERNETHIAN SOCIETY'S ELECTIONS.

SIR,—Many of those who listened to the farewell speech of the outgoing President of the Abernethian Society, at the Annual General Meeting, must have been glad that for once the custom of mere compliment was departed from. The reform of the franchise is certainly urgently needed at this Society's elections. It is to be feared that he advocated a counsel of perfection in suggesting that no one should be entitled to vote who has not attended some of the meetings during the session. But the last election brings out one of the absurdities of the present system very vividly. The average attendance during the session was 44, yet the votes recorded at the election of officers was 321! This means that those who are really interested in the Society can play little part in the choice of their own officers. Yours, &c.,

ABERNETHIAN.

Appointments.

BELDING, D. T., L.R.C.P.Lond., M.R.C.S., has been reappointed Medical Officer of Health by the East Dereham Urban District Council.

* * *

CORBEN, CHARLES, L.R.C.P.Lond., M.R.C.S., has been appointed Public Vaccinator for the Caldicott District by the Chepstow Board of Guardians.

* * *

DODSON, G. E., M.R.C.S., L.R.C.P., appointed House Surgeon to the Norfolk and Norwich Hospital.

* * *

O'SULLIVAN, H. D., M.B., B.C (Cantab), appointed Assistant House Surgeon to the Wolverhampton and Staffordshire General Hospital.

* * *

ROWLAND, P. W., M.B.(Lond.), M.R.C.S., L.R.C.P., appointed House Surgeon to the Out-patients at the Children's Hospital, Great Ormond Street.

* * *

VAUGHAN, H. LL., M.R.C.S., L.R.C.P., appointed Assistant House Surgeon to the County Hospital, Guildford.

Birth.

FURNIVALL.—On March 18th, at 39, Welbeck Street, W., the wife of Percy Furnivall, of a daughter.

ACKNOWLEDGMENTS.—*Middlesex Hospital Gazette, St. Thomas's Hospital Gazette, Nursing Record, Guy's Hospital Gazette, London Hospital Gazette, Charing Cross Hospital Gazette. The Student. St. Mary's Hospital Gazette.*

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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, *Advertising Agent, 29, Wood Lane, Uxbridge Road, W.*

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St. Bartholomew's Hospital Journal,

APRIL 14th, 1899.

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

WHEN the serious historian of the future comes to deal with our scientific, social, and economic advances made during the nineteenth century, he will find himself confronted by a curious growth that has sprung up alongside these, and made itself especially conspicuous through the closing decades of the last hundred years. This strange product we would like to term exotic, but we dare not; it is terribly indigenous. Habitation we have given it, but not a name; Linnæan nomenclature knows it not. We refer to what we may call the "Anti" mind. Such is our suggested generic name; the species are better recognised, anti-vivisectionists, anti-vaccinators, anti-Pasteurites, anti-alcoholists, anti-meat-eaters, to mention only the more corporate or organic groups. There are others of less widespread distribution, apt, however, to affect the same soil as either or several of these. For the "Anti" mind illustrates the law of symbiosis to an astounding degree; no hitherto studied fungus more so. Indeed, we know some men in whom this phenomenon is so remarkably seen that the scoffers amongst us have been known to sum them up as anti-everything-except-humbug. But the peculiarity of mind which enables a man ("from sheer cussedness" it would almost seem; "from honesty of conviction" we are asked to believe), to run counter to the most generally received and proved principles of human knowledge, often wrested from nature through the toil of ages, is, scoffing apart, of no small interest. And not of interest merely, there's a humour in the thing. We can fancy how Charles Lamb, that prince of humourists, would have loved to add this man also to that motley company he was wont to gather together for the sake of their divers mental twists.

There's a humour in the thing, we said; yes, but there's a danger also. We have opened our gates to these and other strange guests, so that to-day sees us actually discussing matters with that strangest sect of them all, the Christian Scientists, whose weird doctrine is able to deprive its believers, and those in their power, of the simplest and most obvious human assistance. However, this is perhaps but a small danger: Major Lesters and Harold Frederics cannot be every-day patients. But when the "Anti" mind gets hold of our system of party politics, it attacks us in a very weak spot. It has done so, and, for a mere party catch-word to get votes, we find ourselves sacrificing the safety of the country's hygiene, and becoming a laughing-stock among the nations. Our "conscience-clauses," "freedom of the subject," and what not, are very fine things to talk about, but not so safe for basing our public health upon.

Doubtless the "Anti" mind, like the poor and the rickets, will be always with us; there's a perversity about the mental attitude we are discussing that bespeaks it born for an existence co-equal in time with that of human nature itself. Yet the fantastic shapes so often adopted in the course of its life-history should, one would suppose, appeal to its reason at times. If a man finds, with Dr. Johnson, that it