

French and German investigators—to compare a variety of wheat, its climatic adaptation, its powers of productions, its fitness for development as a variety that may produce a larger head, more grains to the head, more heads from the seed.

He says:—"Then let it be tried to what extent the varieties of wheat we now have may be improved after chance new varieties that are to be so rich in every quality that no attention need be paid to the soil or its adaptation to the growth of large crops of wheat. Improvement in breeding, in producing food, in developing the quantity of the amount, has doubled the production of meats of all kinds. Does not the success in this department point out to us that by the same rules applied to vegetable life we may double the product of bread. If we would continue to breed the wheats we have already on hand, to develop them in each generation to higher standard by selection, by cultivation, by feeding and fitting the soil to feed them, we have not the least doubt but that a

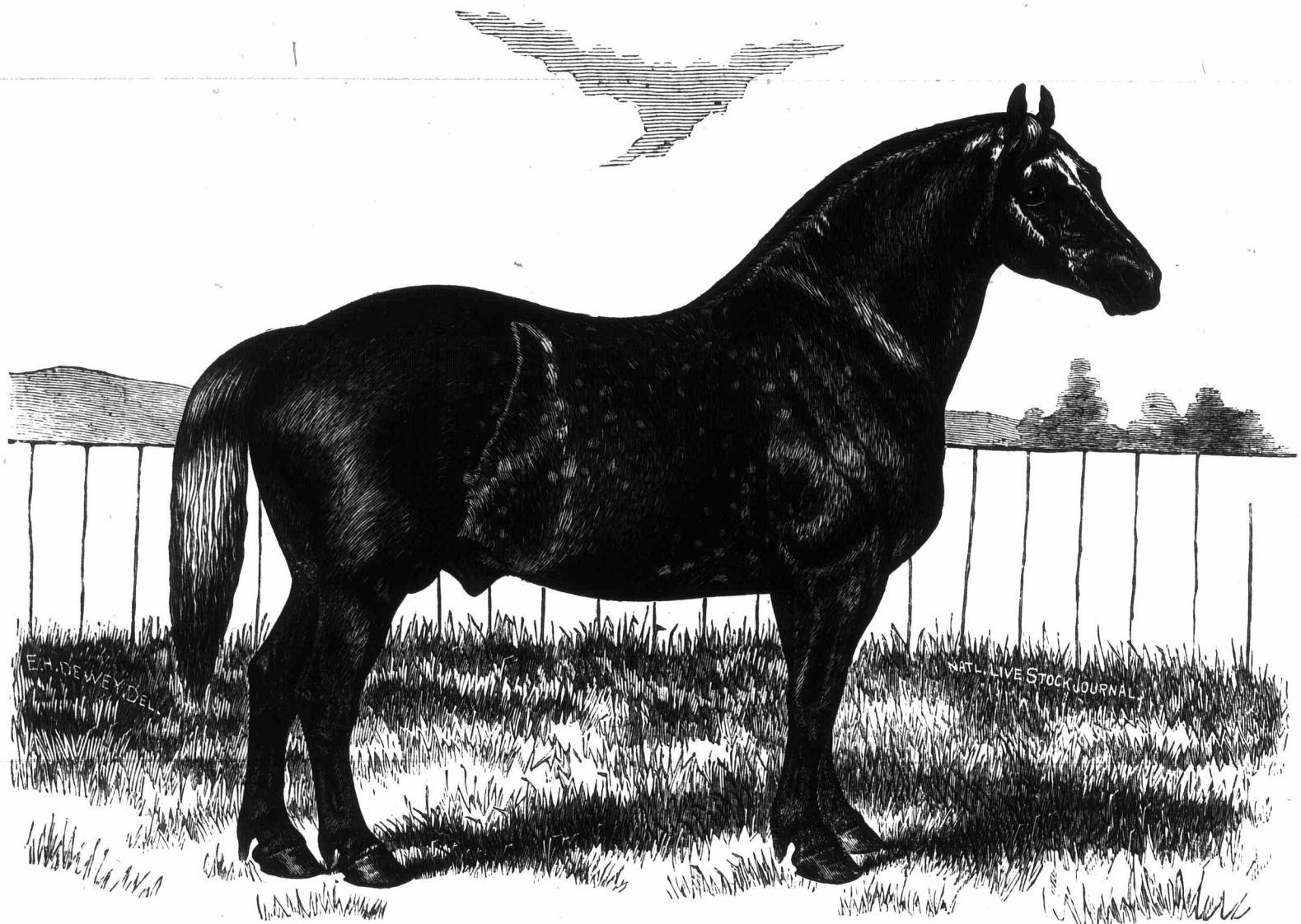
in a pumpkin—vine are played out with us. Give us work from the College such as Dr. Kedzie has done. Give us an acre of wheat producing 75 or 80 bushels per acre. Begin and develop the seed that will grow the heads, that will hold the grains that will weigh in the scale, that will grind in the mill into flour that will stand all tests. While developing the seed it will be easy to learn that the soil must have to possess to process to produce such a crop, and how it must be prepared. Lay the foundation of an improvement in the seed of the wheat plant that will be based on the experience of scientific treatment already on record.

The Percheron Horse.

This class of horses derive their name from Perche, the name of a village or county in Normandy, in France. Lord Dufferin, with his usual generosity and good judgment, has given a special prize to this class of horses. This shows his real

particularly valuable for its astonishing precocity, producing more by its work at two years old than the cost of its feed and keep.

The division of the sexes in Perche is different from most countries where horses are raised. One section contains the mares and produces the colts, while another section buys and raises them. No matter what may be the class to which she belongs, light or heavy, or partaking of both, the mare is expected to breed every year. If barren, she is sold. This fault continuing, she passes into public use. During her gestation she works constantly. A few days' rest before and after foaling is the only time lost. The remainder of her work pays abundantly for keeping and the interest on her cost. At the age of five or six months the colt is abruptly weaned and sold. Led into the interior, upon the fertile meadows, it remains one year unproductive. In winter it is fed on hay in the stable, and during the fine season turned into the field to graze. To sum up, it is rather poorly nourished on bran, grass and hay. The reason is, it is yet unproductive to its master, and it feels the effect. Wait a



PERCHERON HORSE, GREY HAWK—THE PROPERTY OF SNYDER BROS., GERMAN MILLS, NEAR BERLIN, ONT.

bushel of seed properly sown on an acre of land fitted for it, would produce eighty bushels to the acre just as easy as forty bushels are produced now from a bushel and a half. This is work for the Board to take hold of and provide for. Such work belongs to the department of botany as well as to that of agriculture; it needs skill, it needs patience and minute powers of observation, it needs also the foresight to determine in which direction to move, and that ability to fit our means to the requirements we seek, which is only to be obtained from those who are intimate with the whole subject. To develop the wheat plant to its utmost capacity is a task that will pay better than all the collections and all the experiments on fruit trees and vegetable varieties that have been carried on at the College, since its initiation. We have already laid down on the books all that is required to be known of the effects of manure, of fertilizers, of manipulations. Watching over *petite* plats of this or that kind of produce with a dusting of plaster in one corner and a shake-down of salt in another, and a repetition of such affairs as testing how much lifting power there is

interest in our country. We presume he has deemed this class of horses the most useful for our country. Many of our stockmen have as yet paid no attention to the breeding of this valuable class. This will give an impetus to turn their attention to the subject, and, no doubt, in a few years we shall have breeding from this class extended over our country, and that they will prove more profitable than the breeding of those horses has been.

It is generally fifteen to sixteen, and occasionally seventeen, hands high; is of a sanguine temperament, mixed in variable proportions with the muscolymphatic; his color is almost always gray, and is among the characteristic features that first strike the eye. According to their predominance these temperaments constitute several varieties.

Its movements are quick, spirited and light; it exhibits great endurance, both when hard worked and when forced for a long time to maintain any of its natural gaits, and it possesses the inestimable quality of moving fast with heavy loads, and it is

little. Its hardest time has gone by, and work will soften its lot. It reaches, in this manner, the age of fifteen to eighteen months. At this age it is put to work. Naturally docile, and in the hands of a man always patient and kind, its training is generally easy. Assigned to farm labor, it plows or draws a wagon. Harnessed with four or five colts of its own age; together they pull what would be an easy load for two good horses. Put before oxen, or joined to three of its companions, it plows, and is never overworked. Now it is better fed, and taken a great deal better care of. Its *moral* improves, and its master seems to delight in contemplating the progress and development of its qualities. Thus, in travelling through Perche, one involuntarily stops in the middle of the fields to see it work, never tired of admiring the vigor it displays, and the gentleness with which it is treated. At the age of three, the Beauce farmer buys it to work his soft light soil. For him it must be preserved intact, its development uninjured, nay, encouraged.

It has thus been worked one year, abundantly fed, but fed little or no grain. Doing enough light