Scientific American. the
best mechanical paper in the world. CIRCULATIUN 12,000. published wixily.
At 128 Fulton Street, New York (Sun Building, ) and 13 Court Street, Boston, Mass.
By Munn \& Company.
The Principal Omice being at New York. Barlow \& Payne, Agents, 89 Chancery Lane,'London

TERMS---\$2 a yoar- $\$ 1$ in advance, and the remaindor in 6 months.

## poctry.

We watched mer breathing. BY THOMAS HOOD
We watched her breathing through the night, Her breathing soft and low,
As on her breast the wave of life Kept heaving to and fro.

So silently we seemed to speak, So slowly moved about,
As we had lent her half our powers To eke her baing out.
Our very hopes belied our fears, Our fears our hopes belied; We thought her dying when she slept, And sleeping when she died.

For when the morn came, dim and sad, And chill with earthly showers, Her quiet eyelids closed ;-she had Another morn than ours.

## MARY'S WRITE ROSE.

"Oh! train it to my window,To my window, father dear !" Thus rang the voice of beauty, In accents oweet and clear.
So, the doating father train'd it, And pruned the withering leaves, Until the vigorous tree aspir'd Exulting towards the eaves.

Yet when in summer glory With all its clusters rare, It look'd into her casement,Alas! she was not there.

They pull'd its first born blossoms,Full, fragrant orbs of snow,And o'er her pillow strew'd them, A rich and lavish show.

But she stretched no hand to take them These flow'rets of her love,-
No ! she had risen to gather The Angel Rase above.

## Memory.

Of all the early hours I knew, Hours that so sweetly, swiftly flew, Why does one only thing remain To turn the lovely past to pain-
'Tis Memory !
When all my hopes, like dreams, passed by Why didst not thou too, Memory, flyFly from my heart nor thus remain To turn hope, heart, and life to pain, Oh Memory!

## Belles and Dahilas.

A modern writer says, that " dablias are like the most beautitul women without intellectuality ;-they strike you with astonish. ment at their exterior splendor, but are mis erably destitute of those properties which distinguish and render agreeable less imposing flowers. Had nature given the fragrance of the rose or stock to the Dahlia, it would have been the most magnificent gem of the garden-but, wanting scent, it is like a fine woman without mind."


This is a valuable improvement in Diving Bells, invented and patented by Dr. J. Rutherford Worster, of Baltimore, Md., who has inreceived numerous testimonials from eminent gentlemen respecting the merits of his invention. The improvements relate to a new plan of operating the same, which must revolutionize the whole system of submarine explorations and operations. The old Diving Bells, were pondrous machines of immense strength, made of cast or wrought iron to sink by their great weight, and carry down a great quantity of compressed air. They used to be lowered by chains or ropes swung from a vessel, and therefore in rapid currents were perfectly inoperative and dangerous. This diving bell need not be made very heavy-it can be lowered perfectly steady in the most rapid cur-rents-the water does not rise above an inch or two on the bottom. It can sit perfectly Fig. 2.

steady on the most uneven bottom, as it does not depend on that to sustainit. It is lighted with artificial light and is abundantly provided with fresh air. The invention consists of a perpendicular stationary scaffold, erected on a scow or oetween two, and a sliding frame to
which the bell is attached below, which runs
in grooves in the side of the scaffold operated by rack and pinion to apply an unlimited power to force the bell steadily downwards into the water, and raise it in the same manner.
Fig. 1 is a front elevation, fig. 2 is a vertical section of the Bell showing its interior, and fig. 3 is a top view, looking down upon the frame and scaffold. The same letters indicate like parts. A A, are the floats B B, transverse beams of the scaffold, and $D \mathrm{D}$, are uprights of the moveable frame made secure by diagonal braces $E$ E. The uprights D D,

Fig. 3.

move in guide grooves formed by two or four upright posts connected by ties. On the edges of D D, are racks indicated in front bs F. G, are pinions on the scaffold, which are operated by cranks, and by biting into the racks elevate and lower the bell and moveable platform. R R, are two diagonal braces of the scaffold. I I, are tubes to carry off the smoke from the lamps H H. These lamps have oil reservirs S S, which regulate the supply by two cocks, and the air to the lamp can be regulated by another cock below. J, is the speaking tubes with a mouthpiece $L$. M, is the air tube, and T, the air pump. These tubes are made of metal above the bell, but

0 , is the bell platform. V V, the water line. This apparatus is all made in sections, and can be taken to pieces and packed in a very small compass. How excellent it would be for the rapid Mississippi. In describing the parts it is useless to use prolixity, the engraving at once explains the whole arrangement. The inventor has numerous plans of economic construction which make the apparatuscheap, and the scaffold need not be very high, for moveable section parts may be slid on to the moveable frame, as it passes down to differ. ent dep'hs. The Doctor intends to go with it to California, and he has had numerous valuable proposals made. Success is sure to attend his efforts.

## RAILROAD NEWS.

## Ralloads in the west.

Charters for a railroad from Toledo, through Southern Michigan and around the southern bend of Lake Brichigan, to Chicago, have been se:ured by a company of New York capitalists. A railway from Chicago weat to the Mississippi is being constructed. It is expected that the Ohio Railroad Compang will be soon revived, under its charter, and the line from Toledo to Dunkirk completed at an early day.

Boston and Montreal Rallroad.
A meeting of the Stockholders of the Bos ton, Concord and Montreal Railroad was lately held, when it proposed to borrow $\$ 300,000$ upon bonds for present exigencies. The general report was that the Road was doing well. The Company have no money contracts to build the Road beyond Plymouth, but the contractor on that section is going on moderately, taking his pay in the stack of the corporetion. New surveys have been made, by which a saving of some $\$ 75,000$ has been made between Meredith and Wentworth, on the line toward Haverhill.
The receipts of the New York and Erie Railroad have increaed to about $\$ 200$ per day since it was opened to Oswego, a short time since
ago.

The Directors of the Vermont Central Rallroad have voted to issue two million more stock.
Dr. J. O Watson, of Johnston Co., N. C., has authorized the Raleigh Standard to say that he will be one of one hundred men to take the entire stock, one million of dollars, of the Central Rallroad, at $\$ 10,000$ each.

Great Explosion.
On the 11th inst, the steamboat•Embassy collapsed both flues of her larboard boilwr below Green River, near Louisvilie, Ky., by which 18 persons werekilled, and 30 bad!y scalded. When are we to hear the end of this system of wholesale murder. There is an Anti Capital Punishment Society in this city, we would recommend them to alter their tactics and extend their efforts to the prevention of the causes which lead to the infliction of revolting legal death.

Terrific Expiosion of Fireworins.
On the 12th inst. at 4 o'clock in the aftornoon, the Fire Works of Mr. Samuel Jackson. Shippen st Philadelpinia, were hattered to pieces by an explosion of rockets which communicated with three kegs of powder and other explosive materials It is very singular that an accident of the same kind occurred there in 1848, on the same day and at the same hour, and Mr. Jackson had mentioned the circumstance several times in the course of the day, for the purpose of inducing care in handing the explosive materials. Two persons were considerably injured by this explosion.

There is a kind of free stone called Cocalio Land Sb ne, of a very beautiful appearance, now extensively quarried in $\mathrm{L}_{\text {ancaster }} \mathrm{Co}$. Pa .

