

one fact, and he has again and again made the diagnosis of phthisis by careful examination of these regions, where competent men had failed to observe the early changes in the lung tissue, for the simple reason that they had confined their examination to the infra-clavicular regions.

Here it is that we should listen for the prolonged high-pitched breathing which is so significant, and if it is accompanied by râles on coughing, the diagnosis is almost certain. The slight dulness on percussion as compared with the opposite side, is considered of very little value; in the first place, it takes an experienced person to make it out, and by the time it can be distinctly appreciated, the chances are that the phthisical processes have advanced to the second stage. Auscultation, then, is the principal method of examination, for the reason that it is so much more delicate than percussion; and the early changes can only be appreciated by auscultation, not by percussion. Whisper resonance is much more used, for the same reason. In passing, it might be stated, that in all pulmonary examinations the posterior aspect of the chest is the one which is regarded as important, and in many instances the anterior is neglected altogether; many cases of well marked pneumonia give absolutely negative results in front, while behind all the signs of an extensive pneumonia can be distinctly appreciated. From this it is not to be imagined that only the posterior portion and apices of the lungs are to be examined; the rule is to explore every portion of the chest thoroughly, as I have seen several well marked cases of phthisis which originated in the bases of the lungs. The use of the stethoscope for the diagnosis of pulmonary diseases is almost entirely discarded in New York, and the ear substituted in place of it; in cardiac diseases it still holds sway. The much disputed question as to the seat of production of the crackling sounds and crepitant râles heard in phthisis, whether they are produced by changes in the pleura, or in the lungs; it is now considered by most observers as settled, that they are due to changes in the pleura, not in the lungs. The late Prof. Austin Flint strongly upheld the view, that most of these sounds were produced in the lungs; but, since his decease, popular opinion has gradually drifted to the pleural view. Autopsies have confirmed this, and many good diagnosticians affirm that they have yet to hear the crepitant râle

which used to be considered pathognomonic of the first stage of pneumonia; they regard it as a pleuritic friction-sound, and this view is borne out by cases of central pneumonia, in which the crepitant râle is absent.

#### MICROSCOPICAL DIAGNOSIS.

The recent improvements in the methods of staining the tubercle bacillus have at length enabled the microscope to occupy an important clinical position in the diagnosis of phthisis. The new rapid staining method essentially consists in having the staining fluids arranged in two solutions, the first of which stains the bacilli, and the second bleaches everything else except the bacilli, so that they stand out in strong relief and can readily be seen. The whole process is so simple that it can be performed by any practitioner in three minutes, much less time than it takes to make a thorough physical examination. If the bacilli are found, it is regarded as positive evidence of phthisis, even should the physical signs be absent, and they can often be observed before the physical signs give positive evidence of the disease.

A rather remarkable observation has lately been brought out by Prof. Reinzi, of Naples, who conducts one of the most careful clinics in Europe. He states that the blood of all advanced phthisical patients is distinctly acid, and, according to the degree of acidity, the progress of the disease can be estimated. This fact can be readily observed by taking a very thin plaster paris disc, drawing a few drops of blood from the patient's finger and allowing it to filter through the disc on to some delicate test paper beneath. Nothing but serum percolates through, and the acid reaction can be distinctly appreciated. From this he concludes that, by keeping the blood alkaline by the administration of alkalis, the progress of the disease can be checked, not stopped. Observations are being made to test the value of this theory, but as yet it is too early to state the results.

#### TREATMENT.

No specific has yet been discovered, and the treatment is still symptomatic. If the patient is in good pecuniary circumstances, he is sent to some high and dry climate like Colorado or New Mexico. Many writers in the medical journals have published, during the last year, accounts of reported cures by the inhalation of hydrofluoric