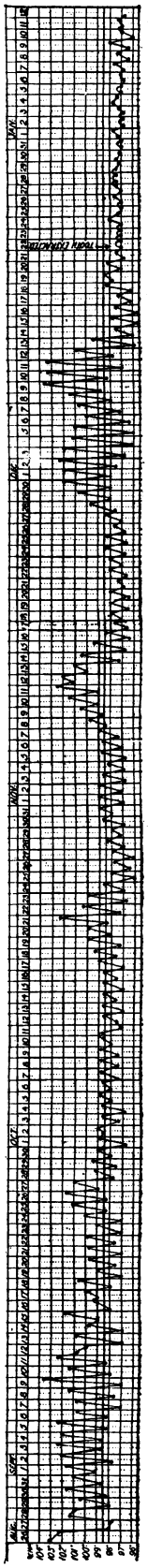
It is not improbable that some of the apparently healthy possessors of abscessed teeth would prove to be running an evening temperature if they submitted themselves to the test of the thermometer. It is also probable that a pyrexia which is attributed to the patient's illness is sometimes due to an unsuspected root infection, and that if encountered, say, after an operation, or after an attack of pneumonia, or in a person with valvular disease, it might be the cause of much anxiety to both patient and doctor.



CASE I.

It cannot be too frequently stated that root abscesses are quite common in the apparently edentulous, and the fact that a patient has clean empty gums does not warrant us neglecting to advise an *x*-ray examination of them if the patient's clinical symptoms are such as can be caused by some obscure focus of infection.

Vague ill health, brachial neuritis and sciatica, fibrositis, weakness of the heart muscle, and—may I add?—pyrexia are among the least serious consequences of root abscess.

CASE I.—*Pyrexia for Seventeen Weeks.*

The patient was a middle-aged lady whom I saw in consultation with Dr. L. Kirkby Thomas in 1921.

She had had a febrile illness for seventeen weeks, without any physical signs or symptoms that afforded the slightest clue to the cause of her high temperature, which at times reached 103°, as is shown in the accompanying chart. All the investigations usually carried out in such a case proved fruitless, including, I am ashamed to say, tests carried out at my suggestion to discover if she was malingering.

Finally, we decided to have her sinuses radiographed, and, though they proved normal, the radiograph revealed an abscess at the root of a solitary tooth.

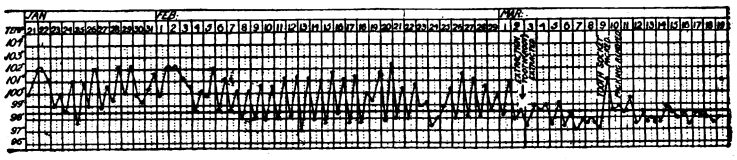
With the extraction of the tooth on the following day the pyrexia ceased, and her health, which had been somewhat affected by her long fever, rapidly improved, and has remained good up to the present day.

The temperature chart was made by the nurses in attendance on the patient. No one knows when the pyrexia began.

CASE II.—*Pyrexia for Six Weeks.*

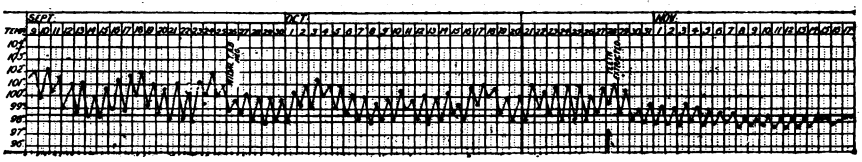
This patient, a middle-aged man, was under the care of Dr. G. C. Hartley, who was first called to see him in January last because the patient's wife discovered that her husband had a high temperature every evening. Dr. Hartley, finding no obvious cause for the pyrexia except a suspicious tooth, had the tooth extracted; in spite of this, however, the pyrexia continued.

Eventually the patient was admitted into the Queen's Hospital, and I investigated his condition in the usual way; but all tests, including blood cultures and Widal and Wassermann reactions, proved negative. A radiograph of the patient's gums, however, revealed a small abscessed root of which there was no part visible from the mouth. This root was extracted, and for the first time since the discovery of the pyrexia the temperature became normal. A few days later, on account of bleeding, the socket was plugged, and the temperature immediately rose again. The next day the plug was removed, and the temperature fell to normal and has remained so ever since.



CASE II.

The accompanying temperature chart was commenced by Dr. Hartley when the patient was in his charge, and was continued by the nurses at the Queen's Hospital. It is not known when the pyrexia began.



CASE III.

CASE III.—*Pyrexia for Seven Weeks.*

A business man, aged 47, a patient of Dr. J. M. McQueen, in September, 1927, complained of a vague ill health and loss of weight and strength. His evening temperature was found to be between 101° and 102°, but no cause for this could be discovered, nor had he any symptoms which gave any clue to the origin of the pyrexia.

The usual investigations and tests were made, but all proved negative till an *x*-ray examination revealed small abscesses at the roots of three root-filled teeth.

With the extraction of his teeth the pyrexia ceased and his health rapidly improved.

He reports that he has been quite well since the teeth were removed, and that there has been no further rise of temperature.

The accompanying chart is constructed from notes kept by the patient and Dr. McQueen. It is not known when the pyrexia began.

Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

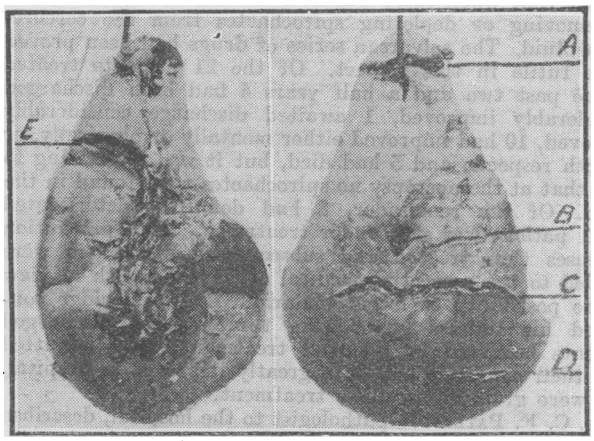
RUPTURED MALARIAL SPLEEN: SPLENECTOMY: RECOVERY.

THE following record may be of interest since rupture of a malarial spleen in Jamaica usually causes sudden death, followed by a coroner's inquest. Moreover, the patient was not seen until thirty hours after the accident causing the rupture.

A man, aged 37, whom I had known for several years to be suffering from malaria, with a large spleen, was on August 22nd, 1926, at about 11 a.m., thrown from a "buggy," falling chiefly on the abdomen. Shortly after the accident he vomited twice; during the following night he had severe abdominal pains, and passed two blood-stained stools. He was not seen by me till 6 p.m. on the following day (thirty hours after the accident), when he was in a collapsed condition, with a pulse of 120, and complained of severe pain all over the abdomen, but most acute in the hypogastrium and right iliac fossa. The abdomen was rigid and very tender all over, with dullness in the flanks; no superficial reflexes could be made out positively.

He was removed to hospital, and at 7 p.m. his abdomen was opened through a right rectus incision. The peritoneal cavity was full of blood, for the most part dark and clotted, but there was evidence of profuse fresh bleeding. The abdominal organs were quickly examined and the spleen was found to be ruptured—

ruptures A and C (see photograph) being easily felt. This wound was at once closed with forceps and an upper left rectus incision made, but as there was some difficulty in delivering the spleen an incision was made along the margin of the lower ribs to meet it. The spleen was then easily delivered, the pedicle clamped and tied, and the organ removed. At this stage the patient's condition was so poor that after rapidly cleansing the peritoneal cavity both wounds were quickly sutured in single layers and a drainage tube was inserted into the pelvic cavity; this was removed in forty-eight hours. Saline injections were given continuously during the operation, and rectal salines for the next twenty-four hours. I find it difficult to give blood transfusions in Jamaica owing to the high incidence of syphilis and to the aversion of the natives to act as donors.



The wounds showed superficial sepsis for a few days; but for this there was an uninterrupted convalescence. The man was discharged in four weeks from hospital, apparently quite well; he has not returned to me with an attack of malaria, but reported four weeks after with an attack of gonorrhoea. The spleen weighed 16 oz. on the morning after the operation. The ruptures labelled A, B, C, D in the accompanying photograph were on the outer surface; rupture E was on the inner surface.

Conclusions.

The haemorrhage must have stopped temporarily, but was renewed by the jolting over a four-mile rough road to hospital. Evidently no large vessel was implicated. The two blood-stained stools may have been caused by a contusion of the bowel which did not appear on the peritoneal surface, or have been due to the common practice of the peasantry of dosing themselves with calomel to remove "bruised blood." Another notable feature of the case is the lack of shock, which I have often observed among the natives.

D. LAURENCE TATE, F.R.C.S.ED.
Montego Bay Hospital, Jamaica.

PNEUMOCOCCAL PERITONITIS.

THE interesting case reported by Dr. Seymour (May 26th, p. 895) prompts me to describe another case of pneumococcal peritonitis, which eventually recovered.

A woman, aged 35, developed acute primary pneumonia involving the lower lobe of the left lung. The crisis occurred on the eighth day, with considerable collapse, vomiting, and copious evacuation of the bowels. Subsequently the abdomen became distended and a faint rash appeared on the flanks. A Widal test on the 11th day was negative. Distension of the abdomen progressed and constipation became absolute; there was no vomiting, but the tongue was very dry, and the facies was Hippocratic. On the advice of Dr. Carey Coombs, pituitrin was ordered every four hours. The patient became very collapsed after the third injection, but the bowels were opened and gradually the acute abdominal condition subsided. The temperature, however, began to rise again, and repeated efforts were made to locate a possible empyema, without success.

On the 21st day the patient became suddenly collapsed after a hard cough; soon afterwards the presence of a small quantity of fluid was demonstrated at the left base. The patient also began to cough up pus; presumably a small interlobar empyema had burst into the main pleural cavity. After this episode the patient made progress and the signs in the chest cleared up.

On the 44th day and again on the 60th day, the patient had a slight attack of intestinal colic. On the 66th day the colic recommenced, peristalsis was visible, constipation became absolute, and she began to vomit.

Mr. C. O. Bodman opened the abdomen under gas and oxygen anaesthesia. Through a median incision the small intestine was seen to be universally distended and densely matted with adhesions in the pelvis. The large intestine was not distended, but was involved in the adhesions in the pelvis; some adhesions were soft and recent, others were tough. Numerous adhesions and bands were divided, but owing to the condition of the patient jejunostomy had to be performed.

After eleven weeks the fistula was still discharging an excoriating fluid, so a second operation was performed by Mr. C. O. Bodman, the scar of the previous operation being excised. On opening the peritoneum it was seen that the adhesions were less numerous than on the former occasion, but the last loop of the ileum was densely adherent to the depths of the pelvis. The fistula was found to be connected with the upper end of the ileum; this was dissected away from the abdominal wall and anastomosed with the transverse colon.

The patient made a satisfactory recovery and was seen recently a year after operation; she was in excellent health and had suffered no further abdominal discomfort.

Apparently at the time of the crisis there was a peritoneal effusion which resolved, leaving in its wake a mass of adhesions; these, in course of time, contracted and caused the obstruction.

I wish to thank Mr. C. O. Bodman, honorary surgeon to the Bruce Wills Memorial Hospital, for permission to record the details of this case.

FRANK BODMAN, M.B.,
Assistant Physician, Bruce Wills Memorial Hospital, Bristol.

Reports of Societies.

MALARIAL TREATMENT OF GENERAL PARALYSIS.

AT a special meeting of the Devon and Exeter Medico-Chirurgical Society at the Devon County Mental Hospital on May 24th, with Dr. G. G. GIDLEY in the chair, the medical superintendent, Dr. R. EAGER, opened a discussion on general paralysis of the insane, with special reference to the treatment by malaria, which had been conducted for about two and a half years at this hospital.

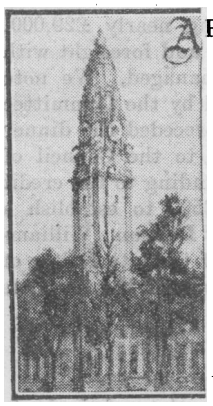
Dr. EAGER said that general paralysis was an organic disease of the cerebral cortex, which gave rise to motor paralysis and extreme mental deterioration; the average duration from the incipient symptoms to death was four years. At present it had to be considered incurable, although remissions might occur. Pathologically the disease was an invasion of the cerebral cortex by the spirochaete of syphilis, and, in addition to the Wassermann and globulin reactions, diagnostic importance was attached to the increased cell count in the cerebro-spinal fluid and to the colloidal gold reaction. Dr. Eager emphasized the greater incidence of the disease in the industrial centres as compared with rural areas; he cited his own experience at the Devon County Mental Hospital and the fall in the figures since cases from Devonport had ceased to be admitted. Further, the disease was almost unknown in uncivilized countries. As regards its incidence in syphilitic infection, 3 per cent. was given as the average figure for the development of general paralysis; lightning pains and ataxia were not, as a rule, concomitant symptoms. Dr. Eager then discussed the three typical stages of the disease, and showed a case under treatment at the hospital illustrative of each stage. In the first stage, that of mental exaltation, appeared the classical ideas of grandeur; this was the most hopeful period for treatment. Next came loss of initiative, when, for instance, the artist failed to secure tone for his pictures and the musician to gain his accustomed encore. Later there followed untidiness and slovenliness of habit. At this period the physical signs present were frequently inequality and sluggish reaction of the pupils; tremors of the face, tongue, and hands; and an increase in the patellar reflexes. In illustration of this stage Dr. Eager showed a man, aged 40, who, on admission, declared himself to be the Prince of Romany, and claimed a flight from Australia in three minutes. His pupils were unequal and the knee-jerks exaggerated; there were tremors of the fingers, and the tongue was protruded in the "trombone" fashion. In the second, or congestive stage, Dr. Eager drew attention to the loss of facial expression and the tendency to sit "huddled up." He showed two men in whom both characteristics were evident. Some improvement had been noted physically in these two cases after malarial treatment. In the course of the third stage, or stage of extinction, there occurred the

NINETY-SIXTH ANNUAL MEETING

of the

British Medical Association.

CARDIFF, 1928.



TOWER OF CARDIFF CITY HALL.

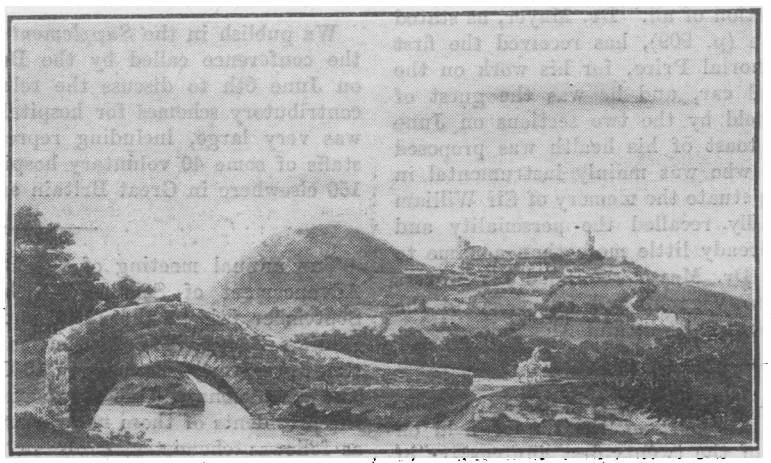
AFTER an interval of forty-three years the British Medical Association will hold its Annual Meeting in Cardiff this summer under the presidency of Sir Ewen Maclean, M.D., F.R.C.P., Professor of Obstetrics and Gynaecology in the Welsh National School of Medicine, who will deliver his address to the Association on the evening of Tuesday, July 24th. The sectional meetings for scientific and clinical work will be held, as usual, on the three following days, the morning sessions being given up to discussions and the reading of papers, and the afternoons to demonstrations. The Annual Representative Meeting, for the transaction of medico-political business, will begin on the previous Friday, July 20th. The names of the officers of the eighteen Scientific Sections are published in the *Supplement* this week, together with an outline of the provisional programme; further details will be announced from time to time as the arrangements for the work of the Annual Meeting take final shape. On the last day of the meeting (Saturday, July 28th) there will be excursions to places of interest in the neighbourhood. We publish below the fourth of a series of descriptive and historical articles, written for the occasion by Dr. Donald Paterson. The first appeared on December 3rd, 1927, the second on January 28th, 1928, and the third on April 21st.

THE COUNTRY ROUND CARDIFF.

VISITORS to Cardiff approaching it from the east become aware of features which distinguish its surrounding scenery from the rest of the Principality. Wales is essentially an upland region, with more than a fourth of its area lying over a thousand feet above sea-level, and its main lines of communication run from east to west rather than from north to south—a factor which has largely determined its political history. From the escarpment of the old red sandstone which forms the northern rampart of South Wales as far as the Bristol Channel on the south, the country is unlike the north and central upland in having a lower relief and the possession of great mineral wealth. Within this area the county of Glamorgan presents characteristics of its own, with two types of scenery which sharply contrast. Its northern two-thirds is occupied by the high ground of the coal-field, the southern edge of which forms a more or less bold escarpment—here and there rising over a thousand feet, like the Garth Mountain that towers over the Taff Valley, and dividing the hill country from the lower undulating district of the Vale. The upland of the coal-field, with flat-topped hills and deeply cut valleys, rises gradually northwards to the Brecon Beacons. Viewed from a height like Twm Barlwm, near Newport, it appears a vast expanse of moorland clothed with rough pasture, uncultivated and uninhabited save by a few mountain ponies and sheep, yet it conceals within the folds of its valleys a dense population, often overcrowded, and affords a marked contrast to the bare uninhabited hills.

On the other hand, the Vale, with its lower relief, is a well-cultivated land, thickly strewn with old churches, country seats, white farmhouses, and ruined castles. Of the last-named it possesses perhaps a larger number than any district in this country, some still imposing in their grandeur, others in an advanced stage of ruin or decayed into mere sites, eloquent witnesses to the fierce struggle that made life anything but pleasant in the March six or seven hundred years ago.

Glamorgan is a well-watered county. Its chief streams, charming in their variety, run more or less parallel in a southerly direction. Some rise in the Beacons, others within the coal-field, and flow rapidly throughout their whole length to the sea; few are navigable even at high water. They breach the south rim of the coal-field in a series of gorges, which afford access to the mineral wealth of the valleys and determined the position of the chief ports—Cardiff depending on the gorge of the Taff, Newport on that of the Ebbw.

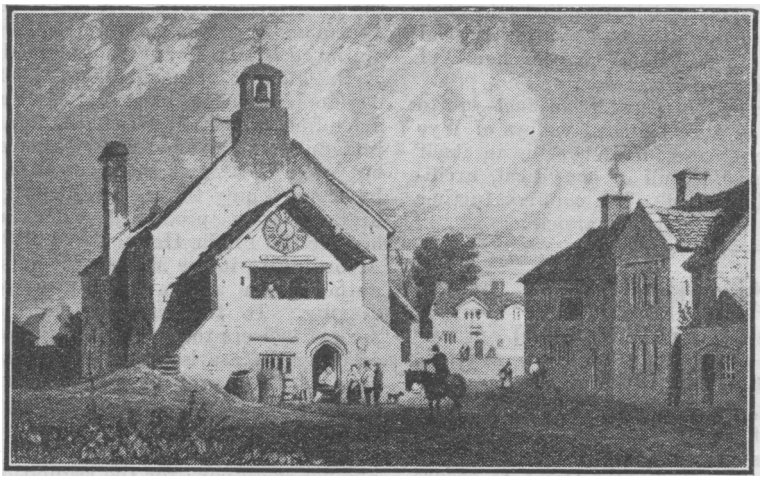


LLANTRISSANT, GLAMORGAN.

On the northern rim of the coal-field, at the head of the Vale of Neath, an interesting example of river capture, due to rapid cutting back of the river Neath and the diversion of several smaller streams, has given us one of the beauty spots of the county. The capture has resulted in the formation of a valley of great charm, with almost inaccessible limestone gorges, lovely waterfalls, swallow-holes, and underground streams, and the great Dinas Rock, within which, legend tells, Arthur still sleeps fully armed among his knights.

Further east the river Ely—after piercing the ridge upon which Llantrissant, one of the most picturesque of Glamorgan hill towns, with its ancient castle, sits astride—flows down a valley of pastoral beauty and winds across the alluvial Leckwith Moors to fall into the estuary of the Taff under the headland of Penarth. The flooding to

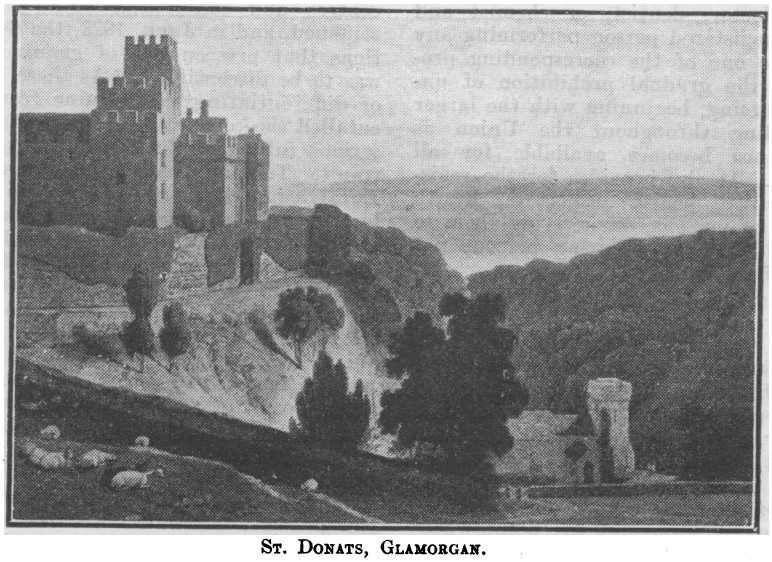
which it is subject in its lower course has become a serious matter now that the meadows which took its overflow have been built over with crowded dwelling houses. On its left bank, about two miles from Cardiff, St. Fagan's Castle, a seat of the Earl of Plymouth, built in Elizabethan times on the site of an original castle then in ruins, has a quaint vandyked appearance from the sharply pointed gables round two sides of the frontage.



TOWN HALL, LLANTWIT MAJOR.

The Taff, a rapid stream throughout its course, emerges from the Brecon Beacons into a valley that had few equals in charm before industrial change transformed it. The river has been the good fairy of the city—a river goddess presiding over its destinies. From its upper reaches it contributes the splendid water supply which has made the city the healthiest of towns; from its valley and those of its tributaries come the minerals which form the life blood of the port; its waters feed the great docks, whilst in its lower course, flowing between thickly wooded banks, with Castle Coch rising sentinel-like from the steep side of the gorge, and lower down the towers of the Cathedral showing above the trees, it affords to the citizens a fair and pleasing prospect.

To the east the Rhymney River, in escaping from the coal-field, makes a winding detour and ends as a tortuous stream flowing across the Cardiff Moors. Its valley, bare and more shallow in its upper part, opens out lower down, and at Caerphilly, where it becomes a wide-spreading vale, the eye rests upon the massive ruins of the old castle, the great border fortress that represented the high-water mark of mediaeval military architecture, whose "concentric" system of defences made it too strong to attack, and left it a history almost without feature.



ST. DONATS, GLAMORGAN.

The Vale is watered by numerous short streams, which reach the sea through gaps in the cliff. The Thaw, rising to the north, flows past the old walled town of Cowbridge under the remains of Llanblethian Castle, with its fine gateway, and along by the ruined manor house of Beaupré, which still retains its Renaissance porch, to fall into the sea at Aberthaw. Further west the Ogmore leaves the mountains of the coal-field, passes through the pleasant town of Bridgend, and, joined by the Ewenny, forms the eastern limit of the sandhills close to the sea. Ewenny Priory, on the banks of the latter stream—"the best specimen of a fortified ecclesiastical building which Great Britain can show"—with its massive tower, embattled walls, and magnificent gatehouse, has the appearance of a castle rather than that of a religious house. Lower down is the crumbling rectangular keep of Ogmore Castle, picturesquely placed, and containing some of the earliest masonry work in the county.

The coast-line scenery varies with the nature of the strata. To the east of Cardiff the flat shore of the Wentloog Level is lined by an expanse of mud. Part of the land is below high-water mark, and, protected by an embankment, is drained by reens. Here the may tree flourishes abundantly, and the pleasant meadows make good grazing ground. Nearer Newport, on the bank of the Ebbw, lies the well-wooded domain of Tredegar House, the park of which is bisected by the main road and overlooked by a hill topped by an ancient encampment.

West of Cardiff, from Penarth Head to the mouth of the Ogmore, the greater part of the coast is bold, with cliffs ranging from 50 to 100 feet, and attaining their greatest height from Penarth to Sully and in the neighbourhood of St. Donats and at Dunraven. Though the regular bedding of the lias limestone of which it is formed gives it an appearance somewhat monotonous, it is not by any means tame and uninspiring. The restless mining of the strong tides of the Channel produces crumbling and slipping year by year, and the constant change in the barrier has an interest of its own. At Barry and Sully the carboniferous limestone has resisted the action of the sea, and leaves islands at high-water mark. The same rock is seen in the islands of Flat Holm and Steep Holm, situated halfway between Cardiff and the Somerset coast.

Penarth, whose fine headland with the church on its summit makes it a well-known landmark, is a residential suburb of Cardiff, having well-kept roads and a promenade and pier that attract summer visitors. Barry, further down the coast, in addition to its extensive docks, has developed alongside them, and yet distinct from them, the sandy bay of its island into a highly successful holiday resort. A few miles west Llantwit Major, a picturesque little town with quaint cottages and inns, has an indescribable air of antiquity. It is remarkable for a striking series of buildings and a church of absorbing interest. St. Donats Castle, two miles away, is famous for its fine situation at the mouth of a well-wooded ravine running up from the Bristol Channel, and admirably chosen for defensive purposes. The extensive grounds, arranged in a series of terraced gardens leading down to the sea, give it a charming appearance as viewed from the Channel.

West of Ogmore the shore is lined by wide-spreading sand dunes or burrows as far as the estuary of the Tawe, except for a distance of three miles, where the rock emerges to carry the flourishing summer resort of Porthcawl. Beyond Sker, the scene of Blackmore's romance, the wilderness of sand attains its greatest depth, and at Kenfig,

where it overwhelmed the old town, the fragment of the castle protruding from the sand has recently been proved by the spade to be an upper part of a fine rectangular keep.

A little further west, about two miles from the sea, are the ruins of Margam Abbey, a Cistercian foundation of the twelfth century. Rising behind is a range of hills, richly clad with oak trees and intersected by a deep ravine concealing a mountain stream which supplied the fish ponds of the monks. The most interesting architectural remains are to be found in a polygonal chapter house of elegant proportion and unique in character.

The immediate neighbourhood of Cardiff, in fact—quite apart from the accessibility of the beautiful valleys of Wye and Usk and the magnificent coast of Devon—is in itself attractive for its scenery, and is full of geological, architectural, and archaeological interest. The country further afield we propose to deal with in a future article.

Union of South Africa.

[FROM OUR CORRESPONDENT IN PRETORIA.]

MEDICAL MATTERS IN PARLIAMENT.

Medical, Dental, and Pharmacy Bill.

THE outstanding feature of the present session of Parliament is the success which is crowning the prolonged efforts made by the medical profession in South Africa to secure satisfactory health legislation. The Medical, Dental, and Pharmacy Bill, which has come before Parliament periodically during the past decade, has at last been passed by both Houses. Only formal proceedings now remain before the bill becomes law. On May 10th the Speaker read a message in the House of Assembly transmitting for information a fair copy of the bill to the Senate, printed on vellum, and forwarded to His Excellency the Governor-General for his assent thereto. The Act will consolidate and amend the existing laws relating to medical practitioners, dentists, chemists and druggists, nurses, midwives, and masseurs; the keeping and sale of poisons, and the importation, sale, and use of habit-forming drugs. It will not only penalize any unqualified person practising as a doctor, dentist, or chemist and druggist, but also any unregistered person performing any act specially pertaining to one of the corresponding professions. It provides for the gradual prohibition of unqualified midwifery and nursing, beginning with the larger urban areas and extending throughout the Union as adequate trained assistance becomes available for all sections of the population. It also provides for the registration of dental mechanics, health inspectors, health visitors, and other classes of persons, empowering them to use the title "registered," and prohibiting persons not so registered from using that title.

In previous sessions the bill has invariably had to be dropped because of the delay caused by the concerted efforts of persons not on the medical or dental registers of any of the four Provinces to become registrable. Its successful passage through both Houses of Parliament is to be attributed to the persistence of the present Minister of Public Health, the Rev. Dr. Malan. At the end of the last session of Parliament, when 75 of its 96 clauses had been disposed of in the Committee stage, he agreed to its postponement only on condition that it should be proceeded with in the present session at the point where it had been dropped. As the most contentious points had already been settled the passage of the remainder was through comparatively smooth waters, and no great opposition was encountered. On the passing of the bill through the Senate the organizing secretary of the Medical Association of South Africa (B.M.A.), on the instructions of the Federal Council, wrote to the Minister of Public Health, conveying to him the thanks of the Association and congratulating him on the passage of the bill. Dr. Malan's private secretary, in reply, stated that the Minister thanked the Association most heartily for the kind expression of appreciation and goodwill. Dr. Malan desired him to state that he appreciated very highly the patience shown by the medical profession, and especially their hearty co-operation, without which it would have been impossible for him to accomplish his difficult legislative task. He earnestly hoped that the same co-operation and goodwill would continue in future in regard to the greater problems in connexion with public health with which South Africa was confronted.

Public Health Amendment Bill.

The Public Health Amendment Bill, too, has reached the final formal stages. A slight verbal amendment in the Afrikaans copy was made in Senate. This amendment was approved by the Lower House on May 10th, and a fair copy of the bill was transmitted to the Senate during the same day to be certified as correct and returned. The first bill amending the Public Health Act was passed last year; when introduced it included the substance of this year's measure, but when it became apparent that the whole was liable to be dropped only the clauses dealing with matters of special urgency were proceeded with, and these subsequently became the Public Health Act (1919) Amendment Act, 1927. According to it the Mining Commissioner becomes the local authority in any area proclaimed an alluvial diamond digging. It further provides for periodical visits by medical officers to places lacking medical aid where malaria or other disease is prevalent, to be paid for out of public funds. The rapid passage of the present bill was unexpected, as it contains all the contentious matter dropped from last year's bill. Its principal objects are to provide for the exemption of conscientious objectors to vaccination against small-pox; for the regulation and supervision of the practice of midwives, especially unqualified midwives, in the interests of the public health; and for summary procedure in regard to nuisances of an urgent nature. Some ambiguities have been cleared up, and several minor alterations in the Public Health Act, 1919, which experience has shown to be desirable have been made.

Vaccination Problems.

The Act of 1919 made vaccination compulsory on all, and arrangements were made for the systematic enforcement of the requirements for all races throughout the Union. But, from the first, strenuous opposition was offered by conscientious objectors, especially in Natal, and during 1921 a number of prosecutions were instituted in various centres and convictions obtained. Opposition, however, stiffened, and in June, 1922, the Government gave instructions that prosecutions of genuine conscientious objectors was to be discontinued. As there were no available means of differentiating the genuine from the non-genuine, this entailed the complete discontinuance of prosecutions, and a serious falling off in the number of vaccinations was the result. The fall has been greatest among Europeans and Eurafricans—that is, among the classes which register births. In many native areas vaccination has also fallen off considerably. This has occurred in spite of the provision of full facilities in both urban and rural areas throughout the Union. Had this position been allowed to continue for a few more years large sections of the population of all races would have been unvaccinated, with the consequent serious danger of outbreaks of virulent small-pox. A large increase in vaccinations occurred in 1926 and 1927 as the result of an outbreak of small-pox in Durban, from which town the chief resistance to vaccination had come. In all, 57 cases occurred, of which 16 were fatal. The borough of Durban and the neighbouring local authorities promptly made vaccination compulsory on all non-Europeans. Vaccination centres were provided, and were immediately besieged by a population demanding to be vaccinated. The local branch of the Antivaccination League took up the attitude that it did not object to vaccination *per se*, but only to compulsory vaccination. A considerable number of conscientious objectors and their families were voluntarily vaccinated. The present bill makes provision for the exemption of conscientious objectors to vaccination. The procedure laid down to obtain such exemption entails more trouble and foresight than to allow the child to be vaccinated in the ordinary way. This, the Minister explained, was intentional, as being the only reliable means of testing the genuineness of the objections. No exemptions are, however, allowed in the face of actual or threatened outbreaks of small-pox; nor may inmates of institutions or persons landing at ports who have recently been exposed to small-pox infection be exempted.

THE MENSTRUAL FUNCTION.

SIR,—I would like to comment on the very interesting article of Professor Beckwith Whitehouse entitled "Practical applications of recent views on the menstrual function," which was published in the *Journal* of April 21st (p. 651).

Professor Whitehouse expresses the opinion that the sanguinous menstrual discharge in the human female has a double causation—namely, the necrosis and consequent shedding of the "decidua" of the pseudo-pregnancy, and the pro-oestrual hyperaemia. He suggests, further, that the cutting off of "ovarin" is responsible for the necrosis, and that "oestrin" is the hormone responsible for the hyperaemic factor. In fact, according to him, there is, at the onset of menstruation, a "telescoping," as Marshall expressed it, of three distinct events, namely: (1) the termination of a pseudo-pregnancy; (2) the "acme of a pro-oestrum"; and (3) an oestrum.

Now it seems to me unconvincing that the activities of two different hormones should coincide to produce three resultant events, all at the same time, especially since two of these activities, which are supposed to take place *pari passu*, are, physiologically speaking, incompatibles. For while the termination of pregnancy is disruptive in its nature—katabolic—the "acme of the pro-oestrum" would mean the height of an anabolic process.

Further, the explanation given by Professor Whitehouse for what he calls "white menstruation" is equally unconvincing. He asserts that the non-occurrence of necrosis of pseudo-pregnancy is a more primitive condition than its happening, and he cites the merino sheep as an example of this primitive condition in mammals. That this is not the case is evident from the fact that we have a definite so-called pseudo-pregnancy necrosis in the marsupial cat (*Dasyurus*), a mammal much more primitive in its reproductive functions than the merino, while we have this pseudo-pregnant necrosis well marked in the dog, a mammal evolutionary of the same grade as the merino sheep. Again, if (as Professor Whitehouse maintains) the menstrual haemorrhage is due to two factors—necrosis and hyperaemia—then in the case of "white menstruation" where, on account of the supposed atavism, no pseudo-pregnancy necrosis occurs, the second factor being still present, a haemorrhage, possibly diminished, due to the hyperaemia, should occur. It seems to me the best way to approach this complex problem of menstruation is through evidence adduced from the study of evolution.

In a paper read before the South African Medical Congress in 1924 I advanced an evolutionary hypothesis of menstruation. Briefly stated it is as follows:

The ovaries, morphologically and functionally, are phylogenetically much earlier than the uterus; it follows, therefore, that the ovarian functions would dominate the uterine activities, and not vice versa. Hence the length of a complete primitive intrauterine pregnant cycle would correspond with the period of a complete ovarian cycle—namely, a period required for the maturation and expulsion of an ovum, which cycle is even now about twenty-eight days. The subsequent and gradual lengthening of the intrauterine gestation period would not influence the ovarian rhythm, which is phylogenetically its predecessor. The pace of a complete intrauterine reproductive cycle would therefore be first set according to the ovarian rhythm; this rhythm has still remained with its primitive somatic and generative changes, and in this sense the whole process of menstruation is atavistic.

—I am, etc.,

S. E. KARK, M.B., L.M.

Capetown, May 24th.

ORAL ADMINISTRATION OF PANCREATIC PREPARATIONS IN DIABETES.

SIR,—It has been brought to my notice since writing on this subject in your issue of May 12th, p. 798, that Messrs. Parke Davis's pancreatic capsules have at no time been on sale to the general public, and that they have not recently been manufactured.—I am, etc.,

Winchester, June 9th. C. B. S. FULLER.

Universities and Colleges.

UNIVERSITY OF OXFORD.

AT a congregation held on June 9th the degree of Doctor of Medicine (D.M.) was conferred on W. F. Skaife.

UNIVERSITY OF CAMBRIDGE.

AT a congregation held on June 8th the following medical degrees were conferred:

M.D.—S. H. Daukes, C. Strickland, M. L. Young.
M.B., B.CHIR.—G. J. O. Bridgeman, R. D. Curran, R. H. T. Rea, M. E. Lampard, B. Blaxill, F. Kellett.
B.CHIR.—C. L. Potts.

Mr. John Basil Buxton, M.A., F.R.C.V.S., has been re-elected Professor of Animal Pathology.

UNIVERSITY OF LONDON.

THE following candidates have been approved at the examination indicated:

THIRD M.B., B.S.—*‖D. S. M. Barlow, *§H. I. Deitch, *¶Emma J. King, *†T. Morton, *‡§¶H. J. Seddon (*University Medal*), *†F. R. Stansfield, *‡H. C. Trowell, F. W. Allinson, S. W. Allinson, I. Bakhsh, Augusta Bonnard, Irene F. Callender, Mildred Carpenter, Doris B. Clay, K. McL. Cobban, M. Coleman, N. E. Cook, J. N. Cumings, Constance M. Cusden, S. Davies, Jessie Edwards, Marguerite M. Fenn, G. M. FitzGibbon, Dorothy D. Forster, F. Forty, Mary Fraser, P. J. Ganner, Yetta Gimpelson, Barbara M. L. Glover, E. D. Y. Grasby, A. C. Hancock, J. C. Hawksley, R. A. Hill, T. H. Hobbes, L. Holmes, Effie L. Hutton, Morfydd R. Jones, A. B. Kettle, M. C. Lavin, Flora W. Lloyd, M. F. B. Lynch, A. R. Macdonald, A. M. McMaster, E. H. Madge, M. L. Maley, Muriel M. Manley, A. N. T. Meneces, Mary M. Moller, R. H. Morley, E. G. Muir, J. W. Notley, Lois J. Ogle, Evelyn D. Owen, J. R. Pierre, E. S. Phillips, R. F. Phillips, A. M. Richards, Audrey E. Russell, J. E. Saville, Thelma Shepherd, Gwladys V. Smallpeice, R. S. Smith, K. H. Southall, C. A. Stanley, Mary M. Tulloch, C. L. Worthington.

Group I.—Sophia Antonovitch, A. L. Basham, A. C. H. Bell, Ruth Bocock, W. P. M. Davidson, Helena M. de Hartog, Marjorie M. Dobson, Dorothy V. Dunolly, Dorothy E. Eglington, Geraldine W. Everett, G. S. Ferraby, C. Gross, Helen M. Herbert, Alice D. M. Hodge, E. C. H. Huddy, D. F. Kanaar, C. F. Moore, Mary E. Pease, G. C. Pether, Gwynedd M. Phillips, Edith J. L. Smith, E. R. Smithard, E. S. Vergette.

Group II.—Mabel A. Baker, S. Bernstein, S. J. M. De Navasquez, D. E. Dunnill, H. Evans, R. V. Farr, A. McK Fleming, W. H. George, J. H. F. Jayasuriya, I. J. Jones, Gladys E. McCabe, M. Mackenzie, H. Mannington, C. G. MacM. Nicol, G. L. S. Plumbly, E. L. Puddy, J. R. Rickett, I. M. Robertson, Clarice A. Skidmore, A. G. Watkins, P. C. Wickremesinghe, Elsie E. Wright.

* Honours. † Distinguished in Medicine. ‡ Distinguished in Pathology. ‖ Distinguished in Forensic Medicine. § Distinguished in Surgery. ¶ Distinguished in Midwifery.

UNIVERSITY OF BRISTOL.

THE following candidates have been approved at the examination indicated:

FINAL M.B., CH.B., PART I (*including Forensic Medicine and Toxicology*): Rowena M. Hickman, April Doreen James, Mabel F. Potter, §N. L. Price. *In Forensic Medicine and Toxicology only*: Isabella J. Armstrong.

PART II (*Completing Examination*): *†T. H. Berrill, B. J. Boulton, ‡R. D. Jenkins, †Helen B. Murgoci, ‖T. B. Wansbrough. *Group II* (*Completing Examination*): D. E. C. Andrew, A. J. McD. Grimston.

* With Second Class Honours. † Distinction in Special Pathology. ‡ Distinction in Public Health. ‖ Distinction in Obstetrics. § Distinction in Materia Medica, Pharmacy, Pharmacology, and Therapeutics.

SOCIETY OF APOTHECARIES OF LONDON.

Mastery of Midwifery: New Diploma.

THE Society of Apothecaries of London announces its intention to institute a Mastery of Midwifery and to issue a diploma under this title denoting the possession of specialized knowledge of ante-natal care, midwifery, and child welfare. References to the proposal were made on several occasions last year, notably on August 6th (p. 225), and the regulations are now available. It is intended to hold the first examination in the autumn and to make this a severe test, so as to ensure a high standard of professional knowledge. The diploma will, however, not be registrable under the Medical Acts. In initiating this qualification the Society has been moved by consideration of the need for organization and improvement in the practice of midwifery and cognate matters, and by a sense of its own traditions in promoting the advancement of medical knowledge among general practitioners. Admission to the new diploma is not confined to licentiates of the Society, but is open to all who have been for not less than a year in possession of a registrable medical qualification. The regulations prescribe that, after qualifying, candidates must have held, for at least six months, a resident appointment in a recognized institution concerned with obstetrics, and must have attended, for periods of three months in each case, a recognized ante-natal clinic and a recognized infant welfare centre before entering the examination. Until 1932, however, special conditions will apply to practitioners of ten years' standing. The examination will be conducted by written papers and by clinical and oral tests. Copies of the regulations may be obtained from the secretary of the Society, Water Lane, Queen Victoria Street, E.C.4.

Medical News.

THE annual general meeting of the Research Defence Society will be held at the House of the Medical Society of London, 11 Chandos Street, Cavendish Square, W., on Tuesday, June 19th, at 3 o'clock. The chair will be taken by the President, Lord Lamington. An address will be delivered by Sir Bernard Spilsbury on "The work and responsibilities of a pathologist," being the second Stephen Paget Memorial Lecture. Tea and coffee will be served after the meeting.

A MEETING of the Tuberculosis Association will be held on June 22nd, at 8 p.m., at the house of the Royal Society of Medicine, 1, Wimpole Street, W. Dr. F. R. Walters will read a paper on the causes of breakdown in health in pulmonary tuberculosis.

THE National Council for Mental Hygiene has arranged a public meeting, to be held in the Council Chamber, Birmingham, on Thursday, June 21st, at 5 o'clock, when addresses on the prevention of nervous breakdown will be given by Sir Maurice Craig and Dr. H. Crichton Miller. The chair will be taken by the Lord Mayor of Birmingham.

DR. ARTHUR HOPEWELL-SMITH will give a lecture, entitled "The process of osteolysis: a histological study," at Guy's Hospital on June 26th at 4 o'clock.

THE annual meeting of the British Hospitals Association will be held in the Congregational Schools at Southport on June 21st and 22nd under the presidency of Sir Arthur Stanley. Sir Thomas Horder will open a discussion on the place of the voluntary hospital in relation to health services, and Mr. G. Q. Roberts, secretary of St. Thomas's Hospital, will open another discussion on the problems of the voluntary hospital to-day compared with those of the past. Miss M. E. Sparshott, lady superintendent of nurses, Manchester Royal Infirmary, will open a discussion on the place of the nurse in the hospital. Further information may be obtained from the secretary of the conference, Mr. J. H. Shaw, Southport General Infirmary.

THE twenty-first anniversary dinner of the Royal Society of Tropical Medicine and Hygiene will be held at the Café Royal, Regent Street, W.1, on Wednesday, June 20th, at 7.30 p.m. for 8 p.m., under the chairmanship of Professor J. W. W. Stephens, M.D., F.R.S., President of the Society. Applications for tickets should be made to the Assistant Secretary, 11, Chandos Street, W.1.

THE Cambridge Graduates' Medical Club will hold its annual dinner in Pembroke College on Saturday, June 23rd, at 7 o'clock, with the president, Sir Humphry Rolleston, in the chair. The annual meeting will precede the dinner. Dr. V. C. Pennell, Westfield, 28, Huntingdon Road, Cambridge, is acting as local secretary.

THE Fellowship of Medicine announces that Mrs. Tindal-Robertson will give a clinical demonstration, for women graduates only, at the South London Hospital for Women, Newington Causeway, on June 20th, at 10.30 a.m. Mr. E. D. D. Davis will give a clinical demonstration in the Ear, Nose, and Throat Department of Charing Cross Hospital at 11 a.m. on June 22nd, and at 3 p.m. on the same day Mr. Dorrell will demonstrate at the Royal Eye Hospital, Southwark. These three demonstrations are free to medical practitioners. Three special fortnightly courses begin on June 18th—namely, one in diseases of the chest at the City of London Hospital for Diseases of the Heart and Lungs, Victoria Park, another in gynaecology at the Chelsea Hospital for Women during the afternoons and some mornings, and a course in medicine, surgery, and the specialties at the London Temperance Hospital from 4.40 to 6 p.m. From June 25th to July 21st the West End Hospital for Nervous Diseases will hold a special course of clinical demonstrations from 5 p.m. daily for the four weeks. The following special courses will take place in July: medicine, surgery, and the specialties at the N.E. London Post-Graduate College (Prince of Wales's General Hospital), Tottenham, all-day instruction, and a week's course in proctology at St. Mark's Hospital. Particulars of all special course syllabuses, a specimen copy of the *Post-Graduate Medical Journal*, and details of the general course of work available for those unable to do whole-time study are obtainable from the secretary of the Fellowship, 1, Wimpole Street, W.1.

THE paper read by Sir Leonard Rogers before the Section of Epidemiology and State Medicine of the Royal Society of Medicine, on the incidence and spread of cholera in India (reported in the *Journal*, May 1st, 1926, p. 784) has been reprinted from the *Proceedings* of the Royal Society of Medicine, as a memoir (No. 9) in connexion with the *Indian Journal of Medical Research*. This memoir also includes articles by Sir Leonard Rogers on cholera in the Punjab, the Central Provinces and Berar, and in the Bombay and Madras Presidencies, the United Provinces, Bihar and Orissa, Lower Bengal, Assam, and Burma. It may be obtained from the Indian Research Fund Association, Calcutta, price 7s. net.

A CONFERENCE of delegates from various educational bodies and other organizations was held in London on June 6th to consider the higher education of the deaf. Lord Charnwood, president of the National Institute for the Deaf, was in the chair, and various speakers described the existing provision and suggested improvements. Mr. W. Carey Roe said that there was no public provision for the post-primary education of the deaf, and outlined a scheme for the creation of a residential college, with facilities also for securing the co-operation of existing colleges or technical institutions. The conference resolved "that the time has arrived for the extension of the national system of education for the deaf by the establishment of provisions for further education than can be given in the present schools for such children," and decided to ask the National Institute to set up a committee to consider the proposals put forward and to report to a further conference to be held later.

THE report of the Home Service Ambulance Committee of the Joint Council of the Order of St. John and the British Red Cross Society for the first quarter of the year contains, in addition to the usual statistics regarding work done, some interesting practical notes on the care and maintenance of ambulances which should receive the attention of all concerned in this important service. It is pointed out that the comfort of patients depends largely on the condition of the cars, and it is suggested that divisions and detachments of the organizations should make it their business to remedy all structural defects which may develop. Referring to the road service scheme adopted last year, which was described on April 7th (p. 603), the report records an appreciable extension in the number of roadside first-aid boxes, first-aid stations, and patrols all over the country. Last year it was noted that the presence of uniformed members of the Order and the Society on the roads served as a warning to many drivers and pedestrians of the need for caution. The committee suggests that units undertaking work on the roads should forward to the headquarters of their organizations descriptions of the schemes of working adopted and any observations on their experience, so that information may be made available for the guidance of those taking up the work for the first time.

DR. CHARLES GORDON MOORE has been appointed physician-in-ordinary to H.R.H. Princess Beatrice in succession to Sir Alfred Rice-Oxley, resigned.

DR. WILLIAM BLACK JONES, J.P., Builth Wells, has been admitted a serving brother of the Order of the Hospital of St. John of Jerusalem.

AT a recent meeting of the Straits Settlements Legislative Council a bill was read for the first time designed to grant authorization to medical practitioners and certain other persons to possess and use dangerous drugs without licence, so far as it is necessary for the practice of their profession or employment, in the same degree as is lawful in England.

THE Hong-Kong Medical Association gave a dinner on April 21st to European practitioners and their friends; the Governor, Sir Cecil Clementi, was present. Dr. Jeu Hawk, the chairman of the Hong-Kong Chinese Medical Association, welcomed the guests, and Dr. Lee Shu-fan, who proposed their health, expressed the hope that there would be still closer co-operation between Chinese and foreign medical practitioners in Hong-Kong. He recommended more adequate medical staffing of some of the local Chinese hospitals, and suggested that the appointment of a full-time European medical officer, together with the arrangement of the medical services in departments, would be very beneficial. The Governor, replying, discussed the hospital organization of Hong-Kong, and, while refraining from defining any policy, agreed that it might be very desirable if representatives of the British and Chinese Medical Associations had seats on the medical board and the midwives board. The toast of the British Medical Association was proposed by Dr. Phoon Seck Wah, and, in reply, Dr. S. S. Strahan spoke of the necessity of upholding the high standard of Western medicine and of increasingly close co-operation with Chinese practitioners. Over 100 medical practitioners were present.

THE centenary of the birth of the celebrated obstetrician Etienne Tarnier has recently been celebrated in Paris at the Hôpital Tarnier and Académie de Médecine.

THE following appointments have recently been made in foreign faculties of medicine: Dr. Spiethoff, professor of dermatology at Jena; Dr. Steinhauser, professor of physiology at Greifswald; and Dr. Tanon, professor of hygiene and preventive medicine at Paris in succession to Professor Léon Bernard, who has been appointed the first occupant of the new chair of tuberculosis.