

ciently backward to bring the mastoid processes into the perpendicular line passing through the acetabula. Several of the members had seen this case on different occasions during the last year, and claimed that Dr. Whitman was succeeding in a very unusual degree in preventing deformity.

Dr. Nicholas Grattan of Cork, Ireland, was present, and read a paper on *Osteoclasia*, demonstrating the use of his osteoclast by operating upon three cases of knock-knee and two of bow-legs. To those who admit that there is a place for osteoclasia, Dr. Grattan's instrument must commend itself as the most simple, safe and certain of those given to the profession. The general feeling, however, was that the cases must be few where osteoclasia should be preferred to osteotomy.

Two unusual cases of knee dislocation were reported: *Lateral Dislocation of the Knee-joint due to Local Disease or Paralysis*, by Dr. T. Halsted Meyers, New York; and *A Case of Complete Lateral Dislocation at the Knee due to Traumatism*, by Dr. McKenzie, Toronto.

Dr. A. J. Steele of St. Louis presented a paper which covered much ground and called out a lengthy discussion, viz., *Plaster of Paris in Orthopædics*. For spinal cases Dr. Steele preferred leather, wet, and applied so as to fit accurately and then heated to a temperature of 210°F. Dr. Phelps claimed that there was no fixation equal to that obtained by the proper use of plaster-of-Paris. There are many who use it, but do not get the good results that might be obtained because they do not know how to employ it. As a retentive dressing in the treatment of club-foot, Drs. Steele, Phelps, McKenzie, Gillette and others considered it superior to all other means. Drs. Ketch, Judson, Taylor and Schaffer prefer to use various forms of steel club foot shoes, on the ground that they are more readily removed so as to employ massage to the foot.

Dr. Bradford of Boston presented a most exhaustive and lucid statement of the question of the *Treatment of Resistant Club foot*. At all ages there are cases where, under an anæsthetic, the foot may be replaced in the corrected position by force alone, without any cutting, employed simply by the hand or various forms of leverage. The next class of cases is found where there are resisting tendons or bands of fascia which may be cut subcutaneously before torsion is applied. Next there comes a class of cases where it is necessary to make an open incision in order to divide the resisting structures more completely, and because the skin is too short to permit correction to be made. Then in some cases correction cannot be fully made, even when all the resisting soft structures have been cut. Under these circumstances Dr. Bradford prefers to remove a cuneiform section from the outer border of the os

calcis. Various bone operations, however, have been recommended. Dr. Morton had presented some good cases operated on by removal of the astragalus, and Dr. Bradford had followed his lead, but had concluded that its removal was not justifiable except as a last resort. The cuneiform section taken from the outside of the foot should never be done as a primary operation, and least of all the removal of the astragalus.

Dr. Phelps followed, reviewing the ground most thoroughly, and claiming that there was nothing in Dr. Bradford's paper which had not been taught and published by him (Dr. Phelps) several years ago.

Dr. Grattan and Dr. McKenzie pointed out that there were cases that could not be restored by any of the foregoing methods, cases where, in spite of the fact that the foot *per se* was fully restored to its normal shape, the patient toed inward, there being evidently a twist in the limb in some part. Dr. L. A. Sayre, Dr. Hetch and Dr. Vance recommended carrying a brace upward to the thigh, and even to the body, in order to turn the foot outward. Dr. McKenzie, in reply, claimed that such treatment must be ineffectual, inasmuch as apparatus applied about the thigh would turn inward as the foot turned, and if applied about the pelvis would turn the foot outward, by causing external rotation at the hip, and would not make correction where the deformity existed. Dr. Grattan recommended osteoclasia of the tibia and fibula, and then placing the foot in the position desired. Dr. Phelps recommended an apparatus devised by Beely of Berlin for children, by which the leg was kept flexed upon the thigh, so that the tendency of the foot to turn inward could not rotate the thigh portion of the appliance, and in older persons osteotomy of any part in which the twist was found most marked. Dr. McKenzie took exception to Dr. Phelps' method of operation in which he makes his first step the cutting of the Achilles tendon, on the ground that it is now much more difficult to correct the varus — always the difficult thing to accomplish successfully. He was sustained in this criticism by Dr. Steele of St. Louis and Dr. Goldthwaite of Boston. Dr. Phelps assigned as his reason for so proceeding, because in one case in every ten there was a very strong, deep ligament connecting the posterior part of the tibia to the os calcis, and as this could not be cut without great danger of wounding the posterior tibial artery, it had to be ruptured, and must be done while the plantar surface of the foot remains intact.

Dr. Moore of Minneapolis presented a *Report of Six Cases of Excision at the Knee Joint*, recommending a careful selection of suitable cases and the high incision, four inches above the patella. Dr. Griffiths of Kansas