sequel, and is apt to make the patient a ready prey for any acute disease which may seize him. Several cases of great mental depression have come under my notice, approaching to a mild form of insanity. Such cases may last many months, and ultimately recover, provided some inter-current affection, as I have said, does not set in and carry them off.

Relapses are very common, many patients contracting the disease again and again, after apparent convalescence, thus keeping them in a low, weakened condition, which, in time, arouses into active existence any dormant diathesis, such as tuberculosis, etc.

## THE TREATMENT OF DISEASES OF THE RESPIRATORY ORGANS BY INHAL-ATION, WITH NOTES OF THREE CASES.

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Since the introduction of Koch's method for the treatment of tuberculosis, and the very promising results reported, in many cases, we may be inclined to let our attention wander from the consideration of older forms of treatment.

By strict attention to hygienic conditions, nourishing diet, etc., we all have observed the benefits that the patient receives.

Halter, Krull, Weigert, and later, Jacobi, experimented with a method of treatment by inhalation of hot air, which would seem at first sight to have claims to be called curative, since its intention was to remove the cause of the disease, by destroying the bacilli.

Latterly, the use of beechwood creosote has given promise of good results. The ardent disciples of this method of treatment, have urged the saturation of the system with the drug; but the irritating effects upon the stomach, its nauseous and pungent taste, and the difficulty of combining it with other drugs, are objections to its internal administration.

These objections and its unquestionably good effects, where it could be well borne, together with the knowledge of the benefits afforded to patients suffering from pulmonary disease, by a residence in places where the atmosphere is impregnated with resinous emanations from pine

forests, led me to try combinations of creosote, oil of Southern Pine needles, and other balsamic preparations, by inhalation, upon three patients suffering from pulmonary tuberculosis, the notes of which are given below.

The treatment by inhalation has long been practiced; but the instruments devised for that purpose, have heretofore been so imperfect, and inefficient, being merely spray producers or atomizers, that the results have been somewhat unsatisfactory.

The primary essential in an instrument for this purpose is its power to completely volatilize drugs intended for inhalation, thus ensuring their reaching the farthest recesses of the respiratory tract. I succeeded in securing a lately devised instrument, known as Dr. Coulter's Combined Vaporizer and Inhaler, which meets this requirement in the highest degree satisfactorily, and commenced using it with case No. I, on Oct. 24th, 1890.

CASE I. W. J. C., age 40, plainer; first seen Oct. 21, 1890. There was consolidation of the upper part of the left lung, extending in front to the lower border of the third rib and behind somewhat lower. There was considerable cough and expectoration, and from Sept. 1st, 1889, thirteen months previously he had had 28 attacks of hæmoptysis. He had been taking for one year previously cod liver oil and creosote, using ergot, turpentine and tannic acid for the hæmoptysis. The creosote had caused considerable gastric disturbance, and the turpentine renal congestion. Began using Coulter's vaporizer and inhaler on Oct. 24th, inhaling twice daily about 15 drops each of ol. pini. sylvestris, tr. iodi., and tr. benzoin co., and twice daily an inhalation of creosote and turpentine āā gtt. xx.

The atmosphere of the room was kept impregnated with these preparations.

The hæmoptysis ceased entirely, the expectoration was lessened, the temperature lowered, perspiration suppressed, the appetite improved, and his weight increased.

He quit using the vaporizer, feeling he needed it no longer, about Jan. 15, 1891.

There is now very little cough or expectoration, although very little apparent change in the physical signs.

Case, Il. Mrs. D., first seen in May, 1890. The physical signs did not definitely establish a