

Scientific American.

THE ADVOCATE OF INDUSTRY, AND JOURNAL OF SCIENTIFIC, MECHANICAL AND OTHER IMPROVEMENTS.

Vol. 4.

New York, November 11, 1848.

No. 8.

THE
SCIENTIFIC AMERICAN :

CIRCULATION 11,500.

PUBLISHED WEEKLY.

At 128 Fulton Street, New York (Sun Building,) and
13 Court Street, Boston, Mass.

By Munn & Company.

The Principal Office being at New York.

TERMS—\$3 a year—\$1 in advance, and
the remainder in 6 months.

See advertisement on last page.

Poetry.

PICTURES OF MEMORY.

BY MISS ALICE CAREY.

Among the beautiful pictures
That hang on Memory's wall,
Is one of a dim old forest,
That seemeth the best of all.
Not for his gnarled oaks elden,
Dark with the mistletoe,
Not for the violets golden
That sprinkle the vale below ;
Not for the milk-white lilies
That from the fragrant hedge,
Coquetting all day with the sunbeams,
And stealing their golden edge ;
Not for the vines on the upland,
Where the bright red berries rest,
Nor the pinks, nor the pale sweet cowslip,
It seemeth to me the best.

I once had a little brother
With eyes that were dark and deep—
In the lap of that old dim forest,
He lieth in peace asleep ;
Light as the down of the thistle,
Free as the winds that blow,
We roved there beautiful summers,
The summers of "long ago ;"
But his feet on the hill grew weary,
And, one of the autumn eves,
I made for my little brother
A bed of the yellow leaves.

Sweetly his pale arms folded
My neck in a meek embrace,
As the light of immortal beauty
Silently covered his face ;
And when the arrows of sunset
Lodged in the tree-tops bright,
He fell in his saint-like beauty,
Asleep by the gates of light.
Therefore, of all the pictures
That hang on Memory's wall,
That one of the dim old forest
Seemeth the best of all.

O THE HEART IS A TREASURE :

BY J. E. CARPENTER.

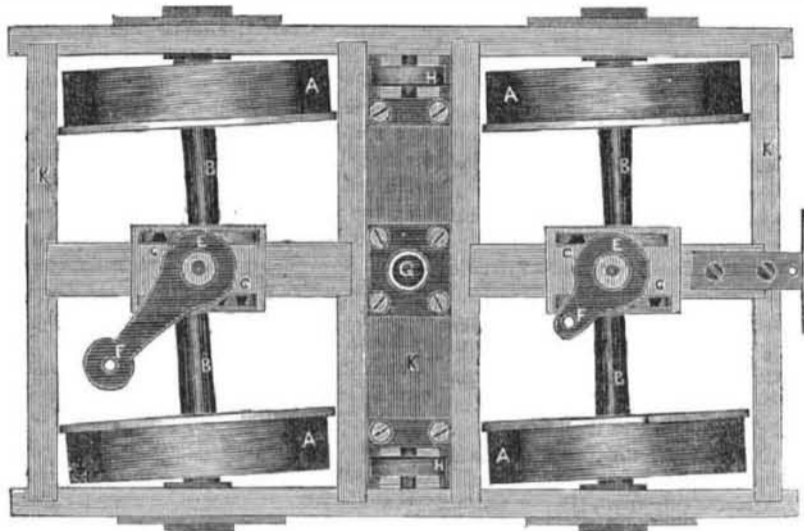
O ! the heart it is a treasure
That should not be lightly won,
To be thrown aside at pleasure,
When the festive hour is done :
'Tis a jewel that, to cherish,
Should be still thy dearest boast ;
For when all beside it perish,
Will its worth be known the most !

If the heart of thee is beating,
Use it gently lest it break ;
Warm and tender be thy greeting,
'Twill grow fonder for thy sake !
And in sickness or in sorrow,
Let thy cares thy solace be ;
Then 'twill all its gladness borrow
From its sun of hope, in thee !

O ! the heart it is a blessing,
In its freshness and its youth,
Be it thine, mid thy caressing,
To preserve it in its truth.
'Tis no worldly gem, at pleasure
To be worn or cast aside,
But a firm and priceless treasure,
And more valued when 'tis tried !

IMPROVED AXLES FOR TURNING NARROW CURVES.

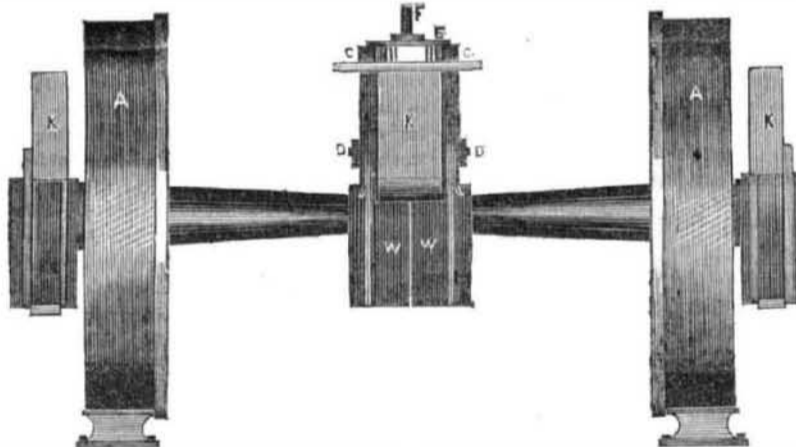
Figure 1.



This is an improvement in the construction of Railroad Car Axles, invented by Messrs. Morse & Mansfield, Machinists, Canton, Mass. This invention has been effectually tried during the past year on the Boston and Worcester, the Boston and Providence, and several other Railroads in New England, and the valuable practical testimony of the Superintendents and Engineers of these roads is highly favorable—exceedingly so. The saving of wear

and wear of the wheels where it has been used, has far exceeded expectation. The nature of the invention consists in having each axle as it were divided and hung in two middle suspension bearings, which are allowed to swing on pivots, whereby the angles of the wheels can be diverged from the straight line for the better turning of narrow curves, than by extended immoveable axles.

Figure 2.



DESCRIPTION.—Fig. 1 is a view looking down upon the truck, and fig. 2 an end elevation. The same letters refer to like parts on both figures, therefore we will describe the engraving collectively.

A A A A, are the wheels. B B B B, are the axles. C C, are pinion and rack coupling. D D, fig. 2, are the pivot axis of W W, the suspended axle bearings. K K K K, are the transverse timbers of the truck frame. E, is a pinion crank, and F F, are vertical bolts in the end of the pinion crank to fit into recesses in the bottom beams of the car. G, is an iron socket to receive a vertical bolt fixed on the bottom of the car. H H, are friction pulleys to ease the friction of the car upon the middle of the truck. The bolts F F, and the bolt in the car to fit into socket G, secure the

car to the truck. E, we call a pinion crank, from the fact that below its cap plate it has notches that fit into notches on the upper end of the swing axle bearings. These notches coincide about one quarter of the circle on each side of the pinion with the notches in the upper part of W W, therefore the top of W W moves in slots in C C, as will be observed in fig. 1. The operation of these axles is obvious ; they prevent torsion, also much wear of the wheels and rails too. To allow the wheels to change with the angle of the axle as seen in fig. 1, the outside journals of the axles are fixed in their boxes in such a manner that both the shoulders and journals move in their boxes and work very nicely.

The inventors have taken measures to secure a patent.

Law and Art.

A Manchester, England, landlord recently levied for rent upon the studio of his tenant, a sculptor of the name of Clark, and sold under hammer about £300 worth of busts for £60. It was proved that the auctioneer sold the head of John Wesley for that of Voltaire : one of Chantrey, as "a bald-headed chap's ;" that of Raffæle, as "a long-haired show-boy's," and that of Sir Charles Bell, as Deaf Burke's. The jury indignant at the oppression of the landlord, the ignorance of the auctioneer, and the desecration of arts gave the sculptor £550 damages

Reduction of Wages at Lowell.

Notice has been given at Lowell that a reduction of wages will soon take place. The Boston Republican says it is to commence on the 20th of November on one corporation, and probably at the same time on the others. The reduction is considerable, 25 to 35 per cent. The speed is to be reduced and the girls are to be made to tend more looms.

The hours of labor should be reduced in preference to the reduction of speed. The very system which the Lowell Companies are about to adopt, is a system which they will yet regret having adopted.

RAIL ROAD NEWS.

Baltimore and Harrisburg Railroad.
A committee has been appointed to receive subscriptions to the capital stock of the Columbia, Marietta and Portsmouth Railroad, the object of which is to furnish a continuous Railroad between Baltimore and Harrisburg, and thus connect the former city with the extending railroad in rapid progress between Philadelphia and Pittsburg. The people along the line of road and its vicinity have subscribed \$100,000, together with the stock of the Turnpike Companies, \$20,000, leaving \$100,000 to be raised at Baltimore.

Hudson River Railroad.

The new contractors have commenced work on the upper section of the Hudson River Railroad which passes through Poughkeepsie. All the sections are progressing rapidly ; as soon as right of way is obtained for less than one mile the company will have possession of the entire line to New-York. No part of the road will be put in operation this Fall, on account of the deep cut through Fort Washington Point, near New-York. By Spring the road will be nearly complete to Fishkill Landing, and in May the cars will come to Peekskill. Before the first of July they will reach Fishkill Landing, and will probably reach Poughkeepsie before the close of that month. In the Spring the route is also to be put under contract to Hudson, and the cars may reach that place at the close of next season.

New York and New Haven Rail Road.

In New Haven is to be seen a railroad usurping the place where the sluggish water formerly flowed along the Hampshire and Hampden Canal, and for more than a mile in a circuitous route under twelve bridges through the heart of the city, now may be seen firm rails instead of water, and locomotives driving loaded trains rather than horses tugging away at almost empty canal boats. The trains pass nearly twenty feet below the surface of the streets, and over them are being thrown commodious and elegant bridges. A noble Depot is rapidly raising on Chapel st. where both the New-York trains and those from the interior of the State on the Collinsville Road, will receive and distribute their passengers. The latter Road has been in successful operation some months, and a more admirable structure cannot be found. Arrangements have been made by which the trains over this route will, in a few days, run through directly to Bridgeport, offering new facilities for travel and freight from the interior of New-England to New-Haven and New-York.

Low Fares Increase Travel and Increase Profits.

When the Lowell and other railroads leading from Providence and Worcester were constructing it was estimated that they would carry forty-five thousand passengers each per annum. By reducing the fare from former prices each road last year carried nearly twelve times as many as the above estimate. This is a very important hint for other roads. By reducing the fare you increase the travel and the freight and consequently the profits.

New Rail Road Depot in our City.

It is rumored that the New-York and New Haven Railroad Company are about to build a splendid depot at the corner of Centre and Canal sts. on the site now copied by the Gas Works. A branch track will be laid down in Centre st. for the use of that road. The property was bought by the company for \$75,000.

Passengers for Albany from New York will be able to travel the whole distance by railroad after the first of January next, via Bridgeport, Conn.