NOTES

FIELD SEED CLEANER FOR SOYBEANS

MOST large and heavy-seeded crops, such as soybeans, require a relatively simple threshing device. As seed cleaning devices constructed in the thresher usually render the machine more difficult to clean, it has been found advantageous to construct this cleaning equipment separate from the thresher.

A relatively simple type of cleaning device which has given excellent results during the past season with soybeans is shown in Fig. 1. As shown in Fig. 2, a forge blower mounted on the thresher is operated from the crank shaft pulley of the small gas engine which operates the thresher. The cleaner consists of a 3/8-inch mesh screen mounted in a suitable metal frame so as to allow the haulm and bean mixture to be shaken by oscillating the screen assembly. All material passing through the screen passes down an inclined chute and encounters a blast of air which is conducted from the forge blower to the cleaner through a flexible 4-inch tube. Chaff and dust are blown up the chute and out of the cleaner (Fig. 1 A), while the seeds roll down into a funnel-shaped receptacle to which a bag mat be attached.

The air-blast is regulated to accomplish the separation by means of a slide on the blower. A butterfly valve in the air tube near the cleaner permits shutting off of the air-blast momentarily after each sample is screened, thereby allowing any light seeds, which may be held in the chute due to equili-

FIG. 1.—Field seed cleaner.
A, chaff exit.


2Both operators should wear a respirator equipped with a wide-vision eye shield to protect both the eyes and respiratory organs against dust and fine particles. As small stones in the thresher sometimes cause fire, and the gasoline in the engine fuel tank gets quite hot when the engine is in operation, and the bean vines are dry and inflammable, it is suggested that a 7-pound Dugas or CO2 hand fire extinguisher be located at an accessible point near the operation. A metal screen and frame guard enclosing the motor and belt drive would add to the safety in operating the equipment.