

diagnosis; but the cough was severe, with copious expectoration. On examination of the sputum, bacilli were found.

First general tonic treatment with ol. morrhuae and creosote was given, with inhalations over hot water.

Afterwards a Coulter's vaporizer was procured, and the improvement has been gradual and marked. There has been no cough or expectoration since October last. The appetite has improved, night sweats have ceased, and she has gained in weight from 96 lbs. to 108 lbs.

CASE III. W. J., aged 21 years. First seen November 1st, suffering from a rapid form of pulmonary tuberculosis. The left side and upper part of right side were flat and perfectly motionless, the lower part of right lung only expanding.

Without any expectation of improvement in so hopeless a case, but merely to satisfy the whim of the patient, I loaned him a vaporizer. Although he was not aware of the condition of his lungs, he called my attention to the fact that he only felt the inhalation in that portion of the lung expanding. This last case serves to illustrate the fact that the volatilized oil was carried to the farthest part of the lung.

In cases I and II there was undoubtedly a marked influence upon the cough, and a general improvement.

Although my experience has been limited, I considered these cases worth reporting, in the hope of hearing further of this valuable form of medication.

### Selected Articles.

#### THE TREATMENT OF BRONCHITIS.

We make no apology for bringing the subject of acute bronchitis under the notice of those of our readers who may be in general practice, beyond the fact that the present foggy weather with low temperature and north-east winds will swell the number of cases under treatment, and we venture to hope that when our remarks have been read our busy brethren will have derived some useful "tips" in treatment.

To do our work thoroughly we will dip a little into the pathology of the disease and see what an important bearing a knowledge of it must have

in directing our efforts. And first let us look at the anatomical structure of the parts concerned in an attack of ordinary catarrhal bronchitis in which we find the larger and medium sized bronchi, and by which we shall see the strong analogy that must exist between similar affections of the nasopharynx and trachea, and which we will define as an inflammation of the mucous lining of the tubes, a prolongation of that lining the above-named organs. But as we get deeper into the chest, and still following a tube to its final ending, we find (1) that the cartilaginous plates become more irregular, smaller, and finally disappear; (2) the bronchial glands also disappear in the finer tubes; and (3) the mucous membrane becomes more intimately blended with the elastic and muscular coats, and also that it gets thinner the nearer we get to the bronchial terminals, forming, in fact, part of the alveoli of the lung proper, and from these we learn two very important lessons—first, to direct our endeavors to confining the disease to the longer tubes, and, secondly, that when acute bronchitis reaches the finer structures it must become a most potent factor in setting up bronchopneumonia. We have also chosen the subject of acute bronchitis as the subject of our remarks because for some years we practised in a district not far from the river, and where we may say the disease was endemic, and thus we had opportunities of watching cases in all stages.

As we are strong believers in the teaching of pathology, let us see what changes take place in the course of an acute attack with regard to anatomical structures. (1) A bronchus consists of a mucous membrane, covered with cylindrical and ciliated epithelium, lying on (2) a basement membrane separated by connective tissue in which the network of capillaries ramify from (3) the mucosa proper, which is composed of elastic tissue surrounded by muscular fibres, and outside this is (4) the sub-mucosa or adventitia which is really the connective tissue proper of the lung, and in which the cartilaginous plates are embedded containing the pulmonary lymphatics. And now for the pathological changes which take place:—(1) Congestion and hyperæmia of the vessels of the mucosa; (2) œdema of the basement membrane; (3) shedding of the superficial epithelial layer with rapid reproduction; (4) infiltration of the adventitia with round cells of inflammation, which are thus transfused by the lymphatics to all parts of the bronchial tissues, and thus the inflammation is generally distributed over both organs. It is thus easy to see how quickly a case of capillary bronchitis may become one of double bronchopneumonia.

Now for treatment. Let us take a typical case. A young man, say from twenty to twenty-five years of age, comes under our notice with a feverish cold, his temperature reaches 101°F. to