

DOMINION DEPARTMENT OF AGRICULTURE.

**SEED BRANCH.**

**PAMPHLET No. 1.**

*January, 1918.*

---

## CLEANING SEED.

---

In cleaning seed the aim should be to produce a sample containing only the larger and plumper kernels of the kind of crop desired. To produce a sample of this kind it is necessary to remove impurities such as straws, chaff, dirt and other inert matter, weed seeds, seeds of crops other than the kind desired, and any small, shrunken, immature and otherwise inferior kernels of the kind being cleaned.

Improper cleaning of seed is in most cases due to lack of the necessary riddles and screens, or to the mill not being properly regulated. Any good fanning mill in which thorough control over the air blast is obtained, and in which a series of four or more riddles and screens\* may be adjusted at will, may be fitted and operated to do fairly good work.

### GENERAL PRINCIPLES.

#### *Impossible to give Definite Directions.*

It is impossible to give instruction for fitting and operating a mill which will apply in all cases, as different samples of the same kind of seed may require different treatment, even in the same mill. On the other hand, the same sample of seed would require different combinations of sieves in different cases, depending on the length and slope of the sieves, the direction and violence of the shake, the strength of the air blast and the way in which it strikes the seed, and the rate at which the grain is passed over the sieves. The operator will have to depend on his own judgment and ingenuity in fitting a mill for doing the best work on any particular lot of seed. Even the directions furnished by the manufacturers of the mill should not be followed blindly. These directions are for cleaning the average lot and cannot be correct for every lot of grain of the same kind. Only general principles can be laid down for the guidance of fanning mill operators.

#### *Importance of the Air Blast.*

The air blast in a fanning mill is intended to remove as much as possible of the lighter material without unnecessary waste of plump seed; it is not strong enough unless a few good seeds are being blown out with the chaff. This is the only way of taking out some impurities which, on account of their size, cannot be separated by sieves. The work of the air blast is of double importance on account of the fact that the removal of the light material assists the sieves by (1) removing part of the grain

---

\* As used in this article the word *riddle* refers to the upper sieve and *screen* to the lower sieve. The word *sieve* is applied indiscriminately to either or both.