

takes place more or less rapidly, but often quite independent of any such forces as those under consideration. Some changes, indeed, appear to occur in opposition to such forces—as, for example, the increase in the angle formed by the neck of the femur with the shaft and the hollowing out of the sole of the foot, which does not occur until the child begins to stand and walk. That the latter does really occur in opposition to the force exerted by the weight of the body is shown by the fact that in so-called “static flat-foot,” which is obviously the result of this cause, the arch of the foot sinks at the same time that the eversion and abduction take place. The power, whatever it may be, which causes this arching of the foot may happen to be in excess of the counterbalancing force of the weight of the body, as is shown by cases of talipes varus and equino-varus, in which there is no greater mistake than to suppose that if the shape of the foot be sufficiently rectified to enable the sole to be placed flat upon the ground, the acts of standing and walking will be sufficient to retain the natural position. It is notorious that cases in this condition, if left alone, are almost certain to relapse. As to the special subject of flat-foot in young children, Volkmann attributes it to four principal causes: 1. Congenital, depending upon intra-uterine pressure. This form should be treated early and energetically. 2. That form which arises from a too rapid assumption of the adult shape of the foot. Treatment of this variety is invariably unsatisfactory. 3. Rickety flat-foot, which, though undoubtedly, as a rule, caused by the weight of the body, in some cases equally undoubtedly sets in before the child has made any attempt at walking. It seems, therefore, probable that the rickety process itself has an influence in determining the flattening of the plantar arch. 4. Paralytic flat-foot.

It will be noticed that Volkmann says nothing about the relation of flat-foot to genu valgum. We ourselves have been in the habit of looking upon the two conditions as occurring synchronously and independently as a result of the same cause. The question, however, does not seem to be one of very great practical importance. —*Med. Times and Gazette*, March 26, 1881.

MATERIA MEDICA AND THERAPEUTICS.

Action of Small Doses of Mercury upon the Lower Animals.

It was pointed out by Liégeois, upwards of ten years ago, that small doses of corrosive sublimate, administered during considerable periods of time to healthy persons, caused an increase in their body-weight. Keyes has published¹ some more recent investigations on the subject. He found that “small doses of mercury, continued for a short or a long period in syphilis, either alone or combined with iodide of potassium, increase the proportion of red corpuscles in the blood, and maintain them at a high standard. Further, mercury in small doses acts as a tonic upon healthy animals, increasing their weight. Lastly, it is a tonic in small doses to individuals in fair health who are not syphilitic. In such individuals, it augments the number of the red corpuscles.” Setting out from these data, SCHLESINGER (*Archiv für Exp. Pathol. und Pharm.*, Band xiii. Heft 5) administered small doses of mercuric chloride to herbivorous and carnivorous animals for long periods of time, and arrived at the following conclusions. No ill effects were ever observed to follow the treatment, in either rabbits or dogs. It may be regarded as certain that the animals so treated gain in weight, and that their blood contains an increased proportion of red corpuscles. *Post-mortem*

¹ Amer. Journ. of the Med. Sciences, Jan. 1876.

examination showed no deviation from the standard of health; nothing, indeed, beyond an unusual accumulation of fat in those regions where fat is normally present. No increase in the amount of urea excreted was ever noticed; albumen and sugar were never met with in the urine. While thus confirming Keyes' facts, the author dissents from his interpretation of them. He does not think that we are justified in ascribing tonic properties to mercury administered after this fashion. The increased number of red corpuscles, together with the accumulation of fat, point rather, in his opinion, to some influence of an inhibitory kind slowly and continuously exerted by the metal upon the processes of oxidation going on in the body.—*London Med. Record*, May 15, 1881.

Antipyretic Action of the Phenols.

Professor LICHTHEIM (*Breslauer Aerztl. Zeitschr.*, 1881, No. 1) regards the alarming symptoms observed by Jänicke during the use of resorcin as the result, not of the direct action of the drug, but of the rapid rise of temperature following the cessation of its action. Professor Lichtheim has made experiments also with the two other members of the dihydroxybenzol group, hydroquinone and pyrocatechin, and also with phenol (carbolic acid), in relation to their antipyretic action when given internally. From these experiments, it appears that there is a distinct and concomitant parallelism between the antifermentative and antipyretic actions of these substances. In order of antipyretic doses, they stand as follows: phenol, $4\frac{1}{2}$ to 6 grains; then hydroquinone, 12 grains; and pyrocatechin, 15 grains; weakest of all, resorcin, 46 grains. Owing to the fleeting reduction of temperature, and the subsidiary actions produced, Professor Lichtheim's opinion is that these drugs will not stand comparison as antipyretics with quinine and salicylic acid.—*London Med. Record*, May 15, 1881.

Apomorphia as an Expectorant.

BECK concludes (*Deutsche Med. Wochenschr.*, Feb. 1881) that apomorphia is decidedly superior to ipecacuanha, antimony, and the preparations of ammonia, in the treatment of bronchial catarrh, whether of primary or of secondary origin. It should be given in the first stage of the disease, when the cough is dry, and only sonoro-sibilant rhonchi are heard over the chest. Within twenty-four hours free expectoration sets in, and bubbling crepitation takes the place of the dry sounds. In the broncho-pneumonia of children, it should be given during the stage of resolution, to promote the expulsion of the inflammatory products from the bronchi. In acute laryngitis, its usefulness is very doubtful. The following is the prescription employed by the author: Hydrochlorate of apomorphia, gr. j; dilute hydrochloric acid, ℥xx; syrup, ℥j; distilled water, ℥iv. Of this mixture, a teaspoonful may be given every hour to children between three and ten years of age. Adults may take a tablespoonful every three or four hours. Given in this way, apomorphia does not give rise to nausea, or disturb digestion.—*London Med. Record*, April 15, 1881.

Intra-Peritoneal Transfusion.

To obviate many of the difficulties and dangers of intra-venous transfusion Ponfick has introduced a method of injecting defibrinated blood into the peritoneal sac, and has availed himself of the rapid absorption occurring from serous surfaces. His example has been followed by others, and KACZOROWSKI has recently published his results in the *Deutsche Med. Wochenschr.* He employed the method first in a case of puerperal septicæmia, and then in five other cases of anæmia