RECENT ADVANCES IN MEDICAL SCIENCE.

THERAPEUTICS.

UNDER THE CHARGE OF

JOHN ORR, M.D., F.R.C.P.

Oil of Chenopodium and Chloroform as Anthelmintics.

Hall and Foster publish a preliminary note (Journ. Amer. Med. Assoc., 30th June 1917) on the use of oil of chenopodium and chloroform as anthelmintics. The former is a volatile oil, official in the U. S. Pharmacopoeia, and is derived from the chenopodium anthelmintica. It is very efficient in getting rid of ascarides, and the authors have made investigations in dogs and human beings to determine its exact effects. It has been found that chenopodium depresses the heart muscle, causes a fall of blood-pressure, decreases vagus irritability, and, what is important, inhibits peristalsis. It is thus a constipating substance, and, being so, is liable to be absorbed into the blood if it is not administered with a laxative. Accordingly, the authors find that it ought to be given with castor oil and followed by the same substance. Doses of 5 to 15 minims are recommended, with half an ounce of castor oil.

For the treatment of hookworms they have found chloroform decidedly superior to such a substance as thymol, and they administer this in 15 to 45 minims doses with castor oil. They recognise that care must be taken that the subjects to whom the chloroform is to be given must be free from renal or hepatic disease, and that the dose should not be repeated till an interval of two or three weeks has elapsed since the first dose was taken. But while chloroform has also a certain efficiency against ascarides, the authors do not consider that chloroform has any decided synergic action when administered with chenopodium. They state, however, that as the two forms of parasite sometimes co-exist, there may be an advantage in combining the two remedies to meet the concurrence in the same patient of the two classes of worms.

Chaulmoogra Oil in Leprosy.

Chaulmoogra oil (oleum gynocardiae) has long been employed by oral administration and by inunction for the treatment of leprosy and tuberculosis, but has met with only moderate success. It is now recommended for hypodermic administration by Bercovitz (Journ. Amer. Med. Assoc., 30th June 1917). Heiser has already published a formula suitable for hypodermic use, consisting of ol. gynocard. 60 c.c., camphorated olive oil 60 c.c., and resorcin 4 grms. Of this mixture 1 c.c. is injected after sterilisation under the skin of the arms or legs at
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intervals of a week, increasing the dose gradually till 3 c.c. are being injected at a time. A slight general reaction may occur but is evanescent, and no local reaction has been observed. Weekly injections are given for nine months. After a month patients have expressed themselves as feeling in better health; increase in weight has occurred, and after some months cases of the anesthetic type have begun to complain of pains in the affected parts, and there has been some return in tactile sense. Tubercles get smaller and some disappear, while painless ulcers heal and become painfully sensitive. Tubercles have been excised after some months’ treatment and have been found to show evidence of degeneration of epithelioid cells and commencing fibrosis. Bacilli have still been detected in such cases however.

The author presents this as a preliminary note, and promises further information later, as his experience increases, of this method of treatment.

Nikalgin.

Nikalgin is the name of a new anodyne and local anæsthetic whose exact constitution, source, and mode of preparation are at present unknown. Probably it is in the main quinine urea hydrochloride. Whatever it be, its action in allaying the sensitiveness of painful surfaces is very powerful, and it is being used largely in the war zones. Like other substances, secret at first, its composition will ere long be published (Med. Record, 29th September 1917).

Treatment of Goitre.

Sheehan (Med. Record, 6th October 1917) revives an old method of treatment for goitre, both of fibrous and exophthalmic type. He cites a series of cases, mainly of the simple fibrous variety, in whom he has injected 4 drops of equal parts of carbolic acid, tinct. iodi., and glycerine at five-day intervals. He claims that he has in every case removed all the pressure symptoms, obtained diminution and sometimes disappearance of the swelling, and in exophthalmic cases has secured abolition of all symptoms and physical signs, save tachycardia. No bad effects have been noted, such as have occasionally been described by other clinicians, and he advocates that arsenic and phosphates in some form be administered during the course of treatment. While he has found five injections to suffice in most of his cases, he says that in more resistant cases there is no objection attaching to the prolongation of the injections for a longer period.

Continuous Bath in Delirium.

The continuous bath treatment in mental disease is the subject of a paper by Strecker (Journ. Amer. Med. Assoc., 16th June 1917), who
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has used this form of treatment in cases of delirium of various types, including delirium tremens, and is strong in its favour. He is of opinion that it is superior to and safer than the routine use of hypnotics, and does not fail to insist on the necessity for careful watching of the patient while the continuous bath is in operation. His testimony to the good effect of this method is in accordance with the experience of Kraepelin, who has long employed hot baths of running water in the handling of cases of acute mania. For many years this form of dealing with these acute mental cases has been in operation in Munich, especially in the clinic for incipient insanity cases and acute mental disorders.

**Thymol in Trichinosis.**

Thymol treatment of trichinosis is dealt with by Kahn (*New York Med. Journ.*, 16th June 1917). When the parasite has left the alimentary canal and has lodged in the muscles, it is necessary to reach it through the blood-stream. In the alimentary canal thymol attacks the parasite with success, but after absorption it undergoes alterations in the liver. If thymol be introduced directly into the blood-stream this action on it by the liver does not take place so readily, and similarly if administered intramuscularly. Fifty grs. of thymol are dissolved in 50 c.c. of sterilised olive oil, and 2 or 3 c.c. of this solution are injected into a muscle daily for seven days. These injections cease for a week and are resumed. No toxic effects have been observed, and many of the symptoms of trichinosis have been shown to disappear, such as muscular pains, swelling of the eyelids and face; while showers of eosinophile leucocytes appear in the urine. Kahn suggests, although he has so far not yet tried, the employment of this method of using thymol in cysticercus, filaria, and echinococcus invasions.

**Mineral Oil as a Vehicle.**

Hoelscher publishes a preliminary report concerning this subject (*Therapeutic Gazette*, 15th October 1917). He alludes to the fact that the paraffin oils do not undergo absorption from the alimentary canal but are excreted unchanged, no part of them being taken into the general circulation. He proposes to make use of this fact in the treatment of intestinal fermentation by antiseptic substances dissolved in this medium, securing intimate contact of the antiseptic with the putrefactive agencies and at the same time no absorption into the blood. He has accordingly tried iodine in strength of 1 gr. in 2 ozs. of the mineral oil, and giving half an ounce once or twice daily. His conclusions are that no iodine reaches the blood, even when the petrolated oil is taken for several months, and on no occasion has any sign of iodism appeared; that the iodine does not interfere with the laxative action of the oil; that the effect on the intestinal putrefaction is bene-
ficial, and the patient's symptoms are decidedly ameliorated or abolished.

He has added in certain cases of colitis bismuth subcarbonate, with a beneficial effect as regards the colitis.

**Drug Habituation and Drug Psychoses.**

Leahy contributes a lengthy paper (*Long Island Med. Journ.*, October 1917) in which he deals fairly comprehensively with this subject. Much of what he writes is not new, but his remarks are well timed at the present day. Dealing with opium and its derivatives, he thinks that heroin is the alkaloidal compound mostly employed by morphinomaniacs of to-day, and that in a large proportion of cases it is taken as a snuff, although, of course, he recognises that it is also taken hypodermically. There is some reason to think that the employment of heroin after abdominal operations may be the introduction of the patient to this drug; and, if this be so, it is incumbent on medical men and surgeons to exercise the greatest circumspection in employing this potent substance. The author rightly holds that cases which have undergone a "cure" are very liable to lapse into the bad habit after getting back to ordinary life. Speaking of the cocaine habit, it is pointed out that it may be added to the morphine habit—an already well-known fact—but he does not allude, save in a cursory fashion, to the important symptom of sensation of foreign bodies under the skin, which is such a valuable clue to the detection of cases of cocaine habit at a comparatively early stage. The author believes that most drug habitués are abnormal people to begin with, and that their mental subnormality militates against their curability. One is inclined to join issue with the author on this point, as one often finds that drug habitués are people of over-average brain power and mental attainments. Treatment in a farm colony is advised, with plenty of manual work and fresh air, and he suggests a three-year course of treatment for cocaine cases. Few medical men who have seen the course of cocaine cases will refuse to subscribe to this suggestion, as small indeed is the percentage of recoveries in the true sense of the term.

**Treatment of Bronchial Asthma by Vaccines.**

Sicard (*Amer. Journ. Med. Sci.*, June 1917) is very optimistic as to the effects of vaccine therapy in this condition. He traces the analogy between asthma and some of the manifestations of anaphylaxis and criticises the so-called reflex causes of asthma, such as nasal polypi. These he regards as interfering with the drainage of the accessory sinuses and permitting absorption of products, which would escape but for the presence of the polyps, whose removal may effect a cure by re-establishing free drainage. Bacterial causes of asthma have much
engaged his attention, primarily streptococcus viridans and hæmolyticus, with micrococcus catarrhalis acting secondarily. The author believes that an autogenous vaccine will cure these cases. Beginning with 100 million in adults he gives larger doses as such appear to be needed, observing carefully for local reaction, which ought not to be too severe if the right dosage is being employed. Too severe local or general reaction calls for a halt for a time. Doses of 1000 million are often all that may be required, but in protracted or refractory cases he proceeds to 2000 and even 3000 million. Sicard believes the streptococci to be the chief offenders, and that nearly all cases are susceptible of cure. Inoculations are made at semi-weekly or weekly intervals.

NEW BOOKS.

Nerve Wounds. By J. Tinel, ancien chef de clinique de la Salpêtrière. Translated by Fred Rothwell, B.A., London. Revised and edited by Cecil A. Joll, M.B., F.R.C.S., Senior Surgeon, Richmond Military Hospital. Pp. 317. With 323 Illustrations. London: Baillière, Tindall & Cox. 1917. Price 15s. net.

This book presents the results of investigations carried out in the Charcot clinic by Déjerine and his pupils (of whom Tinel is one), and the author is deservedly praised by Déjerine for the high standard he has aimed at and succeeded in attaining. While the work of Waller, Duchenne, Weir-Mitchell, Broca, Lejars and others on lesions of the peripheral nerves is mentioned in the introduction, there is the curious omission of any reference to the observations of Head and of Sherren, both of whom we have come to regard as authorities on the subject in this country.

Very distinct differences are drawn of the clinical picture and the prognosis in injuries which are anatomically complete and those which are incomplete; paradoxically, symptoms and outlook are liable to be infinitely worse where the lesion is incomplete. Trophic changes are stated never to be prominent in complete section of a nerve; at the most they are characterised by a cyanotic coloration of the skin, and by a loss of character in the skin which desquamates in a fine, branny form. Marked trophic changes always indicate an incomplete interruption of the nerve, and they are met with not only in the skin but in all tissues of the limb, even including the bones; tendon sheaths become fixed to the tendons, and permanent changes take place in joints that seriously compromise the prognosis. Further, instead of the anaesthesia associated with complete division, the muscle bellies are tender, as is also the trunk of the nerve, and its cutaneous area is