MATERIA MEDICA.

THE fifth volume of our TREASURY RECORD, and the eighty-fourth year-ring of the widely spread fruit-bearing tree Homeopathic Materia Medica.

Poisonings, provings, remarks and characteristics of the chemical drugs; the drugs from plants, animals and the nosodes are followed by comparisons, toxicological and general remarks.

Comp. R. I., is the Record of 1870; R. II., of 1871; R. III., of 1872; R. IV., of 1873.

Dynamids.

Electricity as a means of resuscitation. First. It is useless to expect good results if five minutes have elapsed since life appears extinct.

Second. The current should be steadily applied, the negative pole being placed over the ensiform cartilage, and the positive on the neck at the base of the skull and over the tracks of the great nerves of the neck.

Third. The faradaic, interrupted galvanic currents are the best. Fourth. The current should be applied for some time after the respiratory movements have become regular. (A. M. Hamilton, A. H. O., Jan., 1873. p. 64.)

Electricity in Medicine, H. R. Fetterhoff. (Proc. H. M. S., Penna., 1873.) Comp. R. II., p. 1.

Chemicals.

SULPHUR GROUP.

Sulphur. A severe pain, as if the eye turned against a glass splinter, and forced it toward the pupil, followed by burning

and lachrymation, so that one must close the eye—left. (T. F. Allen, N. Y. J. H., June, 1873, p. 191.)

— As a remedy in intermittent diseases. By Robert Cooper. (B. J., 1872. J. Pr., 1873, p. 249.) Comp. R. I., p. 5; II., p. 2; IV., p. 1.

Chromicum acidum. Resumé of Provings. By F. G. Oehme. (N. Y. J. H., Oct., 1873, pp. 367, 370.) Comp. R. I., p. 3.

PHOSPHORUS GROUP.

Phosphorus poisoning causes a fatty infiltration of the interlobular connective tissue, which in this way is entirely destroyed. The lower cells are changed into fat-globules, while the bloodvessels retain their integrity, and thus the arrangement of the lubulic remains the same. (Winimarten, M. C. Z. J. Pr., 1873, p. 286.)

- On reading, letters look red. (T. F. Allen, N. Y. J. H., Oct.,

1873, p. 420.)

Its influence upon the organism, from Virchow's Archiv., v.
4. (J. Pr., 1873, p. 202. Payr. H. Kl., 1873, p. 153, etc.)
In this article, read before the Berlin Medical Society in November, 1871, the author, George Wegner, writes as follows:

After examining a number of cases of acute poisoning with phosphorus, very little new is found; but one point deserves a prominent place. Not only the central organ of the circulatory apparatus is involved in the fatty degeneration, but also the peripheral parts of the arterial system, even as the minute microscopic vessels. It can be observed in all the organs, most in the brain, in cartilage, the marrow of the bones, and the liver. This process is perhaps hardly observable under the ordinary circumstances as the diseasepicture is principally occupied by the severe changes in the greater organs; the principal symptoms of it are the sanguineous extravasations in the different parts of the body, and these may, indeed, be of most insignificant importance compared with the more grave lesions. Only in one case do these consequences become clinically and pathologically visible, viz., when in a female the poisoning occurs just before the menstrual period, the physiological hyperæmia of the sexual organs attains the parietes of the vessels, which are

lowered in their power of resistance by the fatty metamorphosis, and the hemorrhages become more severe, often so severe that general anemia is a consequence.

The blood coming from the uterine walls is poured out. We find at the autopsy only a somewhat more positive hemorrhagic condition of the lining mucous membrane; it is, however, different in the ovaries, where the unusually great sanguineous discharge does not at once find an exit. but remains within the organs. Here real blood tumors are found, and as probably the hemorrhage does not occur all at once, but gradually, these at first remain within the ovary, gradually enlarging its circumference; not until later can they be voided either into the peritoneal cavity or, when adhesions had been formed, into the rectum. The process attains its maximum when highly vascularised connective tissue has been formed in the surroundings of the uterus, and of its adhesions in consequence of a preexisting perimetritis; then the hemorrhage is not only into the ovary, but also from the numerous thin-walled, and now fattily degenerated, vessels of the new connective tissue. At the commencement of the year 1870, I had an opportunity of bringing before the Berlin Obstetrical Society four cases of poisoning with Phosphor, and of demonstrating preparations showing that hæmatoceles had been found of a size varying from that of a cherry to that of a man's fist; in two of these cases they lay within the ovaries, in one there was a breaking up towards the pelvic cavity, and in the fourth perforation into the rectum had followed.*

While our knowledge of the changes brought about by acute poisoning with Phosphor. in the different organs is pretty complete, we know but little what influence this substance, which is so dangerous in certain doses, may develop when given for a certain time, for weeks or months, in smaller and not directly deadly quantities.

— Its action on the Liver and Stomach. If rabbits, cats or dogs are given Phosphor. in minimum doses, no symptoms occur. But if the dose be increased gradually, so that no acute or sub-acute poisoning occurs, very remarkable changes take

^{*} I have not remarked either in man or animal any change in the soft tissue of the bones or of the cartilages, except the degeneration of the vessels.

place. The mucous membrane of the stomach becomes shyperæmic, swells, hemorrhages occur here and there; real hemorrhagic infarctions are found later on. When the irritation has continued for two or three months, thickening occurs, with induration and discoloration. The structure of the liver is also altered. The interstitial tissue is the part affected. The whole organ is swelled, and feels harder, and within it and on the connective tissue around the portal vessels there is an intense cellular hyperplasia, and further tough fibrous connective tissue is developed from the young cells, constituting a more or less broad stratum at the periphery of the acini. The peripheral zone of the hepatic cells undergoes fatty degeneration, and in the greater part of the acinus the cells have an icteric color, evidently in consequence of the pressure increased by the new prolifically developed tissue on the efferent gallvessels which come with the portal ramifications. In fact, we have interstitial hepatitis in optimâ formâ, the result of which is atrophy of a threefold kind: either a smooth induration of the organ; or a form of atrophy which sometimes occurs in the human subject in consequence of lues, a hepar lobatum with numerous deep strips of cicatricial tissue, dipping down into the organ and deforming it: or, finally, the typical granular atrophy, the classical cirrhosis of the liver. In all these forms, chronic icterus is present.

- Influence on the Osseous System. These influences are divided into the direct local influence of Phosphor. fumes on the osseous system and the general influence of Phosphor. on the osseous system. Of the former the writer remarks: By these adduced observations it is, I think, made probable that the Phosphor. necrosis in man and in animals is not to be considered, as formerly was done, as the expression of a constitutional suffering of a dyscrasia, but as a purely local affection occasioned by the locally irritating influence of the fumes of Phosphor. These same fumes operate everywhere, when brought into direct contact with the periosteum, as an irritant on the latter; the irritation confines itself within the limits of primitive processes; there arises a pure ossifying periostitis when the fumes relatively but little concentrated simply reach the denuded parts; but when they are concentrated and brought into pretty forcible contact with the parts, as in the jaw, it becomes of a purulent, malignant nature, and has all the consequences of this intensification. * * * * * On the other hand, I can give an all the more certain positive opinion on the modification produced by this remedy (Phosphor.) on the development of bone in fracture, subperiosteal resections and transplantations of periosteum, because they are all easily experimented upon. For all these cases I can summarize the result of numerous experiments to to the effect that traumatically irritated periosteum produces under the influence of Phosphor. a more plentiful, dense and solid bone substance; especially in fractures does the callus attain a perfect eburnean structure.

- Theory of the Chronic Influence of Phosphor. If we summarize all the observations which we have thus far mentioned, we shall be able to delineate a complete picture of the chronic influence of Phosphor. on the organism as follows: Phosphor. in minute doses, in all probability, is dissolved in the blood and circulates with it; it operates on the osteo-genetic tissue as a specific plastic irritant brought topically in the form of vapors into contact with denuded periosteum; in moderate concentration it provokes ossifying periostitis. If the fumes operate very energetically, the irritation becomes so intense that suppuration is added to the ossificatory processes. Administered in much larger doses, either as fumes or by the esophagus, its influence, while not exceeding certain limits as regards the osseous system, very prominently affects the digestive apparatus. The interstitial connective tissue of the liver and of the stomach becomes irritated, there arise chronic indurative gastritis and chronic interstitial hepatitis, with icterus and atrophy of the hepatic substance; the last link of the chain is atrophy of the liver, either the smooth or the lobulated variety, or else the classical granular atrophy—the so-called cirrhosis.*

The preceding observations have shown that with small doses, which in nowise exercise a hurtful influence on the organism as a whole, we can attain a considerable provocation and advancement of the development of bones. With the

^{*} The influence of Phosphor., both from the deleterious very large doses and also when simply irritant, is transmitted through the blood of an impregnated doe to the young ones in the uterus, but not by means of the milk of the mother to the young sucklings.

total want of any known internal remedy capable of stimulating the osteo-plastic processes to a more energetic action, therapeutics will have to take special notice of Phosphor. From experiences which have thus far been gathered, the administration of Phosphor. would seem to be indicated in general poor development of the osseous system in children, in fractures (pseudarthroses), in sub-periosteal resections, and in transplantations of the periosteum. With regard to osteomalacia there are no positive observations. If the real nature of osteomalacia lies in this, that from the originally hard osseous tissue by a proliferation of the cellular elements of the same there is produced a predominantly soft, and consequently for the physiological purposes of the bones, useless substance, then Phosphor. must be looked upon as a true antidote to this disease, for the fundamental idea of the action of Phosphor. is just this, that in consequence of the stimulus which it provokes, abnormally dense, hard bone is formed from soft osteo-genetic tissue.

The affair is different in rhachitis. It is not probable that it is the healing remedy for this disease. Here, too, direct observations are wanting at present, and we must therefore leave it for the empirical experience of the future to decide whether this substance, with its powerful action on the osseous tissue, will be sufficiently potent either to stimulate a greater up-take of the anorganic salts into the blood, or to prevent the excessive elimination of the same, and to procure their opportune deposition in the osteo-genetic tissue in sufficient quantity. At all events, I think a trial must be made with the remedy since, for the time being at least, a more promising one is not known.

Phosphor in substance should be made use of in preference to the phosphorous or phosphoric acids, for the two latter must be given in doses which, at least in animals, greatly deteriorates the digestive apparatus.

Just as the preceding experimental investigations have a certain value for special pathology, inasmuch as they give us a better insight into the processes as they are provoked in the organism by the long-continued influence of a substance made use of in manufactures, and formerly at least employed as a remedial agent, inasmuch as they have produced corroborative evidence in favor of current theories

by producing artificially two so much spoken of, and such interesting diseases—cirrhosis of the liver and rhachitis, inasmuch as the specific relation of certain substances to certain tissues are taught by them, and whence therapeutics may at some time extract benefit, just so much we ascribe to them a no less important significance, in regard to principles, for general physiology and pathology.

In the meantime that class of interesting bodies in which we recognize a specific affinity for certain tissues of the body, and to which we reckon *Mercury*, *Iodide of Potassium* a series of organic alkaloids, as *Atropin*, *Curarin*, *Digitalin*, etc., has one more added to its number.

Further, we have here, I opine, exact, convincing, experimental observations that may be repeated at any time, and which prove that one and the same substance, in different quantities and given for different periods of time, can produce totally different actions on the animal organism. Older observations have taught that Phosphor. in large doses influences certain tissues, particularly the parenchymatous elements of the liver, of the kidneys, of the stomach, and of the muscles, as an extraordinarily intense per-acute irritation, of such a violent nature that in a very short space of time a fatty degeneration, a necrobiosis of the same, follow; we have now seen that the same substance, given to the organism in a smaller quantity, while leaving the just-named organs perfectly immune, possesses an irritative influence on totally different kinds of tissue, on the osteo-genetic substances, on the interstitial tissue of the liver and of the stomach; an irritative influence which has not a degenerative, but essentially a formative tendency. There we have ruin, here a stable new growth as a consequence. Let the true cause of this profound difference in the action of different doses of Phosphor. lie in this, that really unequally large quantities of it being present in the blood have in themselves a different effect, or in this, that, with the taking up into the blood of a greater or less quantity of the substance, different conditions of absorption and metamorphoses are given, so much so that consequent thereon dissimilar products of transmutation come into play; at all events, the fact of this fundamental difference of the processes is of trenchant import, both theoretical and practical. These observations suggest a hint with regard to other substances whose violent toxic action in large doses is known, such as *Iodine*, *Arsenic*., a large number of the poisonous organic compounds being experimented upon with similar objects in view; such experiments, if carried on with a knowledge of the subject, carefulness and patience would enrich our positive knowledge with many a new fact, would throw new light on our theoretical views, and also open up here and there an odd corner for renewed activity in our therapeutics. (B. J. H., 1873, p. 29.) Comp. R. I., p. 8; III., p. 3; III., p. 2; IV., p. 2.

Arsenicum, its effects upon the heart, by Prof. Imbert-Gourbeyre.

(A. H. Z., 87, p. 103.)

— Has to sit up in bed with knees drawn up; rests her head and arms upon her knees. (H. V. Miller, A. J. H. M. M., v. 7, p. 531.)

— Its action upon the skin. (Continuation from vol. 84.) By Prof. Imbert-Gourbeyre. (A. H. Z., v. 86, p. 175.) Comp.

R. I., p. 9; II., p. 3; III., p. 2; IV., p. 2.

Ant. crudum, practical study of. By Karl Hencke. (A. H. Z., v. 8, p. 7, 187.) Comp. R. I., p. 13; II., p. 4; III., p. 3.

CARBON GROUP.

Carbo veg., as epidemic remedy in January, 1873, was indicated by the following symptoms in various complaints: nausea; loss of appetite; aversion to food, especially fat things; foul taste in mouth; vomiting; bad smell from mouth; diarrhea; badly smelling feces; weariness and aversion to any kind of work; heavy dreams; unrefreshed after sleep; flatulency; fullness in epigastrium, etc. These symptoms were present in gastric affections, erysipelas, intermittent fevers, diphtheria, all which were cured by Carbo veg. The 30th potency acted more favorably than the 3d. (C. Kunkel, I. Pr., 1873, p. 238.) Comp. R. I., p. 15; II., p. 4; III., p. 4.

Graphites. Great aversion to salt. (Hills. See Amm. carb.)
Comp. R. I., p. 16; II., p. 4; III., p. 4; IV., p. 5.

Petroleum. its healing powers. (J. Pr., 1873, p. 225.)

— Cured promptly during the summer of 1872 various forms of diseases, in all of which the following symptoms were the most prominent: great chilliness with occasional flushes

of heat; coldness of the legs; vertigo; violent pressing pain in forepart of head; whizzing and ringing in the ears; hardness of hearing; unpleasant bitter taste; loss of appetite; diarrhea only through the day, not at night, or at least much worse through the day than through the night. (J. Pr., 1873, p. 230.) Comp. R. I., p. 17; II., p. 5; III., p. 4; IV., p. 5.

Silicia³⁰ given for onanism to a lymphatic boy, cured him also of his egotism and violent character. (Gallasard, N. A. J. H., v. 22, p. 242.) Comp. R. I., pp. 17, 18; II., pp. 5, 6; III.,

pp. 4, 5, 6; IV., p. 5.

OXYGEN GROUP.

Ozone. Medical Rundschau. (J. Pr., 1873, p. 220.) Comp. R. IV., p. 6.

Acidum nitricum. By Dr. Weil. (A. H. Z., v. 86, p. 53.) Comp. R. I., p. 13; II., p. 6; III., p. 6; IV., p. 6.

HALOGEN GROUP.

Fluoric acid. (Jas. C. Burnett, H. W., v. 8, p. 54.) Comp. R. I., p. 19; II., p. 6; III., p. 7.

Bromine. (A. Elblein, Proc. H. M. S. Penna., 1873.) Comp. R.

I., p. 19; II., p. 7; IV., p. 6.

Iodine. Dull, pressing, wedge-like pain extending from the right ovary toward the womb. Patients describe it "as if a dull plug were driven from the right ovary toward the womb." (W. F. Laird, N. Y. J. H., Dec., 1873, p. 445.)

— Proving of. By Dr. T. J. Merryman. (Med. Inv., v. 10, p. 336.) Comp. R. I., pp. 19, 20; II., p. 1; III., p. 7.

Muriatic acid. Characteristic: All the time pushing his finger down the throat, or keeps clawing at the mouth, as if some obstruction must be pulled out of throat. (Drs. C. D. F., and H. R. W., Med. Inv., v. 10, p. 225.) Comp. R. III., p. 7.

ALUM GROUP.

Alumina. Painful throbbing like the tick of a watch in left side of vagina. (See Amm. carb.) Comp. R. I., p. 20; III., p. 7.

Plumbum. Vaginismus caused by lead poisoning. (D. D. Brown, H. M., Sept., 1873, p. 88, also in M. H. R.)

— Poisoning. (M. A., April, 92, C. C. B.) Comp. R. I., p. 20; II., p. 7; III., p. 7; IV., p. 6.

IRON GROUP.

Ferrum phosphoricum is the remedy for relaxation of the muscular fibres, therefore in hyperæmia it is dilatation of the blood-vessels in consequence of a strong irritament which affects the muscular coats of the vessels. For instance, inflammation of the fauces (redness and pain without exudation); acute conjunctivitis. (Schüssler, A. H. Z., v. 86, p. 91.) Comp. R. III., p. 8.

AURUM GROUP.

Mercurius viv. Cases: Mrs. —, æt. 50, used blue pills habitually for constipation. For six months forehead is red, presenting a number of small orifices, like "worm-holes," exuding serous fluid; margins of holes, which communicated with the frontal bone, were somewhat elevated. Pain in forehead when in bed, and subject to severe headache up to time when forehead was affected. Merc. viv. 4m cured in about sixteen days. (A. Berghaus, Tr. Am. Inst., 1872, p. 338.) Comp. R. I., p. 22; II., p. 9; III., p. 8.

Cinnabaris. Pain from the inner canthus of the eye across the brow. (See Neidhard's monograph on Cinnabar, in "Metcalf's Provings.") T. F. Allen, N. Y. J. H., April, 1873, p. 65.) Comp. R. I., p. 23; IV., p. 23.

Cuprum. The most characteristic symptoms by which Cuprum was indicated in the most diverse forms of diseases during an epidemic were the following: headache (fulness, heaviness, dullness, stitch pain); delirium; dyspnæa; pain in the chest (stitch or pressure); cough, either dry or loose, pain, with rust-colored or bloody expectoration; nausea, vomiting, diarrhæa (watery, slimy, bloody); griping and cutting pain in the bowels; rumbling; tingling in the extremities; muscular weakness; prostration; fever (thirst, frequent pulse, heat). (Porsch, A. H. Z., v. 86, p. 171.)

— Therapeutical value of Aceticum. (Dr. John Drummond, B. J. H., 1873, p. 393.)

— Therapeutic hint. (Quoted by R. J. McClatchey, H. M., Aug., 1873, p. 27.) Comp. R. I., p. 23; III., p. 9; IV., p. 7.

MAGNESIA GROUP.

Magn. phosphorica is a remedy for the nerves. It cures, a, pure neuralgias, for instance, such of the nervous supra-orbitalis and infra-orbitalis; gastralgia (without catarrh), enteralgia, etc.; b, spasms, caused by idiopathic affections of the corresponding motory nerves, also reflex spasms of the calves of the legs; spasmodic retention of urine; cramp and inward colic; singultus. (Schüssler, A. H. Z., v. 86, p. 91.)

Zincum. By Dr. Adolf Gerstel. J. Pr., 1873, p. 449, etc.) Comp. R. I., p. 25; II., p. 10; III., p. 9; IV., p. 9.

CALCAREA GROUP.

Calcarea sulphurica acts upon the connective tissue. Rheumatism and gout. Formation of abscesses. Tetter and catarrh with thick, white-yellowish secretion. Indurated glands. Is similar to *Hepar sulph*., but acts deeper and more intense, etc. (Schüssler, A. H. Z., v. 86, p. 92.)

Calcarea phosphorica in its physiological and therapeutical relations. When animals are fed on insufficient quantities of lime, they exhaust the lime in their own bodies. Fractures in young animals heal sooner while they receive phosphate of lime with their food. Dissolved in lactic acid it is good in fractures, rhachitis, cranio-tabes, in scrofulous and atrophic children, especially when they suffer from vomiting and diarrhea, and in tuberculosis.

It is more a palliative than a direct remedy. Cows using the hay of a certain meadow had friable bones; this hay lacked lime and phosphoric acid; the meadow was manured with bone-flour and the same fed to the cows, and in a month they were well. Nurses whose milk was poor in lime got normal milk by taking white-burned powdered bones. The phosphates are useful in rhachitis and craniotabes as an article of nutrition; profuse menstruation of anaemic women; syphilitic ulcers, tuberculosis; syphilitic