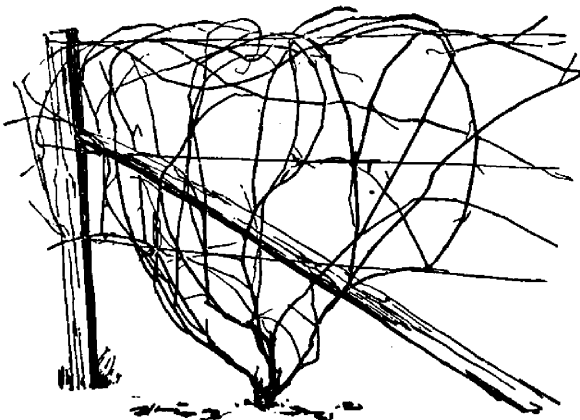


back to about eight buds each and tied to the wire. Two others, with five or six buds each, are tied along the lower wire, as in Fig. 69. At the end of the fourth season the vine will present the appearance in Fig. 70. The same process will then be repeated. Four strong canes will be selected and tied for the fifth season, as in Fig. 69. After a time the cutting back operation will leave a stubby, awkward lot of old wood where the horizontal canes start. It will then be wise to take, at the first opportunity, a shoot direct from the main stem and train it as an arm, cutting away all old wood that has gradually collected between the trunk and the horizontal canes. It will be noticed also that the Kniffin system simplifies pruning very much. There is no desire to urge here that the Kniffin system will give better re-

allow an unnecessary accumulation of old wood; and let pruning be directed so that enough healthy last year's wood shall be left to produce the right number of bearing shoots this year. For one man who prunes too closely there are ten who leave too much wood. From twenty-five to forty healthy buds are ample.

Summer pruning need not be done except in the Fuller system, where some pinching in of the shoots is practised. With most systems, however, the vigorous growers, like *Brighton* and *Rogers*, will produce such immense shoots that cultivation is impeded. When they begin to get straggly and a nuisance, the ends can be trimmed off very quickly with a sharp sickle or corn knife. Importance should be attached to the early removal of superfluous shoots, and laterals or axillary branches. This operation does not take so very long, and is a true "thinning" process. These secondary shoots often bear one or two bunches, and second-class bunches at that. The vine will have enough fruit without them. The remaining fruit will be finer, and there will be a better lot of ripened canes to select from next year. As to the time of pruning: Any time through the winter where the vines can remain uncovered will be suitable. It is better to finish all pruning before the sap starts, though it is questionable if the bleeding of the vine does much harm, and it is hardly necessary to say that it is a vast deal better to prune late than not at all.



Fan-trained Concord. FIG. 67

sults than many other methods in operation. In many vineyards a combination of Kniffin and the Fan system is giving good results, but, properly managed, the Kniffin-trained vineyard will yield as well as any, and nobody can question its greater cheapness and the conveniences it presents. Success can be achieved with all systems, and in this matter of grape-training, there is lots of room for the expression of a man's individuality. The main things are—see that the vine is in a good thrifty condition; do not

THE FAN SYSTEM.—In this system, which is not much in vogue in recent days, the wood is renewed almost from the ground every year. An excessive amount of old wood and a trunk are thus dispensed with, and after fall pruning the vine is easily covered, where winter protection is needed. Fig 67, from Bailey's "Pruning Book," shows a vine trained in this way. With so