

PATHOLOGY AND PRACTICE OF MEDICINE.

On the structure, function, and diseases of the liver; and on the action of cholagogue medicines. By C. H. JONES, M. D., F. R. S.

THE author first described the minute structure of the liver, which consisted essentially of a mass of nucleated cells or celloid particles, usually more perfectly formed than the cells either of the salivary or renal glands, presenting a distinct nucleus, with a nucleolar spot, an exterior envelope, and an included mass of soft, semi-solid, albuminous substance, which commonly contained a few oily molecules. In addition to these, in well-nourished livers, were numerous free nuclei, imbedded in albuminous blastema, which exhibited various stages of progress towards the mature or perfect cell. The oily contents of the cells were subject to great variation, both in the same individual and in different classes of animals; the less perfect the type of the respiratory process, the greater the quantity of oily matter in the hepatic cells. The cells in their general mass constituted the hepatic parenchyma; this might be subdivided into smaller portions, called lobules, which were separated from each other more or less completely by fissures, the fissures themselves being continuous with canals that ramified throughout the parenchyma, and which, from containing the portal vein and its associated vessels, had been termed portal canals. In reference to the mode of distribution of the vessels, originally so well expounded by Mr. Kiernan, the author remarked that he decidedly agreed with Theile, who denied the existence of the vaginal branches and plexus of the portal vein mentioned by Mr. Kiernan. The author quoted from a paper by Mr. Paget, who had described these vaginal plexuses to be derived, not from the portal veins, but from the hepatic arteries, from which they were completely filled, when both arteries and veins were at the same time injected. The interlobular portal veins were therefore derived directly from the portal veins; and those which appeared to be vaginal branches of the portal vein were its internal roots, by which it received the blood which had served for the nutrition of the hepatic ducts and other vessels of the liver. After alluding to the mode of ramification of the hepatic artery, and the divisions of the hepatic ducts following the branches of the portal canal, the author referred to the relation which existed between the ultimate ducts and the cells constituting the parenchyma of the lobules. The prevalent opinion had been, that these cells were exactly homologous to the cells of the renal tubule or salivary vesicles, like them growing on a free surface open to the exterior. Hence some anatomists had believed they had detected a basement membrane, forming anastomosing tubes, constituting a true lobular biliary plexus. Others, unable to find a basement membrane, had described the ducts as continued into the paren-