

of Wurzbach's dictionary¹⁰, declares in his "Meteoritenkunde"¹¹ that the discoverer of the etching-figures himself usually wrote "Widmanstätten" and therefore this form ought to be chosen. In view of Dr. Spencer's publication, I asked friends in Vienna and Graz to inquire anew about the form of the name personally used by the scientist. They went rather fully into the question and completely confirmed Wurzbach's and Cohen's statement. Official documents are still preserved which mention Alois von Widmanstätten as the owner of a house in Graz, as the inventor of a balance, etc.

Keepers of meteorite collections may be glad to learn that there is, therefore, no reason to alter the hundreds of labels bearing the name Widmanstätten.

F. A. PANETH.

Imperial College of Science and Technology,
London, S.W.7.

August 5.

¹ Stenz, E., *NATURE*, **140**, 113 (1937).

² Galle, J. G., *Abhandl. d. Schlesischen Gesell. vaterländ. Cultur*, p. 79 (Breslau, 1868).

³ Wülfing, E. A., "Die Meteoriten in Sammlungen", p. 287 (Tübingen, 1897).

⁴ vom Rath, G., "Ueber die Meteoriten von Pultusk im Königreich Polen", *Festschrift Gesell. für Naturkunde*, p. 135 (Bonn, 1868).

⁵ "Die Meteoriten des Dr. Jos. Melion", p. 7 (Brünn, 1889).

⁶ Brezina, A., "Die Meteoriten vor und nach ihrer Ankunft auf die Erde", p. 22 (Wien, 1893).

⁷ "Notice sur la météorite tombée le 30 Janvier 1868 aux environs de la ville de Pultusk, publiée par la Haute Ecole de Varsovie (1868)"; Meunier, St., "Météorites", p. 491 (Paris, 1884).

⁸ Spencer, L. J., *Mineral. Mag.*, **23**, 329 (1933).

⁹ For example, Heide, F., "Kleine Meteoritenkunde", *passim* (Berlin, 1934).

¹⁰ von Wurzbach, C., "Biograph. Lexikon d. Kaiserthums Österreich", p. 258 (Wien, 1887).

¹¹ Cohen, E., "Meteoritenkunde", I, p. 40 (Stuttgart, 1894).

Response of the Pigeon Crop Gland to Prolactin: Inhibition by Œstradiol Monobenzoate

Riddle and Braucher¹ showed that injections of the hypophyseal lactogenic hormone, prolactin, discovered by Stricker and Grueter², will cause growth of the crop glands of the pigeon. In view of the fact that established lactation is inhibited by administration of Œstrogenic hormones^{3,4,5}, it is of considerable interest to determine whether or not simultaneous administration of Œstrogens will affect the response of the pigeon crop to prolactin injections.

Two groups of 24 young pigeons of 'homer' type were used. Each bird was given six daily subcutaneous injections of 1 ml. of a solution containing 5 mgm. of prolactin. For the gift of this material, which was prepared by the method of Bates and Riddle⁶, omitting the final purification, we are indebted to Dr. F. G. Young. In addition, on the fifth day before the commencement of the prolactin injections one group was given injections of 1 ml. progynon B oleosum forte (kindly supplied by Dr. H. Neumann of Messrs. Schering, Ltd.) containing the equivalent of 5 mgm. Œstradiol monobenzoate in sesame oil, followed by similar injections on the day of commencement of prolactin treatment. The other (control) group received equivalent injections of sesame oil alone. Twenty-four hours after the last injection the birds were killed and weighed. The sex of each was determined and the crop glands dissected out, fixed in Bouin's fluid and weighed from 70 per cent alcohol after pressing in muslin. The mean weights of the crops in mgm. per 100 gm. of body weight at killing are given in the accompanying table, the results for the two sexes being given separately. The crop gland region in the normal

pigeon usually weighs about 300 mgm. per 100 gm. body weight.

	Male		Female	
	No. of birds	Mean crop weight in mgm. per 100 gm. body weight	No. of birds	Mean crop weight in mgm. per 100 gm. body weight
Œstradiol monobenzoate	9	680 (±67)	15	830 (±50)
Sesame oil	7	1490 (±103)	17	1080 (±47)

The figures given in parentheses are probable errors of the means against which they are entered.

In both sexes administration of Œstradiol monobenzoate caused a marked inhibition of the crop gland response, the mean inhibition amounting to about 54 per cent in the males ($P = 1 : 2,500$)* and about 23 per cent in the females ($P =$ about 1 : 40).

This difference between the sexes in the degree of inhibition (sex-difference statistically significant at $P = 1 : 140$) is for the most part accounted for by the fact that in this experiment the reaction of the control birds to prolactin + sesame oil was significantly greater in males than in females ($P = 1 : 180$), while in the group receiving Œstradiol monobenzoate the difference between the responses of the two sexes was negligible.

It is noteworthy that the group receiving Œstradiol monobenzoate lost on the average 7.7 per cent of body weight in the course of the experiment ($P = 1 : 90$), although the control group gained on the average 6.7 per cent ($P = 1 : 210$). In both groups the mean change in body weight was somewhat greater in the females than in the males.

Since the prolactin response of hypophysectomized pigeons appears to be either nil⁷ or considerably less than that of intact birds⁸ it is possible that Œstradiol monobenzoate inhibits the response by way of the pituitary.

S. J. FOLLEY.

The National Institute for
Research in Dairying,

PAUL WHITE.

Department of Physics,
University of Reading.
Aug. 3.

* P = Probability that an effect at least as great as the observed effect should have arisen purely as an accident of random sampling. See Fisher, R. A., "Statistical Methods for Research Workers" (1934), Edinburgh and London, chap. v, *passim*.

¹ Riddle, O., and Braucher, P. F., *Amer. J. Physiol.*, **97**, 617 (1931).

² Stricker, P., and Grueter, F., *C.R. Soc. Biol. Paris*, **99**, 1978 (1928).

³ Jongh, S. E. de, *Acta brev. neerl. Physiol.*, **3**, 52 (1933).

⁴ Robson, J. M., *Quart. J. Exp. Physiol.*, **24**, 337 (1935).

⁵ Folley, S. J., *Biochem. J.*, **30**, 2262 (1936).

⁶ Bates, R. W., and Riddle, O., *J. Pharm. and Exp. Therap.*, **55**, 365 (1935).

⁷ Gomez, E. T., and Turner, C. W., *Proc. Soc. Exp. Biol. N.Y.*, **35**, 59 (1936).

⁸ Schooley, J. P., Riddle, O., and Bates, R. W., *Proc. Soc. Exp. Biol. N.Y.*, **36**, 408 (1937).

Some Interrelations between Bivalve Spatfalls, Hydrography and Fisheries

IN a study of the intensity and distribution of spatfalls of *Cardium edule* on the Cark sands in Morecambe Bay, it was found that the heaviest falls occur (a) where tidal streams meet—such localities being described locally as 'meetings'—and (b) where banks shelter a stretch of ground from prevailing winds. The heaviest falls occur at about the half-tide level.

The fall of spat is contemporaneous with considerable depositions of fine sand intermingled with some