

Scientific American.

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

Vol. 4.

New York, December 9, 1848.

No. 12.

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—\$2 a year—\$1 in advance, and
the remainder in 6 months.

See advertisement on last page.

Poetry.

SONG OF STEAM.

Harness me down with your iron bands,
Be sure of your curb and rein,
For I scorn the strength of your puny hands,
As the tempest scorns a chain;
How I laughed as I lay concealed from sight
For many a countless hour,
At the childish boast of human might,
And the pride of human power!
When I saw an army upon the land,
A navy upon the seas,
Creeping along, a snail-like band,
Or waiting a wayward breeze;
When I marked the peasant faintly reel
With the toil which he faintly bore
As he turned at the tardy wheel,
Or tugged at the weary oar:—

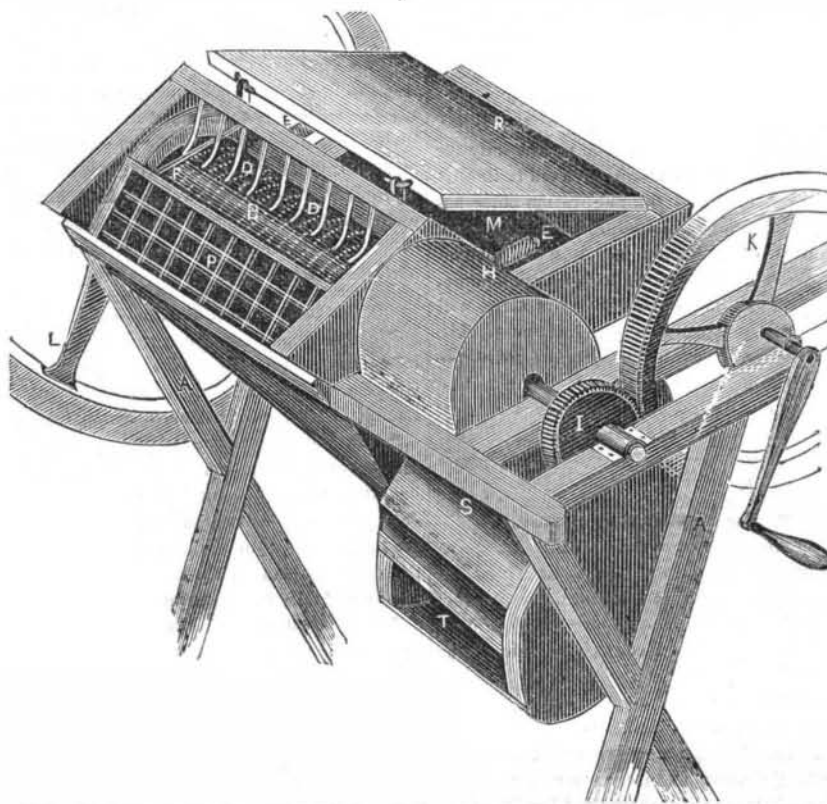
When I measured the panting courser's speed
The flight of the carrier dove,
As they bore a law, a king's decree,
Or the lines of impatient love;
I could not but think how the world would feel
As these were outstripped afar,
When I should be bound to the rushing keel,
Or chained to the flying car!
Ha! ha! ha! They found me at last;
They invited me forth at length;
And I rushed to my throne with a thunderblast
And laughed in my iron strength!
Oh! then ye saw a wondrous change
On the earth and the ocean wide,
Where now my fiery armies range,
Nor wait for wind or tide.

Hurrah! hurrah! the winter's o'er
The mountain's steep decline;
Time—space have yielded to my power—
The world—the world is mine!
The giant streams of the queenly West,
And the Orient floods divine.
The ocean pales where'er I sweep
To hear my strength rejoice,
And the monsters of the briny deep
Cower trembling at my voice.
I carry the wealth and the lord of earth;
The thoughts of the god-like mind;
The wind lags after going forth,
The lightning is left behind.
In the darksome depths of the fathomless mine
My tireless arm doth play,
Where the rocks ne'er saw the sun decline
Or the dawn of the glorious day.
I bring earth's glittering jewels up
From the hidden caves below,
And I make the fountain granite cup
With a crystal gush o'erflow!

I blow the bellows, I forge the steel,
In all the shops of trade;
I hammer the ore, and turn the wheel,
Where my arms of strength are made.
I manage the furnace, the mill, the mint—
I carry, I spin, I weave;
And all my doings I put in print,
On every Saturday eve.
I've no muscle to weary, no breast to decay,
No bones to be "laid on the shelf,"
And soon I intend you may "go and play,"
While I manage the world myself.
But harness me down with your iron bands,
Be sure of your curb and rein;
For I scorn the strength of your puny hands,
As the tempest scorns a chain!

IMPROVED CORN SHELLER.

Figure 1.

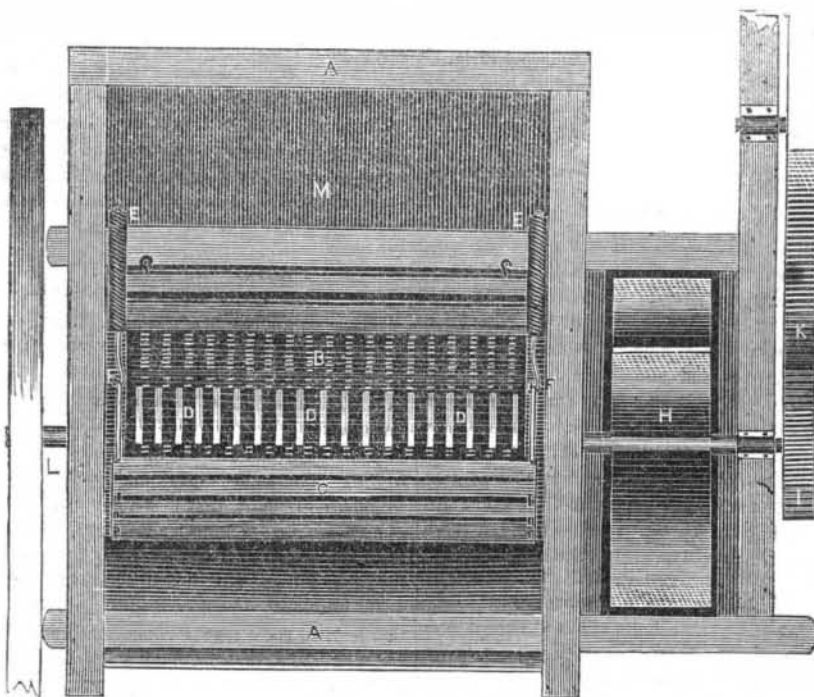


This Machine is the invention of L. M. Whitman, and is now the property of S. G. Wise of Weedsport, Cayuga County, N. Y. It possesses the property of shelling corn with wonderful rapidity and cleans the grain by removing all dust &c., by a blower at one operation.

Fig 1, is a perspective view and fig. 2, is a vertical section, that is, as viewed looking down upon the top of the machine, only the frame P. in fig. 1 is omitted in fig. 2, to shew the parts to better advantage. The same letters in both figures refer to like parts and the reader must refer to both in perusing this description.

A, is a frame made in the usual form or of any other more suitable. B is a concave bed made of cast iron plates, with projections on their inside surfaces. D, is a cast iron cylinder having projections cast on its outside surface and by the ears of corn being fed in between the roller and the concave bed through M, on the other side of the lid R, and the cylinder set in motion, the ears will be carried round between the cylinder and concave bed and all the corn removed from the cob in a most excellent manner, and when it is carried round to the rake teeth seen above D D, the cob is thrown over the frame P, and falls over the side of the machine. The concave bed is hung on strong

Figure 2.



springs E E, which allow it to spring to the various sizes of the ears of corn—making it flexible for that purpose. The plates C, which form the concave bed are placed a small distance apart from one another, so that the corn falls down between them into an inclined conduit which carries the corn below H, a revolving set of fans, where the grain is perfectly cleaned by the dust &c. being blown

out through an opening below S, and the corn being heavier passes into the granery or receptacle out of the opening T.

OPERATION.—The ears of corn are placed in the hopper M, best seen in fig. 2 and the master wheel K is turned, which driving the small cog wheel I, turns the revolving cog surface cylinder D, and carries the ears of corn between it (the cylinder) and the con-

cave bed B, when, by the action of the rough surface of the cylinder and concave bed upon the ear of corn, the grain is effectually removed from the cob, as the ear is carried from one side to the other of the concave bed. And by the concave bed being attached to springs, it will be observed, that according as the ears are greater or small, and also as they get smaller in their progress of shelling, that the exact relative distance to remove the corn from the cob will be maintained between the revolving iron cylinder and the concave bed.

This is a very important and valuable part of the invention. It shells out the corn in great style, and its work is both clean and satisfactory. Measures have been taken to secure a patent.

RAIL ROAD NEWS.

Rochester and Lockport Railroad.

The work of preparing the way for the Railroad from Rochester to Lockport, has been commenced in the vicinity of Albion and Medina. There have been many difficulties with which the Directors have had to contend in forwarding this enterprise; but we are informed that they are nearly all surmounted, and that the work will proceed without further delay, to its final completion.

Northern Line.

The Railroad from Troy to Whitehall, by Saratoga, is expected to be completed in about four weeks. This link in the chain of communication between Montreal and New York is much needed.

East Tennessee and Georgia Railroad.

The Board of Directors of the East Tennessee and Georgia Railroad have contracted with Gen. Duff Green, acting for himself and several northern contractors, to complete and equip the road from its southern terminus to Knoxville. They will soon commence on the line of the State road, and is to be completed to the Hiwassee River by the 1st of July 1850, to the north-bank of the Tennessee, including the bridge, on or before the 1st of March, 1852; and to Knoxville by the 1st of March, 1853.

The bridge over the Tennessee is to be completed by the time the road reaches the river, at a price to be agreed upon hereafter, and the first clear profits of the road are pledged to meet the claim for its construction. The contractors are to receive (exclusive of the cost of the bridge over the Tennessee) \$1,850,000 for building and equipping the road to Knoxville. Of this they agree to take \$1,150,000 in stock in the road, \$200,000 in state bonds (which amount, it will be recollected, must be issued by the State to complete the payment of her original subscription) and \$50,000 in company bonds or cash at the option of the company.

Red River Railroad, Texas.

A Railroad meeting was held in Huntsville on the 20th ult., Hon. Sam. Houston in the Chair, and A. M. Branch, Esq. Secretary. The meeting was addressed by Col. Allen, and resolutions were passed approving of the plan for the construction of the Railroad from Galveston Bay to Red River. Col. H. Yoakum and J. C. Smith were appointed agents for receiving donations of land in accordance with the terms of the project.

The Zoophyte.

The zoophyte occupying the lowest place in animated nature is widely scattered through the seas of the torrid zone, each species being confined to the district best fitted for its existence. Shell-fish decrease in size and beauty with their distance from the equator; and as far as is known, each sea has its kind, and every basin of the ocean is inhabited by its peculiar kind of fish.