178 A M E R I C A N A R B O R - V I T Æ.

concentric circles in stocks of this size, its growth must be extremely slow: I have counted one hundred and seventeen in a log thirteen inches and five lines in diameter. They are more compressed near the centre, as in the Cypress and White Cedar, which is contrary to the arrangement observed in the Oaks, the Beeches, and the Maples.

The foliage is evergreen, numerously ramified, and flattened or spread. The leaves are small, opposite, imbricated scales; when bruised, they diffuse a strong aromatic odor. The sexes are separate upon the same tree. The male flowers are in the form of small cones; to the female blossom succeeds a yellowish fruit about four lines in length, composed of oblong scales, which open through their whole length for the escape of several minute seeds surmounted by a short wing.

In Lower Canada, New Brunswick, Vermont, and the district of Maine, the Arbor-Vitæ is the most multiplied of the resinous trees, after the Black and the Hemlock Spruces. A cool soil seems to be indispensable to its growth. It is never seen on the uplands among the Beeches, the Birches, &c., but is found on the rocky edges of the innumerable rivulets and small lakes which are scattered over these countries, and occupies in great part, or exclusively, swamps from fifty to one hundred acres in extent, some of which are accessible only in the winter, when they are frozen and covered with several feet of snow. It abounds exactly in proportion to the degree of humidity, and in the dryest marshes it is mingled with the Black Spruce, the Hemlock Spruce, the Yellow Birch, the Black Ash, and a few stocks of the White Pine. In all of them, the surface is covered with a bed of sphagnum so thick and surcharged with moisture that the foot sinks half-leg deep while the water rises under its pressure.

The full-grown Arbor-Vitæ is easily distinguished by its shape and foliage. The trunk tapers rapidly from a very large base to a very slender summit, and is laden with branches