

fortable condition. In the presence of eclampsia two indications are paramount. The first is to cause prompt, thorough, and copious elimination by every possible means. The hot pack, free purgation, and saline transfusion are of the greatest importance. To be avoided are sedatives, which hinder excretion and depress the cardiac and respiratory centres. If apoplexy threatens, and a heavy, full pulse indicates bleeding, such a procedure is justifiable. It is rarely the case that a patient suffers from profound toxæmia and eclampsia without the beginning of labor as a direct result of the stimulation of the uterine nerves which the retained toxins furnish. Taking advantage of this conservative process, rapid delivery is indicated so soon as it can be accomplished without positive and severe injury to the mother. The interests of the fœtus are also here served, for the same poisons which threaten the mother often kill the child.—*Therapeutic Gazette*, 1895, No. 7, p. 433.

TAKA-DIASTASE.

MR. FERDINAND LASCAR recalls the fact that diastase has an action upon starch identical with ptyalin. Diastase is contained in a greater or less extent in the different extracts of malt, but in them its utility as a starch-converting agent will always remain a limited one. The diastase now made by takamine is a dry powder, tasteless, and of no perceptible odor, and is powerful enough to convert one hundred times its weight of starch into a soluble condition. The author has even converted 50 per cent. more than is claimed for it. One of the peculiarities of this product is the rapidity with which this conversion takes place, four minutes being sufficient so fully to produce the change that neither iodine nor the microscope can detect unconverted starch. In the making of the tests, as well as in the manufacture of the product, heat should be guarded against, as it easily destroys the action of diastase. The field of usefulness of this product is not alone in infant-feeding, but as well in the amylaceous dyspepsias of adults, which are by no means infrequent.—*Therapeutic Gazette*, 1895, No. 7, p. 437.

ARECOLIN.

DR. G. LAVOGNA has made an experimental study of the physiological action of this new alkaloid, which is obtained from the areca-nut, which has been prescribed for the removal of tapeworm. The alkaloid occurs as the hydrobromate, a permanent, slightly hygroscopic salt, of the formula $C_8H_9NO_2HBr$. Fröhner found that it possessed sialogogue properties, even excelling those of pilocarpine; that it was also a laxative and water-extractive remedy. The author, however, ascertained that it is a myotic. Used in a 1 per cent. solution, dropped into the conjunctival sac, there is experienced a feeling of warmth in the eye; some tears and spasm in the lids follow. These symptoms of irritation last but a minute, and frequently a shorter time. After the spasm of the lids has passed away there is noticed a conjunctival, or, more properly, a bulbar hyperæmia, and a slight superficial injection of the cornea which lasts but a few minutes. After five minutes myosis commences, which reaches its maximum after ten minutes and persists about thirty minutes, when the pupils show a tendency to return to

their normal size, reaching it after seventy minutes. One and one-half hours after, slight mydriasis is noticed. The spasm of the ciliary muscle reaches its maximum in from one to six minutes, and then the refraction tends toward the normal, reaching it thirty-five minutes after the instillation.—*Therapeutische Monatshefte*, 1895, Heft vii. S. 364.

THE DIURETIC ACTION OF THEOBROMINE.

DR. HENRI HUCHARD believes that the future of therapeutics lies in the diuretics, because the permeability of the kidney is the safeguard of the organism, be it healthy or diseased, permitting the elimination of the toxins which it produces or it receives. The classification of Manquat divides diuretics into two groups, the mechanical and renal. The first group is further subdivided into (1) cardio-vascular and (2) aqueous. The second or renal diuretics are either (1) functional epithelial or (2) irritant epithelial diuretics. The functional epithelial diuretics are those which act upon the renal epithelium without altering it, and comprise milk, lactose, glucose, theobromine, potassium and sodium nitrates, asparagus, couch-grass, corn-silk, and elder-bark. The irritant epithelial diuretics are those which provoke diuresis by causing congestion of the kidney, as juniper-berries and cantharides. These give rise to real dangers, especially the latter, and should always be used with great care. The experiments with theobromine have shown that it does not possess any action upon the nervous system, thus differing from caffeine, which is a cerebral excitant. It is very slightly poisonous, even in large doses. It has a diuretic action less prolonged than digitalis, but more so than caffeine. This diuresis follows very rapidly as a urinary downpour; the amount of urine frequently becomes three or four pints. Very rarely it produces digestive disturbances, as nausea and vomiting, which may be avoided by prescribing the drug in capsules of seven grains each. It has no action upon the heart, arteries, or blood-pressure, and is harmless to the kidneys. It does not offer any danger of habituation nor of accumulation, and it is eliminated unchanged in the urine. Finally, it is indicated in dropsies of cardiac origin and in the anasarca of Bright's disease. If prescribed in the above dose, eight capsules should be taken on the first, six on the second and third, and four on the fourth day. To obtain the tonic effects of this drug it is employed in smaller doses, associated with equal parts of neutral sodium phosphate, for several weeks. Diuretin, sodium and theobromine salicylate are untrustworthy.—*Journal des Praticiens*, 1895, 2d semestre, No. 1, p. 5.

ACCIDENTS FOLLOWING THE USE OF SERUM.

GALLIARD reports that a woman, thirty-three years old, entered his hospital service, complaining of a slight angina, which, however, became suddenly worse, so that subcutaneous injection of Roux's serum was administered. There was no febrile reaction nor immediate accident, and convalescence was speedily established, so that she left the hospital five days later. Bacteriological investigation showed that the membranes did not contain the [Klebs-]Loeffler bacillus, but only staphylococci and streptococci. Sixteen

days after the injection the patient returned with a polymorphous erythema and a serious acute polyarticular rheumatism, which yielded to three drachms of sodium salicylate within forty-eight hours. It is impossible not to attribute these cutaneous and articular accidents to the effect of the serum.—*Journal des Praticiens*, 1895, 2d semestre, No. 3, p. 45.

[Compare this report with the remarks of Winters, *AMERICAN JOURNAL OF THE MEDICAL SCIENCES*, vol. cx: p. 211.—R. W. W.]

THE CURATIVE ACTION OF TOXIN IN MALIGNANT TUMORS.

FAUSTO CAMPANINI presents a scholarly paper. He has made use of the toxins derived from a streptococcus culture to which bacillus prodigiosus was later added. The first patient suffered from a fibro-sarcomatous polypus of the naso-pharyngeal vault. The treatment gave rise to severe constitutional symptoms, resulting in great debility and anæmia, and was therefore abandoned without, however, having produced any change in the tumor. The second patient suffered from a large myxo-sarcoma of the breast. Twenty injections were given without giving rise to pain or general reaction, but inasmuch as they produced no effect the treatment was abandoned. Although the writer was apparently anxious to be convinced of the efficacy of the injections, the results obtained were not of such a nature as to merit confidence in them.—*Il Policlinico*, 1895, No. 13, p. 301.

THE PHYSIOLOGICAL ACTION OF EXTRACT OF SUPRARENAL CAPSULES.

DR. L. A. GLUZINSKI has found in his investigations of the extracts from various organs, *e. g.*, thyroid and thymus glands, liver, pancreas, spinal cord, and suprarenal capsules, that upon normal animals (guinea-pigs, rabbits, and dogs) the glycerin extract obtained from the suprarenal capsules possesses markedly toxic properties. Following the injection there appeared a paraplegia of the posterior extremities, a diminution of the sensibility of the same, while in the anterior extremities there were slight spasms, frequently a distinct opisthotonos, feeble respiration, dilated pupils, dyspnoëic symptoms, and terminal general paralysis. Artificial respiration prolonged the life of the animal, providing that the heart was relatively good. The necropsy showed marked pulmonary œdema, ecchymoses, particularly in the pulmonary pleura and pericardium (in guinea-pigs), and the right ventricle and right and left auricles were strongly dilated in diastole and overfilled with blood. Apparently glycerin removes from the suprarenal capsules a substance which is extremely poisonous to the nervous system, influencing the medulla and spinal cord and producing death from pulmonary œdema. So far as investigation has now gone, the paralysis and changes in peripheral nerves and their end-plates are not to be recognized as analogous to those produced by curare.—*Wiener klinische Wochenschrift*, 1895, No. 14, S. 251.

THE USE OF THE THYROID IN THERAPEUTICS.

JORFIDA has made use of the thyroid gland in five cases of parenchymatous goitre. In two of these the tumor entirely disappeared, and in

the remaining cases there was a notable reduction in size. Detailed reports follow, in which it appears that the amount used varied from twenty-eight to forty-five drachms, and the time required from nineteen to forty-three days. In four of the five patients there was a diminution of body-weight.—*Il Policlinico*, 1895, No. 13, p. 338.

DR. FERDINAND WINKLER carefully reviews the literature. The noticeable results in myxœdema are diuresis, diminution of the myxomatous swelling, lessening of body-weight, disappearance of weariness, stiffness, and apathy. In obesity a notable diminution of body-weight has been obtained, and may even be more marked than when dietetics alone are relied upon. Both the somatic and psychic phenomena of cretinism have been markedly benefited by the use of thyroid treatment. In tetany good results have been obtained by Gottstein. In Basedow's disease and acromegaly it apparently produced no good results. Of psoriasis a few cases were benefited, but lichen planus, lupus, eczema, urticaria, prurigo, and acne rosacea were not influenced. Menzies found great benefit from it in six cases of rupia syphilitica, and Abraham a marked improvement in two patients suffering from leprosy.—*Centralblatt für die Gesamte Therapie*, 1895, Heft vii. S. 385.

THE THERAPEUTIC ACTION OF SALOPHEN IN VARIOUS DISEASES.

M. PIERRE MARIE finds that this drug should be considered as a remarkable substitute for sodium salicylate, and possesses valuable properties in acute and subacute articular rheumatism, and appears to possess them in gout. It has no action upon chronic rheumatism. One patient suffering from the chorea of Sydenham was cured in eight days. The drug presents none of the inconveniences of sodium salicylate, and has been well borne by all the patients. Because of its decomposition only in the intestine it does not produce any gastric irritation, and its slow decomposition allows of a larger dose—to seventy-five and ninety grains. Usually forty-five to sixty grains only are required, and that in divided doses. On account of its tastelessness and insolubility it can be taken suspended in pure water.—*Les Nouveaux Remèdes*, 1895, No. 12, p. 272.

THE USE OF OLIVE OIL FOR BILIARY COLIC.

DR. MICHELL CLARKE reports three cases in which an initial dose of one ounce, which was rapidly increased, floated upon the surface of a bitter acid infusion, resulted in success. Eight grains of sodium salicylate, in a mild saline purgative, were also given before breakfast two or three times each week during the administration of the oil. The maximum daily dose of the oil was eight ounces, and the duration of the treatment from six weeks to three months.—*British Medical Journal*, 1895, No. 1802, p. 76.

THE TREATMENT OF TETANY.

DR. R. K. MACALESHER reports four cases. Recalling the observations of Vaughan, who obtained good results with quinine, even recovery in some cases in from eighteen to twenty-four hours, he made use of this remedy; but found that its effect was but palliative and temporary, not preventing frequent