With regard to the splints themselves, there is only one fault to find-they can be taken off, and they are taken off, for massage, etc. For fixing a paralysed limb there is nothing like plaster-of-Paris, and, because it cannot be easily taken off, it not only prevents deformity, but it really helps to bring about recovery.

Correction of Deformities. I only want to say here that an appalling number of cases come to orthopaedic hospitals having had tenotomies and other operations done, and these have to be done again, because the deformities have recurred. To do a tenotomy and not to follow it by proper after treatment is like slapping a child in the face-it is a useless, needless injury.

## The Treatment of Residual Paralysis.

This is a subject which really deserves some consideration by physicians and neurologists. When a group of muscles in the lower extremity remains permanently paralysed a support of some kind will almost certainly be needed, or a deformity will result from the part falling constantly into a faulty position. If a child is able to walk the weight of his body will surely aggravate the deformity; if he is unable to walk the treatment cannot possibly be considered complete until, at all costs, he has been set upon his feet.

There is need for co-operation between those who are responsible for the treatment of acute poliomyelitis in its early stages and those who have to deal with it later. These cases usually come under the care of the physician and neurologist first and under that of the orthopaedic surgeon later. Unfortunately, this sequence is not gener-ally recognized; many physicians and neurologists frankly disapprove of orthopaedic treatment, being apparently quite unaware that the vast majority of cases of persistent infantile paralysis eventually drift into the hands of the orthopaedic surgeon. These cases come in a constant stream to orthopaedic hospitals after having been treated elsewhere. Unfortunately, most of them come in roundabout ways from entirely independent sources and nearly always after a period of neglect; their treatment is then begun all over again. It would be greatly to their advantage if the need for orthopaedic treatment were recognized early, so that it might follow at once on the cessation of medical treatment. Let the physician do what he can for them, then let him recognize that it is time for orthopaedic treatment.

The use of celluloid splints has been strongly advocated by some physicians and surgeons during the last year or two. These splints have been used simultaneously to prevent deformity and to take the place of walking instruments, and it has been held to be a great advantage that the child can walk about while the paralysis is recovering.

I believe this to be a great mistake. The very last thing that one wants is for a child to walk about during the early stages of poliomyelitis. The essential thing is complete rest for the paralysed muscles, and, however perfectly a splint fits, complete rest cannot be obtained while the child is walking about. Again, as I have said, these splints can easily be taken off, and they are in-variably taken off, for active treatment of which I most strongly disapprove. A good thick plaster ensures com-plete immobility and non-interference in a way that nothing clse does. A few months' inactivity does a child no harm, and to gain useful recovery of a paralysed muscle is well worth the temporary restraint.

When recovery is as complete as it can be, and not before, the question arises of a support to supplement the residual paralysis. And, inasmuch as it will probably have to be worn for many years, if not for the rest of the patient's life, it is best at once to give the child a support which can be adjusted as he grows, and which is strong enough to stand the wear and tear of daily use. Experience of the strain to which such instruments are subjected by these children makes it difficult to believe that a celluloid splint is a suitable appliance for this purpose. And, lastly, as celluloid splints are not adjustable, constant relays of new splints must be supplied if the child is to be kept properly fitted.

I have heard pitiful tales of poor little children weighed down by the burden of cumbrous steel instruments. Half an hour in the out-patient department of an orthopaedic hospital will dispose of that myth. A properly-made and fitted instrument should not be a burden to a child, and I have never yet seen a paralysed child who could be made to walk in a celluloid splint but who could not be made to walk equally well or better in an orthopaedic instrument.

## Memoranda:

## MEDICAL, SURGICAL, OBSTETRICAL.

PELLAGRA.

THE following case came under my notice whilst acting as locumtenent at Llanidloes (Glamorgan):

A woman, aged 32, married seven years, with no children, had lived in a small cottage in the hills, five miles from Llanidloes, all her married life. She was never very robust, but had no illness till the summer of 1909. The first attack began with a "heat" rash, mainly on the forehead, under the eyes, over the nose and cheeks, slightly below and behind the ears, on the upper part of the neck, and on the back of the hands and wrists. The rash, at first very red and itchy, was followed by blebs, and finally peeling occurred. She felt ill after the rash was out, had vomiting and diarrhoea, and suffered from mental symptoms, for which she was treated in an asylum for six months (from October, 1909).

There has been a recurrence of the rash each summer, the time of its appearance varying with the amount of heat and sun. The distribution and course have always been the same, but she had experienced no mental symptoms since the first attack, and she had been getting progressively weaker, and for the last year had only been able to walk with a stick a short distance, owing to general weakness and her legs being "jerky." This year the rash appeared in the first week of July; vomiting and diarrhoea began about two weeks later. I first saw her on August 10th. She looked very ill and was much emaciated. The skin of the face was deeply pigmented and peeling, especially on the forehead, under the eyes, over the bridge of the nose, on the malar bones, and at the side of the neck. The lower part of the face and chin were quite clear; there was also very marked pigmentation and free desquamation on the backs of the hands and fingers and the wrists; the front of the wrists was also involved, but not the palms; the line between the pigmented area and clear skin was sharply defined and extended higher up on the radial side. The nails were not affected. The temperature was 98°, and the pulse 140. The tongue was quite clean, like raw beef. The abdomen was rather tense, very tender—indeed, hyperaesthetic all over. There was frequent retching and diarrhoea, but neither mucus nor blood was passed. She had severe cramps in the feet. The knee-jerks were very active, and ankle clonus well marked. The Babinski reflex was of the extensor type. There was no rigidity. There was some very slight lumbar spinal tenderness, but no muscular paralysis; the left pupil was rather larger than the right, though both reacted to light accommodation. She told me she had a very small "swallow." Articula-tion was slow and deliberate, but her mind seemed clear, though she was very querulous and exhausted, and so weak that she could not move herself in bed. She slowly but steadily improved in health, treatment being symptomatic; buttermilk agreed with her better than anything else. At the end of three weeks she could sit up in bed, and was fairly cheerful, and had evidently put on a good deal of flesh. Desquamation had then practically ceased, and the pigmentation was only faint, though still in marked contrast to the rest of the skin, which was naturally fair.

The case seems to be a typical one of pellagra. The rash recurring every summer, its evolution and symmetrical distribution and pigmentation, associated with acute gastro-intestinal symptoms, one attack of (stuporous) dementia, and affection of the nervous system, as shown in the reflexes, etc., can hardly point to anything else.

There is a small stream running down the hillside a short distance away; she has lived there for seven years, and always in this part of the country. I could hear of no other similar case in the district, but information was very difficult to obtain.

Hertford.

L. R. LEMPRIERE, M.B.

### TREATMENT OF KELOID.

KELOID, growing from the jewel holes in the tip of the ear in Indian ladies, is very common and disfiguring. All attempts to remove it by the knife make matters worse, for larger and more numerous growths are sure to follow. Some years ago I began treating these tunnours by injec-tions of formalin (40 per cent. paraldehyde) with uniform success. An Indian lady has

just sent me the accompanying photograph of her right ear, on which was once a keloid the size of a large plum, which disfigured her very much. It will be seen that there is no size of a commune the set of a sign of a recurrence, though it is four years since the operation. The treatment is very simple. Either induce local anaesthesia or give chloroform, as the injection process is painful. About twenty injections of about five minims each of formalin were made in this case at one sitting. The tumour was wrapped up in lint soaked in boracic lotion. In a week or so it had assumed the appearance and consistency



of a piece of coke. It separated in about a fortnight. The dressing was changed daily. There was no odour at any time, nor any pain to speak of. Care must be taken never to inject the formalin subcutaneously, but always into the substance of the tumour only.

Portrush.

JOHN SMYTH, Colonel, I.M.S.

PNEUMOCOCCAL INFECTION OF THE LUNG TREATED WITH AN AUTOGENOUS VACCINE.

JAMES D., aged 33, warehouseman, was admitted to Victoria Park Hospital on August 21st, 1912, when I was acting as house-physician to Dr. Colbeck. He stated that he had been well until three months carlier, when he apparently had an acute illness, the symptoms of which were cough, sharp pains in the right side and back of chest on coughing and breathing, fever, malaise, etc. He was in bed for three months, after which he got about his work for a little time; his cough, however, remained very troublesome, and was accompanied by copious expectora-tion of thick, offensive muco-pus, occasionally streaked with blood. Anorexia, loss of weight, insomnia, and heavy night sweats added to his discomfort. He was a well developed man, coughing frequently, with copious muco-purulent expectation, and experiencing some mode-rate dyspnoea. The temperature was 103°, the pulse 124, and the respirations 44; the tongue was covered with a thick yellow fur, and the breath was very offensive. Movement of the chest was poor, especially on the right side, the base of which scarcely moved at all. On measurement slight contraction of the right side was found, and the percussion note was impaired over the upper half of the right chest, back and front, with marked dullness below the seventh rib. Distant tubular breathing was heard over whole front of the right chest. It was very much diminished behind and practically absent at the base. There was a small patch of cavernous breathing at the angle of the right scapula, and scattered crepitations at base behind and in front. Vocal fremitus and vocal resonance were much diminished over the right side, and there was egophony and whispering pectoriloquy at the angle of the right scapula. The edge of the liver was felt about 1 in. below the costal margin in the right nipple line. Exploration of the right chest upon two occasions gave negative results. The sputum was examined on nine occasions. No tubercle bacilli were found, but a Gramnegative coccus-probably Micrococcus catarrhalis-and Staphylococcus aureus were present, while pneumococci were very abundant.

The patient was in the hospital for seven months and two weeks, and his subsequent history is as follows: Twelve weeks' treatment with creosote given: (1) On Yeo's mask, worn night and day; (2) inhalation in creosote chamber; (3) in a mixture containing creosote increasing to max dose, strychnine, iron, potassium iodide. Other inhalations, containing carbolic acid, iodine and pini sylvestris, were tried. During this time the temperature constantly fluctuated between  $97^\circ$  and  $101^\circ,$  being on one occasion 103.6°; the pulse-rate was equivalently raised, and the expectoration in twenty-four hours averaged 12 oz. (on one occasion 22 oz.), and was repulsively offensive; it was blood stained on cccasions, and there was once haemoptysis of 1 oz.

The patient suffered from profuse night sweats, loss of appetite, and progressive emaciation, his complexion becoming more and more cachectic and his spirits more and more depressed. His condition during the ninth week was one of extreme gravity, the expectoration being very profuse and the temperature rising one night to 104.2°, the patient being then in a state of profound collapse. The rises in temperature seemed to coincide with partial retention of the expectoration, for on several occasions the patient would cough up a small plug of solid mucus, after which the expectoration would become more profuse and the temperature fall. There was, however, no obvious change in physical signs.

At this stage it was decided to give him a course of autogenous pneumococcic vaccine treatment. The initial dose was  $2\frac{1}{2}$  million, and the dosage was continued thus:

First dose	•••		24	million.	
In 3 days' time			5	,,	
In 3 ,,	•••		10	,,	
In 3 ,,	•••		20	,,	
In 6 ,,			40	••	
In 6 ,,	•••	••	60	,,	
In 6 In 7	•••	•••	50	,,	
In 7	•••		100 100	<b>,,</b>	
Tu 7	•••		100	,,	÷
Th 7	••		200	•••	
Tax 7	•••		200	"	
T., 7	•••		300	,,	
In 7	•••		350	,,	
In 7 ,,	•••		400	,,	
In 7 ,,			300	· · ·	

After the third dose, and within ten days of the initial dose, the temperature ceased to fluctuate and remained perfectly steady and normal. Within fourteen days the patient began to get up; appetite improved; weight was put on, and the amount of expectoration became steadily less and averaged about 4 oz. until his discharge. The temperature remained perfectly steady and normal, and the patient felt slight effects from the vaccine on one occasion only—namely, slight headache, malaise, rise of temperature, and staining of sputum.

The air entry into the right lung improved in an extraordinary manner, and the patient was discharged on August 18th, 1912, fifteen weeks after the commencement of the vaccine treatment, very greatly improved in all respects.

I hear from the patient that his condition up to now has remained as good as when he left the hospital. London N. C. G. WHORLOW.

# Reports

## MEDICAL AND SURGICAL PRACTICE IN HOSPITALS AND ASYLUMS.

## PRESTON ROYAL INFIRMARY.

A CASE OF HIRSCHSPRUNG'S DISEASE.

(Reported by W. A. H. McKERRow, M.B., Ch.B. Aberdeen, **Resident Surgical Officer.**)

THE patient in the following case, a boy aged 16, was ad-mitted suffering from enormous tympanitic distension of abdomen. His history was to the effect that ever since the age of 9 months he had been more or less troubled with constipation. Sometimes he would go for two or, three weeks without a proper motion, and at such times his abdomen would get distended. At one time, about ten months before admission, he had been as bad as at present; on that occasion the distension suddenly disappeared, with much passage of stools and wind per anum, within the short period of half an hour. So long as his bowels were kept open with medicine and injections (administered by his mother), his abdomen was not much bigger than normal.

infants, and a translation of Brück's book on diseases and treatment of the nose, mouth, throat and larynx. Besides these, his inventive genius showed itself in devising or improving various surgical instruments and appliances, including one for use in cases of abnormal delivery.

## Public Health LAW MEDICAL SERVICES. POOR

### BACTERIAL FOOD POISONING.

BACTERIAL FOOD POISONING. SUBDEN outbreaks of illness among comparatively healthy people are occasionally reported in which they have all partaken of made-up meat in the form of brawn, sausages, etc. They are usually referred to as cases of ptomaine poisoning; but, as Dr. Newsholme points out in the preface to a report<sup>1</sup> ou the subject recently issued by the Local Government Board, it is more correct to describe them as cases of bacterial food poison-ing, for it is now, denorally recommend that they result from increases of the test of t nultiplication, or which although killed in the cooking are nevertheless poisonous by means of the toxins contained in them. The report, which was entrusted to Dr. W. G. Savage, states very concludy the existing knowledge of the subject which has been obtained from outbreaks that have been in-vestigated in this and other countries. After referring to the historical aspect of the question and to certain special forms of food poisoning, such as that from mussels, cheese, potatoes, or ice-cream, he deals with the clinical and general fectures of recorded outbreaks of bacterial poisoning, and then discusses the different bacteria concerned in the out-breaks. A special section is devoted to the Gaertner group of bacilli to which the majority of recorded outbreaks have been known to be due. In regard to those out-breaks in which these bacilli have gained access from sources outside the meat or food liself. Dr. Savage expresses the opinion that it is an extremely difficult matter accurately to trace their origin, and he discusses three distinct views which have been put forward. The first is that the Gaertner group bacilli, which are the cause of the food-poisoning outbreak, are of human origin, the meat being infected with pathogenic Gaertner bacilli from a human source for example, a case of disease oparatyphoid fever or a carrier case. While abiliting the possibility of this view being correct, he points out that in this country, at any rate, there is no recorded case of food poisoning in which *B. paratophonsus* B has been proved to be the cause. He considers that the eavailable data are strongly against the correctness of the second explanation, which is that the Gaertner group bacilli which set up the food-poisoning out-breaks are derived from ordinary faccal infection of the food-poisoning in which *B. paratophosus* B has been proved to be the cause. He considers best explains all or most of the phenomena of food poisoning is that the outbreaks are due to infection of the food with virulent Gaertner group infection of the food with virulent Gaertner group organisms (or other special bacilli derived from animals which are either for other special bachin derived from alimats which are entire at the time suffering from disease due to Gaerther group bacilli or acting as carriers of these bacilli. In an addendum to the report is a list of seventy-nine British outbreaks of food poisoning which have been recorded since 1878, together with many details of them. A similar list of forty-four Con-tinent to albed is of them. A similar list of forty-four Continental outbreaks is given, and a very complete bibliography of the subject is appended.

# Medical News.

THE Harveian oration before the Royal College of Phy-sicians of London will be delivered by Dr. J. Mitchell Bruce at the College at 4 p.m. on Saturday, October 18th.

AT the Royal Dental Hospital on Tuesday, October 7th, the prizes awarded during the year to the students of the London School of Dental Surgery will be distributed by Prince Alexander of Teck.

An examination for not less than twelve commissions in the Royal Army Medical Corps will be held on January 28th, 1914, and the presence of candidates will be required in London from January 26th. Applications to compete should be made to the Secretary, War Office, not later than January 19th, 1914.

THE ninety-first session of the Birkbeck College, Chancery Lane, will be opened on September 29th, when Sir Francis Darwin, F.R.S., will give the opening address. The college is conducted in relation with the University of London, and provides courses of study for degrees in faculties of arts, sciences, laws, and economics. Last year 42 students took degrees in arts or science, 18 with honours, and two gained university scholarships.

THE subject of the address to be delivered by Sit Charles Lukis, Director General of the Indian Medical Service, at the opening of the winter session at the London (Royal Free Hospital) School of Medicine for Women, Hunter Street, Brunswick Square, on October 1st at 4 p.m., is the Medical Needs of India. Mrs. Garrett Anderson will be in the chair.

DR. B. L. BECKER, of New York, who we learn from the Boston Medical and Surgical Journal began life as a poor east-side boy and has risen to a position of distinction, has offered through the Board of Education of New York to provide 3.000 pairs of spectacles for school children with defective eyesight. The children are to be sent to his office with a proper order from principals, teachers, or visiting school nurses.

A COURSE of twelve lectures for teachers on biology and Social problems has been arranged by the Eugenics Education Society, and will be given by Professor J. Arthur Thomson, of Aberdeen, and Mr. Major Green-wood, jun., Statistician to the Lister Institute of Preventive Medicine, on Friday evenings at 6.30, beginning en September 26th. Full particulars can be obtained on application to the secretary of the society, Kingsway House, Kingsway, W.C.

Is his address at the opening of the winter session at the medical school of Charing Cross Hospital on October 1st. Dr. William Hunter, in dealing with the subject of university medical education, will record certain conclusions derivable from the school's two years' experience of the plan of sending its junior students to pursue their preliminary studies at King's Cobege. On the same occa-sion the prizes won by the students during the past year will be distributed by the Lady Wantage. At the school dinner at Gatti's Restaurant in the evening Mr. H. F. Waterhouse will take the chair.

A DINNER of past and present students of Guy's Hospital, at which evening dress will be optional, will take place in the Students' Club at 7.30 on October 1st. Various members of the staff are expected to attend, and the dean of the school, Dr. Cameron, will read his annual report. A further feature will be a distribution of certifi-The prize distribution usually takes place during the summer session, but this year was deferred owing to the ceremony connected with the opening of the new school buildings by Mr. Arthur Balfour. Mr. Cosmo Bonsor, the treasurer of the hospital, will be in the chair.

RUMOURS appear to have gone the round of the Italian press to the effect that the Italian language was not recognized as an official language at the recent International Medical Congress, and, in fact, barely tolerated. As this is not the case Professor La Torre writes to the Corriere della Sera giving a correct statement of the facts. He shows that the fourth circular of the London congress reprinted in January, 1913, Art. II, declares that "the official languages are English, German, French, and Italian." This effectually disposes of the rumour that the Italian Government had asked some months before the Congress whether Italian was to be reckoned an There is nothing ambiguous about Art. II; moreover, this particular regulation had been printed and definitely approved as long ago as April, 1912, and again in August, 1912. official language and had received an ambiguous reply.

THE Brighton and Sussex Medico-Chirurgical Society commenced its work for the academic year 1913-14 at a meeting on September 4th, when Dr. Walter Broadbent, in a presidential address, discussed the remote effects of disorders of the stomach. Two conditions were specially prone to give rise to them. In one of these, though the stomach was in a state of spasm, it was nevertheless blown out owing to hyperacidity causing the pylorus to remain contracted. There was a tympanic percussion note, the resonance extending as high as the fifth rib and towards the axillary region. It was a dangerous condition in pneumonia and other fevers, and in ordinary cases might give rise to reflex and pressure disturbance either of the lungs or of the heart; asthma or stomach cough sometimes occurred, and at others palpitations, paroxysmal tachycardia, irregularity of the pulse, and even sudden death should the heart muscle be diseased. The second condition was one not of spasm, but of atonic dilatation, brought about by deficient acidity favouring fermentative processes. A splash could be obtained by succussion, and fluid heard to gurgle out of the stomach when the hips were raised on pillows above the level of the pylorus. This condition often led to mental depres-sion or to insonnia, characterized by the patient waking between 2 and 3 a.m., and being unable to get to sleep again for a long time.

<sup>&</sup>lt;sup>1</sup>Reports to the Local Government Board on Public Health and Medical Subjects (New Series No. 77). Report to the Local Government Board on Bacterial Food Poisoning and Food Infections. By Dr. W. G. Savage. (Food Reports No. 18). London: Darling and Son. (Ed.)