Research Laboratory, furniture beetles are more prevalent than is often believed. Dr. Fisher pointed out that war-time furniture storage is likely to spread the trouble even further. Control of insects in wood is exceedingly difficult, but prevention of attack is much more feasible as a result of the researches on the physiology and dietetics of the pests. For example, it has been found that the so-called 'dry' wood-borer, *Anobium*, really needs a fairly high moisture content to flourish. Also the attack of *Lyctus* beetles can be prevented by elimination of starch.

Mr. Fox Wilson dealt with two pests less harmful but of considerable importance as nuisances. It is not generally realized that the invasion of houses by earwigs may actually render them uninhabitable. The reasons for such invading swarms are obscure, but they often occur on new building sites, and various connecting factors have been suggested.

The ants which trouble us in our houses and institutions may either be tropical species which have become 'domesticated' or invaders from the garden.

Both ants and earwigs can best be controlled by baiting, but whereas an arsenic-syrup bait is most effective against ants, the earwigs are most attracted by a bran-fluosilicate-fish-oil mixture.

¹ Johnson, C. G., *J. Hygiene*, **61**, 345 (1942).

cerned with the development of a single organ, the lens of the eye. Spemann entered both these fields, with his famous constriction experiments on the early cleavage stages of Triton, and his early grafting experiments on the optic rudiments of the same form. By 1918 he was able to bring forward his concept of the 'organization-centre', and demonstrate that the morphogenesis of the embryo, in its main outlines as well as in its details, is the result of interactions between different regions of tissue. For the next fourteen years, Spemann was the leader of a school, which rapidly filled in the outlines of what had come to be called 'embryonic induction'; their work was summarized in his Croonian Lecture of 1927. In 1932 he participated in the next major step forward, the beginning of the physico-chemical investigation of the process.

Although his work was one of the most important influences in the final discredit of vitalism, Spemann was never one of those who hoped that the discovery of the organizer would rapidly enable us to reduce the problem of biological form to a few simple chemical statements. His attitude was, in fact, much more a biological than a physico-chemical one. The extreme caution with which he formed his conclusions, joined with intense concentration on a narrow field favourable for an attack on fundamental problems, enabled him to lay a foundation on which the science of experimental morphogenesis can be securely based.

C. H. WADDINGTON.

OBITUARIES

Prof. Hans Spemann

THE death of Hans Spemann, of Freiburg-im-Breisgau, at the end of 1941, brings to a close a lifetime of work which threw a new and most revealing light on the great problem of the development of biological form.

Spemann was born in 1869. After leaving school he spent a few years in his father's business and in the performance of his military service, before beginning the study of medicine at the Universities of Heidelberg, Munich and Würzburg. He held his first position as a lecturer at the last-named University, passing from there to become professor of zoology at Rostock in 1908. During the War of 1914-18 he held a chair at the Kaiser Wilhelm Institute in Berlin, and in 1919 he was called to the professorship at Freiburg-im-Breisgau, which he held until his retirement in 1935, the year in which he was awarded a Nobel Prize for medicine.

Spemann's work did not cover a wide range of topics. His second paper, published in 1898, dealt with the development of the Amphibia; and this remained his field of investigation throughout his whole life. His great achievement was to bring into fruitful co-ordination the two, in themselves inconclusive, lines of attack which had been opened up in the casual investigation of development. On one hand, the studies of Roux and Driesch on the developmental potentialities of the first-formed blastomeres of the egg, although they tackled the major problems of the formation of the animal as a whole, seemed to lead only to a sterile paradox. On the other hand, Roux's notion of dependent differentiation appeared to suggest a plausible causal mechanism for development, but the one known example of it, and that a somewhat doubtful one, was con-

The Right Hon. Lord Salvesen, P.C., K.C.

EDWARD THEODORE SALVESEN brought to his profession and to his hobbies the vigour and enthusiasm bequeathed him by his Norwegian forebears. His profession carried him, by way of the University of Edinburgh, the Scots Bar and a sheriffdom, to a judgeship in the Court of Session of Scotland. His hobbies and his public interests were too many to mention, but he accomplished much for the veterans of the War of 1914-18 (in which his three sons were killed), he helped to reform the divorce law of Scotland, and he was a strong advocate of public-house reform. But his lasting memorial is the Scottish Zoological Park.

It was largely owing to his advocacy and to his energetic leadership as president of the Zoological Society of Scotland, founded in 1909 for the establishment of a national zoological park, the advancement of zoology, and the study of the native animals of Scotland, that the Park was opened in 1913. At that time it was a new venture in British zoos. The site of seventy-four acres with its mansion-house, gardens, fine trees and abundant natural exposures of rock invited broad and picturesque treatment, and the late Sir Patrick Geddes and Mr. F. C. Mears prepared the scheme for laying out the grounds.

Developments, carried out step by step under Lord Salvesen's guidance, as the funds of the Society warranted, have resulted in a park of great attraction, with spacious paddocks, and rocky dens in which the animals live and are seen to the best advantage.

Lord Salvesen presented to the Society its acclimatization house adapted for some less hardy creatures, and was instrumental in obtaining from the Carnegie Trustees the grant which built the Carnegie Aquarium. His and his brother's connexion with the whaling industry in South Georgia enabled them to bring