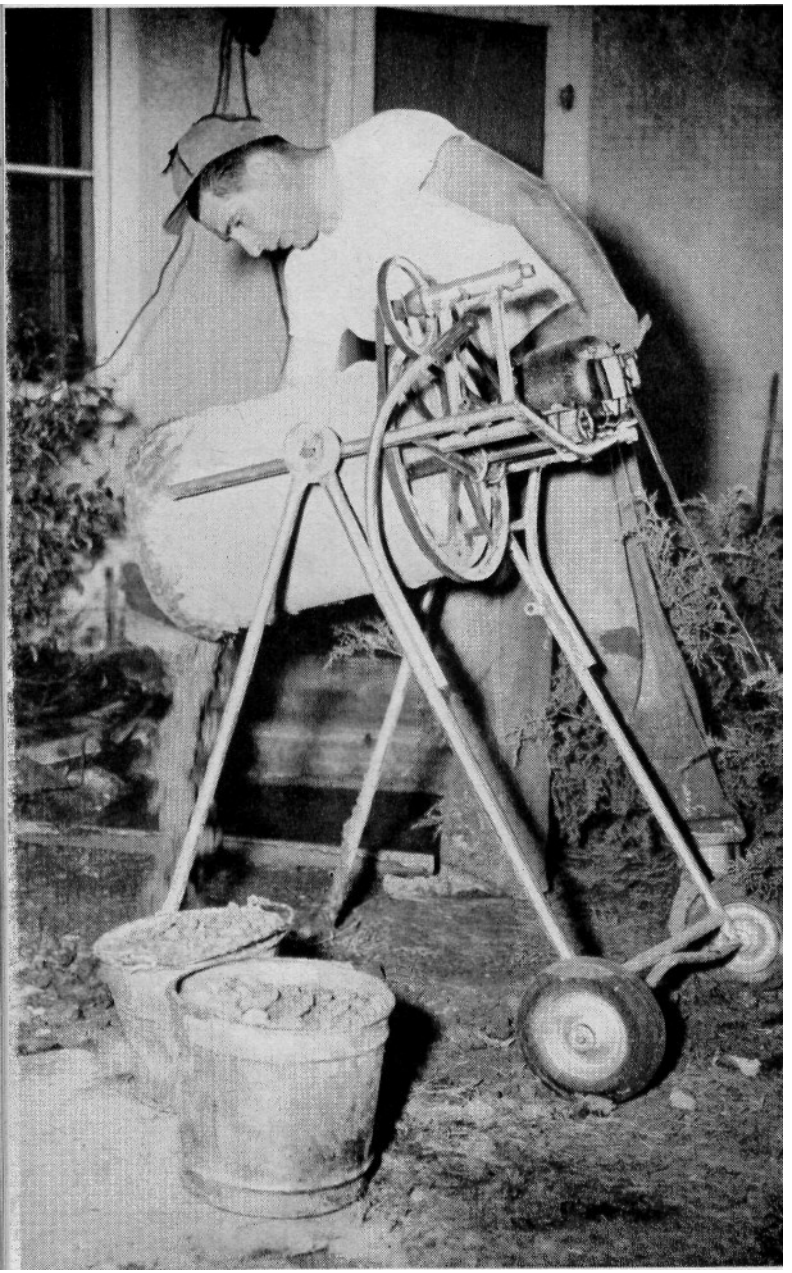
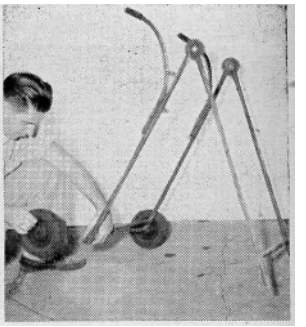
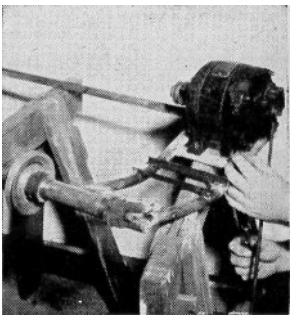
Power Concrete Mixer Eases Home Improvements





Supporting frame. Two identical sides with handles are welded over layout drawn with chalk on cellar floor. Sides are braced to stand vertically and cross members added. Short lengths of 7/16" rod for axles are welded into lower cross member at rear.



Pouring yoke. Cross members of the yoke are bent 1 1/8" below level of side members so that mixer-shatt bearings will be centered. Motor is 1/3 hp., 1,725 r.p.m., fitted with 1½" pulley. Speed-reduction shaft and pulley ratio turn drum at 43 r.p.m.

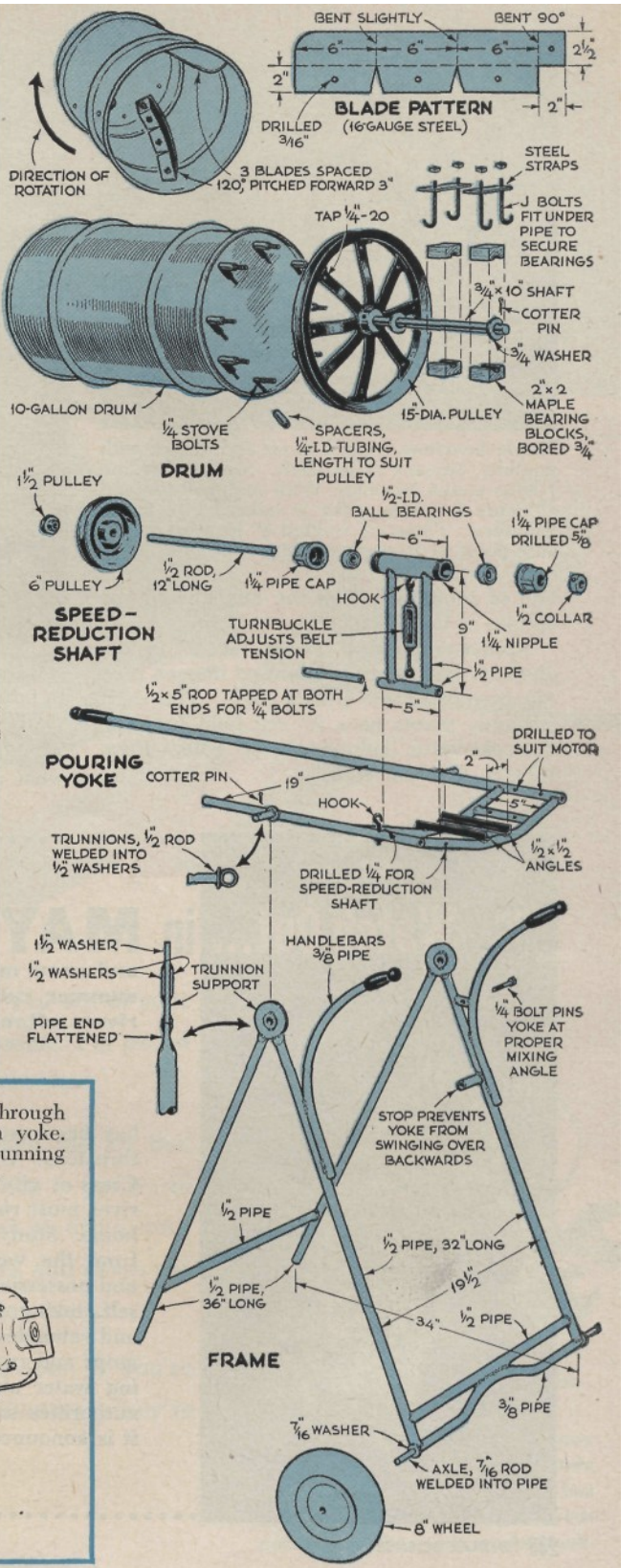
This midget mixer is just right for a one-man job. It'll mix concrete as fast as you can spread and smooth it.

A FEW spare hours spent building this mixer will save you many hours with a mixing hoe when you tackle that new driveway or barbecue.

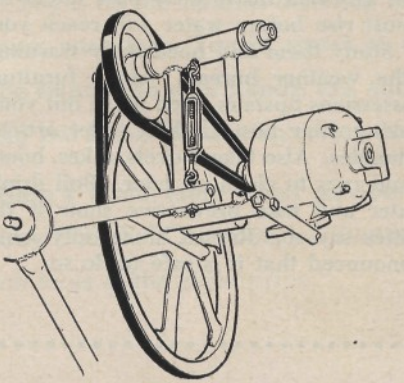
Though its capacity is small, the mixer is no bottleneck on the job. I get through more bags of cement in less time than I did with a rented quarter-bag job. The 10-gal. drum is a type commonly used for soda-fountain syrups, paint and bakers' supplies. Mine is 15" in diameter and stands 18" high.

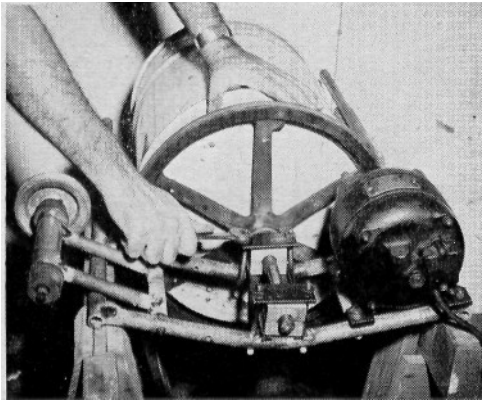
In or out of doors. The convenient handlebars permit you to roll it like a hand truck, and easily get through a basement doorway. The front legs of the frame can stand in a shallow form when you pour, eliminating the need for a chute or wheelbarrow.

Construction. A light welder, electric drill and hacksaw are the tools you'll need. Materials can come from a plumber's scrap pile-3/8" and ½" pipe, and a few short pieces of ½" rod. The mixing blades are bent from 16-gauge sheet steel and bolted to the inside of the drum at a slight angle in the direc-



V-belt drive. Power is transmitted through a speed-reduction shaft mounted on yoke. Turnbuckle adjusts tension of belt running from motor. Other belt must fit close.

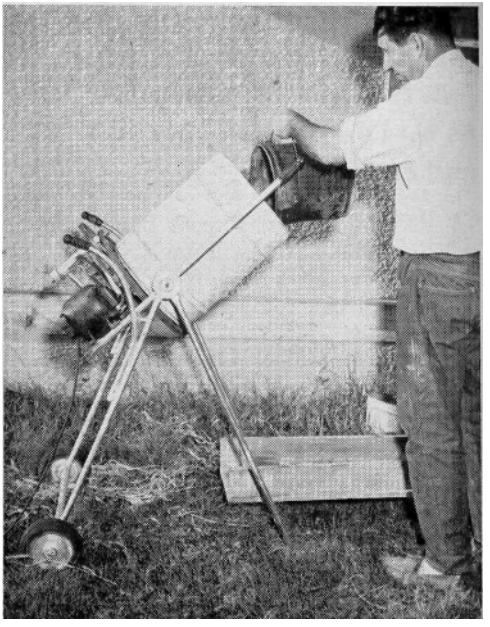




Maple bearings, soaked in oil and dusted with graphite, support drum shaft. Steel straps and J bolts secure bearings. With motor, drum and all parts in place, yoke is balanced to locate trunnions. These are welded 4" forward of balance point so drum swings up.

tion of rotation to toss the mix toward the bottom of the drum.

Speed-reduction shaft. A ½" inside-diameter ball bearing is housed in each pipe cap to support the pulley shaft. The shaft assembly pivots on a ½" rod held between the yoke cross members by ¼" bolts.—*Evan Wright, Topeka, Kan.*



Loading up. Mixer takes about a tenth of a bag of cement for most sand-and-aggregate mixes. In final assembly, the frame is sprung apart just enough to admit the trunnions into the supporting washers. Cotter pins prevent trunnions from slipping out and keep frame from spreading while mixer is moved about.