A CONTINUOUS SEED HULLER

The small thresher-dehuller-seed counter described in the Agronomy Journal, 44:386 has been further developed into an almost automatic seed huller by attaching it to a small "Clipper" seed cleaner. The operation in hulling is as follows:

The seed lot is dumped into the chute (A) shown in figure 1. It falls into the hopper (B) and passes over the top screen of the cleaner where the large trash is removed, and unhulled and hulled seed drop through to the bottom screen. The bottom screen must have the proper size openings for hulled seed to go through and be collected at the spout (C). The unhulled seeds pass over the screen and drop into a bowl-shaped hopper in the bottom, from which they are drawn by suction up through the thresher-dehuller (D) and are then forced by air blast through the rubber pipe into the tall dust chamber (E).

The dust chamber has fine screen wire on the top and two sides to allow escape of the air. The seed and empty hulls fall into the hopper of the cleaner for separation and return of any unhulled seed. The process is continuous until all seed are hulled and the hulls blown out. The air stream is adjusted to blow out only the light trash and empty hulls.

The hulled seed collected at the side spout (C) must be separated from the fine trash and dust. This presents no problem as the whole attachment is completely demountable, not being fastened in any way to the seed cleaner.

The speed of the huller is controlled by a rheostat ("Power Stat" Type 20, Superior Electric Co., Bristol, Conn.) shown by the letter (F). The speed is adjusted slow enough to prevent seed cracking during the hulling process.

This machine is especially handy for many small lots of seed. Wildlife technicians have found it exceptionally useful in removing the duff and soil of "ground samples" and hulling the remaining seed. For an indication of its capacity, 2 1/2 pounds of sericea lespedeza seed are hulled in 5 minutes. In efficiency, it is three times faster than any other method used at this nursery.—K. E. Graetz, U. S. Soil Conservation Service, Gretna, Va.