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## Rail-Road News.

### Railway Accidents Prevented.

Fasten on the bottom of the cars, near the wheels, pieces of wood, to be about six inches above the rails, so that when the axles or wheels break, these projections will reach and drag on the rails, and aid the breaks in stopping the train. These pieces of wood may have a notch embracing the inner side of the rail, and thus effectually prevent the cars from leaving the track. W. F.

Boston, March 27, 1851.

### Mobile and Ohio Railroad.

The agent appointed by the Governor of Alabama to select and locate the lands in that State, appropriated for the Mobile and Ohio Railroad, has completed that duty. About 253,440 acres, or 396 sections, have been selected. Most of the selected lands lie contiguously to the waters of Mobile Bay. The lands are said to be worth an average of three dollars per acre.

### Coal in Road Engines.

The Dimpfel Anthracite Coal Locomotive, which has been in use on our road for some months, is the fastest engine on the line. With 3¼ tons of coal it does the work that in other engines consumed 9 cords of wood! This engine is about to work a complete revolution in the use of our coal, and in the economic value of propulsion in land and water.—[Pottsville Register.

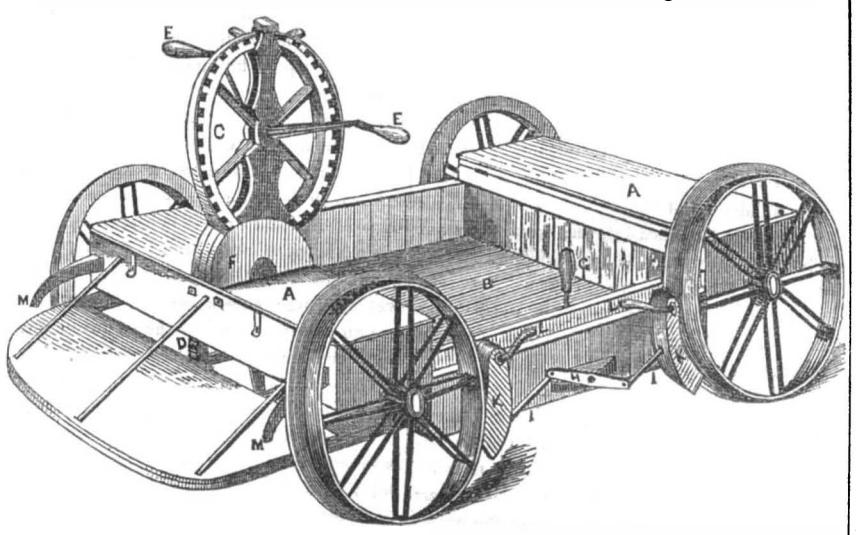
[We are glad to hear of the continued succes of this locomotive. It is to be hoped that Mr. Dimpfel's improvements will be soon adopted on all locomotives and in all marine engines.

### Queenston Suspension Bridge.

The Queenston Suspension Bridge, in presence of a great number of spectators, was opened on Wednesday the 19th ult. A correspondent to the Tribune says, "it is the largest bridge in the world, being 1,000 feet in length. It cost $50,000. A large number of persons from Toronto were present, and the occasion was celebrated by a festival prepared under the superintendence of Mr. Wynn." Mr. Edward W. Serrell, C. E., of this city, is the engineer of this bridge. We must say that he has not been slow in erecting it. Some time ago, in noticing an extract from another paper, we made a comparison between this bridge and the one at Wheeling. We stated that there must have been a mistake, somewhere in the article, and we suppose that many such have been promulgated, but *we* will no doubt have a correct description of this noble bridge at some future day. Mr. Serrell is an accomplished and able engineer.

The Mayor of our city employs boys to go about the streets with the following placards, "Strangers beware of Mock Auctions."

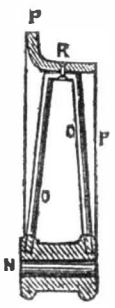
## IMPROVED RAILROAD HAND-CAR---Figure 1.




The improvement on this Car is the invention of Mr. F. M. Mattice, of Buffalo, N. Y. Fig. 1 is a perspective view, and fig. 2 is a vertical transverse section of the wheel, showing how the rods or arms are attached and secured to the same.

Hand-cars for railroads are very important vehicles. The duties they have to perform require a peculiar construction, and an adaptability of parts to enable them to perform successfully and well. They should be strong and light at the same time, and they should be constructed in such a way that their velocity can be arrested in the shortest possible period of time. When a train is coming in any direction, it is required that the speed of the hand car should be instantly arrested, and the vehicle taken off the track. A good brake is necessary to accomplish the first object, and a light car will facilitate the second. Both of these qualities, it is believed, are embraced in this car.

FIG. 2.




A A, fig. 1, are tool boxes in the car; B is the bottom of the large receptacle of the car; C is a cog wheel, and E E are the handles by which the men drive it. There is a band of iron around the wheel to protect the teeth; F is a flange post (one on each side), and between which is a cog-wheel gearing into C; D is another cog-wheel on the wheel axle, gearing into the intermediate. By this gearing any required speed may be given to the car; M M are handles to lift the car; K K are two brakes attached by rods, I I, to the beam leg, H. L L are two brackets to steady and guide the brakes; G is the lever to operate the brakes at once. By pulling on the lever, G, to the right, the beam, H, will be thrown more to the perpendicular on its axis, and the brakes will be thrown from the face of the wheel. By pulling on the lever to the left, the beam, H, will be thrown more to the horizontal and the brakes projected against the face of the wheels.

In figure 2, P P represent the rim of the wheel, made in the usual form. O O are wrought-iron rods bent over at the top, their ends are inserted into the hub, N, the hub being cast, thus embracing the end of the said rods. The rim is shrunk on the rods, the ends of which are formed in a very excellent manner to constitute a seat for the said rim. The rods are united to the rim by a rivet, R, a hole being directed to receive the said rivet. By this mode of making the wheel, one of great strength and lightness can be constructed, and this is the grand desideratum. More information may be obtained from Mr. Mattice.

### British Railroad through Canada to the Pacific.

Mr. Whitney, one of the projectors of a railroad to the Pacific, has gone to England, it is said, to confer with the British Government about constructing a railroad through the British North American Possessions to the Pacific. It is well known that Mr. Whitney has expended a great deal of money on this favorite subject of his, and he travelled through every state of the Union, in order to render his project popular. A majority of our State Legislatures passed resolutions favorable to such a railroad, and a committee of the House of Representatives at Washington reported in favor of his plan. It never met with much favor in the Senate, and we suppose Mr. Whitney has become tired and discouraged of ever carrying through his project and receiving a grant of 60 miles wide, and 2,000 long of lands to build his Pacific railroad. Whether he will succeed in England or not, is a question. There is plenty of gold in England, but it is such a short time since railway speculations played such pranks in the money markets there, that every new project of a kindred nature is now viewed with very circumspect notions of its payability. A railroad through Canada, extending from Halifax and through the country to the Pacific, could be built for as little money as one in the United States, but how could the road be made to pay. If those who invest money in such a road could wait for returns for about ten or fifteen years, and those very small at that, a considerable trade might be nurtured in that time for China, but railroads through Canada could never enable traders to carry goods from China, so cheap as by sailing vessels; neither can one through the United States. The coal of Vancouver's Island, however, is something which will yet be of great advantage to Canada.

### Discovery of Ancient Manuscripts at Rome.

It is announced that a discovery has been made at Rome, of twenty-five volumes, devoted to descriptions of the territory of the United States. These volumes are in the library of the Dominican friars, and our government will unquestionably deem the subject of sufficient importance to procure copies of works so rare and so useful.

It is likely to prove an illusion however, like a great number of other wonderful discoveries these days.

### English and American Patents.

"As regards light dues, it is unnecesary to add anything to the statement given above, by which we are glad to see that the attention of the Government has been drawn to the enormous inequality of the present system. We trust it will not be long before their attention will be in like manner drawn to the inequality existing under the patent laws. An Englishman arrives here, and in a few days may obtain, at almost nominal cost, a patent for the whole Union; but let an American visit London for the same purpose, and he is delayed for weeks by the necessity for obtaining the signatures and seals of a host of placemen, who live out of the taxation thus imposed, and at the close he finds he is taxed to the extent of a hundred or more pounds for England alone; and that if he desires to include Scotland and Ireland, his expenses of time and money must be doubled, if not even trebled.—[Washington Republic.

The above is an extract from an editorial of the "Republic." The remarks are made in speaking of the correspondence between our Minister and Lord Palmerston, about the tax on ships to support the coast lights of Britain. The tax is a bad one, to be sure, and should be changed as suggested by Mr. Lawrence, but we do not think the Republic states the case correctly about the British Patent Laws. The English patent fee is high, but it is as high for John Bull as Brother Jonathan. In our country it is different. We charge an Englishman $500 for a patent fee—all other foreigners $300, an American citizen $30. In England an American will get a patent in about two months. In our country we have known an Englishman pay $500, apply for a patent at Washington, and not get it for eight months. There is no irregularity in the English patent laws, but there is in ours. The comparison of the Republic is an unfortunate one—inapplicable. If it had said the charges were exorbitantly high, it would have stated the plain truth. The English patent fees are high, far too high, and the sooner the price is reduced so much the better, but there is no inequality about them,—the Hindoo and the Englishman are placed on the same footing and are judged by the same law. We suppose that many of our people are not aware of this fact, but have supposed, that Americans paid higher patent fees in England than the natives. The rules of the English Patent Office, we think, are nonsensical, but they are more injurious to the people of England than to foreigners.

### Iron Ships.

The British Government have issued orders stating that no contract will be entered into with iron ships.

The Mississippi river is again so high as to threaten a disastrous overflow. Considerable property has already been destroyed at various points, and much farther damage was apprehended at the last accounts.

Among the objects of the Swiss collection for the London Exhibition is a gold pen-holder with a diminutive watch at the end of it, indicating not only the hour and minutes, but even the day of the month.

Such is the quantity of glass used in the building for the exhibition, that, if the duty had not been remitted, it would have amounted to $200,000.

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