

## Anatomical Studies, No. 57.

### An Abnormally Placed Vulva in a Heifer.

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THANKS TO Mr. L. Herholdt of "Garsfontein", Pretoria, a red heifer (D.O.B. 6278), approximately four years of age, was supplied to the Department of Anatomy, Onderstepoort Veterinary Laboratories. The history was that although the animal had shown oestrus, it had never been served by a bull!

The reason for non-service was immediately apparent, for the vulva, instead of being situated just below the anus, was placed in the middle line, 3.5 cm.\* above the posterior pair of teats, and 41 cm. below the anal orifice. Otherwise the heifer had a feminine appearance which, therefore, did not suggest feminine false hermaphroditism. The vulva, 3 cm. in depth, was not typically bovine, but resembled that of a sow except that it was surrounded by long hairs. The mammary glands appeared normal.

Examination of the internal genitalia revealed two striking anomalies as will be described below. The *ovaries*, although smaller than usual, showed corpora lutea in various stages of retrogression. The left gland measured 2.2 x 1.5 cm., while the right had a diameter of 0.5 cm. The *oviducts*, apart from their somewhat shorter length (i.e. 17 cm.), appeared normal. The *cornua uteri*, with a length of 25 cm., with the *corpus* and *vervix*, 4 cm. and 4.3 cm. in length respectively, showed nothing unusual. The *vagina*, too, 15.5 cm. long, appeared normal. The "*vestibulum vaginae*", however, was extraordinary, being 27.8 cm. in length, vertical in direction, and suggestive of the pars pelvina of the male urethra. Closely associated with the "*vestibulum vaginae*", in fact, lying on either side and stretching from the terminal part of the rectum to the vulva, was a strong muscular band resembling the *M. retractor penis*.

\* The animal was slaughtered on 25th June, 1934, the flesh being used as food, and the genitalia being placed in formalin for further examination. The figures therefore refer to the preserved material.

The suburethral diverticulum was not present and the clitoris was small.

Embryologically the anomaly is bound up primarily with the non-migration caudally of the primitive labioscrotal swellings.

The specimen is preserved in the Teratological Collection, Onderstepoort, under No. 15371.

