

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.