

## Selected Articles.

### REPORT OF SEVENTY-EIGHT CASES OF PULMONARY TUBERCULOSIS TREATED WITH WATERY EXTRACT OF TUBERCLE BACILLI.

A REPORT of seventy-eight cases of pulmonary tuberculosis, treated at the Winyah Sanitarium, at Asheville, N.C., in 1898, with Watery Extract of Tubercle Bacilli, by Dr. Karl von Ruck, appears in the February number of the *Therapeutic Gazette*.

The author giving due credit to the advantages of the favorable climate of the Asheville plateau as well as to the systematic employment of hygienic and dietetic methods in a special institution, shows nevertheless by his results the unmistakable favorable influence of this preparation, which he perfected in his laboratory in February, 1896.

He with many others, notably Professor Koch, have long realized that the bodies of tubercle bacilli contain a soluble substance, a proteid upon which the curative action of all tuberculin preparations and modifications must depend, small and variable quantities of which were thought to enter into the culture fluid from which the tuberculin preparations are made.

Experiments upon animals have shown that the injections of dead tubercle bacilli produce both curative and immunizing effects, but they have always produced abscesses at the point where they were injected and often spurious tubercle in the animals experimented upon, conditions which seemed to preclude their use in the treatment of human tuberculosis.

A solution of the tubercle bacilli, without injury to the curative proteids, was therefore naturally sought for, and in April, 1897, Professor Koch announced that he had accomplished this in the production of Tuberculin R., which was then given to the profession.

Several weeks later Dr. von Ruck announced his success in also making the desired solution, and communicated his experiments and methods in a paper read before the American Climatological Association and published in its transactions for 1897, and also in the *Therapeutic Gazette* for June, 1897. His method of preparation differs from that published by Professor Koch, and is briefly as follows:

The tubercle bacilli are filtered out of the rapidly growing and highly virulent culture. After washing with distilled water for