perimental departments connected with our Government experimental farms, that the large, plump grains will produce much better results under the same conditions than the inferior cleaned and graded grain so much used for seed purposes. The farmer is not altogether to blame for the dirty condition of so many of the farms, for unless he hand-picked the grain it would be impossible for him to procure the sample of seed above referred to. This may account to a large extent for so much imperfect seed being sown

The fact is that if the farmer had proper and efficient grain and seed cleaners and graders that were capable, and had facilities for removing all foul seeds and grading the grain properly, there would very soon be a marked change in the appearance of the fields when the crops are growing, and a change, too, in the sample of the grain when threshed. A full, plump sample would take the place of a mixed crop of grain, wild tares, mustard, cockle, redroot, and all the other contaminating and abominable trash which is so troublesome to the agriculturist, and which robs the grain of nourishment.

Not only is it to the advantage of the farmer to use pure, clean, plump grain for seed, but it is also profitable to prepare his grain (especially wheat) for market, as the price is governed by weight. Most wheat will weigh 60 lbs. to the bushel if properly cleaned, and other grain (barley, oats, etc.) command a higher price it the buyer finds that it is cleaned up to the required standard. The same also applies to beans and peas. It is advisable for the farmer to be as careful in the selection of the latest and best up-to-date grain and seed cleaner and grader as he would be in the choice of any other implement, perhaps in this case even more so. Be careful to sow nothing but pure seed, remembering "that which a man sows he shall also reap."

## More About the Blower Elevator, Ensilage and Feed Cutter.

By D. Thom, Watford, Ont.

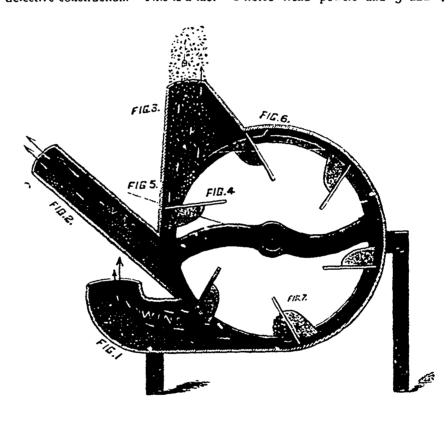
You have already had quite a number of letters on the above subject, and I have reason to believe that your readers are sufficiently interested to have some further information. I claim to be the first to adapt this style of machine to the successful elevating of ensilage, our first efforts dating back to '93. If any of your readers have personal knowledge of any successful silo filler prior to that date, then if upon sufficient investigation we find their claim well founded they can take their true place.

This machine seems to have baffled the mechanical mind to grasp the true construction. The fact that the name blower has been so freely applied to this style of machine has led to the belief that it was a blower simply and the machine that could generate the most wind would take first place, and so nearly all the manufacturers in Canada have burned their fingers, and had their pocket-books considerably disturbed be are they discovered that our success was due to something else. Now they have had their experience, and many farmers can testify to some bitter experience, for it is generally the case that a good deal of experimenting is done at the expense of the farmer.

Let me now give your readers a pointer well worthy of remembering. Put it down as a rule that it takes from one to three years for the best of our manufacturers to get their patterns and boring jigs done to accuracy, so that there are certain defects that give rise to many of the breakages due to defective construction. This is a fact

that case you would call it a thrower, not a blower. It will therefore be seen at fig. 1, the return elbow destroys the throw force, and at fig. 2 the green ensilage naturally falls to the bottom of the pipe; wind naturally rises and so you see the result, wind passes over this. Briefly there lies the underlying principle, and if we had made these facts public years ago it would have saved some manufacturers thousands of dollars and also would have been a saving to a number of farmers.

Now, regarding power required to successfully run this class of machinery there is considerable diversity of opinion, a good many claiming that they can only be operated by a 12 or 14 horse-power steam engine. Some of our readers will be surprised to know that our machines have been successfully run by 2 horse tread powers and 3 and 4



that no experienced manufacturer will care to dispute and few farmers are fully aware of. The principle, needless to say, applies to all kinds of machinery, farm or factory, but it is the intention of this article to deal with feed cutters of the Blower Elevator type. That the principle can be more readily understood, I refer your readers to the accompanying cut, setting forth the three styles of delivery. There is also the independent fan style not shown. We claim that ensilage can only be elevated by the principle as shown at Fig. 3, a fan blower and a centrifugal thrower.

As we have already mentioned it has become customary to use the term blower, when at the same time if there was no wind action or force the centrifugal throwing force of the fans would throw the cut feed 20 feet. In

horse-power, gasoline or gas engine filling silos 20 to 25 feet in height. For example, we have just received a letter setting forth one customer's experience. He had tried a certain make of Blower Elevator machine, evidently of a defective principle, where it took a 12 horse-power engine to drive it. He states after a trial of one of our make that if 3 of our machines were run from one shaft he could operate the 3 easier than the one referred to, so that there is a vast difference in the power required. What I wish most particularly to emphasize is that our Blower Elevator machines are adapted to any kind of farm power, generally from 2 to 12 horse-power.

In support of this we hold a large number of testimonials from prominent farmers.