(*See p. 133.*)

FIG. 1.

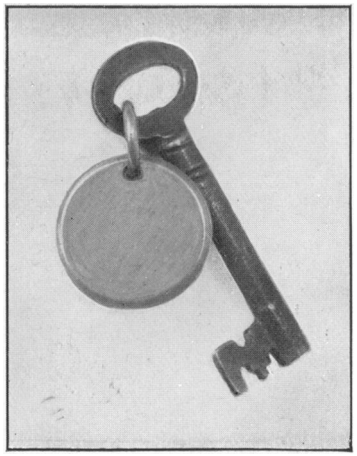

FIG. 2.

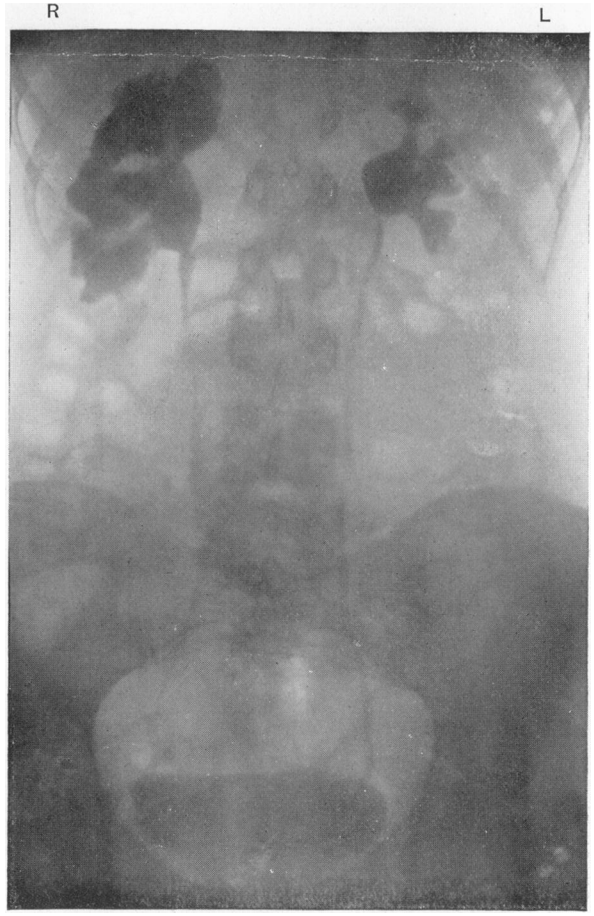

FIG. 1.—Pyelogram showing normal left side with right hydronephrosis (see Fig. 2).

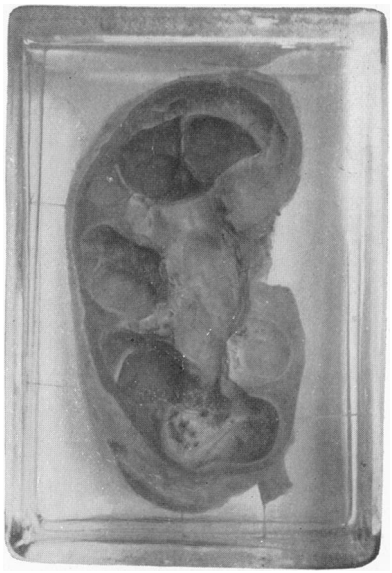

FIG. 2.—Infected hydronephrosis removed by operation (see Fig. 1).

FIG. 3.—Kidney completely disorganized by old-standing sepsis.

ances of tumours occurred. When the lead inoculation was first given with intervals of 0, 1, 2, 5, 7, and 12 days, there were also no disappearances; but with intervals of 3 and 4 days, 8 complete disappearances of the treated tumours occurred out of 22.

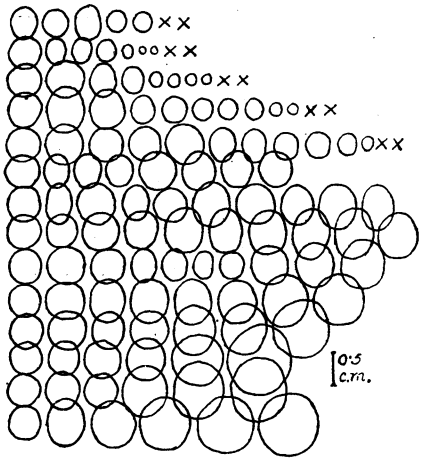

CHART 4.—×=Disappearance of tumour.

The growth of these 22 tumours is shown in Charts 4 and 5.

COMMENT.

The above results show that the combination of these two therapeutic measures will cause a tumour to disappear, using doses which, by themselves, do not produce this effect, but only result in temporary retardation of growth.

It has been suggested that this effect may be due to both treatments acting upon the blood vessels of the tumour and interfering with its supply of blood. In the case of radiation this action has been shown first to occur about 4 days after exposure.[2] Since the best effects of the combined action are obtained with intervals of 3 and 4 days, it follows that lead must begin to act on the blood supply of the tumour about 7 to 8 days after inoculation, provided, of course, that lead acts in this manner. It has also been suggested that radiation has greater action after lead treatment on account of the secondary radiation arising from the lead deposited in the tumour. If this is so, it can hardly be due to any increase in density of the tumour, as the amount of lead present is too small to alter this

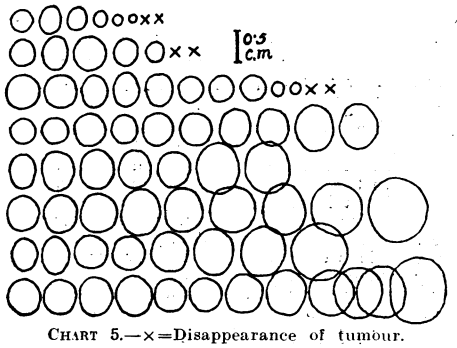

CHART 5.—×=Disappearance of tumour.

appreciably. It might, however, be due to the characteristic secondary radiation from the lead, as this is a new factor with qualitative difference. The results support the view that this combination of treatment should be given a trial in the case of patients suffering from cancer. The radium used was on loan from the Medical Research Council.

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[2] Mottram, J. C.: BRITISH MEDICAL JOURNAL, February 12th, 1927.
[3] Strangeways, T. S. P., and Fell, H. B.: *Proc. Roy. Soc.*, 1927, 102, pp. 9-29.

Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

A METHOD OF DEALING WITH A SWALLOWED OBJECT.

(With Special Plate.)

THE following case is of interest inasmuch as it indicates a practical method of dealing with opaque objects that have been accidentally swallowed.

The patient, a schoolboy aged 12, was brought to me with the history of having swallowed the key of his tuckbox. He had placed it in his mouth while unpacking the contents of the box. A school pal gave him a friendly slap on the back, and down went the key, ring, label, and all. The *x*-ray examination clearly displayed them in the stomach (Fig. 1).

It occurred to me that I might here make use of the method I devised for gastric investigation after an opaque meal—namely, radioscopic palpation. I found that I had full control over the foreign body by manipulation through the abdominal wall. I proceeded to manœuvre the key through the pylorus. As the handle of the key was directed towards the pylorus a complete turning round was necessary. With careful manipulation the wards of the key—that is to say, the lock end—were persuaded to engage in the pylorus. However, the ring and metal disc, both about the size of a two-shilling piece, could not be induced to pass.

The lad was then told to go out and eat as big a lunch as he could without any fluids. To him this was a pleasing suggestion. The manœuvre proved successful, for at the second examination, some three hours later, the key could be seen in the small intestine. A dose of castor oil was ordered, and the key was safely delivered the next day *per vias naturales* (Fig. 2).

It is, of course, quite possible that it would have passed out of the stomach without the assistance here described, but the anxiety of the parents was certainly curtailed, and it is quite conceivable that, in cases where the swallowed object is of an awkward shape or of large size, the possibility of being able to get the most suitable presentation to engage the pylorus is of some value.

S. GILBERT SCOTT, M.R.C.S., L.R.C.P.,
D.M.R.E.Camb.,
Medical Officer in Charge of the Radiological Department, London Hospital.

TOTAL HEPATOPTOSIS.

I BELIEVE the condition of total hepatoptosis is not a common one, and this is my reason for recording such a case in an old woman, aged 75, whom I recently attended in a terminal illness for congestion of the lungs.

I had this patient under observation for some years, and from her figure and fullness of the abdomen I suspected she might have an ovarian tumour. From time to time I attended her for slight malaise and noted that she had some oedema of both feet and legs, which, together with the fullness of the abdomen in an otherwise spare woman, rather suggested an abdominal tumour, but she persistently declined a general examination.

In December, 1927, I was summoned to see her for a chill and a chest condition; a general examination disclosed a tumour which appeared to occupy the whole of the abdominal cavity, the more so as the patient was in the sitting posture propped up in bed. The tumour was smooth and even in outline and extended upwards to the costal margin; laterally it occupied the right flank, and reached the mid-Poupart line on the left. In the downward direction the tumour ended about two inches below the umbilicus, its most dependent part being an edge which conformed to the line of the liver, with the notch between the lobes. On palpating the mass I could get my fingers well underneath it, and quite easily and clearly delineate the liver edge across the hypogastrium through the thin flaccid abdominal wall. The liver could be raised upwards to bring the anterior margin in close apposition to the skin, demonstrating thus its sharp edge and making the inferior surface look forwards. On percussion over the mass the note was dull. The liver was mobile, allowing considerable range of movement, and there was no tenderness or pain on examination. The right hypochondrium had a resonant note, in place of the usual liver dullness.

Besides the wandering liver, examination of this patient showed curvature of the spine, a condition which is occasionally associated with hepatoptosis, also an enlarged thyroid gland. The woman had borne six children, and the abdominal wall was lax and pendulous—another associated condition.

Apparently the patient was unaware of this unusual abdominal content; the only physical sign arising therefrom appeared to be the oedema of the feet and legs, possibly due to interference with the inferior vena cava. The liver was in a position of anteversion with slight rotation to the right.

Shenington, Oxon. A. ALAN FORTY, M.R.C.S., L.R.C.P.

RUPTURED ECTOPIC GESTATION OCCURRING ON BOTH SIDES.

THE following case appears to be of sufficient interest to warrant recording.

The patient, a married woman, aged 31, was admitted to the Hull Royal Infirmary on December 5th, 1927. She gave a history of having had no children or miscarriages, but had been operated on for a ruptured ectopic gestation on the right side six years ago. In October she missed one period, and seven days later started with a discharge of blood and mucus by the vagina, which never ceased. During this period she had a dull aching pain in the left iliac fossa. Three days before admission she experienced a rather more acute attack of pain, but her medical attendant, who saw her, states that she was not collapsed. During these last three days her doctor noticed a swelling above the symphysis, which gradually increased in size, and which he satisfied himself was not related to the bladder. The patient also had some pain, and frequency of micturition.

When admitted the patient showed no anaemia, but on examination there was a rather tender abdominal swelling, tense in character, extending up to the umbilicus. Examination by the vagina revealed a slight fullness in the left fornix, but the abdominal swelling could not be differentiated from the uterus. The cervix was soft to the touch. Examination was not very tender.

A tentative diagnosis of ruptured ectopic pregnancy was made, and the patient was operated on two days after admission. On opening the abdomen there was a cavity filled with old blood-clot, shut off by adhesions caused by the former operation on the right side, and by omentum extending down over the bowel above. There was an ectopic gestation, two and a half months old, present in the left tube, but no free bleeding point was found.

The interest in this case lies in the facts that (1) a ruptured gestation occurred in both tubes; (2) there was considerable difficulty in diagnosis, as the bleeding was very slow, and it was not easy to fix any definite time for the rupture.

I am indebted to Mr. Robert Grieve, who operated on the case, for his courtesy in allowing me to publish it.

E. G. COLLINS, M.B., Ch.B.,
Senior House-Surgeon, Hull Royal Infirmary.

Reports of Societies.

DIATHERMY IN RELATION TO CIRCULATORY DISTURBANCES.

A MEETING of the Section of Electro-Therapeutics of the Royal Society of Medicine was held on January 20th, with Sir HENRY GAUVAIN in the chair.

Professor SIDNEY RUSS opened a discussion on diathermy in relation to circulatory disturbances, more particularly high blood pressure, from the point of view of the physicist. He described the conditions governing the action of high-frequency currents, referring especially to some recent observations of d'Arsonval on the way in which heat was generated in body fluids by such currents' passage, one conclusion being that the efficiency of heating in the dielectric circuit was dependent upon the voltage. The ionic action of a current was of two kinds, oscillatory and rotatory; both played their part in the generation of heat. Professor Russ showed how infinitesimal was the range of these oscillations—equal to a molecular diameter. He emphasized the importance, in the clinical use of diathermy, of maintaining a check on the voltage employed. The question of the distribution of high-frequency currents throughout the tissues was one upon which further investigation was needed, but one accidental experience appeared to prove that nerve tissue provided an unusually good conducting path for weak high-frequency currents. On one occasion in his laboratory a high-frequency current of less than 0.2 ampere was passed from hand to hand for less than thirty seconds; one of the persons concerned said that she felt "pins and needles," and next morning a large part of the surface of her arm was devoid of sensation. This effect could never have been produced with so small a current unless the bulk of the current had followed the nerve.

Dr. T. F. COTTON dealt with the results of diathermy in disturbances of the cardio-vascular system. The value of the treatment, he said, depended entirely upon the production of heat within the body; there was general agreement that no other special effect came into play. Lewis had lately advanced the view that the reaction of dilatation of the arterioles, venules, and capillaries to changes of temperature was dual: there was a direct influence of heat evidenced in a lessening of tone of the walls of the small blood vessels, and also an indirect (and predominating) influence of heat in increasing the concentration of vaso-dilator substances in the tissue spaces. This reactive hyperaemia, with increased blood flow, was the mechanism of fine adjustment which governed the nutrition of the tissues. It was probable that the deeper vessels reacted in a manner similar to that of the cutaneous vessels, and, this being the case, diathermy in the treatment of disturbances of the cardio-vascular system had a direct relation to the physiological facts. It followed from this explanation of the mechanism of response of the blood vessels to heat that when constrictor influences predominated and caused alteration in the peripheral circulation, with eventual pathological changes, the release of these vaso-dilator substances, causing the small vessels to dilate, brought about the restoration of the normal circulation and blood supply to the tissues. Diathermy, therefore, seemed to have an appropriate part to play in the treatment of such conditions. Theoretically, also, in such a disturbance as was found in intermittent claudication diathermy should be a valuable remedial agent, and it was true that in many cases there was symptomatic improvement, but others, for some reason, were refractory, and did not benefit. Another condition in which constrictor influences predominated was acrocyanosis, but here diathermy failed to relieve the venous stasis more than temporarily. The treatment, spread over a number of weeks, had not proved sufficient to control the constrictor influences, which might be of central origin. With regard to high blood pressure and its treatment by diathermy, the speaker thought that patients with hypertension might be divided into two main groups—namely, those with symptoms directly due to the high blood pressure, and those with symptoms due to other causes. Patients in the first category were decidedly better when the blood pressure was lowered 20 mm. Hg, or thereabouts, as a result of diathermy. The second group—namely, that of patients with symptoms due to other causes—included those with signs of renal insufficiency predominating, and it was not rational to give them treatment which had as its main object the lowering of the blood pressure. Diathermy should not be given in hypertension with renal disease predominating. The group also included patients with symptoms of myocardial exhaustion due to auricular fibrillation. The blood-pressure level could be affected in these patients by slowing or altering the rate with digitalis, but no good, in his opinion, could come from diathermy. Diathermy, however, might be a valuable therapeutic agent in patients with high blood pressure and symptoms of angina. Dr. Cotton looked upon angina as itself a symptom of myocardial exhaustion, frequently associated with coronary changes; when such patients had high blood pressure, and this was reduced to a lower level or to normal, the heart had probably less work to do and the circulation was more easily maintained. Unfortunately, many such patients did not do well under diathermy, and it might be that the group of patients with angina who did not improve were patients with coronary disease, on account of which the vessels were refractory to heat. There was, however, another type of angina, sometimes called secondary, in which there was no structural disease, but probably a nutritional disturbance of the heart function which might be of toxic origin, and here diathermy was likely to be helpful after any foci of infection had been removed.

Dr. JUSTINA WILSON gave an account of the symptoms and course of chronic constitutional hypertonia, illustrating it from her experience of various cases. In uncomplicated high blood pressure diathermy might be valuable, and most helpful of all in intermittent claudication, but to be really effectual she thought it should be combined with careful treatment of the lymphatics. Light superficial stroking of the lymphatics of the skin, combined with a thorough vibratory treatment of the deeper lymphatics, was a useful adjuvant. In cases of angina diathermy should be given only with very careful precautions, with treatments certainly not every day, with small amounts of current, and with not over-long séances.

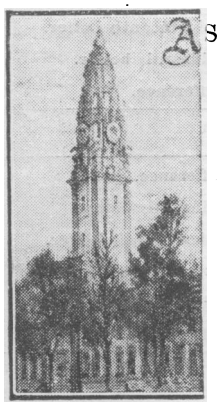
Dr. AGNES SAVILL described a long-standing case of angina in which relief had invariably been afforded by

NINETY-SIXTH ANNUAL MEETING

of the

British Medical Association,

CARDIFF, 1928.

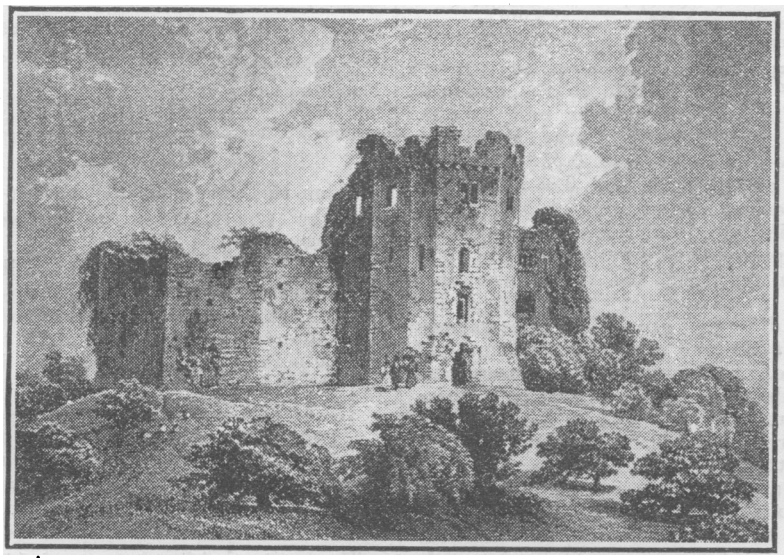


TOWER OF CARDIFF CITY HALL.

AS already announced, the ninety-sixth Annual Meeting of the British Medical Association will be held in Cardiff next 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 Presidents and other officers of the Scientific Sections were published in last week's SUPPLEMENT, together with some preliminary notes on the programme for the Annual Meeting; further details will be announced from time to time as the arrangements take 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 second of a series of historical and descriptive articles on the city and its medical institutions, written for the occasion by Dr. Donald Paterson. The first appeared on December 3rd, 1927.

CARDIFF: A BRIEF OUTLINE OF ITS HISTORY.

CARDIFF is the capital of the county of Glamorgan, a shire of "long and ancient time," part of the far older territorial division of the diocese of Llandaff, which has its bishop seated at Llandaff. The district of which Cardiff is the natural centre was part of the old tribal division of Morganwg, long held under its Welsh rulers in practical independence of the rest of Wales, largely because the mountain barrier of its northern limit decreed its isolation. Archaeology tells us that the cultures of prehistoric times reached it mainly from the opposite shore of the Bristol Channel and from Ireland, rather than from the *massif* of the central and northern uplands which has done much to preserve the independence and the language of Wales. Its lower relief, the possession of rich agricultural land and an indented coast-line with tidal harbours, made the plain of Glamorgan from early times a region of immigration from England and the sea.



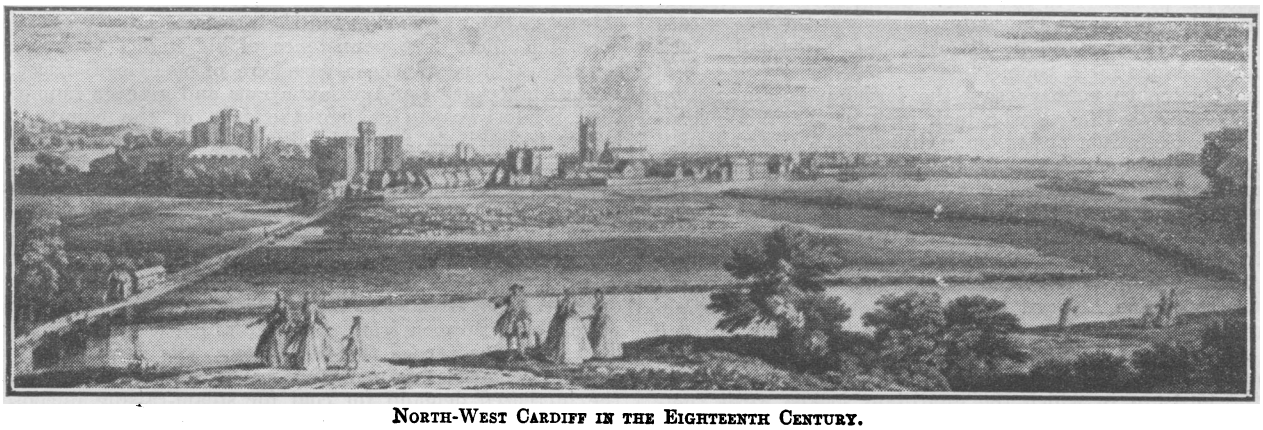
CARDIFF CASTLE: THE KEEP, 1840.

On the origin of Cardiff history sheds no light. There is not even a local tradition to add a salt of human interest and to invite criticism from the historian. Yet its situation with a sheltered roadstead must have proved attractive to the early traders who frequented the coast. It occupied a Roman site, and its position—not on the sea, but on a navigable river a mile from its mouth—presents advantages, military and commercial, generally associated with an ancient settlement.

Cardiff is known to be the site of a Roman station, though its Roman name has not come down to us. The spade has brought to light its existence in the first century A.D., its occupation being military in character, probably dependent on the legionary fortress at Caerleon on the Usk. The Roman Empire was held together by its roads, and the position of Cardiff on the river Taff, in the middle of the great sheltered plain between the Rhymney and the Ely rivers, made it a suitable site for one of the many forts built at strategic points throughout Wales in the early days of the Roman occupation. It was reconstructed and enlarged about the end of the third century, possibly in connexion with Gaelic migrations from Ireland to South Wales at that period, and the site was still occupied towards the end of the fourth century.

With the departure of the Romans the fort fell into decay, having perhaps suffered, like other sites, in the general chaos from incursions of Irish sea-rovers. Like a haunted spot, it remained unoccupied for several centuries, until the practical Norman set up his castle-mound within its walls.

Written record and the well known Ogham stones attest the presence of Irish Gaels during and after the Roman period, and their speech prevailed into the seventh century. In the Age of the Saintes, when community had been established between the ancient British and Irish Churches, when the monastic school at Llantwit Major flourished and Celtic missionaries wandered far afield, the estuary of the Taff doubtless formed a stage in the Pilgrim's Way to the Continent from Ireland.



NORTH-WEST CARDIFF IN THE EIGHTEENTH CENTURY.

The coming of the Nordic peoples brought fresh immigrations to the shores of Glamorgan. The Saxons probably filtered across from the opposite shore of the Severn estuary, as the men of Somerset and Devon have always done. Their Viking kinsmen, after establishing themselves in the seaports of Ireland, organized their commerce and embraced the Bristol Channel in their wide activities. Bristol, the great seaport of the West, owed its rise to this trade, and the same may perhaps be said of Cardiff. Danish ships were frequently seen in the Severn Sea in the tenth century, and in Glamorgan their place-names are remarkable alike for their wide adoption and persistence. In the saga of *Burnt Njall* the slaying of Kol, who was finally discovered settled in Bretland (Wales)—the fitting close of the famous blood feud—may well have been staged at no great distance from Cardiff.

Of the arrival of the Norman *advenae* in Cardiff little that is authentic has come down. The fact of Cardiff being a bridge-town, with free access to the sea, made its early possession desirable. The change perhaps made little difference to the inhabitants and did not involve a breach of continuity. It is fairly certain that when William the Conqueror himself paid his visit to Wales he ordered the great castle-mound of Cardiff to be built, placing it in the keeping of his kinsman Robert Fitzhamon, who subsequently completed the conquest of Glamorgan when the troublous early years of Rufus's reign had passed. In the settlement Fitzhamon retained the rich agricultural land of the low country for his own followers, who held it by service of "castle-guard" at Cardiff; many of them were already holders of fees across the water in Somerset and Devon. The hill districts, mainly forest and pasture, he left on easy terms to Welsh chieftains, in whose hands they remained for nearly two hundred years after the Norman conquest.

When the written record comes in we find Cardiff fully formed as a town, styled a borough with legal administrative machinery, palisaded for defence, the seat of trade, and in possession of a castle which fired the imagination of the writers of Arthurian romance. A seigniorial borough, Fitzhamon probably conferred its first charter. His son and grandson granted it extensive privileges, and the latter extended it by founding a new borough outside the town. This independent community was eventually absorbed in the larger community, as happened in the case of the earlier French "new boroughs" at Norwich, Shrewsbury, Nottingham, and other places.

Fitzhamon established in Glamorgan what was later known as a Marcher-lordship, in which the law of the March was the feudal law of France—an *imperium in imperio* much coveted by great nobles. The lords of the march owed homage, but no service, to the king, and regarded themselves as little short of uncrowned kings; when Edward I visited Glamorgan, Gilbert de Clare, the "Red Earl," received him almost as a brother sovereign. The Welsh March was the most thoroughly Normanized part of the whole kingdom. In Glamorgan alone were some forty castles, some of the largest and some of the smallest in Britain, and their remains continue to form an attractive feature of the county in the present day.

Cardiff became the *caput* or head of the lordship, and from his castle at Cardiff, where he held court and had his chancery, the chief lord maintained the balance in the never-ending struggle between the agriculturist of the low country and the Welsh pastoralist of the hills. Risings of the Welsh broke out at intervals, notably at the death of a chief lord, perhaps because the Celt loves to celebrate a funeral; sometimes, no doubt, deliberately provoked to furnish excuse for conquest. In these upheavals Cardiff did not always escape.

In the mediaeval period the history of Cardiff is linked up with the fortunes of the lordship of Glamorgan. Its chief lords held the castle and town of Bristol as well as Cardiff, and this did much to promote the close relations between the two seaports which remained such an important factor in the social and economic life of Cardiff down to modern times.

The most able of the chief lords was Robert Consul, Earl of Gloucester, who married Fitzhamon's heiress. A natural son of Henry I, his royal father promoted the match, and, according to the old rhymed chronicle, conducted negotiations with the lady herself, who at first made some demur. Her scruples were, however, allayed, and William of Malmesbury tells us "she was devoted to her husband and blest with a numerous and beautiful family." Robert was a man of affairs, a statesman, and a soldier in the difficult days of Stephen. By his moderation he conciliated the Welsh and gained their confidence. He was, moreover, a magnificent patron of letters, and did much to promote the intellectual movements of his time. Among the men of letters who frequented his court at Gloucester and Bristol and Cardiff was Geoffrey of Monmouth, who resided at Llandaff for a time and died there. Geoffrey dedicated to him his famous History of the Kings of Britain, a work which, however little its value as history, made the Arthurian legends fashionable and revealed the possibilities of Celtic romance.

Half a century later Archbishop Baldwin of Canterbury passed through Cardiff on his journey through Wales to preach the Third Crusade. He was accompanied by Giraldus Cambrensis, one of the most remarkable men of letters of his time, and an entertaining writer of freshness and charm, who has left an account in his "Itinerary through Wales." Giraldus admired the "noble castle" at Cardiff, and relates of Henry II that when he spent a night there on his way back from Ireland, and was about to resume his journey on Sunday morning, he was upbraided by a native for breach of Lord's Day observance and warned of the grave consequences. Giraldus had a great struggle for the See of St. David's and paid visits to Rome, where he entertained the Pope with the Latin "howlers" of his archbishop (not Baldwin), which are still paraded in modern dress, but he was not made bishop.

Robert's son William had not the qualities of his father. He distinguished himself by being captured, along with his countess and young son, by Ivor Bach, a neighbouring

Welsh chieftain, who scaled Cardiff Castle by night and carried his prisoners to the hills. John, afterwards King, married his heiress. The lady, however, did not please him after a while, and he divorced her, though he stuck to her revenues for a time.

The thirteenth century saw the lordship in the strong hands of the de Clares, who took most of the Welsh lordships into their own possession. Gilbert, the "Red Earl," played a prominent part in the barons' war, and when Simon de Montfort crossed the Usk and ravaged his lands it is more than likely that Cardiff suffered in the process.

The town attained its maximum under the de Clares. With the fall of young Gilbert de Clare at Bannockburn the lordship went to the Despensers, the arrogant favourites of the incapable Edward II, who wandered in the neighbourhood and was captured not far from Cardiff, to end his career in the tragedy of Berkeley. Cardiff had fallen upon evil days. There were long and frequent minorities in the lordship in which the guardians looked after their own interests rather than the welfare of the people. The visitation of the Black Death in 1348-49, followed by lesser epidemics in the same century, took heavy toll of the town, and in the rising of Owen Glyndwr in 1403-4, in which economic destruction took place on a large scale, part of it was laid waste. From this it did not recover for several centuries. From being a "Market of the Staple" and a leading port in the kingdom for a period in the fourteenth century, it dwindled in the eighteenth to being "a creek" in the port of Bristol, and its population remained not much more than 1,500 until the industrial revolution infused new life into it.

Under Henry VIII the Marcher-lordships came to an end. Latterly they had but served to perpetuate the worst form of anarchy. Henry abolished the law of the March and substituted English law, a change that was welcome and productive of the best results.

The effect, however, was not immediate. Piracy had long been rife in the Bristol Channel, and in the days of Elizabeth Cardiff became a general resort of pirates and adventurers who plundered on the high seas. Many of its prominent citizens were not ill disposed to the practices, and even a high sheriff took a hand. It was urged in excuse that Cardiff "had always protected that class." The Government finally had to move. Many suspected pirates and their accomplices were examined by commissioners, and some of the ringleaders, including the high sheriff, were convicted and heavily fined, in spite of their plea that there was "a difference in law in the matter of spoils done on the sea." Smuggling, however, continued to flourish along the coast for a long time in the "creeks" which were "members of the port of Cardiff."

In the Civil War, Cardiff, following the lead of the West Country, was, on the whole, on the side of the King, though it changed sides more than once. Charles in his wanderings visited the town, but he made little impression, and he went on his way to the north. The defeat of the Royalists by Horton's Brigade at St. Fagans, near Cardiff, did much to keep the neighbourhood quiet.

Cardiff had little to do with the Church. Most of the land in the neighbourhood had been gifted by its early Norman lords to great abbeys which they had founded on their English estates. The Bishop of Llandaff continued to hold his manor or lordship of Llandaff, with some special privileges which were settled by a concord with Robert of Gloucester.

The long period of eclipse which set in in the fifteenth century is perhaps responsible for the old town retaining much of its early form and many of the streets their original names. Its size and shape can readily be made out on the modern map, as the section of the canal from the Castle to the Monument occupies practically the site of the Town Ditch, its eastern boundary. The area within the old town formed roughly a segment of a circle with its arc resting on the Taff, its western boundary. Here the river had seriously encroached on the town and destroyed the old church of St. Mary, and it was found necessary to divert it into the present "straight cut" before the construction of the Great Western Railway. Except in a few instances the streets largely retain their old lines. Some have changed their names, a few more than once, but there is a persistence of old names which does something to recall the atmosphere of mediaeval times.

The eighteenth century saw a new and greater immigration, which was to change the face of the county. It began by arrivals from the English Midlands to exploit the mineral wealth of the hills. The discovery of the previous century that iron ore could be smelted by mineral fuel led to works being established along the northern boundary of the county, where coal and ironstone cropped out and carboniferous limestone was abundant. The iron trade became for a time the important industry of the district. The iron was first carried down on the backs of mules to be shipped from the Taff, which was navigable at high water as far as the Old Quay. The construction of a canal replaced this primitive method of shipment. With the increased demand for coal for steam-raising purposes, especially in ships, greater facilities for its export were provided by cutting docks on the moors to the east of the river, and the modern port of Cardiff began to take shape.

In 1840 the first cargo of South Wales steam coal was exported from Cardiff. Its excellence as steam-generating fuel and its freedom from smoke marked its superiority for steam purposes. Its sale and export is the main industry upon which the district depends, and the phenomenal increase in the volume of trade has led to the rapid rise of the port and its emergence as the economic capital of a province.

Cardiff's export trade has brought it into relation with all parts of the globe, and in consequence it has drawn its inhabitants from many quarters, and is the most cosmopolitan of cities. All its citizens unite in a determination to advance the interests of the city which they have helped to make. In this they but serve to furnish another illustration of the old truth—that the history of this country has been "largely a history of elements absorbed and assimilated from without."

VITAL STATISTICS FOR ENGLAND AND WALES, 1927.

We are indebted to the Registrar-General for the following statement regarding the birth rates and death rates and the rates of infantile mortality in England and Wales and in certain parts of the country during 1927. The statement is issued for the information of medical officers of health. The birth rate and infantile mortality rate for London have been provisionally corrected for transfers.

ENGLAND AND WALES.

Birth Rate, Death Rate, and Infantile Mortality during the Year 1927 (Provisional Figures).

	Birth Rate per 1,000 Total Population.	Deaths per 1,000 Population (Crude Rate).	Deaths under One Year per 1,000 Births.
England and Wales	16.7	12.3	69
107 county boroughs and great towns, including London	17.2	12.3	71
155 smaller towns (populations from 20,000 to 50,000 in 1921)	16.5	11.4	68
London	16.1	11.9	59

The death rate for England and Wales relates to the whole population, but that for London and the two groups of towns to the civil population only.

England and Wales.

The birth rate is 1.1 per 1,000 below that of 1926, and is the lowest rate recorded since the establishment of civil registration. The death rate is 0.7 per 1,000 above that of 1926, the excess being due to the high mortality of the first and fourth quarters of the year. The infantile mortality rate is equal to that of 1923, the lowest on record; the rate in 1926 was 70 per 1,000 births.

Medico-Legal.

A MEDICAL MAN'S HONOUR.

REPUTATION and honour, says Sir Frederick Pollock, in his *Law of Torts*, in some cases may be dearer than life itself, and obviously a medical practitioner's is one of these cases. Though a special jury in the King's Bench Division brought in a verdict for the defendants in an action by Dr. Robert Henry Moon of West Norwood, London, for an alleged slander that he had been implicated in the performance of an illegal operation upon the defendants' daughter, yet the evidence given in the course of the trial, and the jury's rider that there was no reflection whatever upon the character of Dr. Moon, clearly justified the bringing of the action. The defendants themselves admitted that the words complained of were devoid of truth, and without any foundation in fact.

The defendants' daughter, a servant in a Hampshire rectory, being pregnant, placed herself under the care of a Mrs. and Miss Holloway at Brixton Hill, and became a patient of Dr. Moon. Her mother called to see her, and upon Dr. Moon's refusal to allow the mother to examine her daughter, was alleged to have said, in the front doorway: "It looks as if there has been an illegal operation." The mother immediately sent for the divisional police surgeon, who examined the girl and found that nothing of the kind had happened—that, in fact, she had had a miscarriage induced by a fall. The mother, upon oath, said the words were uttered in the hearing of Miss Holloway and no one else, and Horridge, J., held this to be a privileged occasion. The special jury's findings, that the mother did not publish the words to any passers-by, that neither Miss Holloway nor any passers-by would reasonably understand that such words referred to Dr. Moon, and that the mother was not actuated by any malice (in which case the legal privilege would have been lost), made it a verdict for the defendants.

Dr. Moon had, however, achieved his object, for the evidence and the jury's rider completely vindicated his professional honour. It will be seen that there was a possible inference to be drawn from the mother's words which a medical man could not allow to pass unchallenged, and there is no doubt that Dr. Moon took the right course in bringing his action, although the cost of doing so must have been considerable.

The Services.

INDIAN MEDICAL SERVICE.

Permanent Commissions.

THE Secretary of State for India proposes shortly to make a certain number of appointments to permanent commissions in His Majesty's Indian Medical Service. The Selection Committee will meet at the India Office early in February to consider applications.

Well qualified medical men of European descent under 32 years of age who desire to be considered should apply to the Under Secretary of State for India, Military Department, India Office, London, S.W.1, for forms of application, memorandum of terms of appointment, and full particulars of gratuity terms. Envelopes should be marked on top left-hand corner "Medical Recruitment."

The selected candidates will be required to attend a course of instruction in this country, commencing not later than February 16th, 1928, prior to sailing for India in the early autumn.

DEATHS IN THE SERVICES.

MAJOR-GENERAL SIR JAMES MAHER, K.C.M.G., C.B., Army Medical Service (retired), died at Worthing on January 7th, after an operation, aged 69. He was born on December 27th, 1858, the son of the late J. E. Maher of Liskelly, Ballinasloe, co. Galway, and, after taking the Edinburgh double qualification in 1883, entered the army as surgeon on January 31st, 1885. He was specially promoted to surgeon major on March 25th, 1896, for service in the Ashanti campaign, and attained the rank of colonel on September 13th, 1913. During the great war he served as D.D.M.S., with the rank of surgeon general, on the lines of communication and with the Mediterranean force, as D.M.S. in Egypt, and as D.D.M.S. of the Irish Command. He retired on December 26th, 1917, with an honorary step of rank as major-general. He served in the Sudan campaign of 1885 at Suakim, receiving the Egyptian medal and the Khedive's bronze star; in the Ashanti expedition of 1895-96, when he was mentioned in dispatches, specially promoted to surgeon major, and received the star given for that campaign; and in the recent great war, when he was four times mentioned in dispatches, in the *London Gazette* of January 28th, 1916, December 1st, 1916, July 6th, 1917, and January 16th, 1918, and received the C.B. in 1916 and the K.C.M.G. on January 1st, 1918. In 1902 he married Gertrude, daughter of Mr. J. F. Browne, Bengal Civil Service.

Lieut.-Colonel Francis Edward Swinton, C.I.E., Madras Medical Service (ret.), died of pneumonia at Bombay on December 23rd, 1927, aged 61. He was born on June 9th, 1866, the son of the late Robert Blair Swinton, Madras Civil Service, and educated at Bart's, taking the M.R.C.S. and L.R.C.P.Lond. in 1891. Entering the Indian Medical Service as surgeon lieutenant on July 27th, 1892, he became lieutenant-colonel after twenty years' service, and retired on July 27th, 1922. In his first years of service in India he was medical officer of the 28th Bombay Pioneers and, later, personal assistant to the principal medical officer of the Bombay Command. In May, 1908, he joined the Medical Store Department, and held the post of medical storekeeper successively at Bombay, Calcutta, and Madras, with an interval as deputy director-general of the I.M.S. He received the C.I.E. on January 1st, 1919. After his retirement he continued to live at Bombay. He was unmarried.

Universities and Colleges.

UNIVERSITY OF CAMBRIDGE.

AT a congregation held on January 20th the following medical degrees were conferred:

M.D.—*A. A. Gemmell, E. H. V. Hodge.
M.B., B.CHIR.—C. P. Pinckney.
B.CHIR.—J. W. D. Buttery, D. F. Lawson.

* Admitted by proxy.

UNIVERSITY OF WALES.

THE following candidates have been approved in medicine, surgery, and obstetrics, and have completed their qualification for the degrees of M.B., B.Ch.: J. H. Williams, W. G. Evans, T. R. Bryant.

Four candidates have satisfied the examiners in obstetrics and gynaecology, one candidate in surgery, and one candidate in medicine, but, in accordance with the regulations, publication of their names is withheld pending completion of the qualifying scheme for the degrees of M.B., B.Ch.

UNIVERSITY OF DUBLIN.

TRINITY COLLEGE.

AT the Later Winter Commencements held on January 17th the degree of Doctor of Medicine was conferred on David Norman Power, M.B., B.Ch.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

AT a meeting of the President, Vice-President, and Council held on Wednesday, January 18th, Sir William Taylor, K.B.E., C.B., was unanimously elected as representative of the College on the General Medical Council, in the room of Sir Arthur Chance, resigned. At the same meeting Mr. Charles B. Maunsell, ex-President of the College, was unanimously chosen as representative of the College on the Medical Council of the Irish Free State.

CONJOINT BOARD IN SCOTLAND.

THE following candidates have been approved at the examination indicated:

FINAL EXAMINATION.—*Medicine*: R. D. Jones, J. S. Goonting, A. J. F. Almeida, J. Leibman, R. D. Buckner, S. Kaptur, L. M. Davies, F. A. Silva, Agnes Donaldson, W. Wallace. *Surgery*: I. MacG. Chisho'm, J. B. Forrester, S. Kapur, H. W. A. Marshall, H. A. Shakerley, J. B. Cole, A. F. J. C. Chitty. *Midwifery and Gynaecology*: C. H. Rowe, W. F. Noville, R. D. Jones, J. S. Goonting, M. Rifaat, J. Leibman, R. D. Buckner, S. Kapur, N. A. F. de Soyza, J. P. Logan, H. A. Shakerley, R. A. F. Saunders, F. A. Silva, N. S. Fraser, A. J. Pinkerton, J. B. Cole, C. B. Goodwin, A. F. J. C. Chitty, L. H. Abeyewardine. *Medical Jurisprudence and Public Health*: F. E. L. Stewart, Betty C. Hamilton, H. G. Higgins, R. D. Jones, M. Rifaat, C. L. Tessensohn, Anna G. McGregor, C. O. Davis, J. L. K. Lawson, W. F. Squair, L. Craig, D. O. E. Sendel, J. B. Cole, J. Gordon.

Out of 92 candidates entered the following passed:

M. O. Chacko, P. G. Sawmy, H. F. N. Slane, E. E. M. Steen, E. S. R. Menon, W. W. McGlaskan, R. G. Paranjape, J. B. Forrester, S. E. W. Boland, V. Sinnetamby, S. T. Sodah, S. Chelliah, F. H. Emery, J. H. M. Beck, B. J. Ram, J. Masilamani, W. B. Russell, A. G. Smith, N. C. Dasgupta, A. M. Boyne, H. C. Furst, E. P. N. Abeyesundere, B. J. Ess, J. E. D. Mendis, G. R. Gardner, J. M. Chittambalam, M. Klar, K. L. Palit, F. W. Raysmith, J. C. Anders, J. E. Felix

Medical News.

THE Royal College of Physicians of London will be closed during February for internal painting and decorating.

THE annual dinner of past and present students of the Royal London Ophthalmic Hospital will be held at the Langham Hotel, Portland Place, on Wednesday, February 8th, at 7 for 7.30 o'clock, with Sir Wilmot Herringham in the chair. Applications (with remittance 15s.) for tickets should be made to Sir William Lister, 24, Devonshire Place, W.1.

THE annual meeting of the Medical Officers of Schools Association will be held at 11, Chandos Street, W.1, on Friday, February 10th, at 5 p.m., when Dr. A. A. Mumford will read a paper on the school medical officer of the future.

AT the next meeting of the Royal Anthropological Institute on Tuesday, February 14th, at 8.30 p.m., at 52, Upper Bedford Place, W.C., a paper on the increasing size of the skull, illustrated with lantern slides, will be read by Professor F. G. Parsons.

THE Glasgow Burgh panel and local medical committees are giving a complimentary dinner to Dr. J. G. McCutcheon, in the Locarno Club, Glasgow, on February 14th. This function is to mark Dr. McCutcheon's services on behalf of the medical profession in Glasgow and the West of Scotland. If any have been omitted and wish to be present they are asked to communicate with the secretary of the Glasgow Burgh Panel Committee, 257, West George Street, Glasgow.

THE Tavistock Square Clinic for Functional Nervous Disorders will celebrate the seventh anniversary of its foundation by a festival dinner at the Mayfair Hotel, London, on February 6th, with Mr. Dougal O. Malcolm in the chair. The speakers will be Viscount Lascelles, K.G., and the Countess of Iveagh, M.P. After dinner there will be a performance of the play "Suppressed Desires" by Susan Glaspell and George Cook.

A COURSE of lecture-demonstrations has begun at St. James's Hospital, Balham, arranged by the South-West London Post-graduate Association, and will continue until March; with one exception the demonstrations will be given on Wednesday afternoons. Sir Hector Mackenzie opened the course on January 25th with an account of the medical aspects of goitre, and next Wednesday the surgical side will be considered by Mr. T. P. Dunhill. On February 8th a visit will be paid to the Wellcome Historical Medical Museum, and on the 15th a demonstration on blood transfusion will be given by Dr. Stanley Wyard. The "radiographic values in bones and joints" form the subject of a lantern demonstration by Major Meurice Sinclair on February 22nd, and Mr. M. S. Mayou will discuss some common disorders of the eyes met with in general practice on Thursday, March 1st. Dr. C. G. Lakin will take for his subject, on March 7th, the medical dyspepsias, and Mr. Norman Lake will consider the surgical dyspepsias on the following Wednesday. The concluding demonstration will be given by Sir Bernard Spilsbury, on March 21st, at the Battersea mortuary, and will relate to *post-mortem* examination. Particulars of membership of the association and other details of the course may be obtained from the secretary, Dr. R. J. Saunders, 10, Lyford Road, Wandsworth Common, S.W.18.

THE Fellowship of Medicine announces that on January 30th, at 5 p.m., Dr. Vincent Coates will lecture at the Medical Society of London on the principles of spa treatment. On January 31st, at 10 a.m., Dr. Burrell will give a special clinical demonstration at the Brompton Hospital for Consumption; on February 2nd Mr. W. H. Trethowan will demonstrate at the Royal National Orthopaedic Hospital at 2 p.m.; and on February 3rd Mr. W. H. McMullen will give a lecture-demonstration on the causes and treatment of lacrimation, at 5 p.m., at the Royal Westminster Ophthalmic Hospital. The lecture and demonstrations are free to medical practitioners. From January 30th to February 25th the London School of Dermatology (St. John's Hospital) will hold a course, comprising clinical instruction in the out-patient department and lectures, on Tuesdays and Thursdays at 5 p.m. Practical pathological demonstrations can also be arranged. A four weeks' course in venereal diseases, occupying the afternoons and evenings, will start at the London Lock Hospital on February 6th, and consist of clinical instruction and formal lectures. From February 6th to 18th a combined course in diseases of children will be undertaken by the Paddington Green Children's Hospital and the Victoria Hospital for Children; and at the Queen Mary's Hospital, Stratford, from February 20th to March 3rd, there will be an all-day course in medicine, surgery, and the specialties. An eight weeks' course will begin on January 30th at the National Hospital, Queen Square, comprising neurology, the anatomy and physiology of the nervous system, methods of examination, and demonstrations in pathology. Syllabuses, tickets, copies of the *Post-graduate Medical Journal*, and particulars of the general course work may be obtained from the secretary of the Fellowship, 1, Wimpole Street, W.1.

THE Birmingham Public Health Committee has presented to Dr. W. H. Davison an engrossed copy of its resolution, in book form, regretting his resignation as assistant medical officer, and congratulating him on his appointment to the city coronership.

PROFESSOR PORTMANN of Bordeaux is to be associated with Professor Mouret of Montpellier as reporter on the subject of "The anatomical structure of the ear and its influence on the course of suppuration of the middle ear" at the first International Congress of Oto-Laryngology at Copenhagen next July; a preliminary announcement of this congress appeared in our issue of December 10th, 1927 (p. 1125). Messrs. Bennett, travel agents, 65, Haymarket, S.W.1, have been appointed by the Danish Committee to arrange excursions, and will shortly send out particulars to all who have joined the British Committee, the honorary secretaries of which are Messrs. J. S. Fraser (Edinburgh), F. W. Watkyn-Thomas and Lionel Colledge (London), to whom inquiries should be addressed. Dr. G. V. T. Borries, 10, Cristian IX's Gade, Copenhagen K., is in charge of the arrangements for the anatomo-pathological museum, and Dr. F. Norsk, 3, Nytorv, Copenhagen K., is arranging an exhibition of instruments; they invite contributions, and applications should be made as soon as possible.

A MEDICAL post-graduate course will be held at Innsbruck, from March 12th to 18th, and deal with general medicine, surgery, gynaecology, and the specialties. Further information may be obtained from Dr. G. B. Gruber, dean of the medical faculty of Innsbruck University.

THE annual congress known as the Journées Médicales Belges, organized by *Bruxelles-Médical*, will be held at Brussels from April 21st to 25th, under the presidency of Professor Auguste Slosse, director of the Brussels Institut de Physiologie. Papers will be read by Gley of Paris, Bardier of Toulouse, Pautrier of Strasbourg, Donati of Turin, N. Fiessinger and Mathieu-Pierre Weil of Paris, Egas Monis of Lisbon, and Bastos of Madrid.

THE sixth International Congress of Thalassotherapy will be held at Bucarest and Constantza from May 22nd to 30th, under the presidency of Dr. Theohari, professor of clinical therapeutics. The principal subject for discussion will be Pott's disease and thalassotherapy. The congress will be followed by excursions to Constantinople, Athens, and Delphi. Further information can be obtained from the general secretary, Dr. Leo, 50 Avenue du Président Wilson, Paris XVI^e.

THE following appointments have recently been made in foreign medical faculties; Dr. Läwen of Marburg, professor of surgery at Königsberg; Dr. Meixner, professor of medical jurisprudence at Innsbruck; Dr. Emil Ritter von Skramlik of Freiburg, professor of physiology at Graz; and Dr. Zimmermann, professor of anatomy at Berne.

DR. BÉCLÈRE has been elected president and Professor Quénu vice-president of the Académie de Médecine for 1928.

DR. CHAMPY has been nominated professor of histology in the Paris faculty of medicine in succession to the late Professor Prenant.

THE prize of the Marchiafava Foundation of the value of 8,000 lire for the best work on morbid anatomy and experimental pathology has been awarded to Professor Soli, who holds the chair of morbid anatomy at Palermo, for his investigations on arterio-sclerosis produced by *Spiroptera sanguinolenta*, and Professor Brancati, of the Surgical Clinic of Rome, for his investigations on internal tar cancer.

THE *World's Health*, which is the monthly review of the League of Red Cross Societies, published in English, French, and Spanish, contains information about the latest developments in health and welfare work throughout the world. The January issue includes an illustrated article on the floods in Liechtenstein; a description of the French National Board of Public Health, created by a decree in December, 1924; details about public health work in Spain; and notes on the medical first-aid section in connexion with the American Legion in Paris and the "immigrants' hotel" at Buenos Aires. The *World's Health* may be obtained from the League of Red Cross Societies, 2, Avenue Velasquez, Paris VIII^e; yearly subscription 10s.

THE Health and Cleanliness Council aims at the diffusion of information about the advantages of cleanliness, which it promotes also by co-operating with other interested organizations. It has issued over sixty posters, leaflets, and booklets, and has recently published a bulletin. The advisory board includes Drs. G. F. Buchan and Eric Pritchard, Mrs. Sophia S. Friel, and Professors Bostock Hill and Kenwood. Information about the work of the council may be obtained from the secretary, 5, Tavistock square, W.C.1.