years. Dr. G. S. Huntington had then operated by Dr. A. M. Phelps' open method, but without improving the condition. The specimen which he presented was interesting on account of two bony prominences which it showed, and which apparently had been the obstacle to flexion of the foot.

## THE TREATMENT OF ANKLE JOINT AND TARSAL DISEASE.

The paper of the evening, with the above title, was read by Dr. T. Halsted Myers, who also presented a patient illustrative of this subject.

Dr. Myers said that tubercular inflammation might attack, first, the synovial membrane, later, the cartilage, and lastly, the bone; or the primary local focus might be in the bone.

While it was still confined to the synovial membrane, a number of surgeons recommended erasion. If it had attacked the bone, many more urged operative methods, irrespective of the general health of the patient. The author considered only the latter condition.

Simple incision was of no advantage, for we had no element of tension, as in acute processes, and we only opened new channels of infection, leaving the original disease unchanged.

The usual method of treatment, curetting the abscess walls and the sinuses, could not be expected to remove all disease, and would greatly increase the risk of absorption. The success which had been secured in some of these cases, seemed to be due to the power of the antiseptic agent to render inert the bacilli which remained.

The rational method was to remove all the disease at once; but apparently healthy bones contained tuberculous foci, and hence, it was a most difficult problem to know when to stop, and in fact, this could not be determined at the time of operation. If all the disease were successfully removed, the duration of treatment was less than under conservative methods. The ultimate results were, however, less satisfactory. He had seen a considerable number of misshapen and atrophied feet after operative treatment which were weak and painful, and required support to render them able to bear the weight of the body. He had not observed such results from conservative treatment. It was confessedly difficult to ascertain the ultimate results; and, although Dr. Shaffer had kindly placed the records of the New York Orthopædic Dispensary at his service, he had not been able in the short time at his disposal to do more, in most of the cases, than quote the histories.

The number of cases treated before July, 1888, was fifty-five, and of these, he knew personally that at least twenty-one were cured. Five were cases of synovitis, and sixteen of osteitis. The average duration of treatment in the latter was twenty-one and a half months, the longest case being under treatment fifty-five months. The results in all were extremely good; yet under careful private treatment still better results should be expected.

From our knowledge of the various ways in which the bacilli of tuberculosis may be spread in the body, it would seem that a primary tubercular process in a joint must be extremely rare. Drs. Prudden, Northrup, Biggs, and Thacher, to whom he had written for information on this subject, all considered that these affections were generally secondary, but agreed that primary joint lesions did occur. The practical importance of this was that the danger of general infection from a joint lesion, which was not interfered with surgically, was an entirely unknown, and probably extremely small, quantity.

Of the whole number treated (fifty-five), but three had died—one of diphtheria, one while tarsal disease was active, and the other, six months after a note of "nearly cured" had been recorded. In neither of the latter was the cause of death stated. However, in Dr. Scudder's report of eighteen cases of excision, six deaths occurred; three were due to the operation, or to its direct effects; another might have been; and the other two were from tuberculosis, but occurred one and two years after the operations.

The treatment of synovitis consisted in absolute protection of the joint from traumatism. In children, he considered a perineal crutch absolutely necessary while walking. Ordinary crutches were invariably laid aside at times, and the joint left unprotected. In addition to this crutch, the foot should be protected by a splint to avoid local injuries, and to maintain a good position. There being no involuntary muscular spasm while the disease was confined to the synovial membrane, traction was not necessary.

In cases of ostcitis, the same protection of the joint was imperative, and if there were pain and