Confirmatory evidence of the adverse effect of high temperatures has recently been obtained by Mr. Bedford and myself in coal mines. It is almost impossible to compare the output of different miners, as the ease with which they get the coal varies so much from day to day and from place to place, so we adopted another method of measuring their physical efficiency. This depends on the fact that no man, when engaged in heavy work, is able to work continuously. Inevitably he rests occasionally, so we kept individual coal hewers under observation for a period of one and a half to two hours each, and noted down the number and duration of their rests from work. Observations were made on 138 men in all, and we found that whilst the men working under the best atmospheric conditions, when the wet-bulb temperature was 66° F. and the cooling power (as estimated by wet kata-thermometer) was 15 to 18, rested for seven minutes an hour on the average, those working under more adverse conditions took longer rests, and the men working under the most adverse conditions of all, when the wet-bulb temperature was 79° and the wet kata cooling power was 6.4, rested for twenty-two minutes an hour. The atmospheric conditions influenced the speed of work as well as the rest pauses, for we found that whilst, under the best conditions, the men took eight minutes to fill each 10 cwt. tub with coal, they took 9.6 minutes, or 20 per cent. longer, to fill them under the most adverse conditions. From these data we were able to calculate that the efficiency of the men working under the most adverse conditions was 41 per cent. less than that of the men working under the best conditions, whilst with intermediate conditions intermediate reductions of efficiency were observed. The men appeared to be particularly susceptible to air movement, and a moderate improvement of ventilation produced a considerable increase of output, so we seem justified in concluding that all men engaged in heavy work which causes them to perspire freely are considerably benefited by good ventilation.

In spite of the adverse effect of poor atmospheric conditions on efficiency, it does not necessarily follow that the health of the men is affected. In order to obtain direct information on the subject Mr. Rusher and I obtained access to the National Health Insurance cards of 22,000 iron and steel workers, and determined the time lost from sickness over a six-year period. We found that the hotter and heavier the work of the men the greater their loss of time from sickness; for the steel melters, to whom I have already referred, lost 23 per cent. more time than the average, whilst the puddlers lost 20 per cent. more, and the tin-plate millmen 12 per cent. more. On the other hand, the iron and steel men who worked at ordinary temperatures lost 9 per cent. less time than the average. The excess of sickness in the men exposed to high temperatures related chiefly to rheumatism and respiratory diseases. This sickness was largely due to the men sitting about, in the intervals of their work, in clothes which were damp from perspiration, and we concluded that, generally speaking, physical fatigue influenced health indirectly rather than directly. This conclusion was supported by the mortality data, for the various groups of iron and steel workers investigated showed a lower mortality than the general population (of all males, occupied and retired), with one exception. This related to the steel melters on open hearth furnaces. Their mortality was 20 per cent. greater than the average of all males, and 26 per cent. above the average of our whole group of iron and steel workers. We concluded that the excess of sickness and mortality in the steel melters might, in some degree, be the direct effect of the work of furnace mending, as this is far more exhausting than any other kind of industrial work known to us.

Apart from its influence on general health, physical fatigue undoubtedly has an influence on accident liability. Striking instances of this fact came to my notice during the war. At a large fuse factory the hours were at first twelve a day and seventy-five a week, but subsequently they were reduced to ten a day and sixty-four and a half a week. This reduction of hours had no effect on the accident frequency of the men, but that of the women fell to about one-third of its previous value, as it so greatly relieved their physical fatigue. Again, Mrs. Osborne and I found

that accident frequency was much influenced by atmospheric conditions, such as temperature. We found that the minor accidents incurred fell to a minimum at a factory temperature of 67°, whilst at a temperature of 77° they were 39 per cent. more numerous in the men. Probably this rise was due, at least in part, to the physical fatigue of the men, though it acted indirectly rather than directly by diminishing their attention and alertness.

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Evidence bearing on accident liability in relation to the fatigue of miners was obtained by Davies at the Morro Velho gold mine, Brazil. In the deepest workings of this mine, some 6,000 feet below the surface, the wet-bulb temperature reached the almost insupportable figure of 89° F. A cooling plant was introduced, which cooled the intake air to 43°, and the wet-bulb temperature in the deepest workings to 80°, and it was found that whilst in the sixteen months previous to the installation of the plant there were twenty fatal accidents, they were reduced to six in the subsequent sixteen months. Again, Mr. Bedford and I found that the accident liability of the miners studied by us was distinctly influenced by the atmospheric conditions. We obtained data relating to 3,000 miners for a six-year period, and we found that the accident rate of the men working at the coal face of the deeper and hotter seam in a mine (with a wet-bulb temperature of 74°) was 52 per cent. greater than that of the men in the upper and cooler seam (with a wet-bulb temperature of 62°), in spite of the fact that the physical conditions, such as the soundness of the roof, were better in the deeper seam than in the upper one.

It is desirable that further evidence on the subject be obtained before a definite conclusion is arrived at, but in the light of the information so far available we are justified in assuming that improvements in the atmospheric conditions under which the miners work would have an appreciable effect in reducing the terrible accident mortality to which they are subject.

to which they are subject.

To sum up, it appears that whilst the physical fatigue induced by heavy industrial work is apt to reduce health and efficiency and to increase accident liability, much can be done to diminish these adverse effects by improving the atmospheric conditions under which the work is carried on.

DÍSCUSSION.

Dr. J. Stewart Mackintosh (Hampstead) said that fatigue phenomena might be excited by agents other than excessive muscular effort, aggravated or not by an ill devised environment. Toxic and psychic influences were also potent determinants of physical fatigue. Toxic causes included bad or unsuitable food (with its disturbance of the digestive and other systems of the body), septic foci, endocrine disorders, etc. Again, anything provocative of mental conflict, such as trouble in the home or the young man courting another girl, frequently resulted in diminished output or carelessness through a portion of the total available energy of the individual being consumed by intrapsychic tension. Fussy or inquisitive interference by so-called "welfare workers" was to be deprecated; but the hinterland as well as the foreground of the industrial field must be surveyed. Much good work could be, and some had already been, done in this regard by persons possessing the requisite tact and knowledge.

Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

SCOLIOSIS DUE TO UNILATERAL MUSCLE SPASM.

THE following case is of some interest and sufficiently rare to warrant publication.

In March, 1924, a girl, aged 15, had what appeared to be an attack of lumbago; it became more acute until after about ten days she developed a bilateral sciatica. Pain was worse on walking and wore off somewhat during the day. In spite of salicylates, and later complete rest in bed, pain and stiffness increased. Diathermy and, later, change of air gave no benefit. She then went to Bath, where ionization, baths, and hot packs were tried, at first without effect, but later the sciatica ceased to be continuous and was only brought on by movement, and the back became temporarily less stiff after the baths. At this time

she developed intermittent spasm, sometimes of the middle portion of the right erector spinae and sometimes of the right abdominal muscles, bending her either directly to the right or forwards and to the right. The spasms increased in violence and were only loosened by the hot baths; lateral curvature and pelvic tilting increased till she could only stand on one leg, and kneeling was the only tolerable posture one whole night being spent in this position. The spasm generally came on during sleep and woke her up. Massage and exercises made matters worse. A skiagram taken at this time was negative. She returned home and remained in bed with daily massage, but the lateral spasm and consequent scoliosis increased. Hysteria was diagnosed by one physician, on what would appear somewhat inadequate grounds, and an osteopath manipulated the spine, but no benefit accrued. By August, 1924, the spasms were so acute that sleep could only be had in short spells. At the suggestion of a neurologist intramuscular injections were made under an anaesthetic; there was no immediate effect, but in September the spasms decreased in frequency and violence, the pain diminished and she could sleep better, and even walk occasionally for some distance, although the abdominal muscle spasm attacked her when she became tired. However, the erector spinae spasm and scoliosis increased with occasional exacerbations, generally relieved by recumbency. The condition remained stationary through the winter.

In February, 1925, she was seen by Sir Robert Jones and myself. Pain and acute spasm were intermittent, but the right erector spinae between the mid-dorsal and mid-lumbar regions was in continuous spasm and stood out as a hard mass, and the spine was correspondingly held convex to the left, with pelvic tilting. There was no permanent abdominal spasm. She appeared to be a most intelligent and healthy girl with no symptoms of hysteria. We came to the conclusion that the trouble was caused by adhesions around the spine and nerve exits, and accordin she developed intermittent spasm, sometimes of the middle portion

This case never suggested a diagnosis of hysteria and was entirely unlike the hysterical curvatures and tilted pelves with which we are all familiar. It was obvious that there was a definite irritative lesion of the nerves supplying the affected muscles. Personally, I had seen one similar case, much less severe, and Sir Robert Jones tells me that he has seen three or four such cases in the course of his experience, but none more marked than this.

London, W.

P. JENNER VERRALL, F.R.C.S.

RECOVERY AFTER INTRACARDIAC INJECTION OF ETHER.

In view of the cases recently described, the following, which have lately occurred in my practice, may be of

interest.

Case 1.—An adult male on whom I was proposing to operate for inguinal hernia gave no history of previous heart trouble, and the heart sounds appeared normal. Just as I was about to make the primary incision with the patient under open ether he stopped breathing, no pulse could be felt at the wrist and no impulse at the apex. Artificial respiration was commenced and both strychnine and ether given hypodermically, but, as was to be expected in the absence of circulation, these were ineffective. One cubic centimetre of ether was injected directly into the left ventricle, and almost immediately the pulse became palpable, breathing began again, and I was able to do the radical operation. The patient made an uninterrupted recovery and suffered no after-effects.

Case 2.—I was sent for by the midwife to a woman in labour (sixth confinement), and found a shoulder presentation with one hand in the vagina. There was a history of previous "heart weakness," and she had a systolic murmur heard at all orifices. I gave chloroform while my colleague proceeded to turn and pull down a leg. She became rather grey, so I went cautiously with the anaesthetic. The after-coming head jammed at the outlet, and during manipulations to release this the patient stopped breathing. I could feel no pulse and no apex beat. Artificial respiration and subcutaneous medication were again tried, but were ineffective, so that 1 c.cm. of ether was injected directly into the left ventricle. I had my finger on the radial artery and the return of a palpable pulse was very striking. The first beat was felt after perhaps ten seconds, the second about five or six seconds later, the third after about three seconds more, and thereafter the normal rhythm was rapidly established. The child was extracted and was, of course, dead, but the mother made an uninterrupted recovery and suffered no after-effects.

Whether in these two cases the heart actually stopped

Whether in these two cases the heart actually stopped or went into fibrillation I cannot say. But the response to intracardiac ether was dramatic and most gratifying to all concerned.

N. HAY BOLTON, M.D., F.R.C.S.Ed. Wrotham, Kent.

Revielus.

ELLIS ISLAND.

THE title of Dr. BERTHA M. BOODY'S very interesting book, A Psychological Study of Immigrant Children at Ellis Island, is somewhat misleading; her experimental study occupies little more than a third of the pages, and, although suggestive, particularly with regard to the possibilities of testing intelligence when examiner and examinee have no language in common, would be too slight for separate publication. That her work is thoroughly worthy of book form is due to the fact that it contains a readable account of the history and present administration of immigration laws in the United States of America. Fears that the United States might become the dumping-ground of undesirable aliens are not new. In 1819 these words were used by the committee of a New York society: "As to the immigrants from foreign countries, the managers are compelled to speak of them in the language of astonishment and apprehension. Through this inlet pauperism threatens us with the most overwhelming consequences." Similar apprehensions were voiced during the ensuing fifty-three years, but it was not until 1882 that any Federal regulation was attempted, when lunatics and idiots were legally excluded. After 1891, when deportation of aliens admitted contrary to law was ordered, control became tighter. In 1907 feebleminded persons were debarred, in 1917 all aliens over 16 unable to read the English or some other language were excluded, and by the Act of May 19th, 1921, immigration was restricted to a quota of 3 per cent. per annum of the number of the particular nationality recorded in the census of 1910. Finally, in May, 1924, the quota was changed to 2 per cent. of the foreign-born population shown at the census of 1890. After July 1st, 1927, the annual quota is to be a number bearing the same ratio to 150,000 that the number of inhabitants of the United States at the census of 1920 having that national origin bears to the whole population. Dr. Boody says that the result will be the reduction of the number of immigrants from 360,000 to about 150,000, but, unless the term "national origin" is to be understood in some very peculiar sense, we should suppose that the annual number would be considerably short of 150,000. This at least is quite clear-namely, that immigration will soon be a relatively unimportant source of population increase in the United States. Already there is a great difference between the million and a quarter of the "peak" year of 1907 and the net influx of less than half a million in 1923.

The object of this legislation and the administrative measures based upon it is not only to ensure that those admitted are physically sound, but, in the words of one authoritative body, to ensure that "no alien should be admitted who has not an intellectual capacity superior to the American average." Since the would-be immigrants speak twenty different tongues, and include children who cannot read or write, psychological tests alone present a formidable problem. It is not easy to devise a rapidly applicable test of intelligence success under which is wholly independent of acquired knowledge, and the language difficulty greatly complicates the task. When, in addition to all this, it is desired to take account both of eugenic factors and the mysterious attributes of "race," one realizes how difficult is the problem which American administrators and men of science are attempting to solve. The scientific and administrative machinery so far developed functions on its largest scale in Ellis Island, a name which neither the British Ambassador's report of three years ago nor recent press reports have favourably recommended to the home-keeping Englishman. The fourth chapter of Dr. Boody's book, which describes the present procedure, is sure to be read with particular interest. At the outset one perceives that the American Government has at least overcome one of the prime diffioulties of both research and administration—that of

1 A Psychological Study of Immigrant Children at Ellis Island. By Bertha M. Boody, Ph.D. Mental Measurement Monographs, Serial No. 3. Baltimore: The Williams and Wilkins Company; London: Baillière, Tindall and Cox. 1926. (Med. 8vo, pp. 163. 18s. net.)

very grave risks of serious disputes and costly litigation, since some members are apt to expect defence in matters that do not at all come within the scope of the societies. Moreover, it would be objectionable for the councils to defend a member who has deliberately persisted in criminal conduct or conduct involving serious legal penalties. I am quite convinced that the discretion which the societies have very wisely given to their councils by their articles of association are altogether in the best interests of the members; not restricting the benefits but greatly extending the scope of the societies.—I am, etc.,

HUGH WOODS,

London, W.C.2, Sept. 3rd.

General Secretary, London and Counties Medical Protection Society, Ltd.

NOTIFICATION OF PUERPERAL FEVER OR PYREXIA.

SIR,—We have read the article in your issue of August 21st (p. 356) in reference to the Minister of Health's amended regulations relating to the notification of puerperal fever, etc. Whilst agreeing that in the past many cases of uterine sepsis have not been notified, we should like to point out that if cases of pyrexia only are notified a large number of patients with uterine sepsis will go untreated.

After a long experience we are convinced that the cases of sepsis which produce a raised temperature are in the minority. We think that there is another most important sign of sepsis in the early puerperium, and that is the persistence of the red lochia. If attention is not paid to this sign and treated, and if Nature does not do its work, many patients return to hospital for treatment .-We are, etc.,

> REMINGTON HOBBS. MARY R. LEVACK.

St. Mary Abbots Hospital, Marloes Road, Kensington, Sept. 4th.

SUBACUTE APPENDICITIS.

Sir,—The object of this letter is to stress the fact that there is a subacute insidious form of appendicitis which, independent of any previous appendical storm, does not give rise to any local manifestation, but frequently induces symptoms which point to ulceration of duodenum or stomach. In my experience radiological revision in some cases of this occult form of appendicitis is not reliable in that it not infrequently indicates some gastric perturbation which I find may be compatible with either lesion.

In regard to the diagnosis of this type of appendicitis I know of only one genuine sign: distinct localized pain and tenderness (often accompanied with reflex pains) on deep digital pressure over Munro's point—namely, just at the outer edge of the right rectus muscle in the line passing from umbilicus to anterior iliac spine.

In instances in which similar definite localized pain and tenderness can likewise be elicited on digital palpation in gastric or duodenal areas the diagnosis becomes obvious -a dual lesion, which is quite a common coincidence; the moral is not to omit to examine the appendix when operating for gastric or duodenal ulcers. This treacherous type of appendicitis is constantly associated with obvious inflammation and hypertrophy of the adjoining segment of the ileum, with, as often as not, formation of a deadly dense inflammatory adhesion which binds down the gut in V fashion in the right pelvic dip.

The pathology of this complication does not strain imagination if one briefly visualizes the distribution, and connexion, of the lymphatic vessels of the appendix and ileum, not to add the proofs which have been demonstrated of infection ascending from former to latter. The peristaltic strain involved in forcing material into a caecum bound down by an adherent appendix must necessarily result in some hypertrophy of the muscular coat of the small gut; the discoloration of the involved segment, and nature of adhesions so frequently encountered in the ileo-caecal angle and beneath the last few inches of ileum. clearly indicate infective participation.

For years past I have made it a rule when operating for appendicitis not to quit the abdomen without carefully

inspecting the distal ileum, and have been rewarded by finding, in at least 30 per cent. of cases, an adhesion, which, if unobserved, would in all probability ultimately have caused acute intestinal obstruction. It is almost superfluous, nowadays, to add that it appertains to the septic past to open any clean abdomen without taking due stock of its contents.

In conclusion. I find the incidence of this subacute form of appendicitis so constantly associated with diseased teeth that I beg leave to repeat the recommendations-(1) have obviously decayed teeth extracted, (2) do not have any tooth filled or crowned without x-ray examination of its roots and socket, and (3) in all cases of diagnostic perplexity, and pains and swelling of the "rheumatic" type, irrespective of an apparently "perfect set," have the teeth x-rayed.—I am, etc.,

Buenos Aires, June 1st.

JOHN O'CONOB,

WEEDS, CANCER, AND ACIDITY.

Sir,—Anent the suggestions of Dr. A. Mackenzie on the above subject, I beg to call attention to the remarks of Joulie with respect to hyperphosphatic and hypophosphatic patients-namely, that he has never met with cancer associated with hyperphosphatic urine as defined by him in his method, and he therefore recommends the examination of the urine, for this condition to be secured, for those who have been operated on for cancer. It is ever the hypophosphatic urine which is associated with cancer.—I am, etc.,

London, S.E.24, Aug. 29th.

J. BARKER SMITH, L.R.C.P.

Anibersities and Colleges.

UNIVERSITY OF CAPETOWN.

AT the graduation ceremony held in July the following were admitted to the degrees of M.B., Ch.B.:

S. Goodman, S. S. Hoffmann, J. Hotz, J. I. Lipschitz, B.A., W. Milne Murray.

The Services.

KING'S HONORARY SURGEON.

THE KING has been graciously pleased to approve of the appointment of Colonel Frederic Hibbert Westmacott, C.B.E., T.D., F.R.C.S., Assistant Director of Medical Services, 42nd (East Lancs) Division, T.A., to be Honorary Surgeon to His Majesty, in succession to Colonel E. C. Montgomery-Smith, C.M.G., D.S.O., T.D., M.D., retired.

BLANE MEDAL.

SURGEON LIEUTENANT COMMANDER STEWART R. JOHNSTON, R.N., has been awarded Sir Gilbert Blane's Gold Medal, he having obtained a first-class certificate at the examinations held in 1926 for promotion to the rank of surgeon commander.

DEATHS IN THE SERVICES.

DEATHS IN THE SERVICES.

Lieut.-Colonel Walter Frederick Hamilton Vaughan, R.A.M.C. (ret.), died at Bridgwater on August 26th, aged 47. He was born on March 1st, 1879, the son of W. Filener Vaughan, Esq., educated at St. Mary's, and took the M.R.C.S. and L.R.C.P.Lond. in 1901. After acting as resident senior medical assistant at Marylebone Infirmary, Notting Hill, and as clinical assistant at Leicester Infirmary, he entered the R.A.M.C. as lieutenant on January 30th, 1904, and became major on July 1st, 1915. He was placed on halfpay, on account of ill health, on August 9th, 1920, and in his subsequent retirement was granted the rank of lieutenant-colonel.

Lieut.-Colonel John Oldfield Greatrakes Sandiford, R.A.M.C. (ret.), died on July 11th. He was born on May 11th, 1854, educated at Queen's College, Cork, and graduated M.D. and M.Ch. in the Queen's University, Ireland, in 1877; he took the L.A.H.Dubl. in the same year. He entered the army as surgeon in 1880, became lieutenant-colonel after twenty years' service, and retired in 1901.

Surgeon Captain John Charles Groscort Reed, R.N. (ret.), died at Salisbury on August 2nd, aged 53. He was educated at Guy's, and took the diplomas of M.R.C.S. and L.R.C.P.Lond. in 1896. He entered the navy in May of that year, became staff surgeon in May, 1912, and retired, in 1923, with an honorary step in rank as surgeon captain. He served in the China war of 1900 as surgeon of H.M.S. Alperine, when he was present at the capture of the Taku Forts and the relief of Tientsin (medal with clasp). When the recent war began in 1914 he was serving at Bermuda, but during the last two years of the war was senior medical officer of the battleship **Aunderer*, in the Grand Fleet.

Medical Aelus.

THE seventh annual lecture conference of the Industrial Welfare Society has opened at Balliol College, Oxford, and wellare Society has opened at Bahlo College, Calon, will continue until next Wednesday. A lecture on dental service in industry is being given to-day (Saturday) by Mr. H. A. Mahony, secretary of the Public Dental Service Association of Great Britain, and Dr. Innes H. Pearse will speak on the future of preventive medicine in industry on Tuesday afternoon.

AN intensive course in operative surgery at the Central London Throat, Nose and Ear Hospital, Gray's Inn Road, W.C.1, will commence on October 4th, preceded by a preliminary course of six lectures on methods of examination and diagnosis, which starts on September 15th. The syllabus may be obtained from the dean at the hospital.

A special two weeks' course in orthopaedics will be given at the Royal National Orthopaedic Hospital from September 20th to October 2nd. The fee is two guineas. The course is open to all post-graduates, and further particulars may be obtained by applying either to the Secretary, Royal National Orthopaedic Hospital, 234, Great Portland Street, London, W.I., or to the Secretary, Fellowship of Medicine, 1, Wimpole Street, W.1.

THE Minister of Health has issued a circular letter (735) to the effect that the Civil Service bonus will be based from September 1st, 1926, on an average cost of living figure of 70. The bonus payable for the six months commencing on this date to officers whose annual salaries do not exceed £500 will therefore be one-eighth less than that paid during the six months commencing on March 1st. Officers whose remuneration from local authorities is subject to the sanction of the Minister of Health are similarly affected.

THE twelfth annual report (for the year 1925) of the International Health Board of the Rockefeller Foundation by the general director, Dr. Frederick F. Russell, gives in greater detail and with admirable illustrations the data summarized in the review of the president of the Foundation, who is also chairman of the International Health Board. In hookworm disease the use of carbon tetrachloride, which is more effective than other means, is, like them, occasionally followed by poisoning, and most often when taken in association with alcohol or by children with Ascaris lumbricoides, and gives rise to necrosis of the liver; to diminish the risk it is administered in combination with oil of chenopodium, which is highly effective in removing ascarides. Further evidence has accumulated to confirm Dr. H. R. Carter's conclusion that in South America Anopheles quadrimaculatus is the important vector of the malarial parasite. As a result of the increase of malaria in Europe since the war a station was in 1925 established in Corsica to study its epidemiology and train malariologists for work in Europe.

THE Home Secretary gives notice that he has withdrawn from John Symington Stewart, M.B., Ch.B., of 252, Morrison Street, Edinburgh, the authorizations granted by the Regulations made under the Dangerous Drugs Act, 1920, to duly qualified medical practitioners to be in possession of and supply raw opium and the drugs to which Part III of the Act of 1920 applies, and has also directed that the exception in Regulation 4 of the Dangerous Drugs Regulations, 1921, which permits dangerous drugs to be supplied on a prescription given by a duly qualified medical practitioner, shall not apply in respect of prescriptions given by Dr. John Symington Stewart. Any person supplying Dr. Stewart with raw opium or any of the drugs to which Part III of the Dangerous Drugs Act, 1920, applies, and any person supplying the drugs on a prescription signed by Dr. Stewart, will be committing an offence against the Acts.

THE annual report of the National Institute for the Blind THE annual report of the National Institute for the Blind is a most excellent and interesting statement of the valuable work done by this organization. There is scarcely a single part of the whole range of activity of blind persons in which the institute does not take a leading and directing part. The activities of the institute include the printing of books for the blind, the production of newspapers, the organization of homes for the aged and for blind infants. the organization of homes for the aged and for blind infants the two colleges for the higher education of blind children at Worcester and Chorley Wood, and the assistance of blind workers in which the institute takes a large part in co-operation with local authorities. A new and useful feature of the report is a "Who's Who" of the personnel of the executive council of the institute; this might well be copied by similar charitable organizations. Confidence is inspired by frankness of statement. The magnitude of the work may be gauged by the sum total shown in the balance sheet—it now reaches £312,411; the accounts for each branch of the institute's work are set out separately; in many cases they are pre-

sented in the form prescribed by the Ministry of Health or the Board of Education, and in all instances they are so clearly stated that the least knowledgeable in financial affairs cannot fail to understand their import. A new form of activity which has engaged the attention of the institute is assistance and advice in the provision of wireless sets for the blind. Broadcasting is one of the most valuable means of bringing the blind into close touch with the life of to-day. Braille newspapers cannot hope to give them all the information that is desirable. A beginning was made in a small way through the thought of some readers of newspapers, and the institute has taken the matter up with enthusiasm; it is aided by technical advisers. For a gift from the sighted to the blind there can be none better than a wireless set, cr the putting of the blind person in the way of securing an efficient and simple set for himself.

Courses of lectures and demonstrations at the Royal Sanitary Institute will commence on Oc ober 4th for sanitary inspectors, and on October 8th for meat and food inspectors. urther information may be obtained from the Secretary of the Institute, 90, Buckingham Palace Road, S.W.1.

ACCORDING to the Health Office of the Swiss Confederation the epidemic of small-pox in Switzerland, which has lasted for five years, is dying out. Only 329 cases were notified in 1925, as compared with 1,274 in 1924.

THE thirty-fourth Italian Congress of Surgery will be held at Padua from October 25th to 28th, when the following subjects will be discussed: (1) The surgery of the visceral sympathetic, introduced by Professor M. Donati of Padua. (2) The surgical treatment of pulmonary tuberculosis, introduced by Professor T. Letter to the content of the design of the content of duced by Professor Leotta, representing the Italian Society of Surgery, and Professor F. Galdi, representing the Italian Society of Internal Medicine.

THE seventh congress of the German Society of Urology will be held at Vienna from September 30th to October 2nd, when the following subjects will be discussed: the pathology, pharmacology, and treatment of anuria; the pathology and treatment of malignant growths of the bladder. Further information can be obtained from the secretary, Dr. H. G. Pleschner, Alsesstrasse 20, Vienna IX.

THE centenary of Laennec's death was recently celebrated at Plouarec, near Douarnenez, where he died. Addresses were delivered by Professors Chauffard and Marcel Labbé, and Dr. Laigriel-Lavastere.

Tetters, Aotes, and Answers.

- All communications in regard to editorial business should be addressed to The EDITOR, British Medical Journal, British Medical Association House, Tavistock Square, W.C.1.
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QUERIES AND ANSWERS.

X-RAY TREATMENT OF RINGWORM.

"T. E. R." asks for advice on the use of filters in x-ray treatment of ringworm of the scalp. Is any advantage to be gained, he asks, from the routine use of aluminium filters of, say, 1 or 2 mm. thickness, either as regards increased safety or more uniform results in epilation? If so, how is the exposure calculated (taking 4/5 tint B Sabouraud as a safe unfiltered dose), and is the pastille exposed to filtered or unfiltered rays?