A SUGAR BEET TRANSPLANTING MACHINE

In sugar beet breeding work it is common practice to produce the initial seed crop by the biennial method, whereby the beets are grown one season, stored over winter, and transplanted to the field the second season. Where the number of beets involved is small, the transplanting is usually done by hand. However, where several hundred beets or more are involved in a given planting, a transplanting machine would be desirable, particularly during the present shortage of labor.

In view of the labor shortage at Sheridan, Wyo., in the spring of 1944, the machine illustrated in Fig. 1 was built and successfully used to transplant 45 plantings varying in size from 0.1 to 0.5 acre. Fig. 1B shows the base of the machine, which is 4 feet wide by 6 feet in length, with the furrow openers attached on 40 inch centers. Fig. 1A shows the side view of the transplanter and the tractor hitch. The 5-foot width upper deck is elevated 12 inches and covered with a mattress. The supply box is fastened to the base and extends to the rear. Empty storage crates or extra beets may be carried on the upper deck.

Fig. 1C shows the machine in operation and the method of transplanting. Two 40-inch rows are planted each trip through the field. The furrow openers form deep furrows and the twisted arms pull

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Fig. 1.—Sugar beet transplanting machine. A, side view of transplanter and tractor hitch; B, base of machine with furrow openers; C, machine in operation; D, completed planting.