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## Rail Road News.

### Crossing the Atlantic in Seven Days.

A petition has been presented to the Legislature of the State of Maine for the survey of a new line of Railroad in the direction of St. John's, New Brunswick, with a view of its continuation to Halifax, or some good harbor on the coast of Nova Scotia. The object is to have the railway connected with the interior lines in our country, to carry passengers to the said port on Nova Scotia, from which swift steamers are to carry them to Galway, Ireland, thence by railroad to Dublin, and from Dublin across to Wales to the Holyhead railroad. If this scheme were carried out, there can be no question of the practicability of going from New York to London in eight days, and perhaps seven. Halifax might yet become the entrepot of mail intercourse between the east of our continent and the west of Europe. We have no wish to see this result, but by good management and prudent investment of wealth on the part of Great Britain, the Provinces of Nova Scotia and New Brunswick might yet become as famous as either of the States of New York or Pennsylvania.

### Railways.

The entire amount of capital invested in railway communications in all the countries of the world, is estimated at three hundred and sixty-eight millions and a half. Upwards of 18,900 miles of railway have been constructed. The capital to be invested in 7,800 miles in progress, will amount to nearly \$147,000,000.

### Halifax and Quebec Railway.

The Acadian Recorder states that Lord John Russel has consented that the guarantee of the British Government shall be given for a loan of £2,000,000, at 4 per cent., to construct the Halifax and Quebec Railway.

### Long Train.

The Hudson river railroad one day last week brought down a train of twenty three large cars, having 1,750 passengers. The train was half a mile in length—the heaviest train, probably, ever drawn in this country by a single locomotive.

There are now in process of construction nine railroads in the State of Indiana the aggregate length of which is 432 miles.

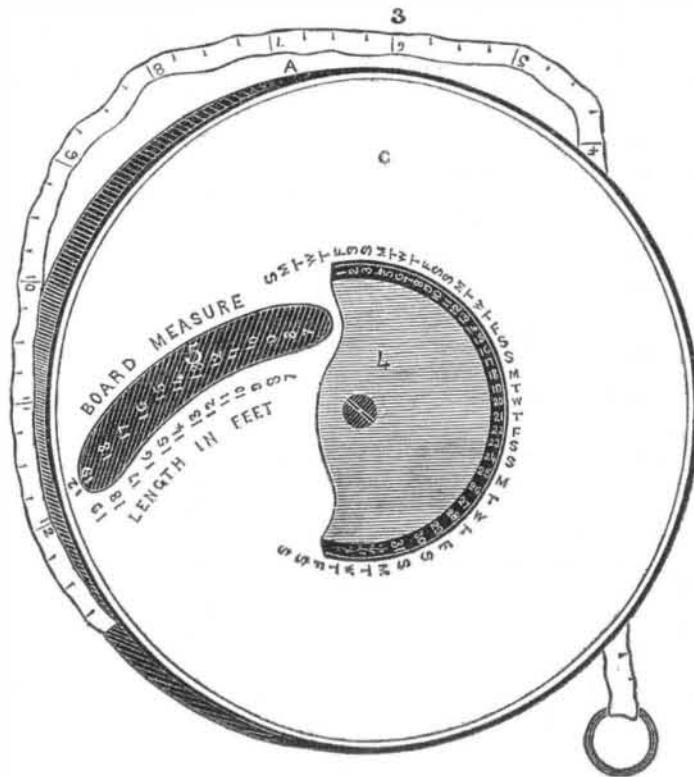
### Bright Nights.

So bright have the nights been in the North, a Scotch paper says, that during a fortnight small newspaper print could be read in the open air in Caithness, after a quarter past eleven o'clock, P. M. At Wick, as the town clock struck twelve at night, a newspaper was read by the light of the sky.

### Saltpetre.

The insurance companies of New York have come to a conclusion that they will not insure any building, or goods in any building, which contains saltpetre. The Councils also talk of putting it on the same footing as gunpowder, limiting the amount allowed in any place.

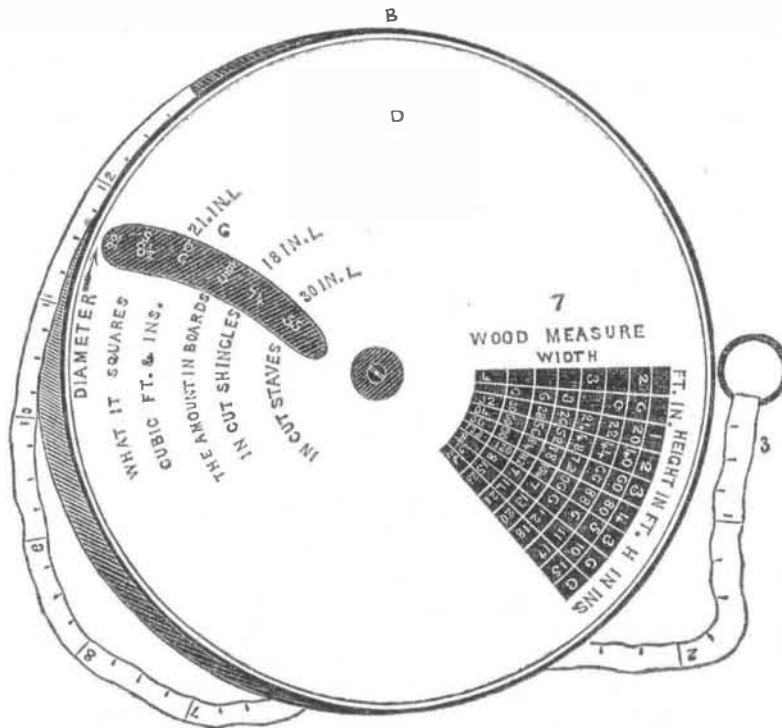
## ROTARY BOARD AND LOG RULE, AND MEASURE.



This improved instrument is the invention of Mr. Charles B. Hutchinson, of Waterloo, Seneca Co., N. Y., and secured to him by patent on the 4th of last month, (June.) The instrument is for measuring lumber, such as logs and boards; showing the number of feet they contain, the number of feet of boards, the number of shingles, or staves that can be cut from a log of a given size; and it contains a table for wood measure and one for the day of the month.

The accompanying engravings represent the two sides of the apparatus, A being the one side and B the other; 3 is the tape, as drawn

from the wheel, which is inside: 4 is a plate distinct from the case, and is moveable on it and numbered from 1 to 31, for the days of the month. On the plate C the initial letters of the days of the week are marked, which are made to correspond with the plate 4, which is moved for that purpose, like the revolving pencil heads, to indicate, with the figures, the days of the month; 5, on fig. A, is an inner plate which revolves, as the tape is drawn out on its axis; 6, on fig. B, is an inner plate revolving like 5; 7, fig. B, is a table showing the number of feet in a given quantity of



ar plates of brass, held together by an outer rim, through which is made to pass the tape into and from the wheel which is enclosed inside. The tape is marked out into 48 inches.

OPERATION—To measure boards, take the instrument in the left hand and draw out the tape the width of the board, and so far that the figure indicating its width shall be opposite the opening in the plate C, fig. A. Then

opposite the figures, on the plate C, at the side of the opening therein, (which figures indicate the length of the board from 7 to 19 feet) will be seen on the inner plate, 5, on the same circular line, the number of feet contained in the board. If the board be twelve inches wide and nineteen feet long, the inner plate, 5, shows that it contains 19 feet. If 18 feet long, then 18 feet is shown. If the board is

16 inches wide and the tape is drawn out 16 inches, the inner plate will show that in a board of that width and 19 feet long, 25 feet are contained in it—and so on. As the tape is drawn out 12, 15, 20, or any number of inches, a corresponding number is shown on the outer edge of the inner plate 5.

To measure logs, and first to show what a log of a certain diameter will square; second, its cubical contents; third, the number of feet of boards that can be cut from the log; fourth, the number of cut shingle; fifth, the number of cut staves. Draw out the tape the diameter of the log, and so far that the figure on the tape corresponding with its diameter, shall be opposite the opening of the plate in figure B. Then will be seen on the inner plate 6, through said opening at the side thereof, and on the circular line with the words on the plate D, fig. B, "what it squares," (the log), and opposite the words on said plate "cubic feet and inches," (its cubical contents,) opposite the words "The amount of boards," "In cut shingles," "In cut staves," will be found the feet of boards, number of shingles, and cut staves that the log will contain. In this measurement it is assumed that the log for the square, cubic, and boards, is one foot long, for the shingles 18 inches, for the staves 30 inches long—for logs of greater length multiplication must be made accordingly. For example, in figure B, if the tape be drawn out 12 inches, a corresponding figure will be found on the outer edge of the inner plate 6, under which will be found, on the same circular line, with the proper words; first,  $8\frac{1}{2}$ , the number of inches the log will square; 6 (measuring six-twelfths of a cubic foot) the amount of cubic measure contained; 5 the number of feet of boards said log will make; 74 the number of shingles, and 55 the number of staves which can be cut from the log. The log for the square, cubic, and boards to be 12 inches long, for the shingles 18, and for the staves 30 inches, the shingles to be  $\frac{3}{4}$  of an inch thick at the butt, and the staves  $\frac{3}{4}$  of an inch thick. A spring is contained inside to draw back the tape in the usual way. This instrument has been highly praised by those who have used it. It is now in the hands of Mr. Wm. Knox, of Waterloo, N. Y., to whom all communications should be addressed (post-paid) who will promptly pay attention to the same. The making and selling of such instruments, we believe, will be a good paying business.

### Farmers, Make your own Candles.

Take 12 pounds of alum for every 10 pounds of tallow, dissolve it in water before the tallow is put in, and then melt the tallow in the alum water, with frequent stirring, and it will clarify and harden the tallow, so as to make a most beautiful article, for either winter or summer use, almost as good as sperm.

If the wick be dipped in spirits of turpentine, the candles will reflect a much more brilliant light.

[The above is from the American Farmer, and appears to be a good receipt.

### To Make Pearls.

The Encyclopedia Britannica gives the following as the method of producing pearls:—"The shell is opened with great care, to avoid injuring the animal, and a small portion of the external surface of the shell is scraped off. In its place is inserted a spherical piece of mother of pearl, about the size of a small shot or grain. This serves as a nucleus, on which is deposited the pearly fluid, and which in time forms a pearl."

Mr. Willet, of Leadyard, N. Y., has sheared from two merino bucks 29 pounds of wool. The sheep are three years old, and were brought from Vermont a couple of years ago.