## BOTANICAL CORRESPONDENCE, NOTES AND NEWS FOR AMATEURS, I.

Conducted by W. A. KELLERMAN.

*Item 1.* It has been asked how many species of plants occur in Ohio. Only a guess can at present be made. In the Catalogue of Ohio Plants, by Kellerman and Werner, prepared in 1893, there were listed 1,925 Spermatophytes, 68 Pteridophytes, 335 Bryophytes, and 1,400 Thallephytes. The Fourth Catalogue, by the writer, published in 1899, gave 2,025 species of Pteridophytes and Spermatophytes. While many additions to the previous list were included, very many species formerly

reported were excluded because unauthenticated by herbarium specimens, and others were undoubtedly extra-limital for Ohio. Two Annual Supplements to this catalogue have been issued, bringing the number of species of the vascular plants, nearly all authenticated, up to about 2,150. The mosses, the higher fungi and the lichens have been listed with some degree of fullness, but most of the other lower plants have been very incompletely placed on record, though large collections, only partially worked up as yet, are now in the herbarium of the State University.

*Item 2.* Miss Ruth E. Brockett, of Rio Grande, Gallia County, Ohio, has found the Showy Skullcap, Scutellaria serrata Andr., previously unreported for this State. The distribution, as given in Britton's Flora, is New York and Pennsylvania to North Carolina, Illinois and Kentucky. In the Rio Grande region many interesting or new plants for the Ohio list have hitherto been detected by Miss Brockett, as the Fringe Tree (Chionanthus virginica), the Purplish Buckeye (Aesculus octandra hybrida), and others too numerous to mention.

*Item 3.* An interesting and suggestive study has been published by Herman Dingler (Muenchen) on the organs for wind-dispersal (flug-organe) in the Vegetable Kingdom. The title of the book is "Ein Beitrag zur Physiologie der passiven Bewegungen im Pflanzenreich." After describing fully the mechanics involved, and the methods of investigation, the author enumerates the *Chief Types* of the flight organs as follows (prefixing to the word "flyer" the descriptive words, 1, dust; 2, granule; 3, bubble; 4, hair; 5, pan; 6, umbrella; 7, sail; 8, disk-twist; 9, barrel-twist; 10, plain-twist; 11, screw, and 12, screw-twist):

I. Group.
1. Staubflieger, e. g. Micrococcus, Puffball, Spores of Mosses, Pollen.
2. Körnchenflieger, e. g. Poppy, Species of the Pink Family, Orobanchaceæ.
3. Blasenflieger, e. g. Ironwood (Ostrya), Valerianella, Rhus cotinus.
4. Haarflieger, e. g. many Bromeliaceæ, Pitcairnia, etc.
5. Napfflieger; e. g. Wafer Ash (Ptelea trifoliata), Cochleospermum.
6. Schirmflieger, e. g. the Compositæ, Milkweeds (Asclepiadaceæ), Willows.

II. Group.
7. Segelflieger, e. g. Cross-vine and seeds of other Bignoniaceæ.

III. Group.
8. Scheibendrehflieger, e. g. flattened seeds of the Iris, and Lily families.
9. Walzendrehflieger, e. g. Silver bell (Halesia), Knotweed (Polygonum), etc.
10. Plattendrehflieger, e. g. Tecoma stans. (The Ailanthus type.)

IV. Group.

11. Schraubenflieger, e. g. Maples, genera of Coniferæ, Sapindaceæ, etc.

V. Group.

12. Schraubendrehflieger, e. g. fruit of Liriodendron tulipifera.

*Item 4.* The recent death of Thomas Meehan, horticulturist and botanist, removes from the list of active American workers one whose numerous, accurate and original observations contributed greatly to the advancement of botanical science.