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All seed corn that you see on the cob, or off of it, will not grow. At the base of each kernel there is a little plant hid away inside which you can easily find by cut-ting the kernel down the centre after allowit to stand awhile wrapped up in a warm moist cloth. Sometimes these germs have been frosted, or perhaps they did not mature in the fall, and when such is the case they either do not grow at all when put into the ground, or the small plant into which they develop at first is weak and yellow. One cannot always tell by looking at a kernel whether it will grow or not, so farmers test their seed before planting to make sure that the corn will germinate. There is something else to be learned by the test. Frequently the germ will send up its leaves and give

to the top? 2. What is the chief factor which causes the corn to germinate?

3. What percentage of the corn grew?
4. If Harry Smith's corn germinated 100 per cent., how did his father care for it since it was harvested? 5. If another sample in the box did not grow what care had it received and

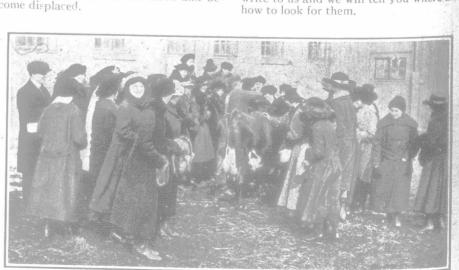
why did it not germinate? 6. How many pounds of seed are required to plant one acre (in hills and drills) when the corn germinates from 95 to 100 per cent?

We are testing our seed corn for Weldwood Farm, and in an early issue we shall be able to tell you how well it germinated and how much we intend to plant per acre.

## A Study of Live Stock in the Rural School.

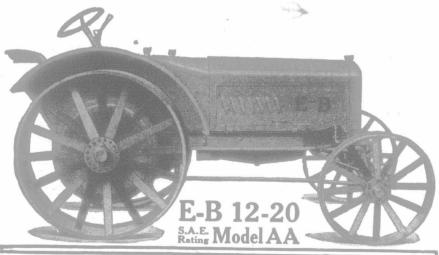
It is impossible to teach live stock husbandry in the school room. An image of all the various types of cattle, horses, sheep and swine cannot be impressed upon the student's mind without having the animals before the class. This has suggested to some teachers that they take the pupils to the farm of some prominent breeder in the neighborhood and there teach the lesson. This has been tried with success on several orcasions and the plan commends itself to teachers in general. Pupils of the public schools should not be expected to know all the breed characteristics of the Shorthorn, Hereford, Aberdeen-Angus, Holstein, Jersey, Ayrshire, etc., but they ought to know the chief points of difference between a beef and dairy animal. They ought to know what is meant by long-wooled and short-wooled breeds of sheep, and it is quite as reasonable to expect that they understand the difference between bacon and lard types of swine. Take the class to the stable of some prominent breeder right in the neighborhood and get him to explain what he looks for when selecting a dairy cow, a steer to feed, or a female animal of the beef breeds. By drawing attention to the important points of the animal before the class a more lasting impression

can be made. There are fundamentals that should be mastered in the study of all live stock. Remember that all typical dairy cows are more or less wedge-shaped. This, on first thought, may appear strange for a good cow, taken as a whole, does not resemble a wedge. However, the general outlines of the cow when viewed from different positions suggest wedges. For instance, stand behind a typical dairy cow and see if she is not wider behind than in front. That is, if you should put a straight-edge against one side and another straight - edge against the other side, the two ends would come together somewhere in front of the animal's head. This is why the cow is said to be wedgeshaped in this particular, but the typical dairy cow can be viewed from two other directions with the same result. If you cannot detect these other two wedges, write to us and we will tell you where and how to look for them.



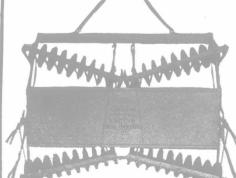
A Class of Teachers from the Hamilton Normal School Studying Live Stock at the Asylum Earn, near Hamilton.





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Testing Seed Corn.

off roots into the soil but both may be so weak that the plants do not grow well and the result is a poor crop. Such seed is said to have low vitality. Testing seed corn is very interesting work and all pupils should bring a sample of their fathers' seed corn to the school and test it to find out what percentage will germinate, and if the plants are healthy and

One of the older scholars might bring a box about two inches deep and two and a half feet square. Fill it three-quarters full of sand or sawdust and cover with a piece of cheesecloth. Then divide the surface into two-inch squares by driving small nails into the edges of the box and putting strings across each way. The squares thus made should be numbered. Each pupil should have at least one square in which to test an ear of corn. Take three kernels from the tip of the cob, three kernels from the butt, and four from the centre and place them well within the strings which mark off the spaces. It is not necessary to take so many kernels but this number makes it easy to figure the percentage of germination. When everything is in place, cover the corn with a layer or two of cheesecloth and moisten the contents of the box, but do not put on too much water. Now sprinkle about one-quarter inch of sawdust on top of the cloths, or cover with a thin layer of sand. Keep the box in a moderately warm room for six or seven days and then open it to see which kernels have germinated and which have not. It may be necessary to moisten this small farm once or twice if it becomes dry during the test. The cover should be lifted carefully for the corn shoots often adhere to the cloth and become displaced.