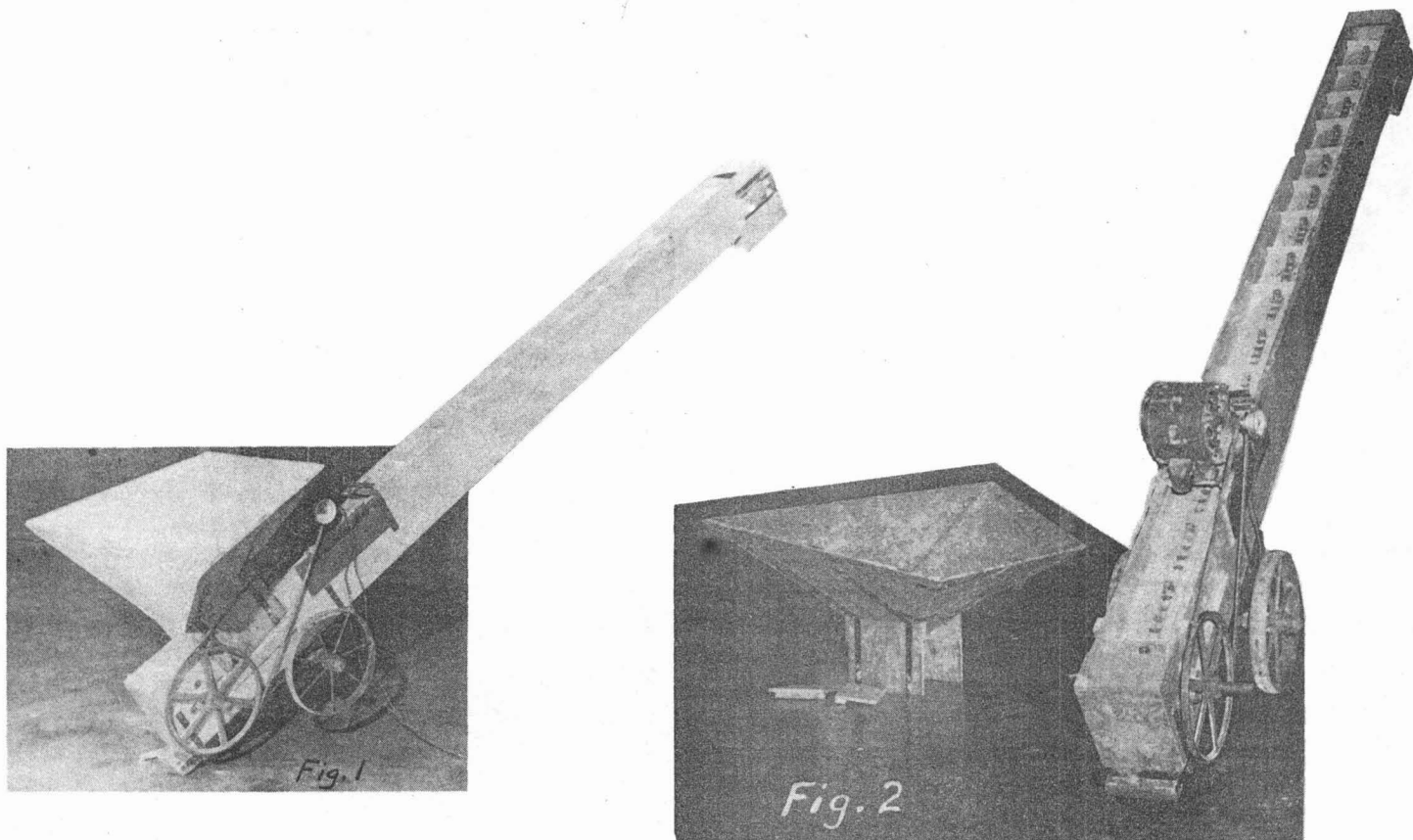


Time and Work Savers



PORTABLE GRAIN ELEVATOR

(As built by Texas A&M College, Agricultural Engineering Research Department)

The overall length of the elevator is 14 feet. It may be made shorter, or somewhat longer, to suit. It is operated by a 1/2 H.P. motor.

The capacity is about 285 bushels of threshed grain sorghum per hour when the elevator is sloped at an angle of 60° with the ground. With an angle of 45°, the capacity is about 535 bushels per hour.

Figure 1, shows a side view of the elevator with the hopper in place. Figure 2, shows the elevator with the removable hopper set off.

The flights are 2" x 7" and are cut from 3/8" plywood. Every sixth chain link is a flight link. No. 45 links are used. The chain sprocket wheels each have nine teeth on them. One inch shafts are used in these sprocket wheels. The upper bearings are hard wood blocks, with adjustable mountings to tighten the carrier chain. The lower shaft is mounted in readymade ball bearings. A 2" to 4" step "V" belt pulley is used on the motor. The "V" belt pulley on the driven shaft is 15" in diameter. The distance from the motor shaft to the pulley shaft is 32 inches.

