



The Fish-catching Bladderwort (*Utricularia vulgaris*).

140.—THE FISH-EATING UTRICULARIA, OR BLADDERWORT.**By Prof. H. N. MOSELEY.**

[From a letter to Prof. S. F. Baird.]

I felt sure that the specimen of *Utricularia** would be of much interest to you. I am sorry that probably I cannot procure for you any more specimens with fish entrapped this year. Mr. Simmis was unfortunately taken ill a few days after he brought his discovery to me and has been unable to set about preparing specimens since. The season for spawing of the common river fishes was already far advanced when the discovery was made, and I found it before I expected too late to get a satisfactory supply, and also have found the matter not so simple as I at first supposed. I found that a certain residual number of a certain batch of young fish remained weeks with the weed untrapped, either because the weed is only able to catch them when the weather is warm, or because they learn by experience (impossible), or because the plant soon loses its activity in confinement (?). Other experiments seem to show that possibly one certain species of young fish get caught. The matter evidently requires a great deal of investigation. I have only very few specimens, such as I sent you, and I intend to exhibit these at Montreal and possibly at Philadelphia, and to read a short paper on the matter. I can send you plenty of our living *Utricularia vulgaris* should you care to have it. I see Asa Gray in his manual refers to VAR. *Americana* as most common in the United States, but no doubt the two varieties will act alike as to young fish. You will no doubt at once try the plant with young carp. I have not found any case of a young fish already trapped by any specimen of the *Utricularia* taken from the pond in which it grows here, although there are many fish in the pond.

14 ST. GILES, OXFORD, June 20, 1884.

141.—MEMORANDUM OF SOME RESULTS OF FISH-CULTURE ALREADY ATTAINED.**By MARSHALL McDONALD.**

CARP.—The carp wherever planted under favorable conditions and receiving reasonable care and attention have grown, bred, and multi-

*The specimen has been figured under the direction of Mr. John A. Ryder (see plate I). Three of the figures are original; one is copied.—C. W. S.

EXPLANATION OF THE PLATE.—*Fig. 1.* *Utricularia vulgaris*, nat. size; plant in flower. (From Maout and Decaisne.) *Fig. 2.* A single cluster of leaves enlarged twice, showing the little bladders in position, one of which has seized a young fish by the head. *Fig. 3.* A single bladder enlarged sixteen times, showing the two branched filaments at the open end. *Fig. 4.* A bladder enlarged seven times; a young fish has been seized by the tail.