# grimtific American. 

THE ADVOCATE OF INDUSTRY, AND JOURNAL OF SCIENTIFIC, MECHANICAL AND OTHER IMPROVEMENTS.
bol. 3. Niew Work, Muly 1, 18ts. No. íl.

## SCITNE THE <br> SCIENTIFIC AMERICAN :

 CLRCULATION 11,000 At 128 Fulton Street, New York (Sun Building,) and By Munn \& Company By TERMS--\$2 a year- $\$ 1$ in advance, and See advertisement on last page.
## poetry.

## THE TELEGRAPM.

He who created heaven and earth, And gave the rolling thunder birth, Who hold'st the ocean in his hand, Whose waves are stayed at his command, Who made the gorgeous sun to gild The humblest cot that man can build Who strewed the earth with lovely flowers, And gave to man gigantic powers, Hath kindty unto Morse revealed What heretofore had been concealed He doth the rapid lightning tameA Telegraph he calls its nameAnd with a single vivid fash, A dot-a space-a line-a dashCan send around the earth the news, Or stop it, just as he may choose, What a mysterious mighty power No noise is heard-no cloud doth lower, And yet the lightning wings its way, And tells whate'er we have to say.

## MEMORY OF THE PAST.

When back ward through departed years On memory's wing we stray,
How oft we find a source of tears Along that wasted way! The heart will vainly seek the light That rested there before And sadly turn to mourn the blight Of all it loved of yore

We watched for tootsteps that orice came To breathe the twilight vowWe listen for the silvery tone Of voices silent now;
We gaze on old, familiar things, And marvel that they bear
No gladness to our spirits wings Like that which once was there FANNY FORESTER'S BIRD. Ere last years moon had left the sky, A birdling sought my Indian nest, And folded-oh, so lovinglyHer tiny wings upon my breast,

From morn till evenings purple tinge, In winsome helplessness she lies, Two rose-leaves with a siken fringe Shut softly on her starry eyes.

There's not in Ind a lovelier bird; Broad earth owns not a happier nestOh God, Thou hast a fountain stirred, Whose waters never more shall rest.

This beantiful mysterious thing, This seeming visitant from Heaven, This bird with the immortal wing, To me-to me, Thy hand has given.

The pulse first caught its tiny stroke, The blood its crimson hue from mine ; This life which I have dared inzoke Henceforth is parallel with thine.

A silent awe is in my roomI tremble with delicious fear,
The future with its light and gloom, Time and eternity are here.
Doubts-hopes, in eager tumult rise, Hear, oh, my God? one earnest prayer : Room for my bird in Paradise, And give her angel plumage there.

IRA CARTER'S CHEESE PRESS.


This is a very neat and novel invention of a cut on the inside near the extremities. These Cheese Press invented by Jra Carter, jr. of racks are for the purpose of pinions FF, workPlattsburg, Clinton County, $\mathbf{N} \mathbf{Y}$. The prin- ing into when as the platiorm is raised so ciple of the invention consists in applying the that the lever will be raised at the same time. weight of what may be called "the lifting gear," to press the cheese by direct lever pressure and in such a manner downwards that as the cheese curd is compressed the lever will accommodate its pressure to the same. Explanation.-N, is a strong cast iron frame with four legs of the form represented in the cut or of any other form for simplicity and solidity. Attached to this are two upright rack standards G G, these are bolted to the pe. destal or base and are stationary-all the other parts are moveable. $K$, is a platform of the cheese table $Q$, and to which the cheese table is firmly fixed by bolts. This platform and rack standards are quite thin in proportion to their length and breadth. A, represents a broad iron plate or bearing which forms arms tor the gudgeons of the rack wheels H H , and the pinions $\mathrm{F} F$, which are cast on the hubs of the said rack wheels. This bearing is bol ted to the platform K , and an axle with a pi nion $C$, on the interior part of it working into an interior rack $D$, seen by the dotted lines, is operated by a handle $B$, whereby the said pinion C , by biting into the rack D , carries up on the rack standard or towards the top of the frame, the whole moveaile gearing. When the platform is thus lifted up and the cheese table elevated, a small spring wedge marked $L$, is inserted into the wedge rack of the platform and held firm by a small butt M. E E, is a double cross bead lever with racks

## The New Star

The new star, says the London Literary Ga. zette, observed by Mr. Hind in the constellaion of the Serpent, occupies the attention and interest of astronomers. It continues of the same brilliancy of the fourth magaitude, and exactly in the same position, within the triangle formed by the three stars, zeta and eta Serpentarius, and nu of the Serpent. Recent ly Mr. Hind has noticed singular changes of color, red and blue or green and yellow tints. When the star is near the horizon, its color is

The pinions on the arms are larger than $C$ the main ur interior pinion, so that when the batform is lifted th $\epsilon$ lever will move up faster pald vice versa. The chese is put upon cheese table jetween $Q$ and $R$, when at the highest elevation and the cheese table lowered, the whole weight of the wheels acting upon the extremitias of the lever as a pressing power, and the space between $R$ and $Q$, diminishing as the cheese is compressed. This is owing to the pinions $F \mathrm{~F}$, being larger than he main pinion $C$; were it not for this no pressure would be expected by the operation. The relative proportions of these pinions hould be at least a third in circumference, he interior one being that much less. S S, re two clasps on the under part of the cheese able to guide the arms of the lever and make them firm, and the arms of the lever are also clasped by the bearing plate. The cheesetable is round, the form of a shield, and it is bolted to the platform or moveable rack, by a strong plate running across to the arms of the ever, and designated by the letters 0 P.
Measures havebeen taken to secure a patent fur this Press, which will answer for more purposes than making cheese. As a small press it is preferable perhaps to many others in use for pressing small packages, as the turning of the handle presses or relieves the pressure, thereby causing but little trouble in putting in and taking out a package
yello'v, deepened with sudden flustes of red ight. Its appearance is stated to be certainy different from that of any other star. It is supposed to be the lost star of Flamstead, observed by him in 1690, which, however, was of the sixth magnitude

The Earle of Rosse, an Irish nobleman, the constructor of the Leviathan Reflectıng Tele scope, is to be the new President of the Royal Society, in place of the Marquis of Northampton, who retires

## RAIL ROAD NEWS.

The Lowell and Lawrence Railroad, Mass. is to be completed by the first of July, and the fare to be thirty cents between the two cities.

A thousand laborers, and a large number of masons are wanted on the Pennsylvania Railroad Good wages are given, and prompt payment in good funds. Work can be had on tse road for several years.
The first locomotive that ever travelled in Vermont, appeared there on the fifth inst. It is supposed to be a swifter horse than the fatrous Morgan breed.

In 1847, Massachusetts expended for 698 miles of railway, $\$ 34,461,513$, which in the aggregate paid a net income of 7.71 per cent and transporteda tonnage of $1,769,332$ tons.

## French Rallways.

We are afraid that the French Railways are in a bad condition, as we have seen accounts of materials sent back to England that had been sent to France for the construction of some of the main lines. A vessel recently brought back from Bologne to London 57 wagons, 114 pairof wheels, 3 brakes and a num ber of other railroad articles. We hope that France will not neglect her internal improvements in the midst of her revolutionary excitement.

Plank Road.
The Central Square and Pine Plank Road, is a work undertaken by the enterprising citizens of the territory bordering on Oneida Lake, and in a fair, way to be carried through to completion. This road, when completed, will extend from Central Square, in the coun ty of Oswego, (near the west end of Oneida Lake,) to Pine, on the Rome and Oswego Plank Road, ten miles from Rome, passing through Constantia, Cleveland, West Vienna, North Bay, and Vienna, A sufficient amount of stock is taken to build all but ten miles of the road. The plank are now being laid, and will before next autumn be completed from Central Square to West Vienna.
From Central Square to Syracuse, a plank road is already in use, and when the Central Square and Pine road is completed, we shal have a continuous road from Rome to Syracuse, on the North side of the Lake, a dis tance of some 53 miles. The scenery along the lake shore in the summer season is delightful, and the plank road will fnrnish a charming ride over this hitherto comparativeIy uffrequented route,

## Salmon of Oregon.

Lieut. Howison, of the U. S. Navy, in his report on Oregon, states, that the Salmon en ter the mouth of the Columbia in May, and make their way up the stream for the dis. tance of twelve hundred miles, being found in the month of September, at the very sour ces of the Columbia. The young fry pass out to sea in October, when they are nearly as large as herring. Different families of salmon resort to different rivers, which empty into the Pacific on the North-west coast. The largest enter the Columhia, coming from the north. They average twenty pound each, and some weigh forty pounds.
These fish constilute the chief subsistence of many thousand Indians, who reside in the country watered by the Columbia, and its tributaries, and besides affording an abundant supply to all those and the white settlers of Oregon, eight hundred barrels a year are exported.
M. Argo has estimated that about seven millions of comets frequent the solar system, which, says a writer in Frazer, fully accounts. for the number annually discovered.

