

drops of quinine-urea solution under the fissure and touches the surface with pure silver nitrate. He assured me his results were satisfactory in most cases. My own method (realizing that spasm of the sphincter is the cause of delay in healing) is to anaesthetize the sphincter with 0.5 per cent. novocain, or quinine and urea solution, using the same technique which I employ for removal of haemorrhoids (*Journal*, March 16th, 1929), and injecting also a few drops beneath the fissure. The sphincter relaxes almost immediately, and a speculum can be painlessly passed for the diagnosis or treatment of other rectal conditions. A simple dressing such as pure ichthyol should then be applied daily. (I claim no originality for this method, which has been practised by Hirschmann and others for many years.) Old and dense scar tissue when present I then remove by the simple method advised by Mummery. Many fissures of old standing can only be cured by this little operation.

The introduction by Mr. W. B. Gabriel (*Journal*, June 15th, 1929) of a new preparation, "A.B.A. anaesthesia solution," a most valuable contribution to the treatment of ano-rectal complaints, has made this method of treating fissure more effective, since the anaesthetic effect lasts many days; I now employ A.B.A. in preference to novocain.

For pruritus ani, if a lengthy trial shows that the good effects of the A.B.A. solution are permanent—and Mr. Gabriel's experience, described with such restraint, holds out hope for this result in certain cases—the great value of this solution will be inestimable. Colonel W. P. MacArthur's letter in the *Journal* of June 28th (p. 1195), especially his helpful advice on diagnosis and treatment, was of much practical value. I also have found thread-worms in many cases. Ball's operation, although recurrences after it are frequent, has given relief in many instances I have known when all other methods were useless, but it should not be advised, and seldom is, until other means have failed. The fact that patients sometimes submit to it a second time and demand it themselves (I have known more than one such patient) is evidence of how sufferers appreciate even its temporary efficacy. General as well as local examination is necessary, since intractable pruritus is often a symptom of remote disease, such as diabetes.—I am, etc.,

London, W.C.1, July 14th.

P. KENNEDY MURPHY.

DERMATITIS FOLLOWING USE OF IODINE SOLUTION.

SIR,—Mr. Charles Alexander's description in the *Journal* of July 19th (p. 100) of a case of fatal dermatitis following the use of iodine spirit solution prompts me to record two cases which, fortunately, did not end fatally, but caused much pain and distress, and were due to the use of the common tinct. iodi mitis, B.P.

The first was that of a man, aged 42, who used the tincture as a counter-irritant for a dull ache in his left arm and forearm. Three hours after a single application the arm was covered with huge blisters, separated from each other by superficial cracks of the skin. When I saw the patient he was sitting in bed undressed, swaying, and supporting with his right hand the painful arm. He had a pale, sunken face, and was obviously in great pain; his temperature was 100° F., and his pulse 60. Soon after I arrived he vomited, and complained of dimness and severe headache. I treated the patient as for burns, and he was able to leave his bed on the fourth day; the arm healed without complications.

The second patient, a woman aged 40, had a small superficial cut (a few millimetres long) on the palmar aspect of the terminal phalanx of the fourth finger of the left hand. She used the remnants of tinct. iodi mitis which she had in her medicine chest, and soon after complained of severe pain in the hand and arm, so unbearable that I was called out at 2.30 a.m. Solutions of liquor ammon. sod. bicarb. and alcohol were used; the pain eased, and she was able to sleep a little. The finger was swollen, and slight pain, concentrated in the terminal joint, which was stiff, persisted for several days, when the skin broke and some fluid escaped.

While there is no doubt that the tincture used in the last case was an old evaporated, and therefore concentrated,

solution, I am not sure what the tincture in the first case looked like, except that the patient bought it from well-known chemists in the district. Both patients are healthy individuals, and do not remember ever using tinct. iodi before.

It seems likely that these were cases of idiosyncrasy, but whether the character of the solutions used had anything to do with the pathological phenomena is impossible to say. It warrants, however, careful observation by everyone using iodine in some form or other.—I am, etc.,

London, N.4, July 21st.

D. G. DE BOUK.

** In the nineteenth edition of *The Extra Pharmacopoeia* (Martindale and Westcott) the warning is given that the tinctura iodi (mitis) "should be recently prepared, or is liable to contain aldehyde and hydriodic acid. This aldehyde in presence of iodine and water oxidizes, forming more hydriodic acid as well as acetic acid. The acetic acid may become etherized, forming ethyl acetate. A little iodic acid added to the tincture will prevent decomposition; it breaks up hydriodic acid as formed."

ANAPHYLAXIS AND DISEASE.

SIR,—I am greatly interested in a remark by Dr. Langdon Brown in his paper on predestination in disease (*Journal*, March 22nd, p. 525). He writes: "In less degrees both allergy and anaphylaxis declare themselves in violent attempts to get rid of the foreign invader. These attempts take the form of diarrhoea and vomiting, of giant urticaria, or of asthma."

In an article on anaphylaxis printed in the *Medical Journal and Record* of February 3rd, 1926, I tried to place these phenomena under the parasympathetic mechanisms. Briefly, they may be expressed thus. All tissues under the control of the automatic system must be in communication with one another by means of either nervous or hormone influence. They must either have one set of impulses stimulating their function and another inhibiting it, or they must have stimulating impulses alone, the tissues resuming normal function on cessation of the stimulus. The automatic nervous system, together with certain of the ductless glands, is clearly divided into opposing forces, each of which has its special functions.

With the sympathetic are bracketed the thyroid, pituitary, and gonads, and with the parasympathetic are associated the parathyroids, thymus, pancreas, spleen, liver, and possibly others. Dr. Langdon Brown has well described how the sympathetic system and its allies take control of all matters pertaining to defence and self-preservation against all factors potential for harm, be they bacteria, wild animals, or financial difficulties; when excessively stimulated they cause symptoms, as seen in exophthalmic goitre and shell shock. The parasympathetic and its auxiliaries preside over the assimilation of food when once procured, and the elimination of all wasteful and harmful products. This is clearly shown by the innervation of the intestine. Stimulation of either of these groups produces a characteristic train of symptoms varying largely according to the severity of the stimulus. The most primitive of the parasympathetic reactions is to eject or vomit. Almost any parasympathetic stimulus causes this, as is seen in seasickness from vagal irritation of the semicircular canals. The vomiting of pregnancy is possibly due to stretching of the uterus; this, as well as early attempts at smoking, stimulates the vagus unduly. Increased intestinal peristalsis resulting in diarrhoea is due to increased vagal stimuli. Vagal stimulation causes contraction of the bronchial muscles, producing asthma. When toxic material gains entrance to tissues that are sensitized immediate efforts are made to eject it; this takes the form of urticaria or angioneurotic oedema, and is identical with that produced by any dermal test for foreign protein. This reaction must also fall into place as a parasympathetic act, and is part and parcel of the same mechanism which enables an amoeba to extrude undigested material. A stimulus may produce the whole syndrome or part of it according to its severity.

The understanding of these two syndromes will help much to unravel symptoms generally, which will be found to fall