

violent motion to increased action; and this even if the lungs be large enough. Nor will the horse be able to use his fore leg to advantage. Their breast muscles must be large to allow the horse to avail himself of the full power of the muscles which are used to propel forward his carcass. The progressive muscles have enough work of their own to do, and will not long last if called on to do that of other parts. These breast muscles have more to do in supporting the weight of the body and giving direction to motion than in creating motion; if they be not competent to their office, other muscles are called upon to overwork themselves to supply the deficiency, viz; the muscles of the shoulder and haunch in motion, and the muscles of the belly (abdominal muscles) in breathing. Then the breast muscles should be large to produce and preserve a proper balance both in action and breathing.

FRENCH CONTRACT FOR ENGLISH CAVALRY HORSES.

For the last few weeks a great number of English horses have been exported to France, on account of the French government. There are several agents at present in this country for the purpose of making some very large purchases of chargers for the remounting of the French cavalry regiments, both heavy and light. The contract is for 12,000, at the price of £25 per horse, for the light cavalry, and £28 per horse for the heavy troops—Cuirassiers, Carbiniers, dragoons, artillery.

The above paragraph we cut from one of our English papers. It teaches the farmer the advantage of rearing an improved stock. Here is France with a much larger and more fertile country, and yet she is tributary to her great rival, England, for the well mounting of her cavalry troops. What a disgrace to France this is, and what honor to England.

At the famous battle of Waterloo, one regiment of English cavalry was so superior to any in the French lines, that in every charge, they easily rode right over the French horses, completely discomfiting them with scarce the necessity of pulling a trigger or drawing a sword. It was the superior breed of the English horses, alone, that enabled them to accomplish this.

There is nothing superior to a first-rate American horse; and if our farmers will only breed from the best animals, we should soon have such a numerous stock in the country as the world never yet saw, out of Arabia.—*Am. Agriculturist*.

TO MEASURE HAY IN STACKS.—“More than twenty years since,” says an old farmer “I copied the following method of measuring hay, from some publication, and having verified its accu-

racy, I have both bought and sold by it, and believe it may be useful to many farmers, where the means of weighing are not at hand. Multiply the length, breadth, and height into each other, and if the hay is somewhat settled, ten solid yards will make a ton. Clover will take from ten to twelve yards per ton.”

PORTABLE STEAM ENGINE FOR FARM PURPOSES.—This engine is a beautiful piece of mechanism of half-horse power, working to a charm. It was operated in the hall, and attracted great attention. It propelled a grindstone, lathe, straw cutter, &c., working with ease at from 500 to 800 revolutions per minute. With it, a farmer might saw his wood, cut his straw and hay, grind his tools, steam his potatoes and other feed with the surplus steam, and while thus operating, save the labor and board of two or three men. It is well worthy of careful attention, and if durable, of general encouragement. It requires from 1 to 1½ cents' worth of fuel per hour, to propel it, and costs only \$75.—*Trans. N. Y. Ag. Soc.*

STORING WINTER CABBAGES.—Such cabbages, at the extreme north, as you wish to keep through the winter and early spring, may be pulled up by the roots, and arranged in compact rows, with their heads downward, resting on the surface of the ground, so that their stalks will stand upright in the air; then, they may be covered with straw and earth, and treated in every other respect as directed for root crops. Should the weather be unusually warm, the earth and straw should be opened to let in air.

STORM GLASS.

This instrument consists of a glass tube sealed at one end, and furnished with a brass cap at the other end, through which the air is admitted by a very small aperture. The tube is nearly filled with the following solution, which may be obtained of any apothecary or chemist:—

Camphor, 2½ drachams; nitrate of potash, 38 grains; muriate of ammonia, 38 grains; water, 9 drachams; rectified spirit, 11 drachams. Dissolve with heat. At the ordinary temperature of the atmosphere, plumose crystals are formed.

On the approach of stormy weather, these crystals are often observed to occupy only the bottom of the tube, where they appear to be compressed into a compact mass; while on the other hand, during the fine weather, they assumed their plumose character, and extend a considerable way up the glass.—These results depend upon the condition of the air, but they are not considered to afford any indication that can be relied upon of the approaching state of the weather. When exposed to a very low temperature, the compound camphor liniment bottle affords the same appearance and indication as these storm glasses.—*Pharmaceutical Journal*.