A New Machine for Making Tar Paper Containers

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A machine has been developed that mass produces tar paper containers for growing drought-resistant nursery stock. The machine has reduced unit cost, produced a uniformly higher quality product with less material waste, and improved operator safety.

The Los Angeles County Fire Department, Forestry Division, has been growing drought-resistant nursery stock for over 60 years in tar paper containers. These containers measure $2^{3}/_{4}$ inches square by 12 inches deep and have proved to be an excellent, low-cost alternative to other plant container designs for dry land plantings when comparing soil volume, growing space, and ease of handling. This nonreusable container will last in the nursery for several years. It is biodegradable and can be used as a mulch if so desired.

Plant containers in the past were produced by a combination of hand-fed machine operation and hand labor. These operations required a 10-person crew and approximately 3,000 hours to produce 100,000 containers. The product was not entirely uniform, and there was an unacceptable amount of waste. The manufacturing process also exposed operators to burn injuries and toxic fumes from hot tar used as an adhesive.

The new machine (fig. 1) has cut labor needs by 80 percent. Unit cost has also been reduced to an average of 14 cents per container. Working in close cooperation with forestry personnel, the Millwright Shop of the Los Angeles County Mechanical Department designed and developed the machine. This machine allows 12-inch rolls of 30-pound roofing felt to be die cut, folded, and jet-melt glued in one continuous operation. The result (fig. 2) is a stronger, more uniform container produced with less labor. Also, operator safety has been greatly enhanced by elimination of exposure to heat and toxic fumes.

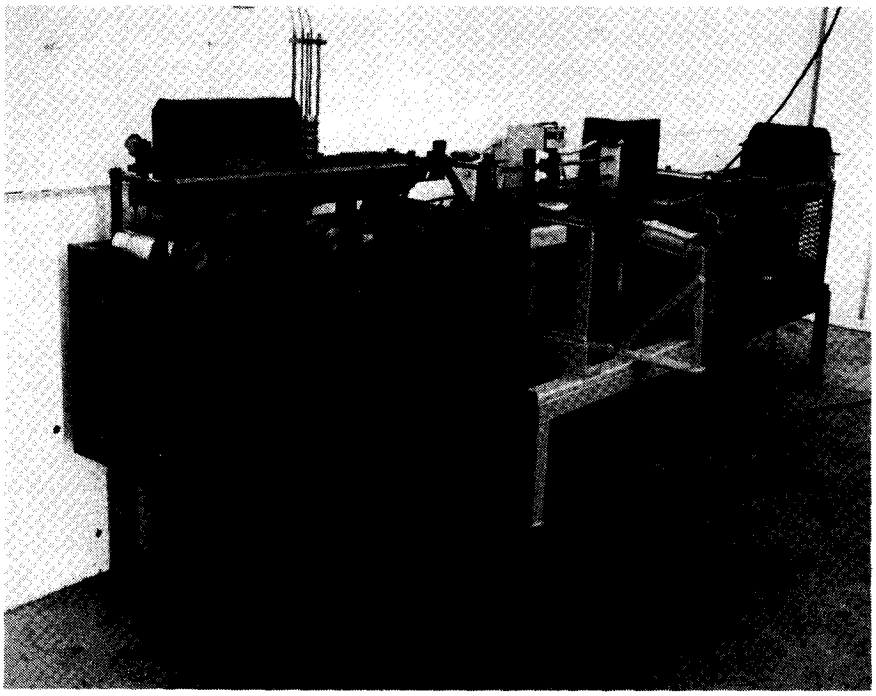

Figure 1—*Tar paper container manufacturing machine showing cutting, folding, and gluing sections.*

For more information, contact the Los Angeles County Department of Forester and Fire Warden, Forestry Division, P. O. Box 3009, Terminal Annex, Los Angeles, CA 90051.

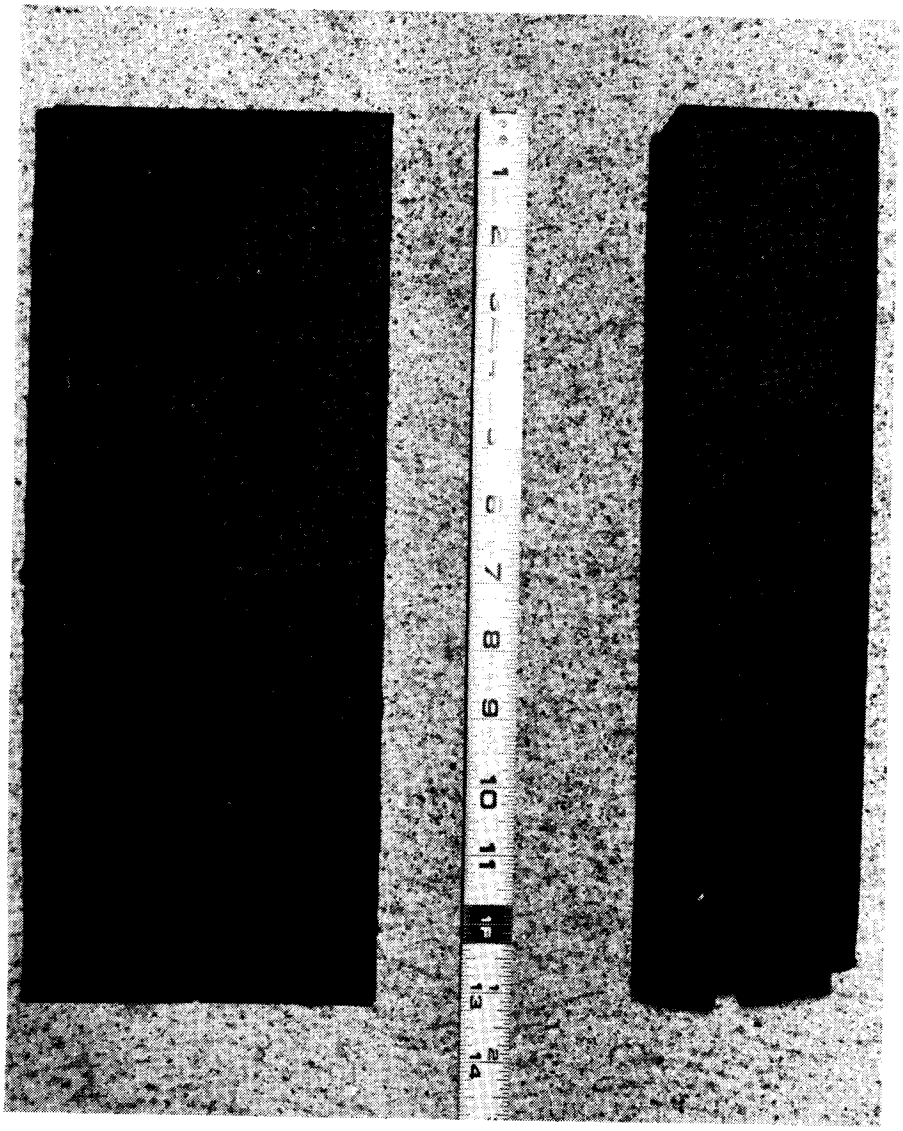

Figure 2—*Two views of the tar paper container: Folded for storage as it comes from the machine (left) and folded and ready for use (right).*