On .4. Manzanita the perithecia are scattered over reddish-brown dead parts of the leaf, mostly the upper half, without any definite spots. The *Alternaria* has conidia composed of globose, brown cells 7-8 *u* diam., joined in toruloid threads, or collected in irregular shaped masses, or forming concatenate conidia 10-30 x 8-20 *u*.

29. Phyllosticta fimbriata, E. & E.

Bull. Torr. Bot. Club 286, 1597.

On leaves of Arbutus Menziesii, Oregon, (Davis.)

Spots amphigenous, rusty brown below, cinereous, purple-margined and slightly raised above, irregular in shape, 2-6 mm. diam. Perithecia epiphyllous, not abundant, gray, 200-300 μ diam., hemispheric-prominent, fringed around the base with straight spreading simple closely septate hyphae 50-75 x 5 μ . Sporules variable in shape, oblong, 3-5 x 1.5, elliptical, 4-6 x 2-3 μ , or globose, 5-6 μ .

30. Phyllosticta Vaccinii, Earle.

Bull. Torr. Bot. Club. 31. 1897.

On living leaves of *Vaccinium arboreum*, Auburn, Ala. (Underwood & Earle.)

Epiphyllous, on brown, irregular, indeterminate spots 1 cm. or more in diameter, perithecia scattered, erumpent, of soft texture, ostiole large $(8-10 \mu)$, size variable, $80-120 \mu$. Spores large, usually ovate, with a large (4μ) spherical gutta near the broader end, about $12 \ge 6 \mu$.

31. Phyllosticta minutissima, E. & E.

Proc. Phil. Acad. 76, 1891.

Exsice, Ell. & Evrht, N. A. F. 1244.

On living leaves of *Acer glabrum*, Nebraska (Webber.)

Spots amphigenous irregular in outline, subcir-

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