Lectures on the Mursing of Lung Diseases.

By Bedford Fenwick, M.D.,

Late Senior Assistant Physician to the City of London Hospital for Diseases of the Chest.

Chapter II.

(Continued from page 531). CHRONIC BRONCHITIS.

THE most difficult cases of bronchitis which Nurses will be called upon to attend are those which occur in elderly people, and which are chronic or of long standing. Such cases are generally more or less associated with the condition known as Emphysema. The latter condition is always the cause of more or less Asthma, and is, therefore, one which deserves The effect of constant some explanation. coughing upon the delicate air-cells can be best described by a homely illustration. If a small elastic bag, such as those used for children's toy-whistles, be blown out too violently by the child, it loses its elasticity, and does not contract again to its original small size. If the process is repeated, the contractile power of the elastic becomes less and less, and is at last altogether lost, and the whistle ceases to sound because the air is not expelled from the overstretched elastic bag. So, with the air-cells of the Lung, the frequent, and sometimes violent and prolonged, expiratory efforts of coughing cause the delicate elastic cells to dilate, and if the cough continues, month after month, the expansion of the cell passes beyond the power of complete subsequent contraction. When this process occurs in hundreds of adjoining air-cells, it can easily be understood that certain results must follow. The lung at the affected part must become larger than natural, because its constituent air-cells are all enlarged. The lung must be unable to perform its proper work of expelling the air from the affected air-cells, because they have lost, to a large extent, their elastic power of contraction. When this change takes place, as it does in cases of Emphysema, throughout the greater part of both lungs, the chest walls themselves begin to suffer by the unusual pressure upon them from the enlarged lungs which they contain; and so the chest, in these cases, instead of being, as in health, more or less flattened in front and behind, gradually assumes more of the barrel shape, which is characteristic of emphysematous patients. In the next place.

the condition of the lung explains the difficulty of breathing from which these patients suffer, and the feeling of breathlessness of which they complain; because the distended air-cells, instead of expelling the air at each expiration, remain more or less full of air, and as the latter rapidly parts with the oxygen it contains to the blood, and therefore holds a considerable excess of carbonic acid, they cease to perform with any degree of efficiency the work which they should do-purifying the blood and removing from the body its carbonic acid. These patients, therefore, sooner or later show the bluish lips, the injected veins of the face, the discoloured and swollen finger-ends, which are all so significant of disturbance in the circulation of the blood through the right side of the heart and through the lungs.

The organic changes, then, explain all the symptoms from which these patients suffer. The external discolouration tells the story of similar congestion of the internal organs, with its various results. For example, the overloading of the veins of the liver and stomach explain why the patient suffers from bilious attacks, giddiness, headache, and repeated attacks of sickness, and for which the nurse will be probably directed to administer Blue Pills at frequent intervals. It explains why these cases have extreme and often very painful attacks of flatulence, and makes the nurse understand why the doctor in these cases directs Jalap or the Apenta or Hunyadi waters to be administered every morning, instead of the usual carminatives, such as peppermint, cardamoms, and ginger. The Blue Pill causes the excretion of Bile, and the purgatives cause a drain of the watery constituents of the blood from the vessels in the intestines. In fact, they tap the overloaded veins, and so not only relieve the local symptoms of which the patient complains, but also the more important general disturbance of the circulation. In former days, Bleeding accomplished just the same results, in a more direct manner; but, unfortunately, the discredit which fell some seventy years ago upon that then muchabused method of treatment has made the present generation unduly afraid of it. The congestion of the kidneys explains why these patients so frequently have more or less albumen in the urine, a sign, by the bye, which does not always mean, as many nurses seem to think, Bright's disease, or grave degeneration of the kidney substance; and it therefore ex-



