

left varied in different animals. One bitch which had lost two-thirds of her total thyroid became pregnant by a healthy male, and all her whelps had enormous goitres, a fact which has also been observed by Edmunds.

Histological examination of the portion remaining shows a sequence of changes remarkably like those occurring in exophthalmic goitre, namely, distension and irregular shape of the vesicles, with watery fluid instead of colloid, and columnar epithelium instead of cubical.

#### REMOVAL OF PARATHYROIDS.

The variation in the symptom-complex following on thyroidectomy, and the variability of response to thyroid feeding, both depend on any coincident injury to the parathyroid glands. For many years these glands passed unrecognized, and most of the effects attributed above to removal of the thyroid are as a matter of fact due to loss of the parathyroids. These are two pairs of small glands lying behind the lateral lobes of the thyroid close to the trachea, not easily distinguishable from the thyroid except by the microscope, when they are seen to consist of columns of polygonal cells with no regular arrangement into acini, and secreting no colloid. One pair was discovered by Sandstrom in 1880, and the functions were investigated by Gley in 1892; but the second pair was not recognized till Köhn's monograph appeared in 1895. A number of physiologists have since described the effects of removal (Vassali and Generali, Edmunds, Moussu).