PLATE 99.

1. *Glyceria acutiflora*, lodicules, united into one; ovary, and base of palet; July 2nd, 6 A. M.
2. *Glyceria grandis*, united lodicules, ovary, styles, and base of curious stigmas; July 15th, 5 A. M.
3. *Glyceria canadensis*, ovary, lodicules and base of palet; July 6th, 7 A. M.
4. *Glyceria pallida*, lodicules, ovary and base of palet; July 7th, 4 P. M.
5. *Danthonia spicata*, lodicules, ovary and base of palet; July 2nd, 10 A. M.
6. The same, side view.
7. *Distichlis spicata;* staminate flower; lodicules, base of palet and of the 3 filaments. Aug. 14th (hour not recorded).
8. *Andropogon furcatus*, base of palet, and lodicules embracing the ovary, viewed from above; Aug. 14th, 9 A. M.
9. *Andropogon furcatus*, lodicules, and ovary viewed from the rear or palet-side;
10, 11, and 12. *Panicum capillare*, ovary, lodicules and palet, from different points of view; 10 to 11 A. M.

NOMENCLATORIAL CHANGES REQUIRED BY SOME GRAMINEAE OF THE SEVENTH EDITION OF GRAY'S MANUAL.

(*Continued from page 173.*)

F. TRACY HUBBARD.

PANICUM SCRIBNERIANUM Nash.

Section V, Canon 16, upholds this name when the American Code is followed, but according to Sect. 7, Art. 50 of the "Vienna Code" *P. macrocarpon* Le Conte in Torr. Cat. Pl. N. Y. 91 (1819) which equals *P. latifolium* L. Sp. Pl. 58 (1753) [Cf. Hitchc. & Chase Contr. Nat. Herb. **15** : 314 (1910)] does not render invalid *P. macrocarpon* Torr. Fl. No. & Mid. U. S. 143 (1824), which is the oldest name of the species [cf. Hitchc. & Chase l. c. 283 (1910)]. Consequently *P. Scribnerianum* Nash becomes *P. macrocarpon* Torr.

PANICUM MACROCARPON Torr. Fl. No. & Mid. U. S. 143 (1824) not Le Conte l. c. (1819). Synonymy in part. *P. Scribnerianum* Nash Bull. Torr. Bot. Cl. **22** : 421 (1895); Hitchc. in Gray Man. ed. 7, 115 (1908); Hitchc. & Chase Contr. Nat. Herb. **15** : 283 (1910).

For complete synonymy cf. Hitchc. & Chase l. c.

Tridens R. & S.

The genus *Tridens* of Roemer and Schultes [Syst. Veg. **2** : 34, 599 (1817)] in its commonly accepted sense is antedated by *Tricuspis* Beauv. Agrost. 77, t. 15, fig. 10 (1812). The generic description of *Tricuspis* is fairly good and its identity is unquestionable. It is commonly cited as a synonym of *Tridens* [in fact it is given as a synonym by Roemer and Schultes l. c. 34] when that genus is separated from *Triodia* R. Br. According to the American Code *Tricuspis* Beauv. is untenable on account of the older *Tricuspis* Pers. Syn. **2** : 9 (1807), but by Sect. 7, Art. 50 of the "Vienna Code" *Tricuspis* Pers. which equals *Crinodendron* Molina, Saggio Chile 179 (1782) [a genus of *Elaeocarpaceae*] does not invalidate *Tricuspis* Beauv.

Beauvois after describing his genus cites *Poa coerulescens* Mich. [should be Michx.] and gives his combination *Tricuspis Novaeborocensis* Nob. without description. According to Ind. Kew. **2** pt. 1, 571 (1895) *Poa coerulescens* Michx. ex Kunth is described in Kunth Enum. Pl. **1** : 319 (1833) in syn., but it also occurs in synonymy in Kunth Rev. Gram. **1** : 108 (1829); in both cases under *Uralepis cuprea* Kunth. In Rev. Gram. there is a plate (t. 68) which agrees very fairly with Beauvois' illustration.

Kunth in Enum. Pl. **1** : 319 (1833) among other synonyms of his *Uralepis cuprea* cites *Poa coerulescens* Michx. [upon which Beauvois bases his genus *Tricuspis*]; *P. seslerioides* Michx. Fl. Bor. Am. **1** : 68 (1803); *P. quinquefida* Pursh Fl. **1** : 81 (1814); *Triodea cuprea* Jacq. Eclog. Gram. **2** : 21, t. 16 (1814) and *Tricupis noveboracensis* Beauv. Agrost. 77 (1812) with a question mark.

Triodia cuprea Jacq. is the name used for the first species of *Triodia* by Watson & Coulter in Gray Man. ed. 6, 657 (1890) while in the first edition we find Prof. Gray using *Tricuspis seslerioides* Torr. with the following synonyms: *Poa flava* L., *P. seslerioides* Michx., *P. quinquefida* Pursh and *Windsoria poaeformis* Nutt. *Tricuspis seslerioides* is given as a synonym of *Triodia cuprea* Jacq. in edition six and this in turn is shown to be a synonym of *Tridens flavus* (L.) Hitchc. Rhodora **8** : 210 (1906). This is the first species under *Tridens* in Gray Man. ed. 7, 149 (1908).

This chain of equivalents shows conclusively that the type species of *Tricuspis* Beauv. is unquestionably the same as *Tridens flavus* (L.) Hitchc. and consequently the older *Tricuspis* Beauv. (1812) replaces *Tridens* R. & S. (1817).

TRICUSPIS Beauv. Agrost. 77, t. 15, fig. 10 (1810); Gray Man. 589 (1848) in part, excl. §2 *Triplasis*. *Tridens* R. & S. Syst. Veg. **2** : 34, 599 (1817); Hitchc. in Gray Man. ed. 7, 149 (1908). *Windsoria* Nutt. Gen. No. Am. Pl. **1** : 70 (1818). *Triodia* R. Br. §1 as used by Watson & Coulter in Gray Man. ed. 6, 657 (1890).

TRICUSPIS **flava** (L.) comb. nov. Synonymy in part: *Poa flava* L. Sp. Pl. 68 (1753). *P. seslerioides* Michx. Fl. Bor. Am. **1** : 68 (1803). *Tricuspis novaeborocensis* Beauv. Agrost. 77, t. 15, fig. 10 (1812). *Poa quinquefida* Pursh Fl. **1** : 81 (1814). *Triodia cuprea* Jacq. Eclog. Gram. **2** : 21, t. 16 (1814); Watson & Coulter in Gray Man. ed. 6, 657 (1890). *Tridens quinquefida* R. & S. Syst. Veg. **2** : 599 (1817). *Tricuspis seslerioides* Torr. Fl. No. & Mid. U. S. 118 (1824); Gray Man. 589 (1848). *Tridens flavus* (L.) Hitchc. RHODORA **8** : 210 (1906); Hitchc. in Gray Man. ed. 7, 149, fig. 146 (1908).

TRICUSPIS STRICTA (Nutt.) Gray in Proc. Acad. Sci. Phila. **1862** : 335 (1863). Synonymy in part: *Windsoria stricta* Nutt. in Trans. Am. Phil. Soc. **5** : 147 (1837). *Triodia stricta* Benth ex Vasey Ill. No. Am. Grasses, **1** pt. 2, t. 38 (1891). *Tridens strictus* (Nutt.) Nash in Small Fl. So. E. U. S. 143, 1327 (1903); Hitchc. in Gray Man. ed. 7, 149 (1908).

GLYCERIA TORREYANA (Spreng.) Hitchc.

Since the preparation of his manuscript for the seventh edition of Gray's Manual Prof. Hitchcock has been abroad and has made extensive studies of the types of American grasses. This has thrown new light on a number of species and has made the change of certain names necessary. *G. Torreyana* (Spreng.) Hitchc. is an instance of this. A study of the type specimen of *Panicum melicarium* Michx. Fl. Bor. Am. **1** : 50 (1803) has shown it to be what has commonly been known as *G. elongata* Trin. in Mem. Acad. St. Petersb., ser. 6, **4** pt. 2, 58 (1836) [cf. Hitchc. Contr. Nat. Herb. **12** : 149 (1908)]. *G. elongata* Trin. has been reduced to a synonym of *G. Torreyana* (Spreng.) Hitchc. in RHODORA **8** : 211 (1906). Consequently as Michaux's name is the oldest we must accept it for our species.

GLYCERIA **melicaria** (Michx.) comb. nov. Synonymy in part: *Panicum melicarium* Michx. Fl. Bor. Am. **1** : 50 (1803). *Poa Torreyana* Spreng. Neue Entdeck. **2** : 104 (1821). *Poa elongata* Torr. ex Spreng. l. c. 104 (1821) in syn. *G. elongata* (Torr.) Trin. in Mem. Acad.

St. Petersb., ser. 6, **4** pt. 2 (Gram. Suppl.) 58 (1836); Gray Man. 593 (1848); Watson & Coulter in ed. 6, 667 (1890). *Panicularia elongata* (Torr.) Ktze. Rev. Gen. **2** : 783 (1891). *Glyceria Torreyana* (Spreng.) Hitchc. RHODORA **8** : 211 (1906); Hitchc. in Gray Man. ed. 7, 158 (1908). *Panicularia melicaria* (Michx.) Hitchc. Contr. Nat. Herb. **12** : 149 (1908).

HYSTRIX Moench.

Unfortunately the generic name was changed from *Asprella* Willd. of the sixth edition of the Manual to *Hystrix* Moench in the seventh. While Willdenow was not the oldest authority for the name *Asprella* or *Asperella*, as it should be spelled, his genus stood for the same plants as the older *Asperella* Humb. in Roem. & Usteri Mag. **7** : 5 (1791). According to the American Code *Asperella* Humb. is invalidated by the older *Asprella* Schreb. in L. Gen. Pl. ed. 8, **1** : 45 (1789). *Asprella* Schreb., however, equals *Homalocenchrus* Mieg. in Act. Helv. Phys-Math. **4** : 307 (1760) which in turn is a synonym of *Leersia* Sw. Prodr. 21 (1788). *Leersia* Sw. is one of Harms' list of *nomina conservanda*. Consequently *Asprella* Schreb. does not invalidate *Asperella* Hubm. (Sect. 7, Art. 50 of the "Vienna Code.").

Humboldt goes into a lengthy discussion of *Elymus hystrix* L. Syst. Pl. ed. Reich. **1** : 234 (1779) which is the same as *E. hystrix* L. Sp. Pl. 560 (1753) and points out wherein this species differs from the genus *Elymus* L. He forms his genus correctly and gives a species *A. hystrix* basing it on *Elymus hystrix* L. Syst. Pl. ed. Reich. **1** : 234 (1779). Furthermore he refers to the older *Asprella* Schreb. and states that Schreber informs him that his (Schreber's) genus is a synonym of *Homalocenchrus* Mieg.

ASPERELLA Humb. in Roem. & Usteri Mag. **7** : 5 (1790) not Schreb. l. c. (1789). *Hystrix* Moench Meth. 294 (1794); Hitchc. in Gray Man. ed. 7, 170 (1908). *Asprella* Willd. Enum. Pl. Hort. Berol. 132 (1809); Watson & Coulter in Gray Man. ed. 6, 674 (1890). *Gymnostichum* Schreb. Beschr. Gräs. **3** : 127, t. 47 (1810); Gray Man. ed. 2, 571 (1856); ed. 5, 639 (1867). *Elymus* § *Gymnostichum* Gray Man. 604 (1848). ? *Stenostachys* Turcz. in Bull. Soc. Natural. Mosc. **35** pt. 2, 330 (1862).

ASPERELLA HYSTRIX (L.) Humb. in Roem & Usteri Mag. **7** : 5 (1790). Synonymy in part: *Elymus hystrix* L. Sp. Pl. 560 (1753);

Gray Man. 604 (1848). *Hystrix patula* Moench Meth. 294 (1794); Hitchc. in Gray Man. ed. 7, 170 (1908). *Asprella Hystrix* Willd. Enum. Pl. Hort. Berol. 132 (1809); Watson & Coulter in Gray Man. ed. 6, 674 (1890). *Gymnostichum Hystrix* Schreb. Beschr. Gräs. **3** : 127, t. 47 (1810); Gray Man. ed. 2, 571 (1856); ed. 5, 639 (1867). *Hystrix Hystrix* Millsp. Fl. W. Va. 474 (1892); Nash in Britt. Man. ed. 3, 158 (1907).

CAMBRIDGE, MASSACHUSETTS.

THE INLAND VARIETY OF SPIRAEA TOMENTOSA.

M. L. FERNALD.

IN looking over a package of plants from Wisconsin I was recently impressed with the aspect of a specimen labeled *Spiraea tomentosa* L. In the almost simple and somewhat remote branches of its inflorescence it contrasted with the common form of the species in the Atlantic States, where the branches of the inflorescence are mostly compound, bearing the flowers often in small glomerules so closely crowded as to give the whole thyrsus a very dense appearance. Examination of all the material at hand showed that generally on the Coastal Plain and in the Atlantic States *Spiraea tomentosa* agrees in having the branches of the panicle densely flowered so that it is difficult to see distinctly the individual pedicels; while the material from the Appalachian Mountain system (West Virginia, North Carolina and South Carolina) as well as that from Wisconsin and Minnesota and a single sheet from southeastern Virginia agree in having the flowers less crowded so that the pedicels are distinctly visible and, though in very young material it is naturally difficult to make out this character, it is readily determined in all flowering and fruiting specimens. Another character seems to accompany that of the inflorescence. In all the fruiting material from the Coastal Plain and from the lower levels of the coastal States the follicles are so densely lanate that only in old or weather-beaten specimens can the surfaces of the follicles be seen; but in all the fruiting specimens of the more inland plant, even in inflorescences with the lowest branches still in anthesis, the com-