

# Scientific American.

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

Vol. 3.

New York, June 24, 1848.

No. 40.

## THE SCIENTIFIC AMERICAN:

PUBLISHED WEEKLY

At 133 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.

### SONG OF A POOR MAN.

I am a poor man, very poor,  
And all alone I go;  
I would I might yet once again  
Right joyous courage know.

In my beloved parents house  
A happy child was I,  
But bitter sorrow is my lot  
Since in the grave they lie.

I see the rich man's gardens bloom,  
His golden harvests nod;  
But mine is an unfruitful way  
By care and sorrow trod.

Yet dwell I in my voiceless pain,  
Amid life's joyous swarm,  
And wish each one I meet, good day,  
So hearty and so warm.

O thou rich God! Thou leav'st me yet  
Not wholly comfortless,  
From heaven sweet consolation comes  
The whole wide world to bless.

On every little hamlet green  
Thy holy house is found;  
The organ and the chorus-song  
In every ear resound.

The sun and moon, and stars yet smile  
Most lovingly on me,  
And when the evening bell rings out,  
Then talk I Lord with thee.

Each good man in thy halls of joy  
Will one day be a guest;  
Then shall I come in robes of light,  
And seat me at the feast.

### DO SOMETHING

Up, up, and be doing!  
Let us work while we may;  
For ill is pursuing  
The idle away.

Labor is noble—  
God-sanctioned is toil,  
Be it black at the anvil,  
Or brown at the soil.

Scorn not your station,  
Be it higher or lower;  
Each honest vocation  
Has glory in store.

Ply at some calling  
No matter what,  
If needful and lawful  
'Twill sweeten your lot.

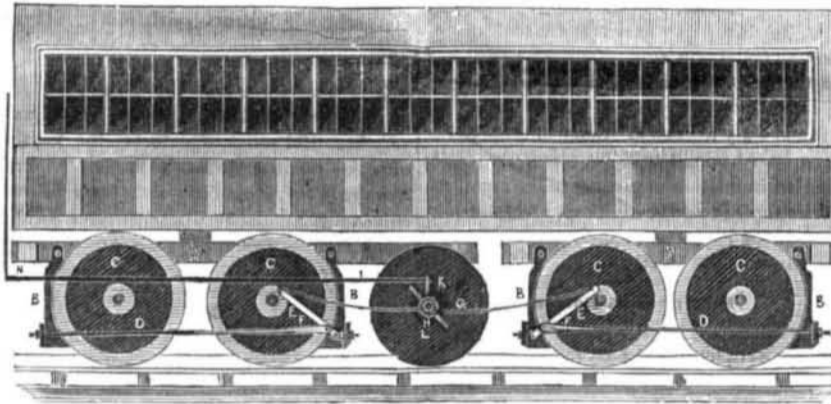
### PROGRESS.

Profounder, profounder,  
Man's spirit must dive;  
To his eye-rolling orbit  
No goal will arrive;  
The heavens that now draw him  
With sweetness untold,  
Once found, for new heavens  
He spurneth the old.

Among the medical students to whom the London College of Surgeons has lately granted a diploma, is a Hindoo gentleman of the name of Soorjocomar Goodeve Chuckerbutty.

## PRATT AND MORSE'S IMPROVED RAILROAD BRAKE.

Figure 1.

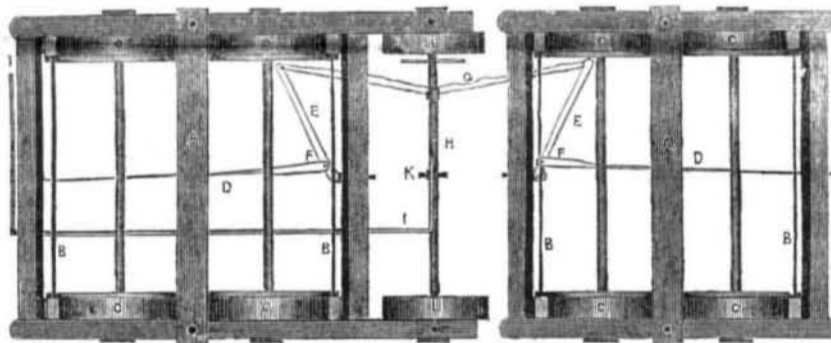


This is an invention of Messrs. Pratt and Morse, of Webster, Mass. It possesses novelty and is worthy of attention. Its nature consists in applying friction brakes to the faces of the running wheels by means of chains winding round an axle of two sliding wheels, which are thrown out of and in gear by a power lever operated as may be, by either the conductor or engineer.

Figure 1, is a side elevation, partly in section. The same letters indicate like parts on

both figures. A A, is the frame. B B B, are friction brakes which press against the wheels. C C, are the running wheels. D D and E, is the brake rod or bent lever connected by a pivot at F. The brakes are attached to this by chains connected with D D E, and pass through an eye on the shaft or axle H. L L, are two light sliding wheels. I, is a large lever shaft keyed on to the axle H, by K, a pivot joint. N, is a lever rod or handle.

Figure 2.



This is a ground plan of the invention and represents the parts minutely. As the same letters indicate like parts on both figures it is needless to refer to them again, only call attention to the arrangement of parts. The sliding wheels L L, form no part of the necessary running gear, they are for the purpose of operating the brakes by winding the chain G, around the axle H. When the cars therefore are running, the wheels L L, do not run on the track, but are what may be termed unshipped, that is, lifted up from the track by the powerful lever I, and the lever rod N, and when the brakes are to be operated, the lever drops the sliding wheels upon the track which then soon winds the chain round the axle H, and stops the cars by the action of the brakes upon the wheels. To keep the sliding

wheels from the track when they are lifted up in the slot frame (which cannot be seen in the engravings,) the rod N, is made to rest and fixed to some convenient part of the locomotive, so as to let the engineer drop it and let the sliding wheels perform their described duty. Attached to the rod handle or arm N, a cord may pass over the cars for the conductor to operate the lever and brakes in cases of danger, as well as the engineer. The apparatus is simple, and can be attached with less expense than some other plans to cars and locomotives in use. Some mechanics have spoken highly of it. More information may be gained by letters, post paid, directed to the inventors at the place mentioned above, who we believe have taken measures to secure a patent.

### Rapid Travelling.

F. X. Aubery, left Santa Fe on the night of the 19th of May, and arrived at Independence on the morning of the 30th, the whole time out being eight days and ten hours; but he lost from detention by the Indians more than a day, and really made the distance of eight hundred miles in seven days. He left Santa Fe with six men, but they gave out before they had accomplished three hundred miles of the distance, and the remainder of the trip was performed alone. He killed 3 horses and 2 mules—walked 40 miles, was 3 days without provisions, and slept only four or five hours on the route. Such travelling is unexampled. The Indians attacked him, and obtained possession of all his baggage, provisions, packages of letters, &c., but he contrived to escape from them.

### Dysentery.

Those having the dysentery or bowel complaint, will find an almost unfailing remedy, by procuring a small piece of the root of genuine Turkey rhubarb, and chewing a piece about the size of a cherry pit, once or twice through the day. If the genuine article is procured, the remedy is said to be almost sure, in whatsoever stage the disease may be.

The garden of the Empress of Russia on the island of Yelaguine has conservatories of glass which are upwards of two thousand feet in length. Eighteen columns support the roof; it is nearly eighty feet high, and upward of one hundred in width.

By a law of this State, any person who bets even a dime on the result of the Presidential election is deprived of his vote.

## RAIL ROAD NEWS.

### Railroad to the Pacific.

The stupendous project of uniting the waters of the broad Pacific with those of the Atlantic by a Railroad to the Bay of San Francisco, California, is one of great magnitude, but it is one which will, and must yet be carried into execution. A railroad will yet connect New York with San Francisco, and a line of steam vessels will cross the Pacific regularly, keeping up a continual communication with China and the United States. Our country will then become the half way house between Europe and the land of silk and tea. Then New York will become the centre of the commercial world.

### Railroad Suit.

The city of Nashville subscribed \$400,000 to the stock of the Chattanooga and Nashville Railroad. Several of her citizens thought it an unconstitutional act, and to escape the burthen of so much additional taxation, we presume, filed a bill praying that the subscription be declared unlawful and void, and that the corporation be enjoined from paying the stock. The case was tried in the Nashville Chancery Court a few days since, and the bill was dissolved, the court declaring the subscription constitutional and lawful. This is a very important decision. The complainants defeated in Chancery, have determined to take the case by appeal to the Supreme Court of the state.

### Pittsburg and Connellsville Railroad.

At the Convention of Delegates, held at the Court House, in the City of Pittsburg, on Wednesday the 31st day of May, 1848, in regard to a subscription by the Commissioners of Alleghany County of one million of dollars to the Central Rail Road of Pennsylvania, the following resolution, offered by Robert Christy, Esq., was adopted, viz. That the Pittsburg and Connellsville Railroad is a work of vast importance to the various interests of the county of Alleghany, and worthy of the most earnest support of the people of Western Pennsylvania, and that as soon as a charter is obtained from the State of Maryland for a company to construct a railroad from Cumberland to the line of Pennsylvania, a due regard for the interests of this section of country, and of Pittsburg, its commercial metropolis, will constrain the citizens of Alleghany to aid in the construction of said road, by all the means in their power.

### India Rubber Springs.

India rubber springs for railroad cars have come into use, and been applied to one of the cars on the Boston and Worcester Railroad, and found to work well. Each spring is comprised of several circular layers or rings of india rubber a thin metallic plate of the same size being interposed between each of the layers.

### The New Orleans Telegraph Line via the Mississippi Valley.

Dispatches by lightning from Memphis, show that the New Orleans Telegraph is working successfully to that point on the Mississippi. The line runs from Louisville via Nashville, to Tusculumbia, Alabama, and Columbus, in Mississippi, on its route to Memphis. The remainder of the line to New Orleans has all the posts up, and will soon be in full operation to the Crescent City. The line now working from Philadelphia to Memphis is about 1,300 miles long, and is part of "Atlantic, Lake and Mississippi Lines," constructed by Mr. Henry O'Reilly. This New Orleans line is worked by the new Columbian Telegraph, invented by Zook & Barnes. From Memphis to New Orleans, dispatches are forwarded by steamboats—thus shortening the communication between New Orleans and the northern parts of the Union.