

Scientific American.

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

Vol. 4.

New York, December 23, 1848.

No. 14.

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.

THE TREASURE SEEKER.

BY GOETHE.

Many weary days I suffered
Sick of heart and poor of purse ;
Riches are the greatest blessing—
Poverty the deepest curse !
Till at last to dig a treasure,
Forth I went into the wood—
“ Friend ! my soul is thine for ever !
And I signed the scroll with blood.

Then I drew the magic circles,
Kindled the mysterious fire,
Placed the herbs and bones in order,
Spoke the incantation dire.
And I sought the buried metal
With a spell of mickle might—
Sought it as my master taught me ;
Black and stormy was the night.

And I saw a light appearing
In the distance like a star ;
When the midnight hour was tolling,
Came it flashing from afar ;
Came it flashing, swift and sudden ;
As if fiery wine it were,
Flowing from an open chalice,
Which a beauteous boy did bear.

And he wore a lustrous chaplet,
And his eyes were full of thought,
And he stepp'd into the circle,
With the radiance that he brought.
And he bade me taste the goblet ;
And I thought—“ It cannot be,
That this boy should be the bearer
Of the demon's gift to me !”

‘Tas'e the draught of pure existence,
Sparkling in this golden urn,
And no more with baneful magic
Shalt thou hitherward return.
Do not dig for treasure longer ;
Let thy future speed-words be
Days of labour, nights of resting ;
So shall peace return to me !”

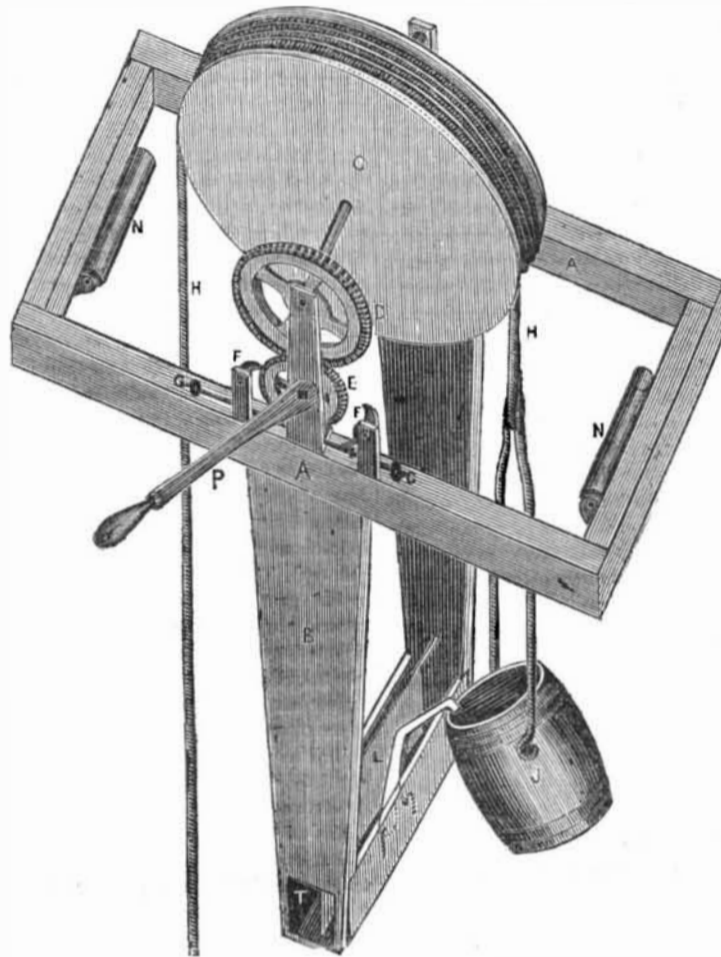
FAITH'S GUIDING STAR.

We find a glory in the smile
That lives in childhood's happy face,
Ere fearful doubt, or wordly guile,
Have swept away the angel trace.
The ray of promise shineth there,
To tell of better lands afar ;
God sends his image pure and fair,
To keep undimmed Faith's guiding star.

We find a glory in the zeal
Of dotting breast and toiling brain,
Affection's martyrs still will kneel.
And Song, though famished, pour its strain.
They lure us by a quenchless light,
And point where Joy is holier far ;
They shed God's spirit, warm and bright,
And keep undimmed Faith's guiding star.

We muse beside the rolling waves,
We ponder on the grassy hill,
We linger o'er the new-piled graves,
And find that star is shining still,
God, in his great design, hath spread
Unnumbered rays to look afar ;
They beam the brightest o'er the dead,
And keep undimmed Faith's guiding star.

VEDDER'S HYDRAULATOR.



This is an apparatus invented by Mr. John I. Vedder of Schenectady, N. Y. and patented on the 24th of October last, so that the patent has the whole fourteen years before it, and it is an improvement on the same kind of apparatus patented by him some years ago.

A A, is a frame erected on the curb of the well. B B, are two side standards the bottom of one communicating with the inside trough by the spout T, through which the water comes. C, is a large grooved pulley, over which the rope H H, passes, to elevate and lower the buckets J, one of which is seen about to be tilted over into the trough, while the other is down in the well. When the bucket J comes up to the trough, it is caught by a crooked arm fixed to the side of the trough so as to bend back a short distance and let the bucket tip over the edge of the trough and be emptied. L is a guard plate placed in the middle of the trough extending across it, to prevent the water splashing over. N N, are two friction pulleys on the frame to prevent the rope from being chafed while passing up or down. The pulley is driven by a handle

P, which drives a spur wheel E, which meshes into a larger one D. On the pulley shaft F F, are two hook bill palls fixed in two standards by pivots and secured at the other ends to a rod G G. These palls are for the purpose of catching into the teeth of E so as to allow the buckets to move up and down, and yet to hold the bucket at any point desired, pushing G backwards and forwards, to throw one pall in and the other out of gear with E as may be required. This prevents the crank from being turned the wrong way and there is no danger of the buckets filled with water dropping down into the well again, even if a child is operating the handle P. The guard plates in the centre of the trough prevent the water from splashing and wetting the rope on the other side, and it is therefore a good improvement to render the well rope more enduring. This engraving presents the apparatus in such a view that all the parts will be distinctly understood.

More information may be obtained by addressing the inventor, post paid.

Origin of "True Blue."

Every body has heard and made use of the phrase "true blue ;" but every body does not know that its first assumption was by the Covenanters, in opposition to the scarlet badge of Charles I ; and hence it was taken by the troops of Lesley and Mortrose, in 1739. The adoption of the color was one of those religious pedantries in which the Covenanters affected a pharisaical observance of the Scriptural letter, and the usages of the Hebrews ; and thus, as they named their children Habakkuk and Zerubbabel, and their chapels Zion and Ebenezer, they decorated their persons with blue ribbons, because the following sumptuary precept was given in the law of Moses : "Speak to the children of Israel, and tell them to make to themselves fringes on the borders of their garments, putting in them ribbons of blue." Numbers xv. 38.

Cannel Coal.

We learn that very extensive mines of this valuable mineral have recently been discovered on Coal River, in the county of Kanawha, Va. They spread over five or six miles square—and the vein varies from three to ten feet in thickness. From some indications it is not improbable that an entire mountain is solid coal. Last year a mine of the same species of coal was discovered not very far from the same place. The coal is the perfection of all coal—and until the discovery of these two mines, we believe no others were known except a few small ones in England.

The cause of the accident to the steamship Great Britain, according to late English papers, has been satisfactorily ascertained to have been the derangement of the compass by the iron of the vessel !!!

RAIL ROAD NEWS.

The New York and Montreal Railroad line having been opened on Monday last, from Saratoga to Whitehall, travellers during the coming winter will be enabled to start from Whitehall in the morning and arrive in New York, via Troy and New Haven and New York Railroad, by ten o'clock, P. M., or before.

Railroad to the Pacific.

Messrs. Howland and Aspinwall the great shipping merchants of this city have petitioned Congress for assistance to construct a Railroad across the isthmus of Panama. The petition has met with encouragement and at present all idea of Whitney's Railroad to Oregon seems to be out of the question. California and the Bay of San Francisco seems to be the climax of a railroad to the Pacific at present.

Railroads in Ohio.

The Statesman says "the State of Ohio has now, either completed or commenced, 515 miles of railroad, which, when finished, will use over 38,000 tons of railroad iron."

Canal to the Pacific.

We see by the N. O. Commercial Bulletin, that the English house of Manning & Mackintosh have obtained control of the Mexican route to the Pacific, at the isthmus of Tehuantepec, and already commenced preliminary operations for making the canal. And so, very well, but we can beat that, and must do it. Uncle Sam must now set to work and build a railroad, and that he will not soon do it, "who's afraid."

Coast Survey.

The Report of the Superintendent of the Coast Survey, submitted to Congress on Tuesday week last shows that since 1844 there has been covered by the triangulation 17,555 square miles ; by the topographical surveys with the plane table 2,318 miles, and an extent of shore line and roads of 7,179 miles ; and by the soundings 20,086 square miles, of which 16,824 were principally off-shore or deep-sea work. This work has been done in the following States : Maine, New-Hampshire, Massachusetts, Rhode Island, Connecticut, New-York, New-Jersey, Pennsylvania, Delaware, Maryland, Virginia, North-Carolina, South-Carolina, Georgia, Alabama, Mississippi, Louisiana and Texas.

Curiosities from the Holy Land.

Lieutenant Lynch has brought home with him a number of specimens of the water of the Dead Sea, the River Jordan, and the Pool of Siloah ; and fragments of the pillar of salt into which Lot's wife was transformed, as a punishment for her disobedience to the command of the Almighty.

In regard to this last, we are informed that the pillar from which it was taken rises nearly forty feet high, stands exactly in the spot designated by the Bible, and that Lieut. Lynch, the commander of the Dead Sea Expedition, expresses the confident opinion that it is the representative of what was Lot's wife. We believe it has not been seen before for many centuries. Josephus records its existence.

There are many other curiosities on board the Supply—as an Egyptian mummy, a pair of the cattle of Arabia, rosaries made of wood from the Holy Mount, shells from the shores of the Dead Sea, gazelles, &c.

Cotton Consumption in the United States.

From an article in the New York Dry Goods Reporter we learn that the cotton consumed in the United States during 1847-8 was not far from 480,000 bales, employing \$80,357,130 capital, 101,260 operatives, 3,012,500 spindles, and distributing weekly in wages \$363,214, or \$18,887,128 per annum, and for all expense, not including cotton, \$491,785 weekly or \$55,562,820 annually. This interest produces 755,000,000 yards of goods, or 47½ yards to each individual.