Scientific American.

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

Vol. 4. New York, October 14, 1848. No. 4.

THE
SCIENTIFIC AMERICAN:
CIRCULATION 11,600.
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—$2 a year—$1 in advance, and the remainder in 6 months.

☞See advertisement on last page.

Poetry.

LIGHTS OF GENIUS.

BY MISS ALICE CAREY.

Upheaving pillars, on whose tops
The white stars rest like capitals,
Whence every living spark that drops
Kindles and blazes as it falls!
And if the arch-fiend rise to pluck,
Or stoop to crush their beauty down,
A thousand other sparks are struck,
That Glory settles in her crown!

The huge ship, with its brassy share,
Ploughs the blue sea to speed their course,
And veins of iron cleave the air,
To waft them from their burning source!
All, from the insect's tiny wings,
And the small drop of morning dew,
To the wide universe of things,
The light is shining, burning through.

Too deep for our poor thoughts to gauge
Lie their clear sources bright as truth,
Whence flows upon the locks of age
The beauty of eternal youth.
Think, O my flattering brother, think,
If thou wilt try, if thou hast tried,
By all the lights thou hast, to sink
The shaft of an immortal tide!

GIRL OF THE BLUE EYE BRIGHT AND BEAMING.

Oh, for the time of the Summer's dawn,
To hear the lark his carol singing;
Oh, for a walk on the dew-clad lawn,
When health from every breeze is springing.
Oh, for the shade of the hawthorn tree,
With the mid-day sun above it gleaming;
Oh, for such hours to spend with thee,
Girl of the blue eye bright and beaming!

Oh, for the time of the evening's close,
With not a breath its peace destroying;
Oh, for a share of its sweet repose,
But not alone the bliss enjoying;
Oh, for the hearth and the winter drear,
When joyous hearts with love are teeming;
Oh for such hours with thee to share,
Girl of the blue eye bright and beaming!

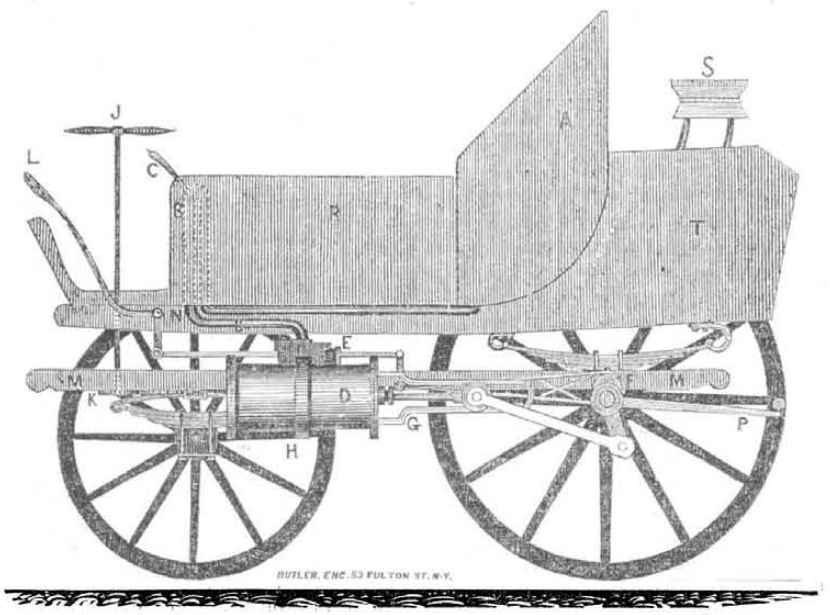
Oh, for a life 'mid scenes like this,
Unclogged by worldly wealth or splendor;
Oh, 'twere a life of radiant bliss,
Shared with a feeling of heart so tender;
Oh, what a fairy scene might be,
In a land where freedom's flag is streaming;
'Twere heaven on earth to be there with thee
Girl of the blue eye bright and beaming!

The Future.

The proud throne shall crumble,
The diadem shall wane;
The tribes of earth shall humble
The pride of those who reign.
And war shall lay
His pomp away;
The fame that heroes cherish,
The glory earned in deadly fray,
Like flowers that fade and perish.
Honor wafts, o'er all the earth,
Through endless generations,
The art that calls the harvest forth,
And feeds expectant nations.

STEAM CARRIAGES FOR COMMON ROADS.

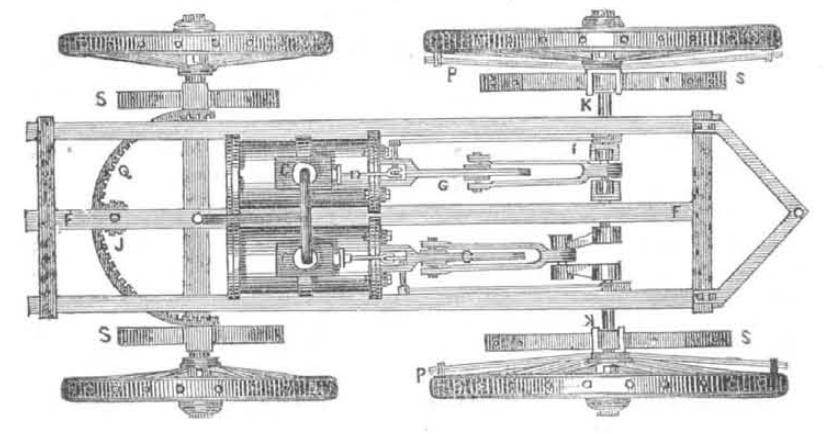
Figure 1.



The invention of Locomotives for common roads is not new to a few, but we presume that it is to many. Of this we were convinced a short time since, by a very respectable gentleman, who called upon us, with such a carriage, a new invention to him, but not so to us. We have also had many enquiries lately respecting such kinds of carriages, especially since we recommended the use of steam carriages for our plank roads. To throw some light on the subject we present this week a side and ground plan of the Locomotive described by Barlow, and invented by Mr. Gurny, an Englishman, and which on a common road went at the rate of 8½ miles per hour. We hope that these engravings will draw the attention of our mechanics to the subject, as we think some of our engineers could so improve on this, as to make it run at the rate of 12 miles an hour on our plank roads.

A, is the position of the boiler without showing the smoke pipe. B, is a steam pipe which leads from the boiler down by N, to the valve boxes of the cylinder D, (there is a cylinder on each side, inside of the travelling wheels.) There is a small wheel attached to the piston rod which runs between two parallel bars G. Attached to this wheel by a spindle is a double connecting rod and during every revolution of the crank the parallel bars are inside of the rod. The fuel and water are kept in R and T. C, is a handle on the steam pipe to regulate the supply. M, is the frame. L, is a lever which the conductor by pulling up, reverses the motion of the carriages or propels them backwards, if necessary. P, is a driving arm. S, is the seat. I, is a lever connected with a pinion K, for turning the carriage, but these will be be better understood by fig 2.

Figure 2.



F F, is the framing I, is the pinion, working into the rack Q, for turning the carriage by the handle, seen in fig. 1. P P, are driving arms, by means of which power is conveyed from the crank shaft to the circumference of the hind wheels, so that one or both wheels may be used. One or both wheels may be used thus it required, as it is obvious, that if the bolt of the driving arm be withdrawn the driving arm will revolve without propelling the wheel. S S, represent the carriage springs between which and the wheels are the driving arms. K K, are the crank shafts. C C, are the valve boxes of the cylinders. G G, are the parallel bars, seen better in fig. 1. The valve rods will be easily distinguished at the extreme ends of the crank shafts, one of them represented by I.

This form of locomotive for common roads was used only for dragging other carriages, and for that purpose it might be useful on our plank roads. When the carriage is to be started, the steam having been up, the conductor opens the steam cock by the handle at his side. The steam then passes through B B, to the cylinders and the action of the engine commences urging forward the carriage on its journey.

It must be known to many of our readers that the ingenious Oliver Evans proposed to drive steam wagons over the roads in Pensylvania. As yet however, no practical test of this kind of Locomotion has been made in our country; in England it has, and would have been successful only it met with such opposition from the Turnpike trustees and from one unluckly accident that occurred on the road between Paisley and Glasgow in 1834, whereby a number of lives were lost.—The experiments made on the Paisley road in Scotland, were mechanically successful—the carriages went through the streets as if drawn by horses and up and down the hills likewise On the road between Cheltenham and Gloucester, England, they were also successful, mechanically speaking. Now as we have no road-trust aristocracy here, we hope to see them permanently successful.

RAIL ROAD NEWS.

The Pennsylvania Railroad.

This company has published a report of the chief engineer, upon the progress of the work, and contains an estimate of the cost. It states that to secure the objects of the company, the trade of the west, the subscriptions must now be filled up. In May 1850, it will be opened to Holidaysburg, and in connection with the Portage, there will be a continuous line of railway, extending from Philadelphia two hundred and eighty-seven miles, out of three hundred and fifty. The western side will be finished the same year as the eastern. The report says:

The absolute necessity of this road to the trade of Philadelphia, is universally acknowledged. The completion of the Cincinnati and Sandusky road, brings that city within three days ride of New York for eight months in the year.

The trade of the Ohio river, which once belonged exclusively to Philadelphia, is now diverted to New York by this new channel of the Lakes. Hundreds of passengers daily pass over that road to New York; where the travel goes, there goes the trade.

The Harrisburg and Lancaster Railroad Company, Pa.

From the annual report of this company, its affairs are in a most prosperous condition. The whole unfunded debt, amounting to upwards of $47,000, has been paid off out of the net surplus receipts of the road; and after paying the interest of the funded debt, and the current expenses of the year, there will be a balance in the hands of the Treasurer of $12,413 11, which, added to the amount paid off, shows that the profits derived from the business of the road are more than nine per cent, on the capital stock of the company.—The Board of directors flatter themselves that the Company is now in such a condition that the nett profits of the road will be amply adequate (after payment of interest on the loans) to pay regular dividends to the Stockholders, besides making appropriations towards a contingent fund, to liquidate the funded debt of the Company.

The Injunction applied for by the stockholders of the Niagara Bridge against Mr. Ellet, the engineer and contractor, has been refused. This is just as we predicted.

The Arctic Expedition.

The log-book of the cutter Bee, Captain Weldon, has the following intelligence:—"July 16. Spoke the schr. Mayflower, Smith master, who had seen the American whaler M'Lellan, of New London, Jackson, master, with forty tons of oil. The American reports her Majesty's ships, under Sir J. C. Ross, as having reached Lievely, Disco Island, on the 2d inst., all well; and Captain Ross had left despatches for the Admiralty, to be forwarded by the first Danish vessel for Europe, and that Captain Ross immediately proceeded in search of his friend Sir John Franklin. The crews were all well." Disco Island lies on the west coast of Greenland, at the entrance to Baffin's Bay, near 70 degrees of latitude.—A voyage five or six degrees farther north will lead to Barrow's Straits, and those regions where intelligence of Sir John Franklin is most likely to be procured.