

Exophthalmic goître as a sequel of influenza : strophanthus as a remedy, and the effect of overdoses of thyreoid extract.

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does not aim to be compendious, but simply gives such facts as may be of daily use.

One of the most concise as well as interesting chapters in the volume is that on habitations. It describes the various sanitary features of a house and the method of making a sanitary inspection thereof.

The chapter on sewage is somewhat too concise.

The authors have evidently aimed to make their work compact rather than comprehensive; and, while this has caused the omission of certain topics that are familiar in works on hygiene, the reader will appreciate their avoidance of voluminousness.

What the book does give is, on the whole, a practical summary of recent progress in hygiene.

The Technique of Post-mortem Examination. By LUDVIG HEKTOEN, M. D., Pathologist to the Cook County Hospital, Chicago, etc. With Forty-one Illustrations. Chicago: The W. T. Keener Company, 1894. Pp. viii-172. [Price, \$1.75.]

THE author states that, while this little book has been prepared for the guidance of medical students, still its scope and method have been arranged with the intention of making it useful to the practitioner.

The form of record and the instruments employed, as well as the various steps in the examination of the body, are described, and the text is elucidated by forty-one illustrations, but we note that Figure 24 is a repetition of Figure 5.

We are glad to see that the author urges that the necropsy should be made as soon as practicable after death.

The work is admirably arranged and printed, and it is the best manual on this subject that we have seen.

A Theory of Development and Heredity. By HENRY B. ORR, Ph. D., Professor at the Tulane University of Louisiana. New York and London: Macmillan & Co., 1893. Pp. ix-255. [Price, \$1.50.]

THE author considers that an explanation of growth, development, and inheritance is afforded by the assumption of the creation of a primitive mass of protoplasm that acquires nervous co-ordinations which influence activity and growth. As this mass divides and subdivides it adds continually new co-ordinations to those already acquired; the process of growth and development comes by repetition to have the character of reflex action—that is, becomes more rapid. "As the same forces act on each generation and form a series of stimuli that are similar for each generation, so each generation repeats in its life the course of development followed by all its ancestors."

We do not believe there is any evidence that will sustain the author's conclusion that the greatest part of the molecular change which is brought about in living matter by the action of external forces is that change which occurs in the nervous organization. In the first place, he confounds the simulation of the functions of the nervous system with the existence of nervous structures. It does not seem to us that the latter need be assumed to explain the phenomena of development and heredity in plants and the lower animals. A study of the phagocytic activity of white blood-cells suffices to explain all such phenomena by analogy. And yet there is no change in the nervous organization of the phagocyte, and there is no nervous organization to be changed. Such a position ignores the inherent forces of a living cell, and the nervous system in living organisms is but an incident, a medium for the transmission of afferent and efferent impulses in the lower forms, and, in addition to these, in the higher forms for storing impressions.

The study of micro-organisms has shown that while, mor-

phologically, there is no change, yet by changes in environment a harmful may in successive generations develop into a harmless microbe. Such a change is necessarily consequent upon some intrinsic transformation of the micro-organism that is certainly independent of any nervous organization. Reasoning by his method of analogy, subject to fallacy as such a method of logic has always been considered, we are justified in concluding that in higher forms of living matter molecular change is produced by the action of external forces independent of even the most elementary form of nervous structure.

Neither heredity nor atavism satisfactorily explains all the phenomena of life; and environment, including education and training, necessarily influences beneficially or disadvantageously the vital phenomena.

We do not believe the evolutionary theory suffices to explain either development or heredity, for there are gulfs in the continuity of the surface of such speculation that are, and probably will remain, impassable.

The Report of the Department of Pathology of the University College, London, 1892-'93. Together with a Collection of Papers and Abstracts published from the Laboratory. Volume I. Edited by VICTOR HORSLEY, F. R. S., F. R. C. S., and ROBERT BOYCE, M. B.

THIS volume is composed of a collection of publications by investigators at work in the pathological laboratory of the University College. The papers embraced in it have been published during the period from the beginning of 1892 to May, 1893, and have appeared in various medical and scientific journals. Actually the volume is a collection of reprints on pathology and histology, and it is a most creditable exposition of the character of the work done in the institution.

Relation d'une épidémie de choléra. (Étude clinique et expérimentale.) Par MM. A. MAIRET, professeur de clinique des maladies mentales et nerveuses, et F. J. BOSCH, chef de clinique des maladies mentales et nerveuses à la Faculté de médecine de Montpellier. Avec 4 planches et 11 tracés dans le texte. Montpellier: Charles Boehm, 1893. Pp. 6-98.

THIS volume gives the observations made by the authors during an epidemic of cholera at the Montpellier Insane Asylum in June and July of 1893. The disease was introduced into the institution by a male nurse from Marseilles, and there were fifty-five cases of cholera in all—twenty-three in males and thirty-two in females.

The authors trace the origin and the course of the epidemic very carefully, and consider that, as the disease did not appear in the wards for females until sixteen days after it had existed in those for males, the water supply of the institution could not be considered as the disseminating medium.

The nurse first affected had charge of the linen, and was on duty two days after he became sick, so the authors think it is probable that the clothing was infected by him during those days. Their experience showed that the number of cases increased when the temperature and the height of the barometer were elevated.

The symptomatology, pathology, diagnosis, prophylaxis, and treatment are very fully considered.

Their brochure is an interesting account of a local epidemic of cholera and of its management.

BOOKS, ETC., RECEIVED.

Dissections Illustrated. A Graphic Handbook for Students of Human Anatomy. By C. Gordon Brodie, F. R. C. S., Senior Demonstrator of Anatomy, Middlesex Hospital Medical School,

etc. With Plates drawn and lithographed by Percy Highley. In Four Parts. Part I. The Upper Limb. With Seventeen Colored Plates, two thirds natural size. Pp. iv-34. Part II. The Lower Limb. With Twenty Colored Plates, two thirds natural size, and Six Diagrams. Pp. 36-74. London and New York: Whittaker & Co., 1894. [Price, \$4.50.]

Venereal Memoranda. A Manual for the Student and Practitioner. By P. A. Morrow, A. M., M. D., Clinical Professor of Venereal Diseases in the University of the City of New York, etc. New York: William Wood & Co., 1894. Pp. iv-332.

The Diseases of Personality. By Th. Ribot, Professor of Comparative and Experimental Psychology in the Collège de France. Chicago: The Open Court Publishing Company, 1894. Pp. 157.

The Johns Hopkins Hospital Reports. Report in Gynecology, II. Baltimore: The Johns Hopkins Press, 1894. Pp. 301-761.

Bilateral Cerebral Thrombosis due to Syphilitic Arteritis, with Incontinence of the Vesical and Anal Sphincters. By J. T. Eskridge, M. D., Denver, Col. [Reprinted from the *Medical News*.]

Tumors of the Cerebellum. Clinical Lecture delivered at the Arapahoe County Hospital. By J. T. Eskridge, M. D., Denver, Col. [Reprinted from the *International Medical Magazine*.]

The Pathology, Symptomatology, and Treatment of Hemorrhoids, Simple and Complicated. By Thomas H. Manley, M. D. [Reprinted from the *St. Louis Medical Review*.]

Surgical Therapy of Rectal Cancer. By Thomas H. Manley, M. D. [Reprinted from *Merck's Bulletin*.]

The Suprapubic Removal of an Enormous Vesical Calculus, together with the Pathology of Stone in the Bladder. By Carl V. Vischer, M. D., Philadelphia. [Reprinted from the *Hahnemannian Monthly*.]

The Relations of Urinary Conditions to Gynecological Surgery. By Charles P. Noble, M. D. [Reprinted from the *American Medico surgical Bulletin*.]

The Causation of the Diseases of Women. By Charles P. Noble, M. D., Philadelphia. [Reprinted from the *International Medical Magazine*.]

Report of a Year's Work in Minor Gynecological Surgery in the Kensington Hospital for Women, Philadelphia. By Charles P. Noble, M. D. [Reprinted from the *Transactions of the Philadelphia County Medical Society*.]

Fibro-myoma of the Uterus and Broad Ligament of Forty-five Years' Duration. By Thomas H. Manley, M. D. [Reprinted from the *American Gynecological Journal*.]

Surgical Treatment of the Tumors of the Neck. By Thomas H. Manley, M. D. [Reprinted from the *Medical Brief*.]

Cocaine Analgesia in the Treatment of Hemorrhoids, of Ulcers, Fistulae, and Fissures in the Ano-rectal Region. By Thomas H. Manley, M. D. [Reprinted from the *Medical Brief*.]

Non-malignant Tumors of the Larynx. By W. Scheppegrell, A. M., M. D. [Reprinted from the *New Orleans Medical and Surgical Journal*.]

The Elements of the Differential Diagnosis of Pott's Disease in Childhood. By Royal Whitman, M. D. [Reprinted from the *New York Polyclinic*.]

Comparative Microscopical Studies of the Ovary. By Francis Foerster, M. D. [Reprinted from the *American Journal of Obstetrics*.]

How shall we make our Homes Healthy? By Benjamin J. Portugaloff, M. D. [Translated from the Russian.]

Fifteenth Annual Report of the Trustees of the Binghamton State Hospital, at Binghamton, N. Y., for the Year ending September 30, 1893.

Eighth and Ninth Annual Reports of the Animal Industry for the Years 1891 and 1892.

Ueber Salipyrin. Von Professor Dr. von Mosengeil, Bonn. [Sonder-Abdruck aus *Deutsche Medicinal-Zeitung*.]

Report of the Kensington Hospital for Women, from October 10, 1892, to October 9, 1893.

Report of Two Years' Work in Abdominal Surgery at the Kensington Hospital for Women, Philadelphia. By Charles P. Noble, M. D. [Reprinted from the *International Medical Magazine*.]

Preliminary Report of the Income Account of Railways in the United States for the Year ending June 30, 1893.

FROM THE EDITOR OF
"BRAIN"
30, Welbeck Street,

Miscellany.

Exophthalmic Goitre as a Sequel of Influenza; Strophanthus as a Remedy; and the Effects of Overdoses of Thyreoid Extract.—At a meeting of the Victorian Branch of the British Medical Association held on November 15, 1893, Dr. R. L. McAdam read a paper in which he gave the history of a case of exophthalmic goitre that had seemed to be the sequel of an attack of influenza in a girl sixteen years old. A report of the proceedings is given in the December number of the *Australian Medical Journal*. For several months treatment of the exophthalmia was unsatisfactory, and in a consultation it was suggested that one of the tonsils, which was unhealthy, be removed, and that was done. Dr. McAdam continued as follows:

"I saw no more of the patient till over two months had elapsed. Then, about the middle of March, she returned to her home, and once more put herself under my care. The effect of the treatment hitherto pursued had been disappointing, and almost nil. Practically, the *status quo ante* was still maintained, though she complained now of palpitation, and I found a well-marked systolic apical murmur present. I determined to make yet another alteration in the treatment, and, while still continuing the faradism, I began to give her tincture of strophanthus. The preparation used was Burroughs, Wellcome & Co.'s, made according to Professor Frazer's formula. The initial dose was $\text{m} \text{v}$ in water three times a day. By gradual increments, I got the dose up to $\text{m} \text{xv}$ thrice daily. This quantity she continued to take for many months, without the slightest appearance of toxic symptoms. Within two weeks after commencing the use of the strophanthus a change for the better became manifest; the rapidity of cardiac action lessened, the prominent eyeballs retreated, the thyreoid decreased in size, the tremors diminished, sleep became natural, appetite improved, the patient felt able for more exercise, she began to put on flesh, in fact, a general amelioration of her condition was unmistakably evident. In three months she increased two stone in weight. Toward the end of April, however, she became anemic, and I gave her Bland's pills in conjunction with the strophanthus, with satisfactory results. As time rolled on, the patient steadily improved, and in July menstruation recommenced, after a cessation of eight months. On several occasions I caused the strophanthus to be discontinued for a little while, and each time the old troubles began to reappear, to subside, however, on resuming the drug. Finally, in November last, I felt justified in pronouncing the patient cured. At that time she was in first-rate health; she could play tennis, take long walks, enjoy dancing, and, in fact, engage in all the exercises to which she had formerly been accustomed. In October

and November, coincidently with the menstrual period, a curious condition was manifested in the patient's eyelids. They became swollen, painful, and discolored, apparently from an exudation of blood-stained serum subcutaneously. Upon the subsidence of the swelling, which occurred in the course of three or four days, the usual oxidation changes which are found in an ordinary ecchymosis in that region took place. I mention the phenomenon, because I do not remember to have met with it, can find no reference to it, and am somewhat in doubt as to how to explain or account for its occurrence.

"About a year has now elapsed since I ceased attending Miss F. During that time she has continued in excellent health and spirits. A few weeks ago I had the opportunity of again examining her, and found that her condition was in all respects satisfactory. One interesting circumstance particularly struck me as evidencing how complete a change had taken place. I mentioned that while ill the patient's singing voice had almost entirely failed. Now, I was informed, it was remarkably good, and she was singing better than ever before, and with greatly increased breathing power. Her chest expansion had increased to between two and three inches.

"This case is worth recording, I think, for several reasons: First of all, it is fair to infer that the patient's attack of influenza was in some way concerned in bringing about the subsequent train of symptoms which justified the diagnosis of Graves's disease. Additional evidence that influenza can act in this way was recently afforded me by a patient who sought my advice for dyspepsia. On inquiring into her history, it appeared that a year before she had been attacked by influenza. Following this, there quickly occurred symptoms which, from her description and that of the friend who accompanied her, there could be little doubt were due to a mild form of Graves's disease. Secondly, it is not often that one has the satisfaction of seeing so entire a recovery from this distressing and frequently fatal trouble—a recovery, too, which was so comparatively quick in its occurrence. Thirdly, the history affords ground for thinking that in *strophanthus* we have a drug which is well worth trying under similar circumstances.

"Permit me, in conclusion, to use this case as a peg on which to hang a few remarks as to the causation and nature of the strange affection of which it is so good an example. Some time since, while reading the accounts of the treatment of myxœdema by thyroid extract, I was much struck with the similarity between many of the phenomena produced by overdoses, and symptoms which one finds in Graves's disease. Here are some of the records to which I refer: G. R. Murray found that following a rapid injection of thyroid extract there occurred flushing, nausea, and pain in the lumbar region. Another observer notes that as the result of too rapid absorption of the extract, tremors and quivering of the limbs developed. Sims Woodhead was struck with the fact that in rabbits peculiar effects were produced on the heart, and that these frequently culminated in degeneration of the muscular tissue of the organ. Again, in a myxœdematous patient of Hector Mackenzie's, overdoses administered by the mouth caused anorexia, a pulse of 116, and on one occasion a rise of temperature to 100° F.

"Similar experiences might be multiplied, but the foregoing will suffice. Now, many years ago in England, Mr. (now Sir John) Simon suggested that the function of the thyroid gland consisted in secreting some substance which was necessary for the nutrition of the nervous system. This idea has in recent years been remarkably verified. But may we not proceed further still, and, in the light of the knowledge we now possess, hold that, while the thyroid secretion in normal quantity is a *sine qua non* of healthy nervous action, its presence in superabundance is, on the contrary, harmful and injurious in a high

degree? May we not, in fine, maintain that in an overactivity of the thyroid gland is to be found the true cause of Graves's disease? Such a view seems to me to be eminently reasonable and worthy of acceptance, and it has recently derived fresh support from the success which has followed in this affection on partial removal of the gland. At any rate, such a pathology is, I take it, far more likely to be true than the vague, unsatisfactory, and even contradictory theories which have hitherto been propounded."

Interstitial Injection of Iodine in the Treatment of Goitre.—Dr. Georges Mangin, an interne of the Paris hospitals, contributes an article on this subject to the *Gazette médicale de Paris* for January 13th, in which he gives the details of the procedure as practiced by Dr. Duguet. These injections, he says, may be employed in any case of goitre, but they are especially appropriate in those of medium size, of comparatively recent formation, fleshy, not much indurated, and not yet calcified, whether they are cystic or not. This little operation succeeds best in hydatid cysts of the thyroid body, which are always cured by a single injection. Contraindications are: Albumin or sugar in the urine, the existence of the menstrual flow, exophthalmic goitre, cancerous goitre, and a cystic goitre containing blood (only a relative contraindication). Accidents in this treatment have occurred to certain operators only because they have not strictly followed the letter of M. Duguet's instructions. Before undertaking the operation certain precautions should be taken. The patient's urine should be examined; it should be ascertained if she is menstruating; and the neck should be measured immediately above the goitre, around it, and below it, and this measurement should be repeated before each injection. Various liquids have been tried, but none is so good as pure tincture of iodine. The needle of the syringe should be of steel or of irido-platinum, and it should be very sharp. After being used it should be cleansed in a very weak solution of ammonium chloride or potassium iodide, and then left until it is to be used again in a ten-per-cent. oily solution of carbolic acid. This having been done, it is necessary to determine the most appropriate point for inserting the needle. The operator should assure himself that the tumor has no souffle and that it presents no expansile movements; then he should palpate it carefully to find the central, fleshy, least resistant part, as far as possible from the large veins which sometimes ramify over its surface and also from any arterial pulsations. Into that point he should plunge the needle. The syringe is to be filled with tincture of iodine and the air expelled. Then the operator raises the patient's head in such a way as to make the throat prominent, holds the tumor immovable between the thumb and forefinger of the left hand, compressing it gently, with the right hand plunges the needle slowly to the depth of from half an inch to an inch, and waits to see if any liquid escapes through it. If pure blood flows, the procedure is to be stopped, the needle is to be withdrawn, and an attempt made to introduce it in one or two other situations, until one is found from which there is no flow of blood. If this can not be done, the idea of administering the injection must be given up for the time being. If a coffee-colored or a chocolate-colored liquid flows, the syringe should be connected with the needle, and, if the cyst is small, the liquid aspirated, and then the injection proceeded with. If, on the contrary, the cyst is large, slow aspiration should be performed with a regular aspirator. In case the injection is to be proceeded with, the syringe filled with tincture of iodine is to be connected with a needle and the piston pushed down very gently and slowly, while the operator observes the patient's face and interrogates him as to his sensations. At the first injection not more than half or three quar-

ters of a syringe should be injected. When the injection has been made, the needle, still connected with the syringe, is to be withdrawn rather suddenly; then the left forefinger is to be placed over the puncture in order to stop the slight discharge which might occur. If the patient's neck or the operator's hands have been soiled by the tincture of iodine, they should be washed in ammonia water. Usually nothing special occurs as the immediate result of these injections, but sometimes there is observed local heat, with tumefaction, a little embarrassment of the movements of the neck and in swallowing, and occasionally some painful sensations about the jaw, the teeth, or the ear of the side on which the injection has been made. These are benign phenomena, and do not last more than a day or two. They constitute no reason for not repeating the injection weekly, as should be done. Occasionally there is feverishness, with chills, headache, depression, agitation, sleeplessness, and gastric disturbance, symptomatic of a slight degree of acute iodism, which usually does not last more than from a few hours to a day or two. The author closes with the statements that this method of treatment acts by causing absorption and a non-suppurative inflammation, and that it is absolutely harmless and of marvelous efficacy when it is employed early and with discernment.

Guaiacol as an Antipyretic.—The *Medical News* for January 27th publishes a portion of a lecture delivered at the Pennsylvania Hospital on January 13th by Dr. J. M. Da Costa, of Philadelphia, entitled *Clinical Remarks on the External Use of Guaiacol in reducing High Temperature in Typhoid Fever and other Febrile Diseases*. Dr. Da Costa thinks that the action of guaiacol is somewhat inferior to that of the cold bath as regards promptness, but he has observed that the reduction of temperature which it produces is more lasting. He thinks it preferable to the use of cold baths, particularly in cases where proper appliances for administering the baths are wanting and where from the nature of the case it is particularly objectionable to move the patient. The odor of guaiacol is an objection to its use, and this Dr. Da Costa has not yet been able to overcome. Oil of bergamot has been tried, but the odor of guaiacol overcomes that of the bergamot. Cologne water and oil of sassafras also have been tried, but the best result has been obtained with oil of cloves. Guaiacol is to be rubbed upon the skin of the abdomen or thigh with a camel's-hair brush over a space previously washed with soap and water. The largest amount that has been applied at once in Dr. Da Costa's experience is sixty drops, but from the application of fifty drops he has witnessed effects that cause him to advise that rarely should so large a dose be used. Thirty drops he thinks about the average dose. The guaiacol is to be rubbed in slowly, and the surface to which it is applied need not be uncovered, for the application can be made under the bedclothing, and it is well to cover the surface with a piece of lint and with waxed paper. The dose should be proportionate to the height of the fever; with a temperature of 103° F. it should not exceed twenty minims at the first trial. It is not necessary to rub the guaiacol in, but if friction is not used the effect is neither so rapid nor so complete. The quickest way is to paint the guaiacol on the surface and then rub it in with the hand. Five minutes are enough for the purpose. The sensation, which is not unpleasant, is likened to that produced by the application of menthol. Dr. Da Costa thinks that guaiacol is absorbed by the skin and that it is carried by the circulation to the heat centers, upon which it acts as an antithermic. Apparently its action does not involve the depression that follows the use of antipyrine, phenacetine, and other remedies belonging to the coal-tar products. Moreover, it produces less sweating. In no instance under Dr. Da Costa's

observation was there any albumin in the urine or any sign of kidney irritation detected that could be imputed to the use of guaiacol; nevertheless, he advises close examination of the urine in all cases in which the remedy is used.

The Antipyretic Action of External Applications of Cocaine.—At a recent meeting of the *Société des sciences médicales de Lyon*, the proceedings of which are reported in the *Lyon médical* for January 14th, M. Gelley, a hospital interne, made a communication on the antipyretic action of cocaine applied to the skin. In Professor Teisser's service a nurse had been directed to make applications of guaiacol to a number of feverish patients. Having one day used by mistake a solution of cocaine, he reported that he had taken the wrong bottle, but the patients' temperature curves nevertheless showed a reduction. Systematic trials were then begun and M. Teisser was able to observe that a reduction of several degrees was produced if care was taken to make the applications at a time when the temperature was no longer rising. The effect upon the general condition was apparently the same as when guaiacol was painted on. The patient experienced a sensation of repose and well-being, but the course of the disease was not modified. The procedure is the same as with guaiacol. A solution of from three quarters of a grain to a grain and a half of cocaine in a quarter of a teaspoonful of water should be used for each application, and the solution is to be applied to the upper part of the thigh. The antipyretic action of the application of cocaine is analogous to that of the application of guaiacol, but it is a little less energetic. M. Guinard reported that he had repeated these experiments on rabbits. He had resorted to the use of a cocainized ointment, the use of which was easier, but he had satisfied himself that unmedicated ointment was incapable of producing any reduction of temperature. With the cocainized ointment, on the other hand, he had caused a reduction of nearly 2° F. He thought it demonstrated that the medicaments employed acted upon the peripheral nerves.

The Antiseptic Action of Diaphthol.—In the *Revue générale de clinique et de thérapeutique* for January 17th there is a letter in which the writer remarks that M. Guinard has been making a critical and experimental study of diaphthol, which is the orthoquinolinemetasulphonic acid of chemists. It is a powder, fusible at 295° C. and capable of being crystallized in the form of brilliant needles which are colored green by perchloride of iron, and not by contact with metallic iron. By its decomposition it sets oxyquinoline free. With an alkaline solution it forms soluble diaphtholates. The diaphtholate of sodium in a ten-per-cent. solution kills the *Bacillus pyogenes fetidus* and the *Staphylococcus pyogenes* in thirty or fifty minutes. In a five-per-cent. solution it only weakens their virulence.

Diaphthol is not very poisonous. The urine of animals which have ingested it rarely undergoes ammoniacal fermentation; nevertheless, it becomes putrid. In experiments recently made, it has been ascertained that the liver of these animals is preserved a long time without decomposition; therefore it is a substance which is opposed to certain fermentations. Add to these essential qualities the fact that this remedy is well borne by the gastric and intestinal mucous membranes, and it is easy to understand the interest shown in the use of diaphthol as an internal antiseptic, and especially as an antiseptic of the urinary passages, as it is eliminated free by the urine.

Bernheim's Nutritive Enema.—The *Union médicale* gives the following formula: Concentrated bouillon, ten ounces; pulp of boiled meat, an ounce; Malaga wine, six drachms. Such an enema, administered every three hours, it says, is sufficient to maintain nutrition.