

A PLANTING BAR EXTENSION FOR SETTING LARGE-ROOTED SEEDLINGS

by

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When hardwood seedlings are hand planted, it is almost impossible to properly arrange the large root systems in the slit made by an ordinary 3-inch planting bar. However, there are numerous advantages in bar planting over mattock or shovel planting. Bar planting is faster, cheaper, and a system that laborers like because they are used to it.

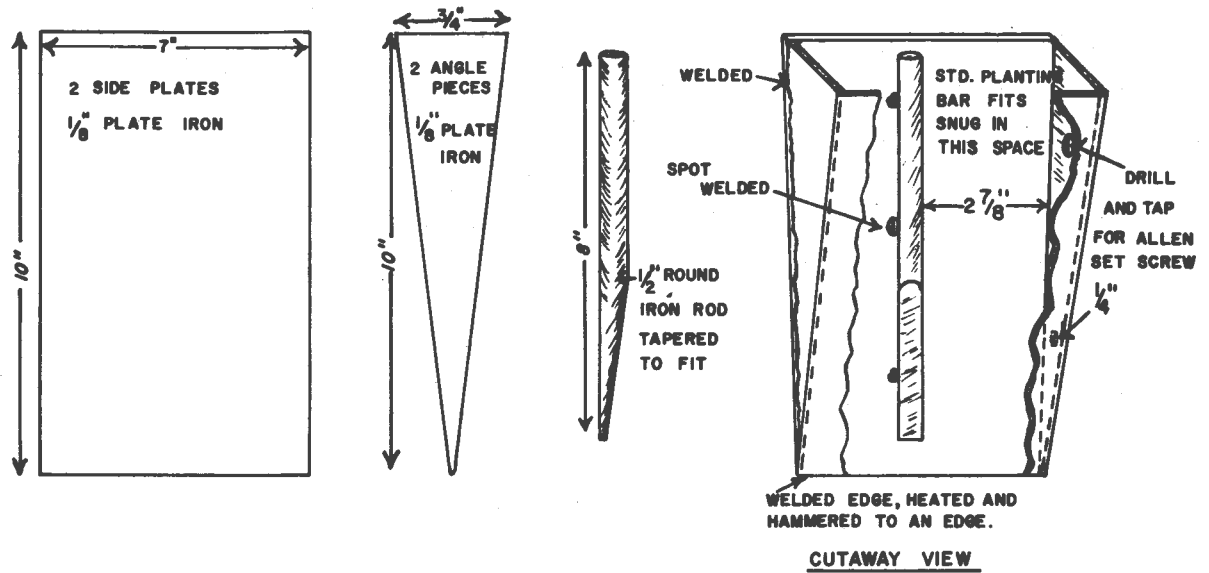
Planters learned that if two or three holes were made side by side most of the large roots could be properly set and a good planting job done. But this made much extra work, because four to six holes, including the closing ones, were needed for each tree.

For these reasons a removable extension has been designed to increase the width of the standard 3-inch bar to 7 inches. The extension, slipped over the standard bar, is held firmly by set screws. When the bars are needed for planting average seedlings, the extensions are easily removed.

Thus, the main advantage of the extension is to make the standard planting bar a convertible tool. Use of this side-bar tool results in a higher quality planting job, with fewer holes per tree. The extra weight of the extension makes carrying the bar more tiring on a day-long planting job, but the high-quality work and the need for fewer holes more than compensate for the extra pounds.

^{1/} Respectively, Farm Agent, Duke Power Company, Morgantown, N. C., and Forester, Southeastern Forest Experiment Station, Statesville, N. C.

The design and details for making planting bar extensions are shown in the adjoining figure. This modified tool should be useful to tree planters throughout the country.



The bill of material for making a planting bar extension is given below. The average cost of manufacture in a machine shop in Morganton, N. C., was \$4.50 per unit for materials and labor.

Bill of materials for one planting bar extension:

- 2 pieces-1/8-inch thick plate iron, 7 x 10 inches.
- 2 pieces-1/8-inch thick plate iron, 3/4 x 10 inches.
- 1 piece-1/2-inch iron rod, 8 inches long.
- 2-Allen setscrews, recessed hexagonal head.
- Welding rod.