

FIRST CONJOINT.—*Biology*.—C. DIX, T. H. Fowler, H. P. Margetts, J. K. N. Marsh, J. C. Sale, A. E. Soden.

SECOND CONJOINT.—*Anatomy and Physiology*.—T. W. Brown, H. Burrows, W. P. Dyer, H. W. Ilius, J. W. Illius, G. J. A. Leclezio, J. O'Hea, G. H. Horton, R. Walker.

SECOND CONJOINT.—*Anatomy*.—E. F. Crabtree.

SECOND CONJOINT.—*Physiology*.—W. M. JAMES.

PRIMARY L.S.A.—*Biology*.—C. F. Bluett. *Materia Medica*.—G. R. Lucas, C. C. Morgan. *Anatomy*.—T. P. Allen, C. Fisher, J. E. Griffith, D. Jeaffreson, T. Young. *Physiology*.—T. P. Allen, C. Fisher, W. H. Goodchild, J. E. Griffith, D. Jeaffreson, T. Young.

Obituary.

OLIVER PEMBERTON, F.R.C.S.

We regret that we have to record the death of Mr. Oliver Pemberton, Coroner to the City of Birmingham, and Consulting Surgeon to the General Hospital. He died on March 7th at Whitacre, near Birmingham, after a short illness, at the age of seventy-two. Mr. Pemberton was the son of a Birmingham manufacturer, and was born in 1825. He was educated at King Edward's School, and at the age of seventeen began his medical career as apprentice to Mr. D. W. Crampton, one of the surgeons of the General Hospital. Shortly afterwards he entered as a student of St. Bartholomew's, pursuing his studies under such distinguished teachers as Lawrence, Stanley, and Burrows. He became a Member of the Royal College of Surgeons in 1847. After qualification he returned to Birmingham, and became Surgeon's Assistant to the General Hospital. In 1852 he was elected Honorary Surgeon to the General Hospital, a position which he held for forty-one years, till 1891, when he was elected coroner. He was throughout this time a very active teacher in the Birmingham Medical School, holding from 1853 to 1858 the Professorship of Anatomy at Queen's College. From 1867 to 1892 he was one of the Professors of Surgery. In 1878 he became a Fellow of the Royal College of Surgeons, and in 1885 was elected to the Council of the College, a position which he held up to the time of his death.

In addition to holding the position of coroner, he was at his death J. P. to the County of Warwick, Consulting Surgeon to the Skin and Lock Hospital, Birmingham, and ex-President and Emeritus Professor of Surgery to Mason's College. Amongst his writings are *Clinical Illustrations of Cancer*, published in 1867, the *History, Pathology, and Treatment of Melanosis*, 1858; *Excision of the Knee-joint*, 1859. He gave the Address on Surgery at the Birmingham meeting of the British Medical Association in 1872, and in 1884 he delivered the Ingleby Lecture on "The Operative and General Treatment of Cancer in the Female Breast." He contributed, moreover, many papers on surgical topics to the *Lancet* and *Medico-Chirurgical Transactions*. In 1894, he gave the Bradshaw Lecture on "The Influence and

Authority of Professor Syme in Surgical Science." In October, 1889, the Abenethian Society of our School had the pleasure of hearing from him an introductory address on "The Progress of Surgery—a Retrospect of Forty Years," an address teeming with useful information and interesting personal anecdotes of the most distinguished surgeons of the time. Mr. Pemberton was a most ardent admirer of Sir James Paget, of Professor Syme, of Sir William Laurence, and of Sir William Savory.

Mr. Pemberton married in 1851 the daughter of Mr. Daniel W. Harvey, M.P., and leaves his widow two sons and three daughters.

On going to press we regret to hear of the death, on March 13th, of Mrs. Pemberton, the widow of Mr. Oliver Pemberton, in her seventieth year.

Reviews.

STUDENTS' MEDICAL DICTIONARY. By GEORGE M. GOULD, A.M., M.D. 8vo. Price 14s. London: H. K. Lewis. Tenth Edition.

This excellent work needs little introduction from us. The present edition has been to a great extent re-written and enlarged. The definitions are clearly and succinctly given, and should be of great assistance to anyone beginning the study of medicine, or of its more specialised branches. In some respects the book is more than a simple dictionary. Several useful tables are given, not the least useful of them, in the present state of nosology, being a "table of eponymic diseases." The difficult matter of pronunciation has been treated with fair success, but many of the methods of pronunciation given are rather those in use on the other side of the Atlantic than those we are accustomed to hear in the London medical schools. We commend the book to those who require a Medical Dictionary, and feel confident that they will find all they need in the work before us.

Births.

BENJAMIN.—On March 27th, at the Old Hall, Dorrington, Shrewsbury, the wife of J. K. Kinsman Benjamin, M.R.C.S., L.R.C.P., of a son.

DOVE.—On February 15th, at Stapleton Hall Road, Stroud Green, the wife of Percy W. Dove, M.B.Lond., M.R.C.S., L.R.C.P., of a daughter.

ECCLES.—On March 25th, at 124, Harley Street, the wife of W. McAdam Eccles, M.S., F.R.C.S., of a son.

MOORE.—March 5th, at 37, Lee Road, Blackheath, the wife of Edward James Moore, M.A., B.M., B.C.L.Oxon, of a son.

NEWINGTON.—On the 9th March, at The Grange, Edenbridge, Kent, the wife of Charles W. H. Newington, M.R.C.S., L.S.A.; L.R.C.P., of a son.

NIAS.—March 8th, at 5, Rosary Gardens, South Kensington, the wife of J. B. Nias, M.D., of a daughter.


Deaths.

PEMBERTON.—March 7th, at his residence, the Quarry House, Over Whitacre, Warwickshire, Oliver Pemberton, F.R.C.S., J.P., Coroner for the city of Birmingham, in his 72nd year.

PEMBERTON.—On the 13th March, at the Quarry House, Over Whitacre, Warwickshire, Anna, widow of the late Oliver Pemberton, F.R.C.S., J.P., Coroner for the city of Birmingham, and only child of the late Daniel Whittle Harvey, M.P. for Colchester, and Chief Commissioner of Police for the City of London, in her 70th year.

ACKNOWLEDGMENTS.—*Guy's Hospital Gazette*, *St. George's Hospital Gazette*, *St. Thomas's Hospital Gazette*, *St. Mary's Hospital Gazette*, *The Gyroscope*, *The Student* (Edinburgh), *The Nursing Record*, *The Charity Record*, *The Hospital*.

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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.

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St. Bartholomew's Hospital Journal,

APRIL 14th, 1897.

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

Some Chapters on Pneumothorax.

By SAMUEL WEST, M.D.

I. THE PHYSIOLOGICAL CONSEQUENCES OF PERFORATION OF THE LUNG.

AS soon as the air has gained access to the pleura the elasticity of the lung comes into play and leads to its collapse. Whether the elasticity of the lung is alone sufficient, as is often stated, to produce complete collapse or not is a question which is of more theoretical than practical importance in pneumothorax; for in most cases, in the early stages, the air enters the pleura on inspiration with greater ease than it can escape on expiration, and thus there is added to the forces tending to

produce complete collapse of the lung the compression of it during expiration. The result is that in a very short time the lung becomes completely collapsed and airless.

If the lung be free from adhesions it lies shrunken about its root and flattened against the vertebrae. If, however, there be adhesions it will contract in an irregular fashion. If the adhesions are at the apex, as they commonly are, the contraction of the lung takes place in a more upward direction. If the adhesions be in front, along the sternum, the lung may be flattened sideways and lie like a pancake between the sternum and the spine. In such a case as this the heart and mediastinum may be fixed in their usual place, and no displacement of organs occur. When the adhesions are limited the lung in the corresponding part may be drawn out into a long band, which I have seen stretch across the pleura and be some inches in length.

These adhesions and the peculiarities of contraction of the lung to which they lead it is important to bear in mind, as they may explain some of the irregular physical signs occasionally met with.

The effect of the collapse of the lung on the affected side is to render it absolutely useless for the purposes of respiration.

Displacement of organs.—The heart and mediastinum are firmly fixed to the spine behind and but loosely attached to the sternum in front, so that they are capable of considerable displacement, much as a door swings on its hinges. The mediastinum occupies its usual place in the middle line because of the elasticity of the two lungs which balance it on either side. If then the elastic traction of one lung be abolished, as it is in pneumothorax, that of the other side, being unopposed, comes into play and drags the heart and mediastinum over on to the sound side. This displacement is the necessary consequence of pneumothorax if the mediastinum be free to move, and it can only be absent under two conditions—first, when the mediastinum is fixed by adhesions; or secondly, when the other lung has also lost its elasticity or power of retraction.

Although, as Douglas Powell showed, elastic contractility

of the sound lung is of itself sufficient to account for the maximum displacement of the heart and mediastinum, still it is supplemented, at any rate in most cases, by the expiratory compression, as already described.

The effect upon the opposite lung in a case of pneumothorax, therefore, is considerable; for, whereas it formerly filled the whole of that side of the thorax, it now occupies a space so much smaller by the room that the displaced heart and mediastinum take up. This may be roughly estimated at perhaps a quarter. If, for the sake of argument, we assume that the two lungs may be represented in capacity by 5 for the right and 4 for the left we have a reduction in the respiratory capacity in the case of pneumothorax which we may express as follows:—The total respiratory capacity of the two lungs—the whole respiratory capacity of the one and a quarter of the other. In figures this would be

$$\text{For right pneumothorax, } 9 - (5 + 1) = 3.$$

$$\text{For left pneumothorax, } 9 - (4 + \frac{1}{4}) = 3\frac{3}{4}.$$

Thus the total respiratory capacity of the lungs is reduced considerably more than a half, it may even be as much as two thirds, and this on the assumption that the opposite lung is healthy. Where that lung is also the seat of disease, the reduction in respiratory capacity will be still greater.

The physiological or functional capacity of the lungs is, however, still further reduced for other reasons. The collapse of the lungs as a whole is associated with a proportionate collapse of the vesicles individually, which not only contain a smaller volume of air, but also offer a smaller aerating surface on which the blood-vessels are exposed to the air.

To some extent an attempt is made to compensate for these defects by increase in the depth and number of respiratory movements, but very ineffectually, while the inspiratory forces are greatly diminished by the fact that only one side of the diaphragm has any effective action at all.

These defects are grave enough, but there is still another, which is perhaps still more important than either, viz. the sudden embarrassment of the circulation which pneumothorax causes.

In the first place, the one lung left is suddenly called upon to do the duty of two. The right heart goes on attempting to pump its usual amount of blood out, but there is only one lung for it to pass into. Unless the blood can pass through the lungs with at least twice the normal rapidity (and that is clearly impossible) the blood must accumulate in the lungs; the vessels will become distended and the lungs congested. As the result of this, the free exchange of gases in the vesicles of the lung between the blood and the air is impaired, and thus the passage of the blood through the lung capillaries is rendered more difficult than before. The heart endeavours to overcome the obstruction by beating more rapidly and more forcibly, but soon it fails, and then the difficulties of the

circulation are still further increased, and the already failing heart becomes still more distended.

As long as the remaining lung and the heart are able to cope with the extra work thus thrown upon them, the lung will yield no physical signs; but as soon as the work becomes too much for them, the congestion of the lung will show itself in the usual way with the signs of bronchitis and sometimes with hæmoptysis, while the failure of the right heart betrays itself by increasing dilatation, irregularity, and feebleness of action.

Thus the end may come in two ways, either from congestion of the lungs or from over-distension of the heart. This is the condition appropriately named by Wintrich "*Insuffisance aigüe du poumon.*"

In the causation of the urgent symptoms time is a very important factor. It is not so much that one lung is helpless and the other has to do double duty, but that the change is so sudden that neither lungs nor heart have had time to adjust themselves to the altered conditions. Although in pleuritic effusion one lung may be as completely collapsed and useless and the displacement of organs to the opposite side may be as great as in pneumothorax, still such urgent symptoms are rarely seen. The difference is due to the fact that in cases of pleuritic effusion the changes have been more or less gradual, or at any rate not nearly so sudden. At the same time, even in pneumothorax, when the patient does not succumb at once, if the heart and the lungs be healthy they may adjust themselves to the altered conditions and the urgency of the symptoms then gradually subside.

The great danger of pneumothorax is during the first hour or so after its occurrence, and the immediate prognosis improves with every hour that life is prolonged.

The urgency of the symptoms of pneumothorax depends, therefore, principally upon the suddenness of the change in the respiratory conditions, and next upon the strength of the heart and the condition of the opposite lung.

The maximum change is met with in cases where the previous health has been good and where the lungs have not been obviously diseased. Accordingly, the most intense symptoms in pneumothorax are met with in those who have been previously apparently in good health; while, on the other hand, in some cases of well-marked phthisis the symptoms may be so slight that pneumothorax may be overlooked. This apparent paradox is intelligible if it is looked at from the point of view of the amount of change in the respiratory conditions which is produced in the two cases. Thus, where the patient has been in apparently good health previously, and the lungs are but little diseased, the displacement of organs, and the consequent collapse of the opposite lung, reach their maximum, while the congestion of the opposite lung is extreme, the patient being full-blooded, and all the nutritive processes in full activity. On the other hand, if the patient has been ill for some time, as

for example, in most cases of phthisis, the amount of blood in the body, and the consequent congestion of the opposite lung, is much less; moreover, one lung has probably for a long time been doing little work, and it may really make but little difference in the respiratory conditions, whether the one lung is useless on account of phthisis, or because it is collapsed as the result of pneumothorax. On the other hand, if the lung on the opposite side be also extensively diseased, the reduction in respiratory capacity may be so great as to be incompatible with life. Yet it is extraordinary how little lung seems necessary in some cases for mere existence, so that even in advanced cases of phthisis pneumothorax sometimes produces hardly any symptoms. Other things being equal, the strength of the heart (which also depends greatly upon the general strength of the patient) will largely influence the power the heart may have of dealing with the altered conditions when the symptoms are urgent.

So we find in some cases of advanced phthisis the occurrence of pneumothorax may lead, not to the ordinary symptoms of pneumothorax, but to cardiac syncope, which may end in sudden death, or a long collapse, from which the patient may never rally.

Megrim cured by Abstinence from Meat (Haig's Megrim).

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

THE following cases are specimens of a class of sick headache that well repays attention because it can be cured.

Benj. C. A—, a male Jew æt. 12, has had headaches ever since early childhood. They have gradually become more frequent, and now occur twice a week. They are general, and not one-sided. They usually come on at midday. He becomes very pale, has to lie down, vomits, then goes to sleep and wakes up better.

He has already been treated with spectacles by an oculist, but without effect. His diet was carefully examined; it appeared to be thoroughly wholesome. No fault could be found with it on ordinary principles. I therefore advised to entirely leave off butcher's meat, and his mother was sensible enough to carry out the treatment. During the next fortnight he had but one headache instead of four, and in the next month one only instead of eight. I gave him no medicine.

Ethel W—, æt. 20, a healthy-looking girl with a fresh colour, has had megrim ever since she was seven years old. The headache used to come once in six weeks, but has gradually become more frequent, and now seizes her once a fortnight. It begins with epigastric pain and nausea; sudden headache over one eye follows, and hemianopia

on the same side. She becomes a livid white, has repeated vomiting, and her fingers become numb. She goes to bed, and is better next morning.

I at first made her take a tea made of guarana when she felt the attack impending, and for a month this kept the headache off. But after that she had a whole week of indigestion, vomiting, and pain in the left temple, and an attack of vertigo and hemianopia to end it.

The eyesight and fundus were quite natural.

After this I persuaded her to give up butcher's meat, and with very happy results. I saw her from time to time during the next few months, and she almost entirely lost the headache.

In neither of these cases was there any affection of the teeth, nor any of the ordinary symptoms of indigestion between the attacks of megrim. Nor could I trace in the family history of either patient gout, rheumatism, or any nervous disease.

This treatment of megrim by abstinence from butcher's meat, and if necessary from other articles of diet, was introduced by Dr. Haig several years ago. He supported it on a theory which I believe to be entirely unfounded, and which has not been confirmed, that the symptoms were due to the circulation in the blood of the salts of uric acid, and other consequences of this. But be the theory right or wrong, I am sure that for a certain set of cases the treatment is successful. I think it worth while to call attention to it, because I do not find it mentioned in ordinary medical writings with the respect it deserves.

These migrainous symptoms are not alone. There are a considerable number of people, both men and women, usually of a nervous temperament, and very often, like patients with megrim, of powers much above the average, who constantly complain not of pain, but of discomfort in the head. They have a sense of fullness, and even of "swimming" in the head; they are unable to do mental work after luncheon, and they complain of a number of little things which one is very much inclined to treat with contempt. It is well worth while in such cases to try what abstinence from red meat will do for them. Most of them have already learnt to abstain from beer or wine, but if not they must be deprived of these things too. It is not the primary digestion that is at fault. They do not usually have pain or flatulence, or a furred tongue. But, for some as yet undiscovered reason, while fish, fowl, milk, and the vegetable proteids are assimilated well, red meat is not.

I have known several of these people entirely relieved from their symptoms by this treatment, and I have even known a person so treated recover the power to drink wine, which used at one time always to disagree.

I should say, to avoid disappointment, that cure is not sudden in these cases, though it is rapid. An occasional recurrence at first of the headache or of the sense of discomfort must be expected.

Pathological Jottings.

By A. A. KANTHACK, M.A., M.D., Deputy for the Professor of Pathology, Cambridge University.

V. ACUTE INFLAMMATION.

TO give a definition of Acute Inflammation is almost an impossibility. Numerous attempts have been made from time to time, but it must be confessed that none of them have been altogether successful. We need not go back to Virchow, because his views on this subject belong to the past and have been forgotten by a precocious generation; moreover few people now-a-days read his works, although they are full of treasures. More recent definitions have been supplied, notably by M. Metschnikoff and Professor Adami. The former, studying inflammation chiefly in its relation to bacteria, builds up a theory upon phagocytosis as a foundation. He observes the changes in mammals, frogs, crustaceans, amœbæ, and finds that phagocytosis is the one phenomenon which is seen in all animals in the struggle against micro-organisms, and therefore argues that it is the *primum movens* of inflammation. Such reasoning is unsound, because the analogy is incomplete, and it is highly questionable whether we can analyse such a process as inflammation, which is extremely complex, and, so far as it is known to us in its true form, occurs in extremely complex animals by going back to such simple animal forms as daphnia and amœba. We might as well try to study mental activity in man and the higher animals by examining an amœba. A process occurring in an animal possessed of highly differentiated nervous and vascular systems, the tissues of which, moreover, are highly complex, cannot be compared to any process observed in an animal the structure of which is very simple, or is represented by a single cell. Structure can be traced more easily and convincingly by the evolutionist; it is, however, a different matter when we are dealing with functions, and what are vaguely called processes or reactions. In defining inflammation, or in describing it, we must restrict ourselves to classes of animals homologous in structure, and known to react by what we recognise as inflammation.

Professor Adami defines inflammation as *the local attempt at repair after an injury actual or referred*. This definition covers too much ground; it includes phenomena which no histologist would or could regard as inflammatory. If we take Professor Adami literally, the constant renewal of the cuticle would be inflammation. An injury—as, for instance, superficial epithelial lesions—may be repaired without what is generally recognised as inflammation, *i.e.* by regeneration and *direct* repair. Some low forms of animal life are capable of regenerating any part or parts of their body. Regeneration is not the same as repair by inflammation, or *indirect* repair. There is no valid reason of ex-

tending the meaning of a term so as to make it answer the requirements of a definition. We know inflammation by its phenomena and its appearances, and by the changes in the tissues, and unless all these are present are we justified to speak of inflammation? Here, as elsewhere, we must be strict in our terminology. A certain process or an attempt at repair in a low form of animal may in some or in many of its phenomena resemble inflammation, yet without being inflammation; just as a cutaneous papilloma may resemble a squamous-celled carcinoma without being a carcinoma. It is unsafe to be too philosophical; inflammation is a complex process which occurs in complex tissues; our criterion of inflammation is what we know to occur in such tissues, and we are not justified in calling inflammation what does not agree with our observations on animals which show the recognised reactions of inflammation in their tissues.

We must start from this, and we shall find that acute inflammation is a reaction of mixed tissues which occurs only in man and other vascular animals; it is a uniform process, varying, no doubt, in its different types, but in degree only, not in kind; there is a uniformity in the pathogenesis, progress, and morphological attributes of acute inflammatory conditions which is so striking that we must demand, that nothing be called inflammation, unless it presents all the essential phenomena which the study of disease in man and other vascular animals has revealed to us. To select phagocytosis, or chemiotaxis, or new formation and repair as essentials, and making them the corner-stones of theories of inflammation which are rendered more attractive by an appeal to comparative anatomy and evolution, is unjustifiable; phagocytosis, chemiotaxis, and proliferation are concomitant, or it may be constant, phenomena of acute inflammation, and each one of them by itself can readily be traced back from the highest to the lowest form of animal; but surely it is not sound reasoning to evolve the whole process of inflammation from one or two of its phenomena, especially when such phenomena are extremely primitive protoplasmic properties. Evolution may teach us how a property or a character has been acquired, it may tell us something of the phylogenetic origin of an organ or a process; but it does not pretend to assert that a complex process in a higher animal type, which perfectly or imperfectly can be traced back to some property or function in a low animal type, is identical with this property or function. In appealing to evolution we constantly lose the thread, and find many gaps which we cannot fill up. Inflammation, as it is known to the human pathologist, occurs only in certain higher animals. *Without a blood-vascular system inflammation is impossible*. This is the demarcation line, and therefore we cannot go back to *avascular* animals for an explanation. A vascular animal reacts to a certain stimulus by inflammation, while the same stimulus in an avascular

animal may produce some phenomenon which also occurs in inflammation, but itself is not inflammation.

Taking acute inflammation as we find it, and analysing the process, we come to the conclusion that (1) without blood-vessels there is no inflammation, and (2) it is a reaction of vascular connective tissue or of connective tissue, itself perhaps avascular, but in immediate and close relation with the vascular system. Inflammation of epithelium does not exist, and nobody has ever yet observed true inflammation in *really* avascular connective tissue, such as cartilage. Those who believe in the existence of acute inflammation in avascular tissue invariably quote experiments made on the cornea. Now no doubt the cornea is anatomically an avascular tissue, but it is in extremely close connection with the circulation by means of the vessels at its periphery and its numerous lymph channels. When we produce so slight a lesion of the cornea that nothing more follows than a limited destruction and proliferation of the corneal corpuscles we are not dealing with inflammation, but simply with direct repair: any tissue that has life left after an injury or a loss of substance will at once repair itself or regenerate. During lactation the cells lining the mammary alveoli are constantly losing part of their substance, but they immediately repair the loss. Is that inflammation? As soon as the injury is severe enough, so as to transmit its influence to the vessels around the cornea, all the changes of inflammation become evident. The cornea, therefore, is a connective tissue which is subject to inflammation if the stimulus be adequate; if not, repair occurs without inflammation. We know that an irritant may produce different effects according to its intensity and the method of application; it may produce a slight injury, easily and directly repaired, or a serious injury, followed by immediate death or slow necrosis, or followed by secondary inflammation, or it may produce an acute primary inflammation. Now because the irritant is one and the same substance, and has remained unchanged, while experimenting on a graduated series of animals, we have no right to assert that the effect of its action is one and the same process, whatever the tissue and whatever the animal. No doubt, if we compare the different effects produced, there is a gradual transition from one to the other, but so there is from an innocent to a malignant growth.

A few vibrations of the mysterious ether around us will produce the subjective sensation of sound, while innumerable vibrations of the same ether will produce one of light, yet sound is not light. The cornea experiments, therefore, cannot be used as arguments against the view, originally supported by Cohnheim, namely, that inflammation can occur only in vascular tissues, because as soon as we produce changes which every one would recognise as inflammation, the vessels around the cornea and the tissue in which they lie have reacted, being, so to speak, drawn into the zone of irritation through the innumerable lymph

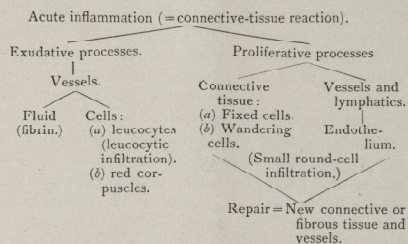
channels. What is observed in some avascular animals may be considered to be or to effect whatever inflammation is or does in a vascular animal, but it is therefore not inflammation.

Inflammation, in my opinion, then, must be regarded as a series of changes occurring only in vascular or vascularisable connective tissue, or in connective tissue which is in easy communication with the surrounding blood-vessels. Starting from this point, we may pass over the causes of acute inflammation by merely mentioning that traumatic, chemical, or physical irritants, including foreign bodies and micro-organisms, are capable of reacting on the connective tissue in such a manner as to produce the phenomena and appearances of inflammation. These irritants must possess a certain *relative* intensity, otherwise inflammation may not set in, or if the intensity is too great necrosis may be the result. The intensity will, of course, vary with the general or local tissue resistance of the individual. Thus in renal disease or *morbus cordis* or venous engorgement, or in certain nervous lesions, inflammation is readily produced by conditions which are incapable of producing it in the healthy man. Necrosis, it must be remembered, may act as an irritant and be followed by inflammation; dead tissue is either absorbed, encapsuled, or cast off, or it is replaced by regeneration, and the absorption or casting off is often or even generally accompanied or effected by inflammation. No doubt the products of necrosis act as an inflammatory irritant. It is difficult to separate necrosis from inflammation; the former may lead to the latter, and *vice versa*; some cellular necrosis almost always occurs with acute inflammation. Necrosis or necrobiosis, however, is not always followed by acute inflammation, but may be the forerunner of fibrosis or so-called chronic inflammation, as I have stated elsewhere (*vide* "Chronic Inflammation").

Passing on now to the phenomena of acute inflammation, we may distinguish two main processes, (a) exudative and (b) proliferative. The *exudative processes* are, speaking generally, most evident during the earlier stages, and are concerned especially with the vessels. Fluid and cells may pass through the vessel wall, the fluid being coagulable lymph, which may or may not coagulate, the cells being leucocytes and red corpuscles. The *proliferative processes* are observed in the connective tissue and endothelium and in the vessels. The fixed and wandering connective-tissue cells multiply, and so do the endothelial cells lying in the lymph spaces and lining the capillary and lymphatic walls. These proliferative changes are best seen in the later stages of acute inflammation. It appears, therefore, that in the earlier stages, if many cells are present in the inflamed area, they are mainly leucocytes, *i.e.* we have a *leucocytic infiltration*; while in the later stages the cells are mostly derived from the connective tissue or endothelium, forming the so-called *small round-cell infiltration*. The products of

proliferation, if repair follows, become converted into fresh connective or fibrous tissue, but when this occurs inflammation is at an end. Although we have said that in the earlier stages of inflammation the exudative changes are especially evident, it must not be imagined that proliferative changes are absent altogether during that early period; in fact, at the seat of irritation itself the proliferative changes may be the first to show themselves. In a general way it may be said that the more vascular a part is the more evident are the exudative changes during the earlier stages; and conversely, the less vascular a part is the more marked are the proliferative changes during the earliest stages. But this much is certain, that in any process which is recognised as inflammation there are always both exudative and proliferative changes.

We shall now discuss in more detail the different phenomena of acute inflammation, and begin with the exudative processes. This, however, must be left for a future occasion.



Cases of Acute Poisoning

by Atropine, Cocaine, Carbolic Acid, Potassium Bichromate, and Aconite.

By J. D. RAWLINGS, M.B. Lond., M.R.C.S., late House Physician, St. Bartholomew's Hospital, &c.

CASES of emergency, either medical or surgical, have always an interest peculiar to themselves; and as any acute poisoning is an emergency *par excellence*, I offer the notes of the following cases which, among others, have come in my way during the last few years.

Atropine.

F. T—, æt. 6, brought to St. Bartholomew's Hospital on September 10th, 1895, by his father, who complained that for the last three hours the boy had been "off his head." The patient's eyes were under treatment, and his mother was dropping a solution of atropine into them at intervals. Three days ago, when this was done the boy "seemed silly" for an hour or two afterwards. At 6 p.m. on

September 10th the drops were again put into his eyes, and at 9 p.m. he again became silly and grew worse. The father was quite certain that the child had not swallowed any of the solution. When seen at midnight the patient was wildly delirious, seeing imaginary objects around him, and expressing extravagant surprise or amusement at them. He was not frightened at any of his hallucinations, appearing, on the contrary, highly exhilarated. When interfered with he struggled violently and cried out. Pupils widely dilated, and not reacting to light. The boy did not look ill. There was no rash, nor did any appear subsequently. There was no evidence that his skin or throat were causing him any discomfort. It seemed only prudent, in spite of the history, to give an emetic, and as the boy refused to drink anything a hypodermic injection of apomorphine gr. $\frac{1}{10}$ was given, which was followed in a minute and a half by copious vomiting with little or no nausea. As the delirium and vomiting continued a hypodermic injection of morphia gr. $\frac{1}{10}$ was given, which was followed by several hours' sleep. In the morning the child was still a little inclined to talk nonsense, but was quite quiet, and was sent home with his parents.

The case was not a severe one, and its chief interest lies in the mode in which the poisoning occurred. It is fortunately not common for the instillation of atropine drops into a child's eyes to be followed by toxic effects, but they may occur apart from any carelessness in the use of the drug, as most ophthalmic surgeons have found. The risk may be reduced to a minimum by compressing the lachrymal sac with the finger for a minute or so after putting the drops into the eye, or by using ointment instead of a watery solution. Where atropine has to be applied at home by the child's parents ointment has the additional advantage over drops, that it is less attractive as an article of diet.

Cocaine.

R. P—, æt. 25, brought to St. Bartholomew's Hospital September 13th, 1895, for convulsions. About a year previous to the present attack patient acquired the habit of taking cocaine by the mouth, in the hope of curing himself of a craving for spirits, which he had already developed. He has cured himself of drinking, but in the course of the past year has had several attacks like the present one. At 5 p.m. on the day of admission patient took six grains of hydrochlorate of cocaine by the mouth. At 7 p.m. he began to have convulsions; he was said by the policeman who brought him to have been unconscious and struggling violently when found. When seen in the surgery at 7.30 he was having violent convulsions suggestive of epilepsy, but when his supra-orbital nerve was irritated he talked clearly and coherently, and said that he had been taking cocaine. The pulse was then very rapid. He had not micturated nor defæcated during the fits. At 9 p.m. his face and body were wriggling all over, the movements being indis-

tinguishable from those of severe chorea. The pupils were dilated, but reacted to light. Knee-jerks perhaps slightly increased. When told to put his tongue in again after protrusion it flew back with the spring-like action seen in chorea. There was no rash then or subsequently. Pulse 108, irregular in time and volume, occasionally intermitting; heart otherwise normal. Respiration natural. Patient had never had rheumatism or chorea, nor any attack at all like the present one till after he had begun taking cocaine. He was quite well the next day, and was discharged.

Although convulsions are a common feature in cocaine poisoning it is quite unusual for the movements to closely simulate chorea. Convulsions caused by cocaine are of cerebral origin, since they cease on division of the cord (Brunton). Chorea is due apparently to either a neurosis or an altered blood state acting on the cerebral cortex (Gowers). The altered blood state which leads to chorea is, generally speaking, associated with the rheumatic poison, whatever that may be. Is it not conceivable that cocaine may in exceptional cases have the same effect on the cerebral cortex as the rheumatic poison, thus causing not a neurotic or rheumatic chorea, but a condition which might with propriety be called "cocaine chorea," but which lasts only until the cocaine is excreted by the kidneys? This is a mere speculation, not an opinion. The case is a fair example of the efficacy of treating the alcohol or morphia habit by substituting another drug for the alcohol or morphia.

Carbolic Acid.

F. F—, æt. 39, music publisher, brought to the Royal Free Hospital at 10 p.m., May 22nd, 1894. Patient had been drunk during the evening, and had drunk about two ounces of strong commercial carbolic acid. He was seen at the hospital a quarter of an hour after taking the poison. He was then comatose with stertorous breathing. Corneal reflex absent. The skin was cold, hands and face livid; about the face and chest were patches whitened with carbolic acid. Lips, tongue, and palate whitened; uvula very oedematous. Breath smelled strongly of carbolic acid. Pulse 120, good volume, regular. Respiration 24. Patient was wrapped in blankets, and hot water tins were applied to feet and legs. The stomach was washed out twenty or thirty times until the washings were odourless and clear. Eight ounces of olive oil was then put into the stomach. The pulse was now smaller in volume, and irregular. A drachm of brandy was injected into the chest wall. The corneal reflex now returned, though the patient remained unconscious. At 11.30 p.m. he was removed to the ward. Temperature 95° F. Patient now began to recover consciousness, but for some hours after admission could not breathe without having his tongue held forward. Temperature at 6 a.m. 97.6°; at 10 a.m., 100.6°. During May 23rd patient was quite conscious and rational, complained

of thirst, but not of pain in stomach or elsewhere; was fed by rectum. Slight general rhonchus, well-marked carborluria and a little albumen in the first specimen of urine passed after admission. May 24th.—Seemed fairly well. Pulse 136, good volume and tension. Respiration 44. Temperature 99° F. Considerable quantity of mucopurulent sputum. Crepitations at both bases behind, and signs of consolidation at the right. The patient was removed in the afternoon by his friends, who had their own reasons for wishing to take him home. I heard subsequently that patient died of double pneumonia on May 29th, *i.e.* seven days after taking the poison.

The immediate danger of carbolic acid poisoning is from paralysis of the nerve centres, evidenced by coma and failure of pulse and respiration. This is not due to shock caused by corrosion of the alimentary tract, for the latter is rendered anæsthetic whenever the phenol touches it; and, moreover, the nervous symptoms of carbolic acid poisoning are the same when absorption takes place by the skin. The general condition of the patient then, though superficially similar, is quite different in origin to that caused by a corrosive mineral acid, such as sulphuric, in which the condition is one of shock, caused by a sudden destruction of mucous membrane richly supplied with nerves. There is a very practical difference, also, between the local conditions in the two cases, for though carbolic acid is often spoken of as a corrosive poison, and we are warned to be careful about passing the tube, the œsophagus and stomach present a very different appearance in phenol poisoning from what they do in a sulphuric acid case. In the latter the walls are charred and rotten, so that it may be the easiest thing to poke one's finger through them. In the former the inside of the stomach and gullet present the appearance of having been tanned, and it is, if anything, rather more difficult to tear their walls than those of healthy organs. Since no safe antidote to carbolic acid is known, it is as important to empty the stomach as in alcohol or opium poisoning. Emetics are useless because the stomach is anæsthetised, and will not react; or, to quote Dr. F. W. Andrewes, when making the post mortem on a case which had been treated with emetics, "one might as well pour mustard and water into a stone jug, and expect that to vomit." Even apomorphine does not always act in these cases, and if it did it would scarcely be a suitable drug to give to a patient already collapsed. The only thing to be done, then, is to wash out the stomach. There will probably be more difficulty in passing a tube than in most cases, because the mucous membrane of the pharynx and œsophagus is swollen and hard; it may, indeed, be impossible to pass the soft tube at all, but in my opinion it is safe not only to use the stiff tube of the stomach-pump if necessary, but to use as much force as is necessary to make it pass, assuming, of course, that the operator is familiar with the use of the stomach-pump, and can pass it easily in ordinary cases.

It is well to bear in mind that even when the patient recovers from the immediate effect of the poison he is still liable to bronchitis or pneumonia.

Potassium Bichromate.

J. C—, æt. 20, furniture polisher, brought to St. Bartholomew's Hospital at midnight, August 12th, 1895. Patient's condition did not admit of his giving a very reliable or accurate history, but he was understood to say that he had taken some "chromate of potash" about an hour before, but did not know the quantity. He was found in a railway carriage and brought to the hospital on a stretcher by the police. When seen at midnight, patient was lying on a couch grunting with every expiration. His general condition suggested simply that he was in some discomfort, and was making the most of it. Face flushed; no staining about lips, tongue, or face; abdomen natural, no pain or tenderness; some vomited matter brought by the police showed nothing characteristic; it was dark brown and grumous. Extremities warm. Pupils rather contracted, reacted to light. Patient answered questions but spoke indistinctly. Pulse slow, regular, good volume and tension. On account of the history, and the fact that a packet of crystals of potassium bichromate was found in his pocket, the stomach was washed out. The first washing contained a quantity of food, and there was nothing unusual in its appearance; the next was tinged yellow, but quite clear. When the washing was complete, about two ounces of magnesium carbonate was put into the stomach. No further treatment was adopted for half an hour, at the end of which time the patient was unconscious, slightly cyanosed, pulse of smaller volume and lower tension than before, and the extremities were becoming cold. He was removed to the ward at 1 a.m., where he was surrounded by hot water tins, and enemata of brandy and essence and hypodermic injections of strychnine were given every two hours. The patient gradually sank, and died at 6 a.m. *Post mortem* no lesions were found to account for death. There was no staining, inflammation, or corrosion of the alimentary tract.

Bichromate of potash is one of the irritant poisons,—that is, a poisonous dose causes a sense of burning in the mouth, throat, and stomach; severe pain, vomiting and purging, with collapse. In this case, however, there were no signs of irritant poisoning, nor were any found after death. In fact, on this occasion bichromate acted not as an irritant, but as a neurotic poison very similar to carbolic acid, paralysing the nervous centres and causing death by heart failure. This case, as first seen, was certainly calculated to deceive: a lovesick youth had taken an unknown quantity of irritant poison, and was very sorry for himself, but had no signs of irritant poisoning. What more natural than to wash out his stomach and send him home? It is interesting to note that potassium bichromate

in doses of gr. $\frac{1}{10}$ sometimes relieves gastric pain when such drugs as bismuth fail to do so.

Aconite.

B. B—, æt. 44, chemist's assistant. On December 5th, 1894, patient ate too much pork for dinner, and at 3 p.m. drank half an ounce of what he believed to be Tinct. Aurantii, but soon found to be Tinct. Aconiti. At 3.30 p.m. he took half an ounce of ipecacuanha wine, and vomited copiously at 3.45 p.m. Immediately after drinking the tincture he noticed that his tongue tingled very much, but he attributed this to the spirit. In about twenty minutes his limbs seemed to become rigid, and the muscles contracted spasmodically. He then became giddy, and his speech thick; he felt numb all over. A "suffocating feeling came over him," and he developed a craving for fresh air; he accordingly went for a short walk, and while out vomited copiously three quarters of an hour after taking the poison. After vomiting he sat down, and for a time did not know where he was; when he partially recovered from this condition he was unable to see anything, and felt very faint. When the sensation of numbness ceased he had "pins and needles" all over him. The above history was obtained from the patient himself after recovery.

The case was first seen in the Casualty Department at 6 p.m., when the patient was faint, face pale, extremities cold and blue. Breathing unobstructed, about twenty per minute, and deep. Pulse 40; irregular, very small volume, very low tension. Heart-sounds scarcely audible at apex. Patient was quite conscious, and answered questions intelligently. He was wrapped in blankets, and had a hot water tin put to his feet. The stomach was washed out three times, half an ounce of brandy was given by the tube, Liquor Strychninæ mij and Tinct. Digitalis m were given hypodermically. After this the pulse improved, becoming fuller in volume and about 60, but the alternate beats were very weak and the corresponding heart-sounds almost inaudible. In about fifteen minutes' time another hypodermic of strychnine and digitalis was given. Patient was then carried up to the ward, where he was given some more brandy and a purge. Tinct. Digitalis m issued out of Haust. Aetheris Ammoniatum was given every four hours. At 8 p.m. the pulse was 64, quite regular, good volume, somewhat low tension. No objective signs of sensory disturbance; but patient said he felt some tingling and numbness in his hands till the following morning. The day after admission he felt quite well; the pulse was 80, regular, good volume and tension.

The symptoms in this case were typical. A very large dose (half an ounce of the tincture) was taken and retained for three quarters of an hour. Digitalis is an invaluable antidote in aconite poisoning when there is heart failure, as there usually is; it should, of course, be given hypodermically. One of the leading text-books on toxicology does not mention this point in the treatment of aconite poisoning.

Vaccinia and its Results.

*A Paper read before the Abernethian Society on
February 18th, 1897.**

By F. W. ANDREWES, M.D., F.R.C.P., Lecturer on
Pathology, and Pathologist to the Hospital.



LAST summer Dr. Gee chose for the subject of his address before this Society "The Conflict of Medicine with the Smallpox." In the admirable historical review of the subject which he gave he purposely abstained from entering into the question of vaccination in its controversial aspect. I have had the boldness to select the subject for my paper this evening, partly for the reason that he did not touch upon it, partly because the long-expected final report of the Vaccination Commission has of late appeared, and with it, in the minority report of the Dissident Commissioners, what may be taken as the very best case which can be made out against vaccination; partly, again, because we have recently had, in the Gloucester epidemic, a striking example of the results which may arise from a wholesale neglect of vaccination. But, above all, I have chosen this subject because I do not think that sufficient intelligent attention is paid to it in medical education. You probably all believe in vaccination in a general sort of way, because that is the atmosphere in which you have been brought up. Yet how many of you are capable of maintaining your belief against a clever and disputatious anti-vaccinationist with a taste for dilettanteism and a keen nose for statistical fallacies? There is too much tendency amongst us to regard vaccination as a sort of article of religion, to question which is a heresy to be ignored and despised. The matter is a much more complex and difficult one than might at first sight be supposed, and if to-night I can succeed in setting clearly before you some of the arguments for and against the practice, so that you may have a secure basis for the faith that is in you, I shall have no reason to regret my choice of a subject. The opponents of vaccination spare neither labour nor expense in the diffusion of their views; it is your duty, if you are sincere believers in vaccination, not to pass by their propaganda in contemptuous silence, but to arise and publish your gospel to the ignorant with an intelligence and conviction born of accurate knowledge, and with a full appreciation of the arguments which can be raised against you. The difficulty of the subject depends largely on the fact that the strongest arguments in favour of vaccination are nowadays based on statistical evidence, in the interpretation of which much care is necessary. Vaccination is probably only one of the factors which has influenced the decline of smallpox, and the problem is to disentangle and justly appraise the share which it has borne. The essential questions at issue are practically these:

- (1) What is vaccination?
- (2) What degree of immunity does it confer against variola?
- (3) What disadvantages or dangers attach to the practice of vaccination?
- (4) What ethical right has the majority, in this particular case, to enforce its views upon the minority?

It is with the first two questions only that I shall mainly endeavour to deal in the time at my disposal this evening.

1. *What is vaccination?* and what is its exact relation to variola? The answer given by modern pathology practically confirms Jenner's original assumption. It is variola, modified and attenuated in virulence by transmission through a relatively insusceptible animal. This is a sweeping assertion. Let us see if it can be justified. The arguments are as follows.

(1) There is an *a priori* argument to which weight, though not the greatest weight, must be attached. We have incontrovertible evidence that vaccination does, for a term of years at least, protect against

* This paper makes no pretence at originality. It is merely an attempt to set forth some of the facts and arguments on the subject for the benefit of students and others who have not the time to study its literature for themselves. I have to acknowledge the assistance derived from McVail's writings, and from the Report of the Vaccination Commission; the facts about the Gloucester epidemic are taken from Dr. Bond's pamphlet, published by the Jenner Society. The crushing reply to the minority report of the Dissident Commissioners recently delivered by Dr. McVail at the Epidemiological Society was subsequent in date to the reading of this paper; my own comments are feeble in comparison.—F. W. A.

smallpox. I do not think this is disputed by any person competent to judge the facts. Within the past few years we have begun to know something definite and tangible about the essential nature of protection and immunity in specific diseases. If vaccinia were not a modified form of variola, the fact that it protects against it would be unique and unexplained—out of harmony with an otherwise consistent body of pathological facts. It is, of course, not impossible that a temporary antagonism may exist between two distinct specific diseases, but I know of no facts lending colour to the supposition that an attack of one specific disease can confer an immunity against another and different specific disease stretching over a term of years. One may hold very liberal views as to the limits of specificity amongst micro-organisms; yet smallpox is at least specific among diseases in the same sense and degree as an oak amongst plants, and there are reasons for comparing vaccinia, in this connection, with a dwarfed and stunted oak grown in uncongenial soil. Recent advances in modern pathology and serum therapeutics indicate that immunity is, in a sense, specific too. We are now familiar enough with the fact that many pathogenic micro-organisms can be attenuated in virulence by transmission through relatively insusceptible animals. The important fact about vaccinia is that the modification of virulence remains permanent; this, however, is by no means without parallel amongst other pathogenic organisms. Regarded as a modified variola, vaccinia takes its place naturally in a consistent body of pathological doctrine; the alternative supposition places it out of harmony with all that we know about other specific diseases. This is merely argument from analogy, and may be deemed an unsafe guide. Let us now turn to facts.

(2) If vaccinia is only modified variola, intermediate stages should be traceable. Such undoubtedly exist. In its characteristic form vaccinia differs from smallpox in being a disease localised at the seat of inoculation. The inoculated form of smallpox was typically followed, after the ordinary incubation period of about twelve days, by a generalised eruption. Now such a generalised eruption does occasionally follow vaccination; vaccinia rashes are usually erythematous, but may be papular, vesicular, or even pustular. A secondary crop of vesicles may develop around the points of inoculation, or they may be generalised over the whole body. Such cases, which are rare, may, I think, be justly regarded as intermediate forms between vaccinia and variola, though to be classed with the former, and not with the latter. It must be remembered that in the last century some of the inoculators had been able to reduce inoculated smallpox to a localised affection without any generalised eruption; this, however, only occurred in exceptionally favorable cases.

(3) A much more convincing proof of the identity of variola and vaccinia is that the latter can be and has repeatedly been produced from the former. This was done nearly sixty years ago by Ceely and Badcock, who each succeeded in producing vaccinia in cows by inoculating them with matter from cases of human smallpox; the lymph thus produced was widely used for human vaccination. It must be confessed, however, that some doubt exists as to these results, and the majority of attempts seem to have failed. In some instances smallpox, and not vaccinia, resulted when the lymph was inoculated upon the human subject; the explanation being that the virus was not sufficiently attenuated by a single transmission through the cow. Twice at least in recent years has the attempt been successful. In 1885 Simpson succeeded in producing a vesicle resembling cow-pox on a cow's teat by inoculation with smallpox lymph. From this cow Cory and Shirley Murphy inoculated a calf. From the calf a child was inoculated; typical vaccinia was produced. In all, eighty-nine calves and 1247 children were inoculated from this strain of lymph; 98.3 per cent. of the inoculations were successful, and nothing but vaccinia was ever produced. In no case was there the slightest trace of a general eruption.

Within the last few years Simpson has repeated these results in Calcutta, and a similar and more absolutely unequivocal result has been attained by Klein, who in 1892 took smallpox lymph and inoculated a series of calves, producing ultimately an atypical vaccinia. But with lymph from this source Cory inoculated a large number of children, producing in every case typical vaccinia, and the retro-vaccination of this humanised lymph on calves gave absolutely typical results. By the kindness of Dr. Klein I am able to pass round photographs of some of these children, so that you may judge for yourselves as to the characters of the local eruption produced. To my mind such results prove to absolute demonstration the identity of vaccinia as modified variola. These later experiments have been performed in the full light of modern pathological knowledge, by the most highly qualified observers, and with the strictest precautions, and rest, therefore, on a more unassailable basis than the results attained in the early part of the century.

(4) I may add, though with more diffidence, a further argument. Until recently no one had succeeded in demonstrating the nature of the actual virus of variola or vaccinia. Such demonstration is still incomplete, but within the past few years Klein, and subsequently Copeman, have shown that it is possible to demonstrate in very early smallpox lymph a minute spore-bearing bacillus, which they regard as the probable cause of the disease. Should this bacillus be successfully cultivated, and should it then prove capable of producing vaccinia when inoculated in calves, the demonstration will be complete. Meanwhile the importance of the fact for our present argument rests in the consideration that the bacillus is demonstrable equally in variolous lymph and that of vaccinia, and as it differs entirely from any other known bacillus some degree of weight may be attached to its presence.

Considering the question, therefore, in the light of modern pathology, I think we are justified in affirming that cow-pox or vaccinia is neither more nor less than a modified form of variola, comparable with what we know of the attenuations of other specific poisons. It has been complained that no definition of vaccination has been attempted. I venture to define it as "implantation of the virus of smallpox, attenuated by bovine transmission, with the view of producing a localised affection which can nevertheless confer an immunity of some considerable duration against the acute disease."

II. I now pass to the second question—what degree of immunity does vaccinia confer against variola? The answer may be sought in two groups of facts.

(1) In the early days of vaccination, when inoculation with smallpox was an everyday thing, the question was answered by actual experiment on the person, and reliance was very properly placed on this "variolous test." Inoculation of smallpox was known to succeed in the vast majority of persons unprotected by previous smallpox. The variolous test was found to yield no result in the vast majority of vaccinated persons. The conclusion that vaccinia protected against variola was plain, and from what was known as to the permanence of the protection given by a previous attack of smallpox, it was naturally enough assumed at first that the protection given by vaccinia would be equally lasting. Only the lapse of a sufficient number of years could prove the fallacy of this assumption; but it soon became recognised that smallpox could and did occur in vaccinated persons, though usually only after many years; it was further noted that post-vaccinal smallpox was usually mild in type. At the present day, of course, it is universally recognised that the full protective influence of vaccination lasts only some seven to ten years, and thenceforward gradually fades, though its influence in mitigating the disease may be traced for a considerable period of life. Further, it is well known that individuals vary widely in the duration of their protection, presumably in accordance with their degree of natural susceptibility to variola.

(2) The variolous test is now illegal, and we have to rely on statistical evidence instead of on experiment. We have a century of experience on which to found our judgment. Our task is to eliminate all possible fallacies, and correctly to interpret the vast mass of statistics which has accumulated. The evidence falls under two main heads:—(a) the diminished incidence of and mortality from smallpox generally since the introduction of vaccination; and (b) comparison of the smallpox incidence and mortality upon the vaccinated and unvaccinated respectively in given local epidemics.

In the early years of vaccination smallpox was much commoner than it is now, and no trouble was taken to isolate cases. The practice of inoculation, too, may sometimes have served to spread infection. People were hence very much more exposed to infection from smallpox than they are now, and this made the difference between vaccinated and unvaccinated persons as regards their susceptibility, a striking and apparent fact of everyday life. Nowadays the comparative rarity of smallpox, and the strict isolation practised, combine to render exposure to its infection a relatively uncommon thing. Hence the contrast between vaccinated and unvaccinated has ceased to be a conspicuous and public phenomenon, and the very success of vaccination in diminishing smallpox has come to be a cause of its neglect among the uneducated and misinformed. It is only when an extensive outbreak occurs, and exposure to infection becomes general, that the lesson is taught anew in its full force.

Before discussing the data furnished by recent epidemics let me draw your attention to the diagram on the wall, which has been enlarged from that given by McVail in the treatise on Public Health edited by Stevenson and Murphy. It shows the smallpox mortality in London from the year 1650 onwards. From 1838 the figures are taken from the Reports of the Registrar-General; before that they are calculated from the London Bills of Mortality. The diagram represents not the actual total of smallpox deaths in each year, but

the number of smallpox deaths per 1000 total deaths from all causes. The increase of population is thus avoided as a disturbing factor. The old Bills of Mortality were probably inadequate enough when judged by modern standards, and there is reason to suppose that they understated the total smallpox mortality, but they form by far the most important evidence we possess as to smallpox mortality in the seventeenth and eighteenth centuries, and the information they afford as to the proportion of smallpox deaths to total deaths is probably much more accurate and reliable than their statements as to total smallpox mortality.

One of the most striking features seen in the diagram is the fluctuation of the number of deaths from year to year. It can be seen that each year of excessive mortality is commonly followed by a year of much diminished mortality, and that three or four years more elapse before another year of very high mortality is reached. There is, in fact, a rough sort of periodicity about smallpox, a high degree of epidemic prevalence recurring every four or five years. The explanation of this fact is not very difficult. Before Jenner's time smallpox was, at least in towns like London, where it was constantly present, mainly a children's disease. Even up to 1853 more than 80 per cent. of smallpox deaths in London were in children under ten, and in Geneva in the seventeenth and eighteenth centuries over 66 per cent. The effect of a big epidemic was roughly to kill or immunise this eminently susceptible section of the population, and it was not till a fresh soil had been prepared for the disease by the births of a few years that another big epidemic was possible.

A second striking feature in the diagram is the fact that smallpox was much more prevalent in the eighteenth than in the seventeenth century, or at least that it killed many more people. An explanation which has been held to account for this is the introduction and spread of the practice of inoculation, which was first performed in England in 1721, but did not prevail much till after 1740. During the latter half of the century the celebrated inoculator, Stutton, claimed to have inoculated 100,000 people. Though the attack induced was habitually a mild one, it nevertheless served as a centre of infection to the unprotected. Where there were many unprotected the result may have been to increase smallpox. Where there were few, as must have been the case in London, it is likely that the practice did more good than harm. On the whole there seems no sufficient evidence to attribute the increase in smallpox in London in the eighteenth century to the practice of inoculation alone, and I know of no other reasonable explanation which has been advanced.

Let us turn now to the astonishing diminution in smallpox mortality which commenced with the closing year of the last century. Vaccination was introduced in 1798. During the first quarter of the present century the diminution of smallpox mortality is seen to be marked, and on the whole progressive. During the remainder of the century the decrease is still more apparent; only twice, in 1828 and 1829, has the disease approached in its mortality that which was the rule in the eighteenth century. The obvious inference is that it was the gradual spread of the practice of vaccination which was accountable for the improvement. Unless other adequate ground can be shown for it this explanation must be inevitably accepted. The only other tenable ground which can be alleged is that which has been adopted in the minority report of the dissentient members of the Vaccination Commission. It is as follows:—If we examine the statistics of the deaths from "fever" (*i.e.* typhoid, typhus, and simple continued fever), it will be found that they have declined very nearly in the same proportion as the deaths from smallpox. Typhus fever has declined even more than smallpox. No one pretends that any influence has been at work in the case of fever other than simple sanitation. The inference is that improved sanitation has been responsible also for the decline of smallpox. The prevalence of smallpox was kept up abnormally during the eighteenth century by the practice of inoculation, the substitution of vaccination, which was non-contagious, for inoculation, which was contagious, must inevitably have produced a great effect on the smallpox death-rate, apart from any immunity it conferred. This is the argument; let us now examine it.

If we consider the death-rates from the different specific fevers during the present century, which period practically covers the rise and progress of modern sanitation, we notice very astonishing differences between them. Some have shown a remarkable decrease: typhus has been practically stamped out in London; typhoid mortality has fallen by more than one half in the last thirty years; the decline of scarlet fever is equally even more striking. In contrast to these, some, such as measles, whooping-cough, and diphtheria, have remained either unchanged, or have even increased; the progress of sanitation has done nothing to check them. It is very easy to select typhus and typhoid, and to compare smallpox with them, and show that they have declined equally, and hence to infer that the same

influence has been at work in the production of the decline in each case. But it is equally easy to select measles or whooping-cough as the standard of comparison, and to arrive at an absolutely reverse conclusion. We have at least as much right to select the latter as the former, and indeed I think more right, for typhus and typhoid are essentially filth diseases, and are much less comparable with smallpox than are scarlet fever or measles. The argument hence loses its force to a very considerable extent, and there are other considerations which weaken it still further. It will be seen that the main decline in London smallpox occurred during the first quarter of the century. A survey of the history of sanitation, such as that presented in Sir John Simon's admirable book, shows nothing more clearly than this, that sanitation has grown up almost exclusively in the reign of Victoria. It is true that during the eighteenth century people were beginning to realise the preventability of much of the prevalent zymotic and other disease, but nothing was done. It was not till the reign of William IV that Local and Central Boards of Health were instituted, and these merely inspected and advised; when Queen Victoria ascended the throne there was practically no sanitary legislation at all. The real beginnings of modern sanitation were the Inquiry, lasting from 1830 to 1842, with which Sir Edwin Chadwick's name is so prominently associated, the Royal Commission which resulted, and ultimately the Public Health Act of 1848. The great mass of sanitary progress was therefore subsequent to the decline in smallpox, and it will be seen to have produced a very trivial effect upon smallpox mortality compared with the earlier decline. It may be answered that, notwithstanding this, "fever" had actually declined during the eighteenth century to an enormous extent. According to the Bills of Mortality it stood answerable for an average mortality of 785 per 100,000 living before the middle of the eighteenth century, and had dropped to 204 in the first decennium of the nineteenth. But before allowing this comparison we must remember that the causes of death were returned by ignorant old women known as the "searchers," now smallpox was a well-known and distinctive disease, easily recognisable even by the ignorant, while "fever" was a *caput mortuum* of miscellaneous zymotic and septic diseases which may have included almost anything. The progress of medical knowledge has weeded it down nowadays to typhus, typhoid, and simple continued fever, but Heaven only knows what these old women meant by it in the last century. The number of deaths returned as due to it would naturally diminish with the growth of knowledge, and hence the apparent decline in its mortality must be very largely discounted when contrasted with that of a definite disease like smallpox. The argument, in fact, cannot be taken seriously. We have no satisfactory proof that sanitation can have exercised upon smallpox the extraordinary influence necessary to explain the fall which took place in the first quarter of the present century. If further argument be needed, let us turn to the facts from abroad. Vaccination was introduced into many other European countries within a year or two of its inception in England. From some of these countries, *e.g.* Sweden and Denmark, we have full statistics of smallpox mortality for this and part of the last century. Everywhere the same result is apparent—an immediate and startling decrease in smallpox mortality. Now England enjoys the credit of being the pioneer in sanitation amongst the countries of Europe: other nations followed us, and usually at a considerable interval. If, then, it were sanitation which explains the diminution in smallpox which marked the first quarter of this century, the diminution should have been later in other countries than in England. It was not. In every case it followed the introduction of vaccination as an immediate and apparently direct result.

There is another and still more powerful argument which may be used against those who attribute the decline in smallpox to sanitation alone. The Registrar-General has calculated out the mean annual deaths from "fever" of successive periods of life per million living at each age-period, and has done this for three different terms of years, from 1847 to 1853, thence to 1871, and thence to 1887. The resulting figures show with marvellous uniformity a steady decrease which is practically the same for each period of life, the decline for the first five years of life being only very slightly more marked than that for all ages taken together. This is what we expect sanitation to do, viz. to produce its beneficial effects upon people of all ages, with a special reduction of infant mortality (which appears less in the case of "fever" than it would elsewhere, because this is not a group of diseases specially fatal in children, but rather the reverse). If now we contrast a similar table furnished by the Registrar-General with regard to smallpox for the same periods, a very different state of affairs is disclosed. We find that, under the age of five years, smallpox deaths have fallen from 1617 per million to 242; between five and ten years of age from 337 to

120. From ten to fifteen years the decline is trivial, from 94 to 69; while from fifteen years upwards there has been a positive rise in the annual number of smallpox deaths (per million living at ages above fifteen). Now these terms of years were chosen because up to 1853 vaccination was optional only, from thence to 1871 it was efficiently enforced, and thence to 1887 much more so. It will be seen, then, that the total reduction in smallpox mortality which has occurred under the vaccination laws has been the resultant of an enormous decrease in infant mortality, with a positive increase in adult mortality. We are asked to believe that sanitation has done this, and invited to compare the decline in "fever" with that in smallpox; nor can it be denied that the comparison is instructive when pursued in detail.

No sane man will deny that improved sanitation, by diminishing overcrowding and improving ventilation, must have done much to raise the general average of health that the spread of smallpox, and by increase resistance against it. But that it has been the main agent in its decline appears to me disproved by the considerations I have mentioned, viz. that the decline was immediately visible on the introduction of vaccination, and was long anterior in date to the main sanitary advances of the century; that a similar decline occurred in other countries, apart from any sanitary improvements, as soon as altogether peculiar, being confined to the early years of life, while the adult mortality has actually risen—a state of affairs easily explicable when we remember the temporary character of the protection afforded by vaccination, but absolutely at variance with what we know of the mode in which sanitation affects the death-rate.

Let us turn now to the other part of the argument, that the decrease which followed vaccination was due to the concomitant decrease in the practice of inoculation. The supposition that inoculation was in the main accountable for the increase in the prevalence of smallpox which marked the eighteenth century is at best an uncertain one.

On a *privi* grounds it seems likely, as I have said, that inoculation must have served to spread the disease amongst an ill-protected population. But the population of London and other large towns at the close of the last century was a well-protected one: probably some 80 per cent. were protected either by acquired or inoculated smallpox. I cannot therefore believe that in London inoculation could have been so largely accountable for the high smallpox mortality in the eighteenth century as this hypothesis demands. In some towns, as in Boston, U.S.A., it is known that the introduction of inoculation very largely diminished smallpox mortality. Another argument of importance is this: if inoculation were responsible for the increase in smallpox mortality in the eighteenth century, it should be demonstrable that this increase went hand in hand with the spread of that practice. It should not have been marked till 1740 and the succeeding years, and should have risen considerably during the latter half of the century as inoculation became commoner. A glance at the diagram will show that this is not borne out by facts. While, therefore, not disputing that some part of the decline in smallpox during the first quarter of the nineteenth century may have depended on the decrease in inoculation, I consider that it is not demonstrated that any important share in the decline is due to that cause. There remains the view that it was due to the introduction and spread of vaccination. I have dealt with the arguments advanced by the dissentient commissioners at some length because they are well worth argument, as being the only serious attempt to explain away the decrease of smallpox on the introduction of vaccination.

Let us now pass on to the other and even more striking statistical evidence derived from a comparison of the vaccinated and unvaccinated in given epidemics. I would first invite your attention to the natural fatality of smallpox, *i.e.* the case-mortality apart from inoculation or vaccination. We know that when introduced into new countries its fatality is enormous, exceeding 50 per cent. of those attacked in some cases. But setting this aside, we know that the records of the London Smallpox Hospital showed in the last century a fatality of 75 per cent., and during the last quarter of the century 32 per cent. This is probably too high for the average fatality, as only the more severe cases would have been treated in hospital. It is clear, too, that the fatality varied considerably in different epidemics, and we have no sufficient data for estimating the average fatality of the disease. One point, however, comes out very clearly—the enormous share in the smallpox death-rate borne by very young children. In the epidemic at Chester in 1774 all the 202 deaths were in children under ten, and in an epidemic at Warrington in 1773 they were all in children under nine. In every epidemic in which

data exist showing the ages at death the mortality is seen to be mainly amongst infants. McVail states that, summing up the statistics of smallpox deaths from Geneva, the Hague, Kilmarnock, Edinburgh, Manchester, Warrington, and Chester for former centuries, we find that, out of 36,755 deaths, no less than 17,252 were under two years of age. These facts prove that in times anterior to the introduction of vaccination fatal smallpox was essentially a phenomenon of childhood, and especially of the first two years of life.

Within the past ten years several more or less extensive outbreaks of smallpox have occurred in England, and have been the subject of critical investigation. Even here, with the greatest precautions, statistics are in a measure fallible, though to a limited degree only. A vaccination census must depend upon either the statements of individuals, sometimes inaccurate, or upon the presence or absence of scars, sometimes obliterated or obscured by eruption. In epidemic times a condition of panic arises in which vaccination is largely resorted to while the epidemic is at its height, and this may tend to confuse the issue. The statistics, however, are so overwhelming that they can stand very extensive reductions for possible errors under these heads without any material weakening of the case for vaccination. On the other hand, allowance must be made in the opposite direction. Since the protection given by vaccination is not permanent, those adults who have been vaccinated in infancy only are imperfectly protected. These form a very considerable section of the population, and hence it commonly happens that in a given epidemic an actually larger number of vaccinated than unvaccinated are attacked. This is put forward by the opponents of vaccination as an argument against the practice, whereas in fact it can be shown easily enough to be an argument in favour of re-vaccination. Statistics require proper analysis before just conclusions can be drawn from them, and smallpox death-rates require to be studied in relation to age-periods.

I will select the figures of the late outbreak at Gloucester as a typical instance of this, though in fact the statistics of other outbreaks would serve as well. That at Gloucester, however, is the most recent epidemic of any importance, and is peculiarly instructive as showing the effects which may be produced in a relatively unvaccinated town.

Gloucester is a city of some 42,000 inhabitants, not behind other similar towns in its general sanitary condition. For some years previous to the epidemic a local anti-vaccination society had established itself there, and had attained such influence that in 1887 the Board of Guardians elected to discontinue vaccination prosecutions. The result was a practical suspension of vaccination in the city. The total vaccinations, which in 1886 had been 1095, fell till in 1891 they numbered only thirty-four. In the ten years from 1886 to 1895, only 2378 vaccinations were performed, out of 15,684 children born; 3176 had died, so that at the end of 1895 there was a balance of over 10,000 unvaccinated children. The adult population was fairly well vaccinated, for prior to the propaganda of the anti-vaccination society the law had been observed in Gloucester as well as in most other parts of England. The isolation resources of the City Council were not very extensive. Under these conditions smallpox was imported into the city towards the end of 1895. A case in a child was concealed and treated as measles, and in a short time the disease had grown out of all control; isolation became impossible, and in April, 1896, when the outbreak was at its worst, over 200 cases were occurring per week. The city was practically boycotted. It was only by prodigious efforts that the machinery of vaccination was at length brought efficiently into play. Mainly by persuasion, 36,000 persons were vaccinated or re-vaccinated. The effect on the epidemic was immediate and striking. By the end of July smallpox was stamped out, and probably no epidemic of equal magnitude has ever been so promptly suppressed. The conversion of the anti-vaccinationists was astounding; few remained, and there is now no city in England so well vaccinated as Gloucester. The cost to the city was estimated by the President of the Gloucester Chamber of Commerce at over £150,000. Such is the broad general lesson.

The statistics of the epidemic, to which I would specially draw your attention, are shortly as follows:—The total number of cases in the city and suburbs was 2035, i.e. about 5 per cent. of the population suffered in the course of a few months—a degree of severity almost unexampled amongst recent epidemics. Of these cases, 1208 occurred in those vaccinated in infancy, and 789 in unvaccinated persons; in thirty-eight cases the question of vaccination was uncertain.

At first sight these figures might be claimed as unfavorable to vaccination, but an examination of the age incidence of the attacks soon sets the matter in a very different light. Of the 1208 attacks

in persons vaccinated in infancy, 916, or over 75 per cent., occurred in persons over twenty, and only 22, or less than 2 per cent., in persons under ten years of age. Of the 789 attacks in unvaccinated persons, 690, or over 88 per cent., occurred in children under ten, and only 39, or less than 5 per cent., in persons over twenty. The ages ten to twenty years occupy an intermediate position. The inference as to the protective effect of vaccination, for a period of at least ten years, is irresistible, even if we allow a large reduction on the grounds which I mentioned previously.

Still more obvious are the fatality statistics. Out of a total of 443 deaths, 113 were contributed by those vaccinated in infancy, and 313 by the unvaccinated, in spite of the smaller number of attacks in the latter class. Not a single child under ten died amongst the vaccinated, and 281 children under ten died amongst the unvaccinated; 40 per cent. of the unvaccinated children who were attacked died.

A more minute analysis of the figures only confirms the conclusion that the protection afforded by infant vaccination is enormous for the first ten years of life, and thence gradually fails, but that it endures in some degree certainly for fifty years.

The statistics afforded by the unvaccinated population of Gloucester show neither more nor less than a return to the conditions prevailing in the eighteenth century, and prove as clearly as possible that vaccination, and not sanitation, has been concerned in the reduction of smallpox mortality which has prevailed since Jenner's day.

I would not weary you with figures. Those of other recent epidemics, amongst which I would specially instance those worked out by Barry in regard to the Sheffield outbreak, all tell a precisely similar tale. Where the proportion of unvaccinated children in the community attacked is high, there the infant mortality is high; where it is low, the child mortality is less predominant. I cannot conceive that any logical mind can resist this inference.

Accurate evidence on the effect of re-vaccination is less easy to obtain because of the absence of statistics; but where it is uniformly enforced its effects are striking. In Prussia re-vaccination was made compulsory in 1874, with the result that smallpox at once almost disappeared from the country. In our own army and navy compulsory re-vaccination has immensely reduced the smallpox mortality. Perhaps more striking than any other figures are those relating to nurses and attendants at smallpox hospitals. A committee of the Epidemiological Society reported on 734 nurses and attendants at the Metropolitan Asylums Board Hospitals; seventy-nine had suffered from previous smallpox, and none of those were attacked; 645 had been re-vaccinated, and none of these were attacked; ten had not been re-vaccinated, and every one caught the disease.

Had I time I could go on to give you figures showing the much smaller fatality of smallpox in cases occurring amongst the vaccinated than amongst the unvaccinated; and to cite the figures of Marson and Gayton, showing that the fatality amongst the vaccinated varies inversely with the number, extent, and character of the cicatrices. But I fear my time and your patience are alike exhausted. I must be content if I have been able to present you with some of the main facts upon which a rational belief in the efficacy of vaccination may be founded, and an examination of some of the more important arguments which have been adduced against it. Put briefly, the effects of efficient vaccination seem to be an almost absolute protection for the first ten years of life, a protection which has succeeded in absolutely reversing the natural age incidence of fatal smallpox, and, by sweeping away the former enormous child mortality from the disease, has reduced its total mortality to a mere fraction of its former extent. On the other hand, it has somewhat increased adult smallpox mortality, since the protection afforded to adults by vaccination in infancy is less than that which was formerly afforded by the usual attack of smallpox in childhood. There is reason for believing that re-vaccination would not only prevent this increase, but practically stamp out the disease.

Let me, in concluding, touch very briefly on the objections which are raised against the practice on the ground of its risks. Vaccination is undoubtedly attended by certain dangers, like any other scratch on the skin. That pure vaccinia should cause death must be an event of the most extreme rarity if it ever occurs; the vast majority of deaths returned as due to vaccination are deaths from its complications, i.e. dependent on concomitant or subsequent infection with other micro-organisms. It is practically impossible to obtain vaccine lymph free from pyogenic cocci, or under ordinary conditions to prevent their access to the vesicles. The severity of local inflammation thus induced is sometimes accountable for death in weakly infants. Erysipelas, again, may occur, and here dirt and carelessness are probably often to blame, though not always. The same is true

of other septic complications. It is said that impetigo contagiosa may sometimes be transmitted in arm-to-arm vaccination; the experience of children's hospitals shows that troublesome and intractable forms of eczema and other cutaneous diseases occasionally, though not often, date from vaccination. But the great risk of which so much capital is made by opponents of the practice is vaccination-syphilis. It is admitted that syphilis is occasionally, though very, very rarely, thus transmitted. The great majority of reputed cases are probably inherited syphilis, which commonly manifests itself about the second or third month at or soon after the time when vaccination is habitually performed. The true test is, of course, whether or not a genuine primary chancre appears, after the usual incubation period, at the seat of the vaccinal inoculation, and is followed later by secondary symptoms; and this has sometimes been the case. It is this risk, infinitesimal though it be, which has induced the Vaccination Commissioners to recommend that calf-lymph should be used whenever the parents desire it. But let us see what all these risks amount to. Some fifty deaths, on an average, are ascribed per annum in England and Wales to vaccination,—not all of these, perhaps, with justice. The sum total of annual primary vaccinations in England and Wales is between 700,000 and 800,000. Against this insignificant number of deaths we have to set the enormous infant mortality from smallpox in the last century, exact figures for which cannot be given, but of which you may form a rough estimate from the diagram on the wall, by remembering that between 80 and 90 per cent. of the mortality there indicated in London alone was in children under ten. You must not, of course, expect parents who have lost a child as the result of vaccination to take this dispassionate view of the facts, but it is your duty and that of Government to weigh the gain against the loss, and be guided accordingly.

Granting, however, that you and the vast majority of intelligent persons are convinced by the facts which I have mentioned, and the far more numerous arguments which I have had no time to discuss to-night, that vaccination is an indispensable prophylactic against smallpox, there remains the purely ethical question, what right has the majority to enforce its convictions upon the minority who do not agree with them? I do not propose to discuss this matter to-night. I will only say, in closing, that since the matter does not merely concern the health of the individual, but that of the community at large, the majority has, in my opinion, an absolute right to enforce its views, for its own protection, as it does in all other social relations. As to the expediency of so enforcing them, opinions may well differ. For my own part I am disposed to place more reliance upon an active policy of instruction and education amongst the ignorant, who have hitherto been at the mercy of the irresponsible anti-vaccinationist, than upon a system of pains and penalties, which has of late succeeded only in evoking amongst a certain class an unreasoning hostility, begotten by prejudice out of ignorance, and baptised by pseudo-martyrdom.

Notes.

THE Kirkes Scholarship and Gold Medal have been awarded to Hugh Thursfield, *Proxime accessit*—T. J. Horder.

THE first Festival Dinner of the Alexandra Hospital for Children with Hip Disease was held on Thursday, April 8th, at the Whitehall Rooms, Hôtel Métropole, the Duke of Fife in the chair. The occasion was in every way a success; most distinctly so from a financial point of view, close upon £3000 being promised towards the funds of the hospital. The toast of the Medical, Surgical, and Nursing Staff was replied to by Mr. Dowly in an excellent and entertaining speech. Though our profession has nothing to do with politics, yet, said he, we combine the merits of all the three great political parties; for we are liberal in our medicine, conservative in our surgery, and radical in our cure.

We have been requested to call attention again to the claims of Ernest Guy Robertson, aged eleven years, for the votes of Governors of the Royal Medical College, Epsom, at the ensuing May election. He is the son of an old Bart's man, who was in practice at Bradford, and subsequently at Hambledon, Hants. His father died in 1891, leaving a widow and four children with very small means. The case is strongly recommended by Dr. Symes Thompson, Dr. Sanson, and other well-known medical men. Proxies should be sent to Mrs. Robertson, St. David's, Kingston Crescent, Portsmouth.

We call the following precious paragraph from the advertisement columns of a morning paper:

"The Society for the Protection of Hospital Patients appeals for Funds to carry on its work, namely, the Protection of Hospital Patients from unnecessary operations and experiments. For particulars apply to the Secretary, A. J. Beatty, 49, Leadenhall House, E.C."

A lady promptly applied by letter to the Secretary of this mysterious Society for particulars, and, strange to say, none were forthcoming. Comment is unnecessary.

MR. W. J. WALSHAM has been elected Joint Lecturer on Surgery *vis à* Mr. H. T. Bullin resigned.

THE HONORARY MEDAL of the Royal College of Surgeons has been awarded to Sir James Paget.

MR. R. C. BAILEY has been awarded the Jacksonian Prize of the Royal College of Surgeons for his dissertation bearing the motto "There's the respect that makes calamity of so long life"—*Hamlet*, Act III, Sc. 2. The subject of the essay was "The pathology, diagnosis, and treatment of diseases of the prostate gland."

FOR three years in succession the Jacksonian prize has been gained by a teacher in our Medical School; Mr. Waring in 1895, Dr. Kaultack last year, and Mr. Bailey this year.

SIR DYCE DUCKWORTH and Dr. Lauder Brunton have been nominated as delegates for the Royal College of Physicians at the International Medical Congress to be held at Moscow.

Amalgamated Clubs.

NEW MEMBERS.

H. V. Wenham.	J. H. Harker.
F. Gröne.	F. W. Jackson.
F. H. M. Spaight.	R. J. P. Thomas.
C. P. Charles.	W. R. L. Drawbridge.
W. P. S. Branson.	G. F. Gill.

CRICKET CLUB, 1897.

THE coming season promises to be one of the best, if not the best we have had for many years. All our last year's men will be

available, and many of them will be able to play more regularly than in the past season. Mr. J. A. Willett's wrist has also quite recovered from the unfortunate accident which put him on the sick list for the last half of the season. The ground at Winchmore Hill looks as if it would turn out very well, and as we have had plenty of rain to keep it going, all we have to do is to pray for fine weather. There has been rather an unfortunate misunderstanding on account of the United Hospitals Club not being able to inform us (as their meeting is not held till May) whether our last year's captain, Mr. H. Bond, is still in his year. This has, of course, prevented us having our match list printed, and also prevented us from selecting our captain for this year; this will no doubt, however, be cleared up, and we may safely look forward to a really good season. Last year it will be remembered we drew with Thomas's for the Cup, and that match is to be played off early in May. The fixtures were published in the last JOURNAL.

Junior Staff Appointments.

HOUSE PHYSICIAN TO—		SENIOR.		JUNIOR.	
<i>Dr. Church</i>	G. Wedd, M.A., M.B., B.C.(Cantab.).	A. L. Ormerod, M.A., M.B., B.Ch.(Oxon.), M.R.C.S., L.R.C.P.	A. L. Ormerod, M.A., M.B., B.Ch.(Oxon.), M.R.C.S., L.R.C.P.	T. J. Horder, B.Sc., L.R.C.P.	M.R.C.S., L.R.C.P.
<i>Dr. Gee</i>	G. A. Auden, B.A., M.B., B.C.(Cantab.), M.R.C.S., L.R.C.P.	L. B. Burnett, M.A., M.B., B.C.(Cantab.), M.R.C.S., L.R.C.P.	J. Hussey, M.B.(Lond.), M.R.C.S., L.R.C.P.	F. H. Maturin, B.A., M.B., B.C.(Cantab.), M.R.C.S., L.R.C.P.	M.B., B.C.(Cantab.), M.R.C.S., L.R.C.P.
<i>Sir D. Duckworth</i>	L. B. Burnett, M.A., M.B., B.C.(Cantab.), M.R.C.S., L.R.C.P.	T. Hampton, M.R.C.S., L.R.C.P.	W. P. Cross, M.R.C.S., L.R.C.P.	E. G. D. Drury, M.B., B.S.(Lond.), M.R.C.S., L.R.C.P.	M.R.C.S., L.R.C.P.
<i>Dr. Hensley</i>	T. Hampton, M.R.C.S., L.R.C.P.	W. F. Cross, M.R.C.S., L.R.C.P.	J. P. Maxwell, M.R.C.S., L.R.C.P.	H. W. Lance, B.A., M.B., B.C.(Cantab.).	M.B., B.C.(Cantab.).
<i>Dr. Brantton</i>	W. P. Cross, M.R.C.S., L.R.C.P.	J. A. O. Briggs, M.B., B.S.(Lond.), F.R.C.S., L.R.C.P.	M. G. Pearson, M.B., B.Sc.(Lond.), M.R.C.S., L.R.C.P.	E. Laming-Evans, M.A., B.Sc.(Lond.), M.R.C.S., L.R.C.P.	M.B., B.C.(Cantab.), M.R.C.S., L.R.C.P.
<i>Mr. Smith</i>	J. E. G. Calverley, M.R.C.S., L.R.C.P.	J. W. Haines, M.B., B.S.(Lond.), F.R.C.S., L.R.C.P.	H. B. Meakin, M.D., (Lond.), M.R.C.S., L.R.C.P.	J. J. Grace, M.B., B.S.(Durham), F.R.C.S., L.R.C.P.	J. J. Grace, M.B., B.S.(Durham), F.R.C.S., L.R.C.P.
<i>Mr. Willett</i>	J. W. Haines, M.B., B.S.(Lond.), F.R.C.S., L.R.C.P.	M. G. Pearson, M.B., B.Sc.(Lond.), M.R.C.S., L.R.C.P.	H. B. Meakin, M.D., (Lond.), M.R.C.S., L.R.C.P.	J. J. Grace, M.B., B.S.(Durham), F.R.C.S., L.R.C.P.	J. J. Grace, M.B., B.S.(Durham), F.R.C.S., L.R.C.P.
<i>Mr. Langton</i>	M. G. Pearson, M.B., B.Sc.(Lond.), M.R.C.S., L.R.C.P.	H. B. Meakin, M.D., (Lond.), M.R.C.S., L.R.C.P.	J. P. Maxwell, M.R.C.S., L.R.C.P.	H. Williamson, B.A., (Cantab.), M.R.C.S., L.R.C.P.	H. Williamson, B.A., (Cantab.), M.R.C.S., L.R.C.P.
<i>Mr. Marsh</i>	H. B. Meakin, M.D., (Lond.), M.R.C.S., L.R.C.P.	J. P. Maxwell, M.R.C.S., L.R.C.P.	J. P. Maxwell, M.R.C.S., L.R.C.P.	H. Williamson, B.A., (Cantab.), M.R.C.S., L.R.C.P.	H. Williamson, B.A., (Cantab.), M.R.C.S., L.R.C.P.
<i>Mr. Butlin</i>	J. P. Maxwell, M.R.C.S., L.R.C.P.	H. Williamson, B.A., (Cantab.), M.R.C.S., L.R.C.P.	H. Williamson, B.A., (Cantab.), M.R.C.S., L.R.C.P.	H. Williamson, B.A., (Cantab.), M.R.C.S., L.R.C.P.	H. Williamson, B.A., (Cantab.), M.R.C.S., L.R.C.P.
OPHTHALMIC HOUSE SURGEON.— E. W. Brewerton, M.R.C.S., L.R.C.P.					
RESIDENT MIDWIFERY ASSISTANT.— E. W. Ormerod, M.A., M.B., B.C.(Cantab.), M.R.C.S., L.R.C.P.					
EXTERNAL MIDWIFERY ASSISTANT.— April—W. Langdon Brown, M.A., M.B., B.C.(Cantab.).					
RESIDENT ASSISTANT ANAESTHETISTS.— Senior.—H. J. Paterson, M.A., M.B., B.C.(Cantab.), M.R.C.S., L.R.C.P. Junior.—F. H. Lewis, B.A., M.B., B.C.(Cantab.), M.R.C.S., L.R.C.P.					

Appointments.

COWIN, D. II. F., M.R.C.S., L.R.C.P., appointed Assistant House Surgeon to the Devon and East Cornwall Hospital.

TICKELL, H. M., M.A., M.B., B.C.(Cantab.), appointed

House Physician to the Brompton Hospital for Diseases of the Chest.

TUCKER, A. B., M.R.(Lond.), M.R.C.S., L.R.C.P., appointed House Surgeon to the Children's Hospital, Shadwell.

WRANCHAM, W., M.B.(Lond.), M.R.C.S., L.R.C.P., appointed Assistant House Surgeon to the Leicester Infirmary.

HUGGINS, S. P., M.B.(Lond.), M.R.C.S., L.R.C.P., appointed House Physician to the Sussex County Hospital, Brighton.

DRAGE, LOVELL, M.A., M.D.(Oxon.), M.R.C.S., appointed Coroner for the St. Albans division of Hertfordshire.

DUCAT, ARTHUR D., M.B.(Lond.), M.R.C.S., L.R.C.P., appointed District Medical Officer and Public Vaccinator to the Chiswick district of the Brentford Union.

HOFMEISTER, H. EDGAR, B.A., M.B., B.C.(Cantab.), M.R.C.S.(Eng.), appointed Medical Officer of Health to the East Cotes District Council.

LOW, CHARLES W., M.B., D.P.H., F.C.S., appointed Medical Officer of Health to the Stowmarket Urban District Council.

COLLINGRIDGE, W., M.D., D.P.H., M.R.C.S., reappointed Medical Officer of Health for the Port of London.

NUNN, P. W. G., L.R.C.P., M.R.C.S., reappointed Medical Officer of Health to the town of Bournemouth.

KINGDON, J. R., B.A.(Camb.), M.R.C.S., L.R.C.P., House Surgeon to the Weston-super-Mare Hospital and Dispensary.

Cases of Special Interest.

Mark, bed 11.—Acute rheumatism and morbus cordis.
Mark, bed 1.—Functional paraplegia.
Luke, bed 8.—Paroxysmal tachycardia.
Matthew, bed 7.—Aneurism of innominate artery.
Matthew, bed 11.—Right hemiplegia.
Colston, bed 2.—Left hemiplegia.
Colston, bed 18.—Purpura.
Colston, bed 20.—Simple meningitis.
Rahere, bed 17.—Sarcoma of chest wall.
Rahere, bed 22.—Posterior lateral sclerosis.
Rahere, bed 24.—Alcoholic neuritis.
Faith, bed 2.—Exophthalmic goitre.
Faith, bed 9.—Exophthalmic goitre.
Faith, bed 11.—Locomotor ataxy.
Faith, bed 20.—Basal meningitis.
Hope, bed 4.—Right hemiplegia (following scarlatina).
John, bed 0.—Hydrochloric acid poisoning.
Mary, bed 2.—Chorea.
Mary, bed 10.—Chorea.
Mary, bed 14.—Hydrocephalus and morbus cordis.
Elizabeth, bed 24.—Rheumatoid arthritis (set. 5).

The Month's Calendar.

MAY.	
Sat. 1st.	—Summer Session begins. Names for Brackenbury Medical and Surgical Scholarships to be sent in. Cricket Nets and Tennis Courts open for play.
Tues. 4th.	—Dr. Hensley's and Mr. Marsh's duty. Dr. Thorne-Thorne commences his course of Public Health Lectures, 10.30, Med. Th.
Wed. 5th.	—Dr. Clave Shaw commences his Lectures on Mental Diseases, 11.30, Med. Th. Sale of Papers, Abernethian Society, 12.30 p.m. Clinical Lecture. Mr. Smith.
Thurs. 6th.	—Primary Fellowship Exam. Brackenbury Medical Sch. Exam.
Fri. 7th.	—Brackenbury Surgical Sch. Exam. Dr. Lauder Brunton's and Mr. Butlin's duty. Clinical Lecture, Dr. Church.
Tues. 11th.	—Dr. Church's and Mr. Smith's duty.
Wed. 12th.	—View-day.
Fri. 14th.	—Dr. Gee's and Mr. Willett's duty. Clinical Lecture, Dr. Gee.
Tues. 18th.	—Sir Dyce Duckworth's and Mr. Langton's duty.
Wed. 19th.	—Clinical Lecture, Mr. Smith.
Thurs. 20th.	—Lawrence Sch. Exam.
Fri. 21st.	—Dr. Hensley's and Mr. Marsh's duty. Clinical Lecture, Sir Dyce Duckworth.
Tues. 25th.	—Dr. Lauder Brunton's and Mr. Butlin's duty.
Wed. 26th.	—Clinical Lecture, Mr. Langton.
Fri. 28th.	—Dr. Church's and Mr. Smith's duty. Clinical Lecture, Dr. Hensley.

Clinical Lectures for the Summer Session.

Clinical Medicine.—Fridays at 1 p.m.

May 7th.—Dr. Church.

„ 14th.—Dr. Gee.

„ 21st.—Sir Dyce Duckworth.

„ 28th.—Dr. Hensley.

June 4th.—Dr. Brunton.

„ 11th.—Dr. Church.

„ 18th.—Dr. Gee.

„ 25th.—Sir D. Duckworth.

July 2nd.—Dr. Hensley.

„ 9th.—Dr. Brunton.

Clinical Surgery.—Wednesdays at 2.45 p.m.

May 12th.—Mr. Smith.

„ 19th.—Mr. Smith.

„ 26th.—Mr. Langton.

June 2nd.—Mr. Langton.

„ 9th.—Mr. Marsh.

„ 16th.—Mr. Marsh.

„ 23rd.—Mr. Marsh.

„ 30th.—Mr. Butlin.

July 7th.—Mr. Butlin.

„ 14th.—Mr. Butlin.

Examinations.

FIRST CONJOINT.—Four years regulations. Chemistry.—F. B. Jones. *Materia Medica*.—E. F. Crabtree.

FIRST CONJOINT.—Five years regulations. Chemistry and Physics.—A. Butler, V. J. Duigan, W. J. G. Johnson, C. H. Turner, F. J. Wood.

FIRST CONJOINT.—Pharmacy.—G. G. Campbell, C. C. Morgan, C. C. B. Thompson.

FIRST CONJOINT.—Biology.—H. H. Butcher, F. W. Cheese, E. W. Dall, G. S. Ewen, L. C. Ferguson, P. Harris, E. O. Hughes, H. Mills, L. M. Morris, A. F. C. Pollard, E. W. Price, H. E. Scoones, M. B.

Scott, H. Whitwell, C. S. Woodwark, J. H. Wroughton, A. C. Young, C. L. C. Owen.

SECOND CONJOINT.—Anatomy and Physiology.—H. E. Ashley, F. M. Howell, J. W. Nunn, K. H. Paramore, A. T. Pridham, C. A. S. Ridout, P. H. Ross, E. Russell-Kistlen, E. G. Smith, A. E. Soden, R. L. Thornley, A. R. Tweedie, E. Wethered, R. H. R. Whitaker, M. G. Winder.

SECOND CONJOINT.—Anatomy.—W. M. James.

UNIVERSITY OF DURHAM.—Chemistry and Physics.—G. Smith, P. E. Turner, B. E. G. Bailey, W. C. Douglas. *Anatomy, Physiology, and Materia Medica*.—H. G. Harris (First in 2nd Class Honours), R. Walker (2nd Class Honour), F. W. Crossman (2nd Class Honour), E. G. Klumpp, G. Smith, E. S. Wilkinson.

FINAL L.R.C.P. AND M.R.C.S.—The following have passed all parts of the final examination.—R. A. Fegan, G. D. Rowland, M. G. Dyson, J. H. Thursfield, A. W. Dickson, H. S. Beadles, H. Mundy, S. Hunt, R. C. Ralston, E. H. Betts, A. E. Ireland, J. Gundlach, J. E. Sandilands, H. C. Manning, E. J. E. Coop, A. Granville, P. Wood, B. E. Laurence, A. Woolcombe.

Obituary.

HUGH ROBERT CAMPBELL BARBER, B.A., M.B., B.C.(Cantab.). We have only just received notice of the death of Surgeon Captain Barber, which took place, following enteric fever contracted in the discharge of his duties, at Murree, Punjab, India, on August 30th, 1896, at the age of 32. Though late, we hasten to chronicle this sad loss of an old Bart's man in the service of his country. Mr. Barber's ability may be gathered from the fact that he was a Scholar of St. Catherine's College, Cambridge, Gilchrist Scholar in the University of London, Clothworkers' Scholar, and Epsom Scholar of this Hospital. Subsequently to qualification he entered the Indian Medical Service, in which he was engaged at the time of his death.

Review.

STUDENT'S NOTE-BOOK. Part I—PHYSIOLOGICAL CHEMISTRY. By ARTHUR J. HALL, B.A., M.B.(Cantab.), M.R.C.P.(Lond.); Hon. Physician, Sheffield Royal Hospital; Lecturer on Physiology, School of Medicine. London: Baillière, Tindall, and Cox, 1897. 2s. 6d. net.

Of the importance of successful teaching in Physiological Chemistry there can be no doubt, for it is on chemistry that physiology must largely rely at the present moment for its further advance. And such an advance appears to be taking place along two lines—the synthesis of complex organic bodies, and the study of the micro-chemistry of the cell. The example of the first which will occur to all is Emil Fischer's work on the synthesis of the sugars. Few things have so cleared and simplified our views of a difficult problem. Even more suggestive are Dr. Pickering's as yet incomplete researches on the synthesis of colloid bodies, which may lead in time to the discovery of the structure of the proteid molecule. The other line of advance does not involve large questions such as these, but the mapping out of the various elements in the cell affords us aid by no means to be despised. For instance, McAllum's methods of detecting intra-cellular iron must help us to an under-

standing of some of the obscure points in the pathology of anemia. It were easy to multiply examples if necessary, for biological problems probed deeply frequently become chemical problems, and it is to the chemist that we must turn for their solution.

It is because of the need and importance of a sound elementary knowledge of physiological chemistry that we welcome the little book before us. Dr. Hall is an old Bart.'s man, well known to many, who in his time played many parts in the Amateur Dramatic Club of the Hospital. His book is precisely what it aims to be, a practical guide for the student to have by him in the laboratory. It makes no attempt to replace text-books for reading, but is an admirable pilot among the shoals of chemical apparatus. By marginal notes the student is briefly reminded of the meaning and character of the tests he is doing, while the text is devoted to telling him precisely what to do. Any one who turns to Dr. Hall's instructions for using Fleischl's Hæmometer (p. 23) will bear out what we have said as to the eminently practical nature of the book.

Of the value of this schematic method of teaching physiology most teachers are now aware. It has been in use for a good many years at Cambridge, and Dr. Hall's plan does not differ widely from that of Dr. L. E. Shore's tables for elementary students, and Dr. Sheridan Lea's for advanced classes. But it most distinctly has its place between these two. Where the general execution is so good it may seem invidious to draw attention to weak points, but it does seem to us that the section on bile and that on urinary pigments are not equal in standard to the rest of the work.

It is well and clearly printed, and thoughtfully interleaved for note-taking. We have noticed but few typographical errors, though there is one unfortunate one on p. 18 (par. 2), where a "not" has crept in the text and spoilt the sense of the paragraph. But that can be altered in the next edition, which will doubtless soon be called for.

New Productions.

"SOLIDS" OF COMPRESSED EUCAINE HYDROCHLORIDE (Burroughs, Wellcome & Co.).—Eucaine as a local anæsthetic has certain obvious advantages over cocaine. It is much less toxic, produces more extensive anæsthesia, keeps better, and can be sterilised by boiling without decomposition. Dr. W. J. Horne and Mr. Yearsley, in reporting thirty-six cases of its use at the Farringdon General Dispensary (*British Medical Journal*, January 16th, 1897), found that 5 per cent. or 8 per cent. solutions were efficacious in most cases, though a 2 per cent. solution was quite adequate for the uvula, laryngoscopy, posterior rhinoscopy, and aural examinations. Anæsthesia is slower in its onset with eucaine than cocaine, taking about ten minutes, and lasting ten to twenty minutes. In only three of their cases were any bad effects noted, and in each of these there were other conditions quite sufficient to account for the symptoms without referring them to the anæsthetics; further, it was successfully used where cocaine had produced bad effects. This drug has not been extensively employed in the throat department of this hospital, but the instances of its use confirm Dr. Horne's and Mr. Yearsley's observations. Its advantage for those patients who manifest an "idiosyncrasy" against

cocaine is very considerable. But these authors mention two drawbacks which will prevent its replacing the better known drug entirely. It is apt to cause temporary salivation when applied to the mouth or fauces, thus hampering the operator; and it does not reduce the size of the turbinate bodies in the way that causes cocaine to be a valuable aid in diagnosis.

Of the efficacy of these convenient "soloids" of the drug recently prepared by Messrs. Burroughs, Wellcome & Co. we can speak from personal observation; one solid dissolved in eleven minims of water makes a solution the strength of which is one in ten. But of their solubility we speak with more diffidence; it is by no means easy to dissolve one in eleven minims of water: we believe the manufacturers recommend the use of warm water, but this is not stated on the bottle.

"TABLOIDS" OF COMPRESSED RED GUM (Burroughs, Wellcome & Co.).—Here is an old friend in a new guise, and a pleasant guise too. By some recent improvements in the formula Messrs. Burroughs & Wellcome have produced a mild though efficient astringent for the throat, which they rightly claim does not "offend the palate or affect the appetite." These tabloids are supplied in bottles containing 100 in each.

Correspondence.

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

WOUNDS AND BRUISES IN THE INSANE.

SIR,—In connection with Dr. Clape Shaw's paper on "Wounds and Bruises in the Insane," the following case recently attended may perhaps seem of some interest.

A man aged about 53 had bronchitis, slight in itself, but attended with very violent cough. After a few days swellings appeared along the margins of the lower ribs in front. These turned out to be hæmatomata, the "bruising" and lividity from which extended over the whole abdominal region, and even on to the penis and scrotum. The hæmatomata were no doubt due to rupture of some fibres of the recti or of the lower intercostals; they were attended with severe pain. Beyond slight rhonchus there were no physical signs in the chest. The man was of neurotic temperament and very muscular. He certainly coughed with unnecessary violence at times.

This condition is, I suppose, a very unusual one, and had it occurred in an insane person in asylum practice it would have been hard to believe that he had not had a good pomelling from the attendants.

I am yours, &c.,
H. STANLEY.

Birth.

BENJAMIN.—On March 27th, at The Old Hall, Dorrington, Shrewsbury, the wife of J. K. Kinsman Benjamin, M.R.C.S., L.R.C.P., of a son.

Marriages.

PENNY—MACRAE.—On the 24th inst., at St. John's Church, Upper Norwood, by the Rev. H. S. Carpenter, Alfred Gervase Penny, M.A., M.B., B.C., of Peterhouse, Cambridge, and St. Bartholomew's Hospital, to Nellie Grace Gillanders, eldest daughter of the late John MacKae, of Arrowah, Bengal, and of Mrs. MacKae, of Ingleside, South Norwood.

SWABEY—STACE.—On the 22nd inst., at Widcombe Old Church, Bath, by the Rev. H. B. Swabey, father of the bridegroom, and the Rev. F. La Trobe Foster, vicar of Widcombe, Maurice Swabey, A.M.S., to Hilda Maunsell, daughter of Lieut.-Colonel E. V. Stace, C.B., Indian Staff Corps.

ACKNOWLEDGMENTS.—*Guy's Hospital Gazette*, *St. George's Hospital Gazette*, *St. Thomas's Hospital Gazette*, *St. Mary's Hospital Gazette*, *The Middlesex Hospital Journal*, *The Guyoscope*, *The Student* (Edinburgh), *The Nursing Record*, *The Charity Record*, *The Hospital*.

St. Bartholomew's Hospital



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NOTICE.

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

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

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

A Cover for binding (black cloth boards with lettering and King Henry VIII Gatenay 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,

MAY 14th, 1897.

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

Concerning the Ship's Surgeon and some Tropical Diseases.

By W. H. MAIDLAW, M.D. Duclun., F.R.C.S.,
Late Surgeon P. and O. S.S. *Caledonia*.

"CŒLUM non animum mutant qui trans mare currunt." Had Horace lived A.D. 1897, and not in B.C. 55, he might have sung "ruunt" instead of "currunt," for in less than twenty-eight days a first-class P. and O. liner will reach Bombay, a distance of many thousands of miles, and in eight months one's general knowledge, ethnological and medical, will be richer by at least a superficial acquaintance with Gibraltar, Marseilles, Malta, Brindisi, the Suez Canal, Aden, and India. Every-

where almost there will be found malaria in its protean form; the Malta, Mediterranean, or Rock fever at Gibraltar and Malta; at Brindisi, once the home of Virgil, you may meet the maize poisoning pellagra; with luck, the guinea-worm (*Filaria Medinensis*), that fiery serpent of the wilderness of the Bible, at Port Said and Aden; and at Bombay there await us also plague, dysentery, beri-beri, leptosy, and Oriental sore (possibly the disease of St. Job), to welcome the keen man of medicine, to say nothing of Mussulman, Buddhist, Parsee, and Hindoo. Of sea-sickness there is no end, and on board a large ship like the *Caledonia*, taking 770 people, there should be no idleness for the good. I write that others may possibly taste these good things too, that those who have may rise in controversy, and add to our knowledge as controversy and competition always do, to tell what I have seen and perchance to interest some one. For, as my opening quotation says, "they change their sky, but not their soul, who plough the vasty deep;" back we come to England, anxious to renew old acquaintanceship, anxious to tell all we know, preferring the joy and competition of England to the cloudless sky of the East. Sunless London, yet adorable London, that brings our paper at breakfast-time! "Cacoethes scribendi" I consider is a bad name for writers in this Hospital JOURNAL. That anyone who has aught to tell useful or interesting should tell it is a symptom of that illogical and perhaps ethically indefensible but quite real instinct or intuition called *esprit de corps*, a spirit that upholds our hospital institutions, of which no one thinks more than those that are gone. There are scattered about the East many old Bart.'s men to whom the JOURNAL is a great joy—if they, as they could, would only contribute their little something! If writing brings no credit, it need bring no discredit; it might even give pleasure, a pleasure given for pleasure received. Wherefore to write for the JOURNAL, if the contribution be wanted (a symptom of which is its reception), is not an instance of morbidity necessarily, of "cacoethes scribendi." "Cœlum non animum mutant qui trans mare currunt."

Now regarding the study and practice of tropical diseases, those principles so well instilled at home form quite

sufficient foundation if—which, however, are also parts of that teaching—our five special senses be alert, and we remember the differences of climate, sociality, and geography, and other “circumstances under which;” above all, if we have that worldly wisdom which is a variety of tact. Our fundamental knowledge tells us what such and such a tropical disease is not; reference to the proper text-books helps to say what it is, it helps to prognosis; experience and worldly wisdom help to treatment. A long-suffering patient with ague or remittent fever may well be left to suggest the best dose of quinine, and how to give it—a few grains more or less may be gravely advised (!); home-learned knowledge in a case of beri-beri can exclude peripheral neuritis, locomotor ataxia, or nephritis, and prognose death from a failing pulse; but the old sea captain says, “It is beri beri.” The mere knowledge that quinine is good for malaria, ipecacuanha or bael fruit for dysentery, is a far cry from knowing how to wield these weapons; as well expect a child to know Newton's great law from knowing an apple falls to the ground.

Writers of great works usually preface their remarks with a garnish of history; in this (!) I would remark that St. Luke, the physician, must be the pioneer ship's surgeon, for he travelled with St. Paul to Asia, and probably to Malta. It has been suggested that he went to treat St. Paul's eyes after the vision; but St. Paul's ocular condition, taking the story on its merits, was probably fundal, and as little adapted for treatment then as now. The late Professor Huxley was also at one period of his great life a ship's surgeon, so we have illustrious ancestors. Judging from our comparatively recent introduction into the English services, probably the ancients did without us. It is curious, yet true, that the world can wag without the doctor!

Now, to become a ship's surgeon one must choose a good Company; the best known are the Peninsular and Oriental (P. and O.), Castle Line, Orient, Holt's, British India, Royal Mail, &c. It is difficult to imagine a better than the far-famed P. and O. running to Japan, India, Australia, Egypt, and the Mediterranean, giving its surgeons a salary of £10 a month, a position in the ship perhaps second only to the captain, a chance of meeting the best society, and of making valuable friendships, improving his knowledge both worldly and medical. Hampered occasionally he may be by official pettiness, or distressed by uncomfortable surroundings during dock duty; the general courtesy is very great, and such discomforts are only to be expected, they are symptomatic of the existence of the world, they are counteracted by the sight of Gibraltar and all the interest of the East, and the joy of seeing plague and beri-beri, ague, &c. The best side of medicine is its attendant circumstances and the sporting instinct they call into being; it is a gratification of the senses, and the best senses—the intellect. At any rate, whatever the motive, the result is usually good for some one. “However” (as our old friend

says when he tells an inconsequential story), “this has nothing to do with the P. and O.” But the subject is nautical, and lends itself to yarns, and many are the traditions about P. and O. surgeons, mostly redounding to their credit. A Bart's man, a friend of mine, was appointed to a ship of iron deck; all the Company knew of him is that a gentleman of modern appearance was seen to thoughtfully tap the resounding deck, and the place knew him no more! I know of a surgeon who treated his captain for ophthalmia with a silver nitrate lotion, to whom in a few days was brought a small piece of coal that had been in the eye, with his commander's compliments. The surgeon, equal to the occasion, expressed much joy that the ophthalmia had “come out so easily.” “However,” would-be surgeons apply at 122, Leadenhall Street, where they are politely asked to state “all they have to say for themselves,” which may or may not be pleasurable. Those with literary adornments and experience do not, I think, have to wait very long for a post, but without a “leetle” influence the man just duly qualified, important as he be, has sometimes a long wait, and it were better for that man if he took a few *locums*. Degrees, &c., are of course vanities, but still useful. Curious waves of choice occur. Some years ago an Irishman was always associated in men's minds with ships' surgeons (was it the L.K.Q.C.P.I. ?); then came the Scot; now there is a large London element, in which are many Bart's men, whom it would make blush did I tell all the good I have heard of them. On board the big ships quite a good experience is necessary, for they carry over 400 passengers and 300 crew. The passengers are often army or political people of much importance (I have given a future admiral a black draught, and painted the fauces of a Hindoo prime minister); the crew is composed of English A.B.'s and stewards, and the rest, besides the officers, are natives, Goanese, or Mussulmans, liable to all the diseases of the Orient. The post is not the sincere that some imagine. It is of course *possible* to be lazy, but an accident is always on the cards; a fireman gets his fingers crushed, here is a case of sunstroke, there a fight, a doubtful rash has arisen, or a hernia descended; then the captain requires a long consultation on matters sanitary, some new and unheard-of smell has greeted some one. We had on one passage seventy children. Indian children are very precocious; they have all the “diseases of Egypt” of their elders. Each must have a bottle of medicine, which he or it carries about in company with Spencer's *Synthetic Philosophy*. Then one gets lost, and the doctor has to join in the hue-and-cry, or he may be required to pronounce whether it is comatose or asleep. “Let a sleeping child lie” is never so important as in the early stages of a voyage. The mothers on board ship, whether of none or ten, as elsewhere, know everything. A child's nose bleeds—that is its liver: it is two years old—but has only got twenty-six teeth (!): it eats too

much—it has the worms: it has a cold in its nose—behold, “fever”! A most annoying type of patient is that one who sends round for chlorodyne or demands instantly some huge dose of quinine, people of whom you know nothing. If your temper is bad you remark you are not a chemist; they go away and say you are a brute, and “another of those ships' doctors!” It is best to treat them and “be nice.” If their own treatment fails they come to you subsequently, and there is a way of learning even from them. They will explain how they were treated by their eminent medical officer at Timbuctoo. As a rule, the passenger does not start with a bias against the doctor, he will tell of many “good surgeons at sea,”—in fact, he is rather of opinion that a surgeon on board a P. and O. must be rather a good man, and noting the absence of fees, perchance puts off his necessary consultation till he gets to sea. The ladies are probably impressed sometimes by the glamour of the uniform, resplendent in brass and velvet, and several surgeons I know have found at sea those partners that have gladdened their declining years, and alleviated the burden of existence. However, one might tell many stories.

The Company provide drugs; the surgeon is expected to find his uniform, which costs about £18, but it is necessary also to lay in a large stock of linen. A cholera belt is very necessary. Chills cause troublesome intestinal complaints, and are usually due to lying on the bunk with port open, clad in thin pyjamas, and exposed to the chill of misty dawn. There is a list of instruments the surgeon has to supply, but it does not include the very necessary tracheotomy instruments, gag, antiseptic ligatures, hydrocele trocar, laryngoscope, and various specula; a throat spray is also very useful. The drugs supplied are the old-fashioned preparations, so I would strongly advise that a stock of tablets be taken, which save so much trouble, are very good, and are remedies not all in the schedule. I would recommend sulphonal, or better, trional, phenacetine, antipyrin, chloralamide, nitro-glycerine, caffeine with antipyrin, binioidide of mercury, voice tablets, cocaine, quinine, ipecacuanha, Warburg's tincture, bromide of potassium, salol, salicylate of soda,—all of which can be obtained from Burroughs and Wellcome. Amyl nitrite is also useful, and the soluble hydrochlorate of quinine for hypodermic injection. Besides Tennyson, the only books required are Davidson's *Tropical Diseases* and a *Materia Medica*. A knowledge of Hindostani to some degree is necessary, in order to deal with the native crew, but by means of a small book and the ears it is soon picked up. In it the letters are Anglicised, and I may say the pronunciation too, to such an extent, indeed, that a new language is likely to arise, a “P. and O. Hindostani;” at all events, a native speaks a language at the end of two years which, when he entered, he could neither understand, nor much less speak. The great idea of the Englishman who learns his Hindostani in

this way seems to be to say *some* word in Hindostani at all costs; thus I once heard a quartermaster say (“puckero” is “to take hold”), “Why (here follow all sorts of English expletives) don't you puckero, you (an expletive)?” There is a very good chance of learning very many languages and studying many religions, from the polytheism of the Hindoo to the atheism of many Englishmen,—“dwellers in Mesopotamia, Phrygia, and Pamphylia, do we hear them speak,” &c. It is said that with care a year's life at Port Said would fit one for the post of interpreter at Babel.

The surgeon's duty, besides keeping an eye on all the sanitary arrangements, treating all the sick, reporting the health of the ship daily to the captain, and sometimes being librarian, is at each port to meet the health officer at the gangway, where he declares on oath the sanitary condition of the ship, and on departure takes and keeps the bill of health, without which the ship must not leave. The last duty is often very embarrassing when there is a doubtful case, for on the one hand there is a risk of detention, and on the other hand the risk of offending one's conscience, if the case be not declared. It is all very well to talk of the happiness of doing one's duty; sometimes it causes much unhappiness. The foreign port officers, however, become more amenable to reason when they have partaken of our cigars and whisky, which they quite expect, and without which they may be quite hostile.

Quarantine laws, if vigorous, must help to the concealment of contagious diseases. Even during these plague times, when everybody is inspected and suspected, it is quite easy to pass over quite difficult and suspicious cases.

One other duty is to read the lessons on Sundays when there is no clergyman, and the captain reads the service. This reminds me of an amusing story. When quarantined at Marseilles it fell to my lot to read, and to read something appropriate. I read in 1 Samuel v, how after the battle of Ebenezer the ark of the covenant was carried from place to place in Philistia, from Ashdod to Gath, unto Ekron, who would have none of it, “that it slay us not and our people.” Afterwards a lady remarked to me, “What a trouble they must have had to move such a large thing!” She had only knowledge of the ark of Noah!

The surgeon is not expected, however—although it has been otherwise supposed—to provide the other entertainments. He certainly *may*, if he wishes to, or if he be one of those talented Crichtons, universal in their excellence; it is good for him and those that receive, but it is usually quite sufficient to help and to partake in the amusements, and to give the value of his high patronage. A leader will always arise, and the leadership is chiefly momentous to the leader. So much, then, for the surgeon, his ship, application, uniform, tools, drugs, and duties. And now for that most common thing he may have to treat, viz. sea-sickness, and, after that, notes on malaria, dysentery, beri-beri, leprosy, sunstroke, plague, &c.

Sea-sickness (mal de mer, Fr.; Seekrankheit, Ger.)—Of this subject the older writers tell us but little. The mariners of old in their trimmes and frailer barks, the younger vikings in their dragon-prowed boats, must like us have suffered once, yet I can find no details worth recording. The poet Ovid seems to have had a bad time of it when sailing to Tomi, his exile for the *Ars Amatoria*. He exclaims (in the *Tristia Eleg.*, iv, 5), "Me miserum quantis increascent æquora ventis!" and (line 23), "Cupio pariter timeoque revelli." "How the wind stirs up the ocean! ah, poor me! how I wish I were washed overboard, yet fear I death," are cries still going up to heaven from Biscay. A ship was driving to rocky death, "The ship is going ashore," was the cry. "Thank God!" moaned a poor sea-sick. Ladies lie collapsed in patient resignation, awaiting death; the male animal roars like a bull led to the slaughter, and wails the day of his birth, curses all that is above or below the ground, "or in the waters under the earth;" sometimes he ruptures himself. It must not, however, be supposed that it is always the novice who suffers; the whole crew of a torpedo-boat may be sick; even a well-salted seaman may be sick if there be any derangement of health, such as fever or gastric disturbance. There are many factors in its causation, but whatever the exciting organ, which apparently is the stomach, yet the essential one is probably cerebral. Reflex conditions must have much to do with it; the unwonted visual effects, the effects on muscular sense, must be quite important; the blind are said to suffer less, and lying recumbent, with eyes closed, in a quiet dark cabin are great helps to comfort. The *direct* cause is probably due to cerebral molecular disturbance, whatever that may mean, having its chief effect at the medulla oblongata, where it may be the origins of the vagi are influenced, leading in turn to some vaso-motor disturbance of the stomach, or altered secretion. It is difficult to say what influence the semicircular canals have, if any. The good effects of carminative drugs may point either to gastric anæmia or altered secretion; the slow, hard pulse, cold extremities, and polyuria, before vomiting has occurred even, seem to point to increased blood-pressure, due to, perhaps, stimulation of the vagal cardiac branches; while the effects of narcotics, the great incidence of the trouble upon neurotics, the aggravation caused by worry, the similar condition of train-sickness, all point to a cerebral origin of the trouble, despite the relief obtained by treating the stomach itself, which is not otherwise than when one treats the symptoms of a disease when the exciting cause cannot be got at (and such treatment may indeed influence that cause, just as when we treat the dyspnoea of pneumonia by oxygen). I know a surgeon who, on the theory of increased blood-pressure being the cause, gives atropine hypodermically as a routine, and says it is very satisfactory. It seems rather heroic.

I really think Dante might have placed sea-sickness in

his hell to make hell more realistic, and I am sure the pen of Dante would have described the symptoms well—the giddiness getting worse, frontal headache, the horrid, indescribable epigastric uneasiness, which are so well known to the victims. The symptoms may remain like this, or proceed to nausea and constant vomiting, first of the contents of the stomach, then mucus and bile, till the patient wonders "where it all comes from." With these are associated a frequent micturition, due to polyuria, a pale pinched face, a slow, small, but hard pulse, coldness and shivering, and the very thought of food is horrible. Sometimes exhaustion supervenes, sometimes the headache may persist, but ordinarily the scene changes as if by magic when the sea stops its raging and the wind drops, and the merry sun sparkles on the face of the waters, "and the sunlight clasps the earth and the moonbeams kiss the sea;" joy reigns everywhere, music again charms the erst sick, now never so well,—in fact, to proceed to bathos, the congested liver has had an excellent stimulation, and the dilated stomach is empty; they have been chastened by adversity.

As regards treatment, much *can* be done, despite the scepticism caused by the presence of so many specifics in the shops. Its alleviation or relief procures many friends; and even were it not so, we should, if asked, relieve a very distressing and real complaint. Men, as a rule, do not suffer so much as women; the quite old are frequently immune; infants in arms only occasionally suffer; dogs, horses, and cows show unmistakable discomfort; pregnancy is not so liable to be terminated as some imagine, due, probably, to the absence of any venous congestion, but it is an indication for careful watching; so also require care those frail creatures who voyage for health—the anæmic, phthisical, the suicidal, the herniated, and the aneurismal. Some ask, why treat a physiological condition? This is begging the question; they use the word physiological, and think they have proved their point; but typhoid fever or any other illness is the physiological result of a physiological cause—the result disturbing our equanimity we call pathological. As a matter of fact, whatever we think is natural—and we must remember nature left to herself may cause death, as when stricture follows ulceration by nature's remedy—we really have not much voice in the matter; civilisation in the nineteenth century demands relief by our art, and where inexorable social law allows it we give it.

The treatment is to be divided into prophylactic and immediate. For prophylaxis the bowels must be emptied three or four days before sailing by a mercurial pill, followed by a black draught, and for the following nights a pill of aloin, belladonna, and podophyllin, or one like that. Thirty to forty grains of bromide of ammonia, with sal volatile, should be given three times a day, increased till there is a certain degree of heaviness, and continued for two days after leaving port. The diet must be simple

in kind, regular and nutritious. When the trouble comes, if come it must, it will be decidedly mitigated, and is usually completely relieved, by a few drops of Spir. Chloroformi, a glass of champagne, or any of the remedies to be mentioned. Of course it is only advisable to treat invariably bad sailors thus, and there must be several contra-indications. It has been quite successful in my hands, and on my own vile body, for I, like Æneas, have had much sorrow, "quorum pars magna fui." It is a curious position to be envied for your immunity as you pass doing your deeds of mercy, when all the time you feel "like Vesuvius just before the destruction of Pompeii," as some one described his sensations.

As regards *immediate* treatment, that which I have found most valuable is to insist on recumbency in a darkened cabin, with nothing to eat but a dry biscuit to nibble, or some solid beef or chicken essence. Do not advise loading the stomach, so as "to have something to be sick on;" remedies cannot act on a full stomach, and besides, it is useless in practice. Then give Tr. Gentian, cardamoms, sal volatile, aa ʒ i dr., and ʒo minims of pure chloroform in a tumbler of ginger ale or soda water, of which a teaspoonful is to be taken regularly at intervals of five minutes. Or into the same medium may be put liq. bismuth citrate ʒ dr., Acid Hydrocyan. dil. ʒ minims, Spir. Lavendulæ Co. ʒ dr. If there be any exhaustion it is best to order iced dry champagne; but whatever be given, it must not be more than two teaspoonfuls bulk, or it will be promptly returned,—a fact which makes the vaunted specifics like chlorobrom, yanatas, &c. (mostly solutions of bromide and ordered in large doses), of so little avail. When the sickness has stopped, if the patient lies wakeful and restless, these may *then* be given; but there is nothing better, in my experience, than chloralamide, sulphonal, or bromide of potassium in tablet form—they are so certainly retained. I have known chloralamide stop the sickness.

The cases which go on to prostration must be very rare. I have only met with one case out of more than 3000 passengers. For them, nutrient enemata, with hypodermic injections of strychnine and morphine, and a little brandy or iced champagne by the mouth, are required.

In many cases the symptoms proceed no further than giddiness, nausea, and a severe frontal headache, which last may be due to the increased blood-pressure giving rise perhaps to uric acid deposit,* or it may be merely due to the assumed cerebral molecular disturbance. For this condition

* On the analogy of such deposits in chronic nephritis. Since, Dr. Haig has kindly made me clearer. The relation between cause and effect is converse. Gastro-intestinal upset leads to diminished acidity of blood, hence the uricæmia, increased blood-pressure, and headache. But this headache is often unaccompanied by stomach upset, and if it be uricæmic, salicylate of soda, by getting more uric acid into solution, should increase it. The post-sea-sickness headache is more likely to be due to this cause, but in it there are no signs of increased blood-pressure, as in the early stage. Perhaps the cerebral disturbance leads to uricæmia. The paper, however, has no pretence to be exhaustive, it is merely suggestive and "charity."

a tablet of caffeine and antipyrin (B. & W.) does much good, and salicylate of soda is sometimes valuable when the former fails; and these same remedies do good to the headache that persists after the storm.

For cases of pregnancy it is often necessary to give morphine fairly soon, in instances when the condition is early and the sickness is likely to be severe, and abortion is probable from the history of other pregnancies. Delivery at sea, especially in a rough sea, is very troublesome, and may be dangerous.

After a little experience, I think it is usually easy to recognise cases where there is danger of the morphine habit. To withhold such a valuable remedy seems to be a confession of weakness. The dangerous class are those leisured, neurotic, and clever people who like to live in the present—those who live on their senses. In some cases morphinism must be better than the alternative, as, for instance, when a vivacious lady doctor, from whom morphia withheld meant severe pelvic neuralgia, who was delightful, happy, and witty under morphia, whose doses required little increase, who was unhappy without it, preferred morphinism to the abdominal section, advised after all else had failed. "Why, indeed," she asked, "should I not live under morphia, if I harm no one? Why must I have my peritoneal cavity viewed by a Philistine?" I could not say she harmed herself; I could only point out that there were not many more available sites for the puncture. She certainly harmed no one—"far otherwise!"

It is worth remembering when one comes across boils about the arms or legs, either in the tropics or temperate climes, to look for signs of hypodermic injections. Mendacity is another symptom of morphinism—most wickedness, indeed, has a physical basis.

But to return to sea-sickness, however, when the remedy mentioned above fails, which it rarely does, the next best remedies in order of their merits are cocaine, given in ʒ-grain doses every half-hour four times, carefully watching; a capsule of nitrite of amyl also helps if sniffed occasionally, and must be given if there be any anxiety from the cocaine; nitro-glycerine tablets every half-hour for four times are sometimes wonderfully useful. Then caffeine and oxalate of cerium, but morphine must always be given if the vomiting be severe and requires stopping quickly. I have tried all these remedies, and they have all seemed at times successful, but I pin my faith to the mixture mentioned above, and failing that, morphine.

When *all* these remedies have failed the storm will have subsided, or the doctor will have done his worst; the sickness will have stopped, even if the patient be alive. For the first stage in men, and in some women, the best treatment is to give a pint of warm water as an emetic, then a few drops of Spir. Chloroform. after emesis. This has done me much good often. It must not be supposed, however, that the

passengers expect treatment for sea-sickness in ordinary cases, as perhaps my description may have led readers to suppose. They are satisfied, on the contrary, that nothing can be done for them. When you do succeed, in spite of their scepticism, in relieving them, they always say, "Why don't you patent and advertise your remedy?" Although for one's peace of mind this negative attitude is not to be discouraged, yet the above-mentioned sporting instinct, to say nothing of enthusiasm to do good, or scientific zeal, makes one try; gratitude, the pleasure of seeing sweet faces once more serene, and receiving praise for such skill, are our best rewards. Yet human nature will always give Cynthia more help and sympathy than to plain and quarrelsome Xantippe; it really feels so sad to see the sweetest plants of nature stricken. As Shakespeare has it in one of his sonnets,—

"Sweetest things turn sourest by their deeds;
Lilies that fester smell far worse than weeds."

But truly nature is a great radical, and quite unfeeling, except through man!

"Our sweetest songs are those that tell of saddest thought." I fear sweetness has been replaced by most flippant song, but to one who has seen much sea-sickness there is an opening for "wit" (!). The people are "so bad," yet so far from seriously ill, one almost laughs for the inevitable joy of their recovery, but only to oneself, like a good Christian should, it might be mistaken for "undue levity, young man." The symptoms of intestinal obstruction have been missed, being masked by sea-sickness, which reminds me to advise in all cases where the bowels have not been opened for some time—and constipation at sea is notorious,—that an enema, preferably of glycerine ʒij, should be given. Oftentimes after relief of this kind the sickness ceases.

In the next number I hope to deal more *abundantly* seriously with malaria, dysentery, beri-beri, sunstroke, and plague.

Ingrowing Toe-nail.

By W. McADAM ECCLES, M.S., F.R.C.S., Demonstrator of Operative Surgery, St. Bartholomew's Hospital, &c.

HERE are many apparently trivial affections which give rise to no inconsiderable amount of annoyance. Probably scarcely any part of the body is more ill-used than the foot, and as a result, quite a number of minor affections are the outcome of the modern foot-gear.

I am venturing in this short paper to deal with one of the most common, because I am convinced that the usual treatment in vogue is much too severe, and I believe is an unsurgical one.

Ingrowing toe-nail is a condition that may be met with

in every grade of society, and which not infrequently leads to much disablement, and occasions intense suffering. At the outset the term used for the affection is, to my mind, entirely misleading, for by its use one would be expected to consider that the nail deliberately grew into the unoffending soft sensitive structures lying by the side of it. But surely the nail does not act in so ruthless a manner. Neither ought it to be said that the soft parts tend to overshadow the nail; for this again is, as it were, to add insult to injury, because the soft tissues have no more tendency to grow over the nail than the latter has to thrust itself into the former.

If the causation of the trouble be sought for, it may be readily found in the pressure caused by boots which are improperly fashioned at the toes.

The digits are forced into a too narrow and unyielding covering, and are so confined that they are obliged to crowd on one another, and as a result corns, hammer-toes, hallux valgus, and a host of other lesions occur. The soft tissues by the side of the nails are much pressed upon, and this particularly in the case of the great toe. Before long they are forced over the edge of the nail, most commonly on the outer side, and so a condition is produced which at first sight might be taken for the growing of the nail into the tissues, but is clearly rather that of the tissues being pushed, whether they will or no, over the nail. "Over-pushed soft parts" is therefore, I think, the most correct term to employ.

This abnormal state of affairs leads to great misery at times on the part of the one who has acquired it. The highly sensitive tissue is terribly injured by the contact with the sharp edge of the nail, and in many cases an actual wound is produced. When this happens it allows the introduction of septic micro-organisms, and therefore active inflammation follows. An exuberance of granulation tissue is often formed, which still further increases the amount of the mass lying upon the nail. A most marked fetor from decomposition, together with a puriform discharge, is an almost invariable accompaniment.

Patients are apt in many cases to endure their discomfort, and often agony, for a considerable length of time, chiefly owing to their dread of the idea of avulsion of the toe-nail—a treatment which the majority think to be the sole one for their trouble. I would venture most emphatically to protest against this procedure, and for the following reasons:—it is based on an erroneous idea as to the cause of the affection; it may lead to the patient being incapacitated for a considerable period, owing to a tardy healing; it will usually require a general anaesthetic, owing to the intense pain caused; the nail in some cases re-forms in a deformed manner, and in some other rarer cases cellulitis or even gangrene of the foot may supervene.

It has been stated by many high authorities that nothing short of the removal of the nail is the least good as a permanent cure. But I think the bad result obtained from

other methods, and not infrequently even after avulsion, is almost always due to the fact that the parts are again subjected by the patient to exactly the same conditions as they were before the treatment—the same boots are worn, and the same consequences follow.

I would lay down the principle, however, that a satisfactory and lasting cure can in nearly every case be obtained if the lines of treatment here laid down are carefully carried out.

First—and if this primary essential is not secured all else will fail,—the pressure which has been acting so injuriously must be entirely removed. The patient must be carefully measured for boots, the uppers of which should be of a less unyielding character than is usual. During the actual treatment it is probably well that the patient should invest his foot in a canvas shoe.

Secondly, the part should be rendered aseptic. If the whole foot is washed with soap and water, then soaked in a hot solution of 1–4000 bichloride of mercury for fifteen minutes, it will be considerably cleansed. The process should be repeated each day for about four days.

Thirdly, a small piece of antiseptic gauze is to be gradually and very gently (after the washing is over) insinuated between the nail and the overlying soft tissues.

This is an extremely painful proceeding if it be at all roughly done, and once a patient has endured any harsh manipulation, he will much more dread a repetition of it. Little if any pain, however, need be caused if great care be exercised. The small portion of gauze will retain itself in position, but it should be removed before the soaking on the following day.

It will now be seen that the tissues are considerably separated from the nail, and this is the time when the nail itself should be trimmed where it is in contact with the soft tissues. After soaking again the gauze is to be re-inserted as before. The patient will soon learn to do this for himself, and it is remarkable how quickly the inflammation, and with it the pain, subsides.

Within a week usually the parts have assumed their nearly normal appearance, and during the time this has been taking place there has been no need for the patient to be laid up and unable to get about. The strip of gauze should, however, be continued for a few weeks, and if the patient has properly fitted boots no further inconvenience will arise.

I have treated a not inconsiderable number of patients in this way, and have hardly known one failure; and from what other practitioners have told me, they appear to have found it equally efficacious.

The dates for the Junior Staff Summer Concert and the Mid-session Address to the Abernethian Society have not yet been fixed. Both the events will take place in the early part of July.

Accurate Diagnosis of Diseases of the Chest.

WITH SPECIAL REFERENCE TO SOME OF THE LESS RECOGNISED METHODS OF EXAMINATION AND PHYSICAL SIGNS.

A Paper read before the Abernethian Society on November 26th, 1896.

By S. II. HABERSHON, M.D., F.R.C.P.,

Assistant Physician to the Hospital for Consumption and Diseases of the Chest, Brompton.



Introducing this subject for discussion I wish to ask your patience while I indulge in a few general considerations.

All accurate diagnosis of disease depends upon careful and practised observation. To observe correctly we require each sense to be trained, while the mind must be sufficiently instructed to interpret any departures from a normal condition, and, indeed, to know what is the healthy state.

But granted the possession of a sound acquaintance with the fundamental facts of disease, and with bookwork as well as with clinical knowledge, observers will be found to differ very much in their powers and capabilities of rapid and accurate diagnosis.

Certain characteristics are absolutely needful to insure success. It is scarcely necessary to mention the need for care and thoroughness in the examination of a patient, though these are too often found lacking.

I may insist, with less fear of speaking commonplace, upon the usefulness of an *invariable routine*. It is so easy to forget to look for one or other of the physical signs unless we accustom ourselves in every case to a methodical and systematic examination of every organ. I have often found men who have failed to read a case correctly, not because they did not possess the requisite knowledge, nor, indeed, because they were not skilled in auscultation or percussion, but for want of this very habit of routine. They have neglected, perhaps, to examine the heart because "they thought it was a lung case." These facts are taught us in the infancy of our medical training, but whether from the plethora of material or from the hurry that hospital practice sometimes engenders, I am afraid we are apt to let them slip. And it is because I am so conscious of this possibility myself that I venture to insist on the importance of routine.

In our early medical training we lay the foundations of our study of disease in acquiring a knowledge of anatomy and physiology. The normal relation of the thoracic organs to the chest walls in the child and the adult, the outlines of the lobes of each lung and the cardiac apex, the position of the main bronchi, the great vessels, and the valves and cavities of the heart, and so on. The better these facts are known, the more intelligent will be the observation of abnormalities and signs of disease; and the same may be said of the importance of a physiological training.

I remember well, in my student's days at this hospital, hearing of what I then thought a miracle of diagnosis on the part of one of your physicians (Dr. Gee). A child was brought in suffering from some pulmonary complaint. No definite history of the onset of the disease could be obtained, but I believe the chief symptoms were those of dyspnoea, with cough and expectoration, and the physical signs, dulness with imperfect air entry over the lower lobe of one lung. Suffice it to say that in spite of some incredulity the diagnosis was made of a foreign body lodged in one of the bronchi. Tracheotomy was performed, with the result that a date-stone was coughed up through the opening in the trachea, and thus fortunately a brilliant diagnosis was confirmed. I am speaking from the memory of a good many years ago, but I believe that the main details are correct.

But not only is the knowledge of the anatomy of health an essential, but no clinical observer can be a properly instructed one unless he bases his observations on an acquaintance with pathology. It is not often possible (fortunately for the patient) to confirm the diagnosis on the post-mortem table, but once having compared the physical signs of disease detected during life with the morbid appearance after death, and better still, having found yourself mistaken, it impresses upon you a picture of the disease that will not easily be effaced.

So far I have ventured to suggest considerations which are perhaps theoretical, but which I am sure we shall recognise to be true if we are to set before ourselves a high standard.

I now propose to refer in detail to some of the methods employed in the examination of a case of chest disease, which have appeared to me of special importance from a diagnostic point of view. Where all are important it has been difficult to make a selection, and I must ask your indulgence for my omissions. My object is rather to lay stress upon certain of the aids to diagnosis than I have found of practical value, and especially to deal with those that are not universally, and perhaps not sufficiently, recognised.

If I am desultory and discursive, it is because I am obliged to confine myself to illustrations and examples only, and I do not thereby minimise the importance of many of the ordinary and well-known steps in the examination of a chest which, for want of space, I must leave on one side.

Instruments as aids in the examination.—I wish at the outset to say one word about the *stethoscope*. The double stethoscope is valuable especially in hospital practice, where you desire to shut out the hubbub and confused jargon of external sounds that are inseparable from the out-patient room, or when it is not desirable to place the head too near the patient. It is also convenient at the bedside when the patient is unable to sit up, or when the position with the ear at the end of a wooden stethoscope would be a constrained or awkward one; for it is impossible to hear, or at least to concentrate your attention on what you hear, if your position is not comfortable.

But I want to urge you not to discard the *single stethoscope*. Many of the best and most accurate auscultators use nothing else. I thought for some years that I was wiser than they, but I may say that after more than ten years of chest hospital practice I have become absolutely and firmly convinced that no double instrument is so delicate or so accurate as the old-fashioned wooden stethoscope. Rales can be detected with this that are not audible with the "binaural," and frequently I have had occasion to prove that metallic sounds, such as the bell sound, the metallic tinkle and echo, were not conducted or lost all their musical character, whereas they were easily and instantly heard with the single wooden stethoscope.

Sometimes direct or mediate auscultation is better than any instrument. I mean the application of the ear to the chest wall with only the intervention of a thin towel or handkerchief. This is valuable if it is desired to examine a considerable area of the chest, and especially of the back, where the walls are thicker and the sounds (as those of the heart) have further to travel or more media to pass through.

A new instrument, the *phonendoscope*, has lately come into notice. It magnifies the sounds to an even greater extent than the binaural stethoscope, on the principle of the microphone, but the number of extraneous sounds heard completely mar its usefulness. It can also be used for combined auscultation and percussion in mapping out a dull area; but though I have heard one observer praise the instrument in this respect, I have very little experience of it.

With regard to percussion, the finger is the best instrument. An artificial hammer, such as the *plessor* with the *pleximeter*, has this disadvantage, that though it may (and I do not say that it does) bring out a difference of note as delicately as the finger-tip, it deprives us of all the information we obtain from the sense of resistance which we are able to detect by means (I take it) of the muscular sense.

I regard this sense as the most important element in practised and skilled percussion. It is the sense of resistance which enables people with no ear for slight differences of musical timbre to detect small variations in resonance. It is this sense which is capable of great training, and at the same time slow to be educated; otherwise I believe that every student with a perfect musical ear would become an accomplished percussor in an exceedingly short time.

I might cite my own case as an example. I believe my own ear for music is somewhat above the average, *i. e.* I can detect differences of musical notes of a small fraction of a semitone; yet I used to find percussion a matter of great difficulty, and needing constant and long-continued practice before I could rely upon myself. I do not believe that a musical ear is necessary, for more than one admirable percussor of my acquaintance is certainly not gifted in this respect.

Momentum is not necessary for good percussion. A heavy blow produced by raising the whole arm is far less effective than the light sharp rap of the finger with the hand only raised from the wrist as on a hinge. By using the weight of the whole arm percussion at once becomes unpleasant and even painful to the patient, and, moreover, does not elicit so clear a note. But this is a digression.

The influence of posture.—If possible the patient should be examined first standing. The movements of the chest are likely to be more vigorous, and the position is less constrained and the most easy for the doctor. It is of some importance that the patient

should stand straight, on both feet, and with the arms hung loosely at the sides, and not held rigidly. The shoulders also should be drooping, and not raised or shrugged. These minutiae are mainly of importance when the physical signs of disease are doubtful or slight. Any position which makes the muscular layer on either side thicker than on the other will alter the relative percussion note. I can remember on more than one occasion a student remarking that one apex (especially behind in the supra-spinoous fossa) was slightly impaired, while no other abnormal physical signs were detected. This was perfectly true, but the patient had been standing mainly on one leg. In another similar case there was old disease of the hip-joint on the dull side, with shortening of the limb, and this had not been immediately observed.

Deformity of the spine will, of course, produce an inequality of thickness of the muscular parietes. I am inclined to think that if the head is twisted to one side or the other the traction exerted produces an unequal effect upon the loudness of the respiratory murmur at the two apices.

The importance of *change of posture* from the erect to the recumbent position is universally recognised with regard to the diagnosis of fluid in any of the cavities of the chest and its change of level. There are, however, several other ways in which the alteration of certain physical signs when the patient is made to lie down may be of help to us in the diagnosis, of the condition; and further, the recognition that changes do occur may save us from falling into errors.

First let me say that in the recumbent position the back is more fixed and the respiratory movements of the posterior part of the chest more limited than when the patient is standing. Consequently the anterior parts of the lungs expand more than the posterior. The limitation of movement is especially seen in rigid and emphysematous chests, or in any in which the extracostal muscles of respiration are brought into play, for their power cannot be exerted to the same extent when the person is lying down. Any operative singer will tell you how difficult it is to produce good notes and a powerful voice when lying down. The respiratory movements, in fact, become more anterior, if the expression is permissible, and more diaphragmatic when in this position.

This, together with an alteration in the direction of the force of gravity, is the reason why the right heart may temporarily be embarrassed in some cases of heart and lung disease. It could mention numerous instances in support of my assertion that the anterior parts of the lungs expand more in the recumbent posture than in the erect, but I shall confine myself to the following.

The sternal edge of the left lung is more free to expand, and its edge can be more easily demonstrated, than any other part, and I have many times satisfied myself that the superficial area of cardiac dullness was diminished sometimes by as much as a finger's breadth directly the patient lay down.

I do not wish to convey the idea that this can always be observed. It is possible that in perfect health it is not so easily detected. But my strong impression is that when this sternal edge is emphysematous the increase of expansion is more marked. When it entirely overlaps the cardiac dullness this observation does not of course hold good.

But the area of cardiac dullness is usually, to my mind, more difficult to define when the patient is lying down, and this has especial reference to the deep area. Even under the most favorable conditions for percussion the superficial cardiac dullness has only a relative limit, for surrounding it is an area of skodak resonance caused by the wedge of lung overlapping the heart, so that in percussing the deep dullness the force of percussion has to be increased as we approach its outer limit, owing to the greater thickness of lung. The thicker the lung tissue between, the more difficult it is to define an edge, and this I believe to be the reason why when the patient is lying down percussion is less exact.

We have recently heard a great deal about exact cardiac percussion, especially in relation to the rapid changes in cardiac dullness that are said to occur under the influence of the now notorious Schott treatment of baths and passive exercises. Though in this paper it would be out of place to discuss the whole of this question with its bearing on cardiac disease, I may, perhaps, be permitted so far to digress as to express my personal view that a great truth underlies this plan of treatment, namely, that regulated exercise without exertion leads to the strengthening of the cardiac muscle and to the diminution of temporary or even sometimes advanced dilatation of the cavities of the heart. But the truth is in danger of being obscured by popular craze and the unreasonable application of the remedy to all forms and phases of cardiac disease, and further, the suppression by its advocates of the failures that result from its use in unsuitable cases.

Personally, I have seen excellent results from ordinary massage in cases of cardiac dilatation. I am bound to say that this *suppression* *veri*, and the claim to an unusual and extraordinary accuracy of percussion made by its advocates, led me to believe that some of the cases have been too highly coloured by the imagination and the favorable bias of their observers.

I cannot recall having read anything about the posture of the patient when the examination was made and the cardiac dullness mapped out. If the first examination before the baths or exercises was made in the erect position, and the second examination in the recumbent, fair account should be taken of the influence of change of attitude. A further inaccuracy seems to me that the lungs expand more fully after exercise, and I doubt whether this factor can be altogether eliminated.

But granted that the influence of the treatment is to produce an immediate and rapid diminution of the dilatation, and therefore of the size of the heart, I cannot help feeling some scepticism as to the unusual accuracy in the mapping out of the edges of the cardiac areas. The delicate curves and angles delineated in some of the figures I have seen, the odd shapes of dullness, and the minute variations detected lead me to compare my own imperfect powers, and to stand by in admiring wonder.

The influence of posture on cardiac murmurs.—It will be generally conceded that the diagnosis of a cardio-respiratory or exocardiac murmur depends in many cases upon the influence of the position of the patient. No doubt it frequently varies with respiration, but this is not always marked in the standing position, and in some cases the diagnosis cannot be made unless the heart is examined when he is lying down. The bruit may be diminished or may disappear, or it may now be found to increase with inspiration and decrease with expiration, and *vice versa*. But it is not so universally recognised that most mitral murmurs become more marked in the recumbent position. This fact has so impressed itself upon me that I always make it a habit to examine every heart case in the two positions whenever it is possible. It is extremely common to find nothing more than an impure or somewhat blowing first sound at the apex when your patient is examined standing, but a marked systolic murmur with the usual conduction to the axillary region when lying on the couch. Similarly with the presystolic murmur, it is in some cases imperfectly marked when the patient stands, but intensified and easily recognised when he lies down.

It is an important point in the difficult diagnosis between the slapping beat of an irritable heart in women, which so often simulates the so-called presystolic murmur, and an imperfectly marked murmur of mitral stenosis. Make your patient lie down, and in some cases you will find that in the former the heart becomes less excited and irritable, and the resemblance to a true murmur disappears, while in the latter the slapping first sound now becomes preceded by an unmistakable bruit. I believe the explanation is that the vigour of heart is greater when the patient is at rest and free from fatigue, and a certain vigour of cardiac contraction is necessary to produce a murmur at all. So much is this the case, that it is not an uncommon experience to examine a patient in the out-patient room and be unable to detect any true murmur of mitral stenosis on account of the feeble action of heart (though the condition may be suspected), and to find that after a few days in bed the murmur becomes loud and distinct. This fact and the reason for it are forcibly stated by my colleague, Dr. Acland, in a lecture published some years ago.

It is not always the case that either of the mitral murmurs I have referred to are thus increased, and I have thought that when the lungs were emphysematous the murmur did not exhibit this alteration from posture.

This increase of vigour of the heart's action is not incompatible with what I have already stated about embarrassment of the heart which takes place when a patient with a greatly dilated right heart lies down. This embarrassment will sometimes lead to the development of a tricuspid murmur, or to an increase in its loudness, and in such a case the mitral murmurs will not be intensified. I lay some stress upon the increased loudness of mitral murmurs in the recumbent posture because, when I mentioned the fact some months ago in a lecture on mitral stenosis, a friend who is well known as an authority on questions of cardiac diagnosis told me that he had been interested to read my views, but that this was not his experience. I can only say that I am constantly demonstrating the point, and could without effort have brought a dozen cases here to-night to illustrate it.

The influence of respiration and the cough as a means of diagnosis.—I have already reminded you of the influence of respiration upon the exocardiac murmur, and the differential diagnosis between it and a pericardial or a valvular murmur by means of it is an

elementary fact. I would only refer to it again to mention a useful hint I once learnt from Dr. Lauder Brunton, and have since frequently put into practice, namely, that if you wish to make a patient with cardiac disease stop breathing for a few seconds, it is wiser to ask him to breathe several times deeply and freely, so that when at your request he stops his breathing a condition of natural apnoea has been produced, and there is far less risk, and it is much more comfortable to your patient.

Respiration is under the control of the patient, and this control can be made of assistance to the doctor or the reverse. In a difficult case with incipient lung disease it is important to see that the expiration is not made unduly loud or noisy, or we may attribute the prolonged expiration which is heard in consequence to the wrong cause.

This brings me to remark upon the great assistance to be obtained from one form of expiratory effort, namely, the *cough*. In all cases of lung disease the cough is an invaluable aid to diagnosis by auscultation. It is surprising that this is not universally taught, for I am told that in some schools on the Continent it is rarely used.

The first inspiration after a cough will often elicit crepitation or rales where none are heard with ordinary respiration; and this is especially the case in the more chronic conditions of lung disease, where the sounds are of a less liquid character than in recent disease, or in a lung which is the seat of active softening. The same may be said of the case of incipient apex disease in the congestive stage. One important physical sign is only produced by the cough. I refer to the sign usually known as *post-tussic suction*. After a sharp cough a sound is produced as of air suddenly sucked into the mouth with the lips almost closed. This sign is usually considered to be pathognomonic of a vomica. I have verified it upon the post-mortem table, and I cannot see in what other way it can be produced than by air suddenly entering a cavity through a very narrow opening.

The combination of auscultation and percussion—ausculto-percussion.—At the present time this method has been largely revived to aid in the delineation of the cardiac areas of dullness, and is especially advocated by Schott and his disciples. I do not think it will ever come into its general use, and for these reasons. It is a little more cumbersome in its application than ordinary percussion. If the finger is used the dull thump is not a sound clearly conducted, on account of the exaggerated vibrations set up. The sharp tap of the plessimeter is better conducted, but this would involve the help of an assistant, and, as I have previously tried to explain when this instrument is used to map out a dull area we lose all the information gained by that feeling or sense of resistance conveyed to the finger by the ordinary method of percussion.

My own experience of ausculto-percussion for dull areas is not extensive, but whenever I have tried it I have found it difficult and uncertain. It would, however, be interesting to hear whether anyone present has been accustomed to use it largely, and what his impressions are as to its value.

There is one form, however, of ausculto-percussion that I use constantly, and find of great value. It is the auscultation of an air-containing cavity, while a coin is firmly pressed upon the external parietes of the chest and sharply struck with a second coin. It produces the well-known *bruit d'airain* or *bell-sound* when the cavity is large. We use it in the diagnosis of a pneumothorax or a large vomica of lung.

This fact is familiar to all, but what is not so universally known is that the bell-sound thus produced may be made the means of diagnosing the exact limits of the cavity. I had long used this method for the mapping out of the area of a distended stomach, especially where it was difficult to distinguish the outline from the neighbouring colon, but I was not aware until about two years ago how exactly an air-containing cavity could be defined by the bell-sound. A case occurred to me that I have quoted before, but should like to mention in this place to illustrate my point.

A girl was admitted to the home at Hampstead called "Friedenheim," and I was asked to see her there. We were much puzzled by the physical signs. The heart's dullness was found in the left axillary region, its apex beating in the third interspace. With exception of this dull area the whole of the rest of the chest on both sides up to the second rib and downwards on auscultation a wonderful bell-sound, hyper-resonant, and produced a low across the epigastric region.

Without going into details, the surgeon, Mr. Pearce Gould, made an incision in the mid-line of the epigastric region, and opened an enormous hydatid abscess of liver containing air, the abscess being about eleven inches in depth, and twelve inches or more from above downwards.

While the patient was under chloroform, and the cavity was being explored with long lion forceps, I asked to be allowed to listen with the stethoscope while my friend Dr. Lush, who was in charge, produced the bell-sound by rapping two coins on the chest. I was able to mark out the lines at which the sound sharply ceased, and then Mr. Gould showed me from within by means of his lion forceps the exact limits of the cavity, which could thus be compared with the external signs. In short, I proved by actual demonstration that the air-containing cavity could be marked out with great accuracy by means of this form of ausculto-percussion. Sometimes the bell-sound is not heard over a large excavation, but in its place a hollow sound is produced by the reverberation of the rap of the coin, which has no musical tone about it. This sound loses its hollow character, and becomes a thinner note, with vibration of less amplitude when the edge of the cavity is reached. The same (by the way) may be said of the stomach when no bell-sound is produced.

The limits of a small cavity are much more difficult to define, for here there are none of the superadded musical signs to help us. Cases sometimes occur in which the lung is riddled with small cavities, and there is some difficulty in distinguishing between this condition and a large excavation, say a total excavation of the lobe. There is such a case at present in the Drompton Hospital. It is that of a young lad with sacculated bronchiectases of the upper lobe. This has been mistaken several times for a large cavity, and at one place an operation was performed. A large flap of skin was reflected, and the second intercostal space laid bare, and an incision made into the lung, with the result that no cavity was found. On listening now over the area there is cavernous breathing of an intense form with the edge of the cavity is reached. The same (by the way) may be said of the stomach when no bell-sound is produced.

Accurate diagnosis from an appreciation of the exact position in the chest where sounds are heard.

Accurate diagnosis of the size of the cavities of the heart from the position of the sounds.

I have been dealing with the question of accuracy in the diagnosis of the size of a pulmonary cavity or of an air-containing cavity in the thorax. The methods employed are, as I have shown, those of auscultation alone, or auscultation combined with one form of percussion.

I have also referred to the methods of outlining the size of the heart by percussion or ausculto-percussion.

I am now going further, and to say that it is possible in some hearts to tell fairly accurately the position of the septum between the ventricles and the relative areas of those portions of the ventricles that are contiguous to the chest wall.

In the normal heart we know that a small portion only of the superficial area of cardiac dullness is occupied by the left ventricle, namely, the small space immediately around the apex. But when either ventricle is increased in size the normal relations are altered, and more of the left ventricle than normal approaches the surface; or, on the other hand, the right ventricle may occupy the whole superficial area of dullness, the left ventricle taking no share in the formation of the apex-beat.

Is it possible by auscultation to discover over which ventricle you are listening? My answer would be that in some cases it is possible with considerable accuracy, by observing closely the character of the two sounds of the heart and the areas over which they are heard. The thumping or prolonged first sound of an hypertrophied right or left ventricle is heard more plainly over the ventricle which produces it, but I have never been able to satisfy myself in any case that I could detect exactly where the sound began to alter, for one sound usually blends gradually with the other. The same is true of a systolic bruit produced in the right or left ventricle. With the second sound it is different. It is a sharper and shorter sound, and though in health the sound of the closure of the two semilunar valves, the aortic and pulmonary, are too similar to differentiate; yet when there is a great difference between the accentuation—that is, if the pulmonary second sound was greatly accentuated and the second aortic diminished,—they can easily be distinguished even far from the place where they are produced. You will remember that the second aortic sound is conducted more easily through the left ventricle, and forms the main part of the second sound heard at the apex of the left ventricle. This is well illustrated by the cases of mitral stenosis in which, with a weak second sound in the right second intercostal space (*i. e.* over the aorta), the second sound heard at the apex of the heart is also weak or entirely absent. On the other hand, the second pulmonary sound is in such a case frequently highly accentuated, and this rapping sound is plainly conducted through the right

ventricle and through the walls of the chest with which it is in contact. It even resonates in the stomach when the latter is dilated, as Sir William Broadbent teaches.

Now you will better understand my point. In a case of mitral stenosis such as the above, this great discrepancy between the pulmonary and aortic second sounds frequently occurs. The right ventricle is usually enlarged and dilated, and it becomes a matter of some importance (especially when the typical murmur of mitral stenosis is absent) to know how far the right ventricle extends towards the left. I believe this can be discovered by comparing carefully the sounds over the pulmonary and aortic cartilages with the second sound heard over the ventricles.

I have frequently been able to trace this sharp second sound all over the right ventricle; then as the end of the stethoscope is passed, say, along the level of the fifth interspace across the sternum from right* to left a point will be reached where it rather suddenly alters in character. If the left ventricle is sufficiently enlarged in size to approach the surface of the chest (and it is often hypertrophied in cases of mitral stenosis) the position of the septum will be reached. Here it is often possible to detect both sounds, and a loud second sound, followed by a muffled and shorter sound producing a kind of canter, will be made out over a very narrow area; or if the two sounds are synchronous, as I have said, the rapping pulmonary second sound becomes muffled or blurred. Move the stethoscope half an inch farther to the left, and the sharpness of the second sound has gone, and the weak second aortic sound alone is heard in the left ventricle.

To show you the diagnostic value that this fact may possess, let me briefly tell you of a case narrated to me some time ago. A woman was admitted to one of the hospitals suffering from the symptoms of extreme dilatation of heart. The area of cardiac dullness was of great size, and over the whole precordium a loud systolic murmur was heard, conducted also though less plainly to the back. The case was diagnosed as one of extreme mitral regurgitation. At the autopsy some days later it was found that the mitral orifice was so much constricted that it was difficult to conceive how blood could enter the left ventricle. The right ventricle occupied the whole anterior surface of the heart, and it was clear that the murmur had been an unusually loud bruit of tricuspid regurgitation, and that the primary cause of the condition was the mitral constriction. I have often considered whether it would not have been possible by noting the character of the second sound to come to a more correct conclusion. Since then I have seen cases which would compare with the above, and I have convinced myself that it was possible to say rather positively whether the right or left ventricle formed the apparent apex of the heart, and even how far the enlarged right ventricle extended.

I will give one other example of the position of a cardiac sound affording a means of rather exact diagnosis. We often find in cases of high pulse tension a ringing or accentuated second aortic sound, and the question arises whether there is dilatation of first part of the aorta or not. When the dilatation assumes moderate proportions we find the evidence in a localised dull area in the second intercostal space close to the sternum, and perhaps a shock or heaving impulse can be detected. Here the diagnosis is not difficult, but when the degree is slight there may be no dullness and no movement perceptible by the finger or the eye. In such cases Broadbent points out that the position of the ringing sound is a guide. When the centre of intensity or the spot at which the sound is heard most sharply is not in the usual situation, but is heard best at a distance of three-quarters of an inch or one inch to the right of the sternal border, that is a sure sign that the aorta is slightly dilated.

There are many other instances that occur to all of us in which in lungs or heart, in pleura or pericardium, the position or conduction of normal or adventitious sounds will guide us in determining the exact seat of disease.

We might, indeed, cover the whole range of diseases of the thorax. The difficulty is to confine such as the present discussion within reasonable limits, and I have found it a more formidable task than I had anticipated to select some of the least common of the aids to diagnosis. Those I have selected must serve as a practical illustration of ways and methods.

After all is said, artificial aids are valueless to enable us to diagnose correctly a condition of disease unless we possess the gift of accurate observation,—rather a power, I should say, than a gift, for it is not denied to any who will educate and practise his senses. Some men are doubtless quicker than others, and the eye, the ear, and the hand seem to be ready and obedient servants. But even the most dull

* The right side of the patient.

and slothful slaves can be stimulated into action and trained by their master-mind, even if with some toil and labour.

Above all, our mistakes teach us more than our successes, and if we can acquit ourselves of carelessness, which is always culpable, we need never be ashamed of them.

And while cultivating accuracy there is always a happy medium to be aimed at between the dogmatism (shall I call it the cocksureness?) of ignorance, and the cautiousness of wisdom. Signs are often deceptive, our judgment is fallible: still our aim in the pursuit of knowledge should be accuracy and truth.

Notes.

IN another column will be found one of the songs that Mr. F. W. Gale (now in New Zealand) used to sing with such effect at the Smoking Concerts. In times past many contributions from Mr. Gale's pen have appeared in our columns. We venture to hope that the present number will remind him that we should be glad of an account of some of his doings in New Zealand.

THE Senior Scholarship has been awarded to S. R. Scott.
Proxime accessit, F. C. Borrow.

THE Junior Scholarships have been awarded as follows:
1. R. C. Elmslie. 2. F. Gröne.

THE Wix Prize has been awarded to J. S. Williamson for his essay on the Life and Works of Dr. P. M. Latham.

JUNE 1ST is the date officially announced for the closing of the East Wing. The provisional arrangement for the distribution of wards is as follows:

	Male.	Female.
Dr. Church	Mark	Faith (front).
Dr. Gee	Luke (front)	Hope.
Sir Dyce Duckworth	Matthew	Faith (back).
Dr. Hensley	Colston	Elizabeth (front).
Dr. Brunton	Luke (back)	Elizabeth (back).
Mr. Smith	Lawrence	President (front).
Mr. Willett	Rahere	President (back).
	Coborn (front)	Lucas (front).
Mr. Langton	John	Mary (back).
Mr. Marsh	Coborn	Mary (front).
Mr. Butlin	Stanley	Lucas (back).
	Abernethy	Coborn
	Coborn	Mary (back).

FROM THE SCHOOL Authorities we have received a copy of the *Directory of Old Students of St. Bartholomew's Hospital*. It contains the name of every qualified Bart's man, arranged in alphabetical order, with the name of the town in which he lives. In addition to this there is an alphabetical list of towns with the names of Bart's men resident in each town. Such a Directory as this should prove of great use, and do much to strengthen the links that connect old Bart's men with one another in different parts of the land.

Amalgamated Clubs.

CRICKET CLUB.

OFFICERS FOR 1897.

Captain 1st XI.—H. Bond.
Captain 2nd XI & *Hon. Sec.*—C. G. Watson.
Vice-Captain 2nd XI.—H. J. Pickering.
Hon. Secs.—E. F. Rose, J. W. Nunn.

Committee.—F. H. Maturin, J. A. Willett, H. S. Greaves, H. W. Pank, J. C. Sale, W. H. Randolph.

ATHLETIC CLUB.

The United Hospital Sports have been fixed for July 10th, at Stamford Bridge.

After the Sports the first Annual Dinner will be held, which it is hoped will be well supported by Bart's men.

Trial heats will be run off on May 27th at Stamford Bridge (5 p.m.), to choose a team to run against Dublin University at Dublin on June 19th. All are eligible to compete, and freshmen specially invited. The events to be competed for are a hundred yards, quarter, half, one, and three miles, 120 yards hurdles, long and high jumps.

RUGBY FOOTBALL CLUB.

ST. BART'S v. GUY'S.

Played at Richmond on February 23rd, the result being a draw, Bart's scoring 1 try to a penalty goal.

This was the third match Bart's played in for the Challenge Cup, and a great deal of interest was taken in it. The weather was beautifully fine, but unfortunately there was a very strong wind blowing from one end of the ground to the other.

Bart's won the toss and elected to play with the wind. For the first ten minutes of the game Bart's forwards could not get together, and Guy's looked very dangerous. Then our forwards, working together, took the scrum down to the halfway flag. In heading the ball our three-quarters showed up well, Falk being especially brilliant in his dodgy runs. From one of his runs he passed to Robbs, who dashed over the line, scoring a try for Bart's. Bennett took the kick and made a very good attempt, but unfortunately an unsuccessful one. On Guy's dropping out from their 25, Bennett again made some splendid shots at dropping goals.

On crossing over Bart's still had the best of the game, and Mason made some fine attempts to cross the line. Bart's forwards then fell off, and Guy's took them into their 25, when from a free kick against us, Guy's, with a splendid kick, equalised. The rest of the game was of a give-and-take nature, and when the whistle sounded Bart's had scored 1 try (3 points), Guy's 1 penalty goal (3 points).

Team.—T. M. Body, S. Mason, T. A. Mayo, C. Dix, H. Falk, G. C. Marrack, A. Hawkins, H. M. Cruddas, A. J. W. Wells, W. F. Bennett, J. K. S. Fleming, C. H. D. Robbs, H. C. Adams, A. M. Amsler, T. W. Plews.

Referee.—Mr. Harnett (Kent County).

ST. BART'S v. NORTHAMPTON.

Played at Northampton on 27th February, and resulted in a loss for Bart's by 2 goals and 3 tries to nil. From the first Bart's forwards were broken by the superior weight of the Northampton forwards, and as a broken pack were unable to give their three-quarters a fair chance. Once or twice, however, the ball was smartly taken from the scrum and passed to the three-quarters, who made good use of it, and gained ground. Unfortunately for us, Adams and Robbs were hurt, the latter player being obliged to retire from the ground, having twisted his knee. The game ended, as stated above, in a win for Northampton by 19 points to nil.

Team.—T. M. Body (back), S. Mason, T. A. Mayo, C. Dix, H. Falk (three-quarters), G. C. Marrack, A. Hawkins (half-backs), H. M. Cruddas, A. J. W. Wells, W. F. Bennett, J. K. S. Fleming, C. H. D. Robbs, H. C. Adams, A. M. Amsler, T. W. Plews.

ST. BART'S v. GUY'S.

Replayed Cup Tie. This match was played at Richmond on March 2nd, before a large attendance, the result being a defeat for Bart's by 2 goals (1 dropped) and 3 tries to nil. Bart's won the toss and started off very well, but soon the forwards became very ragged and would not play together. Unfortunately, Robbs, who

was injured on the previous Saturday at Northampton, was unable to play, his place being taken by Scott.

In the second half Bart's seemed to be thoroughly demoralised, and the game ended in a handsome win for Guy's by 18 points to nil. Team.—T. M. Body, S. Mason, T. A. Mayo, C. Dix, H. Falk (three-quarters); A. Hawkins, G. C. Marrack (half-backs); H. M. Cruddas, A. J. W. Wells, W. F. Bennett, J. K. S. Fleming, H. C. Adams, A. M. Amsler, T. W. Plews, M. D. Scott.

RESULTS FOR THE SEASON.

This season Bart's have played 17 matches, out of which 6 were won, 10 lost, 1 drawn; 4 have been scratched. As regards points, Bart's are on the wrong side, having scored only 106 against 132 points. This is partly due to the poor play kicking.

Date.	Club.	Ground.	Result.	For.		Against.	
				Goals.	Points.	Goals.	Points.
1896.							
Oct. 10	Civil Service	Winchmore Hill	lost	1	3	1	5
" 17	Ealing	Winchmore Hill	won	2	5	25	10
" 24	Wickham Park	Catford	lost	1	5	2	10
" 31	Upper Clapton	Greenwich	won	2	6	1	5
Nov. 4	East Sheen	Richmond	scr.				
" 7	R.T.E.C.	Cooper's Hill	lost			1	5
" 14	R.M.C.	Sandhurst	lost	1	3	2	6
" 21	Marlborough Nomads	Sarbiton	won	1	5	20	1
" 28	Croydon	Croydon	lost			5	12
Dec. 5	Kensington	Wood Lane	lost			1	8
" 12	O.M.T.'s	Richmond	scr.				
" 19	Old Leysians	Stamford Bridge	won	3	0	2	6
1897.							
Jan. 9	Wickham Park	Winchmore Hill	won	1	5	1	3
" 16	Lennox	Winchmore Hill	lost	1	5	1	8
" 23	Upper Clapton	Winchmore Hill	scr.				
" 30	Harlequins	Chiswick	scr.				
Feb. 13	Marlborough Nomads	Winchmore Hill	lost	1	5	1	11
" 17	East Sheen	Richmond	lost	2	14	3	23
" 20	R.M.A.	Woolwich	drn.				
" 27	Northampton	Northampton	lost			2	3

LAWN TENNIS CLUB.

President.—Howard Marsh, Esq.
 Captain.—H. W. Shewell.
 Hon. Secretaries.—V. S. A. Bell, J. K. N. Marsh.
 Committee.—S. Bousfield, F. E. Price, P. Wood, J. W. Nunn, S. Hey, G. V. Ball, H. Burrows, C. H. Barnes.

MATCHES FOR 1897.

Date.	Name of Club.	Where Played.
Wed. May 5	Albemarle L.T.C.	Reekham.
Sat. " 8	Wanstead L.T.C.	Leytonstone.
Wed. " 12	Albemarle L.T.C.	Winchmore Hill.
Sat. " 15	Brixton Wanderers (1st Teams)	Winchmore Hill.
	(2nd Teams)	Denmark Hill.
Wed. " 10	Hornsey L.T.C.	Hornsey.
Sat. " 20	The Clarence L.T.C.	Winchmore Hill.
Tues. June 1	Winchmore Hill L.T.C.	Winchmore Hill.
Wed. " 2	Cooper's Hill L.T.C.	Cooper's Hill.
Wed. " 5	Putney L.T.C.	Winchmore Hill.
Mon. " 14	The Clarence L.T.C.	Putney.
Thurs. " 17	Walthamstow L.T.C.	Winchmore Hill.
Sat. " 19	Hornsey L.T.C.	Winchmore Hill.
Sat. " 26	Brixton Wanderers L.T.C. (2nd Teams)	Winchmore Hill.
Sat. " July 3	Croydon L.T.C.	Croydon.
Wed. " 7	Putney L.T.C.	Putney.
Tues. " 13	Winchmore Hill L.T.C.	Winchmore Hill (Opponents' Ground).
Sat. " 17	Walthamstow L.T.C.	Walthamstow.
Sat. " 24	Brixton Wanderers L.T.C.	Denmark Hill.
Sat. " 31	Croydon L.T.C.	Croydon.

SHOOTING CLUB.

At the Annual General Meeting of the St. Bartholomew's Hospital Shooting Club, the following gentlemen were elected as officers for the ensuing year:

President.—H. J. Waring, Esq.
 Vice-Presidents.—Howard Marsh, Esq., Dr. Edkins, W. E. Miles, Esq., H. G. Read, Esq.
 Secretary.—G. E. Gask.
 Committee.—L. A. Bais, C. R. Brown, J. C. S. Dunn, A. Goodall, G. P. Taylor, F. E. Taylor.

It is hoped that any gentlemen interested in shooting will give in their names to the secretary as soon as possible.

SWIMMING CLUB.

FIXTURES FOR 1897.

May 26th.—Cambridge U.S.C. at Cambridge.
 June 1st.—Otter S.C. at St. George's Baths.
 June 19th.—Cambridge U.S.C. at Fitzroy Baths.

Tickets can be obtained at the rate of 5d. per ticket for the Fitzroy Baths, Tottenham Court Road. The Club will meet on Thursdays at 4.30. Freshmen are invited to come and swim. Members of the Amalgamated Clubs pay no further subscription to this Club. There will be five races held later on in the season, to be competed for by Bart's men at the Fitzroy Baths. Dates fixed at present:—

May 20th.—60 yds. Handicap.

June 10th.—60 yds. Handicap.

July 1st.—60 yds. Handicap.

Captaincy Race—May 10th.—There were only three entries for this race. W. F. Bennett winning easily. V. J. Duigan was second, being some thirty yards behind.

View Day.

VIEW DAY with its usual pomp and ceremony has passed, and its ritual duly observed. The same crowd of relations and friends broke into the Square, and flooded the ordinarily quiet wards. As usual, the ladies were decidedly to the fore; the male friends that the student brings on this day could almost be counted on the fingers of one hand. Of the numbers it is difficult to form an estimate, but an enterprising patient in Mark counted 637 visitors to that ward. The fountain was—also as usual—turned into a receptacle for that excellent disinfectant permanganate of potash. Why View Day should be chosen for the purification of the fountain has always been a puzzle to us, and will no doubt continue to be so as long as we remain within the walls of the Hospital. We can assure the misguided individual who repeats this indifferent joke, that his decorative efforts are entirely unappreciated.

The decorations of the wards were less elaborate than they were some years ago, but the taste displayed was in no way diminished. As was to be expected this year, they were patriotic in design in several instances; in Casualty, for example, red, white, and blue appeared everywhere, cornflowers forming an important item in the scheme of colour. The little swinging flower-pots which met the eye at every turn in that mass of wards were especially admired. The same combination of colours was paramount in the back ward of Elizabeth also, while in the front the chimney-piece covered with blossoms and brownish-green leaves was an attractive feature.

In simplicity and style Stanley excelled with a charming effect produced by a combination of purple irises—imperial purple in honour of the Diamond Jubilee—and yellow tulips. The profusion of flowers and variety of colour in Mark well repaid a visit. Hope, as usual, was well to the fore, though we missed the array of pretty children we have learned to expect there. In Charity swinging baskets of flowers were to be seen again, and here even the gas brackets were covered with ivy, which in contrast to the pink geraniums flourishing everywhere, produced a very light and pretty effect. In Paget, just across the staircase, some visitors commented on the delightful smell of lilac which prevailed there. We heard at least one incredulous person suggest that the lilac was perhaps slightly diluted with iodoforn.

One of the most striking wards to our mind was Lucas, where pink flowers in the front ward and yellow in the back were most

admirably displayed, the effect being much heightened by the white table-cloths on which the vases rested. Here the communication door between the front and back ward had been very skilfully laced with ivy, and the effect was pretty, though perhaps a trifle too obviously artificial.

A ward which few visited was Radcliffe; but here, too, decorations were to be seen. When we looked in, three little mites clothed in light blue were taking their tea in solitary grandeur.

Martha is a ward to which we always turn in anticipation of a pleasant sight, nor were we disappointed, though the traditional baby in the incubator, surrounded by an admiring crowd, was not to be found this year. The new theatre in this ward was much admired; but no attempt had been made to decorate it, and it were surely superfluous to ornament such a gorgeous structure. President was unfortunately closed in consequence of the critical condition of some of the cases in the ward; this was much to be regretted, as President usually ranks high in the taste of its decorations.

Space would fail us to tell of the glories of all the wards; suffice it to say that there were none that did not reflect credit on our Hospital on this festive occasion. Hospitality reigned supreme, and we can testify from personal experience that the palate was not less well cared for than the eye by our numerous and attentive hostesses.

Annual View Dinner.

THE Annual View Dinner was held on the evening of May 12th, after the formal inspection of the Hospital by the Treasurer and Governors. The Great Hall presented the aspect of festivity usual to the occasion, and the numerous and representative guests were provided with an excellent repast.

After the usual loyal toast, proposed by the Chairman, Sir Trevor Lawrence, Treasurer to the Hospital, the toast of the evening, "Prosperity to St. Bartholomew's Hospital, and Health and Ease to the Poor Patients," was given. Sir Trevor, in proposing this toast, said that on this occasion it was usual to pass in brief review the occurrences of the past year. The number of in-patients had again slightly increased, the figures of the various departments being—

	1896.	1895.
In-patients	7,400	7,306
Out patients	14,000	15,792
Casualty patients	133,817	143,217
Maternity patients	1,720	1,520

We congratulated the Hospital on the diminution in the casualty and out-patients' departments, for it was previously here that the greatest difficulty in dealing with the numbers arose. The Samaritan Fund had again relieved a large number of patients, by giving money, food, clothing, and surgical appliances. The proportion of patients who had gone to the Convalescent Home at Swanley had increased, being 1 in 7, against 1 in 8 last year. A friend of his had been troubled to note that, whereas it cost 9d. to feed a patient, the nursing cost 1s. 2d., but he thought it was a good sign—showing the enormous value of modern nursing. The total staff engaged for the welfare of patients was 625.

Coming to Finance, the income proved to be £68,606 for the year, against £67,400 last year. The expenditure for other than Hospital purposes was £2,620, almost 50 per cent. less than last year, which must not be taken to indicate that the property is less efficiently kept up; on the contrary, this ensuing year many leases would lapse, and a great deal more would have to be spent. The one unsatisfactory item was the expenditure on land, which amounted to £4,500.

As to the changes on the Staff, Sir Trevor said that though these were not many, we had to mourn the death of Dr. Andrew, who had been for many years connected with the Hospital, and whose likeness still speaks to us from these walls. Mr. Morratt Baker, too, and our land surveyor, Mr. Hilliard, had been removed by death. He was sorry to see that Cambridge had robbed us of the admirable services of Dr. Kanthack, but in Dr. Andrew's we had one competent to succeed him. The exigencies of a large and increasing practice had compelled Mr. Butlin to resign the Lectureship in Surgery; in his place we had Mr. Walsham, whom we all knew and valued. He further commented on the admirable results Mrs. Cripps's munificence had produced on the Martha Theatre, and the improvements by which asepticism had been secured.

As regards the board of the resident staff, the arrangements foreshadowed last year had been brought into force. In the first instance

these were not carried out to the complete satisfaction of those concerned; in time no doubt the arrangements will work more satisfactorily, at any rate no effort will be spared to make them do so.

Many minor improvements have been effected or are in contemplation—such as the re-flooring of the east wing, better heating apparatus, and the supply of new bedsteads and lockers, the present being of a very antiquated type. But more radical alterations must wait for our "friends across the border" to take their departure, when new resident quarters and nursing home would be constructed.

The Treasurer then went on to say, "There is only one other matter to which I need refer—the proposals for a Central Hospital Board for London. My individual opinion is in accord with the managers of other hospitals. We are perfectly able to manage our own affairs without interference from outside. When I remember that this Hospital was founded in 1120, it would be rather absurd if, after all these centuries of self-management, we needed other people to look after our affairs."

He then referred to the attempt to "collar" the Prince of Wales' Hospital Fund for this Central Board. As to the abuse of out-patients' departments, all agree that it is greatly exaggerated. An authority with strong views on the subject put the percentage of abuse at 2 per cent. What human institution was there that had a less percentage of abuse than 2 per cent?

For the good results obtained we have to thank our admirable staff, self-sacrificing to a degree impossible to exaggerate; and next, the nursing staff, 242 in all. All the time Sir Trevor had been connected with the Hospital he had received no complaint as to the way the nursing staff had done their work. He concluded with an eulogy of the administrative staff, and cordial thanks to his colleagues the Almoners for much valuable assistance.

Sir Edward Clarke, Q.C., M.P., proposed the health of the Medical and Surgical Staff. In the course of an eloquent speech he said, "It has often been my lot to study, to somewhat closely study, at short notice, a medical subject. Whatever candidates for examination may feel, I can tell them it is not half so hard as to cross-examine a distinguished medical man in the witness-box. Pitfalls innumerable lurk at every turn. But it has left upon me a deep and abiding impression of the high character and ability of those who practise the healing art."

"It is indeed an enviable thing to be a member of your profession. It is given occasionally to us to doubt whether our success has been on the right side, whether it has been on the side of justice, or at least whether it has not been at the cost of some pain. Not so the medical man; his success knows no such alloy, and circles, how wide he knows not, rejoice in his success. The blessing which is given by the physician comes back upon himself, until it is one of the commonplaces of one's life that the pleasantest associations and friendships are connected with members of this divine art. If I were asked for the most prominent example of progress during the sixty years we are about to celebrate, I should point without doubt to the medical profession; treatment of which we knew nothing thirty years ago, has produced results of which our fathers were quite ignorant. And such results can only be realised within the walls of such an institution as this, one of the greatest, perhaps the greatest, of the medical schools. Mr. Treasurer and gentlemen, I ask you to drink with acclamation the health of your medical and surgical staff, coupled with the names of Dr. Church and Mr. Thomas Smith."

Dr. Church said, "In thanking you on behalf of my medical colleagues for the cordial way in which you have received this toast, and for the beautiful sentiments of Sir Edward Clarke, I should like to take this opportunity of saying a few words. You, sir, in the remarks you have made on the events of the past year, have alluded to the losses we have sustained. Mr. Morratt Baker was one of my earliest friends here. Dr. Andrew was one of the most beloved of all by the students. Of his merits as a physician I do not wish to speak to-night, but as an administrative officer of this great hospital. In all his capacities he showed the kindness of his heart. I can most confidently assert that of all the great physicians of this hospital none has done his duty more thoroughly; his memory will live long within these walls."

"This is the occasion when your medical staff review the progress of the profession. Surgery used to be the servant of medicine, but has gradually grown to its present important proportions. And a further division had taken place; State medicine, with hygiene, has become a department by itself. Under the able care of Dr. Thorne-Thorne of the Local Government Board, this department is duly considered in our curriculum. All these developments centre round pathology in its modern and most extensive sense, which holds now in relation to medicine generally very much the same position which in the sixteenth century was taken by anatomy. I do not say

this in order that the governors should aggrandise pathology, but that they should recognise the important part it plays. Since the days of Abernethy your staff have never turned to the governors in vain for means to carry out improvements, and I take this opportunity of expressing our gratitude towards them."

Mr. Smith said, "After what has fallen from Dr. Church it is unnecessary for me to say anything more in acknowledgment of the kind remarks of Sir Edward Clarke. I quite endorse his remarks about our profession; we cannot speak too highly of it, the most highly humane of all. In the metaphorical language of a City man, we are engaged with the one hand in relieving disease, with the other in pocketing guineas. Our gratitude to the governors well accords with the old definition, for we have a lively sense of favours still to come."

The toast of the Treasurer and Almoners was proposed by Sir Sydney Waterlow, ex-treasurer, who said, "I thank you for giving me an opportunity of speaking once again at your festival board, I feel as if I had come home again. Probably no one here has had so much experience of the gentlemen whose health I ask you to drink. For the many years that I was treasurer of this great institution I had to lean on the help of the almoners. If you reflect upon it you will agree with me that you ought to express your thanks to them for their assiduous attention week by week to the affairs of this hospital; I wish to associate with the toast the names of your Treasurer, Mr. Almoner Baker, and Mr. Almoner Coleman."

In reply the Treasurer said, "Sir Sydney Waterlow and gentlemen, it is a great pleasure to me and to all of us to have the late treasurer with us again, and to see Mr. Coleman in such excellent health and spirits. In a humble way I have endeavoured to walk in my predecessor's footsteps. It has been said that if we object to a Central Board, it is because we have something to conceal. In all my five years of management I can only say we have had nothing that we could not shout from the house-tops." Sir Trevor concluded with a tribute to the memory of his father, the late Sir William Lawrence.

Mr. Almoner Baker, in thanking the assembled company for the way in which they had drunk the health of the Almoners, said that while it was true that their duties made demands upon their time, the work was very interesting. He then passed on to the duty entrusted to him as senior Almoner—to propose the toast of the Visitors, coupled with the name of the most distinguished, Field-Marshal Sir Donald Stewart. He said that one of the most interesting books that have been in our hands during the last six months was Lord Roberts's "Forty Years in India," and in that book we have read a great deal about Donald Stewart, and of the part he played in the stirring days of the Mutiny, of the qualities he displayed during the siege of Delhi when His Royal Highness the Prince of Wales was in command of the troops on January 1st, 1876, and had been Commander-in-Chief in India for some years, during which time he was popularly known as "The Soldiers' Friend."

Field-Marshal Sir Donald Stewart then briefly expressed the thanks of the visitors for the hospitality they had enjoyed that evening.

Mr. Cosmo Bonser, M.P., said, "As Treasurer of Guy's Hospital I feel it a great honour to be asked here this evening. I can well agree with your Chairman as to the responsible duties which we as treasurers of the endowed hospitals are called upon to perform. I have the honour to propose the health of the successful students; if this had been entrusted to any gentleman either on my right hand or my left, he would have told you of their successes. In the past, your Treasurer knew I should do nothing of the kind; my interviews with my head master were of a different kind—chiefly unsuccessful attempts at explaining away unprepared lessons. But none the less can I honour the success of your prize-winners, whose health I ask you to drink, coupled with the name of Mr. Hussey." Mr. Bonser concluded by referring to the friendly rivalry of Bart.'s and Guy's in the cricket and football fields.

Mr. Hussey, in reply, said that in the absence of Mr. Gillies the duty had devolved upon him—an overwhelming one, he admitted—of replying on behalf of the prize winners. This year the toast had a special interest, as it was proposed by the treasurer of the second greatest hospital; for we must consider it the second, inasmuch as it was not our own. Mr. Hussey concluded by acknowledging the Treasurer's remarks as to the care that those responsible would exercise in supervising the new arrangements for the junior staff.

During the evening several songs were rendered in admirable style by Madame Amy Sherwin, and violin solos by Miss Maud MacCarthy. Miss Carmichael accompanied at the piano. And thus ended a very enjoyable evening.

The Bahere Lodge, No. 2546.



REGULAR Meeting of the Lodge was held at Frascati's Restaurant on Tuesday, May 11th, 1897. Bro. Alfred Cooper, the W.M., in the Chair. Bro. G. V. Worthington was raised to the third degree. Messrs. W. E. Sargant, J. B. Christopherson, J. W. Haines, Henry Ellis, and J. F. Bill were elected Members; and Messrs. Sargant, Haines, and Bill being in attendance were duly initiated into Freemasonry. Bro. W. J. Walsham was unanimously elected Master of the Lodge for the ensuing year. Bro. Gripper was elected Treasurer in place of Bro. Reece, and Bro. Madden was re-elected the Tyler. Messrs. Matthews and Miles were proposed as Members of the Lodge. A donation of two guineas was voted towards the restoration of St. Saviour's, Southwark. Sixty Members and their guests subsequently dined together.

* Members of the Lodge are requested to take notice that the Installation Meeting has been postponed until the third Tuesday in June, as the ordinary date falls this year upon Whit Tuesday. It is hoped that the Meeting will take place in the Great Hall of the Hospital.

Appointments.

ADAMS, JAMES, M.D. (St. And.), M.R.C.S., has been reappointed Medical Officer of Health by the Barnes Urban District Council.

HEDGES, C. E., B.A., M.B., B.C. (Cantab.), M.R.C.S., L.R.C.P., appointed Resident Medical Officer to the Royal Hospital for Diseases of the Chest, City Road.

WRIGLEY, R., B.A. (Oxon.), M.R.C.S. (Eng.), reappointed Medical Officer for the Runham Vauxhall District.

Ballads of the Bart.'s Smoking Concert Club.

THE MALINGERER.

OW wot I sez, is this sez I, as 'ospital is rotten,
And doctors ain't no blooming kind of good;
Ho! yus I does, you bet I does, I knows a bit abah't 'em,
And I'd show 'em up, so help me, if I could.

I goes into 'em reg'lar when the rhino ain't so ready,
Ho! they're 'andy in'itootions for that game.

But Lord, it aint no lavender, they makes you keep so steady,
There aint no fun, it's all so blooming tame.

It's all very well when a feller's really ill,
But when a bloke wants nuthink but a rest,
'E dont want doctors messing
All around 'im wiv their dressing,
And a 'ammering and a banging of 'is chest.

The diseases that I've 'ad, well it's a wonder I aint dead,
I've taken all their physics every way;
The safest thing I've struck as yet's a toomer in the 'ed,
Them paralytic fakes most always pays.
I remember once I tried a bloomin' toomer in the chest,
But you bet your loife I don't try that no more;
When I links of 'ow they fooled me with their silly "puffick rest,"
And when I links of 'ow they starved me, I feels sore.

It's all very well when yer aht and abah't,
Yer can git yer bit of 'addick on the sly;
But when they keeps yer quiet,
And yer dines on Tuffnell's diet,
Well, it makes yer want to go and die.

Another thing abah't them rottin' 'ospital, yer know,
They're much too free a messing wiv the soap.
When us fellers gets the management of London, well we'll show
Them 'ospital a thing or two I hope.
It's a damnright degradation to the 'onest working-man
To go and try to find 'is buried shirt;
It aint no catch this washing—I 'ates the water-can,
It's me mark of 'onest labour is the dirt.

It's all very well when a feller needs a wash,
Tho' washing aint so healthy as they say,
But to take and put him in it
Every other bloomin' minute,
It gives a bloke the shivers all the day. — F. W. GALE.

The Month's Calendar.

MAY.
Sat. 15th. Names for Lawrence Scholarship to be sent in. Cricket. Bart.'s v. Richmond, at Richmond.
Tues. 18th. — Sir Dyce Duckworth's and Mr. Langton's duty.
Wed. 19th. — Clinical Lecture, Mr. Smith.
Thurs. 20th. — Lawrence Sch. Exam. begins.
Fri. 21st. — Dr. Hensley's and Mr. Marsh's duty. Clinical Lecture, Sir Dyce Duckworth.
Mon. 24th. — Final Fellowship Exam. begins.
Tues. 25th. — Dr. Lauder Brunton's and Mr. Butlin's duty.
Wed. 26th. — Clinical Lecture, Mr. Langton. Cricket: Bart.'s v. Hornsey, at Hornsey.
Thurs. 27th. — Cricket: Bart.'s v. Crystal Palace, at the Crystal Palace.
Fri. 28th. — Dr. Church's and Mr. Smith's duty. Clinical Lecture, Dr. Hensley.
Sat. 29th. — Cricket: Bart.'s v. Kensington Park, at Wormwood Scrubs.

JUNE.
Tues. 1st. — Dr. Gee's and Mr. Willett's duty.
Wed. 2nd. — Clinical Lecture, Mr. Langton.
Fri. 4th. — Sir Dyce Duckworth's and Mr. Langton's duty. Examination for Matthews Duncan Medal. Clinical Lecture, Dr. Lauder Brunton.
Tues. 8th. — Dr. Hensley's and Mr. Marsh's duty.
Wed. 9th. — Clinical Lecture, Mr. Marsh.
Fri. 11th. — Dr. Lauder Brunton's and Mr. Butlin's duty. Clinical Lecture, Dr. Church.
Sat. 12th. — Cricket: Bart.'s v. R.T.E.C., at Cooper's Hill.
Tues. 15th. — Dr. Church's and Mr. Smith's duty. Exam. for Sir George Burrows Prize.
Wed. 16th. — Cricket: Past v. Present, at Winchmore Hill.

Examinations.

UNIVERSITY OF CAMBRIDGE. — Final M.B. — Part I. *Surgery and Midwifery*. — J. G. Forbes, E. A. C. Matthews, H. D. O'Sullivan, S. D. Rowland, R. A. Yeld. Part II. *Medicine*. — H. J. Bumsted, J. B. Hughes, C. D. Robinson, H. J. Twigg. *Diploma of Public Health*. — C. P. Handson, F. Perhouse.

UNIVERSITY OF DURHAM. — J. H. Wood, M.R.C.S., L.R.C.P., has taken the M.B. and the B.S. degrees.

SOCIETY OF APOTHECARIES. — Final Examination. — *Surgery*. — A. W. S. Sheldon. *Medicine, Forensic Medicine, and Midwifery*. — A. W. S. Sheldon. *Medicine and Forensic Medicine*. — F. M. Brittain.

Obituary.

JAMES ANDREW, M.D. (Oxon), F.R.C.P.,
Consulting Physician to the Hospital.

To Bart.'s men all over the country the news of Dr. Andrew's death came with a sense of personal loss. Though it is four years since he resigned his active connection with the Hospital with which he had been associated for nearly forty years, his memory is still fresh within its walls, and ever will be. The students of to-day can but dimly realise how high a place he occupied in the esteem of all. Never man sought honour less, deserved it more richly or received it more fully from those who knew him. It is fitting that the JOURNAL of the Hospital for which he did so much should pay a tribute to the memory of "the beloved physician."

James Andrew was born on September 7th, 1829. His school days were passed at Glaisdale and Sedbergh, from which latter school he entered the University of Oxford, becoming a member of Worcester College. But before long he migrated to Wadham, where he had been elected a Scholar; he graduated in 1852, and afterwards became a

Fellow and Tutor of his College. It was not till 1857 that he entered as a student at this Hospital, so that he was at that time already 28 years of age. An old fellow-student and life-long friend, Dr. James Coombs, himself now a venerable member of the profession, says of him, "Both of us were considerably older than the average student, and finding that our tastes and habits were pretty much in accord, we soon became fast friends, continuing so without a break until his lamented death. We dissected our first part together, and I found in him not only an agreeable but a most helpful companion. As members of Mr. (afterwards Sir William) Lawrence's surgical class, we were fortunate in securing the notice of that distinguished surgeon and lecturer, and in this session were the first set of his pupils whom he invited to dine with him in Whitehall Place. These invitations were highly valued as tokens of his goodwill."

"The more Andrew became known the higher he stood in the estimation of his contemporaries, and their appreciation of his ability as a physician was heartily manifested in later years, when they lost no opportunity of calling him in to their cases as a consultant."

He graduated M.B. in 1860, and in the next year, on the death of Dr. Baly, he became Demonstrator of Morbid Anatomy, and then Warden of the College. Four years later he was elected an Assistant Physician, and only had to wait five years more before becoming full Physician to the Hospital, a post he held for twenty-four years. In this respect his career offers a great contrast to that of Mr. Wormald, who, after being Assistant Surgeon for twenty-three years, only held the post of Surgeon for six years before having to resign. From 1868 till 1890 he was Joint Lecturer in Medicine, Dr. Gee being his colleague for many years. Failing health compelled him to retire from active work in 1893, and he went to live at Bourne-mouth, amid the pines on the West Cliff. But the relaxing climate brought but little benefit, and a change to the more bracing atmosphere of his native Yorkshire failed to restore him. On April 21st he passed away.

Of the numerous other posts he held we need not speak here. Suffice it to say that, becoming a Fellow of the Royal College of Physicians in 1866, he was, in succession, Lumleian Lecturer (1884), Censor (1886-8), and Harveian Orator (1890) to that distinguished body. We venture to quote from the *British Medical Journal* of May 8th, 1897, the appreciation of one well qualified to speak of him—Dr. Samuel West.

Dr. Andrew's death will bring grief to many, for no man had more friends than he. Kindly, gentle-hearted, he was loved as few men are; yet sturdy, straight, and strong in character, he hid beneath his gentleness a vigour and determination which sometimes surprised those who did not know him well. Slow to move, he was hard to stop in any action he had decided on. Ready to listen to those he trusted, his confidence once shaken was difficult to regain. Religious-minded, yet tolerant, he respected opinions which he could not share when he believed them honest, for he looked to the man and not his creed. Fond of good-natured satire, and with a dry and caustic humour, he loved a joke, and could tell a good story. He never said a hard, uncharitable word, and if he had judged or spoken wrongly, he felt no peace till he had made amends. With a character such as this, it is no wonder that he was admired, respected, and loved.

In society he was timid, reserved, and shy. He did not like publicity in person or in print; yet whatever he spoke or wrote gained attentive hearing. In ordinary conversation and after-dinner oratory he did not shine; he had no taste for it. He hated to talk on nothing and for talking sake; yet when he felt moved to speak, he could speak well and to the point.

It was in his study or in his smoking room, with an old coat, an old pipe, and an old friend, that he was at his best. There his shyness left him; he was genial, hearty, full of anecdote and humour, easily amused, and how he enjoyed a witty story! A man of simple tastes, happy with his books and pipe—happiest of all when fishing. A good day's sport was an attraction he could hardly resist, and he would often smuggle himself away from the calls of practice in town, and fly off to his favourite fishing haunts.

He wrote little, but what he wrote was good, and made those who read wish for more; for he wrote after long thought, out of a ripe and rich experience, on what he knew, and only when he had something to say. Some of his short articles are models of clearness of thought and style.

Andrew, of course, stood high in the esteem of his colleagues, and upon the School and Staff committees his opinions carried a weight all their own. His influence was always on the side of peace and charity. He never said or did a harsh unkindly thing, and when it was his duty to condemn he tempered judgment with mercy. He was to the last always an advocate of progress, and without his co-operation many of the developments in medical teaching of recent years could not have been carried out.

To Andrew the Oxford graduates turned as to their natural leader—no slight compliment to his sterling merit,—and his influence was felt both in Oxford and in London more widely than many knew.

As a physician his opinion was highly valued and widely sought, for it was known to be both sound and honest. His practice, though large, was never of the fashionable kind, for he hated all self-advertisement, and carried his dislike of it to an extreme which prevented his becoming as well known to the public as his merits deserved. It was from his old pupils and personal friends that his patients came, and when Andrew was to be had, neither the one nor the other thought of any other physician.

Into the wards of the hospital he carried the same gentleness, earnestness, and sympathy which marked his character elsewhere. To him the patients were never mere cases of disease, but suffering men and women who looked to him for help; nor did his interest in them end with their illness, for his ear was open to their stories of distress, and through the Sisters of his ward he dispensed charity with a free hand. Yet he loved to do good in secret, and few of those who received his benefactions knew from whence they came.

As a teacher Andrew was strict, thorough, and systematic, and he took infinite pains to train his pupils how to observe and to learn for themselves. If he spent, as some thought, too much time on elementary details, he did so from a sense of duty, and because he felt that he was laying the only safe foundation on which the student could safely build hereafter. Yet he loved most to get a sympathetic class around him, and pour out before them the riches of his experience, but with such modesty and forgetfulness of self that he seemed hardly conscious that he was giving what no books and few other teachers could supply. "You are going up for your examination soon. Come up some evening next week, and let us have a chat together." This was a not uncommon invitation to a class of anxious candidates—an invitation, need it be said, sometimes asked for. Even after the lapse of many years the memory of those informal chats is still fresh in the minds of all who enjoyed that privilege.

As a lecturer, Andrew was sound rather than brilliant. He wrote his lectures carefully and read from the manuscript. This, no doubt, added to their intrinsic value, but detracted from their effect; yet his lectures were largely attended, for their value was properly appreciated. It was felt that the way to profit most by them was to take full and careful notes, and study them afterwards at home. It was then evident how much matter they contained, and how much labour and research had been spent upon their preparation. He was spoken of in my student days and even after as one of the three great teachers of his time in London, and that deservedly. The other two were Murchison and Sutton. Three men as different in character as in their mode of teaching, but each alike in his own style a master of his art.

Still it is neither as a physician nor as a teacher, but as their personal friend, that his old pupils love best to think of Andrew, for Andrew made friends of all his pupils. How many of these at some critical period in their lives owe to Andrew's timely counsel, perhaps warning, or even material help, much if not all of their success in after life. To Andrew every one who knew him felt that he could go in anxiety, doubt, or trouble, and be sure of sympathy, guidance, or comfort. Even in his busiest days Andrew never failed to make time to give the help wanted to an old pupil or friend. It is all this that makes Andrew's memory dear to Bartholomew's men, and which sharpens their sorrow at his death.

Review.

THE NATURAL AND ARTIFICIAL METHODS OF FEEDING INFANTS AND YOUNG CHILDREN. By Edmund Cantley, M.D. Pp. 376, Six Illustrations. London: J. & A. Churchill, 1897. Price 7/6.

This work, according to the author, is an attempt to give a description of the present state of our knowledge of the feeding of infants and young children, sufficiently concise for the busy medical practitioner and the overworked student, and yet adequate in its outline of such an important subject. The book is divided into nineteen chapters and two appendices. Dr Cantley gives an interesting account of the physiological processes involved in lactation, and of the physiological chemistry of infantile dietetics.

In the chapter on the micro-organisms of cow's milk he asserts that it is unsafe to use uncooked milk in either town or country, except under special circumstances, owing to the liability of contamination with pathogenic micro-organisms.

In order to neutralise this contamination he advises "Pasteurisation" as an efficient method for destroying any microbes which may happen to be present in milk, but he thinks that this is better done at the dairy than at home. No method of treatment will, however, convert bad milk into good milk.

After discussing the composition, advantages, and disadvantages of the different "proprietary foods" which are used in this country, the author states that it may be laid down as an axiom that no proprietary food is necessary for the bringing up of infants by hand as long as good cow's milk, cream, and sugar are available, and that a large number of cases of intestinal disorders in infants are due to the administration of these foods. One of the main objections to these foods is the large proportion of carbohydrate in one form or other which they contain.

In the appendix a very useful table of "directions suitable for the mothers of hospital patients" is given, and is well worth perusal.

In the main the author has succeeded in accomplishing the object for which the book was written, and we can recommend the work to those who wish to make themselves familiar with the present state of medical knowledge concerning the feeding of infants and young children.

Births.

BOSTOCK.—24th April, at 73, Onslow Gardens, the wife of Surgeon-Captain Ashton Bostock, 2nd Scots Guards, of a son.

CRESSEY.—On April 10th, at Timaru, Iorquay, the wife of G. H. Cressey, M.R.C.S., L.R.C.P. (London), of a daughter.

GAMBRIEL.—On May 1st, at Fembriidge Villas, W., the wife of Wm. M. Gabriel, M.R.C.S., L.D.S. (Eng.), of a son.

WAGGETT.—On May 4th, at 45, Upper Brook Street, the wife of Ernest Waggett, M.B., B.C. (Cantab.), of a daughter.

Marriages.

FRANCIS—AGATE.—On April 30th, at Sydney, New South Wales, Henry Alexander Francis, of Sherwood, Disisbury, D.A., M.B., of St. John's College, Cambridge, to Lilian, youngest daughter of the late Joseph Agate, of Ashstead, Emsworth, Hants.

KEOGH MURPHY—SCHEFFIELD.—On April 24th, at the Manchester Cathedral, by the Very Rev. The Dean of Manchester, assisted by the Rev. Stanley Swinburne, Rector of Radcliffe, Lancashire, James Keogh Murphy, of Prince's Square, Baywater, M.A., M.D., B.C. (Cantab.), eldest son of the Right Hon. Mr. Justice Murphy, to Mabel Roney, only daughter of Joshua K. Schofield, of Kersal, Manchester, and granddaughter of the late Sir Cusaak P. Roney.

STERRY—ALLEN.—On the 26th April, at St. Edward's Church, Leek, John Sterry, M.R.C.S., L.R.C.P., of Riverhead, Kent, to Beatrice, youngest daughter of William Allen, solicitor, Leek.

Death.

ANDREW.—On April 21st, at Moorland House, Tavistock, James Andrew, M.D. (Oxon.), Consulting Physician to St. Bartholomew's Hospital, aged 67 years.

ACKNOWLEDGMENTS. *Cuy's Hospital Gazette*, *St. George's Hospital Gazette*, *St. Thomas's Hospital Gazette*, *St. Mary's Hospital Gazette*, *The Middlesex Hospital Journal*, *The GuyScope*, *The Student (Edinburgh)*, *The Nursing Record*, *The Charity Record*, *The Hospital*.

St. Bartholomew's Hospital



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NOTICE.

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

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

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St. Bartholomew's Hospital Journal,

JUNE 14th, 1897.

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

Headache.

A Clinical Lecture delivered on May 14th, 1897,

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

HERE is a boy *et. 11* years in Luke Ward at present, suffering from severe chronic and continuous headache, and I propose to make this condition the subject of my clinical lecture to-day.

The following is an abstract of the note taken of him while he has been in the hospital:

Fifteen weeks ago he began to complain of headache, loss of appetite, and drowsiness. There was occasional delirium. For the last four weeks he has complained of pains in the legs, about the knees, and general weakness. Fourteen

days ago there was epistaxis; there have been no fits or vomiting throughout the illness. One month ago he was unconscious for a week, and passed his feces and urine under him.

He lies curled up on his side, with his hands applied to the head; very drowsy, but will open his eyes and answer questions shortly. Pulse 64, infrequent and irregular; skin very tender to the touch. Photophobia, but no squint or nystagmus; pupils normal. No optic neuritis, veins rather full. No delirium while in the hospital. Knee-jerks increased; no *tache cérébrale*. Urine acid, sp. gr. 1.028; no albumen or sugar.

I do not believe that he has any permanent organic disease of the brain. The indications of disease in his case are as follows:—The severe continuous headache, the irregular, infrequent pulse, and the great tenderness of the skin to touch. He has no fever, but these cases are often febrile, and are then much more puzzling. As to the "choked discs," I would advise you not to pay too much attention to a mere fullness of the veins of the fundus.

Let me give you another case to compare with this. A boy *et. 12*, also of tubercular stock, had been losing condition for two months; he had severe headache, a tendency to tenesmus, and tenderness over the left kidney, but there were no objective signs. When I saw him again a month later there were absolutely no more definite signs of cerebral disease. The pain had shifted from the left renal region to the right—a very significant fact. He got better very soon. Three or four years later, when I heard of him, he was quite well.

I have seen many such cases, and it were idle to multiply instances. They are by no means confined to children. I saw a gentleman *et. 55*, who had been subject to severe headache for years. In one attack he had lost memory and speech for two months, and had completely recovered. To lose the power of speech for a short time is by no means rare, but to recover after two months is uncommon.

In this case I did not hear of any relapse, which is so liable to occur in this condition. And it is often only by accident that you hear of the recurrence, for the patient

deriving no benefit from treatment, gets tired of you, and you see him no more.

Sometimes it seems quite incurable. In one case a man of 30, otherwise healthy, came to me complaining of continuous headache. He led a regular life, and had had a good holiday the previous year. I recommended abstinence from all butcher's meat and from alcohol. A year later this had produced no good result, and he had returned in consequence to ordinary food. I failed to cure him.

With reference to that loss of memory, patients may afterwards have no recollection of the headache at its severest, even though they are not apparently unconscious. I was called in to see a tradesman whose headache was so bad that he was obliged to be kept in bed and in a dark room for a good many weeks. Some time afterwards he came to tell me of his recovery; he said he could not remember anything about his illness, except that I had flashed light into his eye—meaning, of course, during an ophthalmoscopic examination.

These headaches are sometimes even fatal. I saw a girl *æt.* 11, who was lying in bed with her face very flushed; the pain in her head was so bad that she was trembling, and cried out from time to time, "Oh my head!" There was well-marked cutaneous tenderness, and she vomited after food. A few days later I noted that the excessive tenderness still persisted; the legs were mostly drawn up, but the patient could voluntarily extend them. The legs must never be allowed to remain in this position, or a contracture will occur, as in the boy upstairs, which indicates neglect. Whenever you have a bedridden patient to deal with you must bear this carefully in mind. This was in December, and in July a slight pain between the shoulders became much more severe. This severe pain between the shoulders is a common symptom of debility and nervous exhaustion, nothing more. All sorts of things were tried for her without much benefit. Almost a year later, one morning at 5 a.m. the pain grew very severe; she felt numb and appeared to go to sleep, and at about 8 o'clock was found dead. This sudden and unexpected death is very common in chronic cerebral cases.

You will be interested to know what was found *post mortem*. I have very minute notes of the examination; the body was kept lying on its face till it was made, and the result compared with a child who died two hours before of some totally different condition.

[Dr. Gee then read a note of the *post-mortem* examination, and continued:]

I read you all this that you may see how very anxious we were to find out something, but it all amounted to nothing at all.

As to a diagnosis of this headache, it must, of course, be separated most carefully from *tumor cerebri*; optic neuritis is the grand distinction. You must be sure that

the headache is not really an eyeache; and pray bear in mind the possibility of glaucoma. If astigmatism, myopia, or squint be present, you may hope that the headache is due to some ocular defect. There is often asthenopia in these cases, quite apart from any defect in the eyes, and this no glasses can remedy. You must also remember the headache of chronic nephritis, of fever, of syphilis, and of "biliousness,"—a very real state, a very common state, yet one which is very ill understood.

This headache is commonest in men in adult life whose energies are just beginning to fail, in whom this is invariably due to the brain being overtaxed, and is often associated with insomnia. In women it is more often due to depressing emotions. In many cases you will find they have suffered all their life from migraine; the intermittent headache has become continuous.

It is met with in men, it is met with in women, but it is also met with in children. I believe there is always a predisposition in these cases, a state which Dr. Beard has termed neurasthenia, a state which in children is always inherited, but which in adults may be acquired.

A distinct inheritance can often be made out; the children have to suffer for the sins of their fathers. We often see the father engaged in an arduous and exacting business, a man of affairs; a strong father, a weak child, as if the father had used up the strength of the generation. If, in addition to this, the father drinks, or the mother (for drunkenness is not confined to our sex), the chances of the children are much worse. The modern tendency to late marriages fosters this state. It is a tendency much to be regretted; the children are often weakly, neurasthenic, and always suffering from pains in the back. This headache is often associated with a tendency to gout; why, we do not know. It is an example of what is termed the neuro-arthritis diathesis.

As to treatment, when so severe that the patient is bedridden, the room should be darkened, and alcohol is particularly to be avoided; ice to the head should be tried. The most useful drug, in my opinion, is potassium iodide, but you must give it in large doses, 10 to 15 grains three times a day. If it do no good, I do not know what to recommend. You may try anodynes, but not soporific anodynes. Antipyrin and other drugs of that order may be used, but I have for them nothing like the faith that I have in potassium iodide.

In less severe cases have the patient's eyes attended to, but do not be too sanguine; the result is often most disappointing, the headache not diminishing. The great remedy is a complete change, but you must warn your patient that it will take a long time to produce any effect. A cool mountain air on the whole is best. I have here a letter from a clergyman, in which he says, "I followed your kind advice with regard to a climate, but it was at least a month, as you predicted, before I derived any benefit. The head-

ache from which I suffered so long left me on a mountain top."

With children, in bad cases it is very important to separate them from their parents, especially if, as is so often the case, they are the children of wealthy people. The constant inquiry and solicitude only fosters the headache. A boarding-school sometimes does good. With women, separation from their friends is often desirable.

Tea is very pernicious in these cases. Much tobacco and butcher's meat are best avoided. There are two or three drugs which no doubt are useful. Arsenic in small doses for a long time is one of the best. I usually employ arseniate of soda, $\frac{1}{30}$ grain in a pill. Strychnine, too, might be used. And in men *cannabis indica* may be tried, but you should feel your way in small doses, beginning with a quarter of a grain of the extract. In women I should advise you never to think of giving *cannabis indica*, even in small doses, unless you wish to have, as I have had, some very unpleasant experiences; for those of a neurotic temperament seem very susceptible to this drug.

Concerning the Ship's Surgeon and some Tropical Diseases.

By W. H. MAIDLOW, M.D. Dunelm., F.R.C.S.,
Late Surgeon P. and O. S.S. *Caledonia*.

(Continued from p. 118.)

PART II.—TROPICAL DISEASES.

BEFORE quitting the subject of the ship's surgeon to pass on to remarks on diseases of the tropics, there is a subject that requires some attention. This is the subject of voyaging for health, of which very much might be written, but it would not be from any great experience* on my part, so that it is necessary to be careful in this paper, which professes to deal mainly with things seen.

The chief advantages of ocean travel are the fairly equable, or at least gradually, changing atmospheric conditions; the air rich in oxygen in the form of ozone, probably in iodine, and certainly in chlorides of soda and potassium; the amusements without fatigue; a sublime idleness and forgetfulness of name, fame, post, and date; the appearance of new faces; and the daily and nightly scene of sun and stars, hardly a day passing without the enervating sunshine; whilst appetite, digestion, and assimilation all improve. As Shoemaker says somewhere, "the glandular follicles and organs of the alimentary system are awakened to a higher state of functional activity, the skin grows soft

* Experience has been derived from the many sick passengers brought to and from India during eight months, the native crews, and diligent attendance at the Bombay hospitals.

and blooming, the tone of the nervous system is raised, . . . sleep is sound, lassitude vanishes."

All this sounds rather like the *pacans* sung to a new patent medicine, but most of it is true. The improvement of appetite is very marked—fastidious men and women at home, at sea will make three, not to say four hearty meals daily, and when they are not eating they are often sleeping. But there are yet some drawbacks. There is the ceaseless vibration of the powerful screw, which I ought to have mentioned as at least a factor in producing sea-sickness, the daily smell of oil and cooking, close quarters, the occasional monotony of boundless ocean, the possible danger of sea-sickness, and, in the fast ships, it must be remembered how in thirty-six hours the temperature of the air varies (e.g. from 60° to 65° Fahr. at Port Said, it may in July be 100° or more in the shade in the Red Sea*). My opening aphorism says "men change their sky, but not their soul, who plough the vasty deep"—homesickness may be far worse than sea-sickness in its power of counteracting any good from ocean travel. These elements, together with the ship, the officers, the port whither bound, the season, and the condition or stage of illness, must all be remembered before advising a sea voyage. Indeed, hasty advice may be the death-knell.

Another important point: it is but just to both parties that the ship's surgeon should have a note concerning the travelling patient. Many a time have I had historyless patients launched upon me, probably "cheesed off" from some huge practice; and when a doctor travels with his patient it seems, again, to be nothing but proper etiquette that the doctor should communicate with the ship's surgeon, who is supposed to have proper knowledge of the ship's health; and, indeed, if the doctor has not a private medicine chest, it is to his own advantage to do so, as an ill-disposed surgeon could make things quite unpleasant, for he has charge of the dispensary, and he alone could make up the prescription. Personally I have never had any trouble whatsoever, but cases do occur. As a rule, the other medical men on board, Indian medical officers, &c., are most kind and correct in every way; and should this paper ever be seen by any of them, I take this opportunity to thank each and all.

The cases that do well on ship, in my experience, are dyspepsia, constipation (after a while), hypochondriasis, hysteria, hay fever, early or convalescent phthisis (if the weather be good and not too hot), syphilis, debility, nervousness, the lovesick, and, of course, those diseases the result of pernicious climates not maritime. Phthisis with pyrexia, hæmoptysis, or much sweating and cough, seems to do invariably badly. Skin diseases, chronic rheumatism, gout, or bronchitis with scanty expectoration

* The heat of the Red Sea, like the roughness of the Bay of Biscay, is exaggerated. In fast ships sufficient "breeze" is made to counteract this heat, and there are numerous excellent mechanical contrivances to obviate it—fans, windsails, &c.

also, in my experience and in that of my colleagues who have had more, do badly. Of chronic nephritis with dropsy I know nothing, nor of emphysema and heart failure. One case of exophthalmic goitre made splendid improvement, but I know of no other case. Neuralgia (simple) and sciatica, according to a friend of mine, are always worse. Most "eyes" seem to do badly. Anæmia, from any cause that has ceased its work, and chlorosis, probably from improvement of general health, are very satisfactory diseases to treat by a sea voyage when other means fail and the patient wishes to go.

But, however, I cannot protest too strongly against the indiscriminate advice "to go a sea voyage." I have known most sad results, disturbing domestic peace and doing not the slightest good. The all-wise Shakespeare, whom I cannot refrain from quoting here, seems to have recognised the value of a sea voyage and change of scene:

"Haply, the seas and something different
With variable objects shall expel
This something settled in his heart."*

Hamlet, v. 1.

One approaches a description of the following tropical diseases with much trepidation, for it is impossible not to feel the rational disinclination that some have in taking book knowledge or the descriptions by man when experience can be obtained of the diseases described. The great Xavier Bichat is reported to have said, "If I have made such rapid headway, it is because I have read little." But whilst holding these views to some extent I would plead that book knowledge of some diseases is useful, ill, and useful also when experience comes; without it there would be no record of progress; that it is suggestive for thought and may be possibly entertaining, and that books remain one's friends, and give their help long after other friends in the flesh have flown. I here intend, however, only to set forward what is possibly useful and medically entertaining. There shall be no dry facts of ætiology or statistics into which no breath can be put, by me at least, like into those dry bones Ezekiel saw when he cried, "There were very many in the valley, and, lo, they were very dry."

As regards the term tropical in connection with disease, its significance is climatic and not necessarily tropical, for the diseases may occur all the world over (just as ague and dysentery and cholera may flourish in England, or even perhaps in the arctic circle), but they are especially diseases dependent on high temperature and its associated conditions, conditions on the part of the individual whereby

* I have made no attempt, beyond suggesting the general improvement in health, to state how the good results; the paper is already, I fear, too long, but I would take the opportunity of adding the food on board a good ship is quite satisfactory although mostly frozen. The medical officer has the power of ordering extra diet *ad lib.*, but he has to keep accounts, or he will find he has ordered some gallons of milk or pounds of beef that might fill discrepancies in the steward's accounts, of which the surgeon is quite innocent.

the presumed germs flourish, and on the part of the soil where a suitable habitation is found for their extra-human stage. It is, in fact, a good example of Pettenkoffer's A B C factors, the germ, the individual's receptive condition, and the habitat of the germ. Since the germ theory what were once exciting causes of disease have now become associated conditions, e. g. a high temperature, saturated subsoil, rank vegetation, do not produce malaria unless the hæmatozoa are also present to excite the disease. Yet the hæmatozoon must have a suitable nidus, &c. The physiology of life in the tropics affords a partial explanation of the prevalence or absence of certain diseases; thus the lungs and heart and kidneys have no such stress as falls on them in England, therefore nephritis and cardiac or pulmonary diseases are comparatively rare; whilst, on the other hand, the stress of work on the skin, liver, and intestines due to heat, sedentary life, exposure to sun, a certain tendency to alcohol, by leading to hyperæmia and congestion, will do much to explain the special incidence of hepatitis, dysentery, ague, &c. Then, of course, there must be other special conditions in hot climates suitable to special germs, just as the *Tœniada* require special hosts during their life cycle. Diphtheria and typhoid are becoming more common, probably from importation; measles and scarlet fever or whooping-cough make but little headway at present; tetanus and tuberculosis are as frequent in India, the latter more so than in England.

Of the more important tropical diseases, *malaria** is by far the most common tropical disease met with, especially amongst the native crew (to whom it offers a grand chance of malingering, except in cases who come aboard ill. It is usually met with in a quotidian or mild remittent form. A patient will have the ordinary phenomena of acute malaria (ague) lasting for a variable time, and then will be out of sorts or with no symptoms whatever, or occasionally there will be two attacks daily (double quotidian). The second type is a mild one of seven or ten days' pyrexia, which is extremely difficult to say is not typhoid, for the absence of spots, the enlarged spleen, the form of fever, rigors (if present), are common to both, so that most reliance has to be placed on a previous history (of course fallacious to a certain degree), the tongue and abdomen, and the blood examination (which, however, is not easy, as it is not usual to carry a microscope about of any value). The remittent form of "fever" is often very difficult to diagnose also from the fever due to exposure to sun or heat, the so-called "ardent fever," which also has the symptoms of a week's mild fever with headache and malaise. Ague (intermittent fever) is usually fairly easy to recognise. Most people east of Port Said are quite satisfied with the diagnosis "fever," and it is very easy to become slipshod in the matter; yet

* "Good morrow, Casca—
Casar was ne'er so much your enemy
As that same ague which hath made you lean."
Julius Casar, ii, 2.

the remarkable fact, however, remains that in the tropics quite high fever does arise from no particular cause,—it is "fever," and that is all that can be said. A special feature of the constitutions of those who have once had malaria, and in whose blood the hæmatozoa are presumably still potentially active, is the unexpected reaction that occurs when the ordinary troubles of temperate climates afflict them; thus with a bad tooth, with such ailments as tonsillitis, sea-sickness, diarrhoea, nasal catarrh, boils, and such like, quite a high degree of pyrexia results, and quite alters the ordinary appearance of the well-known disease.

During those halcyon days of my house-surgeoncy I call to mind a lieutenant of dragoons from whose right knee a loose semilunar cartilage was removed. For three days this man about six o'clock had most severe rigors, which responded very quickly to quinine, and there was nothing amiss with the wound, which followed the usual course of Pitcairn wounds. Then, again, old or subacute malaria forms a most grave complication to pneumonia, pleurisy, nephritis, and, I believe, to rheumatism, whilst it seems rather an antagonistic disease to dysentery. Apparent "fever" has occasionally arisen in those whose first departure from England it is, but such cases have proved to be usually typhoid or sun fever, although malaria is probably more rife in England than supposed, especially in the low-lying pasture lands of Somerset, in Cambridge, and Kent (Greenhithe, &c.). Theoretically also, it is possible for the cause to hang about the woodwork or water-supply of ships, although accumulating evidence seems to disprove the theory. The value of blood examination for parasites is daily growing; already the larger group previously called "fever," meaning thereby malarious fever, is becoming analysed into its constituents, as has always been the way of progress in medicine, and the time will come, if it has not come now, when the dictum of science will be (with no quinine given) "no hæmatozoa, no malaria," whilst the serum diagnosis of typhoid, when firmly based, will be a great boon indeed to Indian medical officers.

Treatment.—A proper knowledge how to treat malaria is of the first importance, and there is still much controversy thereon; some say, "Give quinine throughout;" others, "Wait for intermission;" to which latter the former say, "Yes," but "the intermission may not come, a-lack-a-day!" However, the treatment in the following way in ordinary cases seems best:—During rigors and coldness wrap up in blankets, give hot tea and brandy; during the hot stage (when there is usually also much headache) give phenacetin 15 grs., or a mixture of spirit. ætheris nitrosi, and liq. amm. acetat., and let the patient have some cooling drink. If the pyrexia be great, tepid and cold sponging is good, and the patient, well covered with blankets, soon begins to perspire or fall asleep, to wake up soaked, when his temperature will be down. *Then* he should be dried and made comfortable, and given his quinine in doses of 5, 10, or 20 grs.,

according to custom and habit. Quinine should be kept going every four hours for the next two or three days, with an additional quantity just before the time of the last attack. The dose, of course, must vary, but quininism rarely seems to do much harm. In a case of severe mixed tertian and quartan ague I gave daily 90 grs. for four days when the patient could not hear me speak for his "tinnitus." He was in great danger from his fever (temp. over 106° Fahr. once or twice); he quite wished the treatment, and the smaller doses had not the slightest effect. Warburg's tincture in this case appeared to remove the mild remittent fever that remained, but the experience of those who have used this remedy is very conflicting. For cases where there is severe vomiting or unconsciousness, the quinine may be given *per rectum* or hypodermically by means of the soluble acid hydrochlorate, or probably better, hydrobromate of quinine, and in these cases it *must* be pushed. For the remittent and continued forms quinine is given in doses according to the effects, just as alcohol is given, at regular intervals. For the sequels and what we may call the signs of potential or subacute malaria, arsenic, with or without cannabis indica (which is often very useful too) is a most valuable remedy; in fact, without it the neuralgias, headaches, joint pains, and forms of anæmia and cachexia might be considered oftentimes incurable. This is an outline of what is usually necessary. No harm occurs from giving quinine during the paroxysms; in the serious cases it *must* be given somehow, and it is the ordinary treatment for out-patients—the natives, who come with high temperature and go away with 10 or 20 grs. of quinine solid in their mouths and much happier. A favourite thing for these people to do is to try and get off work on the morning following an overnight, or what is so stated to have been, fever (bokhara), especially when the surgeon is "just caught," as the sailors say, for no one can say they have *not* had fever and are *not* ill now, and they are well up in their symptoms; but the history of the man's conduct at work, the noise he makes over his sufferings, and his strong objection to taking a black draught, the absence of an enlarged spleen, a clean tongue, and the propinquity of London, are all factors in favour of malingering. On reaching Bombay most native patients get surprisingly rapidly well, but it is often very difficult to say, and in plague times one is on thorns indeed, for if a patient be unjustly accused the medical conscience suffers as only it can. "Res est sacra miser," the person of affliction is sacred, is a maxim one of the best in medicine.

In England, on quite slight exposure—exposure to cold, over exercise of body or mind—any sudden alteration, in fact, of the usual metabolism may cause a recrudescence of malaria, a point that should make practitioners careful to investigate the past, and I am inclined to think that the offspring of the malarial have a distinct tendency to higher

ranges of temperature during ordinary illnesses, and that the same occurs to those living in malarious districts, themselves never having suffered, in fact, where the disease is potential and subactive.

Dysentery is probably the next most important endemic disease. Of its acuter forms, characterised by rapid death, of the pyæmic form, and of gangrenous proctitis I know nothing from experience. Those cases that one usually has to treat are simpler as a rule: one is the form sudden in its onset with acute abdominal pain, rectal and vesical tenesmus, a burning pain in rectum, and bloody mucous stools as frequent and as painful as can be imagined; there may or may not be tenderness over the sigmoid colon or cæcum and liver, and the temperature is, as a rule, normal or sub-normal unless complicated by malaria; the other more chronic, very often the result of an acute case that has not yielded to treatment, and has necessitated invaliding home. Some distinguish from clinical characters the form due to *Amœba coli*, but of the high-class help given to me when I have asked, no one seemed to know much difference. The relation to malaria is conflicting: (1) malaria may complicate dysentery; (2) there is a *diarrhoea* due to malaria; and (3) a malarious dysentery is described; but malaria and dysentery are two specific diseases, and if dysentery only means severe diarrhoea in this phrase it seems a pity to cause such confusion; the correct form might be malarious dysenteroid diarrhoea. Just as with "fever," so with dysentery, there is a tendency to call all diarrhoea dysentery, and doubtless it is difficult to say that an acute diarrhoea with a little blood and probably obvious mucus in an Anglo-Indian who has been exposed to cold, or a baby similarly circumstanced, is not dysentery, but certainly the distinction is of prognostic and therapeutical importance. Malaria may also cause diarrhoea from amyloid disease. The diseases from which acute dysentery requires distinction are cholera, intussusception, bill diarrhoea, tuberculous and simple diarrhoea (due either to cold or ingesta), and ulceration of rectum not due to dysentery, such as cancerous ulceration. It seems a far cry from *cholera*, yet I once found a native in his bunk so collapsed that the senior engineer, a good judge, said he was dead, and who, when he had revived, complained of severe calf cramps, vomited frequently, and had mucus without blood in the stools. Of course the subsequent symptoms cleared up matters, but for one who had not seen cholera to any amount the immediate diagnosis was not easy, and made me very anxious. *Intussusception*, like dysentery, may be an infantile tropical disease, and the possibility of missing intussusception in the routine diagnosis of dysentery is at least existent. *Hill diarrhoea* (sprue, or psilosis) is a chronic diarrhoea occurring in the highlands of India, where the stools are not mucoid or bloody, but of a peculiar frothy, yeasty nature, accompanied by wasting, and an aphthous and ulcerated state of the buccal mucous membrane, tongue,

and lips. Knowing nothing about this last disease, not even having heard of it, and diagnosing chronic diarrhoea due to malaria, to which the history and the temperature seemed to point, I treated such a case, who seemed at death's door, with Dover's powder, iron, and quinine, and with a milk and raw meat diet. The lady got nearly well within the three weeks, a result that must be attributed almost certainly to sea air. An eminent Indian authority afterwards told me the correct diagnosis, and congratulated me. These cases almost invariably get well on a milk diet, and nothing else, as Dr. Manson points out. *Tuberculous* diarrhoea is a form that is often missed in India, where the mind is always biased by dysentery; but an examination of the chest and the stools, which are usually merely loose without much mucus, reveals the disease, whilst if amyloid disease is the cause, whether from tuberculosis, syphilis, or malaria, the condition can be diagnosed from concomitant circumstances. It is, indeed, chiefly a matter of remembering possible causes. Tuberculosis is as fearfully frequent in India as elsewhere. A resident in the tropics, on exposure to cold without sufficient precautions, very often indeed gets an attack of *simple acute diarrhoea* from his vaso-motor system probably working badly; failing to accommodate itself, he gets splanchnic congestion. It is just the same in nursed babies in England, ingesta being innocent, diarrhoea from cold is the most common cause, and is soon cured if timely warmth be given. The *treatment for these cases of simple acute diarrhoea* must be early and thorough, or perhaps an old dysentery will be relighted. Warmth is required, and a bland liquid nutritious diet. I doubt the necessity for a purge, but castor oil has a reaction after a primary relaxation, and does little harm in almost any disease. The natives suffer from diarrhoea of this kind soon after leaving Gibraltar to go northwards; for them a mixture of sal volatile, opium, and tr. cinchonæ co. is very efficacious, and the same mixture, if nice enough, would suit our friend the passenger. For the more doubtful enteritis, where there may be some more acute hyperæmia and an old dysentery, it is well to replace the alkali by an acid, and add tr. catechu, but the constipating action must be stopped if dysentery appears. Nevertheless, a vascular astringent must be distinguished from a mess like the aromatic chalk mixture, and I think the objection to constipation in some stages of dysentery is rather too great, but I speak as one who has not seen a great number of cases.* For the diarrhoea *ab ingestis*, which of course is recognised from its history, the old calomel, or castor oil and opium treatment is as good in the tropics as in temperate climes. Calomel is probably best, as there is usually some hepatic congestion. Much purgation is harmful. Of the last differential diagnosis it is impossible

* Ten cases—six natives (two of whom had beri-beri), of whom four were acute, and four passengers, of whom one was acute and several doubtful cases.

to say beware sufficiently often; many and many an early case of *rectal cancer* is missed, as Mr. Harrison Cripps is so often and truly teaching, merely from not making a rectal examination. It is quite easy to understand how, with dysentery everywhere in India, this mistake could occur; but in England, where dysentery is nearly unknown, the mistake is nearly inexcusable. Probably dysentery in India, like malaria, wants splitting up into constituent diseases.

The *treatment* of dysentery is often quite satisfactory. For the acute forms in children nothing is frequently so valuable as an emulsion of castor oil, dosage according to years; a baby of one year could take $\text{m}j$ — ij of the castor oil every three or four hours. It is not easy to make a nice emulsion at home, but some excellent ones are sold. The same treatment by capsules of ol. ricini $\text{m}v$ — xx every four hours is good occasionally in adults, and that by getting three or four actions from a sulphate of soda and magnesia mixture, which is then diminished or replaced by ipecacuanha, is often equally good, and is highly spoken of by those that have tried it, especially French surgeons. The alternative is to give ipecacuanha *ad initia*. For the cases of acute dysentery I have had to treat I have used a mixed method during the acute pain and vomiting; poulticed or applied a sinapism to the epigastrium, and given opium by the mouth or hypodermically (this relieves the pain and procures sleep, and will allow subsequent remedies to be retained). The next stage is to give opium in small doses with magnes. sulph. ʒj 4tis horis till a good action of the bowels is obtained (which takes sometimes twenty-four hours); then leave off the saline and give the ipecacuanha sine emetinâ gr. xxx, more or less, 4tis horis. Only one of these cases became chronic. One had also beri-beri, but the diarrhoea ceased; the others were well within three weeks. Warmth is absolutely essential—rest, warmth, and ipecacuanha have now regained their lost ground, it seems, but the important point is to get the stomach to retain the ipecacuanha. For diet—milk, rice water, a little broth, and gruel p. r. n. The saline treatment appears very rational if there be definite ulceration, to wash the surface, and to prepare ground for other remedies; but if the condition be one of congestion or hyperæmia, rest, warmth, and a specific like ipecacuanha, however acting, seem to be the best; mercury is often very useful.

The treatment of the *chronic* cases is much more difficult. If the bleeding persists and the patient loses ground ulceration is probably present—for this occasional saline purge, large doses of solid bismuth, and a copious silver nitrate injection of gr. x—xxx ad ʒj aq. dist. is often good. The injection can be given by a funnel, and allowed to run out again as in "lavage d'estomac," and it is important to wash out the rectum first with water, distilled if possible. On the other hand, if diarrhoea continues but blood is absent, and the patient is gaining weight, then mere


congestion or cicatrisation is probable, and treatment by such astringents as tannin, catechu, cinchona, with occasional doses of opium in the form of Dover's powder, and a rather liberal diet often succeeds. An old Bart's man in the Indian medical service, who had, I regret to say, dysentery of this kind, made but little progress till he took to Daël fruit, to use which the fruit must be obtained and the decoction made fresh. It was certainly very efficacious in his case, and he had great faith in it, but the ext. Bael liq. when kept as in England may be considered inert. There are some cases of chronic dysentery to be seen in the Indian hospitals for whom nothing does any good, for whom washing out the intestine and scraping the diseased surfaces *per abdomen* seems almost the only remedy, but I do not know of its having been done.

Both dysentery and ague appear to be indicated in the Bible. King Jehoram probably had prolapsus ani or sloughing of the bowel—"The Lord smote king Jehoram in his bowels with an incurable disease," "and after the end of two years his bowels fell out by reason of his sickness" (2 Chron. xxi, 12). In Acts xxviii, 8, the father of Publius "lay sick of a fever and a bloody flux." In Lev. xxvi, 16, we read "I will appoint over you terror, consumption, and the burning ague that shall consume the eyes," &c., and there are other allusions in Scripture hardly "merely allegorical."

(To be continued.)

3 Plague-wallah.

By H. J. WALTON, M.B., F.R.C.S., I.M.S.

AVING spent several months on plague inspection duty in the Bombay Presidency, I think that a short account of some of my experiences may interest Bart's men.

At the outset I beg to disclaim any intention of considering the plague in its clinical or pathological aspects. From a limited experience—derived from about 150 "pukka" cases of plague,—after trying quite a large proportion of the drugs contained in the British Pharmacopœia, I was finally led to pin my faith on rum and milk; at any rate the former—fiery, country-made stuff though it was—was more appreciated than anything else by my patients. As regards the pathology of the disease, the very few bacteriological observations that I had leisure to make did not, I regret, lead to any results of the slightest importance.

On my arrival at Bombay from the Punjab, "on loan" to the Government of Bombay, I found myself and my friend D. posted to a large railway junction, about thirty miles from the capital, with orders to examine the passengers by all the trains that passed through the station, and to detain—amicably if possible, forcibly if necessary—all persons actually suffering from plague, or who might,

"in the discretion of the medical officer, be reasonably supposed to be possibly suffering from plague."

I guilelessly hurried off to my station, only to find that no accommodation for the patients had been prepared. However, India is the country of "makeshifts," and I found that an empty horse-box was tolerably satisfactory to the patient—if a cause of some vexation of spirit and "free" language to the surgeon, "barking" his shins over its angularities in the dark.

However, in a few days this was remedied, and sheds made of bamboos and matting erected in a neighbouring paddy-field took the place of the horse-boxes.

A refugee Babu from Bombay had just built a bungalow for himself and family within a few yards of the site chosen for the plague camp. He not unnaturally protested with considerable vigour and happy choice of language on this infringement of his "ancient lights," but his protests were overruled.

Tins of various native drugs and simples were sent to me, all infallible cures for the plague. The technique of the treatment was generally very simple,—“Kub a little on the bubo, and all the badness in the body will be extracted.”

The patients preferred the rum and milk. A great difficulty was experienced in getting coolies to work as "hospital nurses" and "porters." They had a "strike" (for higher wages) about every other day, or varied the process by decamping in the night and leaving no address.

The disposal of the dead was also a matter of some difficulty. The Hindoos were easy enough to deal with; a big bonfire every night was all the religious armoury that they demanded. The Mohammedans demanded that their friends should be buried. As the ground was entirely composed of large rocks this was no easy matter. I am afraid that in the case of some of the friendless victims a summary post-mortem conversion to the tenets of Buddha occasionally occurred. Of course, without my official sanction all sorts of fantastic rumours were circulated in the neighbourhood, and implicitly believed in by the natives. One story said that the reason so many inmates of the hospital died was that they were at once poisoned by the "Doctor Sahibs" in order to prevent the spread of the disease.

The hospital assistants, too, were popularly believed to prey upon the livers and hearts of the plague-wallahs. Perhaps their somewhat rotund figures and "presences," at a time when famine was supposed to be rife in the land, may have tended somewhat to the acceptance of this legend by the "man in the street."

But the delights of plague inspection duty were perhaps more emphatic on the station platform than in the plague sheds. With a temperature (indoors) of 90°—100°, goodness knows what the thermometer would have registered in the sun! Walking up and down and examining perspiring and malodorous coolies was scarcely the occupation one would have chosen for an Indian summer.

I really scarcely know which was the more aggravating, the offensive would-be funny manner of some of the European passengers, or the Oriental slowness and stupidity of the third-class people. The local season ticket holders bank Baboos in Bombay—were especially indignant at being submitted to such an outrage as feeling their pulses or looking at their tongues entailed.

An elaborate petition—in its phraseology a perfect gem—was addressed to Government, praying that "these humble ones and devoted slaves" may be exempted from this vexatious delay, and that the "two Europeans" (D. and myself) "and the 'Christian' doctor [a native assistant surgeon; note the distinction!] may receive instructions to examine us merely by a 'penetrating glance.'"

The petition was sent to me for comment, but so little importance did the Government apparently attach to it that only about six weeks afterwards did they discover that, owing to an oversight on the part of my clerk, the petition had not been returned to them.

The native lady passengers, curiously enough, gave less trouble than anybody else, although "this new outrage to their religious feelings," viz. the examination of women by male doctors, called up indignant protests from the Mohammedan community.

The purdah ladies,—i. e. those who go about with their faces concealed by a veil lest some "Kafir," seeing their loveliness, might harbour evil designs on them,—beyond a little maidenly modesty, not to say coquetry, never gave us the least trouble.

Thanks to the extremely limited range of vision that their eye-holes afforded, they were constantly falling between the railway carriages and the platform; but that, after all, was a matter that concerned only themselves.

As I write these few notes I am still engaged on this pleasant duty. However, I am happy to say that the virulence of the epidemic appears to be distinctly on the wane, and I have hopes that my "hard labour" on plague duty may soon be a mere memory.

The Treatment of the Puerperal Uterus.

A Paper read before the Abernethian Society on
October 29th, 1896,

By JAMES MORRISON, M.D.



WISH to bring before your notice a suggestion for the treatment of the puerperal uterus which at the present time I am afraid will raise a good deal of dissent, although from my own experience I am convinced it is the proper antiseptic treatment of the placental site and genital tract, and is based on those principles of antisepsis which guide surgeons in their treatment of wounds in other parts of the body.

1st. In every case of a puerperal woman I suggest that on the third or fourth day after delivery an intra-uterine douche should be given, and the uterus thoroughly washed out.

2nd. Should any signs at the time indicate that the uterus con-

tains any large amount of clot, the cavity of that organ should at once be explored preliminarily to the antiseptic douche.

3rd.—Should the temperature rise after the intra-uterine douche with symptoms of sapremia, the uterus should be explored at once, with or without chloroform being administered.

My reasons for these suggestions are that although nature may probably have intended parturition to be a physiological process, as in some animals, yet in the existing condition in the case of women the placenta cannot be separated without rupture of maternal blood-vessels, loss of blood, and formation of clot for the temporary arrest of hæmorrhage. Thus we have solution of continuity of a surface, and the process becomes pathological.

With the separation of the placenta there occurs the formation of thrombi in the uterine sinuses, accompanied by a larger or smaller amount of external clot lying in the uterine cavity, and during the first few days the lochia consist largely of this dead blood coming away from the uterine cavity through the vagina, and passing over the external genital organs.

But it has been experimentally proved that the vagina and external genitalia contain the various germs of decomposition, and even of specific infection, so that this constant stream from the thrombi in the sinuses is continually exposed to infection in spite of every precaution taken, and when once these various germs begin to grow, the liquefying blood-clot is such a favourable nidus, that the process of putrefaction spreads gradually (or at times very rapidly) up into the uterus by means of this unbroken stream of favourable medium. When once the germs get into the clot inside the uterus, there is nothing to stop them proceeding along the thrombi in the sinuses, and so to come into direct contact with the mother's blood-stream, causing further thrombosis, inflammation, and pyæmia.

There are, of course, other sources of admission for these germs or their products into the woman's general system, as through a torn cervix or ruptured perineum, but I only instance this one method as a sample of the rest. What I wish to lay stress on is the fact that after delivery there is a direct line of communication for admission of germs from the external genitals to the thrombi in the placental sinuses, and this line of communication takes place by means of the lochia, which consist mainly of the liquefying blood-clot and debris from the uterine cavity; so long as this line of communication exists the woman is in danger of infection.

In private, where vaginal douching is not carried out, I believe that practically every woman is, at about the end of the first week after delivery, slightly sapremic or septic.

In hospitals where vaginal douching is carried out, it is found that sapremia (generally slight) often occurs, and occurs, I believe, in the majority of cases if slight symptoms are carefully looked for; indeed, the results of routine vaginal douching have been so unsatisfactory that it has been stopped at St. Bartholomew's Hospital since 1892.

The reason I offer for vaginal douching not giving such favourable results as theoretically it should do, is because it only prevents infection of the lochia from without until the third day, i. e. the last day of the douche; and after that the stream from the uterus to the vulva is re-established, and infection from outside may then take place. That this is probably so is shown by the rise of temperature taking place not at the end of the second day, or third day, but usually on the sixth or seventh day, that is two or three days after douching has ceased. In the sixty cases I show you to-night only one has a sapremic rise of temperature on the third day, and that woman probably had no vaginal douching on account of ruptured perineum. Now what I wish to suggest as a means of preventing this infection from without is if possible to remove the main source of the lochia, which is blood-clot and debris, as soon as possible from the uterus, and so destroy the line of communication which otherwise exists between vulva and placental site; and this removal cannot be accomplished by simple vaginal douching, and therefore intra-uterine douching should take its place, or if this is insufficient, then removal of clots by digital exploration, followed by an intra-uterine douche. If you would suggest that normally the blood-clot should have all come away naturally by the third day, when the lochia are changing colour, I can only answer that clinically this is not the case. Time after time, when the lochia have apparently been normal during the lying-in, I have emptied masses of blood-clot as big as a fist on the tenth or twelfth day, masses which have practically given no indication of their presence, and were only found by routine vaginal examination. Also in a great many cases the lochia become dark brown or red again on the woman beginning to get about, but rather on retention of old clot *in utero*; the colour is brownish red, or "prune juice," rather than bright red.

But you will ask, is there any advantage in removing this blood-clot prematurely, so long as it gives rise to no temperature? Well, so long as the clot remains, so long is the woman open to infection; and as the first stages of infection are very gradual, she may have passed from observation, and you are not called to the patient again until white leg or pelvic inflammation, &c., has set in; you then have to cure what might easily have been prevented. Also the fact that a woman does not die within a fortnight after delivery is no proof that she has been properly treated; and the proper treatment of the uterus after delivery should not only reduce the mortality of child-bed, but to a far greater extent the morbidity also.

No doubt it will be said that logically on these grounds one ought to explore the uterus in every case and then wash out, and theoretically I must admit that this is the correct thing, only practically there is a great deal of difference between an intra-uterine douche and an exploration. An intra-uterine douche can be given in three minutes without causing pain, or any rise of temperature afterwards. A digital exploration without chloroform requires much care, is not always quite thorough, and invariably causes a rise of temperature (102° to 103°), with occasionally a slight shivering. And again, clinically I have found that in the large majority of cases a simple intra-uterine douche will remove all debris and clot, and prevents any later sapremic symptoms; whilst if not, then digital exploration is indicated and is apparently always successful.

As regards the objections to intra-uterine douching, we have firstly the danger of carrying septic material up into the uterus. This at first sight is a strong objection, but only an apparent one, for I presume the doctor is able to answer for his own personal asepsis and for the cleanliness of the intra-uterine catheter, so that the only other source of infection would come from the vulva and vagina; and if the germs are, already there, they will get up easily enough in time into the uterus even if you do not wash out, and so will get a good start before the symptoms become severe enough to force you to irrigate, and in this way two or three days are lost, and this delay may cost the patient her life.

Again, if you do carry up septic material from the vagina, you probably wash it out again or kill the germs by the antiseptic; and clinically I do not believe this infection takes place if the simplest precautions are taken; and I have never myself seen such a case, although I have washed out the uterus now in several hundred cases both on district and in hospital.

Another theoretical objection is disturbing or distressing the patient and needlessly upsetting the lying-in chamber. This, again, is only a difficulty, for an intra-uterine injection can be completed in less than five minutes, the patient feels no pain, and so little is she disturbed that no rise of temperature usually follows.

The danger of sudden collapse, or death through entrance of air into sinuses, or of fluid into the peritoneum, is mentioned in books as having occurred, but such accidents are excessively rare,—so rare, indeed, that refusing to douche on that account would almost be like refusing to travel by train because of the risk of death from a collision.

The theory that there is danger of mercurialism from absorption I also consider unsound; I have never had it occur, and with proper prophylaxis it should never happen. In Germany gallons of perchloride were at one time used for douches, leading to disastrous results in the hands of midwives, and so had to be stopped; but in England we use a smaller quantity, and are so careful to empty the passages immediately afterwards that even the slightest symptoms of mercurialism is of the rarest occurrence.

Many doctors at the present recognising this danger, prefer to use carbolic or iodine, or even creoline, for intra-uterine douching, but these I consider far inferior to perchloride, and although in many cases quite sufficient, yet they are not always certain in their effect.

As regards ill effects after a douche that I have actually seen, I may mention two cases, in both of which the patient complained of some smart pain in the hypogastrium, in the one case immediately after the douche, and in the other about half an hour afterwards; nothing further happened, and both were immediately relieved by a hot fomentation.

Lastly, the objection that an ordinary practitioner cannot pass an intra-uterine tube with any degree of safety is monstrous; if he cannot be taught to learn to do so, for sooner or later he will have cases in which an intra-uterine douche is the only means of saving the patient, and he will then either neglect his patient altogether, or try to pass a catheter under still further difficulties; the passage of a catheter should be learnt before leaving hospital, and is no harder, though far more important, than learning to pass a throat mirror in order to see the vocal cords.

The risk of an intra-uterine douche, then, as far as my experience goes is practically nil, the benefits are considerable. There are a class of symptoms in the lying-in woman which, if carefully looked for, can always be found; which sometimes force themselves on your notice, and which in many women cause the puerperium to be a time of great discomfort. These symptoms consist of headache, generally frontal, and often very severe, with feeling of heaviness and lassitude; often depression and a tendency to cry at the least thing; vague fears of impending calamity; neuralgia; pain in lower abdomen, varying from very slight to very severe; pains in lumbar and sacral regions, in the left inguinal region, in the limbs and joints, or the feeling of being "beaten all over;" sometimes "pins and needles," or numbness in the feet or hands.

Now whatever these symptoms are due to, you will find that they can be removed at once by an intra-uterine douche, so that I consider them symptoms of slight sapremia, occurring as they do about the fourth to the sixth day, and accompanied or shortly followed by somnolence or offensiveness of the lochia with or without rise of temperature. When there is something in the uterus of any size the pain in the sacral region is very characteristic.

A localised red tender spot in one breast is also very often a diagnostic sign of decomposition occurring in the uterus, and if the uterus is not washed out may lead to mammary abscess.

If a douche is given about the third day without any previous marked symptoms of sapremia, you know that you have anticipated any sapremia that may occur; whereas if you wait until marked symptoms show themselves you have no guarantee that the infection has not already got beyond control.

Another point seems to be brought out by the cases I have treated, and that is if there is any mass of clot or debris left in the uterus after an intra-uterine douche has been given, the mass immediately begins to decompose, so that in a day or two you have pyrexia and well-marked symptoms of sapremia. When this occurs you can almost certainly predict that there is still something left in the uterus, and on exploring bring away a mass of clot, membranes, or bits of placental tissue.

Do not say that the douche only made the woman septic, and therefore should not have been given: rather rejoice that by this means you discovered the mass and was able to remove it whilst the woman was still under observation, instead of leaving it alone to cause almost certain trouble afterwards. In such cases, after removal and a second intra-uterine douche, the temperature invariably falls rapidly to normal, and the woman quickly feels well again. Such masses, let me here add, are quite compatible with the fundus of the uterus being at its proper height, for in most of these cases the uterus is much anteverted. In some, also, involution appears to take place to a great extent, in spite of the mass in the uterine cavity.

It is not always the quantity of clot in the uterine cavity that is important; many cases in which the temperature is high are immediately reduced to normal by an intra-uterine douche, whilst only a few shreds of membrane and debris come away in the douche.

Now as regards the cases: they consist of thirty-eight consecutive patients delivered in Queen Charlotte's Hospital, who were given an intra-uterine douche as a routine on the third or fourth day after delivery.

Two cases I shall not consider with the rest, as they had other complications; one was a case of placenta previa at fifth month, the other a case where the vaginal wall was torn by the forceps and suppurated.

Of the other thirty-six cases some were douched on the third and some on the fourth day, but practically no difference could be made out, although in cases where vaginal douches have been given from the beginning I should personally prefer the fourth day, as I think the clots are looser and more likely to come away; if no vaginal douche is given, then the third day is the safer.

Twenty-three of these cases had no rise of temperature after the douche, and no rise of temperature up to 100° afterwards; in no case was a second intra-uterine given; in two cases there was a slight rise of temperature (99.5°) in the second week, with the lochia slightly suspicious, but the temperature fell after a vaginal douche. Six cases had a slight rise of temperature immediately after the douche, but this never recurred, and a second douche was not required—first, 100°; second, 100°; third, 100°; fourth, 100.2°; fifth, 100.4°; sixth, 101.5°.

In three cases the temperature rose to 100° for one day, about the end of first week; no second douche was given, and the temperature was considered accidental. One case had a temperature between 100° and 103° for five days, due to impacted scybalæ, which were removed digitally; no second douche was given.

In three cases there was sapremia:

- (1) A good deal of blood-clot came away with the douche; next day the lochia were suspicious. The temperature rose on the third day after the douche; the lochia were red and offensive, *i. e.* slight symptoms of sapremia. On the fourth day after the douche the uterus was explored under chloroform, and small pieces of placental tissue with much blood-clot were removed. Temperature after exploration rose to 102°, but fell next day to normal, and kept so; all the symptoms disappeared.
- (2) Very little came away with the douche; two days later temperature rose to 100.8°, and was supposed to be due partly to constipation. Vaginal douches of Condy's fluid were given, but six days after the douche the lochia became red and offensive, and the temperature irregular, but never above 100°. On the fourteenth day she had bearing-down pains, and the lochia were still offensive; the uterus was explored without chloroform, and a good deal of putrefying blood-clot and debris were removed. Temperature rose to 104.8°, and there was slight shivering; next day temperature fell to normal and remained so. This case was one in which vaginal douching was tried, but failed to remove the symptoms of sapremia. The rise of temperature after the exploration caused me no anxiety, as it was expected, and also as it took place immediately after the examination.
- (3) In the third case there was no rise of temperature until the ninth day (sixth day after the intra-uterine douche); on the tenth day the lochia were free, brown, and slightly offensive, and the temperature rose to 102°. Vaginal douches were given with some fall in temperature, but no permanent result. On the twelfth day the uterus was explored without chloroform; the uterine cavity was found to be of three dimensions, and a very offensive mass of clot and pieces of placental tissue were removed. She had no rise of temperature after the exploration; the temperature steadily fell to normal, and remained so.

Here also vaginal douches were tried without success, and only wasted time.


I quite agree that it is impossible to make any definite statements from so few cases, but what I wish to show by bringing them forward is this, that intra-uterine douching is not at all dangerous, that it does not distress the patient any more than a simple vaginal douche; in most cases once it is sufficient to prevent sapremia, and in those cases where it is insufficient a cause exists which indicates intra-uterine exploration.

As regards the number of intra-uterine douches that may be given, I may say that in one case I gave three and four intra-uterine douches daily for four days, and so long as the temperature falls after douching one should continue it until the temperature reaches normal and remains so.

As regards the antiseptic—creolin, iodine, and carbolic I distrust; perchloride of mercury I have always found perfectly satisfactory; and although the biniodide of mercury appears better in surgical practice, I see no reason for giving up the use of perchloride in midwifery in favour of the more expensive drug.

On some future occasion I hope to show the good effect of routine intra-uterine douching on the mortality of childbed, and that will be far harder of proof, on the morbidity following the lying-in.

Masonic Charity.

 The General Court of the Royal Masonic Institution for Girls, held on April 8th, Ruth Stewart, daughter of John Hunter Stewart, M.R.C.S.(Eng.), L.R.C.P.(Lond.), formerly a student of St. Bartholomew's Hospital, was elected at the top of the poll. The case was a deservingly one, as Mr. Stewart's death left his wife wholly without provision for their nine children. The child was elected at the first application, and her success was due in great part to the influential support she received from members of the Rahero Lodge, more especially from its first Master, Dr. Clement Godson, who is a Vice patron of the charity. The institution is an excellent one, and is deserving of all support. It not only gives the girls a first-rate education, but it clothes and keeps them for a certain length of time, and afterwards gives them a start in life.

Case of Pernicious Anæmia.



JOHN HEDLEY, æt. 58, iron-foundryman, admitted into Colston Ward February 2d, under Dr. Hensley, suffering from anæmia.

History of present condition.—Was in Colston Ward from July 1st, 1896, to November, 1896, suffering from (?) pernicious anæmia and asthma. When he went out he attended regularly as an out-patient; he had not much cough, but got gradually shorter of breath and paler in the face again. About a fortnight ago his gums bled. Severe headache lately.

Past history.—Asthma; healthy otherwise.

Family history.—Unimportant.

Present condition.—Blood examination:—hæmoglobin, 42 per cent.; red corpuscles, 1,466,000; white corpuscles, 11,000. Very anæmic, but not so much as last time. *Heart.*—Breath-sounds very weak. No cardiac dullness. *Heart.*—Apex-beat not felt. Sounds very weak, faint systolic blow. *Abdomen.*—Natural. Spleen not felt. Liver not felt. Legs, no œdema.

Since admission he has complained of headache a good deal. Urine, sp. gr. 1020; no albumen, no sugar; acid.

Feb. 11th.—Red corpuscles, 1,600,000 = 32 per cent.; white corpuscles, 8,000; hæmoglobin, 52 per cent.

16th.—He had bleeding from gums and blood per rectum (both slight).

18th.—Red corpuscles, 968,000 = 19 per cent.; white corpuscles, 7,000; hæmoglobin, 25 per cent.

24th.—Has not looked so well for last few days, colour worse; red corpuscles, 1,100,000 = 21 per cent.; white corpuscles, 6,000; hæmoglobin, 25 per cent.

March 5th.—Red corpuscles, 1,048,000; white corpuscles, 6,000; hæmoglobin, 18 per cent. Spleen easily felt. Liver dullness increased downwards two inches below ribs.

11th.—Red corpuscles, 1,022,000; white corpuscles, 3,600; hæmoglobin, 20 per cent.

19th.—Red corpuscles, 900,000; white corpuscles, 4,500; hæmoglobin, 20 per cent. He continued about the same until April 3rd, when he had fever for two or three days, his temperature on April 5th being 103° in the evening. Spleen two fingers breadth below ribs again, which had not been the case lately.

April 5th.—Fever gone, spleen not palpable. Red corpuscles, 610,000; hæmoglobin, 13—14 per cent.

6th.—An attempt at transfusion was made, but did not succeed. Discharged by Dr. Herringham on April 14th, at patient's request. The temperature remained about normal with the exception of the few days about April 3rd.

Diet.—The patient was put on medium diet (D. D.), with wine, 5iv.

On February 27th he was ordered bone marrow, but as he disliked it very much it was discontinued, and he was put on meat juice. On April 8th he was ordered chicken broth, meat juice, jelly, biscuits, and custard.

Treatment.—Feb. 5th.—R. Haust. Senegæ Ammon. ʒj; Tinct. Hyocyanini, m̄ss. Ter die.

14th.—R. Pulv. Ferr. Reducti, gr. iij; Ter die.

18th.—R. Liq. Arsenici Hydrochlorici, m̄ij; Acidi Nitro-hydrochlorici dil., m̄x; Tinct. Aurantii, m̄xx; Aq. Chloroformi, ad ʒi. Ter die. Oxygen gas (10 minutes at time) ter die.

24th.—R. Haust. Liq. Arsenici Hydrochlorici, m̄v. Rep. oxygen every six hours for ten minutes.

27th.—R. Liq. Strychninæ Hydrochloratis, m̄ij; Acidi Phosphoricæ dil., m̄xv; Sp. Chloroformi, m̄xv; Inf. Quassia, ad ʒi. Quartis horis.

March 5th.—R. Haust. Liq. Arsenici Hydrochlorici, m̄j. Sextis horis.

10th.—R. Hyd. Perchlor., i in 1000, m̄iss hypodermically twice daily.

22nd.—R. Haust. Strychninæ et Acid. Phosph. Ter die.

24th.—Injection of Hyd. Perchlor. stopped. Rep. haust. Liq. Arsenici Hydrochlorici, m̄ij.

April 6th.—R. Liq. Hydrag. Perchlor., ʒj; Pot. Iodidi, gr. v; Caramel, q. s.; Aq. Chloroformi, ad ʒi. Ter die.

REMARKS BY DR. HERRINGHAM.

Pernicious anæmia, described as "idiopathic" by Addison about 1850, has not yet been explained. We can distinguish it now from chlorosis by the great loss of red cells; and Hunter, finding free iron in the liver and other viscera, believed this to be evidence that the red cells were actually broken up. He thinks the disease to consist in a destruction of blood-cells, not in inability to form them properly. Why they

should be so destroyed we still are ignorant. No one has ever discovered any microbe in the blood or organs. It has been suggested that some poison is formed in the intestines, but treatment directed to this part has been ineffectual.

Various things have done good in various cases. Arsenic has often been of service. I have seen a man improve considerably on bone-marrow. This was suggested because the red bone-marrow is one of the sites of blood formation in the child, and in pernicious anæmia one often finds the marrow in the short bones very red and pulpy, as if in an attempt to supply the defect of red cells. But I found that the hospital kitchen was supplying the marrow from long bones, which is yellow and almost all fat. By that time the old man had taken a dislike to it, and I could not get him to take the red. He had improved before under oxygen inhalations; but these had no effect the second time of admission. A case was reported from Italy not long ago which was benefited by the injection of perchloride of mercury. I tried this for a few days, but it gave him great pain, and produced no perceptible change. Lastly I tried transfusion of blood by the arm-to-arm method. If transfusion is to do good in these cases it is reasonable to take all possible care of the red cells; this made me prefer this method to the injection of defibrinated blood. It is, however, not an easy operation, and in this instance it failed.

The blood could not be sucked through the apparatus. It is difficult to be sure of the effect of treatment, for this disease will often get better for a time and relapse. But all these methods have been in different cases followed by improvement, and all ought to be tried.

Notes.

The Mid-session Address of the Abernethian Society will be delivered on Thursday, July 1st, by Dr. Norman Moore, in the Medical Theatre. Dr. Moore has chosen for his subject "The Deaths of the Kings of England."

The Summer Concert given by the members of the Junior Staff and of the Musical Society has been fixed for Tuesday, June 29th.

DR. A. HILL, Master of Downing College, Cambridge, has been elected Vice-Chancellor of the University for next year.

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

MR. BRUCE CLARKE, as President of the West London Medico-Chirurgical Society, took the chair at the dinner held on Friday, June 11th, at the Trocadero. Lord Lister and Sir John Williams were among the guests.

DR. KANTHACK has been elected a Fellow of the Royal College of Physicians.

At the recent soirée of the Royal Society one of the most interesting exhibits was a series of preparations by Dr. Kanthack illustrating the hæmatozoa of the tsetse-fly disease.

MR. D'ARCY POWER has been elected Surgical Secretary of the Pathological Society of London for the ensuing year.

We hear with regret that Dr. Russell, F.R.S., intends to resign the Lectureship in Chemistry at the end of the present Summer Session.

We regret to announce that Mr. Bowlby has resigned the Demonstratorship of Practical Surgery.

DR. C. K. BOWES has taken the degree of M.D. in the University of Oxford.

THE M.D. degree of the University of Cambridge has been conferred upon Hugh Walsham.

L. T. GILES, C. F. LILLIE, and R. D. PARKER have taken the M.B. degree of Cambridge.

DR. J. HAYWARD has been elected Casualty Physician vice Dr. Horton Smith.

MR. C. B. LOCKWOOD has been elected Lecturer on Anatomy vice Mr. W. J. Walsham.

MR. K. GILL has been re-elected Chief Administrator of Anæsthetics.

MR. W. G. CLARK has been appointed Assistant Demonstrator of Physiology vice Dr. Drysdale.

THE Brackenbury Medical Scholarship has been awarded to T. J. Horder.

THE Brackenbury Surgical Scholarship has been awarded to L. B. Rawling.

THE Bentley Prize has been awarded to C. C. Ingram Turnbull.

MR. A. N. WEIR won the Senior Medal at the Stanmore Golf Club on June 5th with the score of 88 less 10 = 78.

E. C. FINCHAM has been elected a Fellow of the Royal Photographic Society.

At the Competition for the Naval Medical Service recently held, Mr. S. Roach was fourth with 2315 marks, and Mr. W. K. Hopkins was eighth with 2195 marks. Mr. E. Foliott, who passed sixteenth, also gains a commission.

The Editorial Staff of the Magazine of the London School of Medicine for Women and Royal Free Hospital are to be congratulated that each succeeding number maintains the high standard of excellence of its predecessors. Our rivals among the gentler sex certainly do not "play at their work;" whether they work at their play is a more doubtful question.

The May number contains a clever article on "Cycling and Health." Though there is considerable digression from the subject, we confess to much amusement derived

from this paper, especially the remark that "so many riders complain of thirst, of a degree and character quite inexplicable on any theory of increased secretion of sweat." Oh that thirst! has it not an important place among the charms of cycling? The writer of the paper attributes this thirst to "mouth breathing," and adds that "nothing can be more harmful than the usual recourse to alcoholic beverages." We profoundly trust that the writer maligns her fair sisters, and that such a recourse is less usual with them than it would seem from the paper before us.

THE same number also contains a portrait of Dr. F. W. Andrews, and some farewell verses; the latter, had space permitted, we should like to have reproduced. Possibly there may be space in our next issue. They are a parody on Brutus's speech, and conclude—

"Oh, Andrews! to Bartholomew's thou'rt fled,
And we have lost our Lecturer! Bear with us;
Our heart is at thy ancient hospital,
And we must pause till it come back to us."

Very touching, to say the least of it, on the part of the ladies!

THE Duke of Saxe-Coburg and Gotha (Duke of Edinburgh) has appointed Mr. Alfred Cooper, F.R.C.S., to be his Surgeon in Ordinary, in the room of Mr. William Hickman.

MR. LUTHER HOLDEN will give away the prizes at the Annual Distribution on Thursday, July 15th, at 3 p.m., in the Great Hall of the Hospital. All students are invited to attend.

MR. D'ARCY POWER has been appointed an Examiner in Physiology for the First F.R.C.S. Eng.

Amalgamated Clubs.

NEW MEMBERS.

Table listing new members with names and affiliations: N. A. W. Conolly, W. V. Wood, A. O'Neill, C. W. von Bergen, P. J. Martin, G. Hughes, W. P. Yettes, F. W. Alment, C. M. Pennfather, F. N. White.

ST. BART'S HOSPITAL ATHLETIC CLUB.

At a general meeting of the above club the following gentlemen were elected officers for this season: President—Howard Marsh, Esq., F.R.C.S. Vice-Presidents.—Dr. H. M. Fletcher, P. Furnival, Esq., F.R.C.S., J. S. Sloane, Esq., F.R.C.S., R. C. Bailey, Esq., F.R.C.S. Hon. Secs.—A. L. Vaughan, J. A. West. Committee.—P. W. James, A. Hay, G. W. Stone, W. Fay Bennett, W. V. Wood, E. W. Woodbridge, and C. Fisher. It is hoped that members will do their best to make the Sports a success by competing in the various events, and inducing their friends to do the same.

We may congratulate ourselves on having the services of W. V. Wood, President of the C.U.A.C., in the mile and three miles, thus giving us an increased chance of the Shield.

CRICKET.

INTER-HOSPITAL CUP.

1st Round. A. London v. St. Bart's. B. Charing Cross v. University. Byes.—St. Thomas's, King's, St. Mary's, Guy's, Middlesex, Westminster.

2nd Round. C. Winner of A v. Winner of B. E. St. Mary's v. Guy's. D. St. Thomas's v. King's. F. Middlesex v. Westminster.

Semi-Final. G. Winner of C v. Winner of D. H. Winner of E v. Winner of F.

ST. BARTHOLOMEW'S HOSPITAL v. STOICS.

This, our first match, was played at Winchmore Hill on May 8th, and resulted in a draw. The Stoics went in first, Rose and Pank sharing the attack. Roberts also showed any form with the bat, and but for the weakness of our bowling our opponents should have been got rid of very cheaply. As it was, the Stoics declared their innings closed with the score 117 for 8 wickets.

Pank was the most successful bowler, claiming 4 wickets for 38 runs. Time did not suffice for us to hit off the runs, and with the exception of Nunn all our batsmen seemed quite out of form. Nunn played a really fine innings, and appeared to especially relish the fast deliveries of Roberts.

The wicket was by no means perfect; at the pavilion end especially, several of the bowlers bumped in very awkward fashion.

Table showing cricket scores for St. Bart's vs Stoics. Columns for Stoics and St. Bart's with player names and runs.

Table showing extras and totals for both teams in the St. Bart's vs Stoics match.

Table showing bowling analysis for the St. Bart's vs Stoics match, including overs, maidens, runs, and wickets.

ST. BARTHOLOMEW'S HOSPITAL v. RICHMOND.

This match was played at Richmond on May 15th, and ended in a draw. Bond won the toss, and took Nunn in with him to face the deliveries of Williams and Denham. The start was unfortunate, Nunn being out off the first ball of the match, and disasters did not end here, as at the fall of the third wicket the score was only 27. Sale and Brunner made a short stand, Brunner hitting out vigorously, but he was bowled by Williams at 58. Rose followed, and the best stand of the innings was now made. Rose scored rapidly off all the bowlers, and in spite of changes the score mounted to 125, at which total Sale pulled a short one from James into his wicket, the partnership having realised 67. Maturin did not stay long, but Willett rendered Rose great assistance, the pair adding 47 before Willett was stumped for a useful 22. Rose could get no one else to stay with him, and carried out his bat for 86, the total being 213. Though not absolutely free from blemish, Rose's innings was a splendid one; he never seemed in difficulties with the bowling, and scored freely all round the wicket. Richmond started badly, the first wicket falling at 8, while the third wicket fell with only 57 on the board. On the arrival of Gurney, however, Worsley, who had hitherto played a careful game,

commenced to hit. In spite of the efforts of six bowlers, Worsley reached his century off the last over of the match. The rapidity of his scoring may be judged from the fact that he scored 100 out of a total of 137. Beyond one or two lucky strokes in the slips he gave nothing approaching a chance, and his innings was a fine exhibition of powerful hitting. Our fielding was fair, but none of the bowling appeared to have any sting.

Table showing cricket scores for St. Bart's vs Richmond. Columns for St. Bart's and Richmond with player names and runs.

Table showing extras and totals for both teams in the St. Bart's vs Richmond match.

ST. BARTHOLOMEW'S HOSPITAL v. CRYSTAL PALACE.

Played at the Palace on May 27th. We were unfortunate in being unable to play our full team, Greaves and Nunn, two of our best bats, being unable to play. The Hospital took first innings, and made 198. Rose was top scorer, and played a really fine innings of 60, while Sale, Whitwell, and O'Neill all made useful scores.

The weakness of our bowling was again demonstrated when the Palace went in. Colman, Turner, Fleming, and Walker all scored well, but so slowly that they robbed themselves of victory. The latter batsman tried to force the game, but the only result was that they were cheaply got rid of, and at the call of time their score was 198 for eight wickets, the match ending in a draw.

Our ground fielding was excellent, but two easy catches were dropped, a fault which must be remedied before the Cup ties.

SCORES.

Table showing cricket scores for St. Bart's vs Crystal Palace. Columns for St. Bart's and Crystal Palace with player names and runs.

BOWLING ANALYSIS.

Table showing bowling analysis for the St. Bart's vs Crystal Palace match, including overs, maidens, runs, and wickets.

ST. BARTHOLOMEW'S HOSPITAL v. KENSINGTON PARK.

This match was played at Wormwood Scrubs on May 29th, and owing to frequent interruptions by rain ended in another draw. We won the toss, and made a good start, Bond and Nunn scoring

47 for the first wicket. Greaves played a brilliant innings of 67, but except Willett none of our later batsmen did much.

As usual our bowling was hit to all parts of the field when our opponents went to the wickets. Dr. Scott and Donaldson put on 62 for the first wicket, and at the call of time Kensington Park had scored 122 for the loss of one wicket only. Scott played a first-rate innings, his cutting being especially fine.

SCORES.

Table with columns for St. Bart's and Kensington Park, listing players and their scores in various matches.

Total 191 Total (for 1 wicket) 122
A. W. Watson, E. H. Seaton, M. A. Nicholas, E. V. Acton, G. T. Brown, J. G. O'Brien, C. F. Wade, A. H. Unwin-Clarke, did not bat.

ST. BARTHOLOMEW'S HOSPITAL v. HORNSEY.

This match was played at Hornsey on Whit Monday, June 7th, and resulted in a severe defeat for the Hospital by 137 runs. We won the toss and went in first, but this proved a poor advantage, as the wicket was decidedly sticky at first and improved later.

Our team was by no means at full strength, and two substitutes had to be secured on the ground. Greaves alone made any stand, and the innings closed for 94. With Pank and Willett away our bowling was weaker than ever, and no one was surprised when Hornsey knocked up over 200.

Tubbs and Nicholls both played excellently for 51 and 44. Sale was our most successful bowler, securing four wickets for 66 runs. In our second innings we scored 72 for three wickets, Whitwell playing well for 35 not out.

SCORES.

Table with columns for St. Bart's and Hornsey, listing players and their scores in various matches.

HORNSEY.

Table listing players for Hornsey and their scores.

BOWLING ANALYSIS.

Table with columns for Overs, Maidens, Runs, and Wickets, listing bowlers and their statistics.

ST. BARTHOLOMEW'S HOSPITAL 2ND XI v. ST. ANNE'S HEATH.

Played at Virginia Water.

SCORES.

Table with columns for St. Anne's Heath, listing players and their scores.

ST. BART'S.

Table with columns for 1st Innings and 2nd Innings, listing players and their scores.

ST. BARTHOLOMEW'S HOSPITAL 2ND XI v. BANSTEAD ASYLUM.

Played at Banstead.

SCORES.

Table with columns for St. Bart's Hospital, listing players and their scores.

BANSTEAD ASYLUM.

Table listing players for Banstead Asylum and their scores.

ST. BART'S HOSPITAL 2ND XI v. LONDON HOSPITAL 2ND XI.

Played at Winchmore Hill, Wednesday, May 19th.

SCORES.

Table with columns for London Hospital and St. Bart's, listing players and their scores.

ST. BARTHOLOMEW'S HOSPITAL 2ND XI v. ST. PAUL'S SCHOOL 2ND XI.

Played at Kensington, May 22nd.

SCORES.

Table with columns for St. Paul's School and St. Bart's, listing players and their scores.

UNITED HOSPITALS CRICKET CLUB.

The Annual Meeting was held at Guy's Hospital on Friday, May 14th. There was a record attendance, all the hospital's sending representatives except St. Thomas's and St. Mary's. Mr. R. B. Stamford, the Hon. Treasurer, took the chair. The chief business done was the revision of the rules. Several important additions were made; amongst them, "That a man be allowed to play in Cup Ties for five years after date of entry at a hospital, provided that he is attending or in residence at that hospital."

SWIMMING CLUB.

Table listing swimming fixtures, including dates, locations, and participants.

May 20th—60 yards handicap. There were twelve entries. Winners.—1st heat: 1st, W. Fay Bennett (scratch); 2nd, M. B. Scott (8 seconds); 2nd heat: 1st, T. C. Litter-Jones (8 seconds); 2nd, F. E. Taylor (8 seconds).

The final took place on May 28th. T. C. Litter-Jones and M. B. Scott came in a dead heat, so the race was repeated on June 1st. Result.—T. C. Litter-Jones, 45 seconds; M. B. Scott, 47 seconds.

WATER POLO MATCHES.

ST. BART'S v. RICHMOND S.C.—Played at Richmond on the 24th of May. Won by 1 goal to nil. The goal was shot by W. Fay Bennett. The game was in favour of the Hospital throughout, Richmond not being fully represented.

Team.—T. C. Litter-Jones (goal); F. G. Richards, M. G. Winder (backs); E. M. Niall (half-back); A. M. Amaler, W. Fay Bennett (capt.), L. A. Walker (forwards).

ST. BART'S v. CAMBRIDGE UNIVERSITY S.C.—Played at Cambridge on the 26th of May. The Hospital was poorly represented. Lost by 5 goals to nil. H. W. Masterman (2), E. J. Scott (2), and C. Powell scored for the University. Amaler played the best game for the Hospital.

Team.—M. B. Scott (goal); E. M. Niall, M. G. Winder (backs); C. Dix (half-back); F. E. Taylor, A. M. Amaler, E. A. C. Matthews (forwards).

ST. BART'S v. OTTER S.C.—Played at St. George's Baths on June 1st. Bennett being unable to play for the Hospital, the Otters provided a very good substitute in Pugh. Lost, 6 goals to nil.

H. W. Allason (2), A. A. Green (2), J. H. Kipling, and W. H. M. Marx scored for the Otters.

Team.—T. C. Litter-Jones (goal); F. G. Richards, M. G. Winder (backs); G. B. Nicholson (half-back); A. M. Amaler, S. Pugh (Otter), E. M. Niall (forwards).

The Hospital's First Association Football Match.

THE following is a copy of a paper cutting giving an account of the first Association football match played by "Bart's," dated October 4th, 1879. It was kindly sent to the Secretary of the A. F. C. by Mr. F. Barnett, Hon. Sec. of the late Upton Park F. C. The "minutes" of the St. Bart's A. F. C. at present in possession only date back as far as 1881, which is three years after the first match was played. It will be noticed that in those days there were only two half-backs and two centre forwards instead of three half-backs and one centre forward, as at present.

UPTON PARK v. ST. BARTHOLOMEW'S HOSPITAL (October 4th, 1879).

Played at Upton Park on Saturday last. This was the first appearance of the Hospital as an Association team, and, though they were decidedly beaten by a fairly strong eleven of the older club, still they played up vigorously, and when more practised together will doubtless make a better show. The Uptonians had the best of the game throughout, the forwards all working well and energetically, and as a rule passing unselfishly, and the backs also proving practically impassable. A. J. Weakly played well for the losers, and their goal was excellently defended by H. W. Burke.

TEAMS.

St. Bart's.—H. W. Burke (goal); A. Jacob, A. J. Weakly (backs); A. P. Tinder, C. J. Muriel (captain) (half-backs); A. Maude, C. D. Nuttall (right); G. Little, C. J. Nixon (left); J. C. Evans, A. Robinson (centres).

Upton Park.—C. Warner (captain) (goal); A. H. Ward, C. Ward (backs); C. Hodgson, A. L. Bambridge (half-backs); J. B. Hunter, O. R. H. Bury (right); S. R. Bastard, F. Hutley (left); C. Mitchell, H. R. Barnett (centres).

Result.—Upton Park 6, St. Bart's 0.

Appointments.

HIND, HENRY, F.R.C.S.(Edin.), appointed Consulting Surgeon to the Stockton Hospital.

LYSTER, A. E., M.R.C.S.(Eng.), L.S.A., appointed Medical Officer for the Fourth District of the Chelmsford Union.

PAGET, STEPHEN, M.A.(Oxon.), F.R.C.S., appointed Aural Surgeon to the Middlesex Hospital, *vice* Leopold Hudson, F.R.C.S. (Eng.), deceased.

PRATT, ELDON, M.B.(Lond.), M.R.C.S., L.R.C.P., appointed Assistant Resident Medical Officer to the Cardiff Infirmary.

The Month's Calendar.

JUNE.

Wed. 16th.—Cricket: Past v. Present, at Winchmore Hill. Amalgamated Clubs' dinner at the Holborn Restaurant at 7.45.

Fri. 18th.—Dr. Gee's and Mr. Willett's duty. Clinical Lecture, Dr. Gee.

Sat. 19th.—Cricket: Bart.'s v. Jesus College, Oxford, at Winchmore Hill.

Tues. 22nd.—Sir Dyce Duckworth's and Mr. Langton's duty.

Wed. 23rd.—Clinical Lecture, Mr. Marsh.

Fri. 25th.—Dr. Hensley's and Mr. Marsh's duty. Clinical Lecture, Sir Dyce Duckworth.

Sat. 26th.—Skyner Prize. Cricket: Bart.'s v. M.C.C. at Winchmore Hill.

Tues. 29th.—Dr. Brunton's and Mr. Butlin's duty. Concert by Junior Staff and Musical Society.

Wed. 30th.—Clinical Lecture, Mr. Butlin. St. Bart.'s Hospital Athletic Sports, Stamford Bridge Grounds. Eighth Decennial Club Dinner, Café Royal, at 7 p.m.

JULY.

Thurs. 1st.—Mid-essional Address to the Abernethian Society, by Dr. Norman Moore, on "The Deaths of the Kings of England," at 8 p.m.

Fri. 2nd.—Mr. Smith's and Dr. Church's duty. Clinical Lecture, Dr. Hensley.

Sat. 3rd.—Cricket: St. Bart.'s v. Henley-on-Thames.

Mon. 5th.—Shuter Scholarship Examination.

Tues. 6th.—Dr. Gee's and Mr. Willett's duty.

Wed. 7th.—Clinical Lecture, Mr. Butlin. Cricket: Bart.'s v. Hornsey, at Winchmore Hill. Dinner of Seventh Decennial Club at Frascati's at 7 p.m.

Frid. 10th.—Sir Dyce Duckworth's and Mr. Langton's duty. Clinical Lecture, Dr. Brunton.

Sat. 10th.—Cricket: Bart.'s v. Surbiton, at Surbiton.

Tues. 13th.—Dr. Hensley's and Mr. Marsh's duty.

Wed. 14th.—Clinical Lecture, Mr. Butlin. Cricket: Bart.'s v. Ealing, at Ealing.

Thurs. 15th.—Annual Distribution of Prizes in the Great Hall by Mr. Luther Holden, at 3 p.m.

Fri. 16th.—Dr. Brunton's and Mr. Butlin's duty.

Examinations.

UNIVERSITY OF LONDON.—*M.B. Examination*.—1st Division. S. L. Box. 2nd Division. P. C. Barford, J. F. Bill, J. S. Chater, E. W. H. Croxson, J. H. Maxwell, S. F. Smith, H. Weeks.

PRIMARY F.R.C.S.—F. C. Borrow, A. R. J. Douglas, T. A. Mayo, J. Morrison, A. E. Nuttall, H. J. Paterson, L. C. P. Phillips, S. R. Scott. FINAL.—W. G. Clark, C. H. Drake, G. R. Fox, W. E. Lee, T. P. Legg, H. J. Paterson, E. H. Stack.

We are asked to call attention to the Dinner of the 8th Contemporary Club on Wednesday, June 30th, at the Café Royal. Those wishing to join the Club should send in their names to Dr. Kanthack or Mr. Waring.

Correspondence.

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

SIR.—A courteous correspondent, who unfortunately refused to disclose his name, has drawn my attention to a serious *lapsus calami*, as he politely calls it, which occurs in my last Pathological Jottings. On page 101 I wrote: "A few vibrations of the mysterious ether around us will produce the subjective sensation of sound, while innumerable vibrations of the same ether will produce one of light. Yet sound is not light." I regret I was foolish enough to employ a metaphor instead of following the sound advice of the present editor of Fagge's Medicine, to avoid metaphor in scientific discourses. It is, of course, obvious that instead of sound I ought to have written heat, meaning thereby, "radiant heat." It should read thus: "Fewer vibrations of the mysterious ether around us will produce the subjective sensation of heat, while more vibrations of the same ether will produce one of light. Yet heat is not light." But even then I am not satisfied with the metaphor, which betrays an ignorance of physics difficult to hide; my meaning is clear enough, though my expression was erroneous. I am sorry that my correspondent prefers to be anonymous, for I wish to thank him for a good service rendered to me.

I am, Sir, yours, &c.,
A. A. KANTHACK.

Review.

DENTAL SURGERY. By A. W. BARRETT, M.B.Lond., M.R.C.S., L.D.S., Third Edition. With Illustrations. London: H. K. Lewis, 136, Gower Street, W.C. 1897. Crown 8vo. Price 6s. 6d.

This book is written for the use of medical practitioners and students of medicine. It aims at imparting a practical knowledge of the elements of Dental Surgery in a short and simple manner. In this, the third edition, various alterations have been made which are to be regarded as improvements, but we would suggest to the author that his aims would be still further carried out, and the value of his book enhanced as a rapid means of instruction by the omission of the chapter on "Artificial Teeth," and by a considerable curtailment of the reading matter in the chapter on the treatment of "Irregularities of the Teeth." The many and various mechanical details referred to in those chapters are quite unintelligible to a medical man without that experience which a dental student receives in a laboratory of Dental Mechanics during the early period of his curriculum. With these exceptions we think the book a useful one, and cheap at the price.

Births.

CROUCH.—On 8th inst., at Weston-super-Mare, the wife of Charles Percival Crouch, F.R.C.S., M.B., of a daughter.

FARRAR.—On May 22nd, the wife of Dr. Reginald Farrar, of Stamford, Lincolnshire, of a daughter.

WHITE.—On May 21st, at 144, Sloane Street, S.W., the wife of C. P. White, M.B., of a daughter.

Marriages.

MILSOME—ARMISTEAD.—On April 22nd, at St. Andrew's, Stapleford, Cambs., by the Rev. C. H. T. Wycr Daw, Vicar, Harry Blunt Milsome, B.A., M.R.C.S., L.R.C.P., of Chertsey, Surrey, son of J. R. Milsome, M.D., of Adlestree, Surrey, to Amy Warwick, elder daughter of W. Armistead, M.B.(Edin.), of Stapleford, Cambs.

NANCE—MARSHALL.—On June 1st, in the Parish Church, Croft-on-Tees, Henry Chester Nance, F.R.C.S., of Norwich, to Mary Dorothea, daughter of the Rev. J. M. Marshall, Rector of Croft.

ACKNOWLEDGMENTS.—*Guy's Hospital Gazette*, *St. George's Hospital Gazette*, *St. Thomas's Hospital Gazette*, *St. Mary's Hospital Gazette*, *The Middlesex Hospital Journal*, *The Gynoscope*, *The Student (Edinburgh)*, *The Nursing Record*, *The Charity Record*, *The Hospital*, *Magazine of the London School of Medicine for Women*, and *Royal Free Hospital*.

St. Bartholomew's Hospital



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NOTICE.

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

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

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

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

St. Bartholomew's Hospital Journal,

JULY 14th, 1897.

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

Enteric Fever.

'A Lecture delivered October 5th, 1896,

By NORMAN MOORE, M.D., Lecturer on the Principles and Practice of Medicine.



PROPOSE this session to begin my course on medicine with some lectures on enteric fever, since this is the time of year when it is commonly prevalent in London, and therefore can be observed to advantage in this hospital. It is a very common disease in London and throughout England, and one about which you ought all to try and know much. You are certain when you come to practise to have to treat many cases of enteric fever, and the patient's life will often depend upon your knowledge; upon whether you can recognise the disease, understand its course, and apply the proper treatment.

How can I best make enteric fever clear to you? I have to remember that while some of you have seen patients in the wards and out-patient rooms, others have but lately finished their anatomical and physiological studies, and are at the very beginning of

medicine. I should like to begin with something which they can connect with the studies they have just left, and so I shall commence my account of enteric fever by the way of anatomy. The old physicians were all anatomists; human anatomy, morbid anatomy, comparative anatomy, they constantly dealt with as pertinent to their consideration of disease. One of them, the first Englishman who wrote a book on clinical medicine, lived in this hospital, and died here 29th July, 1573. His body was taken to Cambridge, and buried in the chapel of the college in which he had been educated, and to which he made such splendid additions that it has ever since been best known by his name of Caius. His treatise 'De Epliemerâ Britannicâ' was the first series of observations of a particular disease published in England, and his residence here entitles him to mention in the beginning of a course of lectures in this hospital, and to do so the eve of his birthday, for he was born on October 6th, 1510. Norfolk was his native county, a region from which many famous men have come to St. Bartholomew's.—Dr. Edward Browne, whose travels in Eastern Europe were much admired in their day, and are still worth reading, Dr. Robert Gooch, the best writer of his time on the diseases of women, Sir James Paget, still happily amongst us, his brother, Sir George Paget, whom I and many other Cambridge men remember with gratitude, and Sir George Murray Humphry, almost whose last letter was written to express regret that he could not come here on the 1st of October. Many of us were familiar with his voice and figure, and it seems right not to mention him without pointing out how much he did in life. When he began work after education here his opportunities seemed such that it was likely he would attain to large general practice in Cambridge-shire and the Isle of Ely, and that his life might in this work be counted well spent. How much more he accomplished than this, or than could have been expected from him! He graduated in the University, wrote a treatise on the skeleton, which placed him high among English anatomists, and was elected Professor of Anatomy. He made that subject clear and interesting, first to a small number of students, and then to many, and established human anatomy among the studies of Cambridge to a degree unknown before, urging on at the same time all other medical studies, so that in great part by his exertions the University became crowded with students of medicine. His idea of medical education in a university was perhaps not perfect, but he brought the practitioner of medicine into a relation with the University unknown before in England, and certain in the future to exercise a profound influence for good. He died Professor of Surgery, the first at Cambridge, and his career will always be memorable in the history of the University. I could not pass his name without mention, well known as he was to me as one of my teachers, to many of you, and to the whole medical profession; but let us return to Dr. John Caius. He had seen the very beginning of modern anatomy, for he lived at Padua from 1539 to 1541, and part of the time in the house of Andreas Vesalius, who in the revival of learning was to anatomy what Lincæus was in this country to medicine, and Erasmus to classical education throughout Europe. The 'De Corporis Humani Fabrica,' published at Basle in 1535, was the greatest book on anatomy Europe had seen, and is still the most statey in form. Fallopius and Eustachius, with whose names, as they are commemorated in the house of Realduca Columbus, who were pupils of Vesalius, and so was Realduca Columbus, who first noticed the folds of the pleura and of the peritoneum; while Picothomius, who first detected the cerebral cortex, Arantius of the corpus Arantii, and Botallus of the duct, were workers due to the same

influence. Caius made no anatomical discovery, but returned to England convinced of the value of practical anatomy. He established its teaching on the dead body in his college at Cambridge. This probably was Harvey attracted to the study, and his great discovery of the circulation, first published in lectures given in April, 1616, and afterwards made known to Europe in his 'Exercitatio Anatomica de Motu Cordis et Sanguinis,' printed at Frankfurt in 1628, gave a fresh impetus to the study of anatomy as well as to every part of medical research. England was not behindhand. Francis Glisson at Cambridge described the capsule of the liver, and a little later Clopton Havers, of Catharine Hall, who becomes known to every student in his first session, demonstrated the structure of bone; while at Oxford Thomas Willis prepared his famous 'De Anatomia Cerebri,' and George Joyliffe first worked out the structure of the lymphatic system. Abroad the greatest discoverer was Malpighi, who demonstrated the structures of the skin, liver, kidneys, spleen, and eye. It would be easy to dwell long upon the anatomists of the seventeenth century, but I have only detained you by mentioning some of them in order to put into his place in the series John Conrad Peyer, whose 'De Glandulis Intestinalium' was published at Schaffhausen in 1677. He was a native of the town, born in 1653, and graduated at Basle. He was first Professor of Rhetoric, then of Logic, and finally of Medicine, at Schaffhausen. He died in 1712. His book contains the first description of the glands which we call by his name:

Exercitatio Anatomico-Medica
de
Glandulis Intestinalium
carumque; usu et affectionibus cui subjungitur
Anatome Ventriculi Gallinacei.

Studia
Joh: Conradi Peyerii
Scathusa-Helvetii.

Scafhuse
Impensis Onophrii & Waldkirch
Typis Alexandri Rildingii.

1677.

On the back of the title are two verses from Psalms civ (24) and cxxxix (14):

"Quam ampla sunt opera tua, ó Jehova! quam ea omnia sapienter fecisti! Celebro te, eo quod suscipiendis operibus istis in admirationem traducor: celebros mirabilia opera tua quam maxime novit animus meus."

The book is dedicated to the great physician of Schaffhausen, who was the first to demonstrate cerebral hemorrhage, John James Wepfer, who had shown constant kindness and given much instruction to Peyer. He helped him at home, and wrote to him when he was at the University of Basle,—most learned letters, which increased his zeal in study. Peyer describes exactly the structure of the ileum and its glands. The only trace of a knowledge of their relation to enteric fever he shows is that he associates them with the presence of diarrhoea, and had plainly seen them enlarged (cc. x and xii, pp. 85 and 95). It seems probable that he had examined cases of enteric fever post-mortem. The following century added little to pathological knowledge about these groups of lymph-follicles, and even the lucid and observant Dr. Matthew Baillie, in his 'Morbid Anatomy of Diseases,' published in 1793, says nothing more definite than (p. 167) that "in the follicular glands which are gathered together in little oval groups I think ulceration occurs more frequently than in other parts of the intestine," a remark which indicates that he had seen the characteristic ileum of enteric fever.

Bretonneau, in 1818, proposed to call a fever in which the Peyer's glands were found diseased "Dothienterite" but it took many observers and several years to establish the fact that there is a specific disease in which the Peyer's glands are always affected in a particular way. In England this important pathological point was finally and completely established by Sir William Jenner in his essay on "The Identity or Non-Identity of Typhus and Typhoid Fevers," published in 1850. This disease, in which the Peyer's glands are always affected, and of which the most appropriate name is enteric fever, was first called typhoid fever because of the clinical resemblance which some of its cases showed to typhus fever, and we still often use the term, though it may be hoped that the influence of the 'Nomenclature of Diseases,' which the College of Physicians after careful deliberation on every term issues once in ten years, and of which the last revision appeared this summer, will lead to the

adoption of the more appropriate name, enteric fever. The Germans call it "abdominal typhus;" the French, "fièvre typhoïde." It is a common disease in England, and like other epidemic diseases has a season of its own. In this hospital there are generally most cases from August to January. Its clinical manifestations show great variety, so that it may in some cases be easily mistaken for other diseases, and is distinguished from other conditions with difficulty but its morbid anatomy is characteristic, and whether enteric fever was present or not during life can be determined with certainty at post-mortem examination, while the period of the disease at which the patient died can be determined approximately. The most experienced physician may sometimes be uncertain, for a time, whether a patient has enteric fever or not, and his uncertainty will be an indication of his knowledge, and of his ignorance; but the youngest licentiate in medicine may be rightly expected to be able to say for certain at a post-mortem examination that the patient has or has not died of enteric fever.

The region in which conclusive evidence of the presence of enteric fever is to be found is the lowest part of the small intestine. The Peyer's glands nearest to the ileo-cæcal valve are invariably affected, and sometimes those higher up in the ileum as well. Out of eighteen fatal cases examined by me from September, 20th to December, 20th, 1881, in eleven three feet or less of the ileum were affected, and more than three feet in seven. Out of ninety cases examined here by Dr. Church, Dr. Gee, Dr. Wickham Legg, and by me from September, 1867, to September 20th, 1881, three feet or less of the ileum were affected in forty-six, four feet in twelve, and more than four feet in thirty-two. The affection of the glands is in three conditions, which a comparison with the clinical observations shows to be successive. In patients who have died earliest the Peyer's glands are swollen, and project with serrated edges from the mucous surface of the intestine. This condition I have seen in a patient who died with enlargement of a very large number of the glands on the eighth day of the disease. Our museum contains a specimen (No. 1088) in which such swelling, and no other change, was found after death on the twelfth day of the disease. Where this change and no other is present you may be certain that the patient has died before the end of the second week of the disease, and after the middle of the first week. In patients who have died at the end of the second week, or in the earlier half of the third, the tissue of the Peyer's glands has undergone necrosis, and they remain attached in their places as ragged sloughs, often stained with fecal matter, or with fecal matter adherent to them. These sloughs are easily detached in washing out the intestines post mortem, and towards the end of the third week are detached during life. Thus in the third week more and more ulcers with smooth floors appear, as more and more sloughs become detached. The floor of the ulcer is generally the muscular coat of the intestine: sometimes it is little more than the peritoneum. The edges are thin and overhanging; they are the remains of the mucous layer, beneath which lay the periphery of the lymphatic tissue. Now and then a minute eroded blood-vessel may be detected in it, generally with a small blood-clot adherent in the erosion. Sometimes the floor of the ulcer shows a perforation into the peritoneal cavity. Many ulcers with smooth floors and none with sloughs point to the fourth week of the disease. Sometimes such ulcers are still to be found much later. On the forty-fourth day I once found four of which one had perforated the peritoneum. I ought, perhaps, to give some examples of the state of the Peyer's glands from my own observations. In one case, on the thirteenth day many sloughing glands and no ulcers were present. In another, on the thirtieth day many sloughing glands and a few ulcers with partially detached sloughs were found. In a case in which death occurred on the fourteenth day only sloughing glands were present. In one, on the fifteenth day no completely detached sloughs were found, but some were partially detached. In another, on the eighteenth day some smooth ulcers and many attached sloughs were present. In one, on the twenty-first day, of twenty-six ulcers a majority had detached sloughs and smooth floors; but in another, on the twenty-first day, in three feet of ileum there were a great many glands in a state of slough, and only one ulcer with a smooth floor. On the twenty-eighth day, on the twenty-ninth, on the fortieth, and on the forty-third smooth-floored ulcers only were discovered. I have mentioned these examples to impress upon you that even when the date of the first day is as certain as it can be, much variation occurs in the state of the Peyer's glands. Enlargement alone indicates the end of the first week and beginning of the second. Sloughs and enlargement or sloughs alone indicate the second week or the beginning of the third. Sloughs and smooth-floored ulcers indicate the end of the second week, the third week, or the beginning of the fourth week. Smooth-floored ulcers

alone indicate that the fourth week or some later period has been reached. I am speaking of cases in which no definite relapse has taken place. The probable day of the fever, as determined by the post-mortem examination, is not merely interesting as the solution of a pathological problem; it may be of the utmost importance in determining the possible place of origin of an epidemic, thus leading to the prevention of further infection. When you are thoroughly familiar with the appearances I have described in the ileum you will never fail to recognise post mortem a case of enteric fever.

There are some other appearances which ought to be mentioned. The solitary glands near the affected Peyer's glands are often enlarged, and sometimes become the seat of small ulcers. Ulceration, sometimes extensive, of the mucous membrane of the large intestine may be present. In the eighteen cases of the autumn of 1881 it was present six times, while among the ninety cases (1867-81) it was present twenty times. In two cases only out of the whole hundred and eight did perforation take place in the large intestine. The mesenteric glands and the spleen always swell, and except when death occurs very late are always found enlarged. Other organs may be affected in various ways, but the lesions I have described are those which are to be regarded as strictly belonging to uncomplicated enteric fever. From the publication of Peyer's book in 1677 to the publication of Sir William Jenner's in 1850 is the period which it took to establish our knowledge of the morbid anatomy of enteric fever, and its precise relation to the disease. So great is the difference between the labour of discovering truth and that of acquiring ascertained knowledge, that in one lecture it is possible to put before you what it took many men one hundred and seventy-three years to work out.

Case of Mediastinal New Growth (Sarcoma).

H patient, John Napier, a stoker, æt. 25, was admitted into Colston Ward on March 20th, under care of Dr. Hensley, complaining of cough and pain in the left side.

History of present condition.—On March 9th he had to give up work with backache and pains all over, and has not been to work since. He had no sweating at night, no hæmoptysis, and had not been ailing at all before March 9th.

Past history.—Always healthy, not subject to cough, and never had hæmoptysis.

Family history.—Father, healthy; mother, died (cause unknown). No history of phthisis obtained.

Present condition.—In no apparent distress at all. Tongue clean and moist. Temperature on admission 103°. Resp. 40. Pulse 120.

Heart.—Apex-beat not localised. Cardiac dulness to left border of sternum. Sounds rapid, weak but clear.

Thorax.—Less movement on left side. Vocal vibrations *minus* above. Percussion note impaired down to lower edge of pectoralis major, where it is resonant again.

Breath-sounds weak, expiration prolonged with wheezing. Some crepitations over cardiac area, probably pleural (at this point there was well-marked dry friction on admission, extending into the axilla, which has practically disappeared now). In the axilla there are numerous crepitations. On the right side expiration is prolonged, otherwise natural.

Behind. On the left side vocal vibration is feeble above, well marked at base. Percussion note impaired at apex, resonant at base.

Breath-sounds weak, with numerous crepitations at base. On the right side crepitations at base and expiratory wheeze.

Abdomen natural.

Sputum mucous-purulent. No pain since friction has disappeared.

March 30th.—Signs practically unaltered except that there are very few crepitations. Temperature normal. At first he sweated profusely, but now scarcely at all; has good nights. No bacilli found as yet in sputum.

April 2nd.—Some nasal hæmorrhage and streaky hæmoptysis. Voice changing, more hoarse in character. Enlarged glands on both sides above clavicle. Percussion note impaired on both sides below the clavicle. Loss of vocal vibration over the left apex.

Abdomen natural. Has noticed a slight difficulty in swallowing lately.

April 7th.—**Larynx:** no swelling or redness. Left cord quite fixed. Right cord normal. Trachea normal as seen through laryngoscope. No tubercle bacilli found on examination of sputum.

April 9th.—Coughing up some blood-stained material. Glands in neck enlarged more. Some difficulty in swallowing. Chest move-

ment feeble at left apex. Absence of breath-sounds and vocal vibration. Slightly dull on sternal side of right apex, unaltered on sternal, and left apex. Apex-beat in sixth space inside nipple line. Behind impaired at both bases, no added sounds.

April 12th.—Seems a little better. Less impairment at left apex. Breath-sounds heard. No added sounds. Vocal vibrations just perceptible. Not coughing or spitting so much.

April 16th.—Not so well. Temperature last evening 102.6°.

Nothing definite found. Later in the evening he became more restless and complained of a choking sensation. His cough became worse, and he got very restless, spitting up some foetid sputum. Left base some bronchial breathing with some rales, but no dulness. Right base clear. Relieved for a time with oxygen and steam, and got much better, but about six hours afterwards he got suddenly much worse, and died very soon afterwards.

Treatment.—On admission patient was put on quinine and iodide of potassium.

On March 31st iron was substituted for the latter drug.

On April 19th oxygen gas was administered, and liq. strychnine *wij* in brandy every four hours.

Post-mortem examination.—Externally enlarged glands could be felt above the clavicles. Brain and meninges natural.

Chest. Oesophagus not infiltrated by new growth, not obstructed. Above the right clavicle was a mass of glands infiltrated with new growth, about the size of pigeon's eggs. The glands of the anterior mediastinum, the tracheal and bronchial glands were all much enlarged with new growth, white on section, some soft and some hard. They formed a large mass, especially in front, from the pericardium to the lower border of the thyroid (thyroid not involved), involving in their midst the aorta (not obstructed or invaded), the superior vena cava and right and left innominate veins (not obstructed or invaded). The left recurrent laryngeal nerve was involved in the enlarged tracheal glands. Larynx natural, trachea much injected.

The right lung was adherent to the glands near the apex; no growths in it. The lung was congested and oedematous, and at the apex was a small cretaceous mass of old tubercle. The wall of the left bronchus was infiltrated with new growth in places, so that growth could be seen beneath the mucous membrane, but the latter was healthy. The bronchial tubes going to the lower part of the lung were not involved, but those going to the upper and middle part of the lung were infiltrated with growth which in places fungated into their lumen, and thus caused considerable obstruction. This growth was continuous with that of the bronchial glands, and it extended in white strands into the middle of the lung, as though along the bronchial tubes. The left lung was congested and oedematous at the base, and at the apex was a nodule of old calcareous tubercle. In the middle third it was in part pneumonic, in part gangrenous and riddled with cavities with ragged walls, and containing greyish-black thick fluid with very offensive odour. In another section, more anterior, the process was not so advanced, and showed many cavities, due, no doubt, to dilated tubes. The left lung was everywhere adherent to the chest wall, and at the apex the adhesions were of some standing; the dulness during life was due to collapse.

Heart.—In the pericardium was nearly half a pint of yellow turbid fluid, with many yellow flakes in it. The surface of the heart was dulled with flakes of adherent lymph here and there. New growths could be seen bulging into the pericardial sac at its highest part at either side, and in front of the aorta and pulmonary arteries (this, no doubt, caused the pericarditis). The heart was dilated, otherwise natural.

Abdomen.—Peritoneum, stomach, and intestines natural. Liver, 78 ounces, congested; spleen, old adhesions around. Pancreas and suprarenals natural. No new growths in the abdominal lymphatics.

Kidneys congested, hard to feel; capsule tore on removal, cortex not evidently lessened; ureter and bladder natural.

New Productions.

BOVRIE STAMNOIDS.—These stamnoids are a new preparation supplied by "Bovril, Limited." They are easily carried in the pocket and are very palatable. They are to be regarded more as stimulant than as food, but as stimulant of a safe and healthy variety, and will be found welcome by those whose occupation keeps them for long intervals without food.

A Case of Diffuse Suppurative Meningitis.

By G. S. HAYNES, House Surgeon, Belgrave Hospital for Children.



B—, a boy *æt.* 7 years, was admitted into the Belgrave Hospital for Children on May 28th, 1897, with the following history:

About four weeks ago he had had a blow on the left side of the head with a cricket ball, followed by hæmorrhage from the left auditory meatus. He remained in his usual health till May 17th, when he complained of pain in the left ear and left side of head. During the night he "had a fit" (general twitchings, no loss of consciousness) and vomited.

May 18th.—He was seen by a doctor, who found him "unconscious, with occasional twitchings of both arms and left side of face; no discharge from ears. Tongue thickly furred; bowels constipated; vomiting. Temp. 103°; pulse full and rapid."

19th.—Quite unconscious; restless; twitchings more marked; squint; head somewhat retracted. He was advised to go into a hospital, but the parents refused to allow him to go. Condition remained about the same till May 28th, temperature keeping up to 103°–104°, and pulse rapid and full all along.

22nd.—Patient had a definite fit lasting about ten minutes, convulsions beginning in the right hand, the thumb being turned in, the hand clenched, the arm flexed at the elbow, then general convulsions following.

28th.—Admitted to Belgrave Hospital. *Condition on admission:* patient lay on his back, with the legs flexed on abdomen, the head turned to the left and resting on the left hand. The right hand was clenched and the forearm flexed on the chest. He was unconscious; face flushed and mottled; eyes widely open, slightly squinting. The head had been shaved. There were no signs of any external injury. Temp. 103°; pulse 128, full, increased tension, regular; respiration 44, regular, quiet.

Nothing abnormal was found in the chest. The abdomen was doughy. There was no carination. Patient was restless, moving his left side more than his right, and he frequently had general twitchings, especially of left face and right shoulder.

Eyes: pupils large, sluggish reaction, lateral nystagmus; fundus, *vicia* dilated, no optic neuritis.

Ears: No discharge, no smell; with speculum, tympana congested, otherwise natural.

Later the temperature rose to 104.5°, on cradling came down to 103.5°. Patient took his food well; he passed dejecta under him.

May 29th.—Patient became more restless; the paresis of right side was more marked; the right hand was blue and cold. The right foot was colder than the left. There were no definite fits, but general twitchings occurred frequently. The pulse was more feeble, and was still rapid and regular. Temp. 104°.

30th.—Patient became worse at 5 a.m. Temp. fell to 100.4°. The pulse was irregular and variable in force. The respirations were irregular and stertorous. The right arm was rigid; occasional slight general twitchings were noticed. Patient gradually sank, and died at 10.30 a.m.

When first seen the question of trephining was raised, but it was thought that though there was probably a collection of pus under the dura mater, pressing on the left motor area, yet as there was evidence of general purulent meningitis, no operative interference was likely to benefit the patient.

Post-mortem examination.—The child was well developed and nourished.

The head: no sign of any external injury was discovered. On removal of skull-cap the vessels in the dura were seen to be dilated and congested. No laceration or fracture of inner table noticed. Under the dura mater were found patches of greenish, purulent lymph, especially over the cortex of the left hemisphere. There was one patch about the size of half a crown, and a quarter of an inch thick, situated over the junction of the middle and lower thirds of the fissure of Rolando on the left side. On removing this the brain substance was found to be indented, with distended vessels running across the depression. Purulent lymph was seen on both sides of the pia mater, over both hemispheres, but was more abundant on the left side. No laceration was discovered. The brain was large and firm, with some exudation at the base not extending down the cord. There was no naked-eye evidence of tubercle, and no distension of the ventricles. The pus was entirely confined to the cortex. No fracture of the base could be detected.

The middle ear on both sides was natural. Nothing of interest was noted in other organs. These notes are published by the courtesy of Mr. Dent and Dr. Ewart, under whose care the patient was admitted.

The New Martha Theatre.

By E. LAMING EVANS, M.A., M.B.

THE alterations in the Martha Theatre have just been completed, and we can congratulate ourselves on being able to offer our patients advantages which but a few years ago were undreamt of. A short account of the improvements will give some idea of the existing luxuries; and I take this opportunity of deploring that stress of work has prevented Mr. Harrison Cripps from writing the account which he originally promised the JOURNAL.

Gynæcology has shared with surgery those rapid advances during the last fifty years which we owe to the late Sir James Simpson and Lord Lister, and that we have kept abreast of the times is shown by these facts.

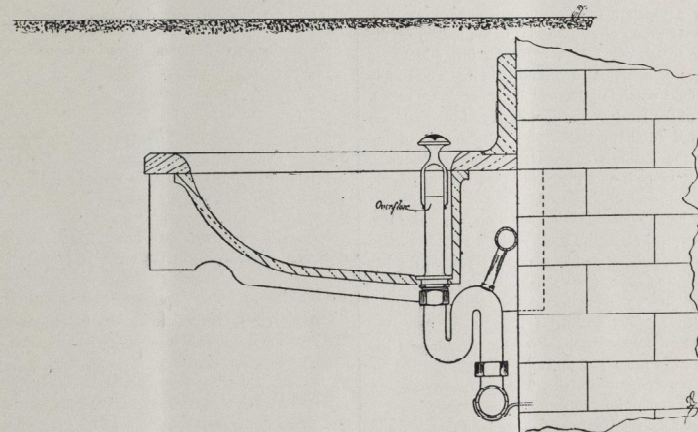
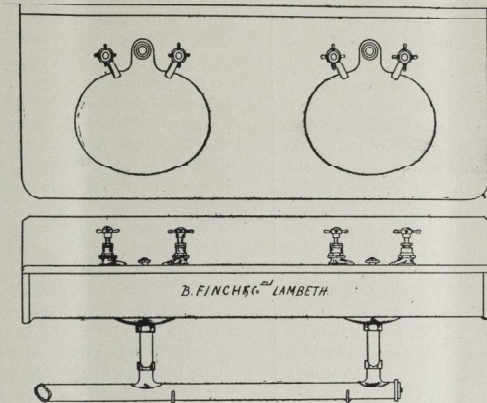
In 1848 Dr. Charles West was appointed Joint Lecturer on Midwifery with Dr. Rigby. The gynæcological department was conducted by Dr. West, and consisted of out-patients on Saturday mornings, and there were no beds in the Hospital devoted to these special cases. A year later Dr. West was allowed to admit cases under Mr. Stanley's care into the back ward of Harley. In 1851 the front ward of Martha was for the first time made into a separate women's ward. Dr. West's position was then in part recognised, for his name was printed on the patients' cards; but he was never elected a medical officer of the Hospital. He resigned his position in 1861. He tells me that there were practically no operations at that time. There was no theatre attached to Martha; and the opening of a pelvic abscess, or the tapping of an ovarian dropsy, was done in the ward.

In September, 1861, regulations were drawn up by the Committee for the appointment of the first Physician-Accoucheur, and a month later Dr. Greenhalgh was appointed.

In 1864 the expenses for the conversion of the back ward of Martha into separate rooms were voted by the Committee, and one of the rooms, the site of the present Theatre, was set aside for gynæcological operations.

In the Hospital 'Reports' for 1893, Mr. Harrison Cripps has described the Martha Theatre as it then existed, and I propose now to detail only those changes which have taken place since that date.

The floor was originally composed of teak laid in closely-fitting narrow boards; these were kept highly polished, a no light task. Now the old teak flooring lies hidden under a layer of waterproof paper, a three-inch thickness of Portland cement, and a pavement of finely-laid white



Roman mosaic with a black and white patterned border. The whole floor has a fall to the corner of the theatre, underneath the wash-hand basin. The improvement is irresistible; it is more easily kept clean, and requires less labour to do so: being for the most part white, it adds considerably to the light of the theatre.

The walls formerly were painted, with many rectangular corners; now they are lined in alabaster and marble, and every corner is rounded. The artistic effect of these walls is particularly striking on entering the theatre. Slabs of

accurately-fitting alabaster, from the quarries of Derbyshire and Staffordshire, with a dado and skirting of St. Ambrosio marble, the finest variety from Verona, cover the walls.

On the north wall is a set of marble shelves. The top shelf is occupied by glass barrels of carbolic acid, corrosive sublimate, and distilled water; the bottom shelf by trays, basins, and bowls; beneath are the tin cases holding the ordinary dressings. (The dressings used for abdominal sections are kept in the sterilizer until ready for use, as hitherto.)

The washing basin is entirely new. It is situated in the south-east corner, and consists of a range two vein marble lavatories supported upon marble cantilevers, with six-inch fascia in front. The basins, of large size, are fitted with Finch's hospital waste, which also acts as an overflow. The accompanying plates, which have been specially prepared for the JOURNAL by Messrs. Finch, admirably explain this ingenious arrangement. The cylinders are easily cleaned, the necessity for a separate overflow pipe is done away with, and with it that group of perforations in the pottery of the basin which always acted as a nidus for dirt, and was a serious source of infection to the water in it. The supply of hot and cold water is governed by screw-down valves. The marble of the lavatory and the pottery of the basin are flush with one another; there is no overhanging of the marble, and the basin is easily cleaned in consequence. Each basin is tapped, and the waste pipe passes directly through the wall, and discharges into the open air, so that there cannot be any possible contamination from sewerage. The hot-water pipes along the south wall are as before; also the sterilizers and the irrigator. Considerable space has been gained in the floor of the theatre by doing away with the spectators' rows of benches in the south-east corner. The only advantage that accrued to this structure was the absolute waste of time spent by those thirsting to see the details of an abdominal section from its benches, and its unfortunate occupants were stimulated to descend and trespass on the domain of the surgeons' assistants.

The old fireplace has been supplanted by a dog stove in a recess lined with Dutch tiles. Along the west wall are two cases, containing surgical instruments, supported by marble brackets. In all parts of the Theatre where it is practicable, the corners have been rounded off by letting in

a fillet of alabaster or marble, with concave surface, in the angle. The diagram shows this. The concave surface of this fillet is flush with the converging walls.

The skylight was added to the theatre six years ago; it was then made to open and shut by means of cords and pulleys. Each time it was opened, particles of dust it harboured fell into the theatre, and, if open during an operation, smuts from neighbouring chimneys fell on to the table. The cords no longer remained sterile. The sky light is now hermetically sealed. To prevent the dropping of condensed aqueous vapour down the sides of the skylight, a layer of tow has been inserted between the glass and the framework of the window. This has to be occasionally changed.

The ceiling is covered with cement, painted with three coats, and varnished.

One word about the relative value of marble, alabaster, and other materials, such as glazed tiles. Verona marble takes a high polish, but is dark in colour, and very expensive. It is not, then, suited for lining the walls of a theatre, except for its first-named property. Alabaster is an ideal material; light in colour, easy to obtain in large pieces, and to work so that each slab fits accurately with its fellow; it takes a high polish, and resists condensation of moisture upon its surface. Glazed tiles are inferior to alabaster, except in low cost of production.

And, in conclusion, I feel sure that on behalf of all readers of the JOURNAL, I may express our thanks to Mrs. Harrison Cripps, to whose munificence we owe still one more far-reaching advantage to Martha Ward.

We greatly regret that owing to want of space we are compelled to hold over the continuation of Dr. Maidlow's paper "Concerning the Ship's Surgeon and some Tropical Diseases."

Notes.

MR. BERRY and Mr. D'Arcy Power have been appointed Demonstrators of Practical Surgery.

MR. D'ARCY POWER has been elected, and Mr. Waring re-elected Demonstrators of Operative Surgery.

MR. BAILEY has been re-elected Demonstrator of Anatomy, and Mr. Furnivall and Mr. Sloane have been re-appointed Assistant Demonstrators.

DR. FLETCHER has been reappointed as Assistant Demonstrator of Practical Medicine.

DR. MORRISON has been appointed to the Assistant Demonstratorship of Physiology.

MR. P. J. CAMMIDGE and Mr. C. J. Thomas have been elected to the Assistant Demonstratorships of Biology.

DR. DRYSDALE has been reappointed as Demonstrator of Pathology.

DR. HORNE and Mr. J. H. Churchill have been appointed Assistant Demonstrators of Pathology.

THE Shuter Scholarship has been awarded to Mr. D. Truman and Mr. F. A. Bainbridge.

THE Senior Scholarship in Anatomy, Physiology, and Chemistry has been taken by Mr. T. R. Scott.

J. H. THURSFIELD has taken the degree of M.B. OXON.

MR. MCADAM ECCLES has been elected Examiner in Anatomy to the Society of Apothecaries.

DR. T. W. SHORE has been re-elected Examiner in Biology to the Conjoint Board.

DR. NORMAN MOORE has been elected an Examiner for the Army and Indian Medical Services.

MR. H. J. WARING has been appointed Erasmus Wilson Lecturer to the Royal College of Surgeons.

MR. WILLET has been elected Senior Vice-President to the Royal College of Surgeons.

IN REFERRING in our last issue to a paper in the magazine of the London School of Medicine and Royal Free Hospital, Mark Antony's famous speech was attributed to Brutus. It is unfortunate that the paragraph was not more carefully supervised before it was sent to press, but we have guarded as far as possible against any further mistakes of the same sort by severing all official connection with so ignorant a correspondent. He has been discharged without either wages or notice, and but for the leniency of some members of the Committee, would have been held head downwards in the fountain "until dead."

ONE of the best deserved Diamond Jubilee Honours was the baronetcy given to our Senior Surgeon. Great was the rejoicing at Bart.'s, and a congratulatory telegram was sent to Sir Thomas Smith before nine o'clock on Jubilee day. Sir Thomas received an ovation as he drove into the Square on the following day, from which he literally fled. In acknowledging his reception at consultations, Sir Thomas gracefully remarked that he thought it an honour meant for the Hospital rather than himself, and expressed the hope that he might still be known and remembered as "Tom Smith."

FEW misfortunes have been the cause of so much regret at Bart.'s as the loss of Mr. G. H. Forman in the "Aden." It seemed impossible to realise that "Tottie" Forman, always so full of life and fun, was to be numbered among the dead. Forman changed into the "Aden" in order to come home for his brother's wedding in the autumn. As surgeon to the P. & O. Co. he was spoken well of by all who met him, and he seems to have gained the same universal popularity on board ship that he did amongst us. We have lost a friend, and the world has lost a man in every sense of the word. His mourning relatives have our most sincere sympathy.

SURG.-CAPTAIN O'KINEALY, I.M.S., has been appointed Examiner in Physiology to the Calcutta University.

SURG.-CAPTAIN R. BIRD, M.D., M.S.Lond., F.R.C.S., I.M.S., has been appointed to act as Lecturer on Physiology, and has also been appointed Examiner in Anatomy to the Calcutta University.

SURG.-CAPTAIN C. R. STEVENS, M.D., B.S.Lond., F.R.C.S., I.M.S., has been appointed Examiner in Midwifery for Honours for the Calcutta M.D.

MORTON, CHARLES A., F.R.C.S. Eng., appointed Joint Professor of Surgery in University College, Bristol.

Amalgamated Clubs.

NEW MEMBER.

F. W. Jackson.

CRICKET CLUB.

ST. BARTHOLOMEW'S HOSPITAL v. R.L.C.

This match was played at Cooper's Hill on June 12th, and ended in a win for the Hospital by 95 runs. Bond and Nunn put on 71 for the first wicket, and Rose and Greaves added 70 for the third wicket. Greaves was top scorer with 64. The fourth wicket fell at lunch-time for 201, but then after lunch came a terrible collapse, and the innings closed for 226. R.L.C. made 131. Pank took 6 wickets for 56 runs, and Sale and Whitwell divided the rest.

SCORES.

ST. BART.'S.

H. Bond, b Adamson	29	W. H. Randolph, b Adamson	0
J. W. Nunn, b Plummer	44	E. Talbot, run out	7
H. S. Greaves, b Adamson	64	H. Whitwell, b Plummer	0
E. F. Rose, b Plummer	41	H. W. Pank, not out	0
F. H. Martin, c Bailey, b Adamson	22	Extras	10
J. A. Willett, b Adamson	7	Total	226
J. C. Sale, b Adamson	2		

R.I.E.C. G. L. Thomas, b Whitwell ... 0 A. H. Plummer, not out ... 14 A. F. Bayley, b Pank ... 3 A. M. Adamson, b Pank ... 3

BOWLING ANALYSIS. Overs. Maidens. Runs. Wickets. Rose ... 5 ... 0 ... 11 ... 0 Pank ... 17 ... 3 ... 56 ... 6 Sale ... 11 ... 3 ... 20 ... 2 Whitwell ... 3 ... 0 ... 18 ... 2 Willett ... 6 ... 0 ... 18 ... 0

PAST vs. PRESENT.

This annual fixture was brought off on June 16th at Winchmore Hill in the presence of a good number of spectators. Unfortunately the Past had been unable to be reinforced by several present team, and their ranks had to be reinforced by several present members of the Hospital.

SCORES.

PAST. C. W. H. Newington, c ... 13 Greaves, b Rose ... 4 G. Wedd, b Sale ... 4 H. W. Carson, b Sale ... 4 H. J. Pickering, b Rose ... 4 C. H. Turner, c sub., b Rose ... 4 H. E. Boyle, b Sale ... 4 C. G. Watson, b Willett ... 35 C. S. W. Cobbold, c Randolph, b Rose ... 8 H. E. Scoones, not out ... 0 T. Hampton, c Talbot, b Greaves ... 10 A. Hawkins, b Rose ... 0 Extras ... 22 Total ... 125

BOWLING ANALYSIS. Overs. Maidens. Runs. Wickets. Rose ... 17.3 ... 9 ... 19 ... 5 Sale ... 14 ... 6 ... 20 ... 3 Whitwell ... 4 ... 0 ... 18 ... 0 Willett ... 8 ... 1 ... 19 ... 1 Greaves ... 7 ... 3 ... 21 ... 1

ST. BARTHOLOMEW'S HOSPITAL vs. JESUS COLLEGE, OXFORD.

Another easy victory was added to our list on June 19th, when we defeated Jesus College by 125 runs and 7 wickets. Bond won the toss, and went in with Nunn left at 11, but on Greaves' arrival runs began to come at a great pace. Most of our opponents had a turn with the ball, but it was not until the score had reached 129 that Bond was out for a well-played 50, the partnership having produced 118 runs.

SCORES.

ST. BART.'S. G. L. Thomas, b Whitwell ... 0 H. Bond, c and b Donaldson ... 50 J. W. Nunn, c Martindale, b Donaldson ... 7 H. S. Greaves, not out ... 152 E. F. Rose, c Martindale, b Edwards ... 38 (The rest did not bat.)

JESUS COLLEGE. C. L. Donaldson, b Pank ... 18 L. Dartington, c Pank, b Rose ... 0 J. H. T. Hopkins, l-b-w, b Whitwell ... 22 R. B. Metcalfe, c Bond, b Whitwell ... 28 L. J. Edwards, c Sale, b Pank ... 26 G. L. Thomas, c Rose ... 7 W. Martindale, l-b-w, b Pank ... 5 S. H. Hughes, c Talbot, b Pank ... 0 S. D. Thorman, b Rose ... 0 H. Harding, c Scoones, b Rose ... 2 — Sturgess, not out ... 1 Extras ... 24 Total ... 133

BOWLING ANALYSIS.

Overs. Maidens. Runs. Wickets. Pank ... 17 ... 7 ... 25 ... 4 Rose ... 20 ... 4 ... 43 ... 4 Sale ... 4 ... 0 ... 23 ... 0 Whitwell ... 7 ... 2 ... 18 ... 2

INTER-HOSPITAL CHALLENGE CUP.

1st Round.—St. Bart.'s (Holders) v. London.

We played our first cup-tie on Guy's ground at Honor Oak Park v. London Hospital on June 21st, and won by the wide margin of 8 wickets.

London won the toss, but only made 124, out of which Wilson made 42 in brilliant form. Pank bowled with great success, capturing 7 wickets for 37 runs. We hope he has at last returned to his brilliant form of two years ago.

SCORES.

LONDON HOSPITAL. A. E. Gilmore, b Pank ... 0 G. P. Wilson, st Bond, b Pank ... 42 R. C. Pitt, b Pank ... 1 D. Le Cren, b Pank ... 0 H. Fletcher, b Pank ... 19 W. M. Sing, c Pank, b Whitwell ... 20 P. A. Green, b Pank ... 8 H. Thwaites, c Whitwell, b Rose ... 15 H. W. Hodgson, c Scoones, b Rose ... 4 W. M. Jackson, b Pank ... 0 H. Edmondson, not out ... 0 Extras ... 15 Total ... 124

BOWLING ANALYSIS.

Overs. Maidens. Runs. Wickets. Pank ... 20 ... 5 ... 37 ... 7 Rose ... 12.3 ... 4 ... 40 ... 2 Sale ... 4 ... 1 ... 20 ... 0 Whitwell ... 3 ... 0 ... 12 ... 1

ST. BARTHOLOMEW'S HOSPITAL v. M.C.C.

This match was played at Winchmore Hill on June 26th, and ended in a brilliant victory for the Hospital by 8 runs after a most exciting match.

The Club brought down a very strong team, especially in the bowling line, which dismissed the Hospital for 49. Woodcock and Needham each taking 5 wickets for 23 runs. The wicket was very sticky, and favoured the bowlers immensely; still no one dreamed that the M.C.C. would get out for a smaller total. Thanks, however, to the splendid bowling of Pank and Rose, backed up by brilliant

fielding, the M.C.C. were got rid of for 41. Pank took 6 wickets for 26 runs, and Rose 4 for 14.

At their second venture the Hospital started badly again, and 9 wickets were down for 44; Pank and Boyle, however, came to the rescue, and added 44 runs for the last wicket, Pank supplementing his fine bowling by a hard-hit innings of 31, the highest individual score in the match. M.C.C. required 97 runs to win, and at call of time had scored 67 for the loss of 8 wickets. Rose again bowled magnificently, getting 6 wickets for 29, making a record for the match of 10 wickets for 42. Woodcock took 13 wickets for 57 runs.

Considering the strength of the M.C.C. team, this match was a brilliant performance, especially as five of our regular team were away, and reflects the greatest credit on those playing.

SCORES.

ST. BART.'S HOSPITAL. 1st Innings. H. Bond, b Woodcock ... 2 J. W. Nunn, b Woodcock ... 11 H. S. Greaves, c Hillary, b Woodcock ... 18 E. F. Rose, b Woodcock ... 6 H. J. Pickering, b Needham ... 0 C. G. Watson, b Needham ... 1 H. Whitwell, b Needham ... 4 2nd Innings. Woodcock ... 13 Storer ... 2 Woodcock ... 1 Pochin, b Woodcock ... 8 Storer ... 5 Woodcock ... 31 not out ... 12 Extras ... 15 Total ... 49

M.C.C.

1st Innings. C. A. Beldam, b Rose ... 14 S. Storer, c Bond, b Pank ... 16 R. Hillary, b Rose ... 3 E. A. Short, b Pank ... 4 J. G. Howard, b Pank ... 0 Woodcock, b Rose ... 0 Major Pochin, st Bond, b Pank ... 3 Handford, b Pank ... 0 C. Hulton, b Rose ... 0 Needham, b Rose ... 0 Cooper, not out ... 1 Extras ... 1 Total ... 41

BOWLING ANALYSIS.

M.C.C. Overs. Maidens. Runs. Wickets. 1st Innings. Rose ... 10 ... 2 ... 14 ... 4 Pank ... 11 ... 3 ... 26 ... 6 2nd Innings. Rose ... 14 ... 6 ... 28 ... 6 Greaves ... 13 ... 0 ... 30 ... 2

ST. BARTHOLOMEW'S HOSPITAL v. HORNSEY.

This fixture was brought off at Winchmore Hill on July 7th, and resulted in a defeat for us by 44 runs. We have always been in our worst form against Hornsey, and this game was no exception to the rule. The wicket was terribly bumpy, and at the pavilion end especially was quite dangerous.

Hornsey made 160. Pank was the most successful bowler, and took 4 wickets for 30 runs.

We started very badly, our first 5 wickets actually falling for 9 runs; and though Bond, Scoones, Whitwell, and Willett played up well later in the innings, they were unable to avert defeat. This is only our

second defeat this year, Hornsey having also beaten us in the first fixture.

SCORES.

HORNSEY. I. H. Nicholls, c Whitwell, b Pank ... 4 H. Collett, c Maturin, b Rose ... 11 D. Nimmo, b Rose ... 24 L. Orton, b Sale ... 6 F. H. Swinstead, run out ... 34 Brown, b Pank ... 31 W. P. Harrison, c Sale, b Greaves ... 6 A. Hawkins, b Greaves ... 0 E. A. Cox, b Pank ... 13 G. Hart, b Pank ... 0 Di. Orton, not out ... 6 Extras ... 25 Total ... 160

BOWLING ANALYSIS.

Overs. Maidens. Runs. Wickets. Rose ... 20 ... 5 ... 49 ... 2 Pank ... 14 ... 4 ... 36 ... 4 Whitwell ... 4 ... 2 ... 8 ... 0 Sale ... 12 ... 2 ... 29 ... 1 Willett ... 3 ... 1 ... 2 ... 0 Greaves ... 8 ... 3 ... 13 ... 2

ST. BARTHOLOMEW'S HOSPITAL v. HENLEY-ON-THAMES.

This match was played at Henley in beautiful weather on July 10th, and ended in a victory for us by 37 runs and five wickets. Henley had not a strong team, but managed to compile 208, both our bowling and fielding being slack. We were left two hours and a quarter in which to get the necessary runs, but so last was the rate of scoring that we knocked the runs off with twenty minutes to spare. Sale and Maturin put on 92 for the first wicket, and after their dismissal Rose hit up 65 not out in a very short time.

SCORES.

HENLEY-ON-THAMES. B. Molloy, b Rose ... 0 Eustace, c Maturin, b Willett ... 20 R. H. Brewer, c Scoones, b Rose ... 58 C. H. Surtees, c Maturin, b Marrett ... 18 F. Scott-Murray, b Whitwell ... 6 H. Peacock, b Whitwell ... 0 Dr. Lidderdale, b Talbot ... 41 G. L. Bush, c Maturin, b Sale ... 26 Aldridge, c Whitwell, b Bond ... 12 C. Holmes, run out ... 10 W. Fairburn, not out ... 0 Extras ... 17 Total ... 208

ST. BARTHOLOMEW'S HOSPITAL v. SURBITON.

This match was played at Surbiton on July 10th, and ended in a win for us by 83 runs. Surbiton batted first, but were dismissed for the small score of 64, Sale and Rose being the bowlers. Sale secured six wickets for 29 runs, and Rose four for the same amount. Bart's made 149, Greaves was top scorer with a well-played 42, while Doyle hit hard at the end of the innings for 30. Surbiton in their second innings scored 146 for four wickets, of which Sale secured three, with lobbs, for 28 runs.

SCORES SURBITON.

Table of cricket scores for Surbiton, including 1st and 2nd Innings with player names and runs.

ST. BART'S.

Table of cricket scores for St. Bart's, including 1st and 2nd Innings with player names and runs.

BOWLING ANALYSIS.

Table of bowling analysis for St. Bart's, showing overs, maidens, runs, and wickets.

ST. BARTHOLOMEW'S HOSPITAL 2ND XI v. MILL HILL SCHOOL.

Played at Mill Hill on Saturday, June 12th.

SCORES.

Table of cricket scores for St. Bartholomew's Hospital 2nd XI v. Mill Hill School.

ST. BARTHOLOMEW'S HOSPITAL 2ND XI v. MAIDENHEAD.

Played at Maidenhead, Saturday, June 19th.

SCORES.

Table of cricket scores for St. Bartholomew's Hospital 2nd XI v. Maidenhead.

ST. BART'S 2ND XI.

Table of cricket scores for St. Bart's 2nd XI, including 1st and 2nd Innings.

ST. BART'S HOSPITAL 2ND XI v. HIGH BARNET 2ND XI.

Saturday, July 3rd.

ST. BART'S.

Table of cricket scores for St. Bart's Hospital 2nd XI v. High Barnet 2nd XI.

Total (innings declared closed) for 9 wks. 210. Barnet were dismissed for 67.

ST. BARTHOLOMEW'S HOSPITAL 2ND XI v. BANSTEAD ASYLUM.

Played at Banstead on Wednesday, June 30th.

SCORES.

Table of cricket scores for St. Bartholomew's Hospital 2nd XI v. Banstead Asylum.

BANSTEAD ASYLUM.

Table of cricket scores for Banstead Asylum, including 1st and 2nd Innings.

ST. BART'S 2ND XI v. LONDON HOSPITAL 2ND XI.

Wednesday, July 7th.

SCORES.

Table of cricket scores for St. Bart's 2nd XI v. London Hospital 2nd XI.

Kendon, White, Upward, and Vaile did not bat.

ST. BART'S.

Table of cricket scores for St. Bart's, including 1st and 2nd Innings.

ST. BARTHOLOMEW'S HOSPITAL 2ND XI v. UNIVERSITY COLLEGE SCHOOL.

Wednesday, July 14th.

SCORES.

Table of cricket scores for St. Bartholomew's Hospital 2nd XI v. University College School.

Total (9 wks.) *238. Total 89.

* Innings declared closed.

SWIMMING CLUB.

Race (90 yards handicap).—This race was swum on June 10th. There were twelve entries. 1st heat.—1st, G. B. Nicholson (7 seconds); 2nd, V. J. Duggan (scratch). 2nd heat.—1st, C. Dix (10 seconds); 2nd, E. M. Niall (5 seconds). Final swum on June 17th. 1st, G. B. Nicholson (75 seconds); 2nd, E. M. Niall (78 seconds).

WATER-POLO MATCHES.

St. Bart's v. Cambridge University.—Played at the Fitzroy Baths on June 19th. Cambridge only turned up five men, so they took a substitute, and the match was played six a side. We again missed our captain, who was unable to play, and lost 2 goals to 1. For.—M. G. Winder. Against.—H. W. Masterman, 2; H. A. Powell, 2; F. E. Tayler.

Team: T. C. Lister Jones (goal); F. G. Richards, E. M. Niall (backs); G. B. Nicholson, L. A. Walker, M. G. Winder (forwards).

St. Bart's v. St. George's.—St. George's having no water-polo team, we do not play in the first round of the cup tie. St. Bart's v. London Scottish R.V.—Played at the St. George's Baths on July 2nd. The Hospital team included one of its old members, Mackintosh, who played a good game at centre forward during the first half-time, and then played goal, where he saved some good shots. In the first half Walker scored with a good shot for the Hospital. Mackintosh also scored with a long shot, but it was disallowed, as half-time had been given just as he shot. In the second half Walker got the ball from a corner pass and scored, but the goal was disallowed on account of standing. Soon after he again shot, just failing to score, and Winder put it through. V. J. Munroe scored for the London Scottish with a shot that beat Mackintosh. Result: 2 goals to 1.

Team: M. G. Winder (goal); F. G. Richards, E. M. Niall (backs); G. B. Nicholson (half-back); L. A. Walker, J. S. Mackintosh, A. M. Amsler (forwards).

St. Bart's v. Ealing (a). Played at the Fitzroy Baths on July 7th. Lost, 4 goals to nil. O. W. Thornhill (3), W. F. Fedden scored for Ealing.

Team: F. E. Tayler (goal); E. M. Niall, M. G. Winder (backs); G. B. Nicholson (half-back); L. A. Walker, W. Fay Bennett, A. M. Amsler (forwards).

INTER-HOSPITAL LAWN TENNIS CUP TIES.

Played at Chiswick Park.

Table of tennis scores for inter-hospital lawn tennis cup ties.

ST. BART'S v. ST. THOMAS'S.

Singles.—H. Shewell beat P. H. Brown, 6-1, 6-3. J. Marsh beat E. F. Buzzard, 6-4, 6-2. S. Bousfield beat H. J. Marriage, 6-1, 6-1. R. Baird beat I. E. Gilbert, 8-6, 6-3. V. Bell lost to R. Allport, 5-7, 3-6. C. H. Barnes lost to F. Bawtree, 4-6, 2-6. Doubles.—Shewell and Baird—beat Brown and Buzzard, 6-1, 6-3. beat Allport and Bawtree, 6-2, 6-2. Marsh and Bousfield—beat Marriage and Gilbert, 6-0, 6-4. beat Brown and Buzzard, 6-3, 6-0. Bell and Barnes—lost to Allport and Bawtree, 4-6, 6-4, 8-10. lost to Marriage and Gilbert, 3-6, 2-6. St. Bart's won by 8 matches to 4, 11 sets to 8.

ST. BART'S v. ST. GEORGE'S.—Final.

Singles.—H. W. Shewell beat A. C. Peasoun, 6-4, 6-0. J. V. N. Marsh beat S. G. Penny, 6-2, 2-6, 6-3. S. Bousfield beat J. B. Hardie, 6-2, 6-4. K. F. Baird beat E. K. Le Fleming, 3-6, 6-4, 8-6. V. S. A. Bell lost to L. Powell, 2-6, 7-5, 4-6. J. Stirling Hamilton beat W. Horne, 6-3, 2-6, 6-1. Doubles.—Shewell and Baird—beat Pearson and Penny, 6-4, 6-4. beat Le Fleming and Powell, 6-3, 6-4. beat Hardie and Horne, 6-3, 9-6. Marsh and Bousfield—lost to Le Fleming and Powell, 2-6, 7-9. beat Hardie and Horne, 6-2, 8-6. Bell and Hamilton—lost to Hardie and Horne, 2-6, 6-4, 6-3. lost to Pearson and Penny, 0-6, 1-6. St. Bart's won by 9 matches to 4, 20 sets to 12.

Abernethian Society.

On Thursday, July 1st, the Midsummer Address was delivered by Dr. Norman Moore in the Medical Theatre. His subject, "The Deaths of the Kings of England," suggested an address of unusual interest, as, indeed, it proved to be. The number of members and visitors present formed an admirable tribute to Dr. Moore's eloquence and learning. The Society is greatly indebted to him for the trouble he has taken in preparing such an extremely interesting communication. At 8 o'clock the President, Mr. Langdon Brown, formally welcomed Dr. Norman Moore, who then proceeded to deliver his address, which dealt with the deaths of the kings from Alfred the Great to the accession of the House of Hanover. Our faith in Hume was repeatedly shaken; for instance, the story of William the Conqueror meeting his death from his horse after that of the war he was so exhausted that a fatal edema rapidly ensued. Again, with regard to Henry I's provincial fatal meal of lampreys, several improbabilities in the story were pointed out, and his death attributed to an attack of acute pneumonia contracted after hunting. Of all the kings, eight in number, who met their death from

traumatic causes, in only one did the fatal issue accrue from imperfect surgery, and this was William II, who suffered from blood-poisoning following inadequate cleansing of the wound.

The notes of a physician in Stuart times were decidedly amusing, dealing principally with the matter of fees. He divided his patients into four classes:

1. Those that are certain to pay.
2. Those that probably will pay.
3. Those that most likely will not pay.
4. The desperate cases.

And it is worthy of comment that the last list was invariably headed by the name of His Majesty King Charles II.

Dr. Norman Moore concluded his address amid great applause. A vote of thanks was proposed by Dr. Maidlow, whom we were glad to welcome to our meeting once more. He referred to Dr. Moore as the recorder and maker of history, and went on to say that the seeds which he had been sowing had already begun to bring forth good fruit in teaching us to avoid the narrow groove of speciality into which some tended to fall. This was ably seconded by Mr. W. G. Clark, who thought that Dr. Moore's address showed conclusively the progress of medical science, especially in the branch of diagnosis. The vote of thanks was carried with acclamation, and Dr. Moore having replied, Dr. D'Arcy Power asked if the paper could be published, as from stress of time the address had been curtailed in parts. To this Dr. Moore kindly assented. The meeting then concluded, refreshments being served in the Library.

It was very gratifying to see that there were nearly 300 persons present, including the matron and nursing staff. Among the visitors were noticed Dr. Pye-Smith and Dr. Mrs. Robert Jones.

St. Bart's Hospital Athletic Club.



THE 18th Annual Meeting of this Club was held at Stamford Bridge on June 30th. The weather was dull and sultry, but happily no rain fell until the programme was almost finished.

Owing to the unfortunate occurrence of a School Committee meeting on the same day, many of the staff of the Hospital, including our most popular President, Mr. Marsh, were unable to be present until late in the afternoon.

There was a very fair number of visitors, and the Club was greatly honoured by the presence of Sir James and Miss Paget, the latter of whom kindly gave away the prizes at the conclusion of the meeting, and won all hearts by her genial manner and the interest she showed in the proceedings.

Although the entries were not so numerous as last year, the fields were good, and productive of great excitement in several events.

Mason again distinguished himself by winning the Quarter-mile Challenge Cup for the third year in succession. This year he added the One Hundred Yards Challenge Cup to his trophies, after an ostentatious race with Falk, who made a dead heat of it first, but was just beaten on running it off later in the afternoon.

Mr. Marsh very kindly contributed a handsome pair of silver candlesticks towards the prizes, for which help we were more than usually grateful this year. Our very best thanks are due to those officials who by their energy and patience helped to make the meeting a success.

President.—Howard Marsh, Esq., F.R.C.S. **Judges.**—J. S. Sloane, P. W. James. **Starter.**—Dr. H. M. Fletcher. **Timekeeper.**—P. Furnival, Esq., F.R.C.S. **Brief details:**

100 YARDS SCRATCH.—S. Mason and H. Falk, dead heat; E. Wethered, 3. On running off the dead heat, S. Mason, 1; H. Falk, 2. This was a grand race, resulting as above. Time, 11½ sec.

HALF-MILE HANDICAP.—J. G. Forbes, 30 yds. start, 1; A. L. Vaughan, 40, 2; W. V. Wood, scr., 3. Forbes quickly worked his way to the front, and won easily by twenty yards. Time, 2 min. 1½ secs.

120 YARDS HANDICAP.—J. A. West, 10 yds. start, 1; H. Falk, 2. West had matters all his own way, winning by three yards; Falk made a plucky run, but was unable to catch the limit man. Time, 12½ secs.

HIGH JUMP.—T. M. Body (received 8 in.), 4 ft. 0 in., 1; A. Hay (received 2 in.), 5 ft. 1½ in., 2. This event was keenly contested, six men competing.

HURDLES.—A. Hay (owes 8 yds.), 1; E. W. Woodbridge (owes 4 yds.), 2. Hay fell over the last hurdle but one, and was passed

by Woodbridge, whom, however, he beat in the run in by a few inches. Time, 21½ secs.

LONG JUMP.—H. Falk (receives 1½ ft.), 20 ft. 6 in., 1; A. R. Badger, 20 ft. 6 in., 2.

QUARTER-MILE SCRATCH.—S. Mason, 1; E. Wethered, 2. Mason romped away from the start, and won with great ease.

FRESHERS' 220 YARDS SCRATCH.—H. Falk, 1; J. M. Plews, 2. An excellent race for the whole distance, Falk just managing to put the race to his credit. Time, 25½ secs.

PUTTING THE WEIGHT.—T. M. Body (receives 5 ft.), 29½ ft., 1; J. A. West (receives 1 ft.), 32 ft. 8 in., 2.

ONE MILE HANDICAP.—J. G. Forbes, 30 yds. start, 1; A. L. Vaughan, 30, 2; F. M. Howell, 60, 3. This ended with a good race at the finish, Forbes winning by a couple of feet. Time, 4 min. 30½ secs.

STRANGERS' HALF-MILE.—D'A. Wentworth, L.A.C., scr., 1; W. Paul Jones, L.A.C., 18, 2. The limit man led for the first lap, after which Wentworth soon went to the front, and won easily by forty yards. Time, 1 min. 53½ secs.

TROWING THE HAMMER.—J. A. West (receives 15 ft.), 1.

United Hospitals Swimming Club.

A MEETING was held at Guy's Hospital on June 10th, Guy's, Bart's, Thomas's, and London being represented. W. Fay Bennett was elected Captain for the year.

Draw for Cup Ties.

- 1st round.—A. St. Bart's v. St. George's.
 B. Westminster v. St. Thomas's.
 C. Guy's v. Middlesex.
 D. Charing Cross v. London.

Byes.—University, King's, St. Mary's, Dental.

- 2nd round.—A. Dental v. University.
 B. D. v. A.
 C. King's v. B.
 D. St. Bart's v. C.

Semi-final.—A v. C.
 D v. B.

The final is at present arranged to take place at the Bath Club, July 1st.

It was decided to raise an Inter-Hospital Team Race Trophy, to be subscribed for by the Hospitals.

The following gentlemen have kindly subscribed on behalf of our Hospital Swimming Club:

	£	s.	d.
Howard Marsh, Esq., F.R.C.S.	2	0	0
W. P. Herringham, Esq., M.D.	1	1	0
P. Furnival, Esq., F.R.C.S.	0	10	6
L. C. Thorne-Thorne, Esq., M.D.	0	10	6
	£4	4	0

Amalgamated Clubs Annual Dinner.



THE Third Annual Dinner of the above clubs was held on Wednesday, June 10th, at the Holborn Restaurant, Mr. Bowly presiding. The Staff were represented by Dr. Church, Sir Dyce Duckworth, Mr. Howard Marsh, Dr. Tooth, Dr. Calvert, and Mr. Berry, the Warden, and a goodly throng of demonstrators, the Past (more of whom we would gladly have welcomed) and the Present bringing up the total to eighty.

The toast of "The Queen" was proposed by the Chairman and drunk with jubilee honours. The "Amalgamated Clubs" followed, proposed by the Chairman. Mr. Bowly, in a few remarks referred to the advantages which accrued in after life to the nation in general, and to Dart's men in particular, from an athletic education, and went on to give a brief sketch of the life-history of the clubs. Referring to the initial cost of the ground, which was roughly £7000, £2000 of which was expended on the Pavilion, and £1000 on levelling, &c., while the remainder purchased the ground at £400 per acre; the adjoining land had recently been sold for building at

£1100 per acre, so that in two years the land had almost tripled in value, and if they desired to realise now they could be more than £2000 in pocket (cheers). As to the progress of the individual clubs, he estimated the success more by the standard of enjoyment received from them and from the use of the ground than victorious results against opponents. He called attention to the Cricket Cup before them for the first time in its history, and he hoped not the last, which he would shortly send round as a loving-cup. The Amalgamated Clubs had risen to their present position by the untiring efforts of the Secretaries, Mr. Meakin, who throughout has edited the JOURNAL, Mr. Bond, Mr. Woodbridge, and their present Secretary, Mr. Brown. In conclusion he coupled with the toast of the "Amalgamated Clubs" the names of Mr. Brown and Mr. Bond (Capt. of Cricket XI). (Applause.)

Mr. Brown, in replying, thanked the Chairman, gave a résumé of the results for the past year, and said that the clubs now boasted of 680 members. He referred to the raising of the subscription to eight guineas, and concluded by thanking the secretaries of the individual clubs for the assistance they had rendered.

Mr. Bond (Capt. Cricket XI, 1896) thanked the Chairman for the compliments he had bestowed on the cricket team, and said he attributed the present success of the club to the ground, as in past years there was great difficulty to get eleven men together, and then few had had any practice; now they could raise two teams without any difficulty, and the 2nd XI was the training ground for the 1st XI. Mr. Bowly had very kindly sent round the Cricket Cup filled with champagne-cup, and he felt confident of its going round again next year. (Applause.)

Mr. Valerie proposed the toast of "Old Bart's men." He had been put up to make this speech, and the gods and Mr. R. P. Brown alone knew why. He relied on brevity as the soul of wit, and in few remarks anent the past proposed Old Bart's men coupled with the names of Mr. Colbold (Capt. Past Cricket XI) and Mr. Roger Brown (Capt. Past Tennis VI). Mr. Colbold, in reply, enlarged on the advantage to the School of the ground at Winchmore Hill, of success in sports to Bart's men in the future; prominent among Old Bart's men in the cricket world were Dr. W. G. Grace and Dr. W. G. Hoosman, and he hoped in the future, with the greater advantages now possessed, that Bart's would turn out cricketers of as high a class.

Mr. Roger Brown remarked on the good fellowship existing between Old Bart's men scattered over the world, and told the audience how his humble home had been raided by some Bart's men in his absence, good feed ordered and done justice to—just as it should be, and just as he liked it to be, Bart's was a name to conjure with, and so long as Bart's men stuck to Bart's men always would be.

Mr. Meakin gave the toast of "The Medical and Surgical Staff of our Hospital." This was the seventh occasion on which he had found himself in his present predicament, namely, that of having to speak at a Bart's dinner. If anything could solace him under such embarrassing conditions it would be the fact that he was privileged to propose so noble a toast. This was no toast to be lightly treated. Mr. Meakin wished that the toast had been committed to the charge of an abler tongue than his; he wished that it were possible for him to rouse the men to a state of wild enthusiasm, so that they might drink it with rapture, and, if they could, with one foot on the table. Did we not all love the members of our Staff? Did we not love them so much that we shrank from the cold and distant prefix of Mr. P? Did we not rather, when speaking of them in our conversation terms of endearment, such as "Tom" and "Alfred," "Johnnie" and "Willie," "Howard" and "Anthony," as "the Kerk," and with the same intense respect, even as "Duckie"? Did they not command respect to so great an extent, how would it be possible for us to use terms expressive of so great affection? Our Staff lived, we must remember, in that fierce light which beats upon a throne, and blackens every blot. But where were the blots? They did not exist, hence there were none for the light to blacken. The members of our Staff were all obviously extremely rich, but they had certainly one point in common with the poor—they were always with us. Mr. Meakin was confident that there was no trouble into which a Bart's man could get, in which he would not have the Staff with him to help him,—provided, of course, that there was nothing disreputable in the cause of his trouble.

Though we shrank from thinking of the day when the inextinguishable hand of time would remove the present members of the Staff from its ranks, still it was our continual hope that when that day came, the successors might be men of the same stamp as the present Staff; that self-aggrandisement might never enter into the motives of any

individual member of our Staff, but that the glory of the individual might be always merged in the glory of the whole, in the consciousness that the reflected glory falling upon the chief officers of so noble an institution as our hospital, was far greater than any glory to which the efforts of the individual alone could ever attain.

Mr. Meakin asked the men to drink the toast in such a manner as would show how Bart's men could drink a toast, and to couple with it the names of Dr. Church and Mr. Howard Marsh.

Dr. Church, in replying for the Staff, thanked Mr. Meakin for the very flattering way in which he had spoken of the Staff. The students and the Staff worked hand in hand, familiarity was tempered with respect; were it not so, such a speech could never have been made. After paying tribute to the pursuit of sport and athletics, he concluded by hoping that many a well-fought game was in store for those present ere they should have joined with him and echo the refrain of the well-known Harrow singer:

Forty years on, getting older and older,
 Shorter in wind, as in memory long,

Feeble of foot and rheumatic of shoulder,
 What shall it profit that once we were strong?

Mr. Howard Marsh thanked Mr. Meakin for the great praise he had bestowed on their humble body. He was taken by surprise; he had expected to propose the Chairman's health, and now had got an undelivered speech inside him. In Mr. Langton's unavoidable absence he was called on to reply for the Staff, and it was with great anxiety that he entrusted the safety of Mr. Bowly to the hands of a physician. (Laughter.) If it must be a physician Sir Dyce was the man for the occasion. They all regretted the absence of Mr. Smith. All true Bart's men have an affectionate regard for their dear friend "Tom," who was extremely sorry not to be able to come. Mr. Marsh then concluded in his usual jovial manner with a few timely anecdotes, which received hearty applause.

Sir Dyce Duckworth said it was his pleasurable duty to reduce the dislocation which had occurred to the toast of the Chairman, but he wished he could unlearn that undelivered speech on his left.

He referred to athletics, their value to the mind in mental grasp and culture to the robust athlete, as shown in Mr. Bowly, whose prowess in the athletic world was well known to Bart's men. He then called upon the company to drink the Chairman's health, a toast which was enthusiastically received.

The musical programme, under the management of Mr. D. L. E. Bolton, was ably carried out. The professional services of Mr. Gammon and Mr. Dick Welch were secured for the evening, and highly appreciated.

MUSICAL PROGRAMME.			
Overture	.....	Mr. C. B. Gammon	
Song	..... "Queen of the Earth"	Mr. J. Valerie	
Song	..... "Whisper and I shall hear"	Mr. T. H. Glaze	
Song	..... "The Maggie"	Mr. Footer	
Song	..... "Sally in our Alley"	Mr. Gammon	
	..... "Daddy" (encore).		
Song	..... "Lovely Spots of the Earth"	Mr. Roger Brown	
Song	..... "The Noisy Johnnie"	Mr. C. D. Moxon	
Song	..... "Up I came with my little lot"	Mr. C. G. Meade	
Song	..... "They're coming on again"	Mr. Dick Welch	
	..... "Trying to catch 'em" (encore).		
Song	..... "The Irish Gentleman"	Mr. C. B. Gammon	
Song	..... "Phil O'Fluter's Ball"	Mr. C. D. Moxon	
	..... "Auld Lang Syne."		
	..... "God Save the Queen."		

The Eighth Decennial Contemporary Club Dinner.



THE Annual Dinner of this club—the youngest of the series—was held on June 30th at the Café Royal. Dr. Kanthack was in the Chair, with Dr. Drysdale and Mr. Waring acting as Vice-Chairmen. The attendance was not large, doubtless owing to the youth of the Club.

After the loyal toasts Mr. Macintosh gave a piano solo—a waltz by Ch. Widor—which was much appreciated. The singer for the evening was Mr. Valerie, an old friend whose musical gifts were indeed welcome. After his first song he gave Pinauti's "Queen of the Earth" as an encore, and then Dr. Kanthack rose to speak.

"Gentlemen," said he, "though I have a pleasant duty before me in speaking to you, I assure you I should be more at ease in giving you a pathology 'grind' than in making an after-dinner speech. The club—our club—is a very young one, and this fact accounts for the small number here to-night, for our members are only just beginning their life-work. Moreover we meet at a time when there are many social distractions.

"We are still in our infancy, it is true, but we therefore possess the promise of youth—a precious belonging which no other decennial club has. We shall, gentlemen, I assure you, be a power yet in the medical world. We shall get among our number a few knights, baronets, and lords, and then we shall remodel the hospital. The hospital requires remodelling, and we are the men to do it. We are all proud of Dart's (cheers). We look with pity on a man who does not belong to it. We are turning out more good men than any other London hospital, and that is our great difficulty, that we do turn them out. Some of our men ought to have been kept about the place. I say this without the slightest personal feeling, that the hospital does not appreciate us as much as we appreciate ourselves. The hospital does not sufficiently encourage men to go elsewhere and build up great reputations, and then recall them. If a man once leaves the hospital, with very rare exceptions he never reappears. It means twenty-five years in the dissecting rooms, or about thirty in the physiological laboratory before a man is considered fit for a physician or a surgeon.

"The system of our medical schools is directly responsible for this. They ought to be more than mere machines for turning out general practitioners, whose very reason of existence is to form the feeding medium to the consulting physicians and surgeons of the hospital. Medicine, gentlemen, is more than a mass of obscure diagnoses from which to draw fees. The schools ought to teach everything. Our medical schools should be general training grounds; whereas at present if any crisis arises in British dependencies or colonies we have to call in the assistance of well-trained foreigners. Lately we have had some examples of this—a Frenchman sent to Bombay, a Russian to Calcutta, a German to our refuge in South Africa. Our men are not up to the mark, and the fault is not, as some would make us believe, due to the universities. Medicine is practically a new thing at the 'varieties'; they have indeed a hard fight to keep up with London, Edinburgh, and the rest. It is to the hospitals we must look; they must turn out the men thoroughly capable of treating the public, and persuading it of their efficacy. No more machines are wanted. It is the duty—I cannot repeat it too often—of the men of this decennium to remodel medicine. At present we have no influence; we can but follow our seniors. But when we get to be seniors we hope to keep these views of medicine, and persuade the public of our mission.

"Our men are all over London on the staff of hospitals. Lately, however, we have seen even if a man is the best candidate he does not get the appointment if he is from Bart's. This is where our seniors ought to protect us. We must, if injunctive be done to us, hold together and maintain our honour—silently if possible, if not by speaking. If we mean to rise, we must see that our merits are rewarded. I would like to proclaim these few facts I have mentioned in the hospital square—if I dared to!

"Gentlemen, this is the third meeting of the club. Already our men are well represented on the Junior and Teaching Staffs. Outside the hospital the Club has won many honours, of which I hardly care to speak. Thrice has the Jacksonian prize fallen to our members, and I could almost name to whom the next would go. May the Jacksonian be got for the next ten years by our men.

"Finally, gentlemen, I recommend to you the toast of the evening—'The Eighth Decennial Club!'"

Mr. Valerie then sang "The Longshoreman."
Dr. Drysdale, in proposing the Chairman's health, said he understood it was the custom for the man who knew him least to do so. To-night this rule was departed from. It was true that not all of the members of the Club were distinguished yet, but Dr. Kanthack had shown them their duty, for the youngest decennial club had as its chairman a Professor of one of the oldest universities. The health of the Chairman was then drunk with musical honours.

Dr. Kanthack returned thanks, and alluded to a loss already sustained by the Club, namely, H. B. Forman, who he feared was lost on board the "Aden."

Dr. Maidlow, in a speech full of characteristic charm, proposed the health of the secretaries, quaintly describing them as "the essence of the science of the Club," and after adding that he would not indulge in "unnecessary adulations."

Mr. Waring responded for the secretaries, and after "Auld Lang Syne" had been sung the meeting broke up.

Summer Concert.

IN SPITE the numerous other social attractions of the week, and the unavoidably short notice that was given, there was a very fair attendance at the concert given by the Junior Staff and the Musical Society on Tuesday, June 29th. It was not possible to provide orchestral music for the occasion this year, but the excellence of the chamber music provided consoled us for this loss. The programme began with Beethoven's Trio in C minor (Op. 1, No. 3), by Messrs. Pollard, Myers, and Field. This is quite the most noteworthy of the three pianoforte trios, which are themselves of special interest as being Op. 1 of Beethoven. The first movement was selected; it contains one or two sudden and, at first sight, almost capricious changes of key, which were highly displeasing to the pedantic and orthodox at the time of its appearance, and which were a forerunner of the much greater development of the same method which we find in his later works. This composition, which at the present time would be described as smooth, graceful, and very delicate, was formerly considered heterodox and revolutionary. Nurse Ball then sang "Spring is here" (E. A. Dick), in excellent style. This very pretty song was rendered with an ease and entire absence of effort which charmed the audience. The Nursing Staff have every reason to be pleased that they were so ably represented in the programme. In Dr. Austen we have an oboist of talent to a degree rare in an amateur. His solo, a sonatina by Walmisley, was very well received. Walmisley, though an English composer of a school long since past, possesses such sterling merit that his work is still very welcome.

No summer concert can be considered complete without a song from Dr. West. This year he chose "Where'er you walk," from "Semiele," one of Handel's most delightful songs. "Semiele" is one of the many operas, written by Handel, of which we hear very little now-a-days. Still it contains some exceedingly good work, most of the numbers being quite equal to this one in worth, if not in popularity. Mr. C. S. Myers played two violin solos—(a) "Aven," by Leonard; (b) Bolero, by Carl Bohm. Mr. Myers played with remarkable finish, and the solos were much enjoyed by the audience.

Miss Daisy Campbell chose as her two songs a cradle song by Max Staige and a villanelle by Eva dell' Aequa. She has a very fine voice, pure soprano in quality, and she took her high notes with great ease and a reserve force which was very pleasing.
Two glees by the Choral Society concluded the first part of the programme—"April," by Salaman, and Dr. Wood's "How sweet the moonlight sleeps." Both were rendered in excellent style. It is interesting to remember that Dr. Wood holds the only Fellowship given for music at either University. This particular glee is a very fine specimen of his method in works of smaller size; the extremely soft opening was much admired by all.

It is in no way derogatory to the Musical Society to say that the interval is a very important part of the evening's entertainment. The weather was propitious, and the square presented a gay sight. So pleasant was it there, that the audience seemed unwilling to leave it. Refreshments suitable to the temperature were provided in the Library by the Junior Staff—every effort was made to prevent crowding, and with success.

The second part opened with Schumann's Pianoforte Quintet, by Messrs. Pollard, Myers, Roughton (whom we were glad to welcome back after a prolonged absence), Jordan, and Field. This, generally considered one of the finest pianoforte quintets in existence, is the only one written by Schumann. A well-worn comparison will at once occur to every one. Beethoven and Mendelssohn each wrote only one violin concerto, and these two have never been surpassed. This quintet is an exceedingly popular work; the piano part is very difficult, and well worth close attention. In Mr. Myers we have a leader of proved capacity, and he was well supported by the rest of the strings. Both the violins used were very fine specimens by Galliano.

With Balfe's "Killarney," Nurse Ball quite carried the audience away. This is the first time Nurse Ball has sung at a Hospital Concert, and the pleasure that she gave makes us hope that she will sing for us many times again. The audience clamoured eagerly for an encore, which was given in the form of another Irish song—"My love is an arbutus" (Stanford). Mr. J. S. Field then rendered two violoncello solos in faultless style—an Adagio by Goltzmann, and an Allegro by Tschaiowsky.

Mr. Valerie's "Bedouin Love Song" (Pisenti) displayed a magnificent bass voice, thoroughly under control. It is a pity that

he now so seldom sings at our various concerts; the audience would take no refusal, and "Hybris the Cretan" was given as an encore.

Dr. West then sang "Kathleen Mavourneen," and was in better voice than ever. The song and its singer are both old favourites well known at these concerts. As an encore he gave "Sigh no more, ladies." The Choral Society then repeated by request "How sweet the moonlight sleeps," much to the delight of the audience, followed by "It was a lover and his lass" (Booth). The chorus was well in hand, good both in attack and in tone.

The Junior Staff rose to the occasion, and revived an old custom by singing the parting chorus themselves. This year they chose Scott Gatty's "Shine, shine, moon!" and revealed much latent musical talent. What was lacking in finish was compensated for by heartiness, and the audience enthusiastically demanded an encore. Whereupon they sang the last verse again, and then modestly avoided a further demonstration by plunging into the National Anthem.

Our thanks are especially due to Mr. S. P. Pollard, who again so ably fulfilled the onerous duties of Musical Director; and in addition acted as accompanist during the evening; nor in this must we forget the other responsible for the arrangements of the evening—Messrs. Meakin and Ormerod.

The Ashere Lodge, No. 2546.

IN THE Installation Meeting of this Lodge was held in the Great Hall of St. Bartholomew's Hospital at 4.45 o'clock Tuesday, June 15th; W. Bro. Cooper, P.G.D., the W.M., in the chair. Messrs. Matthews, Miles, and Shewell were initiated into Freemasonry; Messrs. Gell and Auden were proposed as candidates for election, whilst Bro. C. O'B. Harding was proposed as a joining member. Bro. Walsham was then installed by Bro. Trollope as the Worshipful Master of the Lodge for the ensuing year. Bro. Walsham appointed Bros. Burns and Reece as his principal officers, and invested Bro. Gripper as Treasurer of the Lodge. The balance-sheet was adopted as correct. It showed that the Lodge had a balance at the bank of rather more than £120 in addition to its invested funds, amounting to nearly £300, yet it had contributed freely to the various masonic charities. A past master's jewel was presented to Bro. Alfred Cooper in recognition of the services he had rendered to the Lodge during his year of office as Worshipful Master. The Lodge was then closed, and the Brethren with their guests betook themselves to Frascati's Restaurant. Here they dined together to the number of seventy-three. The usual toasts were proposed, and that of the Visitors was responded to by Bro. the Lord Ernest J. Seymour, and by Bro. Sir M. M. Bhowaggee, M.P., K.C.I.E., Bro. Celli, Bro. West, Bro. Burns, and Bro. Holden did much to enliven the evening by their musical talents. The following guests were present: Bro. W. K. R. Bedford, P.G.C., Bro. Pope, Q.C., P.G.D., Bro. Drury, P.A.G.D.C., Bro. Tomlinson, P.G.D., Bro. Trimmer, P.G.S., Bro. the Lord Ernest J. Seymour, Bro. Sir M. M. Bhowaggee, M.P., K.C.I.E., Bro. Tower, P.P.G.D., Bro. Scallon, P.G. St. Rearer, Bro. Morton the W.M. of the Apollo, No. 301, Bros. Celli, Cartwright, Brantwaite, Thornton, Harding, Samuel Lloyd, Hayward, McCann, Simonds, Melhado, D. F. Heywood, Marshall, Thomson, Lyon, Gabriel, and others.

Distribution of Prizes.

THE Certificates, Books, Medals, and other awards in the various Scholarship and Prizes Examinations held in the School during the past year were distributed by Mr. Luther Holden, Consulting Surgeon to the Hospital, on Thursday, July 15th, in the Great Hall of the Hospital. There was a large attendance of Governors, Staff, and students with their friends. The Chair was taken by Sir Trevor Lawrence, Bart., the Treasurer of the Hospital. After a few introductory remarks, the Treasurer asked Dr. Shore, as Warden, to read his report. The report was as follows:

"It is my pleasing duty to be able to present a very satisfactory report of the work of the Medical School during the past year. The number of students who have entered the School for the year 1896-7 is 105, consisting of 84 full students, 59 entering for special classes, and 22 studying preliminary science. Although as compared with last year there is a fall of 21 full students, yet St. Bartholomew's still keeps the lead among the metropolitan medical schools.

Several changes have taken place in the Teaching Staff of the Medical School during the year. Mr. Butlin, to the great regret of his colleagues and of the students, has resigned the Lectureship on Surgery. Mr. Walsham has been appointed to succeed him, and in consequence has resigned the Lectureship on Anatomy, to which Mr. Lockwood has been elected. Dr. Kanthack, having accepted the Deputy-Professorship of Pathology in the University of Cambridge, resigned the office of Lecturer on Pathology and Pathologist at the end of the Winter Session. He has been succeeded by Dr. F. W. Andrews, by whom the important duties of the office are being carried on in a most able manner. It is with the greatest regret that the Medical Officers and Lecturers have learnt that Dr. W. J. Russell, who has been Lecturer on Chemistry for twenty-six years, will resign at the end of the present session. He will be succeeded by Dr. Chantway, who was elected last week.

In resigning, Dr. Russell has most generously presented to the Chemical Department the apparatus and specimens required to thoroughly equip the Laboratory for work, and the Medical Officers and Lecturers have accepted Dr. Russell's generous gift with grateful thanks.

During this summer the Medical Officers and Lecturers have received from Mrs. Andrew, widow of their late colleague Dr. Andrew—a present of her husband's large and valuable Library, in accordance with his expressed desire. They most cordially and gratefully thank Mrs. Andrew for this generous present.

In the department of Practical Surgery the School will shortly lose the services of Mr. Bowly and Mr. Lockwood; Mr. Bowly's resignation especially will be much regretted by the students. Messrs. Berry and D'Arcy Power have been appointed to succeed them in October next. Owing to Dr. Andrews' election to the Lectureship of Pathology, Dr. Horton Smith has been appointed an Assistant Demonstrator of Practical Medicine. During the winter session the Medical Officers and Lecturers decided to appoint a Demonstrator and two Assistant Demonstrators of Pathology to assist with the greatly expanded work in that department. Dr. Drysdale has been appointed Demonstrator, and Messrs. Pigg and Lillie Assistant Demonstrators.

Mr. W. G. Clark has succeeded Dr. Drysdale as Assistant Demonstrator of Physiology, and Dr. J. Morrison has succeeded Dr. Horton Smith in that department.

Dr. Murray Fletcher has been appointed Assistant Demonstrator of Materia Medica and Pharmacy, and Messrs. Camidge and C. J. Thomas have been elected Assistant Demonstrators of Biology.

During the year the duties of the Curator of the Museum have been divided between a Curator and an Assistant Curator; Dr. Andrews has been appointed Curator and Mr. Pigg Assistant Curator.

The work in the pathological department—chiefly in connection with the routine investigation of the diseases of the hospital patients—continues to increase, and the Medical Officers and Lecturers earnestly hope that the Governors may shortly be able to construct a new laboratory for this work—an improvement urgently needed.

Mr. J. W. W. Stephens, who for two years was the Treasurer's Research student in Pathology and Bacteriology, has been appointed Bacteriologist to the Government of India; Mr. C. P. White, the previous Research student, has been appointed Pathologist to the Birmingham General Hospital. Mr. Walter Emery has been elected to succeed Mr. Stephens.

It is with the greatest satisfaction that I am able to report that again, and for the third year in succession, the Jacksonian Prize of the Royal College of Surgeons, for an essay founded on original research on some surgical topic, has been carried off by a young surgeon of St. Bartholomew's. It has been awarded to Mr. R. C. Bailey for his essay on "Diseases of the Prostate."

At Examinations the students have fully maintained the high reputation of the Hospital and School. At the Royal College of Surgeons, thirteen have passed the Final Examination for the Fellowship of the college—the highest British diploma in Surgery. In the Examinations of the Conjoint Board, no fewer than 100 students have passed the Final Examination and received the diplomas of L.R.C.P. and M.R.C.S., whilst similar numbers have passed the various parts of the Intermediate Examinations.

At the University of London, eight have taken the degree of Doctor of Medicine and twenty-two have taken the degree of Bachelor of Medicine, seven securing Honours. Amongst the Honours men, the conspicuous success of Mr. Walter Emery is the most noteworthy. He secured Honours in all the subjects, and was awarded First Class Honours with the Scholarship and Gold Medal in both Medicine and Obstetric Medicine, as well as taking a Second Class Honours in Forensic Medicine.

Mr. A. R. J. Douglas also secured Honours in all the subjects, and Mr. G. B. Price obtained a First Class in Obstetric Medicine. The other Honours men were Mr. M. W. Coleman, Mr. S. P. Huggins, Mr. A. B. Tucker, and Mr. C. H. Drake.

Five students have taken the degree of Bachelor of Surgery. A former student, Dr. F. F. Blackman, now Demonstrator of Botany in the University of Cambridge, has taken the degree of Doctor of Science. Nineteen have passed the Intermediate Examination in Medicine, and twenty-seven the Preliminary Scientific. Amongst those who have passed the Preliminary Scientific, Mr. S. G. Mostyn is conspicuous in having taken the first place in First Class Honours in Physics, and Mr. R. C. Elmalié has been awarded a First Class Honours in Chemistry, whilst Mr. J. A. Lloyd has secured Honours in Physics.

In the University of Cambridge, six have taken the degree of Doctor of Medicine, fourteen have passed the first part of the Final Examination for the degree of Bachelor of Medicine, and twenty the second part of this Examination. Six have taken the Diploma of Public Health of the University of Cambridge.

In the competition for the Indian Medical Service in August last, Mr. J. M. Woolley was second, Mr. G. A. F. Sealy was seventh, and Mr. J. H. Hugo eighth in order of merit. On leaving Netley Mr. Woolley gained the Martin Memorial Prize for Medicine, and Mr. Hugo the second Montefiore Prize for Surgery. At the competition in February last Mr. J. B. Dredge was fifth.

In the competition for commissions in the Army Medical Service in February Mr. C. H. Hopkins obtained the second place.

In the competition for the Medical Service of the Royal Navy Mr. A. R. H. Skey was first in November last, and Mr. P. H. Nimmo was eighth; and in May Mr. S. Roach was fourth and Mr. W. K. Hopkins eighth.

In the Examination for the various Scholarships and Prizes there have been good competitions, some—notably the Lawrence Scholarship and the British Surgical Scholarship—being keenly contested.

In gaining public appointments old St. Bart's men have during the year fully maintained the reputation of the School. Early in the year the Medical Officers and Lecturers issued a second edition of the Directory of old St. Bartholomew's men, which shows that 2370 gentlemen educated at St. Bartholomew's are in practice in England and Wales, or over one tenth of the total number of practitioners.

The arrangements made for the recreation of the students continue to give satisfaction, and St. Bart's students this year hold the Inter-Hospital Cricket Cup—the first time it has fallen to them. I hope they may long retain it, and that in respect to their professional studies and to their athletic sports they may also long maintain the credit of the oldest Medical School in the kingdom.

Mr. Holden then distributed the prizes to the successful students, who were presented to him in order, beginning with the Jefferson Exhibitioner and ending with the Lawrence Scholars and Gold Medalists. He addressed a few appropriate words to each student. Dr. Church proposed, and Mr. Willett seconded, a vote of thanks to Mr. Holden, which was carried by acclamation. Sir Thomas Smith, Bart., proposed, and Dr. Gee seconded, a vote of thanks to Sir Trevor Lawrence for presiding, and to the Governors for the use of the Great Hall, after which the proceedings terminated.

Appointments.

HOFFMEISTER, HENRY E. W. B.A. (Camb), M.R.C.S., appointed Medical Officer of Health to the East Cowes Urban District Council.
LOW, CHARLES W., M.B. (Durh.), M.R.C.S. (Eng.), L.S.A. (Lond.), appointed Medical Officer of Health to the East Stow Rural District Council.

SPEAT, FRANK, M.R.C.S. (Eng.), L.S.A., appointed Medical Officer for the Friern Barnet District of the Barnet Union, *vice* Hugh Stott, M.R.C.S. (Eng.), L.R.C.P. (Lond.), resigned.

ROYDEN, WILLIAM, M.A. (Cantab.), M.R.C.S., L.R.C.P., reappointed Medical Officer of Health for the Incorporated Hundreds of the East and West Flegg Union, Norfolk.

STOTT, HUGH, M.R.C.S. (Eng.), L.R.C.P. (Lond.), D.P.H.R.C.S. (Eng.), appointed Medical Officer of Health to the Battle, Cuckfield, Eastbourne, East Grinstead, Hallsbam, Newhaven, Titchhurst, and Uckfield Rural District Councils, and Cuckfield, Hayward's Heath, and Uckfield Urban District Councils.

GIBSON, W. R., M.R.C.S., L.R.C.P., appointed Assistant Medical Officer to the St. Saviour's Infirmary.

NAISH, A. E., M.R.C.S., L.R.C.P., appointed House Physician to the Royal Free Hospital.

GRANVILLE, A., M.R.C.S., L.R.C.P., appointed House Surgeon at the West London Hospital.

BETTS, E. H., M.R.C.S., L.R.C.P., appointed House Surgeon at the Tottenham Hospital.

WEEKS, H., M.B. (Lond.), appointed House Surgeon to the East Suffolk and Ipswich Hospital.

Births.

GELL.—19th June, at 36, Hyde Park Square, the wife of H. Willingham Cell, of a son.

HAMER.—8th July, at 71, Dartmouth Park Hill, N.W., the wife of W. H. Hamer, M.D., of a son.

LEWIS JONES.—6th July, at Kenilworth Road, Ealing, the wife of H. Lewis Jones, Esq., M.D., of a son.

Marriages.

NANCE MARSHALL. On June 1st, at Croft, Yorkshire, by the Right Rev. the Bishop of Richmond, assisted by the Rev. Canon Yates, uncle of the bridegroom, Henry Chester Nance, F.R.C.S., of Norwich, son of the late J. Nance, Esq., F.R.C.S., of Eccleshall, Staffs, to Mary Dorothea, eldest daughter of the Rev. J. M. Marshall, late Head Master of Durham School.

BAKER—WALLIS.—On July 1st, at St. Michael's, Basingstoke, by the Rev. F. F. Russell, M.A., assistant priest of St. Alban's, Holborn, assisted by the Rev. H. R. Cooper Smith, D.D., Vicar of the parish, John Charles Baker, M.B., B.A. Lond., M.R.C.S., L.R.C.P., of Witley, Surrey, to Charlotte Sherry, eldest daughter of Arthur Wallis, J.P., of Coombehurst, Basingstoke.

HEWER—BAKER.—On June 16th, at the Parish Church, West Derby, Liverpool, by the Rev. Percy Stewart, M.A., Cecil McKenzie Hower, F.R.C.S. Eng., of Tarporley, Cheshire, son of the late John Henry Hower, of Highbury, to Annie Hower, only daughter of the late Howard Baker, of Acle Hall, Norfolk.


CANDLER—MCKEAN.—On June 10th, at Holy Trinity Church, Wavertree, Liverpool, by the Rev. A. E. Brisco Owen, assisted by the Rev. J. T. Mitchell, Rector of the parish, and the Rev. T. Limcox Lea, Wallace Harry Charles Candler, M.R.C.S., L.R.C.P., of Stone, Staffs, to Mary Elizabeth, daughter of Jno. McKean, Esq., of Wavertree.

Death.

EDWARDS.—On April 17th, at St. John's, Antigua, Arthur Elliot Edwards, F.R.C.S. Edin., President of the Leeward Islands Branch of the British Medical Association, and Junior Medical Officer to the Island of Antigua.

ACKNOWLEDGMENTS.—*Cuy's Hospital Gazette*, *St. George's Hospital Gazette*, *St. Thomas's Hospital Gazette*, *St. Mary's Hospital Gazette*, *The Middlesex Hospital Journal*, *The Cynoscope*, *The Nursing Record*, *The Hospital*.

St. Bartholomew's Hospital



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NOTICE.

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

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

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

A Cover for binding (black cloth boards with lettering and King Henry VIII Gateway in gilt) can be obtained (price 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,

AUGUST 14th, 1897.

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

On the Operative Treatment of Fracture of the Patella.

A Clinical Lecture delivered June 30th, 1897.

By H. T. BUTLIN, F.R.C.S., D.C.L.

GENTLEMEN.—To show that the treatment of fracture of the patella is worthy of a clinical lecture, it may suffice to state that our hospital statistics of the years 1891 to 1895 inclusive tell that 150 cases of this accident were admitted into the hospital during the five years, making an average of thirty cases each year; and the large majority of the cases occurred in active men, in the full vigour of health and strength.

As Demonstrator of Surgery, years ago, I held and taught

that recent fracture of the patella should be treated by the expectant method, and I am told that this is still the routine teaching of the practical surgery department, and for much the same reasons as I used to give: first, because operation is dangerous; second, because the "expectant method" yields perfectly satisfactory results; therefore operation is both unnecessary and unjustifiable.

To-day I am going to take the opposite side, and try and show that there are circumstances in which operation is not only justifiable, but very desirable.

The "expectant method" usually adopted in this hospital is briefly as follows:—The limb is placed on a back-splint or patella apparatus, means being taken to bring the fragments into close apposition. Sometimes the joint is tapped and the fluid drawn off. At the end of six weeks the limb is put up in plaster of Paris for another six weeks. The patient is then allowed to go about, wearing some apparatus to restrict the amount of movement, and this is ordered to be worn for three, six, or even nine months. Hence many months elapse before he is able to pursue active bodily work. And what is then the result? Generally speaking, a limb less sound than it was before the accident. The bond of union between the fragments is prone to give way. The same patella is often broken a second time. And the other patella is not infrequently broken owing to the weakness of the union of the patella which was first broken. (Of the patients shown to-day, one has broken the same patella three times, and another has broken both patellæ.)

A curious proof of the failure of the "expectant method" is to be found in our hospital statistics, which show that during the five years already mentioned there were twenty-nine admissions of old fractures of the patella. And in several of these the union was so defective that an operation was practised to bring the broken fragments in apposition.

As regards the dangers of the operation, it is interesting to study a paper by Mr. Turner, of St. George's Hospital, written in the year 1883 (*Clin. Soc. Trans.*, 1884, p. 37). Mr. Turner collected together all the cases, whether published or not, in which the patella had up to that time been

wired for old and recent fracture. The results were not very encouraging. There were fifty cases in all. Two of the patients died of septic poisoning; the joint suppurated in thirteen cases; many of the patients were left with a stiff joint. When it is further known that the treatment was tedious, that the wires were usually removed by a second operation, that a stiff apparatus was kept on for three or more months, and that it was then often necessary to break down the adhesions, I can well understand that neither surgeons nor patients were much in favour of an operation.

It must further be borne in mind that all the fifty operations collected by Mr. Turner were performed after the introduction of antiseptic surgery, and were supposed to have been performed with greater or less antiseptic care. It may, therefore, easily be understood that the publication of this paper had a decided effect in discouraging surgeons from performing the operation of wiring the patella.

Its influence has lasted so long that very few text-books on surgery or on fractures venture to recommend that fracture of the patella should be treated by operation.

I believe I performed the first operation which was performed for a recent fracture of the patella in this hospital in the year 1893, only four years ago, and I believe the only "open" operations for recent fracture during the year 1894 were mine. But since then some of my colleagues have performed the operation, and I am glad to be able to say that not one of our "open" operations, whether for old or recent fracture, has suppurated, and I believe the results have been uniformly good. Since I have been surgeon to the hospital I have opened the knee joint many times for the removal of loose bodies, for the removal of the internal semilunar cartilage, and for displacement of the tibial tubercle. Not a single case has given me any anxiety, and not one of the wounds has suppurated even superficially, and I am gradually coming to the belief that the opening of large joints is less likely to be followed by occasional suppuration than many other operations whose reputation is much better. I am sure that the operations for the radical cure of hernia and for amputation of the breast and removal of the contents of the axilla are much more likely to detect and resent a flaw in detail.

The manner of performing the open operation may be briefly described as follows:—The integument is very carefully prepared on the night preceding. A longitudinal or (better still) semicircular incision is made, and the bone is thoroughly exposed. Blood-clot and other materials which lie between the fragments are removed, and the interior of the joint is cleansed. The surfaces of the broken patella are scraped with a Volkmann's spoon. The upper fragment is then bored with an ordinary borer from above downwards and from before backwards, in such a manner that

the borer passes from the upper margin through the bone, and emerges just in front of the cartilage. The lower fragment is bored from the broken surface of the bone, in front of the articular cartilage, out through the lower margin of the bone or through the ligamentum patellæ. Two pieces of stout silver wire are passed through the fragments. The joint is washed out with an antiseptic solution, followed by boracic lotion or sterilised water. The fragments are brought closely together, and the ends of the wires are twisted so as to hold the fragments as close as possible. The cut twisted ends are bent down, so that they look towards the bone, or are even pressed into the surface of the bone. A drainage-tube is inserted, and if there is much oozing a second drainage-tube is inserted at the other angle of the wound. The flap is stitched in place, the dressings are applied, and beneath them a back-splint and foot-piece, and the limb is slung.

The drainage is generally removed on the third or fourth day. The wound is dressed again on the tenth day, and the stitches are removed. If the drainage-wounds are closed, the splint is taken off. A week later the patient is allowed to move the limb in bed, but in an elastic bandage. He is usually discharged at the end of a month or five weeks from the operation, wearing an elastic bandage, and walking slowly about. If the case is treated in this manner there is no question of removing wires by a second operation, and no need to break down adhesions, for the patient has begun to move the joint slightly within a fortnight of the operation, and is up and about between three and four weeks after it.

The advantages of such wiring are that, when it is successful, the limb is as strong and useful as it was before; the patient can climb and carry weights, and run and jump. And, second, the duration of the treatment is greatly shortened. A man can walk about, with caution, and perform light duties six weeks after the operation, and he need wear no other support than an elastic bandage. But I think, if his work is arduous, he ought not to undertake it for three months after the patella has been wired. He is certainly fit for his work in half the time needed under the expectant treatment; and I believe that I am much understating the advantage which he gains in this respect. Look at it, if you will, from an economic point of view—two to three months saved to a working man. Measure the value of his time at a pound or thirty shillings a week, and that amounts to ten or fifteen pounds for ten weeks saved.

I do not go so far as to recommend or practise operation in every case of fracture of the patella. But, in transverse fractures, in young and active subjects, or even in men under sixty years of age, who are in sound health, I wire the patella whenever the patient will permit it. In order that there may be no uncertainty as to the relative risks and results, I generally take the opportunity of going over

the case with my class at the bedside of the patient, who thus hears the discussion and accepts the operation with as full a knowledge as a layman can have of the risk he runs. I do not think that wiring is so necessary in women, but there is no objection to it in good subjects, especially in those who are young and work hard.

The operation may be performed at once or within a week or two of the accident; it seems to matter little whether it is performed at once or is deferred for a while. The last patient on whom I operated was a putman, and I left him for ten days to see whether he had been in the habit of drinking much more than was good for him.

I need scarcely say that whether the operation is performed on aseptic or on antiseptic principles every detail must be scrupulously attended to. Surgeons who are doubtful of the course of their operation cases should not undertake these operations.

I am also strongly of opinion that it is desirable to drain the joint during the first three or four days after it has been opened. In cases in which loose bodies are removed it is not our custom to drain. But where the interior of the joint is much more roughly handled I am sure it is a wise precaution. This was decidedly impressed on me about three years ago in the case of a young officer of the army, from whose knee-joint I cut out a loose, partly detached semilunar cartilage. Although the limb was kept on a back-splint and slung, and the pulse and general condition were satisfactory, the temperature steadily rose and the knee became more and more full of fluid, until he suffered so much pain that I was obliged to introduce a tube under an anæsthetic and drain away the synovial fluid for two or three days. I do not know that the progress of the case to perfect recovery was interrupted, but the patient suffered a good deal of pain, while I was alarmed lest the joint should be suppurating.

The description of the method of operating shows that the wires should not lie in the interior of the joint, and this I regard as extremely important. Should stitch suppuration spread from the external wound to the wires, it might extend into the joint along the line of the wire. And if for any reason it should be necessary to remove the wires, it would be much better and safer that they should be at that time shut out from the interior of the joint.

I have not dealt in this lecture with other methods of uniting the fragments of the patella, for I have had no experience of them. Personally I prefer to open the joint and see clearly what I am doing. But subcutaneous methods have been invented, and one or two of them are very ingenious. I believe the subcutaneous all-round method has been employed on several occasions in the hospital, but the results have not been so good as those which have followed the open method.

NOTE.—Four patients were exhibited. In the first the

operation had only been performed a few days. He was brought across from the ward to show the condition of the other patella, which had been long previously broken. The fragments were separated to the extent of about 3 or 4 inches. The limb was so weak that he readily accepted an operation for the recent fracture. (He rapidly recovered and has since left the hospital, walking about in an elastic bandage between four and five weeks after the operation.)

In the second case the patella had been united about five or six weeks previously. It had been three times broken transversely at different levels, the last time a few days before the operation. Three of the fragments were united by wires, but the distance between the third and fourth was so great that I was afraid to attempt to bring them together lest the other fragments should be torn apart. This patient was no longer in the hospital.

The third and the fourth patients had been operated on long previously. The union was perfect, and the men were able to do all they had done before the accident. One of them had returned to his work, which was very arduous, three months after the wiring; the other not until six months had elapsed. I could not discover any reason why he had remained so long idle, except that he seemed to think that it would be safer to take a long holiday. Although his work was heavy, he seems to have been quite fit for it three months before he took it up again.

Contributions towards a History of the Surgical Teaching at St. Bartholomew's Hospital during the Nineteenth Century.

By D'ARCV POWER, F.R.C.S., F.S.A., Demonstrator of Practical and Operative Surgery.

I. HARMONY.

MUCH may often be learnt from a retrospect. It tells us not only what we have been, but it teaches us where we are and by what means we may improve. The end of a century, too, is no inconvenient time to take stock of our methods, and to see what progress has been made. My position as a teacher of surgery in the medical school renders it incumbent upon me to know the best plans of teaching; my pleasure leads me to reflect upon the methods formerly adopted in the school; its interests lead me to find out why they have failed or by what means they have become modified.

It is impossible to fix a date when surgery became a progressive science in England. The more intimate we become with early surgical literature, the more we realise that some members of our profession were always striving to raise it above the level of their time. Men like Read

and Halle and Clowes in the reign of Elizabeth did infinite service by steadily working to make surgery a profession rather than a handicraft. Wiseman introduced a new element into it—that of gentility,—and from his time surgery was no longer a servile profession. The mantle of Wiseman fell upon Percivall Pott, from Pott it passed to Hunter, from Hunter to Abernethy and Astley Cooper, and from them to Lawrence—perhaps the most highly cultivated surgeon the world had seen. By such steps it has been possible for the Sovereign to bestow a peerage upon Lord Lister, for it is only by slow gradations that we have become fitted to obtain social distinction.

The systematic teaching of surgery at St. Bartholomew's Hospital began in 1744, when Percivall Pott was elected assistant surgeon "in room of Joseph Webb, appointed surgeon and guide to Kingsland Hospital." Pott was then living in Watling Street, and he used to invite pupils to his house to teach them the more theoretical parts of surgery. The course was at first private, but it soon acquired so great a reputation that in 1765, the year in which he succeeded Nurse as senior surgeon, it was delivered publicly to all students at St. Bartholomew's Hospital. "These lectures," says his biographer and eulogist, "at first given with hesitation and reserve, afterwards became the most celebrated in London, and served to spread his views and methods of treatment throughout Europe."

Percivall Pott resigned the office of surgeon to St. Bartholomew's Hospital July 12th, 1787, after having served the charity, as he used to say, man and boy for half a century. On July 15th, 1787, Abernethy was elected after a contest to succeed to the vacant office of assistant surgeon. Abernethy was a born teacher, but like many of his successors in the hospital his natural ability was still further sharpened by the necessity of maintaining himself during the long and unremunerative interval which almost necessarily occurs in the life of every hospital surgeon who aspires to the highest position in his profession. Surgical teaching in its modern sense began at St. Bartholomew's Hospital at the advent of Abernethy. His position differed greatly from that occupied by Pott. When Pott began to teach he had no models to follow. The formal lectures at the Barber-Surgeons' Company and at the College of Physicians still existed, but they were almost effete. Abernethy, on the other hand, could not only follow the lines laid down by Pott, but he could see the results of really good teaching at the Hunterian or Great Windmill Street School of Medicine, where William Hunter, assisted by the best teachers in London, had for many years given a very complete course of medical education. It was not, therefore, so hard for Abernethy to make a beginning as it had been for Pott, yet it was hard enough. The rank and file of the profession at this time began to desire education. They were so thoroughly dissatisfied with the management of the profession as it was ordered by the

Corporation of Surgeons that when an opportunity occurred they took advantage of it to overthrow the Surgeons' Company. Indeed, so complete was the overthrow, and so determined was the opposition to the establishment of any corporate body upon the same lines, that it was only with the greatest difficulty that the present College of Surgeons was brought into existence.

Abernethy (1764—1831), like Pott, lectured outside the hospital, for as yet there was no medical school. His lectures were given in Bartholomew Close, and at first they were devoted to anatomy. In a short time physiology, pathology, and surgery were added to his syllabus, and in 1791 he ventured to introduce into his course some prefatory remarks upon physiological chemistry. His lectures lasted for many years, and they soon became one of the surgical attractions of the metropolis, frequented alike by English and foreign students. Their value was early recognised by the governors of the hospital, who gave orders that a lecture theatre should be built within its walls, and in October, 1791, the lectures were given in the new theatre, and the medical school came into existence.

We have no contemporary record of Abernethy's lectures for some years after he had commenced to deliver them, and it is not until (Sir) Robert Christison became a student at St. Bartholomew's Hospital that we are able to obtain a graphic record of his manners and habits from an authentic source. Sir Robert in his autobiography, written late in life, gives an interesting account of the state of surgical teaching in 1820 at St. Bartholomew's Hospital.

Starting from Leith in May, 1820, Christison reached London after a journey of eight days and nine nights at sea, and was welcomed by Cullen, who had engaged lodgings for him in Well Yard, Little Britain, then a students' quarter. Cullen had already been six months in London, and was acting as prosecutor to Abernethy, so that Christison was at once introduced to the great teacher. He describes him as a very little man, but in figure and countenance uncommonly handsome. "He had not strength enough to become a great operator, and the diagnosis and constitutional treatment of surgical diseases were his favourite field of practice, and in these branches of consulting practice he was at this time *facile princeps* among London surgeons. He was an early cultivator of what is now aptly called 'conservative surgery,' but I do not remember that term as in use at the period in question, and the surgical tendency certainly was to fly too precipitately to the knife and saw. That never was Abernethy's fault. He was a good operator when driven to operate, but he disliked it. Cullen, who was his anatomical assistant, told me he had seen him in his retiring room, after a severe operation, with the big tears in his eyes, lamenting the possible failure of what he had just been compelled to do by dire necessity and surgical rule."

It was a rule of the hospital at this time that surgical

students did not visit the medical wards unless duly entered as physicians' pupils also. But by use and wont the physicians' pupils were allowed to go freely into the surgical wards, and Christison often took advantage of the privilege. Thus he soon became intimate with the two house surgeons, and he notes it as a curious fact that although there were resident surgical assistants there were no similar medical officers. At this time, too, there were but three students in the medical wards, whilst the surgical pupils amounted to several hundreds.

Abernethy's lectures were given in an evening, like all the surgical lectures in London, whilst the anatomical lectures were given earlier in the day. His position was always easy and natural, sometimes a little too homely. In the anatomical lecture he always stood, and either leant against the wall, with his hands folded before him, or resting one hand on the table with the other perhaps in his pocket. In his surgical lecture he always sat, and very generally with one leg resting on the other. The expression of his countenance was in the highest degree clear, penetrative, and intellectual, and his long but not neglected powdered hair, which covered both ears, gave altogether a philosophic calmness to his whole expression that was particularly pleasing. Then came a sort of smile which mantled over the whole face, and lighted it up with something which we cannot define, but which seemed a compound of mirth, archness, and benevolence. He used neither manuscript nor notes in his lectures. They were delivered spontaneously, and Mr. Macilwain says of him that he was particularly happy in a kind of cosiness or friendliness of manner, which seemed to identify him with his audience; as if we were all about to investigate something interesting together, and not as if we were going to be "lectured at" at all. He spoke as if addressing each individual, and his voice seldom rose above what we may term the conversational either in pitch or tone. It was in general pleasing in quality, and enlivened by a sort of archness of expression. His loudest tone was never oppressive to those nearest to him, his most subdued was audible everywhere. The range of pitch was very limited; the expression of the eye and a slight modulation being the media by which he infused through the lecture an agreeable variety, or gave to particular sentiments the requisite expression. There was nothing like declamation. He had no offensive tricks, for he had acquired the most difficult of all arts for a lecturer to acquire, the appearance of perfect ease without the slightest presumption. The matter of his lectures was as good as their manner. Clothed in the simplest language, his lectures were a sort of running metaphor, which aided by a certain quaintness of manner made common things go very amusingly. Muscles which pursued the same course to a certain point were said to travel together socially, and then to "part company." Blood-vessels and nerves had certain habits in their mode of distribution contrasted in this way; arteries

were said to creep along the sides or between muscles. Nerves, on the contrary, were represented as penetrating their substance "without ceremony." Then he had always a ready sympathy with his audience. If a thing was difficult, he would anticipate the feelings of the audience. His lectures, too, were illustrated with a variety of anecdotes drawn from every source, all calculated to awaken the interest of the class in the subject under discussion, but all equally calculated to fix some important point in the memory of the audience. Mr. Macilwain thus sums up his lectures:—"His manner was so good that it is difficult to convey any idea of it. It was easy without being negligent, cheerful without being excited, humorous, often witty without being vulgar, expeditious without being in a bustle; and he usually took care that you should learn the thing before he gave a name to it, and understand it before he expatiated on the beauty or perfection of its adaptation to the end it seemed designed to serve."

Like all great men, Abernethy trained his subordinates to carry on his traditions, and enable his work to progress in spite of the limit which time puts to the endeavours of an individual. Chief amongst his subordinates was Edward Stanley (1793—1862), a nephew of Sir William Blizard, Abernethy's old master in anatomy, at the London Hospital. Stanley had been apprenticed to Thomas Ramsden, one of the surgeons at St. Bartholomew's Hospital; but when Ramsden died in 1810, Stanley was turned over to Abernethy to serve the remainder of his term. It soon appeared that he had a natural genius for the study of morbid anatomy. He was indefatigable in attending the deadhouse at a time when no physician, and hardly any of the surgeons, were known to set foot within its walls. Abernethy approved his zeal, and set him to work to enlarge the museum of specimens with which he was accustomed to illustrate various points in his anatomical and surgical lectures. Hitherto the Museum had been the private property of the teachers, first of Pott, then of Abernethy, and finally of Abernethy and Stanley jointly, but in 1829 Abernethy and Stanley offered their collection to the governors of the hospital for the use of the medical school, and engaged themselves not to make any private collection, but to add future specimens to the nucleus thus provided. The offer was accepted, a proper catalogue was ordered to be prepared and printed, and the museum began to assume the important position it has ever since held in the surgical teaching of the hospital.

Abernethy was at first his own demonstrator of anatomy, but Stanley soon came to his help, and relieved him of the drudgery of this office, and he in turn gave place to Skey, and then to Wormald. During the later years of Abernethy's life Stanley acted as joint lecturer, and when Abernethy ceased to lecture in 1828, Stanley assumed the whole duty of the office.

It would be invidious, and not altogether profitable, to

compare Abernethy with his great contemporary, Sir Astley Cooper, or with his remarkable pupil, Sir William Lawrence. Yet to the school of St. Bartholomew's Hospital Abernethy bore much the same relation as Astley Cooper bore to that of Guy's Hospital. He made it, brought it to maturity, and left upon it the stamp of his own individuality which has continued to the present day. Abernethy had no real love for anatomy. He was essentially a physiologist, and had he lived at the present day he would in all probability have been a pathologist. Like his successors, Paget and Savory, he dealt rather with the principles of surgery than with operative details. His lectures, like theirs, were models for the instruction of students; for out of generalities an intelligent pupil could afterwards formulate for himself the rule of practice in individual cases. The accidents of his position were unfavorable to the highest development of his intellectual powers; for if his period of bondage in the out-patient room could have been shortened, there is no doubt that his mental energy would have found an outlet in producing something of more lasting value than anything to which it gave rise. Surely John Hunter was wiser in his generation, when at forty he refused any longer to teach anatomy, and immediately began to publish those observations which have rendered his name immortal.

Eucaine as a Local Anæsthetic when used Hypodermically.

By F. C. WALLIS, M.B., F.R.C.S.,
Assistant Surgeon, Charing Cross Hospital; Surgeon to
the Metropolitan Hospital.

IN the *British Medical Journal* of January 16th, 1897, there is an interesting article on the use of eucaine as a local anæsthetic in the surgery of the throat, nose, and ear, by Dr. Horne and Mr. Yearsley, but there is no mention of its effect when used hypodermically, except in two cases by Dr. A. L. Fuller. I have used eucaine in this latter way for some months past, very frequently at St. Mark's, and also to a less extent at Charing Cross Hospital, and I propose recording here the general results of my experience of this drug. I may start by saying they are most satisfactory. The following points seem to be those which are of practical importance.

1. The strength of the solution.
2. The preparation of the solution and duration of its efficacy.
3. The amount injected.
4. The method of injection.
5. The extent of operation possible.
6. The after effects.

1. *The strength of the solution.*—I have used only one strength since I first began to use the drug, and that is a solution of 4 per cent. I have never seen any signs of toxic effects even when a considerable amount has been used—except in one doubtful case which I shall mention later. This percentage is quite strong enough to produce absolute local anæsthesia for any small operation.

2. *The preparation of the solution and duration of its efficiency.*—Eucaine is soluble to a limited extent and with great difficulty in cold water. It is quite soluble in hot or boiling water, and, as has been pointed out in the paper alluded to above, the drug can be sterilised by boiling without any alteration in its composition or effect. The solution thus prepared will be effective for a week, but after the third day it is as well to prepare a fresh solution, as it has not such a decided anæsthetic effect after this lapse of time.

3. *The amount injected.*—This will, of course, depend upon the extent of the operation. I have, in a large ischio-rectal abscess, injected as much as $3\frac{1}{2}$ to 4 drachms subcutaneously without any ill effects at all. The average amount required for a small operation is from 1 to $1\frac{1}{2}$ drachms of the 4 per cent. solution. But one of the great boons this drug possesses is that the operator need not be at all nervous about using sufficient, and if the desired anæsthetic effect is not produced by 1 drachm, the second or third can be used with every confidence as to the safety of it.

4. *The method of injection.*—The syringe should be one of those which has the needle to screw on the nozzle, to which a washer is attached; such are supplied by Parke, Davies, and Co., and others. This is a matter of importance, because if the needle is simply fixed on a smooth nozzle, it will be found in endermic injections that the fluid comes out where there is least resistance, namely, between the needle and the nozzle, especially when the tissues are inflamed, brawny, or cicatricial. The syringe and needle should be of such a kind that all parts of it can be thoroughly cleaned, and either sterilised or rendered aseptic by other methods. At St. Mark's the needles and syringe are placed in a 5 per cent. solution of carbolic acid, about an hour before the out-patient work is begun, and kept there when not in use the whole afternoon. The necessity for this will be obvious. The method which I pursue in the injection of the fluid is as follows:

The patient is shown the needle and told that he will feel the first prick of it and nothing else (this is nearly, but not quite always true). If the patient is not aware of what is happening, and feels the prick of the needle, he is almost sure to jump away, and the process has to be repeated.

The first injection of about 10 minims is made into the epidermis; after three or four seconds the needle is pushed onwards into the subcutaneous tissue, and in the line of the

proposed incision. If more than one syringe is required the needle is withdrawn, filled and thrust in again about half an inch in front of the last puncture, thus ensuring an anæsthetic area for the puncture, and in nearly every case this is painless after the first prick. When sufficient has been injected for the length of the incision, the knife may be used *immediately*. In the greater number of cases the time occupied between the first prick of the needle and the incision is not more than *one minute*; there is no doubt about this, and it is quite remarkable how complete and rapid the anæsthesia is.

When eucaine is injected endermically or into tense or inflamed tissues, the first injection causes pain beyond the prick of the needle for a second or two. This is due to the *distension of the tissues by the fluid*. In these cases the first injection should not consist of more than 5 or 6 minims.

5. *The extent of operation possible.*—I do not think it possible to say yet how much one may do in certain cases. If the operation is of some length, it is always advisable to have the patient prepared for a general anæsthetic, and to have an anæsthetist present, as patients sometimes suddenly lose all nerve control, and then it is hopeless trying to do anything with eucaine.

Perhaps the best plan will be to enumerate the cases in which I have used the drug.

Removal of tumours:

Lipoma	...	...	...	2
Dermoids	...	...	...	2
Sero-cystic of breast	...	...	...	1
Enlarged bursa patelle	...	...	...	1
Sebaceous cysts of face	...	...	...	2
Sarcoma of ulnar nerve	...	...	...	1

Rectal operations:

Ischio-rectal abscesses	...	...	...	24
Fissures of anus	...	...	...	13
Perinæal piles	...	...	...	7
Thrombotic external piles	...	...	...	2

(I have used it for a large number of these, I do not know how many.)

Abdominal operations:

Umbilical hernia (with suppurating sac)	...	...	...	1
Closure of colotomy wound	...	...	...	1

I have frequently used it in the out-patient room for abscesses, and have found it most useful, both in hospital and private work, for removing the redundant skin which is sometimes left after operations for hæmorrhoids.

The last two operations in the list are the most interesting. The umbilical hernia took about thirty-five minutes. The eucaine was first injected into a sinus, and after that had taken effect it was injected into various places on the skin. Two large flaps of skin were removed; the omentum

was then scraped and ligatured, and the skin brought together by silkworm-gut sutures. The only pain felt was when my assistant stuck a pin into the patient, when he—the patient—volunteered the statement that that was the only pain he had felt.

The closure of the colotomy wound took fifty-nine minutes. The effects of the first lot of eucaine lasted fifty-four minutes, and the last amount was used for putting in the sutures for the skin.

The patient was quite quiet after the first ten minutes, before which he would persist in laughing, which made operating somewhat difficult; but after he had been spoken to about this he was perfectly quiet, with gentle, regular abdominal movement, and there was no after vomiting which so often takes place with general anæsthesia.

In this last case I used from first to last quite six drachms of the 4 per cent. solution without any kind of toxic effects whatever.

This patient was prepared for general anæsthesia in accordance with the rule laid down above. In this case, and in the case of the umbilical hernia, the comfortable condition of the patients during the operation was remarkable, and the effect of the drug in every way was most satisfactory.

6. *The after effects.*—I have not any to record. There was one doubtful case—a rectal one. The patient was a young man with an ischio-rectal abscess, which had been allowed to burst. I injected between twenty and thirty minims of the 4 per cent. solution and enlarged the opening. When he got up from the table the patient became very white, and looked faint, perspiring profusely; I thought it might be due to the drug, except that such a small amount had been used. On inquiry, I found that he was liable to turn faint in this way, and had often done so. This is the only case.

The results recorded above prove, one may fairly say, that eucaine used hypodermically as a local anæsthetic is most effective, and without toxic effects even when used in comparatively large quantities. The rapidity with which it produces anæsthesia is also a point in its favour.

With regard to the duration of the effect, I do not think that the case of the closure of the colotomy wound quoted above should be taken as an example. The greater part of the time was spent in sewing and over-sewing the bowel, and, as one knows, this can be handled freely without causing pain even when no anæsthetic has been used. From twenty to twenty-five minutes is about as long as one can count upon the anæsthesia lasting.

Eucaine is cheaper than cocaine, and considering the drug all round, it has a great deal to recommend it. The one thing against it is its family name:

"Eucaine is the methylester of benzoyl-n-methyl-tetra-methyl-gamma-oxy-piperidine-carboxylic acid!"*

* *British Medical Journal*, January 16th, 1897.

Concerning the Ship's Surgeon and some Tropical Diseases.

By W. H. MAIDLOW, M.D. Dunelm., F.R.C.S.,
Late Surgeon P. and O. S.S. *Caledonia*.

(Continued from p. 135.)

PART III.—TROPICAL DISEASES.

BERI-BERI (Kakké of Japan) is a very interesting peripheral neuritis, probably due to a specific organism endemic in India, Ceylon, and Australia. Its name is probably derived from the Arabian "bhur," dyspnoea, and "bhari," maritime, according to Carter, in allusion to the frequent mode of death in this disease. Of its symptoms pages might be written, but it must be seen to be realised; and it can be always seen at the Dock Hospital, where a most courteous house surgeon will show them, or Dr. Manson would make an arrangement to let men go round with him. It is a most important disease for an intending ship's surgeon to realise, so indefinite and insidious its onset, yet withal, like the puzzle, so clear when it has been pointed out, that one wonders at one's blindness. It is the disease *par excellence* that is mistaken for malingering. As Dr. Manson eloquently says (in his article "Beriberi," *Tropical Disease**), "malingering is only too common in native crews: . . . it will be well, however, to pause before pronouncing such a diagnosis. Too often in such cases the possibility of beri-beri is overlooked, and the man who is pronounced a malingering to-day is found dead in his bunk to-morrow morning." The first case I saw which I put together to mean beri-beri subsequently, I sent to bed without a diagnosis. I found him dead twelve hours afterwards, probably from syncope. Beri-beri occurs in two forms, the *wet* and the *dry*: (1) the *wet* is an example of anasarca without usually albuminuria, with the addition of peripheral neuritic symptoms; (2) the *dry* has very slight oedema of the legs and thorax, there are calf pains, anæsthetic patches, girdle pains, absent knee-jerks, an irregular and dilated heart, and the gait is characteristic from the foot-drop,—in fact, it is a peripheral neuritis due to beri-beri, and diagnosed as thus due, because a Mussulman or Hindoo does not drink strong waters to any extent, there is no syphilitic sign or history, he has not had diphtheria, and there is nothing else to account for the condition. Death, however, is imminent from cardiac or diaphragmatic failure due to vagal involvement. Consequently, any native with an irregular pulse, absent knee-jerks, and calf pains must be put off duty at once. There are no ocular symptoms, but the condition may simulate locomotor ataxia. A poor man who says he feels weak and has pains in his legs, and cannot describe what he feels, who can only say he cannot work, in the hurry of the moment is easily accused of

* Edited by Davidson.

shamming; and the worst of it is the disease seems most prevalent in those arch shamblers, the Punjabis. During my "reign" in the "Caledonia" I had six cases, two of whom died, one from syncope and dysentery, another from pulmonary oedema; two were lost sight of in Dombay, and the fifth, also dysenteric, left in the hospital for five months with a grave anæmia, which I have just heard has been satisfactorily treated by a preparation of dry hæmoglobin. Nothing much can be done for treatment, but rest, tonics, and good sufficient food are very necessary. The stomach must on no account be loaded, or the heart will be affected by the easy dilatation of a paretic stomach.

Hepatic disorders need a word in passing, because not many years ago, as in England, but with probably much more reason, an obscure disease was "liver out of order." The predisposing causes to *organic* disease, hepatitis, may be considered the exciting of *functional* disorders; and those which are most obvious are (1) the effects of the high temperature, which seems at first to stimulate, then to diminish the secretion of bile; (2) the lessened pulmonary action throws increased work on the liver; (3) there is a distinct blood deterioration marked by anæmia, probably due to increased corpuscular destruction, which probably occurs in the liver; (4) over or wrongly eating and drinking, a cause now-a-days probably not so important as formerly, when there was not so good adaptations to climate, the meats and beers of England having now yielded to lighter foods, whilst whisky and soda may be considered the European drink, although Pilsener and Lager beer has its advocates; (5) dysenteric processes acting through the portal system must influence the liver to some extent for evil.

It is impossible to discuss all the forms of hepatitis, but the forms are best divided into (a) functional and (b) organic. The step from functional to organic disease is no great one; the "livery" subject may at any time show signs of acute hepatitis. But the old "Nabob's liver" and person are more talked of than seen, that rich relative of the romances, yellow-skinned, irritable, ever thinking of past glories. What one generally meets with is impaired digestion, with some or all of such symptoms as heartburn, flatulence, nausea, and sometimes vomiting, irregularity of the bowels, stools pale and offensive, coated tongue, a sallow rather than jaundiced skin, a tendency to sleep, and urine loaded with urates; there may be tenderness and fulness over the liver. The temper is often horrid. I can call to mind many such cases.

Treatment applied to the liver is more efficacious than to the rather clamorous stomach. The diet must be regulated to blandness and absorbability, and moderate exercise recommended. In acute attacks, which on board ship are caused often by a chill or the change of temperature (from a temperature of 90° F. in the Red Sea to 60° in the Mediterranean in less than seven days is a severe strain for

a vaso-motor system that has done its duty in India for years), a hot bath and blanketing do much good, which are to be followed up by a pill of podophyllin or rhubarb, with or without some calomel, according to the patient, and on the following day a large dose of magnesia or seidlitz powder. If after this the patient "hangs fire," a mixture of chloride of ammonia and gentian usually succeeds. When these people are found in England I am told the judicious use of a Turkish bath does good. In one case where there was much tenderness I kept a compress of nitro-hydrochloric acid (5)—Oj for twenty-four hours over the liver with success. Children also suffer much in the same way, and functional liver seems to cause their occasional epistaxis. When dietary causes have been excluded, a mercurial purge, followed by castor oil and a mild diaphoretic, with minute doses of ipecacuanha for twenty-four hours (if relief is not speedy) soon corrects this. Of course these cases are not so simple as may seem from this brief notice, yet the ordinary type is as stated. Of B, the *organic* condition, the following subdivisions seem to cover most cases. (1) Acute hepatitis due to the causes above mentioned, but excited by cold, malaria, dysentery, and alcoholism. This may become (2) chronic hepatitis, the symptoms of which are often difficult to distinguish from those merely of functional disorder. (3) Abscess of liver. This may arise in four ways: (a) from dysentery,—this is not so clearly proved as the books lead students to suppose; (b) from acute hepatitis not due to dysentery, probably the most usual cause; (c) from pyæmia not due to dysentery; (d) from gall-stones. Practically these so-called tropical abscesses may be divided into (a) the pyæmic due to dysentery or other septic conditions of the intestines or elsewhere; (b) the simple or ordinary, due to acute hepatitis from what ever cause arising, and as often as not, perhaps, there is no particular history of anything. (4) Another hepatic disease is the amyloid, and that so often missed, I believe, syphilitic disease. Many livers sent home from India get remarkably well from potass. iodide. This at least was my experience at Taunton, where a large number of troopers from Burmah came for treatment. Gall-stone is said to be rare in India by some, and denied by others. Two cases came under my observation, and I saw several in the hospitals.

The treatment for acute hepatitis must be energetic, the possibility of suppuration being remembered. In those cases where abscess is threatening, fever is irregular and hectic, with profuse nocturnal sweating, a dull pain in the right shoulder, and localised tenderness over the liver, of which the area feels full, and may be oedematous; there may be diarrhoea, urine is scanty and of high specific gravity, and there is probably nausea, vomiting, and a dirty furred tongue. In the presence of such symptoms, if exploration be not done, order rest, restricted diet, free purgation by mercury and salines, hot fomentations and leeches to liver, ammonia chloride, nitro-hydrochloric acid,

and ipecacuanha internally. This treatment seems to cut short the hepatitis very often, but no one hesitates to explore if relief is not speedy. Acute simple hepatitis is marked by a feeling of weight in the liver region, pain in the shoulder. The skin is of a faint yellow colour; there may or may not be fever, but the disease is often ushered in by a rigor. It is difficult to describe the symptoms well. Acute hepatitis is, in fact, one of the ordinary results of catching a chill in India, where the above-mentioned predisposing causes exist. Instead of acute nephritis (of which I have never seen a case in India, and they are said to be rare), or pneumonia, or bronchitis, the result is hepatitis, or a recrudescence or first attack of ague or dysentery. In all the above conditions of liver jaundice is not well marked as far as one can judge from a limited experience, and excluding gall-stones the functional forms give rise to it the most often, the pathology of which may be rather paradoxically called a catarrh; people often say, "You doctors always say everything is a catarrh."

Sunstroke from a pathological point of view had better be called *heat-stroke*, inasmuch as it seems the heat rays that cause the troubles, and exposure to non-solar heat, or at least not directly solar (for, of course, any heat on earth may be considered originally solar), causes many of the same symptoms, and thermal symptoms are most prominent in most cases. Nevertheless the actinic elements may play a part in the face of recent evidence of superficial and deep lesions caused by the X rays (*vide* Notes, "Clinical Journal," vol. 2, No. 1). Fayrer's seems, however, the best definition when he says, "Under sunstroke are included these pathological conditions and their concomitant symptoms, which are due to the effects of excessive solar or artificial heat generally, though not invariably to the former, which occur most frequently in tropical and sub-tropical climates, especially under peculiar atmospheric and meteorological conditions." In whatever form the result occurs the essential lesion seems vaso-motorial, whether the main symptoms be respiratory, cerebral, or circulatory. It explains best the shock, asphyxia, and the nervous symptoms, internal hæmorrhages, and the hyperpyrexia, as will be obvious if the chief types be considered. Meteorological conditions are also very important, the "relative moisture" especially so. The relative moisture point will almost invariably be found high when many cases occur. With low moisture percentage the temperature may be quite inadequate to cause the symptoms; and for the same reason, whatever that be, most deaths in the Turkish bath occur when the skin fails to act, and the hot temperature of the vapour-bath has a temperature able to be borne much less than that of the dry and Turkish bath. Most cases of sunstroke on ships occur in the Red Sea, where my wet bulb thermometer (Daniel's) rarely registered less than 85°—90° of humidity according to Glaisher's Tables. Due to solar exposure, the occipital and temporal regions seem the

most vulnerable parts, and sunstroke is especially liable to occur whilst bathing, when again the skin is not acting; due to heat and at sea, in the engine-room, or exposure on the deck. Overwork and exhaustion from any cause are the great predispositions. The following are the chief varieties usually seen:—1. Syncope and shock, which seem merely matters of degree. Thus W. H.—, steward, in the Red Sea, with temperature in shade 86°, degree of humidity 89 per cent., said he felt giddy, suddenly became unconscious, and remained pulseless, cold, and pale for nearly five minutes, temperature subnormal, remained giddy and weak for three days afterwards. This type requires cardiac stimulants, fomentations, and rubbing externally. I have not met a case of this kind where death was imminent, but they are the cases where a man falls as if struck, and post mortem is found a dilated heart, and perhaps a cerebral hæmorrhage. If recovery occurs—and the same condition may result in the syncopal variety—the temperature may run up to a high degree; there may be paralysis somewhere, and persistent headache or a mental disorder, perhaps having a physical basis of meningitis, and pleurisy, with or without effusion, and pneumonia may also occur, all perhaps due to internal congestions. The previous history—such as of injury, alcoholism, debility—plays a great part in determining both the onset and the results.

Perhaps the following is such a case, the result of injury. A lieutenant was found two days after leaving port who had not the slightest idea how he had travelled from Central India, and how he had got aboard; everything was to his disadvantage to have done so. He gave a history of unconsciousness from injury three months previously. In the severer cases sometimes bleeding to relieve the over-distended right heart does good, and purgation by calomel or other drastic purge, recumbency, and quietness being requisite also in all cases. But usually most reliance is placed upon cold douching to reduce the temperature, which soon runs up in the shock cases, and to arouse by reflex action. As a matter of fact, however, it is difficult to describe the treatment dogmatically, because each variety is often so badly marked, the shock or syncopal becomes the second variety, viz. thermal, and all of them may have the same sequelæ. They are, in fact, but clinical varieties of the same disorder. In the pure syncopal and shock cases it seems to me that the treatment should be directed to the heart; bleeding must not lightly be undertaken at least until diffusible stimulants (by mouth or rectum), mustard poultices to body and legs, &c., have had a fair trial. For the sequelæ, the ordinary treatment for the condition present. Sunstroke is an undoubted exciting cause of many a case of insanity.

2. The *thermal* variety is very well marked. It may be described as acute or subacute. The acute begins in two ways: (1) where the patient becomes suddenly comatose (heat apoplexy), and with reaction hyperpyrexia occurs; or

(2) where the onset is gradual. An example of (2) was Col. Y—, the notes of which I have from my successor, Dr. Felvis, and as the symptoms and treatment are typical I give the case in brief outline.

July 30th.—In Red Sea, felt ill, temperature 102.5°, sod. salicylat. (to relieve joint pains) grs. xv statim.

July 31st.—Temperature in morning 102°, evening 105.2°, at 9 p.m. 106.2°. Given quinine and antipyrin, aa gr. xx; 10 p.m. delirious, incontinence of urine and fæces, placed in an ice-bath, temperature 60°, and cold douching to head; 11 p.m., temperature in rectum 109°; 11.30 p.m., 109.2°, body rubbed with ice; at 12.45 temperature of bath 40°. Temperature of patient had gradually fallen to 104.5°; blanketed, whisky, &c.

August 2nd.—Improvement maintained, calomel gr. v given. A slight febrile relapse occurred subsequently, but the patient ultimately made a good recovery. The temperature of the air had not been particularly high, probably between 80° and 90° F., but obviously, apart from a consideration of other meteorological states, no one can say what the "sunstroke temperature" is.

Sub-variety (2) is often very obscure. Some one on a certain day is exposed to the sun or other heat, a day or two afterwards he feels ill; there may be a rigor or some gastro-hepatic intestinal symptoms, and a continued or sub-remittent fever lasting ten days or more. This is the ardent, thermic, or sun fever. It requires diagnosis from malaria or typhoid; e.g. I. R.—, æt. 7, had never been out of England, sat on deck with uncovered head; in evening had a rigor, and for three days a rigor at 5 p.m., with intervals of moderate pyrexia, some splenic enlargement, and jaundice and headache. She got quite well with minute doses of calomel and phenacetin, gr. x daily. G. K.—, æt. 17, was disappointed in love, and walked about in Egypt with a small cap on his head. Next day diarrhoea, tender abdomen without distension, thickly coated tongue, and for four weeks a subremittent temperature between 100° and 101°. On shore was seen by a doctor, who diagnosed typhoid, which the subsequent events entirely disproved.

Prophylactic treatment is of the first importance; prevention from fatigue, regular habits, temperance, good ventilation, light food, careful protection of the head by a whitened topee of pith, in which lightness, reflection of rays, and ventilation are assured; tinted glasses, pads to spine are sometimes necessary. Clothes of a light white woollen texture are best. Exercise and work out of doors must be done in the cool hours by morning or evening; in the afternoon comes the siesta, that sixth hour when awaried lies under the grateful breeze of the punkah the "son of the morning." No one if possible works then. The "son of the morning" is the traveller. The Biblical story of the Shunammite widow's son (2 Kings iv. 18), who had gone to find his father with the reapers, who cried

"My head! my head!" and who was taken home and presently appeared dead, reminds me of other methods to restore the unconscious, for Elisha the prophet appears to have given some errhine—the boy "sneezed seven times"—and done artificial respiration by direct inflation; "he lay upon the child, put mouth to mouth," &c.

My knowledge of leprosy was obtained in a visit to the great Leper Hospital at Matunga. I gleaned the following facts about it:—(1) Most "leprosy" of Leviticus is not leprosy at all, the mistake having arisen doubly from having translated the Hebrew word into *lepra*, and confusing the Greek *lepra* (any scaly eruption, e.g. psoriasis) with leprosy as we know of it in England, and from confusing elephantiasis arabum (filariasis) with elephantiasis græcorum (true leprosy). (2) Much has been called leprosy that is really leucoderma or vitiligo (the alphas of Celsus). (3) The leprosy of Leviticus and elsewhere, except in the possible case of Uziah (of whom nothing else is told but that he was a leper), was probably leucoderma or psoriasis ("as white as snow"), syphilis, eczema, elephantiasis arabum, tinea, impetigo, or scabies (where the house required disinfection) (Lev. xvi. 38), &c. (3) There is not the slightest relation between leucoderma and leprosy. (4) The early changes in colour may be a dull paleness, increased pigmentation, or redness from hyperæmia. (5) Early nerve leprosy and syringomyelia and Morvan's disease may be much alike. (6) Pure nerve leprosy is rare, the usual form is the combination with tubercular or nodose. (7) In the tubercular or nodose form the ulceration is often determined by the state of the general health. (8) The resulting cicatrices look on superficial view like leucoderma. (9) The eyeball often sloughs, the pre-montory symptom being a sort of pannus. (10) Orchitis is quite rare, so direct infection of a mother by this means is not likely. (11) Various arthritides are common, and are relieved by salicylates, and they may be considered due to trophic nerve influence analogous to Charcot's disease, and throw a possible light on the pathology of other arthritides which the lesions resemble. (12) Syphilis, tuberculosis, and elephantiasis arabum form complications that should be remembered. (13) At Matunga marriage between the inmates is encouraged, but they are usually not fertile. In four years out of seventy matches four children were born, of whom one died. One lived till youth and died free from leprosy, two became leprosy. (14) Infection rarely results from contagion, heredity gives a predisposition only. (15) Those who use chamoogra oil externally or internally do best. (16) Exacerbations of fever occur, and seem to be due to a lymphangitis. The mental state of the patients now *not* compulsorily isolated is by no means one of unhappiness or gloom; they have their tailor, wise man, priest, and carpenter, the little colony of lepers live day by day working and playing, marrying, and contemplating nature, and shrugging their shoulders at Kismet. One meets with the

greatest courtesy from the Parsee native doctor there, and the visit is well worth while. In signing one's name one has to make some remark. "Would I were a leper here!" is some one's; certainly a worse fate awaits many of us.

Malta fever deserves notice because it may turn up in a large practice which includes old residents abroad, in whom, just as in malaria or dysentery, some exciting cause, such as cold, debility or ill-health, the partially extinguished flame will rekindle. The people who may thus suffer are the army men and their wives or children who have been quartered at some of the Mediterranean ports where the disease is endemic, although each locality may have its own name for it; e.g. at Gibraltar it is *rock fever*, at Malta, *Malta fever*, at other ports *Mediterranean fever*. This local naming is very common indeed abroad; just as each little town, wood, highway, amongst Hindoos has its own little but identical deity, so we recognise under the name Oriental sore, the Delhi boil, the hantou loil or sore of Aleppo, Bagdad, or Mooltan, but it is doubtful whether it be quite correct to say jungle fever. Marsh fever and the many other names which are supposed to be merely local conditions of the same thing are really identical with simple malarial fever. The tendency to progress in medicine is to analyse disease; and just as typhoid was separated from typhus, so *Malta fever* is one of those triumphs of analysis from the group of simple "fever," whilst the opposite process of synthesis is suspicious of retrogradation, to give an example of which I need only mention gout, rheumatism, and osteo arthritic, for which some find a similar pathology. At Gibraltar I learnt that twenty years ago most diseases were grouped under the word "fever," now there are recognised rock fever, typhoid, ague, remittent fever, and a class of diseases requiring investigation, viz. bilious remittent, gastric and slow continued. Much must be expected from bacteriology and the microscope, if history repeats itself. *Malta fever* itself has been differentiated both from malarial and typhoid fever; it is, however, even now by some, from its likeness to both these diseases, called typho malaria. Three things, however, seem certain: (1) that in no case amongst the 3 per cent. mortality have intestinal ulcers been found, and (2) in pure cases hæmatozoa are not found; (3) Bruce has found micro-organisms—*Micrococcus melitensis*—which are not found in either disease, and which I believe cause an analogous fever in certain apes; but as far as I can understand an article in the "British Medical Journal" (May 15th, 1897), the serum diagnosis from typhoid is not very easy.

I have had experience of five cases—one a child, in private practice, who had left Malta (Valetta, where the disease is most frequent) three months previously, and four who were soldiers sent home on sick leave, two from Malta, one each from Salonika and Gibraltar. The ordinary moderate attack may be described somewhat as follows:—An onset like typhoid, usually insidious, a vague illness with anorexia, inability to work well occasional

shivering and frontal headache. Then at the end of a week the patient comes for relief, and examined we find him with a temperature varying from 101° to 103° , perhaps some signs of basic congestion, an enlarged and tender spleen, and occasionally a tympanitic abdomen, all of which signs point to typhoid, and when no spots appear the diagnosis is still not altered. About the thirteenth day the patient is anæmic and slightly icteric; there is still constipation, the tongue is covered with a white fur, and there have been profuse perspirations with sudamina. There is no special discomfort. The temperature keeps of a remittent type, between 101° and 103° , and gradually falls to normal during the third or fourth week. There may or may not be rigors. During this third period of fall of temperature the so-called rheumatism occurs, marked by synovitis of one or more joints, indistinguishable indeed from ordinary rheumatism; and after this there may be, for perhaps some months, waves of gradual rises and falls of temperature up to 103° or 105° , lasting eight to ten days, with fresh rheumatic attacks which are diagnostic, and are especially helpful when they occur, as they may, rather earlier. During this period the patient's anæmia increases, he is languid, despondent, and much emaciated. Death is rare, and recovery is fairly rapid, but certain, when the pernicious climate is left. Three of the cases I had charge of were in the third stage, but one, unless I had not been convinced by a very experienced naval surgeon, I should have considered typhoid. Diagnosis from typhoid rests on the absence of spots, duration and character of the fever, the rheumatic symptoms, and the sweating, and, of course, where possible, on bacteriological observations. The poison seems to be carried in the drinking-water, and to live best in insanitary conditions; just as typhoid fever, it is worst in the summer months, and attacks adults especially. It is not contagious. As regards treatment, prophylaxis by removal of the patient and improvement of sanitation is obvious. Little can be done by drugs: quinine seems useless in pure cases; salicylate of soda, although said to be very useful; but iron, which would seem indicated for the anæmia, must be given cautiously, for, as in rheumatism, it is very apt to cause fresh synovitis. On the whole mild tonics are best. For the fever tepid sponging is probably better than antipyretic drugs. The diet is very important; during the uncertain diagnosis fluids alone are of course admissible, but as soon as conditions admit as much sustaining food as possible must be given, cautiously, however, for too much will inevitably produce fresh fever and synovitis. The constipation must be treated by the usual methods.

The sad news of the death of G. H. Forman in the wreck of the s.s. "Aden" has been but too certainly confirmed. Already I know he had made himself beloved by

both officers and crew (the best tribute possible), by his geniality, kindness, and care. Doubtless he did his duty to the last, as we shall soon hear, gallantly and well. He will leave a blank in the affections of many men.

(To be continued.)

Case of Diabetes Mellitus with Coma.

THE patient, Henry B., æt. 48, was readmitted to Luke Ward under Dr. Gee on February 2nd, 1897, complaining of weakness, giddiness, wasting, and delirium. *History of present condition.*—Was in Luke from April 14th to July 18th, 1896, when he was found to be suffering from morbus cordis (aortic regurgitation) and anæmia (? pernicious). Before going out he complained of numbness round the stomach, and had some conjunctivitis. He attended as an out-patient and remained fairly well until December 29th, when the note was "exophthalmos marked especially in right eye, cramps in calves for last three weeks, knee-jerks present but sluggish." On January 15th he had been "very tottering" on his legs for the last fourteen days. He had been in bed for four days, and has been very drowsy. For the last two days he has "nauseated" at night, has no appetite, but has not vomited. He passes a great deal of water. Bowels have not been opened for "three weeks." His speech has been getting thick for four or five days, and he sees spots before his eyes.

Past history and family history not obtained.

Present condition.—Patient on admission looked much thinner than when last in the hospital. His eyes are much more prominent, due probably to absorption of orbital fat. Eyes reset normally. Tongue clean and very dry. Breath has a sickly sweet acetone odour. Speech is thick and hard to understand. He is very drowsy and is roused with difficulty, falling to sleep again at once. Neck thin, some pigmentation; has taken arsenic for some time.

Chest poorly covered, moves well. Lungs, nil abnormal found. Respiration 16, deep and slow.

Heart: cardiac dullness not made out. Apex-beat in sixth space in nipple line. Impulse extremely feeble. Sounds weak but fairly clear. No murmur made out. Pulse 76, soft, small, artery thickened.

Abdomen flaccid, much pigmented, especially in lower part. Many scybala felt. Legs wasted. Knee-jerks lost. Arms normal, a slight papular rash on forearms. Urine 1028, acid, no albumen, much sugar. Is passing his urine in bed. Has taken liq. arsenicis mijj ter die for many months. Enemata given in the surgery brought away a few scybala.

February 3rd.—Slept soundly all night, and tends to sleep all day, though he can be roused.

Blood examination.—Red corpuscles, 4,480,000; white, 24,000; hæmoglobin, 42 per cent.

On June 8th, 1896, when he was in Luke the blood examination was—red corpuscles, 1,501,000; white, 8,000; hæmoglobin, 28 per cent.

February 4th.—Could not be roused during the night or this morning. Died comatose at 11.50 p.m.

Temperature since admission has been subnormal.

When admitted he was given calomel grs. x statim and acidi lactici dil. ʒss. aq. ad ʒj. quartis horis.

On February 4th, 12.30 a.m., liq. strychninae mijj statim.

Post-mortem note.—External appearance pale and emaciated. Head, no examination.

Chest: lungs, old adhesions at both apices, both emphysematous and oedematous. Heart, 11 oz. Adherent pericardium, no fluid; adhesions firm and old. Right side a little dilated. Mitral valve thickened and shrunken. Chordæ tendinæ thickened and shortened.

On the auricular surfaces of the valves were some isolated vegetations, not forming a continuous row. Aorta and vessels showed some atheroma.

Abdomen: peritoneum dry. Some old adhesions among the coils of the small intestine. No obstruction. Stomach and intestines natural. All the tissues in the abdomen were very dry. Large intestine full of hard feces. Liver, 5 oz. Did not give "blue colour" reaction with potassium ferrocyanide and HCl. Surface covered with old adhesions.

Spleen shrunken, old adhesions to surrounding structures; capsule wrinkled.

Pancreas looks atrophied, not unusually hard.

Abdominal lymphatics and supra-renal bodies natural.

Kidneys, 5 oz. each; pale, capsule adherent.

Bladder somewhat dilated. Vermiform appendix $5\frac{1}{2}$ inches long, hanging into pelvis.

Remarks.—This case presents several points of interest. In the first place it demonstrates the difficulty often attending the diagnosis of cardiac lesions. The adherent pericardium was not suspected; its diagnosis was, of course, out of the question.

After careful examination and much discussion the valvular lesion was decided to be aortic incompetence; *post mortem*, mitral incompetence was the most prominent lesion.

The condition of the blood during the patient's first stay in the hospital was such that Dr. Kanthack reported in favour of pernicious anæmia. On readmission the blood presented the features of simple anæmia. That cases of so-called grave or pernicious anæmia frequently recover, temporarily at least, is not sufficiently insisted upon in the text-books. From the same ward last year a patient with all the signs of grave anæmia, on examination of the blood, was after the futile exhibition of iron, arsenic, oxygen, bone marrow, &c., allowed to go home unbenefited. A few days ago he returned in perfect health.

With regard to the diabetes, two points are noticeable. The duration was short, apparently less than seven months; no sugar was detected in the urine during the patient's first stay in the hospital. The type of coma is of interest, beginning as the drunken form. When admitted, the patient's gait was staggering, and his speech thick and unintelligible, so much so that it was suggested that he had been drinking. On approaching him, however, the sickly sweetness of his breath revealed the true cause. He gradually became more somnolent until his death.

The *post-mortem* appearances were such as are usually found in such cases. It is difficult to explain why peritoneal adhesions should so frequently occur.

Surgical Notes.

Some cases recently culled from the wards of distension of the gall bladder with gall stones, with a renal case simulating the above, reported by permission of the Surgeons in charge.

1. A case of distension of the gall bladder with gall stones, which was sent up to the hospital as a case of moveable kidney. E. R., a woman æt. 43, was admitted into Stanley Ward under the care of Mr. Bowlby on March 24th, 1897.

History of present condition.—On December 29th, 1896, the patient was suddenly seized with an attack of pain in the region of the navel, accompanied by vomiting of yellow matter, the attack lasting three days.

On January 2nd, 1897, she was again seized with a severe attack of pain and vomiting, lasting ten hours, the vomited matter being greenish in colour.

She has had no further attacks of vomiting, but almost constant pain, especially after walking, usually localised to the right side of the abdomen, but shifting about, and worse when under the ribs. She has never had jaundice, or passed blood or gravel in her urine.

Present condition.—On examination there is in the right hypochondriac region a well-defined, smooth, hard swelling, regular in outline, which on pressure slips up under the liver and seems to be continuous with the lower border of the liver. It has the ordinary characters of an enlarged gall-bladder, being about three inches in diameter. The tumour is painful to the touch, and the pain is referred to the right hypochondriac region and not to the loin, shoots across to the umbilicus, and upwards but not downwards. Urine 1024, acid, slight trace of albumen.

April 2nd.—Mr. Bowlby cut down upon the gall-bladder, which was found greatly distended with fluid, and bound down to the under surface of the liver by adhesions. Ten ounces of clear yellow fluid were drawn off with the aspirator and five gall-stones extracted, varying in size from the aspirator and a Brazil nut, the largest of which was found impacted in the mouth of the duct. The gall-bladder was then fixed to the peritoneum, and the edges of the opening in the gall-bladder stitched to the parietes, and a drainage-tube inserted.

Patient made a good recovery, and left the hospital on May 7th. The tube had been taken out, but there was still a slight discharge of bile through the wound.

2. A case of distension of the gall-bladder, which on consultation was thought to be renal. C. S., a woman æt. 59, was admitted into President Ward on April 3rd, 1897, under Mr. Willett's care, suffering from pain and swelling in the right side of the abdomen.

History of present condition.—In June, 1895, patient first noticed a lump in the abdomen about the size of a small egg, her attention being drawn to it owing to a sharp pain in the side. She has never had jaundice, renal or biliary colic. The lump has got gradually larger, and causes more pain, especially when she is moving about. She has had nausea before meals for the last twelve weeks.

Present condition.—Nearly in the situation of the right kidney there is a moveable swelling, rounded and slightly elastic, moving slightly on respiration, with well-defined edges, and about the size of a foetal head. The lower boundary is well above the pelvis, the upper border below the ribs, it extends to the middle line of the abdomen, and is dull on percussion. Urine 1020, acid. No albumen, sugar, or blood.

April 10th.—A consultation was held, and the general opinion was in favour of the tumour being renal, and an operation was advised.

April 20th.—Mr. Willett cut down on the tumour from the front, and found it to be the gall-bladder much enlarged and with thickened walls. Ten ounces of thick muddy-coloured fluid were drawn off with an aspirator. The gall-bladder was washed out, and a calculus the size of a walnut, with a nodulated mulberry-like surface, removed. Another calculus was found impacted in the cystic duct, which was broken and removed, and was exactly similar to the other except for the presence of two facets. The gall-bladder was stitched to the peritoneum, the margin of the wound stitched to the parietes, and a glass drainage-tube inserted.

May 17th.—Patient has made a good recovery, and has now no pain. There is now no discharge, and the wound has almost healed.

3. A. S., a married woman æt. 31, was admitted into Paget Ward under the care of Mr. Lockwood on April 20th, 1897.

History of present condition.—About the end of February the patient first began to have sudden sharp attacks of pain in the abdomen, in the region of the gall-bladder (and nowhere else). She had no vomiting, but felt faint during the attacks.

Present condition.—In the lower part of the right hypochondrium, in the region of the gall-bladder, a hard irregular and nodular lump can be felt, about the size of a tennis ball, which is freely moveable, as is also the abdominal wall over it. Its lower border is on a level with the umbilicus, and it can scarcely be felt in the loin. It is not adherent to the surrounding parts; it moves with respiration, and is rather painful if pressed on. Patient has never had jaundice, or renal or biliary colic. Urine 1020, acid. No albumen, blood, or sugar.

May 3rd.—Mr. Lockwood opened the abdomen, and found the gall-bladder deep down and adherent to the under surface of the liver. The gall-bladder, which was distended, was opened and washed out, and a large stone extracted with some difficulty from the cystic duct. A glass drainage-tube was inserted, and a purse-string suture drawn round to avoid escape of bile between the tube and wound, and the gall-bladder secured to the abdominal walls. The gall-stone on examination was very light, about two and a half inches long and one inch broad, and had no facets, dark green in colour with yellow specks.

May 9th.—Made a satisfactory recovery. Patient has only slight pain, and very little discharge; the tube has been removed.

4. A case of hydro-nephrosis simulating the above cases of distension of the gall-bladder. H. C., a woman æt. 45, was admitted on May 5th, 1897, to Paget Ward, under the care of Mr. Butlin, suffering from pain in her right side.

History of present condition.—About two and a half years ago she was suddenly seized with intense pain in her right side, which was followed by vomiting, and she then noticed a swelling in her right side in the neighbourhood of the right kidney. The pain has been just below the costal arch, exactly in the region of the gall-bladder; it has always been most severe in this situation, although it sometimes goes down to the right groin and thigh. She usually has attacks of pain every three or four weeks, and between the attacks the swelling usually goes down; of late the attacks have been more frequent. She has never had jaundice.

Present condition.—No swelling can be felt in the usual region of the kidney in the loin, but in the situation of the gall-bladder there is a round smooth tumour as big as a tennis ball, attached to and apparently moving with the liver. It is not tender. The lower

border is above the level of the umbilicus. She passes her water fairly regularly, but rather more often between the attacks than during. Urine 1022, acid. No albumen, sugar, or blood.

May 11th.—Mr. Butler cut down upon the gall-bladder but found it normal, and on exploring found the swelling to be connected with the right kidney; the abdominal incision was then sewn up, and a lumbar incision made over the right kidney. A fluid swelling was found, and a dissector passed into the tumour through the kidney substance, and a quantity of clear fluid evacuated. No stone was found in the kidney. The wound was drained.

Remarks.—The above cases illustrate the difficulty of diagnosis between "gall-bladder and kidney." We notice—

1. Entire absence of jaundice.
2. Sudden spasmodic attacks of pain.
3. Pain localised to region of gall bladder, and not shooting down.
4. A tendency to nausea and vomiting.
5. That the swelling is generally higher up and further forward than the kidney, and that it can generally be felt through the loin.
6. That the patients are all of the weaker sex.
7. That they are of "middle age."

Notes of Two Septic Puerperal Cases.

THE notes of the two following cases, kindly sent to us by Mr. P. O. Andrew, M.R.C.S., L.R.C.P., may prove of interest as belonging to a series of four or five in which the source of infection could be definitely traced to the same midwife, who had come from a case which subsequently died of puerperal septicaemia. It is needless to add that she was promptly stopped from attending confinements.

CASE 1.—On June 30th I was called to attend a primipara 21 years old, who had been in labour six hours. I found the head low down on the perineum, and on account of the weakness of the pains, delivered with forceps, using every precaution. There was very little laceration, and the placenta came after twenty minutes *in toto*. July 1st.—Temp. 102°. Pulse 120. Slight tenderness over uterus. Lochia somewhat scanty. Tongue slightly furred. Patient restless; had only slept two hours. I gave a vaginal douche, and quinine and opium powder.

2nd.—Temp. 103°. Pulse 95. Lochia scanty, but sweet; no clots. Patient had slept well. There was some milk in the breasts. An intra-uterine douche was given.

3rd.—Temp. 104°. Pulse 100. No change otherwise. Patient slept well, and takes food well. Bowels open. Tongue red but clean.

5th.—Temp. 105°. Pulse 100. Tenderness increased over uterus. Slight distension of abdomen; intra-uterine douche given. General aspect of patient is good. She sleeps six or eight hours every night, and takes broth, &c., well. Bowels open twice. Tongue furred.

6th.—10th.—Distension of abdomen gradually increasing; no tenderness. No milk in breasts. Lochia almost absent, perfectly sweet. Retention of urine relieved by catheter. Temperature irregular, between 106° and 101°. Bowels confined.

6th: 10 p.m.—I injected mix of a solution of anti-streptococcus serum in skin between angles of scapulae.

7th: 3 p.m.—Injection repeated.

7th: 10 p.m.—Injection repeated on buttock; the serum did not seem to have any marked effect on the temperature, however. I noticed intense anemia at the point of injection. There were no rigors or vomiting.

9th.—An erysipelatous rash appeared on buttock (not starting from point of injection), which gradually spread to vulva and down inner side of thighs; it began to fade at the point of appearance.

11th—13th.—Temperature varied between 105.6° and 103.8°, showing a morning rise and evening fall. Pulse about 120, strong and regular. Tongue dry and red. Bowels open 4 or 8 times daily; stools offensive, and of pea-soup consistency. Distension of abdomen great, but very little tenderness. Patient sleeping well, and taking plenty of nourishment. Breasts quite flaccid; no lochia.

14th—18th.—Temperature remains high and irregular. Face puff. Abdomen less distended. Erysipelatous rash extending down thighs; some oedema of both legs. Tongue dry, and sordes on lips. Passing motions and urine under her.

18th.—Temperature dropped from 105° to normal after a quinine and antifebrin powder. Patient had a rigor and some vomiting, but no hiccough. Diarrhoea less. Perspiration profuse.

19th.—Temperature again 105°, falling to 102° during the day. Distension of abdomen decreasing; rash fading, but considerable oedema and tenderness of right leg.

20th—22nd.—Condition improving. Temperature gradually falling. Less oedema and tenderness of leg. Abdomen soft and natural. Diarrhoea less.

23rd and 24th.—Patient very weak, but temperature coming down. Rash gone; a small bed sore on left hip.

25th—28th.—Temperature normal. Strength increasing. Oedema of leg nearly gone. General condition much better.

The patient ultimately made a satisfactory recovery.

Treatment.—Quinine in five-grain doses, antifebrin in five-grain doses, and wet sponging were used to try and control the temperature. In the later stages of the disease the effect of the combined powder was very marked. Digitalis was given to control the pulse-rate; strychnine, ammonium carbonate, and spiritus aetheris co. to support the strength; intra-uterine douches (1—2000 and 1—4000 perchloride of mercury) were given for the first six days; turpentine enemata were used for distension; brandy was given freely (half an ounce every two hours at first, which was increased as the disease progressed). Milk, beef tea, mutton and chicken broths were employed as diet.

Remarks.—The anti-streptococcus serum was not a success, possibly because it was not persevered with, but the appearance of the rash caused some alarm, and there seems to be no doubt that it was caused by the injection. I might remark in passing that Burroughs, Wellcome and Co. supply a small bottle of dry serum with instructions to inject 10 c.c., but as a cubic centimetre is a liquid measure, and the serum is dry, it would be better if their directions were more explicit. There was never any offensive discharge except about the eighteenth day, when some muco-pus exuded from the vagina. No localised collection of pus could be made out at any time. The unusual features of the case were the low pulse-rate and the amount of sleep the patient had. She seldom slept less than six hours a night. It seems that one of the best prognostic signs is sleep. I have seen four or five such cases (all attended by the same midwife), and in the two that recovered the patient slept well all through.

CASE 2.—I was called in on July 10th to see a primipara aged 25, delivered nine days previously by the same midwife. Temp. 103°; pulse 120. She was delirious. There was no milk in the breasts. No distension or tenderness of abdomen, and the lochia were absent. I immediately washed out the uterus with 1—1000 biniodide of mercury, and gave 5 grains of quinine and 5 of antifebrin every six hours. The temperature rose on the second day to 104°, and on the third to 103.2°, but then fell to normal, and patient made an uninterrupted recovery.

The uterus was washed out four times, and on the first three occasions the lotion was returned blood-stained and thick.

The symptoms here seemed to point to a septic intoxication.

Notes.

It was very gratifying to Bart's men to find that Dr. Thorne Thorne's services at the Local Government Board had been suitably recognised by his having the K.C.B. conferred upon him. We beg to offer our sincere congratulations to Sir Richard on the event.

MR. BRUCE CLARKE has been appointed Surgical Instructor to the Probationary Nurses.

DR. F. D. CHATTAWAY has succeeded to the Lectureship in Chemistry, held for so many years by Dr. W. J. Russell.

THE Demonstratorship in Chemistry thus vacated by Dr. Chattaway has been filled by Dr. Kennedy Orton, who has the unique distinction of being the only Englishman on whom the University of Heidelberg has conferred the degree of Ph.D. *summa cum laude*.

DR. ORTON was originally a student of St. Thomas's Hospital, and graduated from St. John's College, Cambridge, where he subsequently became Hutchinson Research Student. Recently he has undertaken research work under Prof. Ramsay at University College, London.

MR. H. J. WARING has been appointed Surgeon to the Metropolitan Hospital, and also Surgeon to the Department for Diseases of the Throat at that hospital.

MR. J. S. SLOANE has been appointed Assistant Surgeon to the Metropolitan Hospital.

THE Lawrence Scholarship and Gold Medal has been awarded to G. A. Auden and J. Hussey.

MR. T. W. H. GARSTANG has taken the D.P.H. at Victoria University.

THE Commemoration number of the *British Medical Journal* is a publication of permanent value; in a record of the progress of the medical sciences in the Victorian age, it is not surprising to find that Bart's occupies a prominent position. The portrait of Sir James Paget is excellent; there is also an admirable portrait of the late Sir George Humphry, whose great work in advancing the study of medicine at Cambridge would entitle him to a high place in such a record if his scientific and professional work did not of itself constitute an adequate claim.

MR. D'ARCY POWER contributes an interesting account of Medicine at Oxford. We notice also a reproduction of the water-colour sketch of Rahere Ward as it was in 1833, with which we are familiar, from its present position in the ward.

DESPITE the competition of the *Guyoscope*, our contemporary the *Guy's Hospital Gazette* holds its own. The July number has a useful article, called "Tricks of the Trade," on the important subject of buying a country practice. Another contribution of interest is from the pen of Surgeon-Captain Childe, on "The Pneumonic Type of Plague." He points out that besides the less rapidly fatal form characterised by buboes, there is a more deadly type in which the stress of the disease falls upon the lungs, yielding the physical signs of broncho-pneumonia. The bacilli, though absent from the blood, are abundant in the sputa. Surgeon-Captain Childe points out that this is a very infectious form, for the patient is freely coughing up and scattering round him what is practically a virulent pure culture of the plague bacillus. There is often hæmoptysis. These observations are of considerable interest when we recall the fact that in the "black death" this hæmoptysis was very common, but has been very rare in all sub-

sequent epidemics of plague. It adds another argument in favour of the view that the black death was a hæmorrhagic form of the plague as we now know it.

Amalgamated Clubs.

SWIMMING CLUB.

Race.—A 2 lengths handicap race was swum off on July 1st. There were eighteen entries.

1st heat.—1st, A. M. Amsler (9 seconds); 2nd, T. C. Littler Jones (6 seconds). 2nd heat.—1st, E. A. C. Matthews (8 seconds); 2nd, C. Dix (16 seconds). 3rd heat.—1st, A. Hay (3 seconds); 2nd, G. B. Nicholson (6 seconds).

The final was swum on July 21st. It was very close, the first three touching with not more than a second between them. 1st, T. C. Littler Jones (45 seconds); 2nd, E. A. C. Matthews (48 seconds); C. Dix, who was third, will receive a prize, as Jones has already won a first and may not hold another.

WATER-POLO MATCHES.

CUP TIE.—*St. Bart's v. London Hospital*.—Played on July 13th at the Aldgate Baths. In the first half Jones scored for the Hospital. In the second half Walker scored, and then Bennett scored twice. Result, 4 goals to nil.

Team: M. G. Winder (goal), F. G. Richards, T. C. Littler Jones (backs); E. M. Niall (half-back); L. A. Walker, W. Fay Bennett, A. M. Amsler (forwards).

CUP TIE (Semi-Final). *St. Bart's v. Guy's*.—Played at the Southwark Baths on July 15th. The game was a hard one, at the commencement looking as if it would be a nearly even one. In the first half Guy's scored twice, and in the second half they scored four times. Marshall (2), Ash (2), Sells, and Payne scored for Guy's.

Team: M. G. Winder (goal); F. G. Richards, T. C. Littler Jones (backs); E. M. Niall (half-back); G. B. Nicholson, W. Fay Bennett, A. M. Amsler (forwards).

St. Bart's v. London Scottish R.V..—Played at the St. George's Baths on July 19th. In the first half Bennett scored twice for the Hospital. There was no scoring in the second half, so the game ended in a win of 2 goals to nil.

Team: C. Dix (goal); F. G. Richards, M. G. Winder (backs); E. M. Niall (half-back); G. B. Nicholson, W. Fay Bennett, A. M. Amsler (forwards).

St. Bart's v. Richmond.—Played at the Fitzroy Baths on July 21st. Bennett played a very good game for the Hospital, scoring three times in the first half and twice in the second half, while Richmond scored once in each half. Result: 5 goals to 2.

Team: C. Dix (goal); F. G. Richards, M. G. Winder (backs); E. M. Niall (half-back); A. M. Amsler, W. Fay Bennett, F. E. Tayler (forwards).

RESULT OF SEASON.

Played 10 matches. Won 5, lost 5. Goals for, 15; against, 29.

The Anniversary Dinner.

THE Anniversary Dinner, popularly known as the "Buck Feast," was held in the Great Hall of the Hospital on Wednesday, July 28th, when a goodly assembly of alumni, governors, and their friends, and the medical, surgical, teaching, and junior staffs sat down as the guests of the stewards. The Treasurer, Sir Trevor Lawrence, occupied the chair. After dinner the Chairman proposed the first three toasts—"The Church and Queen," "The President of the Hospital and the rest of the Royal Family," "Prosperity to St. Bartholomew's Hospital, and health and ease to the poor patients." This was followed by the toast of the Lord Mayor and Corporation of the City of London, which, in the absence of the Lord Mayor, was acknowledged in a graceful speech by Alderman Sir J. V. Moore. Perhaps the most entertaining speech of the evening was the Attorney-General's. Sir Richard Webster, who was entrusted with the toast of the medical and surgical staff, maliciously confused our senior physician with Dean Church, and our senior surgeon with "the man who made the best crackers." Sir Thomas Smith retorted by saying that the Attorney-General must have obtained such authentic in-

formation from Webster's Dictionary. Dr. Church made some weighty utterances as to the responsibilities that the advance of medical science laid upon governing bodies. We had hoped for the pleasure of hearing Mr. Rudyard Kipling reply for the visitors, but unfortunately the necessity of his catching a train prevented us from listening to any more "plaint tales." His place was taken by Sir Ralph Thompson, K.C.B. Mr. B. L. Cohen, M.P., proposed the health of the Treasurer and Almoners, and Mr. Almoner Coleman in reply proposed the health of the Stewards, the hosts of the evening. Mr. ex-Sheriff Cooper's acknowledgment of the toast brought the proceedings to a close.

During the evening Mrs. Helen Trust sang several songs in her usual finished and charming style, and M. Tivadar Nachez performed some admirable solos on the violin.

Appointments.

STACK, E. H. E., B.A., M.B. (Cantab.), F.R.C.S., L.R.C.P., appointed House Physician to the Bristol Royal Infirmary.

DINGLE, WILLIAM ALFRED, M.D., Surgeon Captain 2nd Tower Hamlets Royal Engineers (Volunteers), to be Surgeon Captain Army Medical Reserve of Officers.

FERNIE, J. F., M.R.C.S., L.R.C.P., has been appointed House Surgeon to the Staffordshire General Infirmary.

KERSWILL, H., M.R.C.S., L.R.C.P., appointed House Surgeon to the Devonshire Hospital, Buxton.

Examinations.

UNIVERSITY OF LONDON.—INTERMEDIATE EXAMINATION IN MEDICINE.—*Entire Examination: 2nd Division*.—H. F. J. Lister, C. A. S. Ridout, R. L. Thornley, J. S. Williamson. *Excluding Physiology: 1st Division*.—A. T. Pridham, 2nd Division.—N. C. Beaumont, A. G. Ede, J. C. Marshall, F. Russell-Rislen, F. W. Sheppard. *Physiology only: 2nd Division*.—C. R. Brown, F. H. Burrows, W. H. Casaly, J. M. Cullins, H. B. Gibbins, S. H. Millen, A. J. W. Wells.

PRELIMINARY SCIENTIFIC EXAMINATION.—*Chemistry and Experimental Physics*.—H. Falk, R. Holtby, C. R. Keed, S. W. Milner, J. M. Pleva. *Biology*.—H. A. Kellond-Knight, E. I. Martin, W. P. Price, E. G. Pringle, E. B. Smith.

CONJOINT BOARD.—The following have passed the final examinations for the diploma of M.R.C.S., L.R.C.P.—W. Beckton, R. P. Brown, J. H. Churchill, E. H. B. Fox, H. J. Godwin, F. Harvey, T. D. Jago, H. E. Jaffreson, A. W. Lamb, C. W. Mainprize, T. Martin, F. E. Meade, E. C. Morland, H. K. Palmer, C. S. Myers, W. T. Storrs, J. H. Tomlinson, F. Whincup.

FIVE YEARS REGULATIONS.—*Chemistry and Physics*.—F. W. Cheere, N. A. W. Conolly, W. R. L. Dawbridge, F. H. Ellis, G. E. Ewen, F. W. Jackson, J. C. Lewis, L. M. Morris, T. C. Neville, C. L. C. Owen, F. D. Farbuoy, H. S. Petrie, M. B. Scott, H. H. Serpell, C. S. Woodwark, J. H. Wroughton. *Practical Pharmacy*.—E. F. Court, V. J. Daigan, G. J. Humphreys, W. J. G. Johnson, B. S. O. Mansell, A. A. Meaden, W. P. Miles, D. H. H. Moses, E. W. Price, H. H. Raw, F. M. P. Rice, J. C. Sale, F. E. Taylor, A. R. Tweedie, H. Whitwell, M. G. Winder. *Elementary Biology*.—G. F. Gill, A. Goodall, G. W. Miller, F. D. Parbury, H. A. Woodruff. *Anatomy and Physiology*.—H. C. Adams, T. P. Allen, C. L. Chalk, A. T. Compton, R. T. Cooke, D. Davies, A. E. Donaldson Sim, S. B. Green, P. B. Grenfell, A. E. J. Lister, R. H. Lloyd, T. M. Pearce, F. W. Sheppard, W. C. B. Smith, G. S. A. S. Wynne.

FOUR YEARS REGULATIONS.—*Materia Medica*.—W. Amsden, P. Cator, R. Cope, F. R. Eddison, T. B. Jones.

APOTHECARIES' HALL.—JULY EXAMINATION.—*Midwifery*.—G. C. Hobbs. AUGUST EXAMINATION.—*Surgery*.—L. L. Allen, J. B. Cautley (Section I). *Medicine*.—E. C. Corfield. *Forensic Medicine*.—E. C. Corfield. *Midwifery*.—E. C. Corfield. The Diploma of the Society was granted to E. C. Corfield.

Correspondence.

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

SIR,—I scanned the pages of your last issue in the hope that Dr. Morrison's paper on "The Treatment of the Puerperal Uterus" might have provoked some controversy. I feel impelled to make some remarks thereon, if only to lead to a more adequate discussion

of this important subject. I take it that Dr. Morrison urges intra-uterine douching as a routine not so much because of the present morbidity of the puerperium, but because of the septic troubles, such as pelvic inflammation, which arise after the patient has passed from observation. Now this is an argument based upon hospital practice, and I admit that the number of women who attend the out-patient gynaecological department of a large hospital with pelvic inflammation following confinement form a dismal enough picture. But what do we know of the conditions under which these women were delivered? Probably only a very small percentage will be found to come from that hospital's own midwifery charity, what guarantee have we that any antiseptic measures were used at the time of delivery in the other cases? Now in private practice in a small town our cases do not thus pass away from our observation; should any trouble follow we are sure to hear of it, either directly or through a brother practitioner. During eleven years of practice, in a country town of about 11,000 inhabitants, I have attended 930 confinements, including versions, placenta previa, and many forceps cases, and have had septic trouble in less than ten, and curiously enough in one of these I had used intra-uterine douches in consequence of reading Dr. Morrison's paper. Does he seriously maintain that if I had employed intra-uterine douches in these 930 cases I should have avoided any septic troubles? Certainly his thirty-six cases with three definite cases of sepsæmia do not encourage me to believe that this would have been the result.—I am, sir, yours, &c., G. P.

New Productions.

FORMALDEHYDE GAS AS A STERILISER AND DEODORANT.—The Formalin Hygienic Company, Limited, of St. Mary-at-Hill, E.C., have forwarded us a specimen of the lamp they are introducing for the diffusion of formaldehyde gas from the polymerised dry formalin.

It has been observed that 1 gramme of formalin diffused in a sick room of 1000 cubic feet will sufficiently deodorise the atmosphere, while 10 grammes diffused in a room of the same cubic space will inhibit the growth of micro-organisms. On the other hand, Dr. Aronson has shown that 70 grammes diffused in 1000 cubic feet will still be harmless to the respiratory organs in man. The lamp is a convenient, ingenious, and inexpensive means of diffusing the gas, and the 1-gramme tablets prepared by the Formalin Hygienic Company render the whole process exceedingly simple.

Births.

ARNOLD.—On July 31st, at Oxford Road, Manchester, the wife of F. S. Arnold, M.B., of a son.

BEAUCHAMP.—On August 7th, at Cromwell Road, S.W., the wife of Sydney Beauchamp, M.A., M.B. (Cantab.), of a son.

HEBERDEN.—On August 15th, at Marine Parade, South Lowestoft, the wife of Malcolm L. Hepburn, M.D., F.R.C.S., of twin girls (prematurely).

MURDOCH.—On August 17th, at The Oaks, Hythe, Kent, the wife of Alan Murdoch, M.R.C.S., of a son.

Marriages.

GLOVER—GLOVER.—On July 22nd, at Union Chapel, Islington, by the Rev. Richard Glover, D.D., of Bristol, and the Rev. W. Hardy Harwood, of Islington, Lewis G. Glover, M.A., M.D. (Cantab.), of 1, College Terrace, Hampstead, youngest son of John Glover, J.P., of Highgate, to Mary Mildred, only daughter of James Grey Glover, M.D., J.P., of Highbury.

ECCLES—JACKSON.—On August 10th, at the parish church, Chirk, Arthur Symons Eccles, M.B., of Hertford Street, Mayfair, W., to Annie, eldest daughter of John Jackson, of Caeaugwynion, Chirk, Denbighshire.

Death.

PALMER.—On July 28th, at 87, Harcourt Terrace, S.W., Edward Palmer, M.D., in his 81st year.

ACKNOWLEDGMENTS.—*Cuy's Hospital Gazette*, *St. George's Hospital Gazette*, *St. Thomas's Hospital Gazette*, *St. Mary's Hospital Gazette*, *The Middlesex Hospital Journal*, *The Gynaecologist*, *The Nursing Record*, *The Hospital*.

St. Bartholomew's Hospital



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NOTICE.

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

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

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

A Cover for binding (black cloth boards with lettering and King Henry VIII Gateway in gilt) can be obtained (price 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,
SEPTEMBER 14th, 1897.

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

Weak Hearts.

A Clinical Lecture delivered on June 18th, 1897.

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

IN the hospital we meet with many cases of heart affections, but they are almost all due to valvular disease, any affection of the muscular walls or of nerve supply being secondary to disease of fibrous structures, especially the endocardial. In private practice cases of this kind are seldom met with; most affections of the heart are muscular or nervous from the first. In hospitals we are great in murmurs and thrills; in private practice auscultation and percussion more often than not are of no avail, unless to tell us that there is nothing wrong with the heart

that they can discover. They will tell us what there is not, rather than what there is. It would be interesting to go into the reasons for this difference of disease in the different ranks of life; one great factor is that rheumatic fever is comparatively rare in private practice.

Weak hearts are indicated by symptoms of three kinds: (i) Sensations referred to the heart. (ii) Shortness of breath. (iii) Changes in the pulse.

(i) Sensations referred to the heart.

(a) Pain, which may be of all degrees of severity; usually slight, sometimes so slight that patients will often refuse to use the word pain, but sometimes as bad as in genuine angina pectoris. By genuine angina pectoris I mean the pain associated with degeneration of the muscular walls of the heart. This form, not due to structural disease of the organ, is especially apt to occur in women, which they call heart attacks. During such an attack the extremities sometimes become cold and blue, "dead fingers," as they are often called. If a young woman is suffering from pain having all the features of angina, you must take my word for it that the probability of muscular degeneration of the heart is very slight indeed. Another point of difference is that the ordinary remedies for angina do no good, but even harm, and I never think of giving nitrates in these cases.

These sensations, more or less painful, may be felt over any part of the heart. Sometimes there is a feeling of tightness across the chest, hence Heberden gave it the name *angina pectoris*. Sometimes the pain is not over the heart at all,—for instance, just below the right nipple or between the shoulder-blades high up. If it be felt over the epigastrium it is by no means easy to distinguish it from a stomach pain, especially as these patients often have weak stomachs. The name *cardialgia* dates back to the time when physicians could not distinguish between a heart pain and a stomach pain, and illustrates the difficulty. In Horace the word *precordium* signifies the pit of the stomach.

(b) Palpitations.—These may be either ordinary palpitations in which all the heart-beats are sensible to the patient, or a form in which only one or two beats are thus felt. There is a prolonged diastole, during which the pulse

at the wrist intermits, then the heart gives a sort of kick (sensible by the patient), and then goes on beating again. This is a very common symptom in weak hearts. Patients sometimes speak of the heart "fluttering." It is difficult to know exactly to what this is due; nothing abnormal is heard on examination.

(c) Indescribable sensations referred to the heart. These, when bad, occasion much distress, and patients feel as if they were dying. Anguish is a name often given to this symptom.

These morbid conditions are often brought on by exertion, excitement, or by taking food (especially indigestible food). But sometimes the immediate cause of the attack is not obvious,—as, for instance, when it comes on during sleep.

(ii) Shortness of breath on slight exertion, such as going upstairs, is the second kind of symptom. A French physician said, if a patient complain of shortness of breath don't examine his lungs, examine his heart.

(iii) Changes in the pulse. The pulse may be disturbed in frequency or in regularity. In the former instance it may be too frequent to count, but if you use a sphygmograph cleverly you may find the rate to be 200 or more, but quite regular. These attacks of frequent action of the heart lasting an hour or two are usually due to reflex disturbance, generally from the stomach, and they may be quite relieved by vomiting. There is no evidence of any affection of the heart. But in "weak hearts" the increased frequency is constant, seldom so frequent that the pulse cannot be counted. In the other class of cases the pulse is irregular or intermittent, and intermittence is usually associated with "thudding," and sensations referred to the heart.

These are the chief symptoms, and, as I have said, there are no definite physical signs. The impulse of the heart is often very weak, and sometimes impalpable; but the patient is often fat, and sometimes emphysematous. The sounds are natural or merely weak; percussion may sometimes be able to detect slight dilatation.

Pathology.—Now as to the pathology or nature of these symptoms. There are at least two different kinds of weak hearts. No doubt a great many of them are really due to degenerative changes in the muscular fibre, tending to fatty heart. But in many other cases the course of the disease makes us believe that there are no such degenerative changes; if the symptoms have gone on a long time, or if they occur in the young, we cannot believe they are due to true angina. In these we assume some defect in the innervation of the heart, to use a phrase much in vogue, a neurosis of the heart: in many cases there is probably a combination of these conditions.

Etiology.—Turning to aetiology, or the conditions under which weak heart occurs, we sometimes meet with a tendency to fits of palpitation in children; with this exception, the heart affection is one of adult life, of any age and both sexes. I am here not speaking of palpitation except as a

symptom of weak heart. The probability of degeneration of the heart is greater after forty years of age, and greater the older the patient, so that age is an important factor in prognosis. It occurs in both sexes pretty equally, but the probability of degeneration is greater in men than in women. In women under forty the symptoms are probably due to nervous derangement.

The influence of family tendency is most undoubted. Perhaps the mother of a family suffers from a weak heart, and as the years go on you find the daughters one by one, as they reach fifty, begin to break down in exactly the same way.

The strain of life has much to do with it—worries, cares, business anxieties, and overwork. These conditions begin to tell when people have passed forty years. It is common in business men who have led a toilsome exciting life, who have worked up a large business from small beginnings, and have attained to wealth, perhaps great wealth; just as they reach the time which they looked forward to for enjoying their wealth their heart gives way, and thenceforth they enjoy nothing. The meals of such men have been hurried and irregular, often a very hurried breakfast followed by no lunch. If they live out of town they are constantly hurrying to catch trains.

There is often a history of a great deal too much alcohol, and perhaps tobacco; they find their strength failing, and they fly to alcohol for support; their lunch becomes an excuse for drinking, their dinner is accompanied by champagne, and followed by port. These patients are often gouty, and suffer from arterial changes.

A similar state is common in professional men—and, I am sorry to say, especially in our own profession. I am even disposed to think the normal mode of death in a medical man is through a failing heart. He lives one long round of broken nights, of interrupted meals, of ceaseless work. As Pope says,—

"Even Sunday shines no sabbath day to him."

The same is true of clergymen, who, whatever they did in the past, certainly lead no easy life to-day.

But undoubtedly hearts like these are sometimes found in people who have lived a quiet temperate life; we must all grow old, and many people grow old in their hearts first.

For the last eight years a very potent cause of weak heart has been rife, and that is influenza. Those past their prime, say past forty, fall victims to this. During an attack of influenza the heart sometimes suffers its action is very feeble, the pulse feeble and very frequent, or in other cases infrequent, irregular, and intermittent. There is palpitation and pain of all kinds, sometimes like genuine angina pectoris. Sometimes people die during the attack of influenza from these heart symptoms. But if they recover from the attack, usually their heart never wholly recovers. And that is the worst of influenza; there are so many left with its legacy of weak heart.

A strain to the heart very commonly comes on suddenly during violent exertion. This is a factor at all ages, but especially in people just past youth, say past thirty. I know a case of an unmarried lady of thirty where it came on during swimming. A clergyman of thirty-six was playing hockey when he was seized with a sudden pain in the heart, and what he called "collapse." I have known golf the cause of this strained heart, as it is a game often played by men past their prime. Bicycling is a very common cause, especially in oldish people, but also at any age when excessive. Bicycling uphill is the worst of all; quite a number of elderly men have died on the spot while going uphill.

I should say that when patients at any age have once strained their hearts in any of these ways they seldom completely recover.

Tobacco in excess is a cause of all these symptoms in some people; excess of tea also, but this is a much less potent cause than tobacco.

In many patients there are signs of general nervous debility, "neurasthenia"—constant headache and backache, atonic dyspepsia, sleeplessness, and sometimes melancholia.

Course of the disease.—People past middle life never wholly recover, but by taking great care of themselves they may live many years, and at last die of something else. Sometimes they become subject to genuine angina pectoris and all its dangers, sometimes they manifest symptoms of fatty heart and a tendency to syncope, sometimes of a dilated heart and dropsy. Sometimes all these conditions occur together before death. In elderly people death may occur in two or three months after the first occurrence of symptoms.

Treatment.—Patients must avoid exertion; exercise must be moderate, the amount depending on the degree of the disease. Particularly they must avoid all hurry. Tobacco they had much better give up altogether, for this is one of the things of which old Dr. Samuel Johnson's saying is very true, "It is more easy to abstain than to be abstemious." They should avoid indigestible foods, all over-eating, and drinking too much liquid at meals; they must be strictly temperate in alcohol.

They must be got away if possible from an exacting business or profession for several months. A bracing place is best, they do not do well in hot climates; mountainous climates are not advisable, not only because of the climbing, but because of the rarefaction of the air. The easiest way, very often, of getting a man out of business is to send him abroad; English people prefer it; and if you name a place like Nauheim, which has a reputation in the treatment of heart disease, people will often go there who will not go anywhere else: moreover they are out of call to business, and they will stop away longer than they would in their native country. I am doubtful if there be any specific character in the treatment there; it is a dull, quiet life,

and their diet and habits are regulated; but they all know the name of Nauheim, and will quite cheer up at the idea, buoyed by hope, the best of tonics.

As to drugs, two are especially useful, arsenic and strychnine. I usually prescribe arseniate of soda, $\frac{1}{10}$ of a grain in a pill, and about the same dose of strychnine. These should be given for a considerable time. Arsenic is particularly good in cases where there is pain. Digitalis is no use here.

Really bad cases had better take no exercise at all; they should go about in a Bath chair, and be carried upstairs. Cases tending to end in dropsy should be treated as for dilated heart, and digitalis and strophanthus may now be tried.

Some Chapters on Pneumothorax.

By SAMUEL WEST, M.D.

II. ONSET, SYMPTOMS, AND PHYSICAL SIGNS.*

ONSET.—The onset of pneumothorax is sudden, and often without obvious cause. The patient is seized all at once with pain in the side and shortness of breath. The difficulty in breathing rapidly increases, and in a few minutes becomes extreme. The patient is now found sitting up, panting and gasping for breath, rapidly becoming more and more cyanosed, and with an expression of the greatest anxiety and distress, unable to speak or, at any rate, to utter more than a syllable or two at a time, the whole body bathed in perspiration, and the extremities cold. There may be a little cough, and it, like speaking, adds greatly to the suffering. The mental distress is great, for the patient looks and feels as if about to die.

The symptoms rapidly grow worse, and it is evident that unless relief is given the patient will die. A needle is inserted into the side, air escapes, and the breathing is relieved; the needle is removed, but the air again accumulates, and the symptoms become once more urgent. A second, and it may be a third time relief is given by paracentesis; but often the relief is but temporary, and the symptoms soon become as bad as ever, the opposite lung becomes congested, and the patient dies, it may be within an hour or two of the commencement of the attack. If the result is not to be so immediately fatal, the interval between the tappings increases, the dyspnoea gradually becomes less severe, and in twenty-four hours or so the extreme urgency of the symptoms passes away.

Dyspnoea.—The dyspnoea depends upon several factors: (1) upon the rapid collapse of the affected lung; (2) upon the partial collapse of the opposite lung, caused by the displacement of the organs; and (3) upon the consequent

* No. I appeared in the April number of this year.

congestion of the opposite lung; while it varies a good deal in proportion to the amount of previous disease in the lungs.

Although it is the rule for pneumothorax to be ushered in by the grave and urgent dyspnoea described, still it is not always so, and the absence of such acute symptoms is not conclusive against the presence of pneumothorax. In some cases, indeed, there may be little to suggest what has occurred, and the pneumothorax may be discovered only by physical examination when there has been hardly any appreciable dyspnoea to draw attention to the chest. These cases are usually called *latent* or *insidious pneumothorax*, and will be dealt with by-and-by.

If, as in some of these phthisical cases, there be widespread adhesions, the collapse of the lung on the affected side may be less, and it is also possible that the displacement of organs may be prevented. These cases are often spoken of as *partial pneumothorax*.

If there be extensive disease of the lung on the affected side it may make little difference to the patient whether the one lung is useless because it is infiltrated with tubercle or because it is collapsed as the result of the pneumothorax, and the symptoms, therefore, may be slight or even entirely absent.

If, however, the opposite lung be also much diseased, the dyspnoea must necessarily be extreme, and especially if there be much displacement of organs, for the reason that there is so little lung left for the performance of respiratory purposes. Yet it is extraordinary how little lung is really necessary for mere existence.

When pneumothorax occurs in the course of advanced phthisis there is one other cause of dyspnoea which deserves to be mentioned, though it is not usually referred to. Then the lung on the affected side contains many cavities, the secretion contained in them may be suddenly expelled into the air-tubes as the lung collapses, and if not immediately coughed up, may very seriously aggravate the dyspnoea. I have seen a patient all but suffocated in this way, and in two cases in which death occurred in twenty minutes and thirty minutes respectively from the time of onset, it was largely due to this cause.

Pain.—The sensation usually experienced is that of a sharp, stabbing or tearing pain, and is often described by the patient "as if something had suddenly given way in the chest." It is usually of short duration, and not very severe, or at any rate not severe for long. It is commonly felt in the mid-lateral region, *i. e.* in the axillary region, but it may be referred to the upper part of the chest in front or under the breast. Occasionally it is referred to the spine, to the angle of the scapula, or even to the abdomen, and it may radiate round the chest. In one case the pain was so severe that the patient could not be prevented from shrieking out, and the dyspnoea was not grave.

In some cases the initial symptom complained of is not

that of pain, but of some other abnormal sensations, such as cold water running down the side, or of air rushing into it.

In the later stages the usual sensation is that of distension or tightness, which, though distressing, can hardly be called pain.

The occurrence of pneumothorax is sometimes marked, not by pain or dyspnoea, but by a sudden attack of faintness or collapse, upon which dyspnoea follows as soon as the patient rallies. Occasionally the collapse may be fatal, and pneumothorax thus be the cause of sudden death—an extremely rare occurrence, of which I have never seen an instance myself. Lebert describes a case of the kind in a medical man of twenty-eight years of age. Though I have not seen death from shock owing to perforation of the pleura I have seen it produced by perforation of the peritoneum. In this case the rupture of a hydatid of the liver caused death, the patient, a previously healthy young man, falling down suddenly in the street, and being picked up dead.

The temperature.—This presents nothing especially noteworthy. In itself pneumothorax need not affect the temperature at all. The onset, it is true, is usually attended with a drop in the temperature, which may be considerable if there be much shock or collapse. If any deviation of temperature be present it is due, not to the pneumothorax as such, but to the original disease which has caused it, *e. g.* phthisis, or to complications by which it has been followed, *e. g.* pleuritic effusion.

Where the temperature has been previously raised, as in phthisis, the onset of pneumothorax may be marked by the usual drop as stated, and it may be some little time before the previous level of temperature is reached again. This fact has been used as a strong argument in favour of what I believe to be a fallacious theory, *viz.* that pneumothorax, or, to put it more generally, the collapse and compression of the lung to which pneumothorax leads, and to which, of course, pleural effusions similarly lead, checks the progress of tubercle. Admitting the fact that pneumothorax may be followed by a diminution of fever, it may be permitted to question the explanation that this is due to a check in the development of tubercle in the compressed lung.

To this theory there are many objections, and as it involves questions of practice, it will be again referred to under treatment. For the present the objections may be simply stated:

1. That the theory has more exceptions than proofs.
2. That the occurrence of pneumothorax is often followed by the development or progress of tubercular mischief in the opposite lung.
3. That the relief of the collapse by operation is rarely followed by progress in tubercle, as it would be likely to be if the theory held true.

4. That recent tubercles, apparently of formation subsequent to the occurrence of pneumothorax, are not infrequently found post mortem in the collapsed lung.

The explanation which I should give of the fact is this: the fever of phthisis is in great part due to septic absorption from cavities which are the seat of secondary infection with suppurative organisms, and is the same in character as that due to an abscess or pent-up pus. The collapse of the lung would act like the opening of an abscess, and evacuate the contents of the cavities, and be in the same way followed by a fall of temperature. If this explanation be correct the diminution of fever has nothing whatever to do with the rate of progress in the tubercular mischief.

The pulse varies greatly according to the general condition of the patient and the severity of the dyspnoea. Under any circumstances the respirations are likely to be more affected than the pulse, and accordingly the pulse-respiration ratio becomes perverted even to almost as marked a degree as in pneumonia, and may fall to 3 or 2 to 1.

If the onset of pneumothorax has been attended with shock or collapse, the pulse will be small, irregular, and perhaps hardly to be felt at the wrist, as in a patient fainting or collapsed from other causes. If the dyspnoea be extreme and suffocation imminent, the pulse betrays the consequent embarrassment of the heart, and the circulation through the lungs, for it becomes irregular in force and frequency, fluttering and of low tension; the action of the heart, though laboured, is not at first much accelerated, but becomes later very rapid and feeble.

When the dyspnoea has passed off, the pulse recovers itself quicker than the respirations, so that the perverted pulse-respiration-ratio may still continue for some time. It may then show no peculiarities other than would be met with in any person of feeble health, *i. e.* it is of low tension and easily disturbed in rate and power by slight causes.

The respirations may number 40, 50, or more in the minute, but there is a strong contrast between their number and their depth, as there is also between the shape and movements of the two sides.

Position of the patient.—As long as there is urgent dyspnoea, the patient sits upright, or lies in the semi-recumbent position with the shoulders raised. When the urgency of the dyspnoea is past, the patient takes that position which is found most comfortable. This varies much, but is usually upon the affected side, with the object, no doubt, of giving the opposite lung full play.

Physical signs.—The characteristic physical signs are distension of the side, displacement of organs, and tympanic percussion, to which may be added the bell sound, and, if fluid be present, succussion, while in most cases the breath- and voice-sounds are absent.

The shape of the chest.—The affected side is greatly distended, the shoulder raised, the sternum thrust forward, and the intercostal spaces widened. This distension is

not limited to the affected side only, but involves to some extent the other also, for the elastic traction of the lungs upon the ribs, which tends to keep the side somewhat smaller than it would otherwise be, is removed or diminished in consequence of the displacement of organs on to the sound side. In spite of this, the measurement may show a difference of an inch or so between the circumferences of the two sides.

This position is often described as the "maximum inspiratory position," but I think it may exceed anything which can be intentionally imitated in health.

If the intra-pleural tension be low the distension may be less marked; and if there be a large opening into the lung, so that there is no increase of tension at all, the distension may be entirely absent, or the side may even be contracted somewhat, much as it is after it has been opened for empyema, so that, although distension of the side is an important sign of pneumothorax, its absence does not count for much against that diagnosis.

The respiratory movements of the affected side.—The respiratory movements are absent, in other words the distension is fixed, for there is no expiratory retraction. On the other hand, if there be a free opening through the lung, the movements are present, or may even be exaggerated, just as they may be with a free external opening after empyema; but in these cases the movements of the chest have but little effect upon the lung, which, if it expands at all, is forced out only during expiration, rather than sucked out by inspiration.

On the opposite side the movements are rapid and shallow. The respiratory excursion is small, for though the side attains its maximum inspiratory expansion, it fails to retract to the extent it should on expiration. The movements of the diaphragm are seen also to be deficient on both sides, but especially on the affected side.

The rapidity of breathing varies with the dyspnoea, so that if dyspnoea be absent the respirations may be but little if at all accelerated, except by exertion.

The superficial veins over the affected side and also on the corresponding side of the neck and down the arm are sometimes found dilated. This is rightly referred to obstruction of the intra-thoracic veins. It is, however, a rare phenomenon, and only met with when there is high intra-pleural pressure, especially when there is a considerable effusion, and the conditions have existed for some time. It is therefore not so often met with now that pneumothorax is recognised earlier and treated more actively.

In the same way oedema may be seen, not a local oedema due to the pointing of pus, as may be met with in any neglected pyo-pneumothorax, but a general oedema of the whole side, the result of the venous obstruction just referred to.

The impulse of the heart is far out of its proper place; on the left side, this will be the apex of the heart, and may be

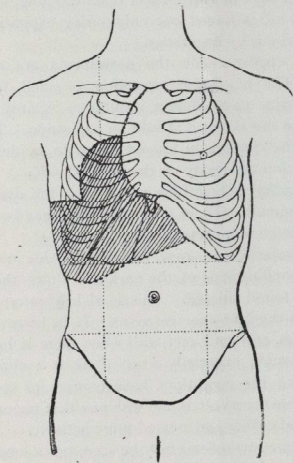
seen in the anterior axillary line; on the right side the impulse is that of the right auricle or ventricle, and may be seen in the right nipple line, or even an inch or so beyond it.

Palpation.—The impulse of the heart may be felt as well as seen in its new position.

The vocal vibrations on the affected side are usually completely absent, but may be sometimes indistinctly felt. On the opposite side, if there be much congestion of the lung, wheezing may be felt, but if not there is nothing abnormal on palpation.

Displacement of organs.—The mechanism of displacement has been already considered. It is due chiefly to the elastic retraction of the lung on the sound side, but it is supplemented on the affected side by the increased pressure on expiration, and by the general rise of intra-pleural pressure when fluid forms. As the result of these causes the heart and pleura are displaced far over on to the opposite side, while the diaphragm falls and carries the organs in relation with it downward into the abdomen.

Percussion.—The displacement is chiefly determined by means of percussion. The side yields a tympanic note, which is obtained as far as the pleura extends in all directions; thus it may reach an inch or two beyond the



sternum on to the opposite side, to the costal arch below, or even somewhat beyond it.

The effects of displacement differ a good deal on the two sides, and it will be convenient to consider them separately,

for with right pneumothorax it is the liver that is chiefly affected, and with left pneumothorax the heart.

The position of the displaced organs, as determined by percussion, is proved by post-mortem examination to correspond very closely indeed with the surface markings obtained upon the chest, as the diagrams demonstrate.

Pneumothorax of the right side.—The heart is seen and felt beating two inches or more outside the left nipple line. The area of cardiac dullness is correspondingly displaced, the right border being found an inch, it may be, to the left side of the sternum.

The chief displacement on this side is the position of the liver, for this is not only pushed downwards, but is curiously rotated. Percussion yields a resonant, tympanic note right down to the costal arch. Usually at this place the hepatic dullness makes itself evident, but in some cases where the diaphragm is so far depressed as to be convex towards the abdomen, there may be a zone of resonance one to two inches in width between the edge of the ribs and the upper border of the liver; this, however, is but very rarely met with.

As the right lobe of the liver is so much displaced, while the left retains its ordinary position in relation with the heart, or at the most is displaced an inch to the left, it is evident that the organ will be greatly rotated or twisted.

Thus the lower border of the liver may reach nearly to the iliac fossa, and from thence ascend in a curved line slightly below or through the umbilicus up to the position which the apex of the heart occupies. The notch is usually found either immediately beneath the left costal arch, or an inch or so away from it, while the gall-bladder may be either in the middle line, or slightly to the left of it. The spleen is in its normal position, but the area of stomach resonance between the liver and the spleen is of course much reduced.

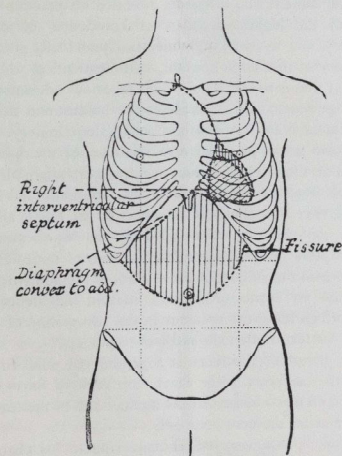
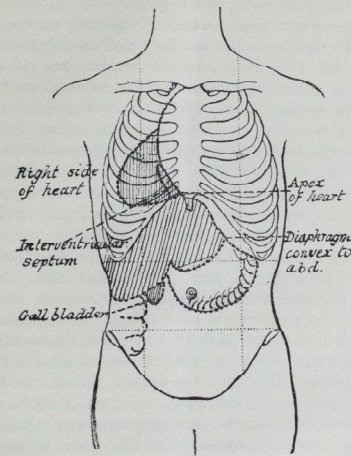
Extreme as the displacement of the liver is, I do not know that it ever produces any disturbance in its function.

Pneumothorax of the left side.—Here it is the heart that is chiefly displaced. The descent of the diaphragm carries down below the costal arch the stomach, the spleen, and to some extent the left lobe of the liver.

The spleen may be felt quite distinctly below the ribs, the left lobe of the liver is thrust slightly down, but beyond this the liver retains its normal position, so that its upper border remains in its usual place on the right side, viz. the upper border of the sixth rib in the nipple line.

The displacement of the heart is remarkable, for impulse may be seen and felt even two inches outside the right nipple line. The impulse felt here was formerly stated to be the apex-beat, for it was supposed that the heart was fixed by the large vessels at the base, and that when it was displaced a distinct rotation took place, so that the apex moved from its normal position on the left side to the place where impulse was felt on the right. Post-mortem examination

proves this to be quite incorrect. What really happens is that the heart moves bodily over with the mediastinum, retaining approximately its normal relation to the diaphragm



and suffering little or no rotation at all; the impulse felt to the right side of the sternum being that of the right auricle, while the apex, even with the maximum displacement of the

heart, lies either beneath the lower part of the sternum, or hardly beyond it. This the two accompanying diagrams prove, the one showing the surface markings during life, and the other the actual position of the organs found on post-mortem examination.

Great as the displacement is, it rarely produces any marked effect upon the heart's action. Murmurs due to the displacement are described, but they are certainly as rare in pneumothorax as in pleuritic effusion. I do not remember ever to have seen an instance myself, nor have I seen evidence in pneumothorax, any more than in pleuritic effusion, of that linking of the vena cava which has been described as being sometimes the cause of sudden death.

(To be continued.)

Contributions towards a History of the Surgical Teaching at St. Bartholomew's Hospital during the Nineteenth Century.

By D'ARCY POWER, F.R.C.S., F.S.A., Demonstrator of Practical and of Operative Surgery.

II. DISCORD.

DURING the early years of its existence, and so long as Abernethy maintained his pre-eminence, we hear but little of conflicting interests in the School. A stronger than Abernethy soon obtained a footing in the Hospital, and for some years the most discordant counsels prevailed.

William Lawrence, the son of a surgeon, was born on the 16th July, 1783, at Cirencester, in Gloucestershire, and was apprenticed to Abernethy in 1799. Abernethy found him so useful and so able an anatomist that in 1803 he caused him to be appointed Demonstrator of Anatomy, though he did not become a Member of the Royal College of Surgeons until two years later. Lawrence held the post of Demonstrator for twelve years. He was elected Assistant Surgeon in 1813, and a full Surgeon eleven years later—an office which he held for more than forty years. In the winter of 1826-7 he delivered a course of lectures on Surgery at the Aldersgate Street School of Medicine, and in 1828 he succeeded Abernethy as the Lecturer upon Surgery in the Medical School attached to the Hospital. Bred a teacher, by nature a surgeon and an orator, the teaching of Surgery at St. Bartholomew's Hospital reached its acme whilst Lawrence remained in his prime. Of his lectures Sir James Paget says, "They were the best, I think, of all those given in London,—admirable in their order, their perfect clearness of language, and quietly attractive manner. They were given on three evenings in each week, at seven o'clock, after dinner. He used to come to the

Hospital in the omnibus, and after a few minutes in the museum, as the clock struck, he entered the theatre, then always full. He came in with a strange vague outlook, as if with uncertain sight. The expression of his eyes was always inferior to that of his other features. These were impressive, beautiful, and grand, significant of vast mental power, well trained and well sustained. He came in quietly, and after sitting for about half a minute, as if gathering his thoughts, he began in a clear rather high note, speaking quite deliberately, in faultless words, as if telling judiciously that which he was just now thinking. There was no hurry, no delay, no repetition, no revision; every word, I believe, had been learnt by heart. The lectures were already in print in the 'Lancet,' and yet there was not the least sign that one word was being remembered. It was the best method of scientific speaking that I have heard, and there was no one at that time in England—even if there were one in Europe—who had more completely studied the whole principles and practice of surgery."

No less remarkable was his clinical teaching, and we are fortunate in possessing an accurate account of his manner as it was known to Dr. William Ormerod, one of the very best of his pupils. Dr. Ormerod says of Lawrence: "The whole tenor of his writings, conversation, and practice was to set before the student the value of the great practical writers in the profession, and the utter worthlessness of the mere noisy claimants for notoriety; to teach all to form a proper appreciation of the constant and hard labour required for a proper and competent discharge of professional duties, and the real incapacity of any one not practically laborious; and, above all, to lay clearly before every one that, whilst professional learning allowed us to deal with some of the greatest difficulties and dangers, there was a clear line bounding our knowledge, beyond which we had no right to assume that our information extended. To be ignorant of clearly-ascertained and written knowledge, to be idle or not absolutely industrious, or to attempt to hide ignorance by obstinate certainty and noisy argument, were with him faults of so deep a dye, and so utterly below all honorable feeling, that his countenance at once told the student his hatred and contempt of such vile attempts at assuming professional knowledge.

"How often have we waited at the ward fire for Mr. Lawrence in his week, though not on his day, feeling that his love for his work and daily diligence had not forsaken him, and that he would come to see if anything was wanted! Perhaps some injury of the head, a bad fracture, or a case of acute inflammation had been admitted, some case which had a real difficulty and required an immediate decision, or perhaps even an operation. As he entered the ward each hat was taken off, and the sister standing at the right hand corner of the door curtseyed, but no one spoke. Mr. Lawrence then bowed or nodded to somebody, or to the house surgeon, and then proceeded to the bedside of the

patient, to whom a few kind words were spoken before anything was done. An examination of the patient was then gone through, with a few questions to the house surgeon, to the sister, or to the patient himself, and then the orders were given, or the patient was told that some operation was required, or nothing was said; but the short question 'Is Mr. So-and-so here?' told the regular attendants that a consultation would be held. But this short interview at the bedside was often succeeded, as we knew, by a few remarks at the fireplace away from the bedside, where a short clinical lecture on the case and its probable termination, with especial stress on the points to be watched as capable of being treated, and a minute description of any rarity either in the occurrence of such cases or in any particular symptom present, were, as we well knew, so often given and so good, that we calculated on them.

"How often have we rejoiced to see him in the theatre, whether he operated or not. If he operated himself, everything was done with the greatest care, from the time at which he tried the edge of the scalpel on his thumb, to the moment at which the patient left the room, unencumbered with any quantity of bandages, plasters, or other ill-timed applications. If he did not operate himself, we knew how sure we were to have a good view, for nobody so carefully cleared the area between the patient and the class of opaque intruders, and we knew that when he was by, persons were very shy of saying anything without being quite sure of it. These were our gain as pupils. . . .

"The student who diligently attended his practice saw a man of the highest abilities, of knowledge, of minute accuracy, and never failing readiness, punctually attending to his duties in a large hospital, to the patients of which he afforded that care and relief which laborious education and long experience, with coolness in the boldest and delicacy in the most minute operations, could alone convey. The bookworm or the practical man, the lover of the operating theatre or the mere dexterous manipulator, might all learn a lesson from him when a rare dislocation afforded scope for reference to authorities; a cancer of the breast allowed him to quote his long and decided experience; a severe case of erysipelas or some formidable tumour of doubtful relations formed the subject of his operations; or some delicate operation for hernia or cataract attested that delicacy of touch which his great accuracy in the recognition of deep-seated matter so often showed him to possess."

The picture of Lawrence is a graphic one, and it recalls to us the accuracy with which Sir William Savory had imitated all that was best in the manner and in the teaching of his master, the man he loved.

Lawrence, however, had another side to his character. He was absolutely without emotion, and he was so rigidly just and upright in his dealings, that his actions sometimes appeared to be harsh and ungenerous. He hated and despised all cant and imposture, and easily saw through it.

Concerning the Ship's Surgeon and some Tropical Diseases.

By W. H. MAIDLOW, M.D.Dunelm., F.R.C.S.,
Late Surgeon P. and O. s.s. *Caledonia*.

(Concluded from p. 172.)

PART IV.—PLAGUE.

THE present Bombay and Karachi epidemic broke out in last September. Previously unrecognised there, it was well known in Northern India in some villages at the foot of the Himalayas as Pali or Mahm-hoori (?), in which places it is endemic with epidemic outbursts. Its most likely route to Bombay was probably from Hong Kong, with which recently plague-stricken place the commerce is very great. The Persian Gulf ports and Bagdad, and the Mecca pilgrims, have all in their turn been charged, but with not much reason. Whether conveyed by commerce or by winds would seem doubtful; the better evidence points to the former, for the germs appear to be quickly killed by aquatic or oxygenic dilution, and cases of ship infection according to prevalent winds have not been proved, in fact the ships lie in dock quite safely. It is difficult to name an incubation period; in the autumn of 1896 there were probably two cases in England (one of which at least I was associated with), both of whom had left Bombay for more than three weeks. Infection, indeed, seems to come from exposure to a common source of the poison rather than from human contact, an inoculation process having more the nature of that with tetanus. But where the poison lurks elsewhere than in patients is the question of the day. Over-crowded, insanitary, ill-ventilated dwellings are certainly predisposing elements and the hot-bed of the epidemic. Rats seem to suffer from the disease, and the outbreak began with many deaths of rats in whom Kitasato's microbe was found, and inoculation from their blood caused similar deaths in others, and inoculation of bare feet by the excreta of dead rats seemed a likely method of incidence. Where the rats became infected is not known, it was presumed from grain which harboured the germs, but experiment has had quite a negative result; a plague-stricken rat may have come from Hong Kong or Persia, "who infected the malt that infected the rat that plagued Bombay that worried Europe." At one time, again, some deaths amongst pigeons who may have eaten the grain seemed reasonable, but they may have taken the disease from grain picked from the excreta of rats diseased. Professor Hankin, whose work during the epidemic has not yet received the recognition it deserves, is said to have found the microbes in the posterior end of ants which he found in basements of the insanitary dwellings, whilst inoculation by the anterior ends had no specific result—work which indi-

He possessed singular skill in estimating the ability and attainments of others, and was not readily imposed upon. Besides, in his earlier years he was extremely liberal in his opinions, and was eager in his desire to correct some of the many abuses then prevalent in the corporate and hospital life of the profession.

Abernethy, on the other hand, was naturally conservative, and was tenacious of his position as the father of the Medical School at St. Bartholomew's Hospital.

It would appear as if some discontent had been simmering for some time between the master and his former pupil, for in 1816 an open rupture took place between them, quite suddenly and apparently without any adequate cause. In 1816 Lawrence was appointed Professor of Anatomy at the College of Surgeons, and in the course of his lectures took occasion to criticise some obscure statements of John Hunter's about the theory of life which had been upheld by Abernethy. Abernethy at once resented the criticism in such a manner as to enrage Lawrence, who replied in no measured terms. The controversy continued, religious topics were intruded, and soon all London was loud in its condemnation of infidel Tom Paine, and the arch-heretics Lord Byron and Surgeon Lawrence. The dissension did much harm to the School, for it led to the re-establishment of the Aldersgate Street School of Medicine, where Lawrence lectured for a time on surgery. But the separation did not last long, for, on the retirement of Abernethy, Lawrence was called upon to fill his place. Stanley, who had also quarrelled with Abernethy, became Lecturer on Anatomy, and Skey was appointed Demonstrator in preference to Wormald, who became one of Lawrence's first house surgeons, though he was the favourite pupil of Abernethy.

The Aldersgate Street School of Medicine proved to be a perfect Cave of Adullam. In 1831 Skey seceded from the Medical School of the Hospital, in consequence of a dispute with Lawrence, and for the next ten years he lectured there upon surgery, though he continued to hold his post of Assistant Surgeon at the Hospital, to which he was elected on the 29th August, 1827.

The presence of a private medical school in the immediate neighbourhood of the Hospital, officered by members of the Medical Staff of the Hospital, and the ill-concealed dislike of the surgeons one for another, inflicted a severe blow at the prestige of the School, and long prevented it from taking the foremost place to which it was otherwise entitled. The sudden death of Stanley on No. 6 bed in the front ward of Henry, in 1862, the retirement of Skey in 1864, the resignation of Wormald three years later, and the death of Sir William Lawrence himself on the 5th July, 1867, brought these feuds to an end.

cates how in future bacteriology will investigate etiological factors, and not be contented with mere observations of humidity, temperature, sun, moon, or star. There are very few cases of plague that are easily found to have been due to contact with, or from nursing the affected; doubtful cases leave the plague hospital scatheless, doctors and nurses do not catch it as a rule, despite the sad case of Dr. Manser and his nurse. Probably *prolonged* personal contact with the sick is different, but the history of the Hong Kong epidemic is much the same. The vultures that eat the bodies of Parsees dead from plague have not been affected; there is almost special immunity for Europeans, and, to a lesser extent, Eurasians, for native servants and tradesmen have died in the very midst of European quarters, whilst the deaths amongst Europeans have probably not yet attained double figures. This immunity, instead of turning native attention to their own insanitary dwellings, as might be supposed, only fans the superstition that the Queen is angry (a beautiful statue of her had recently been defaced), that the trouble will not cease till so many heads or livers have been accorded her, and hence it is that part of the dread to hospital arises which so increases the difficulty of isolation and segregation. This, however, is not the whole reason; caste prejudices are much more potent—to die in a strange bed, not to be sprinkled with the holy water of the Ganges at death, to be seen eating by others, to lie near a Mussulman or Hindoo* as the case may be, or near a tradesman of another kind, are all examples of this feeling, which seems invincible. Hindoos are a most suspicious and sensitive race, incapable often of judging cause and effect as we do; the very chloroform given to relieve the pain of an incision into a gland is the cause of death, the drugs are poisoned! It is only a matter of degree after all; still in some parts of England the really sick fear hospital treatment.

Kitasato, to whom the credit of the first description of the microbe is usually given, describes it thus: "rod shaped, whose both extremities stain deeper than the middle part with aniline pigment; having a capsule; its shape resembles that of fowl cholera." It is found in the blood, fæces, sputum, urine, and enlarged glands; inoculable into rats, pigeons, and guinea-pigs, producing a specific disease in which similar organisms are found, not liquefying gelatine, and not stained by Gram's method. They seem to be quickly destroyed by aerial or aquatic dilution, but not

* The word Hindoo is used in these pages usually in its religious or "caste" sense (as generally so used in India). I know of no English word which expresses a "native of India." "Indian" should express this fact, but then Columbus gave the same name to certain natives of his newly-discovered land, and the name has spread to such an extent that an "Indian" may imply equally a Comanche or a Punjabi. The word "Hind" in the word Hindoostani seems to mean "black"; hence a Hindoo merely means a black man or negro (? Lat. *niger*), and has therefore probably nothing whatever to do with the inhabitants of the land of the Indus, and is in any case inaccurate. An accurate monosyllable seems to me very necessary to prevent confusion; "native of India" is intolerably clumsy.

improbably flourish in the soil,* and in certain merchandise.

As to the nomenclature. The Bombay authorities use the term bubonic plague; at first bubonic fever, partly with a view to tone down the ugly word plague, and partly thinking the disease really differed from plague. But even so "bubonic" is hardly accurate; in some cases there are no external or even internal glandular enlargements, for "Bubo" is derived from *Βουβων*, the groin; hence *Βουβωνία*, to suffer from groin (Liddell and Scott); but the glandular enlargement may be in the neck or axilla. Moreover, the disease is not due to the swellings, even if they be called buboes, but both the swellings and the other signs are due to a specific poison. Probably in this case the old method of using a well-recognised name on the analogy of such diseases as chorea, measles, gout, &c., is at present better than a pathological attempt by a name which must vary with fluctuating knowledge. In any case the Continental ports never wavered; they considered *Plague* existed in Bombay, and for some time imposed quarantine.

Of the many times the word plague is used in the Bible † there is no evidence sufficient to show that *one* was true plague. ‡ The word is used more in the sense of nuisance or affliction; and every nuisance is not plague, although most plague is a nuisance. In the sense of trouble of a non-specific kind the Greek translation is *πληγή*, when an epidemic is meant *λοιμὸς* is used. The expression plague in association with the ten troubles of the Israelite-persecuting Egyptians under a Pharaoh Rameses is only the translators' heading, and they seem to have been more of the nature of a duel of magic or interpretation of coincidences between Moses and the wise men of the Court than aught else. Probably much the same difficulty occurred to the translators of the Septuagint as occurred to them when they translated Hebrew "Tsaraath" through Greek lepra to English leprosy. The examples of *πληγή*, *i. e.* of plague used in the sense of trouble not specific, are well seen in such expressions as in St. Mark v, 29, where the woman feels "that she was healed of that plague," and Zechariah xv, 12, the "plague wherewith the

* A great argument in favour of cremation. Burial customs in India are very interesting. Islam, like Europe, has earth burial; Hindoo bodies are burned; Parsees are exposed on "towers of silence," and the soft parts devoured by vultures kept for the purpose.

† Instances from the Bible have been noted in these pages because most of the diseases therein mentioned did and do exist in Palestine. Of Palestine the most accessible record is the Bible. The historical testimony of disease in India obtained from the "Hoang-Ty-mi-king," or in the cuneiform inscriptions of Assyria, would have been given at a much more second-hand rate, and at a cost also of diminished originality. Like all testimony from history, there is little intrinsic value in such observations, but they are frequently interesting and entertaining. It is therefore in no spirit otherwise than earnest that I have made use of the valuable Biblical records.

‡ I cannot refrain from referring the reader to Moore's "Paradise and the Peri." "The very vultures turn away, and sicken at so foul a prey," *et seq.* The sentiments are beautiful beyond description. It is impossible to repeat the lines here.

Lord will smite all those that fought against Jerusalem,—their flesh will consume away while they stand upon their feet, and their eyes shall consume away in their holes, and their tongues shall consume away in their mouth," is not a bit like plague—it sounds like famine. In Numbers xi, 33, we find the words, "whilst the flesh was yet between their teeth the Lord smote them with a great plague." The quails probably had eaten poisonous food, just as the flesh of grouse is occasionally poisonous. The Greeks would, however, have probably used the word *λοιμὸς* in the following instances. (1) The Sixth Plague of Egypt; but boils and blains "breaking out on man and beast" is not like plague. Anthrax has been suggested, but although the drought and flies may have been possible causes yet no mention is made of death amongst men. (2) The Botch of Egypt, Deut. xxviii: "Will smite thee with the Botch of Egypt;" "A sore botch on the knees and on the legs from sole of foot to crown of head;" also "with the emerods and with the scab, and with the itch from which thou canst not be healed" [Botch = Italian "bozzo," French "bosse," hence English boss or lump; it is the Greek *ἔλκος*, an ulcer. I interpret the botch to have meant gumma. Emerods are generally taken to be equivalent to hæmorrhoids,* and these threatenings were uttered in connection with or in the same year as the Baal Peor (Phallus or Lingam †) orgies.‡ A better explanation can be offered than plague, and so also with the plague of Pharaoh's Court in the time of Abraham (Genesis xii). (3) The "Plague of Emerods at Ekron after Shiloh" in 1 Samuel v, 6, bears not the interpretation of plague; nor is the "plague" of Baal Peor (Numbers xxi, 16), due to the disobedience of the Israelites in not slaying Moabites; and the wickedness at Shittim and again in Midian, in the light of verse 18, points very strongly to a disease other than "plague." (4) The plague of David's choice rather than famine or defeat (2 Samuel xxiv, 13), may have been plague, but it lasted only three days, and killed in that time 70,000 people; "from Dan even to Beersheba, 70,000 men." (5) After the earthquake that destroyed the rebellious Korah, Dathan, and Abiram and their followers, a plague followed (Numbers xvi, 46). "The plague is begun," and "they that died were 14,700 in addition." This, † then, and the Davidic pestilence may have possibly been plague as we know it, and the earthquake may have been some predisposing factor. The oldest date of the existence of plague that I can find is B.C. 277, where Rufus of Ephesus (*circa* A.D. 98) quotes a certain Dionysius to say that in B.C. 277 a

* If hæmorrhoids, possibly condylomata. A plague of hæmorrhoids from Baal Peor worship is absurd.

† Many temples in India have remnants of huge phalli. They may be rather vaguely described as "wishing-stones" of a peculiar shape for those who came to pray for fruitfulness. It is obvious how Baal Peor worship could be abused.

‡ So too, possibly, the epidemic which slew the "mighty men" of Sennacherib, when he "came down like a wolf on the fold" (2 Chron. xxvii, 21).

certain disease was known in Libya and Egypt, and described as *Pestilentis bubonis*. The date of the exodus is put at B.C. 491. Defoe's *History of the Plague* is probably a pure romance as far as figures are concerned. The Black Death of the Middle Ages is almost undoubtedly plague; the Sweating Sickness may have possibly been influenza, from the accounts.

I have notes of forty-seven cases of plague, and the following are the clinical aspects.

(1) An acute or fulminating, in which with little or no warning there is epistaxis or hæmatemesis, or an apparent syncope, sometimes with death in a few hours. I was lurching in Bombay when such a case happened beneath the window. (2) The so-called *Pestis minor*,* or *Pestis ambulans*, where there is general malaise, perhaps not hardly that, and an unaccountably inflamed gland, especially in the femoral group, ending in suppuration often; death from exposure and persistence at work happens, as in typhoid. This seems to be the type of endemic plague cases, and occurs in declines of epidemics. An inflamed femoral or other lymphatic gland with fever, not malarial, and no sore on foot (and if there were it might be plague inoculated), are the suspicious and difficult cases. A blood examination, of course, is the best means of diagnosis; the effects of time is obviously not a good criterion, since convalescence may be rapid, the case being mild. The "facies" must also be fallacious. Inflammation of an inguinal gland with these symptoms is much less often plague; I sent a case like this latter to the hospital, causing thereby much flutter, but it was probably not plague. (3) Then there is the pneumonic or visceral variety, and (4) the ordinary form. In both (3) and (4) there is much initial malaise and an almost characteristic face—quite early of mixed apathy and despondency, a heavy languid earthy face, a sort of exaggerated "Kismet look," with injected conjunctiva, a vacancy and bewilderment, not easy to describe, but considered by some so typical that its absence, indeed, is frequently used as a reason for excluding plague. Onset is usually sudden, with or without a rigor, with back-ache, headache, and vomiting. In twenty-four hours the patient is well "in" the disease—delirious, and getting out of bed. The delirium is almost of the "D. T." type, according to histories of the nurses, but there did not seem to me to be any terror from the hallucinations. Tongue is dry and brown, not thickly furred or bluish as in malaria; pulse rapid, small, weak, and soon irregular. In less than twenty-four hours one or more tender enlarged glands will be felt, usually in the axilla or Scarpa's triangle,—brawny, smooth, or faintly lobulated, and usually suppurate before reaching the size of a plover's egg if the patient does not die; sloughing may occur without definite pus formation.

* These should have been subdivided. *Pestis ambulans*, like typhoid *ambulans*, may or may not be *Pestis minor*; it is perhaps as likely to prove dangerous from neglect.

leaving a foul ulcer with undermined edges,—which are sometimes the so-called “carbuncles”* (the others being really pressure sores or sloughing of blood effusions). Petechiæ are not so very common (a petechia is the “sign” spoken of in old accounts of plague). I saw but two of these, both of which were subconjunctival. When present they are ominous of death. Hæmorrhages from the various mucous tracts are not uncommon. Liver and spleen usually are enlarged and tender. Constipation is more frequent than diarrhoea. Albuminuria is frequent; the urine may be suppressed or retained. The temperature has little that seems typical; there is an early rise to 103° or 104°, keeping up with slight remissions till the gland suppurates, when it falls, and then seems to depend upon the septicity or otherwise of the wound; on the whole, it is the temperature of septicæmia. “Inarticulo” or heralding death there is often hyperpyrexia. In the visceral or pneumonic form (3), with the same initial symptoms, and in pure cases without obvious glandular enlargement, there are signs of bronchitis or pneumonia, temperature keeps very high (a crisis is quite unusual), and the patient much more ill than the physical signs can account for. The rusty sputum, however, is quite distinct, and hæmoptysis may occur; in fact, the blood is usually much greater in amount than in ordinary lobar pneumonia. In the sputum can be found the bacillus, which must be searched for in doubtful cases. Recovery is not to be expected in this form. The elements of bad prognosis in plague are failing pulse, hæmorrhages, pneumonia, and previous starvation. The mortality at the height of the epidemic was probably about 80 per cent.—men die more often than women, Hindoos more than Mahomedans, Parsees than Eurasians, Europeans hardly at all. I have seen a child of three months affected, but I believe it recovered.

The treatment of plague merits some attention. Isolation and segregation are prophylactic remedies that are difficult for reasons above stated to carry out, but with their thoroughness the plague is diminishing now. Notices are posted to warn against bare feet, intemperance, insanitary states. Whisky is rather advised to be taken instead of water, or mixed with it, although the water supply seems unimpeachable. The quarantine imposed seems useless. No cases have reached London since December at least; in places where there is quarantine the plague has often in times past broken out, trade is at a standstill, and the days when it was said, rather let the ship's company die than a “whole city full,” ought to have passed by, now that everyone's right to live is recognised in this altruistic year of grace 1897, and especially when the chance of infection can be nearly removed by due inspection and isolation of actual or doubtful cases, and observation of those that have landed, as is the English custom. Marseilles qua-

* True carbuncles are more spoken of than seen.

ranted the “Caledonia” for ten days; the health on board was never so good, but had one passenger landed, a riot would have ensued, a member of the Extreme Left would have asked awkward questions, then fall of the ministry. Soon afterwards the citizens marvelled that there were so many dockmen unemployed; then the unemployed grumbled, and I expect did riot.

The immediate treatment is directed towards sustaining life till the poison has done its worst, by such means as are well known to all (quinine, however, has little value), and by counteracting the poison. This brings us to the two methods that so well exemplify the value of bacteriological work from a therapeutical aspect, viz. serumtherapy. Haffkine's method is a vaccination, and should have been mentioned under prophylaxis; to prevent plague he injects minute doses of an attenuated, very virulent plague serum,—analogous, in fact, to vaccination,—and it seems to do good even when the disease has occurred. He was himself of the first inoculated. Yersin's, on the contrary, is another example of antitoxin treatment, such as we have for diphtheria, tetanus, typhoid, and some forms of pyæmia; he injects some principle obtained from the blood of a plague-immunised animal. Both treatments, however, are still *sub judice*, and Yersin's was not tried till the epidemic had obviously begun to decline. There is some value in injecting the involved glands where possible with 1 in 5 (?) iodine solution or 1 in 1000 HgCl₂. Early extirpation of them seems futile.

Meanwhile the medical officers are working patiently, and earnestly visiting house to house, doing their best amidst murmurings from the people, who can never realise that an epidemic must claim its thousands, that prevention is better than cure, who think, unless the medical voice is raised in noisy debate, and medical advice is not that of Mrs. or Miss So-and-so and retired Col. X, that nothing is being done. So it ever will be. “Justitia non fit, cælum non ruit.”

OTHER DISEASES.*

Gonorrhoea is quite common in most parts of India. In hospital the local treatment by mercurial inunction, and exposure to sun, seems very efficacious.

Mollities ossium is said to be relatively frequent in Bombay, and is one of the most frequent causes for Cæsarcan section.

In *hæmaturia* one must remember *Bilharzia hæmatobia*. *Persistent anæmia* in the tropics may be due to *ankylostomiasis*—the St. Gothard Tunnel anæmia. The condition seems very frequent in Egypt.

Influenza-like symptoms accompanied by joint effusions

* The subject of calculus has been omitted; it is too long, and differs in no essential points from calculus in England. The operation in children of crushing through a median lithotomy wound is deserving of mention. The author has not seen it done in England.

are very often signs of *dengue*. The scarlatiniform eruption is not a *sine quâ non*. I had one such case in Bombay which was followed by persistent jaundice. An isolated case of influenza is probably rarer than one of *dengue*. Very little seems to be known of the pathology of this disease.

Glandular enlargement is common in natives on board ship. The officials usually consider them due to strain even when suppuration occurs, a not impossible explanation; and I believe “strain buboes” have been described in the German army. The most commonly enlarged are the axillary, inguinal, and femoral group. These often become tender in “fever,” and if previously unnoticed embarrass one's mind during plague. They may be due to malaria. There are also the varicose lymphatic glands due to filariasis described by Dr. Manson. The rest may be traced to some general disease like syphilis, or to peripheral irritation, from impetigo, and a form of ringworm (Dhobie itch), &c. There are some cases of “inguinal” buboes, which seem to be only attributable to a general condition; they own no peripheral exciting cause, and are certainly not venereal, and occurring not only in the districts of plague, but in England, and I believe in the army especially, can hardly be cases of abortive plague, or Pests minor. A writer in the *British Medical Journal* for June 12th, 1897, finds arsenic very useful for this condition.

Madura foot might easily be mistaken for tuberculous caries, at least I so misdiagnosed.

Pneumonia on board ship in a malarious native is usually fatal. It is said to be equally fatal inland. I had one such fatal case and one recovery.

Prickly heat is probably essentially due to follicular inflammation from excessive perspiration, but eczema may arise from it. For treatment a cooling lotion and a non-amylaceous powder is best (starch tends to block the gland openings by its hygroscopic properties, and for the same reason it is best to wash with *fresh* water after a sea bath to remove NaCl crystals). Some consider it malpraxis to treat prickly heat at all—much for the same reason, possibly, as they would refuse to help a chronic ulcer to heal even if they could. Laziness may be a factor in this negative attitude possibly.

Mosquito bites are best treated by a 1 to 80 carbolic lotion, which acts as a local anæsthetic, and by using a carbolic soap. Pennyroyal, sassafras, or eucalyptus are good also as preventives and alleviators, but nothing is so good as a proper curtain. The subject of mosquitoes is rapidly growing in importance since Dr. Manson's work on filaria, and the possibility of their connection with the malarial parasites.

Scurvy is quite rare now in the mercantile marine.

Specific urethritis in natives seems to get well spontaneously in three or four weeks. In the tropics a urethritis may occur due to no obvious cause, perhaps due to an

over-concentrated urine, due to excessive perspiration. An old specific urethritis is relighted very often by no adequate cause.

Carbuncles and *boils* are certainly best treated, if severe and indolent, before suppuration, as so ably recommended by Mr. West, with injections of 1x—xx of a 1 in 3 solution of carbolic acid in glycerine. I know of several patients subject to boils who actually request this treatment.

Febriçula.—Despite the insecurity one properly feels in making an early diagnosis of febricula, there is probably such a disease as febricula or ephemeral fever. When it is not febricula it is probably one of the following diseases in mild form: (a) the effects of exposure to sun = ardent fever; (b) a mild exanthem, especially typhoid during typhoid epidemics; (c) a mild remittent fever; (d) where there is slight jaundice, Weil's disease may be suggested. There certainly is, and especially in warm climates, a mild three to six days' fever, with sometimes gastro-intestinal symptoms set up by cold or other indiscretion, associated with a furred tongue, quick pulse, loss of appetite, headache and oliguria, and best treated by a small dose of calomel, and an effervescing mixture of citric acid, soda, and phenacetin, with rest in bed and mild fluid diet, and some sulphonal at night if there be restlessness. I can think of many such cases, some of whom have caused very great anxiety. It is a disease of which the diagnosis can only be safely made after convalescence.

Tropical typhoid, whose identity with “temperate” typhoid was at one time doubtful, is one of those diseases that was once “fever,” from which it has been triumphantly separated but lately. The complaint is now “everything is typhoid,” which must be the case amongst those to whom everything was previously “fever.” The disease may be in fact, however, for some reason on the increase, although there seems but little doubt that natives of India are almost immune, judging from P.M.s. on cases diagnosed typhoid, all of whom have probably suffered from remittent fever. The difficulties of the diagnosis depend upon (i) the very frequent absence of spots in tropical typhoid, and (ii) the great difficulty in tracing sources of epidemics; (iii) blood examination must be so often negative because so many have had malaria. The cases I saw in hospital I should have despaired of diagnosing from remittent fever—spleen enlarged and tender, rigors, and temperature character are common to both; the spots (so often absent, ? 70 per cent. in India), abdominal tenderness, and distension have to be the sheet-anchors for those who cannot use bacteriological means. Sun fever may also simulate typhoid. The diagnosis of Malta fever has been mentioned. Malaria with typhoid symptoms has been called typho-malaria, a most iniquitous term, for others call typho-malaria a disease in which typhoid and malaria co-exist, or a new disease due to the operation of both causes, and others still call Malta fever typho-malaria—“quot homines tot sententiæ.”

It reminds us of our aged and ageing friends rheumatic gout, and diabetic phthisis, &c.

Variocoele is frequent amongst Europeans in hot climates, partly, no doubt, due to relaxation of all tissues of support, sedentary occupations, and perhaps increased functions. Natives suffer less, due perhaps to their acclimatisation, and partly to a very efficient support which passes from behind forwards and upwards. Probably more actual physical and psychical discomfort is caused, which together with the opportunity of malingering makes the compulsory radical operation before joining the ranks in my opinion just. As regards the value of the open operation, I know of two cavalry officers who are well pleased with the result as regards themselves.

In conclusion, I do not profess to have been so exhaustive as, I fear, exhausting to those who have honoured me by reading, but have told some of the truth, and nothing wittingly false. I rather fear the appropriateness to me of that terrible criticism, "Il dit tout ce qu'il vent, mais malheureusement il n'a rien à dire."* At no time does one feel so grateful to one's old teachers and their well-known aphorisms than when confronted by the unfamiliar diseases of the tropics; difficulties are soon surmounted by those fundamental principles of medicine learnt in youth. Lectures on tropical diseases must be very useful and interesting as post-graduate work, yet I see no use for them compared with what they might replace if previously given; but this again, as all things are, is a matter of opinion. Shakespeare has it somewhere, rather fallaciously I feel—

"He is not worthy of the honeycomb
That shuns the hives because the bees have stings."

Fallaciously because one can get honeycomb without being stung.

My experience for the comparatively short time has probably been exceptional, but in any case with a certain amount of "keenness" it is really possible to learn very much indeed without making oneself a nuisance. What is true in England is essentially true wherever England's flag waves and civilises. "Coelum non animum mutant qui trans mare currunt."—R.I.P.

WRITTEN IN MEDITERRANEAN SEA; February, 1897.

ADDENDUM.

1. I have one or two practical hints of importance for the ship's surgeon. If he have on board a doubtful fever or eruption let him isolate it, but there is no need to make a diagnosis to the port medical officer. It is sufficient to report that such-and-such symptoms exist, and let the onus, if possible, rest with the official. Thuswise one's credit and popularity may be conscientiously preserved. This is especially important at Australia, where variola yet has never been firmly rooted. I know of many cases

* Quoted in a preface by Matthew Arnold.

where morbilli rubella and varicella have been misdiagnosed variola, to our everlasting annoyance. Above all things, never conceal the truth, let alone the immorality of it. It is bound to leak out, because you *must* isolate on board.

2. As regards *burial at sea* there is nothing very special; he may have to read the service. Never attempt to hush up a death amongst the crew; it is absolutely certain to be reported on the house-tops, and there is no knowing what reports will be disseminated. I know of one ship that was suspected of having had on board plague, and another cholera, owing to the secrecy of a burial.

3. Land a bad case whenever possible, especially amongst the crew, when outward bound. A death sows considerable gloom amongst the company.

4. With a little trouble one can buy quite a good second-hand outfit. The best way is to go down to the docks and make friends with the officers, who are proverbially genial and frank.

5. For the credit of our profession we must work and keep up our knowledge, and strive to keep up a good standard reputation, not inferior to that of our naval comrades, in the mercantile service.

6. An interesting paper might be written on the mercantile surgeons. I find references to them in many books, e.g. in Smollet, Robinson Crusoe, and even earlier. The surgeons then, like now, were often a discredit to the profession that tries to heal. With the discredit of a member, often falls the credit of the group—it is too often the case of "Ab uno disce omnes."

FERRATUM.—In the paragraph on Malta fever in my last article, the sentence should read: "It is doubtful whether it be quite correct to say jungle fever, marsh fever, and the many other fevers which are supposed to be merely local conditions of the same thing, are really identical with simple malarial fever."

W. H. M.

ILMINSTER; October, 1897.

Temperature and Sea-sickness.



HAVE not, like Mr. Maidlow, traversed many seas, but in my short voyage to New York I had under my care a case of sea-sickness with high temperature for three days, in many respects like typhoid fever, and on account of a small spot on abdomen I had to take typhoid precautions. The following is from my notes.
Muriel H—, *æt.* 11. Left Paris on April 16th; walked on board ship on April 17th quite well; the ship sailed at noon. During the night of 17th, and on two following days, 18th and 19th, she had nausea and vomiting, and could not keep anything down, not even water. As she was delirious on the night of the 19th, I was asked to see her on the morning of the 20th. I examined her and found eyes bright, cheeks flushed; complained of severe headache; tongue coated, clean at edges and down centre; pulse 120, full and rather bounding; temperature 101°.

The abdomen was tender all over; rather distended; there was tenderness in right iliac region and over spleen, but not more than elsewhere; spleen could not be felt. This abdominal tenderness was due to continued vomiting, and is present in almost all cases of continued sea-sickness; it is especially confined to epigastric region, and may be due to slight inflammation of coats of stomach and intestines; it is deep-seated, and points more to this than tenderness of abdominal muscles.

On 21st, 22nd, 23rd, and 24th the condition continued about the same, the temperature oscillating between 103° and 104°.

Below the left costal margin about the nipple line there was a reddish spot, exceedingly like a typhoid spot, which the mother thought had always been there, but on pressing her she could not be certain. This spot I showed to another doctor on board, and he agreed with me it was very suspiciously like a typhoid spot.

I believe that high temperature through sea-sickness is often observed in children. Dr. Schadt, of the *s.s.* "St. Paul," who has been five years at sea, told me that he had often observed it.

The temperature in the above case fell on the fourth day after I had seen her, and the patient left the ship quite well, but in a weak condition.

D. BOYD KEOWN, M.R.C.S., L.R.C.P.

Notes.

MR. P. J. CAMMIDGE, one of our recently elected Assistant Demonstrators of Biology, has been appointed Lecturer in Biology to the People's Palace.

DR. CLAYE SHAW will begin his class in Mental Physiology for the M.D. on Wednesday, October 6th.

WE UNDERSTAND that Mr. D'ARCY Power will deliver the Introductory Lecture at the Royal Veterinary College on October 1st, at 1 p.m.

DR. W. J. GOW, formerly Tutor in Midwifery at Bart's, and now Assistant Physician Accoucheur to St. Mary's Hospital, will deliver the Introductory Address there.

THE SPECIMENS added to the museum during the past year will be exhibited on the ground floor of the museum from October 1st to October 15th inclusive.

MR. A. R. DOUGLAS passed third into the Indian Medical Service with 3012 marks in the competition recently held. Mr. R. F. Baird passed sixth with 2889 marks, and Mr. P. K. Chitale passed eleventh with 2776 marks.

DR. CHAITAWAY has been elected Examiner in Chemistry for the Conjoint Board.

THE Abernethian Society will begin its 103rd Session on Thursday, October 14th, when Mr. Langton will deliver the inaugural address in the Medical Theatre. He has chosen as his subject "Some of those after whom the Wards are named." At the conclusion of the address refreshments will be served in the Library.

In this number Dr. Maidlow brings to a close his series of articles on the Ship's Surgeon and some Tropical Diseases. Various references in the pages of our contemporaries testify to the interest they have awakened. Dr. Maidlow is now in practice at Ilminster, Somerset, in partnership with Mr. Munden, where we wish him every success.

WE are requested to call attention of the Governors of the Royal Medical Benevolent College, Epsom, to the claims of Horace Dewick Sawtell, aged ten years, who is making his third application for a Foundation Scholarship in May next. He is the third son of the late T. H. Sawtell, M.D. Lond., M.R.C.P., M.R.C.S., an old Bart's man who died at Hyères, in February, 1891, from phthisis. Dr. Sawtell had been suddenly obliged to give up his practice in the North of London in 1888 when on the very threshold of success, and before it had been possible for him to make any adequate provision for his wife and four children. The case is strongly recommended by Dr. Gee, Sir Dyce Duckworth, Dr. Champneys, Mr. Butlin, and Dr. Shore, among others.

WE are requested by Miss Vogan to state that her nephew, R. J. N. Vogan, has been duly elected as a Foundation Scholar at Epsom, and that she wishes to tender her sincere thanks to those who voted for him or otherwise assisted his candidature.

FOR Bart's men to distinguish themselves in active service is no new thing; nevertheless we have great pleasure in reading the account quoted in the *British Medical Journal* for September 18th, of the devoted service of J. H. Hugo, who has left us but recently, at the siege of the Malakand:—"The casualties in the 31st Punjab Infantry were very heavy,—two killed and twenty-one wounded, including Lieutenant Ford and Lieutenant Swinley, the former very severely. In fact, it was entirely due to Surgeon-Lieutenant Hugo's perseverance that Ford's life was saved; with the greatest difficulty the bleeding was stopped, Hugo holding on to the arteries with his fingers for some hours."

Amalgamated Clubs.

NEW MEMBERS.

G. H. Adam.	F. A. Bainbridge.
A. D. White.	B. R. B. Truman.
W. B. Washel.	F. E. Brunner.
G. C. J. Acres.	G. E. Aubrey.
H. Walker.	W. M. Willoughby.
A. W. Izard.	H. E. Stanger-Leathes.
F. O. Hughes.	J. Corbin.
C. W. C. Harvey.	N. E. Waterfield.
R. A. Aldersmith.	A. H. Muirhead.
A. J. L. Speechly.	C. R. H. Ball.
E. G. D. Milson.	F. Sanger.

The late Mr. J. W. Ellison: an Appeal.

We reproduce here a letter written to the *Lancet* by Mr. Howard Marsh, in the hope that old Bart's men will show their practical sympathy with the relatives of one who lately belonged to their number.

To the Editors of the *Lancet*.

SIRS,—I should be very greatly obliged if you would have the kindness to insert the enclosed letter from Mr. Hatfield. The case to which he refers is one into which I have myself very carefully inquired. I am quite sure it is perfectly genuine, and it appears to me to be one in which we may, with every hope of success, appeal for help to the readers of the *Lancet*. Any subscriptions that may be sent will be gratefully received by Mr. Hatfield, York House, 1, Park Road, Forest Hill, S.E., or by myself, and will be at once acknowledged.—I am, Sirs, faithfully yours,

HOWARD MARSH.

30, Bruton Street, Berkeley Square, W.; July 23rd, 1897.

[ENCLOSURE.]

DEAR MR. MARSH,—I want to bring before the profession the sad case of Mr. F. W. Ellison, a former student of St. Bartholomew's Hospital, who died last September at Glenely, Adelaide, after two days' illness, aged forty-two. He took the M.R.C.S. in 1878, and after practising for five years at Catford he went to Australia twelve years ago and managed after some time to make a living at Glenely. He has left a widow and six children totally without means. The eldest, a boy aged sixteen, has weak lungs; the youngest is a boy aged six. Mrs. Ellison and her family are now in this country, and are entirely dependent on relatives, who are by no means well off. Up to the present time they have received small remittances from Australia, the result of the collection of book debts, but these have now almost ceased. An aunt has undertaken the charge and support of one of the daughters, and we wish, if possible, to secure for the family a small house within reach of some good school. They have, however, no furniture, and the friends are anxious to raise a fund for the purpose of buying some for them. If you can help me in this I shall be very glad. I have before me some flattering testimonials to Ellison's good qualities from yourself, the late Dr. Black, Dr. Gee, Sir Dyce Duckworth, Dr. Clement Godson, and Mr. Walsham, so I expect he will be well remembered at the hospital. He was a charming man and a great friend of mine when he lived here.

I have already been helping in some way, and I propose to subscribe to any fund that may be opened, and my friend H. A. Francis, who wrote from Vancouver immediately he heard of the death, has informed me that he also should subscribe.—Believe me, yours sincerely,

W. H. HATFIELD.

York House, 1, Park Road, Forest Hill, S.E.; July 23rd, 1897.

The following subscriptions have already been received:

	£	s.	d.		£	s.	d.
The Lancet Relief Fund	15	0	0	W. H. Hatfield, Esq.	2	2	0
British Medical Benevolent Fund	3	0	0	H. A. Francis, Esq.	2	2	0
Sir Thomas Smith, Bart.	10	5	0	Harrison Cripps, Esq.	1	1	0
Howard Marsh, Esq.	5	5	0	Bruce Clarke, Esq.	1	1	0
Dr. Lauder Brunton	5	5	0	Dr. Hutchinson	1	1	0
Dr. J. Kidd	5	0	0	Rev. J. Porter	1	1	0
Sir Dyce Duckworth	3	3	0	W. M. Kelly, Esq.	1	1	0
				Anonymous	0	10	0
				Total	56	17	0

Appointments.

BROWN, R. P., M.R.C.S., L.R.C.P., appointed Assistant House Physician to the Metropolitan Hospital.

DEADLES, H. S., M.R.C.S., L.R.C.P., appointed House Surgeon to the Grimsby Hospital.

BURNETT, L. B., M.A., M.B., B.C. (Cantab.), M.R.C.S., L.R.C.P., appointed House Surgeon to the Royal South Hants Hospital, Southampton.

HAYNES, G. S., M.R.C.S., L.R.C.P., appointed Assistant House Surgeon to the Metropolitan Hospital.

PRICE, F. E., M.R.C.S., L.R.C.P., appointed House Physician to the West London Hospital.

Surgeon-Captain HENRY MITCHELL, from the 2nd Life Guards, is promoted to be Surgeon-Major in the Royal Horse Guards, in succession to Surgeon Lieutenant-Colonel Melladew, July 6th. Surgeon-Major Mitchell entered the service as Surgeon-Captain, August 2nd, 1884, and was in the Soudan campaign in 1885, receiving a medal with clasp, and the Khedive's bronze star. He was appointed to the Grenadier Guards, May 30th, 1888; was transferred to the 2nd Life Guards, June 3rd, 1891; and from thence he now joins the Royal Horse Guards.

Examinations.

UNIVERSITY OF DURHAM.—H. G. Harris has passed the third examination for the degree of M.B. Also C. W. von Bergen.

FINAL CONJOINT.—In the list last month of those who have passed the final M.R.C.S. and L.R.C.P., we accidentally omitted the names of H. Allen and H. C. P. Bennett.

SECOND M.B. DURHAM.—P. M. Perkins has passed second in Second Class Honours. B. E. G. Bailey, R. Thorne-Thorne, and P. E. Turner have also passed.

FINAL L.S.A.—J. B. Cautley and F. R. Greenwood have passed in Surgery; and C. G. L. Dähne has passed in Midwifery.

PRELIMINARY SCIENTIFIC (M.B.) LONDON.—We regret that the name of E. C. Williams was omitted from the list published last month. Mr. Williams has obtained honours in Chemistry.

Births.

ANDREWES.—On August 28th, at Highwood, Hampstead Lane, Highgate, N., the wife of F. W. Andrewes, M.D., of a daughter.

ECCLES.—July 11th, at 63, Sackville Road, Hove, Brighton, the wife of G. Tolcher Eccles, M.A., M.B. Cantab., of a son.

Marriages.

BLAGDEN AND MURPHY.—August 10th, at Kilternan Church, by the Rev. T. A. O. Morchoe, M.A., John J. Blagden, B.A. Cantab., M.R.C.S., L.R.C.P., of Harwood, Horrabridge, South Devon, youngest son of the late Richard Blagden, Esq., of Petworth, Sussex, to Jessica, only daughter of the Right Hon. Mr. Justice Murphy, Glencairn, Sandyford, and granddaughter of the late Right Hon. William Keogh.

HOGARTH—LYNAM.—7th inst., at St. Matthew's, Nottingham, by the Rev. Canon Ferris, Robert George Hogarth, F.R.C.S. (Eng.), of Salisbury, only son of the late George Hogarth, of Eccles, Totts, Berwickshire, and of Mrs. Dear, Milford House, Salisbury, to Mabel Winifred, youngest daughter of the late D'Ewes Lynam, of The Park, Nottingham.

SURRENDER—BIRTWELL.—On August 21st, at St. Elizabeth's Church, Ashley, Edward Ernest North Surrender, B.A., M.B., B.C. Cantab., of Knutsford, to Edith Winifrede, eldest daughter of the Rev. Geoffrey Birtwell, B.A., Vicar of Ashley, Cheshire.

WILSON WHITE.—On the 24th inst., at All Saints', Kenley, Surrey, by the Rev. Ambrose Wilson, D.D., brother of the bridegroom, assisted by the Rev. Harry Wilson, M.A., cousin of the bridegroom, and the Rev. L. H. Squire, M.A., vicar, Norman O. Wilson, F.R.C.S., of Kingston Hill, eighth son of J. W. Wilson, M.I.C.E., of Elmhurst, Kenley, to Margaret Louise, fifth daughter of George T. White, of Malvern, Kenley.

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

