

"The Giovi Incline is upon the Turin and Genoa Railway, and commences $7\frac{1}{2}$ miles from Genoa, a point 295 ft. above the level of the Mediterranean, and ascends the Appenines. The Semmering Incline is upon the Vienna and Trieste Railway, and crosses the Noric Alps at the pass of that name. It is replete with extensive and extraordinary works. The preliminary operations and study of this Incline occupied from 1832 to 1848, a period of six years. It was opened in May 1854, its construction having taken $5\frac{1}{2}$ years. Upon the Bhoré Ghaut, about four years were spent in preliminaries, and the works have been completed in about $7\frac{1}{2}$ years from the date of their commencement. In the four months of the monsoon, during which about 150 in. of rain fell, no work could be carried on except in some of the tunnels, where the work has never ceased night or day.

Great International Wheat Show.

A Great International Wheat Show will be held at Rochester, N. Y., September 8th, 9th, and 10th, under the auspices of the Monroe County Agricultural Society. The following premiums are offered:—

For the best 20 bushels of white winter wheat...	\$160 00
For the second best 30 bushels of white winter wheat	75 00
For the best 20 bushels red winter wheat.....	100 00
For the second best 20 bushels red winter wheat.	50 00
For the best 2 bushels white winter wheat.....	50 00
For the second best 2 bushels white winter wheat	25 00
For the best 3 bushels red winter wheat.....	40 00
For the second best 2 bushels red winter wheat...	20 00
For the best 2 bushels spring wheat.....	20 00
For the second best 2 bushels spring wheat.....	10 00

Competitors for these prizes will be required to furnish samples of the wheat in the ear, and with the straw attached (say fifty ears of wheat and straw); also to furnish a written statement of the nature of the soil on which the wheat grew, method of cultivation, time of sowing, quantity of seed sown, manures (if any used), and mode and time of application; also the time of ripening and harvesting, and the yield per acre, with such other particulars as may be deemed of practical importance; also the name by which the variety is known in the locality where it was grown. The wheat must be one variety, pure and unmixed. The prize to be awarded to the actual grower of the wheat, and the wheat which takes a prize to become the property of the society.

Composite Soap Patents.

The following constitute the substance of two patents granted for composite soaps: Patent for soap granted to W. L. Dawson, of Lynchburg, Va., on April 9, 1861:—strong potash lye, 75 pounds; tallow, 75 pounds; cocoa-nut oil, 25 pounds. Boil until the compound is saponified in the usual manner.

To make 30 pounds of the new composition, take 2 gallons of boiling soft water in a kettle, add half a pound of sal soda, 2 ounces of borax, 2 tablespoonfuls of spirits of turpentine, and 1 teaspoonful of linseed oil. Stir this mixture until the borax and soda are dissolved: then add 15 pounds of the above soap made from lye, tallow and cocoa-nut oil; and continue the boiling with stirring for fifteen minutes, until the whole is incorporated and dissolved. Now add two ounces of the spirits of hartshorn, and stir. It may be

scented with any essential oil, or odor, and colored, if desired; then run off and molded into cakes fit for toilet use. It is a good soap for chapped hands, and is free from any disagreeable odor.

Patent for soap, granted to Henry Warren, Goshen, Ind., on Sept. 3, 1861, called "Warren's compound chemical soap," 2 gallons of water; when boiling, add eight pounds of Brown's opodeldoc, shaved fine, three-quarters of an ounce of alcohol, half an ounce of spirits of turpentine, half an ounce of ammonia, 2 ounces of sal-soda, 2 ounces of borax, 1 ounce of spermaceti; boil until all is dissolved; color red, with Chinese vermilion; blue with ultramarine. This makes 24 pounds of soap. Pour it out into frames and it becomes solid in three weeks. Brown's opodeldoc is an article of common manufacture.—*Sci. Am.*

Sulphur in Coal.

Taking the amount of sulphur in the coal used for gas-making at 1 per cent., the coal used annually for this purpose in London would contain more than 10,000 tons of sulphur.

A Smart Canadian Village.

The *Scientific American* thus describes a village in Central Canada, which is the type of many now springing up into towns throughout both divisions of the Province. The village of Hastings is situated on the River Trent, a few miles from Rice Lake, C. W. Three years ago there were some dozen houses in it; now there are over one thousand inhabitants, two four-story factories—one cotton and one woollen; two large saw mills, grist mill and tannery, and ten stores; altogether, it is quite a thriving village. The cotton factory is called the Trent Valley Mills; it has 30 looms, and turns out about 8,000 yards of grey cotton per week. The same firm have a small factory, where they knit gentlemen's underclothing, vests and parts.

Canadian Mineral Wealth.

From information received from Quebec, says an English paper, we learn that the mineral wealth of Canada is slowly but surely becoming developed. It is something less than six years since the copper regions of Lower Canada first attracted attention, and we now find them filled with mining enterprise, drawn by the rich promise from Europe and the States, bringing abundant capital, and giving employment to hundreds. The Acton mine, in the county of Bagot, was the first to which much attention was directed, and the success of the operations in regard to production and money value are supposed to be without parallel. Within three years after it was opened 490,000 dols. worth of ore had been obtained, and between 500 and 600 hands were employed in its working. The Harvey Hill Mines, in the county of Leeds, a large interest in which was held by citizens of Quebec, is, as we learn, a still more valuable property than that of Acton. These mines have been disposed of within the last few days to Boston capitalists for the sum of £50,000 sterling. 322 tons of this ore from the Harvey Hill Mine, sent to England, give an average of 38 per cent. This is a much higher percentage than is generally obtained, but we are informed that much of the ore raised from this mine is as high as 50 per cent.