

in the tuberculous stock. This is an induction drawn from a considerable number of cases observed over a period of years. Others may be able to support or negative the view as a result of their experience. The tonsil in the throat and the so-called tonsil of the bowel (the appendix) have much in common anatomically and pathologically. They both are largely composed of lymphoid tissue, the tissue that the tubercle bacillus—and I may also add, the *Bacillus typhosus*—strikes by predilection. They are both very liable to acute inflammation, ending in abscess or perforation. The medicinal treatment of both that I have practised during the last ten years has been very satisfactory—that is, to give aconite with opium, pushed until pain is entirely subdued, with a very restricted liquid diet.

A medical friend informs me that for years past he has treated cases of appendicitis with sodium salicylate, a drug that has been praised recently by Dr. Eustace Smith.

If, as many believe, tonsillitis is a rheumatic affection, it may be a fruitful study to inquire how far the appendix is influenced by the rheumatic state. To those who are interested in tracing constitutional tendencies to disease, I humbly suggest the following inquiry to be made in cases of appendicitis:

1. Is the patient the subject of habitual constipation or not?

2. Has the patient been troubled with his tonsils?

3. Is there any undue tendency in the family to tuberculous diseases or enteric fever?—I am, etc.,

Glasgow, Nov. 21st.

JOHN T. MACLACHLAN.

SIR,—Is appendicitis relatively as common in India as in those countries that have the "latest sanitary conveniences"?

I mention India (a) because the great bulk of its population defaecates in a natural position; and (b) because, being under the eyes of so many well-trained doctors, we seldom read reports of operations for appendicitis.

The appendix contains a large number of solitary glands, and it is not unreasonable to believe that, in the primitive mode of defaecation, the secretion from these glands is squeezed out into the bowel, as Nature intended it to be.

Perhaps some members of the profession practising in districts in India where there is an absence of the usual water-closet will be good enough to inform us whether appendicitis is relatively as common as in England.—I am, etc.,

Skegby, Notts, Nov. 21st.

W. C. RAINSBURY.

SIR,—Appendicitis was rare twenty years ago, but as soon as influenza appeared in this country the number of cases increased enormously. We all know the bacillus of influenza is always with us, and that it retains its vitality for months outside the human body, only awaiting a suitable soil to start breeding; we also know that this bacillus is responsible for inflammatory attacks of the lungs, kidneys, bowels, etc.; why not the appendix?

Before the outbreak of influenza twenty years ago, I did not see more than one case yearly that might have been an inflammation of the appendix, neither do the death returns in this town about that period show any record of cases of death from peritonitis or perityphlitis. Since then I have at least twenty cases yearly, very few of which would have recovered without operation. Multitudinous causes are given for what is now a veritable scourge, but personally I am quite convinced that the influenza bacillus is the cause in 90 per cent. of the cases of appendicitis.—I am, etc.,

Dovercourt, Nov. 21st.

H. GURNEY.

MECHANO-THERAPY AND DISEASE.

SIR,—I read with pleasure Drs. Cyriax's letter in the *Journal* of November 12th, approving of and commenting on Dr. Bryce's article on mechano-therapy. I am glad to see that the profession is at last turning its attention to the much neglected subject of manipulation surgery. It has not received this attention in the past. Some of its methods are mentioned in textbooks and to a slight extent described. To an equal extent they are practised in actual surgery classes. But it must in all honesty be admitted that no great degree of care has been taken to describe minutely or practise carefully these methods. It

has never been thought of sufficient importance to give a brief but minute description of all the ligaments, tendons, cartilages, articular surfaces, etc., concerned in their regional anatomical relations in the particular pathological condition under consideration. It is true they are taught in the anatomy and pathology classes, but it would be well that a brief but minute description should be given in the surgery class-rooms when describing the method concerned. More stress might be laid upon observation of the parts at which pressure, rotation, etc., would be applied in order to produce a certain result in employing manipulative treatment. How many dislocations of the larger articulations are for any length of time tried to be reduced by manipulation pure and simple without the use of an anaesthetic? Very few. I grant that anaesthesia in many cases of dislocation is a boon, but what of these in which a patient's condition does not permit of an anaesthetic? In these cases skilled manipulation is required so as not only to accomplish the reduction by the joint, but to do this in the easiest and most scientific manner, so as to save the weakly patient from shock. It must be granted that in such cases—and they are not few—manipulative surgery is exceedingly valuable, and should therefore have a special degree of importance in the curriculum.

This is one reason. But there are others. Take a case of what is popularly known as "lawn-tennis knee." In this affection we know how difficult it is to return the cartilage to its proper place, and yet how advantageous it is to have a cure effected without having recourse to an operation which lays open to the air, with its millions of germs, dangerous even in the presence of the most careful and rigid application of strictly aseptic measures, and of a temperature which cannot always be so regulated as to correspond exactly with temperature of the delicate structures which enter into the composition of a joint—an operation, moreover, which naturally leaves a scar, which, as we know by experience, is much more susceptible to any malignant influences to which the patient may be predisposed than with an unaltered skin. In this particular affection manipulative measures have, in the hands of a skilful operator, given absolutely successful results.

Further, in most spinal cases, where straightening would be advisable, cutting would be absolutely iniquitous, especially as the bends generally depend on the hardening of many vertebral articulations. Therefore, the correcting of the curvature would be effected by the treating of each articulation. In such cases manipulation by skilful hands gives most brilliant results, especially in children.

A case recently treated by myself—that of a lady patient who had suffered from severe rectal discomfort for many years through the coccyx pressing into the bowel. This, I believe, had been caused by a fall on the buttocks dislocating the coccyx at the sacro-coccygeal articulation. In course of time, this being unreduced, partial ankylosis took place, with the result that the sacro-coccygeal articular surface of the coccyx projected backwards, and the point pressed into the rectum. The patient was put under chloroform, and with one finger in the rectum and my thumb as a lever pressing on the partly ankylosed articulation, I steadily pulled on the point of the coccyx with the forefinger which was in the rectum, and by doing this several times strongly, steadily, and yet without any jerking, the coccyx was brought to a perfectly favourable position. As a result, the rectal trouble has disappeared. That this is not by any means new I know, but I am firmly of the belief that even in the severest cases, in 999 out of 1,000, intelligently applied manipulation will accomplish all that more drastic surgical operation can do, and with none of the dangers of the latter.

Manipulative surgery can only be learnt by practice. It does not mean merely pulling, breaking down adhesions, etc., but consists of carefully regulated movements, and in such cases as the last mentioned there must be a very fine appreciation of the amount of pressure, straining, etc. (as it would seem in the operator's fingers), so as to be able to "feel" just how far he may strain to come just near to the amount which would cause a fracture or a rupture, and yet not actually cause either. Practice alone gives the operator this "force-gauge" feeling in his fingers.

Drs. Cyriax recommended that those who are well

known experts in these methods and have practised for years, and whose knowledge and experience would be of great value, should be placed on a register, and so remove any barrier to free exchange of ideas and experience between them and others. I have had opportunity of meeting and seeing the work of one at least of the most famous experts of this art and have seen more of its great possibilities than I had dreamt of, and I would be glad to learn more. I therefore very earnestly support the suggestion by Drs. Cyriax and devoutly hope the Medical Council will speedily take action in this important matter.—I am, etc.,

London, W., Nov. 23rd.

A. A. PHILIP, M.B., C.M.

PROVISION FOR THE INSANE POOR.

SIR,—With reference to a letter from Dr. R. C. Stewart, in the JOURNAL of November 19th, p. 1658, headed "Provision for the Insane Poor," may I point out that of the asylums for purely private patients, practically all the registered hospitals and most of the licensed houses will take patients for 30s a week? Many of the larger will do so for less. There is no lack of accommodation in private asylums for cases on such terms.—I am, etc.,

Rotherham, Nov. 21st.

GILBERT E. MOULD.

KANGRI-BURN EPITHELIOMA.

SIR,—In the JOURNAL of September 24th Dr. H. D. McCulloch raises some interesting questions. I do not, however, think that the Kashmir epithelioma supports a "riverine or alluvial" theory of the origin of cancer. In Kashmir itself the disease is also found in mountainous districts. The freedom of the mountainous districts of Ladakh, Skardo, Poonch, and Kishtiwari, with all of which I am familiar, is due to the fact that the kangri is not used there by the general population. The people, too, wear a distinct dress, so the conditions are quite different.

Our observations on the condition of the lymph glands are based, not on mere palpation, but upon examination after removal of many hundreds. Infected glands soften early. When they break down they cause diffuse infiltration. In their early stages on section they show grey spots or patches, and later on soft granular pultaceous areas, which are found to consist of large epithelial cells of the same type as those of the primary tumour. These are arranged concentrically, the more central cells being laminated and horny.

There is no doubt whatever that this material is highly infective locally. In my opinion, however, the infectivity is an attribute of the altered and highly proliferating epithelial tissue cells. The primary growth is evidently due to intermittent heat irritation. As a result of this, the cutaneous epithelium appears to escape the trophic nerve control which maintains the balance of growth, and the epithelial cells get, as it were, out of hand. The result is a double process. Large masses perish from want of nutrition. Gangrene, ulceration, and septic infection follow. Other cells, actively proliferating, enter the lymphatic circulation.

That epithelioma may be produced by such widely differing agents as the administration of arsenic, the use of x rays, the application of caustics—themselves powerful antiseptics—the irritation of heat applied to various parts of the body, the action of chemical irritants—soot, lime, betel chewing, etc.—is most suggestive of a causation of epithelioma which is not parasitic. The special tendency of the reproductive system to epithelial cancer, especially in women, and the influence of the internal secretion of the ovary on mammary cancer, also point in the same direction.—I am, etc.,

Kashmir, Oct. 11th.

ERNEST F. NEVE.

A POSSIBLE FALLACY IN FEHLING'S TEST FOR SUGAR.

SIR,—With reference to the correspondence in the issues of the JOURNAL for October 15th and 22nd *re* reduction of Fehling's solution by urine containing formalin, this reaction is, of course, characteristic of aldehydes as a class. Indeed, it seems likely that the reducing sugars owe their

power of reducing Fehling's solution to their possessing the $\begin{matrix} \text{O} \\ \parallel \\ \text{C} \\ | \\ \text{H} \end{matrix}$ radicle common to aldehydes, and they may, in a sense, be regarded as aldehydes, behaving in many ways as such.

There are so many other possible fallacies in connexion with Fehling's test, especially when the suspected urine contains only a small quantity of sugar, that it seems desirable at least to confirm the reaction.

I have for some years used an excellent and delicate test, first shown me about ten years ago by Dr. Lloyd Jones of Cambridge, but as it appears to be little known I will describe it.

Sodium nitrophenyl-propionate, which is obtainable in solids containing $\frac{1}{2}$ grain, is dissolved with the aid of a little heat in water, preferably distilled, the proportion being one solid to about 10 c.cm. of water. To this solution a few drops of the suspected urine are added, and it is boiled for a short time. The presence of sugar is indicated by the formation of "indigo blue," the solution becoming decidedly green.

This reaction is brought about only by glucose and lactose, no other reducing substance commonly found in urine, such as glycuronic acid or the products of drug elimination, causing it. As lactose is rarely found, even in the urine of pregnant or nursing women, the fact that it gives a positive reaction with the indigo test places the latter at no disadvantage, seeing that lactose will reduce Fehling's solution, even in the cold.

Curiously enough, the presence of formalin prevents the occurrence of the indigo reaction, but, as Dr. O'Kelly points out, making the urine alkaline with ammonia and then boiling decomposes the formalin (hexamethyleneamine, a condensation product, being formed), and if glucose or lactose be present, the indigo reaction now comes off as usual.—I am, etc.,

Great Malvern, Oct. 25th.

J. N. F. FERGUSSON, M.B.

BAD PROGNOSTIC SIGNS IN ECLAMPSIA.

SIR,—I was much interested in Dr. Shaw's article,¹ on some bad prognostic signs in eclampsia. As a prognosis is always demanded of the doctor in this alarming condition, anything that assists us in forming an opinion should have due weight. It will be of interest, therefore, if others can state their experience as to the signs mentioned—namely, small amount of albumen, a high temperature, and commencement of fits after labour. I have some notes of half a dozen cases of those that I have attended during the last twenty years, in which I find that my experience, though much more limited than Dr. Shaw's, agrees remarkably closely with his as to the first two signs. As regards the last, I have not yet had a case in which the fits have begun after completion of the labour. The age varied in the cases of which I have notes, from 16½ to 43 years. The onset was before or during labour.

Albumen was present in all, in large quantity in the 3 that recovered, in small amount in the 3 fatal cases. The temperature was normal, or below 100°, in the 3 non-fatal cases, above 100° in the fatal ones. In the young girl there was total suppression from the time I saw her, and the temperature reached 104°.

The drugs used were morphine and chloral and bromide injections, with jalap in some cases. No drugs could be administered to the youngest patient. I have found Bozzi's dilator of the greatest assistance in two of the later cases, delivery being effected in each case in less than forty-five minutes, dilatation to 4 in. diameter occupying half an hour. In the other cases dilatation was effected with the fingers and forceps applied. The eldest patient, a primipara of 43, gave me a most anxious time, but here prompt delivery by means of the dilator, followed by bleeding, hot packs, and intravenous infusion, saved the mother's life. Two of the children recovered.—I am, etc.,

Coventry, Oct. 31st.

R. CARMICHAEL WORSLEY.

EXPRESSION OF THE LENS IN ITS CAPSULE.

SIR,—With reference to Lieutenant-Colonel Henry Smith's, I.M.S., remarks on "extraction of the lens in its capsule," it seems hardly fair to say that the conclusions arrived at in the article referred to in the JOURNAL

¹ BRITISH MEDICAL JOURNAL, October 28th, p. 1306.