

SOME DISEASES OF BONE.*

1. *Atrophy*—Eccentric and concentric with report of a case.
2. *Tuberculosis*—Diagnostic value of X Rays.
3. *Necrosis*—Successful use of decalcified bone chips.

ATROPHY.

IN bones affected with eccentric atrophy, the disease begins in the interior—the bone thins from within outwards. The medulla increases at the expense of the solid constituents and there is produced in it new connective tissue cells.

The walls of the alveoli are absorbed. The Haversian spaces enlarge but there is no softening of the compact tissue as in osteomalacia, for, what is left of the bone though thin and brittle still retains its solid consistence.

In concentric atrophy, on the other hand, the surface of the bone is attacked and the same process of medullization goes on, periosteal proliferation ceases, and the bone diminishes from without inwards.

Fatty osteoporosis in which there is an abundant proliferation of fat cells in the medulla and spaces may occur in bones after prolonged immobilization, but in atrophy there is a greater or less disappearance of fat cells from the medulla and their replacement by cells resembling those of fetal marrow.

By some, the condition of atrophy has been attributed to a diminution of nerve influx—by others, to a lowering of the circulation. (Ashurst).

In the following case the fracture was across the nutrient canal of the ulna;

W. G., age 32, farmer, in Dec. of last year had his right arm injured in a threshing machine, suffering a compound comminuted fracture of radius and ulna. An attempt was made to save the arm by wiring the bones, and when he came under my care in June last, the ulna seemed firmly united, but there was considerable movement in the radius.

Exsection of a portion of the ulna to approximate the bones, and their fixation by Senn's bone ferrule was decided on. Thinking, however, information as to the exact condition present might be

*Read before Kingston Medical and Surgical Society, July 6th, 1896.