

## SIDE PRUNER DEVELOPED AT MOUNT SHASTA NURSERY

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We will discuss briefly the experiments conducted in developing this root-pruning machine.' Work on the machine was started a few years ago. Trials made last year were most encouraging, so we built a side pruner based on those tests.

'The machine was designed and built by James Higgs and Karl B. Lanquist.

It was difficult to find cutters that make a clean cut without tearing off the roots. However, cutters like those shown in figure 1 proved almost completely satisfactory. These cutters, which are self-sharpening, were made from 20-inch coulters. The indentations in the cutters gather up the roots and cut them off clean (fig. 2). The two coil springs hold the cutters in the ground and act as a safety



**Figure 1.--Side pruner, cutters in the up or raised position.**

device if a cutter should hit something solid in the soil. The cutters are clamped onto a 2-inch bar and can be adjusted for almost any spacing.

The machine is operated by a hydraulic lift at the driver's seat. The operator can easily see and position the cutters between the rows of trees because the machine is mounted just ahead of center, under the tractor. The main reason for this mount is to shorten the distance between the steering control and the cutters.

Most of the machine's components may be purchased from almost all implement dealers. The framework, including the lever actions, was made and fitted to the nursery's tractor.



**Figure 2.--One-year-old 3-0 ponderosa pine side pruned.**

Details and dimensions are available from the nursery.