

To prevent any lost motion, and to push back the razor support when the 4-inch wheel is turned backward, a strong spiral spring may be placed on the bolt so as to extend from the bearing to the nut.

With the above described arrangement of parts, sections can be cut one thirty-two hundredth of an inch thick. By shifting the eccentric so that alternate teeth work, the sections are of double the thickness, etc. But little eccentricity is needed, about one-sixteenth of an inch being sufficient when each tooth of the ratchet is employed.

ON THE ORGANOGONY OF COMPOSITE. By G. W. MARTIN.

ON THE DEVELOPMENT OF THE ARCHEGONIUM AND APICAL GROWTH IN THE STEM OF *TSUGA CANADENSIS* AND *PINUS SYLVESTRIS*. By D. M. MOTTIER.

[ABSTRACT.]

This work consisted in a study of the development of the archegonium and the meristems of the stem. The results obtained in reference to the archegonium differ from those of Strasburger in that the neck of that organ in *Tsuga* consisted of two cells in as many cases as where one only was found, and very rarely three. In *Pinus* the neck of the archegonium was found to be made of two layers of cells, four in each layer, lying one above the other, instead of one layer.

As regards the growth of the stem it is argued that we can not say with certainty that growth proceeds from a single initial cell, as claimed by DuRoi for the Gymnosperms.

PRELIMINARY NOTES ON THE GENUS *HOFFMANSEGGIA*. By E. M. FISHER.

DEVELOPMENT OF THE SPORANGIUM AND APICAL GROWTH OF STEM OF *BOTRYCH-
IUM VIRGINIANUM*. By C. L. HOLTZMAN.