

solvent and other properties, which render it so useful as a vehicle or basis for pharmaceutical preparations."—*Edinburgh Med. Journal*, Sept., 1856.

6. *Proto-iodide of Iron Plaster*.—M. ALQUIE speaks highly of the resolvent power of this plaster in the case of white swelling and lymphatic enlargements. Experiment has shown that its employment is much more satisfactory when made by combining its separate elements with the plaster, than by the introduction of the ready-formed proto-iodide. Take of iodine 1, powdered iron filings 2, and pitch plaster 30 parts. Melt the plaster gently, and add the filings, and then the iodine, previously dissolved in 10 parts of alcohol, stirring well with an iron spatula, until a greenish-brown colour is produced. It is then spread and cut into strips for application.—*Med. Times and Gaz.*, Oct. 25, 1856 from *Bull. de Thérap.*, tome 1. p. 503.

MEDICAL PATHOLOGY AND THERAPEUTICS, AND PRACTICAL MEDICINE.

7. *The Nature of Phthisis, and particularly of the Pretubercular Stage*.—Dr. EDWARD SMITH read a very interesting paper on this subject before the Medical Society of London (Oct. 25th, 1856). After pointing out the advantages of special hospitals in the study of diseases, the object of the author was to show, 1st. That the treatment of phthisis, in order to be commonly successful, must be in the pretubercular stage. 2d. That there is a pretubercular stage, which is capable of easy demonstration, and in which treatment would commonly prevent the deposition of tubercle. And 3d. That the nature of phthisis essentially consists in a lessened inspiratory action of the air-cells of the lung. He admitted that phthisis was induced by a multitude of causes, but he affirmed that the tendency of all those is towards exhaustion, and that they, although many, have one common mode of action in inducing the disease. He criticized minutely the prevalent opinion that phthisis is a disease of blood, and proved that whatever may be the state of the blood in the disease, there is no universal condition of it which attends the origin of the disease, or which is really causative of it. The state of the system, which is one of the causes of phthisis is one of both solids and fluids, and is to be expressed rather by a general predisposition to the disease than by a specific state of a part of the system, viz., the blood, in which the elements of the disease had never been found, nor had been directly transmitted to another system. He also proved, from his own investigations, that the functions of alimentation were not at fault as causative of phthisis, by showing that the quantity of food taken in the early stage is equal to that in health: and by a reference to the feces, solids in the urine, biliary and cuticular excretions, he showed that there was no larger excretory waste than occurs in health. The lessened action of the air-cells he proved from the lessened vital capacity, feeble inspiratory power, and lessened mobility in the earliest stage of the disease; the consequent lessened vesicular murmur, harshness of respiration, and flattening of the chest, with slight dulness, indicative of atrophy of the lung. He also proved that the signs of lessened vesicular action are found in all those cases which, by common consent, are said to be prone to phthisis, and mentioned instances in his own practice at the hospital in which the vital capacity was reduced to two-thirds or one-half of the normal quantity, without there being any evidence of the deposit of solid material in the lung. This stage of lessened vesicular inspiratory action without any evidence of tubercular deposition, he designated as the first stage of the disease, and is one in which every hope of success may be entertained from suitable treatment. The second stage was that of tubercular deposition, and the third that of destruction of tissue, whether to the extent of softening only, or to the further degree of the formation of a cavity. He then proceeded to show the connection between the act of inspiration, and

the circulation through the lungs, and the importance of maintaining a balance between the systemic and pulmonic circulations, and explained the especial liability of the apex of the lung tubercles, by a consideration of the mode of action of the lung, whereby the cells of the apex must at all times be less perfectly distended than those at the base, and consequently have less circulation and vital influences. He discarded the notion of the deposition of tubercle in the lung from the blood; and, having referred to Dr. W. Addison's theory of the formation of the tubercle in the lung from degenerated epithelium, showed how readily the air-cell is rendered fit to be a receptacle of such morbid products, when its action and vital influences are lessened or lost. The extreme liability of the lungs to the deposition was not from any question of the blood, but from a consideration of the peculiar action of extension and retraction of the air-cells (as he had demonstrated) and from the immense number of such fitted receptacles as the air-cells of the lungs offered. He believed that phthisis and scrofula are distinct diseases, and that while they may be sometimes causative of each other, their co-ordinate occurrence was chiefly accidental. He also explained the occurrence of hæmoptysis before the deposition of tubercle, upon the principles now laid down, and pointed out the impropriety of any attempts to arrest it directly, and also of interfering with that degree of increased frequency of respiration and pulsation which nature sets up as a prophylactic measure when the amount of circulation in the lungs is so greatly lessened, as it is in all stages of phthisis. The discussion of the proper treatment, based upon these views, was reserved for a future occasion, but he strongly urged his professional brethren to recommend to the community the importance of a frequent examination of the chest of the younger members of families, with a view to the detection of the disease in its pretubercular stage.—*Med. Times and Gazette*, Nov. 1, 1856.

8. *Scrofulous Deposit*.—Küss considers (*Canstatt's Jahresbericht*, 1855) that pulmonary tubercle, so called, only consists in the heaping together of epithelial cells in the various vesicles of the lungs, and that all its metamorphoses arise from their destruction. In this way, he asserts that tubercle in the various glands, the intestinal mucous membrane, and the medulla of bone, &c., is easily to be explained as arising from the globules existing therein. Thus, according to him, tubercle is not a foreign heteromorphous material, but simply the results of proliferous cell elements. By Mandl (*Archives Générales de Méd.*, Avril, 1855) scrofulous deposit is considered to be a crude mass, only exhibiting corpuscular and other arrangement as the result of the method in which it is torn up. He determines that it has no specific histological character, and that the fatty and shrivelled elements of reticulated cancer, and many other products, are to be compared exactly to tubercle corpuscles. According to Engel (*Prager Vierteljahrsschrift*, Buch, 1855, Band xii. p. 1), tubercle at first consists of an amorphous exudation, in which cells are formed at a later period, which gradually undergoes a fatty or calcareous change, and softens.—*B. and F. Med.-Chirurg. Rev.*, Oct., 1856.

9. *Treatment of Typhus and Typhoid Fever*.—Prof. DIETL, of Cracow, has just published an interesting paper, in which (like Graves) he advocates a nourishing and tonic regimen in fevers, instead of the severely antiphlogistic measures which had been too much in vogue. The dietetic part of the treatment he considers as more important than the pharmaceutical; and advises that, instead of combating the disease, we should strive to strengthen the patient, to enable him to overcome the attack. Good nourishment and pure air are, therefore, indispensable. He thinks that the diet should not consist of weak slops, such as tasteless beef-tea, gruel, thin milk and water, and diluted tea; and advises the diet to be fluid, sapid, and nourishing—the milk to be unreduced by water, and the beef-tea to be strong.

He considers *cold applications to the head* to be injurious, increasing the sopor without diminishing the heat; for the heat and stupor in typhus are the result of a dyscrasia, and not of a simple cerebral congestion, and, moreover, the continued cold has a paralyzing effect on the nerves and bloodvessels.