will be poled, and the productive powers so overtasked as to enfeeble the root and endanger the prospects of the second crop.

**MANURING**

Is done in the fall, as it thus serves the double purpose of enriching the soil and protecting the plant from the winter frosts, and should on no account be omitted. Young yards require but little if any protection in winter, while old yards and bearing yards on sandy soils require much. It is, however, just as essential to manure the former as the latter. About a bushel of barn manure to the hill on sandy soil is none too much, and as the quality approaches the clay, the quantity can be reduced, till but two shovels full to the hill are required. That the hops may not be smothered, the manuring should not be done until the approach of winter, and should be removed as soon as the frost is out of the ground.

**POLES.**

The winter following the planting of the yard will naturally occur to the prospective grower as the proper time to procure and sharpen his poles. These may be of any kind of timber most easily procurable, though, of course, the more durable and symmetrical, the more valuable. Cedar and tamarack are highest in favor, and pine, poplar and basswood lowest. They should be from sixteen to twenty feet in length, and two and a half to four inches in diameter at the butt, with a true taper to the top, which should be not less than one inch through. They should be trimmed closely to enable the box-tender to remove the vines easily at picking time. The taper of the pole will prevent the vines from slipping when loaded with hops.

The poles being piled convenient to the yard, the work of sharpening commences. Tie three poles securely together within three or four feet from the tops, rear them up and spread their butts in the form of a triangle. Nearly under the centre of these poles place a block, which is commonly a section of a tree, from one and a half to two and a half feet in diameter, and about one and a half feet high. The pole to be sharpened is now reared on end, with the butt on the block and the top in the crotch of the poles. With an ax—a carpenter’s hand ax is preferred by many—the pole is now sharpened to a true taper, beginning about eighteen inches from the butt. It is best to ross the pole a few inches higher up, as it is less liable to rot. As they are sharpened they should be piled ready to scatter on the yard before the ground breaks up in the spring.

**GRUBBING.**

The hop plant has two kinds of roots—the top or “bed roots,” and the lateral roots, or “runners, as they are technically called. These last have eyes, like the potato, and are the roots from which the plant is propagated. They are not thrown out until the second season. The second spring after planting, these must, therefore, be