

Thus the most certain property in Britain—the land would be rendered to be scarcely of any value, except to be pleasure grounds for manufacturing lords and their dependants. It will be the same case with landed proprietors in Canada, if the production of our own soil is not encouraged and protected. We consider British North America as a part and portion of the British Empire, and entitled to the same protection and encouragement as the inhabitants of the British Isles; and had we these advantages, we could raise a large produce, which would enable us to buy and pay for British manufactures, and be more certain customers than any foreign nation ever will be.

It is a remarkable circumstance of the horses and oxen of Paraguay (where both species have run wild and multiplied very rapidly), that while all those are domesticated vary considerably in colour, those that are wild have all the same colour: the horses a chestnut or bay-brown, the oxen reddish-brown on the back, and black on the rest of the body. The power of man to change the form of domesticated animals so as to make them suit his purpose to the best advantage is very great. By attention to breeding and feeding their original form and character may be astonishingly altered and vastly improved. In no part of the world has this improvement been carried to such an extent of usefulness as in the British Isles. There, indeed, breeds of horses, neat cattle, sheep, and swine are now brought to so profitable perfection, as to be very unlike the original breeds. Carefully selecting both male and female animals for breeding, and keeping the progeny of these breeds selected, and good food and management every way, have effected these advantageous improvements in every species of domesticated animals in Britain.

The watering of the horse is a very important, but disregarded portion of his general management. The kind of water has not been sufficiently considered. The difference between what is termed *hard* and *soft* water, is a circumstance of general observation. The former contains certain saline principles which decompose some bodies, as in the curdling of soap; and prevents the solution of others as in the making of tea—the boiling of vegetables, and the process of brewing. It is natural to suppose that these different kinds of water would produce somewhat different effects on the animal frame, and such is the fact. Hard water freshly drawn from the well, will frequently roughen the coat of the horse unaccustomed to it, or cause gripping pains, or materially lessen his power of exertion. The racing and the hunting grooms are perfectly aware of this, and so is the horse, for he will refuse the purest water from the well, if he can obtain access to the running stream, or even to the turbid pool. Where there is power of choice, the softest water should undoubtedly be preferred.

The temperature of water is, of far more consequence than its hardness. It will rarely harm if taken from the pond or running stream, but its coldness when recently drawn from the well has often been injurious. It has produced colic, spasms, and even death. It should therefore be exposed for some hours, if in summer, in the stable or some tank; and in winter, it should be heated to the proper temperature.

There is often considerable prejudice against the horse being fairly supplied with water. It is

supposed to chill him, to injure his wind, or to incapacitate him for hard work. It certainly would do so if immediately after drinking his fill he were galloped hard, but not if he were suffered to quench his thirst more frequently when at rest in the stable. The horse that has free access to water, will not drink so much in the course of the day, as another who, to cool his parched mouth, swallows as fast as he can, and know not when to stop. When on a journey, a horse may with perfect safety be more liberally supplied with water than he generally is.

PAGE'S PORTABLE SAW MILL.

(Continued from our last.)

Mr. J. S. Selby, in a letter to the publisher of the "American Farmer," says:—

"Mr. Page has put an addition to the machine, which is very important. It runs the log back immediately after the plank is cut, and then is ready to go forward to cut another plank; after the alteration, we sawed a green poplar log, 15 feet, which made 310 feet of plank. There were several gentlemen here at this time to see the performance, and several cuts were made by time, which were as follows:—One cut was made 15 feet long and 12 inches wide, in 3 minutes and 40 seconds, equal to 275 feet per hour, or 2,750 feet per 10 hours; one cut was made 15 inches wide, by pushing the horses, in 3 minutes. An oak log was brought to the saw by a neighbour of mine, (which, by the way, was seasoned and very hard,) 9 feet 3 inches long; it was sawed into 7.8th plank, at the rate of 24 minutes for each plank; being 244 feet to the hour, and 2,440 feet for ten hours." "I am fully satisfied that with four horses, one man, and a boy, it will cut 1,500 feet per day, without pushing the horses, or driving them beyond their usual work. The machine attached for shingles is very simple and cheap, and any common hand can work it, and make perfect shingles. I am of the opinion that they can be worked to a great profit in manufacturing lumber for market. After cutting the timber for a large building, 38 by 54 feet, and 2 stories high, it not having been out of repair the whole time, although worked by common hands; I am satisfied it will be durable, and not liable to get out of order."

Mr. John Watchman, of the city of Baltimore, says, in the "Farmer,"—

"I consider it a valuable acquisition to our country, and will be of vast importance to large districts of country. I think it will fully answer the purposes of the inventor, and have backed this opinion by purchasing one for the use of my establishment, deeming Page's decidedly preferable for every purpose for which it is intended. As the machine can be examined in operation in this city, I invite public attention to it."

The Rev. Henry Aisquith, of Anne Arundel county, Md., says:—

"I have frequently witnessed the operation of Page's Circular Saw Mill, by horse power, at Mr. Selby's farm, near Annapolis. I have been so much pleased not only with its operations, but with the simplicity of its construction, and so satisfied of its usefulness to every farmer who has much timber, that I have ordered one for my own use. The Horse Power, also by Page, I consider one of the best; being simple and durable, and less liable to get out of order than any I have yet seen. As the best recommendation I can give, I have ordered one for my own use."

Major R. I. Jones, of Annapolis, under date of Feb. 7, 1841, says:—

"On this day I rode to Mr. J. S. Selby's farm, for the purpose of seeing the operation of Mr. George Page's Horse Power, to which is attached a Portable Saw Mill. Four horses and mules were worked, and during the time I staid there was no change of horses. A log of green poplar, 15 feet long and 12 inches wide, was sawed into plank at the rate of about 3 minutes and 40 seconds to each plank, equal to 275 feet per hour, or 2,750 feet for 10 hours' work." "A railway for

the log to travel on forward while cutting, and to back it for the next cut, worked admirably indeed. The whole machine is handsomely constructed, and worked with great ease, the horses not more pushed than would be necessary to work a thrashing machine. This horse power (Mr. George Page's) is far superior to any I have ever seen. It is simple in its construction, at the same time is powerful enough to attach 8 horses to it, if it were necessary. There can be no question, that with the attention of any person accustomed to the manner of working it, with timber of good length, say 25 to 30 feet long, and from 10 inches to 2 feet diameter, it will turn out at least 2,000 feet for a day of 10 hours' work; it can certainly be made to cut 3,000 feet per day. I am assured it will make from 2 to 4,000 shingles per day, and those perfectly true and ready to lay on the roof. There can also be attached to this power machinery for boring and morticing posts, pointing the rails, and cutting the tenons with as great precision as by hand. This power will answer for every use a farmer can wish for on an extensive farm—for thrashing the grain; also a mill that will grind meal at the rate of 5 bushels in the hour; and, by applying a Corn Sheller, will readily get out 1,000 bushels of corn in the course of a day. What more does the farmer want?"

The following testimonial of the operation of this machine, in Louisa County, Va., appeared in the Richmond Whig, of April 30th:—

"We, the undersigned subscribers, have this day examined the Portable Saw Mill, drawn by four horses, lately put in operation by Mr. George Page, of Baltimore, at the Victoria furnace, in Louisa county. It was sawing rough pine logs, and it cut 300 feet per hour. The plank was exceedingly nice, smooth, and straight. The oak timber it had cut before we examined it, was equally nice.

HUGH GOODWIN, JUNR.
CHAS. B. COSBY,
G. B. TAYLOR,
P. BOXLEY."

PAGE'S PORTABLE STEAM SAW MILL.

This mill, with all its fixtures complete, ready for manufacturing lumber, with a steam boiler, or power equal to 10 horses included, costs \$3,000.

The following specification will show the items comprising the gross sum of \$3,000, as above named, together with the price of each, by which the reader will perceive that they exceed that amount, viz:—

Steam-engine and boiler of 10 horse power, portable,	1200
Saw mill, 12 feet carriage and 24 feet ways, large and strong, with a 48-inch circular,	500
Two pair of lumber wheels, for hauling logs, and removal of engine and boilers,	250
Bay cant-hocks, files, sets, &c.,	50
Two hand-carts, for removing lumber when sawed,	100
Extra length of carriage 25 feet, 50 feet ways,	50
Bench for sharpening files, with saw shaft,	50
Fixtures for cutting wood,	50
Six pair extra head blocks,	100
Post Morticing machine,	60
Upright roller for long plank,	100
Bands,	100
Elevator, with cups on buckets,	100
Windlass, with chains and fixtures,	175
Extra Saw,	133
Gross amount,	3,050

The Mill without steam power, of large size, to saw 12 feet long; (\$3,000 for all extra lengths over, for extra carriages for preparing and raving 3 or more logs at a time; by which, while one log is being sawed the others may be made ready for that operation), \$500.