

It is my experience, that herdsgrass and red-top will produce more hay, even the first season, than if mixed with clover, and that red top is preferable to either. That red-top will produce more feed after mowing, and is far preferable for pastures. A horse of ordinary size has been known to eat about six tons of herdsgrass (without grain) in a year; though performing very little labor. Orchard grass deserves notice.

#### FRENCH MERINO SHEEP.

General R. Harmon, of Wheatland, Monroe county, recently returned from Vermont, with about thirty choice French Merino sheep, procured from S. W. Jewett, Esq. of Middlebury. They are all young and splendid animals, and were, with one or two exceptions, all selected from Mr. Jewett's importations from France, during the past season. One ram, ten and a half months old, with a very fine fleece on his back, weighs 166 lbs.

### SCIENCE AND ART.

#### NIAGARA SUSPENSION BRIDGE.

THE Lockport *Journal* says that laborers are busily employed in pushing the Niagara Suspension Bridge to completion. In remarking on the structure, that paper says:—

"Imagine a span 800 feet in length forming a straight hollow beam 20 feet wide and about 18 feet deep, with top, bottom, and sides. There will be an upper floor to support the railroad and cars 58 feet wide between the railings, and suspended by two wire-cables, assisted by stays. The lower floor 19 feet wide and 15 feet high in the clear, is connected to the upper floor by vertical trusses. The cohesion of good iron wire, when properly united into cables or ropes, is found to be from 90,000 to 130,000 lbs per square inch, according to quality. The limestone used in constructing the towers will bear a pressure of 500 tons upon every square foot. The towers are 60 feet high, 15 feet square at the base, and 8 at the top. When this bridge is covered with a train of cars the whole length, it will sustain a pressure of not less than 145 tons. The speed is supposed to add 15 per cent to the pressure, equal to 61 tons. The weight of superstructure added, estimated at 782 tons, makes the total aggregate weight sustained 1,273 tons. Assuming 2,000 tons as the greatest tension to which the cables can be subjected, it is considered safe to allow five times the regular strength, and providing for a weight of 10,000 tons. For this 15,000 miles of wire are required. The number of wires in one cable is 8,000. The diameter of cable about 9½ inches. The bridge, we believe, is the longest between the points of support of any in the world."

#### THE TREASURES OF OUR FORESTS.

The products of the forests embrace the most important items of Canadian exports, and from their bulky nature secure to us a greater amount of intercourse with Great Britain than all other articles of export or import collectively.

The relation which the products of the forest bear to other productions, in a commercial point

of view, is represented below for the years 1849, 1850, and 1851:—

1849.	
Value of the products of the forest exported.....	£1,327,537
Value of all other productions.....	1,000,027

Balance in favor of the products of the forest.....	£327,510
Value of the products of the forest exported to Great Britain, not including ships built at Quebec.....	£1,009,669
Value of all other productions exported to Great Britain.....	338,755

1850.	
Balance in favor of productions of the forest exported to Great Britain...	£670,914
Value of the products of the forest exported.....	£1,360,734
Value of all other productions.....	1,309,264

Balance in favor of products of the forest.....	£51,470
Value of the products of the forest exported to Great Britain, not including ships built at Quebec.....	£371,375
Value of all other productions exported.....	229,474

1851.	
Balance in favor of products of the forest exported to Great Britain...	£741,901
Value of the products of the forest exported.....	£1,509,545
Value of all other productions.....	1,315,085

Balance in favor of the products of the forest.....	£184,460
Value of the products of the forest exported to Great Britain, not including ships built at Quebec.....	£1,180,000
Value of all other productions exported.....	325,350

Balance in favor of products of the forest exported to Great Britain...	£854,658
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Hence it appears that the value of the products of the forest exported to Great Britain, has steadily increased during the last three years; the numbers indicating those values being in 1849, £670,914; in 1850, £741,901; in 1851, £854,658.

It is thus seen at a glance that forest productions, exclusive of pot and pearl ashes, and the furs and skins of animals, are of the highest economic importance to us, and yet who, that is acquainted with the diversified trees of our forests, can fail to perceive that very extensive sources of revenue are neglected from ignorance of the value of many species of wood, which are especially adapted to the peculiar purposes of artificers in Great Britain.

We are led to these remarks in consequence of the information respecting forest productions which the recent Exhibition of All Nations in London has brought to light.

Not less than one hundred and thirty varieties of British wood were exhibited at that magnificent exposition of industry. Among them, it may be well to mention, specimens of apple, pear, plum, and apricot trees were introduced, in consequence