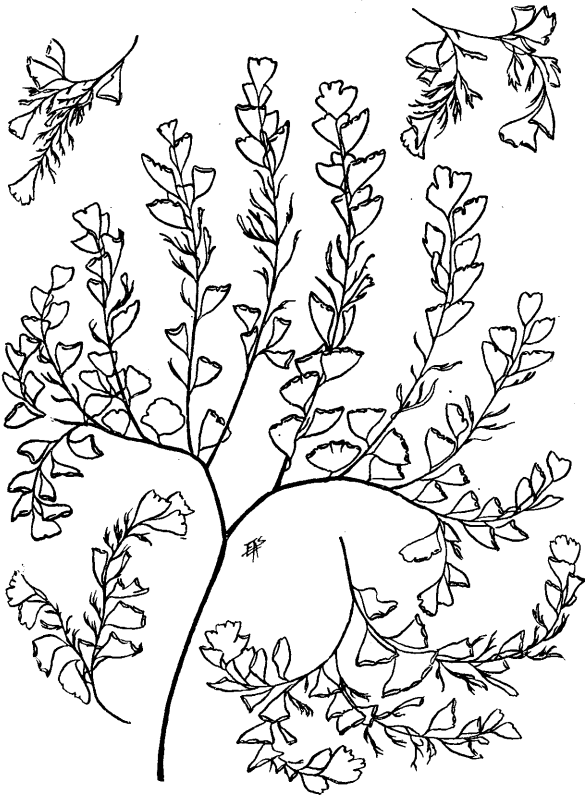


NEW VARIETIES OF COMMON FERNS.

L. S. HOPKINS.

For several years while collecting in the woods of Wayne County, Ohio, I have noted here and there occasional plants of *Adiantum pedatum* L. whose fronds differ very materially from those of the normal type. The difference consists mainly in the normal pinnules being replaced by linear branching pinnules which are partly fertile and partly sterile at their tips. This transposition may occur either at the end or the middle of the pinna, more often the latter.

FIG. 1. *Adiantum pedatum laciniatum* Hopkins.

One of these plants was transplanted to the yard of the McFadden homestead in Wooster where it has been under observation for a period of four years. It seems to thrive in its new home and each year has continued to produce fronds of the type described.

The form is probably a sport but as such it seems to deserve a name as it is likely to occur elsewhere. Therefore, I propose the name:

Adiantum pedatum L. var. *laciniatum* Hopkins var. nov.

Pinnules linear, lanceolate, or oblanceolate, more or less branched; growing with the type; rocky wooded hillsides, Wayne County, O. (Fig. 1).

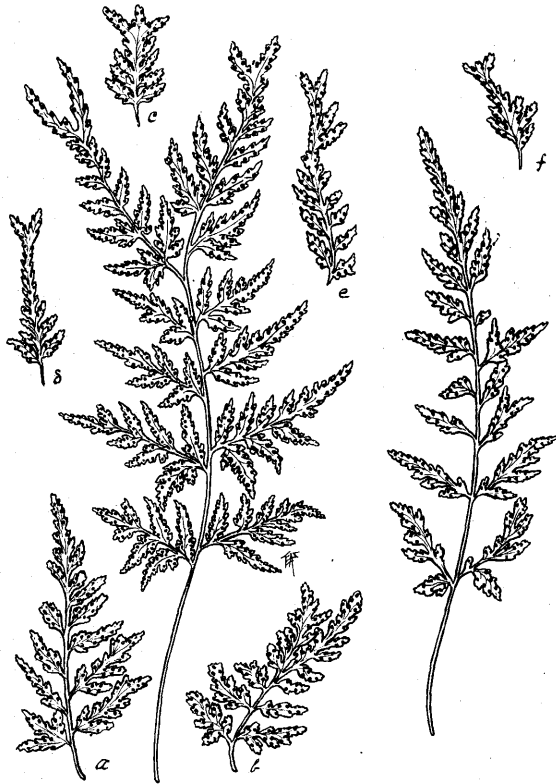


FIG. 2. *Cystopteris fragilis cristata* Hopkins. a, b, c, Apexes of frond. d, e, f, Pinnae.

In the latter part of August, 1909, in company with Mr. R. J. Webb, of Garrettsville, and Mr. A. N. Rood, of Phalanx, I visited Woodworth's Glenn, in Portage County.

A clear rapid flowing stream very suggestive of trout has cut out a small ravine through the sub-carboniferous (?) sandstone. In some places this ravine is quite narrow and the walls almost perpendicular.

The ordinary Fragile Bladder Fern grows in abundance upon these rocks. A hasty glance revealed the fact that it differed very materially from the ordinary form. The apexes of the frond and the tips of the pinnae are branched two to four times, acuminate, obtuse or emarginate.

The plant grows plentifully in the partially shaded ravine and the differences from the normal type of frond seem to warrant the name:

Cystopteris fragilis (L.) Bernh. var. *cristata* Hopkins, var. nov.

Apex of frond branched, the branches often dividing again; obtuse or acuminate, pinnae linear, lanceolate, broadly triangular, acuminate, acute or obtuse often branching into two or more irregular segments; in part on sandstone rocks, Woodworth's Glenn, Portage County, Ohio. (Fig. 2).

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