SEPT. 19, 1896]

## Lectures on Elementary Physiology in relation to Medical Mursing.

BY BEDFORD FENWICK, M.D. Physician to The Hospital for Women, Soho Square.

## LECTURE IV.—THE EXCRETORY ORGANS (Continued from page 203.)

HE practical points, then, to which attention is necessary, are that patients who are suffering from Dropsy, in any

part of the body, which is due to organic disease, and which is increasing in extent, may show signs of this effusion of water into the cavities of the chest; and that therefore, when confined to bed, the head and chest of such patients should be well raised so as to prevent as far as possible the occurrence of this condition. But, beyond this, such patients are liable to have a form of dropsy of the softer organs, and especially of the lungs. The soft, spongy, distensile, tissue of the latter, in many cases of advanced heart or kidney disease, becomes almost tense and hard in consequence of dropsical effusion into its substance. The bloodvessels of the organ permit the watery part of the blood to pass out from them into the tissues of the lungs, just as we have seen that the same effusion took place into the tissues beneath the skin of the limbs, and even into the open cavities of the abdomen and the chest.

Such a complication of course increases the patient's danger, in the same way that the pressure upon the lung, caused by fluid in the pleuræ, diminishes the activity of the organ, and thus interferes with the breathing. The blocking of the lung cells prevents the proper expansion of the affected part, the sufficient admission of air to the lungs, and therefore, the proper oxidation of the blood. These cases of œdema of the lung are therefore as dangerous a form of dropsy as that occurring into the pleura; and the same carefulness on the part of the Nurse with regard to the posture of the patient is required in order to prevent as far as possible the detrimental effect of gravity in causing such dropsy. We often find in patients suffering from kidney disease, and whom the Nurse has permitted to lie with the head low, and constantly upon the back, that the bases of the lungs suffer from this form of dropsy; and so the patient, instead of being relieved

by the rest in bed, seems to become daily more and more embarrassed in his breathing ; and his Heart, experiencing every day more and more difficulty in pumping the blood through the water-logged lung, becomes alsoenfeebled instead of strengthened, and perhaps, some day, suddenly ceases to act. Or, on the other hand, the patient's blood receiving less than its proper supply of oxygen, and being continually delayed in its passage through the lungs, causes an increasing amount of pressure on the right side of the Heart, and therefore, on the venous system, which shows itself by the increasing fulness in the veins of the neck, face, and forehead, the increasing blueness of the lips and finger nails, the increasing duskiness of the skin, and finally by death from asphyxia.

Once more, then, the lesson is taught that all these results might perhaps have been delayed, and perchance prevented altogether, if the patient had been kept well raised in bed so that the Dropsy, if it occurred at all, should be limited to the limbs and abdomen, and not affect the more vital organs. It was in some of these cases that the old-fashioned plan of Bleeding used to obtain its most successful results. It was not understood then, as it is now, why this was so; and consequently the treatment was one of rule of thumb, and haphazard; and being indiscriminately employed in all cases of disease, however dissimilar they might be, the removal of blood fell first into disfavour, and then, unhappily, into complete disuse. There are many medical men now, however, who point: out the value and importance of blood-letting upon rational and scientific principles, and in properly selected cases; and it is probable, therefore, that to a large extent, the treatment will be revived, though not as before, without definite reasons. When Dropsy, for example,. occurs from kidney or heart disease, it is more reasonable to argue that the vessels which, in order to lessen the pressure of their contents, cause part of them to exude, would be im-mensely and immediately relieved of that superfluous pressure if part of the blood itself were withdrawn. Dropsy, in fact, is an effort of Nature to effect a cure, and bleeding would to some extent carry out some of Nature's own intention by relieving the system of the excess of fluid, which, in default of such help, is thrown off into the surrounding tissues and cavities of the body.

(To be continued.)



