

NO. II.

*Description of a new species of Sarracenia. By Thomas Nuttall.
Read May 7th, 1830.*

AMONG the more curious new species of plants which I have lately detected, in a pedestrian tour of twelve hundred miles through the states of South Carolina, Georgia, Alabama and Florida, is the following:

SARRACENIA *CALCEOLATA.

Pumila; ascidiis reclinatis, tubo ventricoso, operculo subgloboso-inflato carinato, gine intruso-inflexo, ore subrotundo parvo.

Description. A very distinct and dwarf species, about the relative size of *S. adunca*, but lower. The autumnal ascidia are furnished with broad leafy ridges running along the upper edge of the tube; these appendages become much narrower in the vernal ones, but their very similar character throughout each section of the genus renders their specific employ wholly useless: the ordinary ascidia are short and reclinate, with a ventricose tube scarcely ever exceeding three or four inches in length. The operculum (unlike all the other species) is confluent with the tube and of a singular, inflated, globular form, *carinate* above, bluntly pointed and uncinately curved, with the edges broadly inflected, so as to leave only a circular opening, as in the lip of the *Cypridium*, which this appendage indeed wholly resembles; its colour is usually a fine purple-red, varied and reticulated with varioloid diaphanous whitish meshes somewhat similar to those of the operculum

of *S. variolaris*; the inner side of the tube is almost throughout lined with long coarse reflected hairs, which must thus render it a formidable trap to all winged insects. Interfoliar stipules small and ovate. Scape a little longer than the ascidium. Flowers nearly the size of those of *S. purpurea*, the petals lingulate-oblong, dark blood-red; twice the length of the calyx; the angles of the peltate stigma deeply emarginate.

Habitat. West Florida, near Tallahassee (ten miles west, rare). Very abundant in Tatnal county, Georgia, particularly within a few miles of the new court-house; growing with *S. variolaris* and *S. flava*, in the drier sphagnous marshes, by the margins of the "Bay-galls" or ponds, in the usual sandy pine-forests. Flowering time, March to April:—confined to about the latitude of thirty to thirty-two degrees.

Observation 1st. The natural affinity of this very singular North American genus continues to demand investigation. After many fruitless attempts on my own part, I have at length had the satisfaction of observing the germination of *S. purpurea* in the collection of Mr Hibbert of Philadelphia, who very opportunely called my attention to the subject; this species, then, has perfectly distinct, long, *linear cotyledons*; probably, from their appearance, folded and involute within the seed. At present, we cannot but consider the *Sarracenia* as the type of a distinct order *Sarraceniaceæ*, bearing some remote affinity perhaps with the *Nympheaceæ*. Most of the species are confined to the more temperate regions south of Virginia.

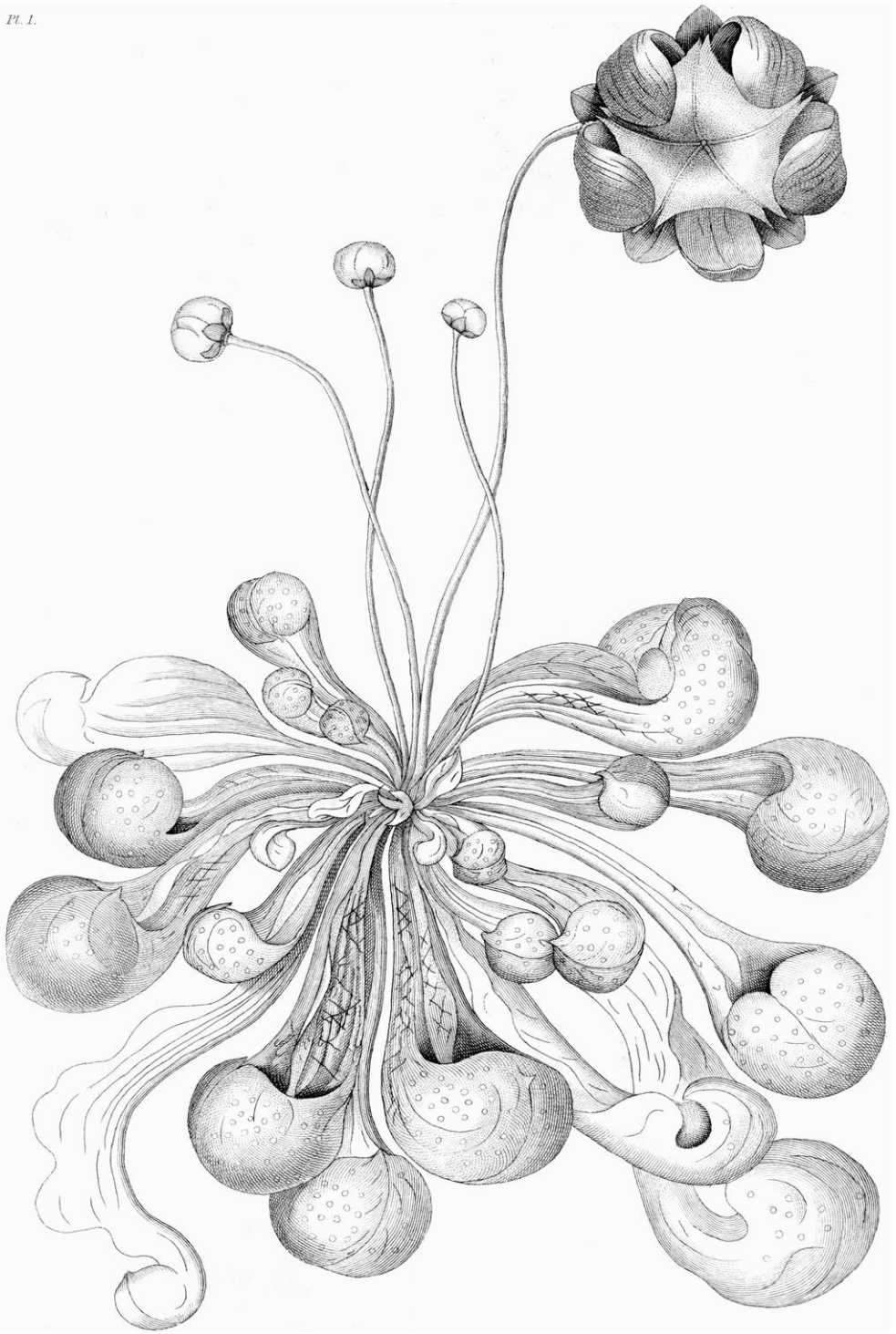
Observation 2d. The genus now presents *three* sections in the form of the ascidia.

In the first, the ascidia are erect and tubular, in the form of trumpets, with the operculum *free* and reflected. In this are included *S. flava* and *S. Catesbyana*, lately restored by Mr Elliott. In these the flowers are yellow*.

* To the first section (with *S. flava* and *S. Catesbyana*) may also be added, to me an obscure species, *S. rubra* of Walter, "foliis erectis tubulatis, *valva plana* erecta," which, as Mr Hooker remarks in his Exotic Flora, Vol. I. p. 14, cannot certainly be the *S. psittacina* of Micheaux, (a species with which I am familiar from the very places quoted by the discoverer), in which the operculum is *always* strongly recurved as well as arched. The figure given by Mr Hooker, t. 13, also perfectly accords with Walter's character; the ascidium in fact being erect, and very similar to that of *S. flava*, except in the greater dilatation of the summit of the tube. In this species the flower is a deep red.

In the second section, the ascidia are ventricose and reclinate, with the operculum *free* and arched over the aperture of the tube. The relative order of this section to the preceding will be *S. adunca*, somewhat allied to the preceding in the almost erect tube;—then *S. purpurea*, of which, near Northampton, Massachusetts, there exists a yellow-flowered variety;—*S. variolaris*, with the operculum also strongly arched, and marked with diaphanous reticular meshes, the flowers yellow; in the two other species they are a dark brownish red.

Our present new species, *S. calceolata*, will form a third section, characterized by producing reclinate ventricose ascidia, having the operculum *confluent* with the tube, and with the margin reflected inwards, so as to leave only a circular foramen passing into the tube; it is also like *S. variolaris*, marked with diaphanous discoloured meshes. The flower is deep red. This is the most southern species yet discovered, and confined apparently to about the parallel of the thirtieth degree.



J. Whittield Del.

SARRACENIA CALCEOLATA.