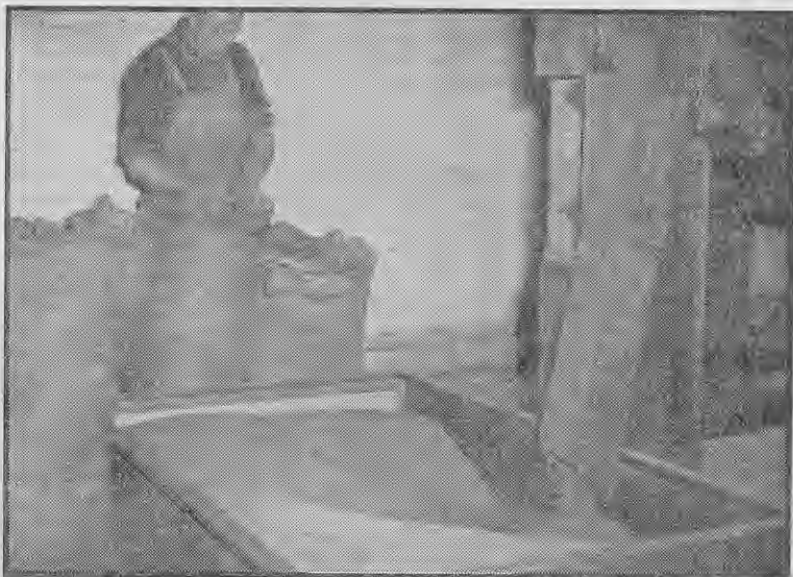


There are a number of subsidiary separating devices which may be required to deal with special classes of seeds or to improve the purity of difficult lines of seed. The dossor is a machine used commonly in the cleaning of clover. It makes use of revolving velvet surfaces on which irregular, flat, and broken seeds are carried up and round seeds roll down.

Another less usual but effective device has been incorporated in a machine which is particularly useful as a final process in removing chipped and broken seed from clovers. Magnetism is used to effect separation, it being necessary to mix a very small quantity of iron filings with the clover, the filings adhering to the broken surfaces but not to the whole seeds. Still another machine, by using wind and differing specific gravities of seed, is often able to separate seed of similar size but different weight with which riddles and cylinders may not be able to deal. In this machine, known as a specific gravity separator, a current of air passing upward through a perforated jumping table keeps the seed continually in motion and makes a number of very fine separations based on variations in the specific gravity of the material being handled. Saddlers' felt or similar blanket material is sometimes used to separate "clinging" from other types of seeds. The material is suspended on a horizontal plane above the riddles of a jump machine. The action of this machine throws the seed against the under side of the material. Seeds such as sweet vernal adhere to the matted surface, while other seeds fall back to the riddle. The blankets require cleaning periodically if they are to retain their effectiveness.

The hummeller is used to remove husks from seed or grain and to clip the long ends off oats. It is fitted with cutting knives or brushes according to the work to be done. At the outlet an air suction draws away all light material rubbed off by the hummeller. Brushes may also be used as other adjuncts to the seed-cleaning process. They may be used underneath the riddles or screens to prevent them becoming blocked with seed, so that uniform work may be ensured throughout the cleaning operation. For the shelling of some seeds such as Yorkshire fog, the brushes separate the shells from the kernels, the cylinders lift the kernels away, and an aspirator removes the husks by suction. Again, brushes may be used for breaking up double heads of cocksfoot as well as for brushing up a sample to make it flow better when it is being sown, or they may be used in breaking up soft dirt in subterranean clover seed so that the dirt may then be removed.

Polishers make use of brushes working over a wire concave. They are used by seed-dressing firms to break



Field-dressed clover seed in receiving bin of dressing plant.



The dossor, a "finishing" machine for clover seed.