

to break well and form strong canes, as the tendency is to make the strongest growth at the extremities. This may be overcome by bending the ends of the horizontal canes to the ground and fastening them there until the growth in the eyes at the base has become vigorous. This may be greatly helped by pinching back the two canes several times during the second season's growth, which will cause the lower buds to be very strongly developed.

These upright canes will bear fruit this year, and in the autumn the vine will present the appearance shewn in Figure No. 4.

Subsequent pruning will consist merely in cutting back each of these

alternate canes which were left standing to the top of the trellis are allowed to bear fruit on the lateral branches which will grow from each bud. As many laterals are allowed to grow and bear each one bunch of grapes as the strength of the vine will admit; all the others are rubbed off, and, after the first bunch appears, the lateral is pinched off so as to leave two or three leaves only beyond the bunch of fruit. The next year the upright canes that bore fruit the previous season are cut back to one eye above the horizontal arm, and a new upright trained up to bear fruit the following year. Thus the canes are cut back alternately.

The other system of training is called



Figure No. 4.
THREE-YEAR OLD VINE IN FRUIT.

upright canes to the first strong, plump bud above the horizontal arm, and training up a new fruit-bearing upright cane each year. Some cultivators cut back every other one of these upright canes to within one bud of the arm, and cut the others back merely at the top of the trellis. Those canes which are cut down to within one bud of the arm are not allowed to bear any fruit, but the new shoot is trained upright to the trellis to bear fruit the next year. The

Arbor System. Stout poles are set in each row of vines midway between the vines. To these poles are fastened other and lighter poles, reaching from pole to pole, at such height from the ground as the size of the vines may require; also other light poles reaching across to the poles of the next adjoining row. Upon these horizontal poles light sticks are laid and fastened, forming a sort of lattice over the space between the first and second row, the third