In this case, then, we have an example of a hæmorrhage limited to and distending one lobule of the thyroid and of rupture of the vessels resulting in distention of the follicles with interstitial disturbance. Of actual cyst formation the specimen showed no sign.

Plate XV, Fig. 3, represents a much further advanced condition. The case from which this was taken was one of parenchymatous goitre in a woman of twenty years, with diffuse hypertrophy of the organ most marked upon the right side. For four or five years the growth had been slow; during the last twelve months it had been more rapid.

Examined microscopically, the vesicles were found to vary greatly in size (from 15 μ to 300 μ in diameter, the average appearing to be from 25 μ to 30 μ). The larger vesicles were relatively rare, and occurred mainly in the deeper, more central portion of the gland. The contents of the vesicles had a shrunken appearance, and their epithelium was of well-formed columnar type. There was a certain amount of hyaline change in the interstitial tissue.

The enlarged gland presented several hæmorrhages, and upon a closer study of these under the microscope some vesicles were seen filled with blood, as in the previous case. There had, however, been more abundant extravasation into the interstitial substance, and, following upon this, a rupture of numerous follicles. In this way spaces had been produced filled with blood, and showing here and there along their edges layers of columnar epithelial cells, the remains of the burst follicles. Small collections of cells and masses of dislocated tissue could be recognised here and there in the blood-stained fluid, filling these rents in the thyroid. The hæmorrhages were not entirely recent, for in the interstitial substance and in some of the vesicles large pigment-containing cells could be seen.

Two series of changes might reasonably be expected to occur in connection with a lesion such as has been described. Either the epithelium of the ruptured follicles might undergo atrophy, the effused blood might become absorbed, and, through simple inflammatory and reparative processes, the lesion be eventually represented by a small mass of fibroid cicatricial tissue containing more or less blood pigment. In other regions of the specimen last described patches of