some, ending in a broad flat and somewhat stiff tendon of insertion 2.74 centimeters long.

The slender round tendon of origin passes along the line of origin of *M. sartorius* on the crest of the ilium. The fleshy part and one centimeter of the flat tendon lie free amongst the layers of loose fascia so common in this region. Fleshy origin fibers of *M. gracilis* arise along the posterior 1.7 centimeters of the flat tendon, and for 1.2 centimeters of this from the tendon alone, the origin then shifting to the pubis. The flat tendon inserts on the anterior and ventral border of the pubis immediately lateral to the pubic symphysis. The position of this singular muscle suggests either a modified or abnormal Poupart's ligament.

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THE EFFECT OF PROLACTIN ON THE ESTRUS CYCLE OF NON-PAROUS MICE

THE mammary milk secretion is governed by a specific pituitary hormone which is independent of the growth- and gonad-stimulating hormone of the pituitary. It was first isolated by Riddle, Bates and Dykshorn[1] and named prolactin. Prolactin does not affect the mammary glands of normal adult guinea pigs or rabbits, unless they have been previously prepared for about three weeks with theelin and progestin. Moreover, it acts when injected in similarly prepared male or female animals that have been castrated or hypophysectomized. Crew and Miskaia[2] noted that the length of the lactation interval (from the estrum after parturition to the estrum at the close of lactation) extends for from 20 to 25 days. The question arises whether this delay in estrum is caused by the corpus luteum or the pituitary hormone prolactin. If this former were true, the injection of prolactin should not influence the estrus cycle in the non-parous animal.

Accordingly, the estrus cycle of 30 mature young female mice was studied over a period of one month. At the end of that time, 14 mice, whose cycles had been absolutely regular, were selected. These 14 mice were injected subcutaneously with one bird unit of prolactin[3] daily, over a period of 30 days. Daily examinations showed that no changes occurred in the mammary glands as the result of the prolactin. Twenty-four hours after the prolactin injections were begun, the estrum became suspended. Daily vaginal smears from all mice showed no estrum during the following 20 to 25 days. It reappeared after this period of 20 to 25 days in spite of further continued injections of prolactin, and was markedly prolonged, continuing from 4 to 8 days. During these days the vaginal smears showed only non-nucleated epithelial cells.

These observations may be summarized: In the mature, nonparous mouse prolactin suspends the estrus cycle for about three weeks, after which a prolonged estrum sets in lasting from 4 to 8 days in spite of further continued injections. It would appear from this observation that the suspension of the estrus cycle during lactation is caused by the pituitary hormone prolactin, rather than a hormone from the corpora lutea.

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SCIENTIFIC BOOKS

FARADAY

Faraday's Diary. Edited by THOMAS MARTIN, M.Sc., and published by order of the Managers of the Royal Institution of Great Britain, with a Foreword by Sir William H. Bragg, O.M., K.B.E., F.R.S. G. Bell and Sons, Ltd., London. Vols. III, IV, V.

VOLUMES I and II of this great publication were reviewed in SCIENCE of January 13, 1933. Two more volumes are to follow. The books will be sold only in sets, of which 750 copies will be issued. The price of the set is twelve guineas.

The volumes now in hand show the same careful transcribing and editing as the earlier ones. They are beautifully printed and bound. The editor, the managers of the Royal Institution and the publishers are to be again congratulated on the further progress of this noble memorial.

In Volume III Faraday records the progress of his research on electrostatic induction, the earlier part of which was recorded in the previous volume. He was particularly interested in proving that induction could act along curved lines, similar to the curved lines of magnetic force. When he was able to show this experimentally he was led to the belief that these lines of force were evidence of a polarized condition of the medium between the two conductors. He was then led to think that some differences in inductive power might be shown if different media were used to transmit the inductions and so to the discovery

[1] *Amer. Jour. Phys.*, 105: 190, 1933.
[2] Allen, "Sex and Internal Secretion."
[3] The prolactin used was furnished by the Research Department of E. R. Squibb and Sons.