

blood or serum, failing this by injections of gum solutions or salines containing alkali, and stimulation of excretion by all available channels.

REFERENCES.

- ¹ *Proc. Roy. Soc.*, vol. B, lxxvii, 1905, p. 102; *Bio-chem. Journ.*, vol. i, 1906, pp. 88 and 383; vol. iii, 1908, p. 279. ² *BRITISH MEDICAL JOURNAL*, 1918, ii, p. 78. ³ *Journ. of Physiol.*, vol. xxxii, 1905, p. 225. ⁴ *The Respiratory Function of the Blood*, Appendix III, p. 316, and *Proc. Physiol. Soc.*, January, 1914. ⁵ *BRITISH MEDICAL JOURNAL*, 1917, and *Journ. of Physiol.*, vol. li, 1917, p. 380. ⁶ *Amer. Journ. of Physiol.*, 1908-1910, and *Journ. Amer. Med. Assoc.*, vol. lxix, 1917, p. 965. ⁷ *Annals of Surgery*, vol. lxii, 1915, p. 262. ⁸ *Amer. Journ. of Med. Sci.*, vol. clxiii, 1917, pp. 90-99. ⁹ *Journ. Amer. Med. Assoc.*, vol. lxxviii, 1917, p. 1393. ¹⁰ *Surgery, Gynaecology, and Obstetrics*, vol. xxv, 1917, p. 23. ¹¹ *Lancet*, 1917, vol. i, p. 8. ¹² *Comptes rendus Acad.*, vol. cxxxi, 1900, p. 293. ¹³ *C. R. de trav. du Laboratoire de Carlsberg*, vol. xlii, 1917, p. 1. ¹⁴ *Amer. Journ. of Physiol.*, vol. xv, 1906, pp. 257 and 271; vol. xviii, 1907, p. 250; vol. xxi, 1908, p. 427. ¹⁵ *Bio-chem. Journ.*, vol. i, 1906, p. 286 et seq. ¹⁶ *Bio-chem. Journ.*, vol. i, 1906, p. 297. ¹⁷ *Beitr. z. chem. Physiol. u. Path.*, vol. iii, 1903, p. 528. ¹⁸ *Schafer's Textbook of Physiology*, vol. i, p. 153. ¹⁹ *Journ. of Biol. Chem.*, vol. xxx, 1917, p. 289. ²⁰ *Proc. Physiol. Soc.*, 1918. ²¹ *Bio-chem. Journ.*, vol. i, 1906, p. 175. ²² *Amer. Journ. of Physiol.*, vol. vii, 1902, p. 261. ²³ *Bio-chem. Journ.*, vol. ii, 1906, p. 34. ²⁴ *Amer. Journ. of Physiol.*, vol. xx, 1907, p. 127. ²⁵ *Proc. Roy. Soc.*, vol. B, lxxxix, 1916, p. 25. ²⁶ *Bio-chem. Journ.*, vol. iii, 1908, p. 422.

THE TREATMENT OF EPILEPSY BY COLLOSOLO PALLADIUM.

BY

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For some time I have been using the different collosole preparations in the treatment of furunculosis, seborrhoea, acne rosacea, eczema, etc., and can fully verify the excellent results already stated by Sir Malcolm Morris, Mr. McDonagh, and others, in the *BRITISH MEDICAL JOURNAL*.

A study of the interpretation of the chemio-therapeutic action of the various collosoles led me to believe that, given a suitable collosole, epilepsy should respond to its treatment. Without at the moment entering into my reasons, collosole palladium suggested itself to me as a preparation which should give good results.*

I therefore took twenty-three typical epileptics for systematic treatment and carefully examined the night and day records of their fits for the past four months, during which they had been under my own personal observation. Having, therefore, a sound basis to work upon, I injected each patient intramuscularly with 0.5 c.cm. of "pallamine" at intervals of three days. So far the results have been most marked and encouraging. To cite four cases:

Case 1.—H. G., male, aged 45, suffering from epilepsy of a doubtful traumatic history, had an average of at least four fits weekly. These fits were of a very violent nature, the convulsive stage lasting on occasions for an hour, followed by stupor, confusion, and excitement. Three injections were given as stated above. Since the injections only one fit has occurred in a fortnight, and that of a mild nature, lasting only 30 seconds. The patient feels greatly improved in his general health, is less morose, more conversant, expressing himself more lucidly, and is very grateful for the treatment.

Case 2.—M. A. L., female, aged 53, an epileptic of thirty years' standing, with a fit average of six per week, these being of a very violent nature. Since injection, three weeks ago, no fit has occurred, but she has had a few slight sensations. She is now placid, well behaved, and much better in every way.

Case 3.—M. A., female, aged 16, congenital epilepsy. Her fits at times, owing to their extreme frequency, were uncountable. She seldom had less than three or four a day. Since injection, three weeks ago, only four fits have occurred, of a mild nature, and of short duration.

Case 4.—W. H., female, aged 29, had a fit of a very violent nature at fairly regular intervals of three days. The first injection was given fourteen days ago, and to the time of writing no fit has occurred. She is much brighter, greatly improved in health, and has now great hopes of being discharged from the institution recovered.

It is an interesting fact that in two cases 1 c.cm. of collosole manganese was injected as a stimulant after the injections of "pallamine." In both cases a fit resulted.

Generally most of the patients who have been treated have greatly improved. The nurses and attendants have noticed a marked difference in their general behaviour, a

* Colloid palladium (pallamine) can be purchased from Crookes' Collosoles Ltd., 50, Elgin Crescent, W.11.

great diminution in the frequency and severity of the fits, and say that their work in the epileptic wards is lightened to a large extent.

The results so far obtained from this treatment have been so encouraging, in fact, have so far exceeded my expectations, that I hasten to bring the matter before the profession in the hope that others will give this form of treatment a trial, and find great benefit to the epileptic ensuing therefrom.

I am still keeping careful records, and hope that at some future date I may be able to show further results.

Memoranda: MEDICAL, SURGICAL, OBSTETRICAL.

THE NIGHTCAP FOR INSOMNIA.

WHILE the treatment of insomnia in any individual case must depend upon a correct estimation of the particular causes in that case, attention to details likely to assist in wooing sleep must always have precedence over drugs.

From this point of view the wearing of a nightcap takes precedence over the drinking of one. Did our grandfathers and grandmothers think, believe, or know from experience that the wearing of a nightcap encouraged sleep? How did this article come into such prevalent use in olden times? We are not entitled to suppose that the older generation wore it from vanity or foolishness, but rather to presume that it had knowledge and experience on its side, and had found that it encouraged sleep thereby.

This view is supported by war-time experience of the knitted Balaclava helmet and knitted cap comforter. That the feet should be warm in bed is recognized as necessary for sound unbroken sleep, but that warmth of the head may be soothing and sleep-winning is not sufficiently recognized at present in civil practice. The war cap comforter is well named. Those who use it at night in cold weather know its soothing virtues in dug-outs, shacks, huts, brick-floored billets, and such similar resting places.

The use and benefit of this accessory might be extended to civilians suffering from insomnia not of gross organic origin. In addition to its soothing sleep-promoting warmth the cap comforter can be used to decrease the intensity of sense impressions from light and sound, encouraging sleep and lessening the chance of its unnecessary interruption, particularly in the early morning.

It is recognized that light and fresh air purify the bedroom atmosphere and make sleep thereby more wholesome and refreshing. A drawn blind, to a large extent, excludes these. The open window, however, admits the full intensity of sounds from outside and daylight tends to waken the sleeper too early. The cap comforter is used to diminish these sensory excitants. The lower part, folded to a treble thickness, is brought over the ears and eyes. The sleeper then has all the benefit of the fresh air and purifying light without the disadvantage of sensory excitation of the eyes and ears. Extraneous sounds are greatly diminished in intensity and darkness is over the eyes. Thus two real objections sometimes raised by a patient to the open, blindless, curtainless bedroom window are removed. For those who know its value the cap comforter is a potent nightcap.

There is another war-time practice prevalent among soldiers for inducing sleep. As, prior to sleeping, the bird puts its head under its wing, and other animals curl up and thereby lessen the respiratory exchange, so, not infrequently, the soldier pulls his blanket completely over his head to facilitate sleep. He thus obtains increased head warmth, diminished sensory excitation, and a narcotic effect from rebreathing his own carbonic acid. While this practice cannot be recommended as giving healthy sleep it does decidedly promote sleep. As would be expected, such sleep is not so refreshing as fresh air sleep, and the man is often slow to waken and in wakening passes through a stupid, confused phase, resembling that of one coming out of a brief anaesthetic state. This practice is most useful where sleep is being prevented by coldness of the body due to wet clothing, wet feet, or insufficiency or wetness of blankets. The heavy sleep gives a welcome escape for the time being from the many abominations of the war zone.

W. J. BURNS SELKIRK, M.A., M.D.

THE SIZE OF THE HEART.

METHODS of determining the size of the heart are just now matters of more than usual importance; and, especially in view of the opinion authoritatively expressed that systolic murmurs may be confidently ignored in absence of symptoms, if the heart be normal in size, it is incumbent upon us to neglect no precaution against making a mistake with regard to size.

Consequently, the astonishing statement rather recently made, that "examination to determine the size of the heart should always be made with the man lying down," is greatly to be regretted. For not only has it been shown over and over again that the exact converse is correct, but every day medical experience makes plain to any one who can percuss and distinguish notes that "*examination to determine the size of the heart should always be made when the patient is erect.*"

How many cases of dilated heart can one not recall in which the width of the cardiac dullness in recumbency was notably less than in the erect position, and much less than the probable width of the heart? I have seen a case in which the recumbent dullness was only 5 in. wide, whilst the standing dullness was 9 in. In such a case is it common sense to suppose that the lesser measurement—not much over normal—more correctly indicated the width of a heart giving all the evidences of serious dilatation? I remember once being sent for to see a boy who had fainted after unusual exertion, and presented, to his doctor's surprise, a perfectly normal heart dullness; the lad had been too ill to allow of his being examined in any position but the recumbent; by the time I arrived he was sufficiently better to be allowed to sit up for a few minutes, and percussion in the sitting posture at once showed the considerable dilatation which, after taking all the circumstances into account, we had both suspected to exist. The diagnostically valuable recumbent reduction of cardiac dullness in many cancer patients is enough alone to dispose of this absurd error. Commonly, the dullness is no larger than a postage stamp. Are we to conclude from such a dullness that the heart also is of that size? Sometimes there is no recumbent dullness at all, although the standing dullness is normal. Are we here to set aside the standing dullness and to assume that the heart has disappeared?

After all, the action of gravity must be supposed to affect the heart as well as the historic apple. True, one medical correspondent has called this in question, reminding me of an equally amusing suggestion by a lady friend, who once said to me, "How curious it is that the human body should be no heavier after a meal!" Moreover, the fact of the effect of gravity is not now merely a matter of inference. A valuable paper by Professor Rudolf of Toronto several years ago contained *x-ray* photographs showing laterally the heart's relation to the anterior chest wall both in the erect and recumbent postures.

In the present instance we can only suppose that a misprint is responsible for a most unfortunate misstatement.

Exeter.

W. GORDON, M.D., F.R.C.P.

ALOE AS A LOCAL SEDATIVE.

THAT it has long been known that aloe is a local sedative is shown by the formula for friar's balsam, in which aloe is a considerable ingredient. The balsam was used for bites of all sorts, as well as for other wounds, and still is a good application. I think, however, that a saturated solution of aloe in tincture of tolu is a much pleasanter form. It is, as far as I know, the only thing that relieves the virulent itching of harvest bug bites. It should be kept in a stoppered bottle, and shaken before use by applying the stopper to each bite once or twice *before scratching*; the relief is great. By going over the whole body when stripped for bed a good night is obtained. I speak from experience, both personal and from the reports of patients. The credit for this particular preparation is due to my late father, Frederick Cock, M.D.

May I, in addition, advocate the use of tincture of tolu in bronchitis instead of compound tincture of benzoin? Here, after the aromatic portion has volatilized, the peculiar disagreeable odour of aloe persists, whereas the tolu remains pleasant all the time, and is at least as soothing and antiseptic as the friar's balsam.

London, W.

F. WILLIAM COCK, M.D.

Reviews.

TREATMENT OF LOCOMOTOR ATAXY.

SINCE he first began to write on the subject in 1902 Dr. E. LEREDDE has constantly advanced the argument that tabes dorsalis is a curable disease if given the proper form of treatment; everything, he says, depends on the technique of the treatment adopted. The disease is a manifestation of syphilitic infection, and is, he continues, the result, from the point of view of pathological anatomy, of a syphilitic posterior meningomyelitis. In some cases, but not all, the disease can be cured by vigorous mercurial treatment. But arsenobenzene is a far better drug to employ, and Dr. Leredde confines himself to its use. The sooner the treatment is begun, once the diagnosis is made, the better; the doses of arsenobenzene are small at first, and are increased later in accordance with the patient's tolerance of the drug. The object is to avoid, as far as possible, Herxheimer reactions, or thermal local and general reactions attributed to the destruction of the specific spirochaetes by the antisyphilitic drug employed.

Since 1910 Dr. Leredde has treated 87 tabetics, of whom 37 had had the disease for from ten to twenty-six years when they first came under his care; these may be fairly regarded as difficult cases, being so inveterate. In a large and fully documented volume¹ he gives a full account of his methods and results, emphasizing the importance of prolonged treatment with perhaps forty or fifty injections of 606 or 914. In disagreement with Fournier, he holds that syphilis is an infection that does not become attenuated as the years go by; he believes that a clinical cure of tabes may be obtained by thorough treatment, but holds an absolute cure to be impossible. Of the 87 patients he reports on, 29 received from three to ten intravenous injections of arsenobenzene, 28 from eleven to twenty injections, 18 from twenty to thirty injections, and the remaining 12 from thirty-one to seventy-three injections apiece. Intrathecal injections of arsenobenzene or of arsenobenzenized serum he condemns out of hand. He gives the drug himself in separate series of from four to seven injections, each at intervals of a week or fortnight, with a month or more between each series. To judge by the detailed reports of his cases, the treatment gives good results.

OTOSCLEROSIS.

DR. ALBERT GRAY's reputation as an expounder of otology as well as an investigator in its realms, is well maintained by his treatise on *Otosclerosis*.² This disease has always been the opprobrium of this branch of the medical art from the time when it was described by the self-contradictory name of "dry catarrh" of the middle ear, and it will probably remain so for long under the term of "otosclerosis," though Dr. Gray, who designates it "idiopathic degenerative deafness," carries us a step further and reviews the treatment of the affection in a wider manner than any single author. The predisposing factors, without which the exciting causes fail of effect, receive patient consideration, and among them heredity is assigned a very prominent place. Several family trees are reproduced so far as they bear upon idiopathic degenerative deafness. The exciting causes lead to its development only in those subjects in whom a predisposition—the predisposition—is present. Among these exciting causes Dr. Albert Gray gives a prominent place to suppurative inflammation of the middle ear, and he seems certainly to have proved his point by bold reference to the book of nature. In point of fact, his morbid anatomical sections show the association quite unmistakably, and the causal nature of the association seems unquestionable. The characteristic lesion of "otosclerosis" is present along with those of suppurative inflammation, but is quite distinguishable from them. The line of demarcation between the degenerative area of otosclerosis and the surrounding bone, whether otherwise diseased or healthy, is most pronounced, and equally so is the absence of the microscopical features

¹ *Traitement du tabes (Meningomyélite syphilitique postérieure)*. By E. Leredde. Paris: A. Maloine et Fils. 1918. (Roy. 8vo, pp. 487. Fr. 14.)

² *Otosclerosis (Idiopathic Degenerative Deafness)*. By Albert A. Gray, M.D., F.R.S.E. London: H. K. Lewis and Co., Ltd. 1917. (Pp. 197; 20 illustrations. 12s. 6d.)

service, will be eligible for selection. In the case of officers of the Indian Medical Service, the possession of an additional pension for administrative service under paragraphs 728 and 731, A.R.I., vol. i, or of a compensatory extra pension under paragraph 734 of the same, will disqualify for selection for a Good Service Pension.*

TERRITORIAL DECORATION.

THE Territorial Decoration has been conferred upon Lieut.-Colonels (temporary Colonels) R. Pickard, L. P. Demetriadi, J. M. Crombie, and W. E. Foggie, and Majors C. A. Goullet, G. Black, and J. W. Cook, all of the R.A.M.C.(T.F.), as well as upon Major C. E. Goddard, M.D., of the T.F.(R.).

THE ORDERING OF DECORATIONS.

D.S.O., M.C., AND D.C.M.

Services in Action.

THE Army Council have decided that, in respect of services in the army, the Distinguished Service Order, the Military Cross, and the Distinguished Conduct Medal shall be regarded, as from August 1st last, as distinctions to be awarded for "services in action" only. The term "services in action" shall be held to mean:

1. Services under fire.
2. Distinguished individual services in connexion with air raids, bombardments, or other enemy action which at the time produces conditions equivalent to services in actual combat, and demands the same personal elements of command, initiative, or control on the part of individuals, and, in a lesser degree only, possibly entails the same risks.

In no circumstances will any exception to this rule be allowed.

An Army Council Instruction (754 of 1918) was issued on July 10th showing the order in which Orders, Decorations, and Medals should be worn. The Victoria Cross takes precedence of all. Then follow the Garter, the Thistle, St. Patrick, the Bath, the Order of Merit, Star of India, St. Michael and St. George, the Indian Empire, the Crown of India, the Royal Victorian Order (Classes 1, 2, and 3), the G.B.E., K.B.E., and C.B.E. The D.S.O., the D.S.C. (naval), and the Military Cross come after several civilian orders. This has excited some criticism.

EXCHANGE.

REGIMENTAL Medical Officer in Northern Command would like to exchange with M.O., Regimental for preference, but not essential; in Western Command, if possible, near to Manchester. Address No. 3450, BRITISH MEDICAL JOURNAL Office, 429, Strand, W.C.2.

Universities and Colleges.

UNIVERSITY OF LONDON.

ST. THOMAS'S HOSPITAL.

THE second Entrance Science Scholarship (£60) has been awarded to M. C. Sivakara, and N. G. Harris and Emrys Williams have honourably mentioned.

SOCIETY OF APOTHECARIES OF LONDON.

THE following candidates have passed in the subjects indicated:

SURGERY.—J. Behesnilian, *J. Gorsky, *W. H. Haupt, †B. A. M. Henderson, *†F. Lyth, *†H. Lyth, *H. E. Reburn, *†G. P. N. Richardson, *†W. H. Steavenson, *†J. Stephen.
MEDICINE.—*†H. Carter, *†W. H. Haupt, *†W. D. Macrae, *†G. P. N. Richardson.
FORENSIC MEDICINE.—J. F. E. Burns, F. I. G. Edwards, W. H. Haupt, W. H. Steavenson.
MIDWIFERY.—F. I. G. Edwards, I. R. Florence, W. H. Haupt, J. A. Marriott.

*Section I.

†Section II.

The diploma of the Society has been granted to Messrs. J. Behesnilian, J. Gorsky, F. Lyth, H. Lyth, G. P. N. Richardson, W. H. Steavenson, and J. Stephen.

LONDON INTERCOLLEGIATE SCHOLARSHIPS BOARD.

THE following are the results of the examination for medical scholarships held in July last:

University College.—Bucknill Scholarship: I. W. Gallant. Medical Exhibitions: H. Rosenberg, B. Deane, Rachael Halperin (*proxime accessit*).

King's College.—Warneford Scholarships: P. B. Wilkinson, M. G. L. Perkins, L. H. Savin.

Westminster Hospital Medical School.—Natural Science Scholarship: M. Stieber.

King's College Hospital Medical School.—Science Scholarship: Christine P. Francis. Arts Exhibition: W. P. H. Sheldon.

London (Royal Free Hospital) School of Medicine for Women.—St. Dunstan's Medical Exhibitions: Margaret E. Reynolds, Ellen M. Howard. Isabel Thorne Scholarship: Ethel A. Perrott. Mabel Sharman-Crawford Scholarship: Dorothy N. L. Leverkus.

DR. NILO PECANHA, Brazilian Minister of Foreign Affairs, has lately announced that Brazil is sending a medical mission of fifty doctors, besides a number of students, to France. They are to be attached to the Brazilian Hospital in the zone of operations.

Medical News.

THE Minister of Pensions is making a strong appeal for contributions to the King's Fund for the Disabled. The King has handed over to the fund the City of London silver wedding gift, amounting to £53,000, and £25,000 from his own purse. The fund is vested in trustees, of whom Mr. Hodge, the Minister of Pensions, is chairman, and it is hoped to raise a sum of three millions. The object of the fund is to help disabled men to establish themselves in businesses, and in suitable circumstances to help women also; 2,500 cases have already been dealt with, but it is found that the sum of £25, hitherto the the maximum of any grant, is in many cases insufficient.

As already announced, Dr. Truby King, on the invitation of the Chester Local Medical and Panel Committee, will give an address on infant welfare centres to a meeting of medical officers of health and medical officers and members of the committees of the centres in Cheshire, at the Crewe Arms Hotel, Crewe, on Saturday, September 14th, at 3.30 p.m.

AN elementary course of lectures on infant care, for teachers, infant welfare workers and mothers, arranged by the National Association for the Prevention of Infant Mortality (4, Tavistock Square, London, W.C.1), will be given at 1, Wimpole Street, beginning on September 30th.

A PREPARATION for preventing condensation on laryngoscopic mirrors, microscopic and camera lenses, spectacles, and other glass surfaces has been placed on the market by Messrs. Arnold and Sons, 6, Giltspur Street, E.C.1. It is called "Clarocit," is easily applied, and appears to be effective.

AN American war hospital established on the east coast of Scotland has recently been taken over by the American navy. The American staff, consisting of twenty-two medical officers, sixty-three nurses, paymaster, clerical staff, orderlies, and artisans, was organized at Los Angeles, California, by Dr. Rea Smith, surgeon U.S.N., and the commanding officer is Dr. C. M. Devalin, U.S.N. The equipment has been brought from America. British patients from both army and navy are to be received in the hospitals as well as patients of corresponding American services.

THE medical department of the United States Army has appointed to each camp a division surgeon, who is responsible for its health. To assist him he has a sanitary officer and a sanitary engineer, with from one to two hundred men. Particular attention is given in all camps to the cleaning up of places which are breeding grounds for mosquitos and flies. It has sometimes been found necessary to dig channels in streams, drain swamps, and do elaborate ditching work in order to clean stagnant pools. Where it has been found impracticable to drain swamps, slow moving streams and bodies of still water are kept covered with oil, and points within the camp where there is any possibility of mosquitos or flies breeding are daily sprayed with oil. Arrangements have been made with the Federal Public Health Service to carry out similar measures in the territories adjacent to camps. All buildings in which food is prepared or stored are screened. Flytraps have been placed in all buildings; on an average there are 6,000 such traps in each camp. More than 22,700,000 square feet of screening have been used in the camps.

FROM the reports made to the annual general meeting of the Professional Classes War Relief Council it appears that over ten thousand applications had been dealt with, and that the professions most hardly hit by the war were those of musicians, artists, architects, and journalists. It was reported that during 1917 the amount received in subscriptions and donations was £22,802, and on the last day of that year the immediately available assets were £17,945, in spite of an expenditure out of the general fund during the year of upwards of £23,500. The sum of £7,379 had been received during 1917 from American sympathisers, making more than £10,000 in all from that source. During what had passed of the current year, £10,840 had been received and £12,750 expended. The chief expenditure had been upon education—that is to say, the keeping of children at suitable schools. Mrs. Scharlieb, M.D., states that at the Maternity Home supported by the Council about 450 infants had been born, most of them the children of men serving in the forces; in addition fifty mothers had been supported in their own homes, and in some twenty other instances the means had been furnished for the women to find assistance elsewhere.