

Summary.

A case of generalised osteomata was observed in a hen, some two years of age, in which five tumours were found. Four were in connection with joints and one on the shaft of one of the long bones. All apparently were making a gradual growth.

Areas examined macroscopically and microscopically showed evidence of expansion or enlargement.

The areas infiltrated with osteoblasts and the mature bone cells, together with transitional stages, indicated a gradual conversion of the new growths into compact bone.

The scarcity of cartilage cells, the apparent absence of hyaline

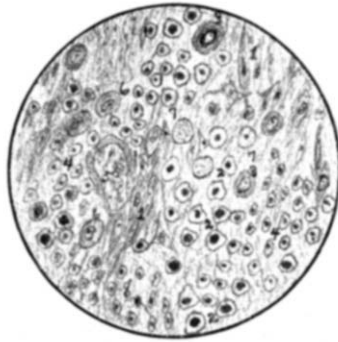


FIG. 2.

A composite drawing showing: 1, fibroblasts; 2, osteoblasts; 3, osteoblast becoming a bone cell; 4, bone cells; 5, blood vessel; 6, cartilage cells; 7, bone matrix; 8, bone.

cartilage, and the presence of fibroblasts and connective tissue indicated that these tumours perhaps originated from connective tissue, as in the periosteal type.

DUPLICATION OF THE GALL-BLADDER IN A SHEEP.

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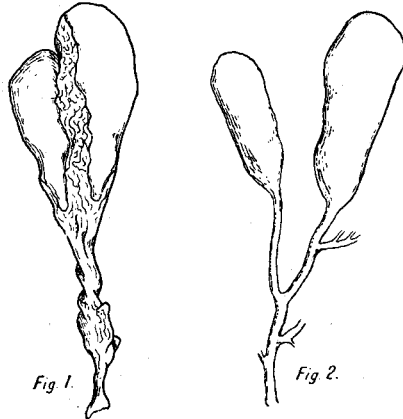
THE gall bladder is subject to many minor malformations, such as constriction and more or less distinct bifidity. The case recorded here is, however, of a rather more advanced type, involving complete duplication of the vesicle.

The specimen removed from the liver of a sheep came into my possession in the condition shown in fig. 1. It consisted of two gall-filled vesicles with their ducts. The bladders were of unequal size and loosely attached together. In fig. 2 the bladders and ducts have been dissected out and the extent of the duplication is made clear. Each bladder has its own duct—in either case more than 1 inch long; that from the larger vesicle received one or more hepatic ducts, and a common duct was formed to the duodenum. Owing to the way in which the specimen had been removed it was difficult to

make out the hepatic ducts; such as were apparent have been sketched.

The subject does not call for much discussion, but I believe complete duplication is rare.

The subject is thus referred to in Quain's *Anatomy*: "Sometimes the gall-bladder is irregular in form, or is constricted across the



middle, or, but much more rarely, is partially divided in a longitudinal direction."

The origin of such a malformation must, of course, be sought in a bifidity of the primitive bud from which the gall-bladder arises.

JOHNE'S DISEASE.

THE REACTIONS OF ANIMALS TO "JOHNIN."

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By the term "Johnin," as used in this article, is meant a material analogous to tuberculin but prepared from the bacilli of Johne's disease.

An important part of the investigations which have been carried on in the Research Institute with regard to that disease has been concerned with the questions (1) whether infected animals would react to such a preparation, as tuberculous animals do to tuberculin, and (2) whether the reaction was in like degree specific, that is to say, not exhibited by healthy subjects, or by those free from Johne's disease but affected with tuberculosis.