

ture or upwards be used as an illuminator, the markings of Diatomaceæ will be scarcely distinguishable, with any object-glass; the glare of the central rays overpowering the effects of structure on those that are more oblique.

“On the Structure and Functions of the Rostellum in *Listera ovata*.” By J. D. Hooker, M.D., F.R.S.

The author first gives an account of the form and structure of the rostellum of *Listera ovata*, and its relation and position to the anther and stigma. He finds that the rostellum is divided by parallel septa (at right angles to the plane of that organ) into a series of longitudinally elongated loculi, which gradually taper from the base upwards, and terminate at two opaque cellular spots, one on each side of the apex of the rostellum, towards which latter the loculi also converge. When the flower is fully expanded, these loculi are distended with a viscid grumous fluid, full of chlorophyll granules. Their external walls, and the septa dividing them, are formed of a delicate, transparent tissue, which is cellular at the base and apex of the rostellum only.

Their grumous contents, when examined at the earliest period of development, present the appearance of opaque club-shaped compressed bodies, with areolated surfaces; a form and appearance that may be restored at a later period by coagulating with alcohol.

At the period of impregnation the slightest irritation of the rostellum causes the sudden and forcible discharge of the contents of these loculi (through the rupture of the cellular tissue at the apex of the rostellum) and its protrusion in the form of two viscid glands, which coalesce into one, after which the rostellum rapidly collapses and contracts.

The pollen-masses, when freed from the anther-case, fall naturally upon the rostellum; they are retained there by their viscid gland-like contents, and, breaking up, the pollen-grains become (by the contraction of the rostellum) applied to the subjacent stigmatic surface.

The author adds remarks on the structure of the rostellum in allied genera of Orchideæ, and indicates some of the more important morphological changes to which that organ is subjected, in connection with the development of various appendages to the column and pollen in the same natural family.

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1. NOTE ON THE GOUWA (*Bos frontalis*) OF WESTERN INDIA, CALLED “THE BISON” BY ENGLISH RESIDENTS.

BY CAPT. J. WYCLIFFE THOMPSON.

Eliot Vale, Blackheath, Kent,
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THE size of the beast I cannot state with any exactness, having had no means of judging beyond forming an estimate by the eye of the