Scientific American.

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

VOL. 2.

NEW YORK, SEPTEMBER 11, 1847.

NO 51.

THE SCIENTIFIC AMERICAN :

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.

FULTON THE MECHANIC.

BY LUDI MAGISTER.

Immortal Great ! grey headed years
Bear onward Cæsar's fame ;
But when time that no longer bears,
A child shall lip thy name.
Thou art not dead, thy spirit rides
Upon the iron way--
Wings where the ocean steamer glides,
Like sea-bird when at play.

Who'll be thy bard ? great Milton sleeps,
And hush'd is Byron's song ;
As all shall fall, Death never weeps,
But fiercely strides along ;
No brow is crowned to touch the lyre
O'er which their fingers ran,
None else for thee may smite the wire,
O, mighty artisan.

Though mingles each successive year,
The dust of son and sire,
The future shall a mind uprear
Touched with poetic fire ;
He may not tell of Rome or Greece,
Or write of bloody war,
But sing how joyous heaven born peace
Rides o'er the earth afar.

How man has garnered in the flood,
Bound with an iron band,
And how the pondrous engine trod,
Swift winged through every land,
When Tartar fierce and Arab wild,
Start at his thunder tread,
And Ishmael wakes—that desert child,
To give the Gentile bread.

BUY THE TRUTH.

BY MISS M. O. YEATON.

Go thou in life's fair morning,
Go in thy bloom of youth,
And dig for thine adorning,
Thy precious pearl of truth.
Secure this heavenly treasure
And bind it on thy heart,
And let no earthly pleasure,
E'er cause it to depart.

Go while the day star shineth,
Go while thy heart is light,
Go ere thy strength declineth,
While every sense is bright.
Sell all thou hast and buy it,
'Tis worth all earthly things--
Rubies, and gold, and diamonds,
Sceptres and crowns of kings.

Go, ere the cloud of sorrow,
Steal o'er the bloom of youth ;
Defer not till to-morrow,
Go now, and buy the truth,
Go, seek they great Creator,
Learn early to be wise ;
Go place upon the altar,
A morning sacrifice !

Them Boots.

Not long since, a raw Hoosier came aboard
a steamboat above St. Louis. At night the
Hoosier turned into his berth with his *boots*
on. The steward, seeing this, said, "Sir, you
have lain down in your boots." The raw one
raised his head, and looking down at the boots,
innocently replied, "Well, it won't hurt 'em,
they ain't the best I've got."

WIND ENGINE.---Figure 1.

Although steam and water power have performed wonders and have revolutionised both science and art, yet who can doubt but there yet remains a great field for the display of mechanical genius and the application of that power which is "free as air." On our vast prairies, our southern and northern plains, far from

Figure 2.

Fig. 1 of the engravings represents an Eolian Engine in its simplest form. The ground framing A, supports a vertical shaft B, which turns in an orifice through the centre of the platform A, and in a step at bottom. At the top of this shaft is a frame work, consisting of two cross-bars, supported at their outer ends by stays from an iron upright M, on the centre. On one of these bars, and running parallel with it, is a pair of sail-booms T, united at the centre by a metal tube, and each carrying a sail. These sails are fixed on the booms to work at right angles to each other so that when either one is vertical the other must be horizontal, and they are counterpoised by weights g, in order that they may take any change of position with ease, and the booms are hung so that they will turn freely on their axis. On exposing the engine in this state to the action of the wind, one of the sails will be immediately elevated to a vertical position, and the opposite one at the same moment depressed to a horizontal one; when, as in the case of a common vane, the machine will swing round, in doing which, the impulse given and the action of the counterpoise are

found sufficient to cause the sails to change positions, when the evolution is repeated, and rotary motion thereby communicated to the shaft, and it can be stopped or set in motion in a moment by the stop rod N.

Though perfectly serviceable in this simple form, the same framework may carry any required number of sails, and constitute an engine of greater power but with some degree of complexity. For example, fig. 2, shows the same machine hung with eight sails, four on the upper side, and four on the under, and each pair is at right angles to the other on the same side, and consequently neither sail takes the wind from the other, the power is by this arrangement quadrupled.

The principal advantage of this invention is the extremely simple and inexpensive form in which considerable power may be gained by it, as an engine of a single pair of sails will be certain in its action, and of a power proportioned to the breeze and the surface of sail exposed to it. Also, the universality of its application, as every man may avail himself of, and turn to motive power the wind which passes over his own premises.

A Woman's Wit.

"Mary, I am glad your heel has got well."
"Why?" said Mary, opening wide her large blue eyes with astonishment.
"Oh, nothing," says Mag. "only I see it's able to be out!"
"Annexation and war, that's true, every word of it," said a pert old maid; "no sooner do you get married than you directly begin to fight."

Silent Thunder.

An old woman in the country told us, the other day, that she couldn't see the use of having thunder with lightning. "It ain't no use," said she, "it only makes a great noise and frightens folks." "Madam," we asked, "how would silent thunder suit you?" "Oh luddy suz, yes! that's just what I should like!" she exclaimed, without giving herself time to think upon the nature of the article.

LIST OF PATENTS

ISSUED FROM THE UNITED STATES PATENT OFFICE.

For the week ending Sept. 4th, 1847.

To Robert W. Bicknell and Charles J. Abel, of Philadelphia, Penn., for improvement in Scrubbing Brushes. Patented Sept. 4, 1847.

To John H. Fellows, of Cincinnati, Ohio, for improvement in the construction of Vessels. Patented Sept. 4, 1847.

To John Shugert, of Elizabeth, Penn., for improvement in the manufacture of Soap. Patented Sept. 4, 1847. Ante-dated March 4, 1847.

To Jacob H. Bower, of Walnut, Penn., for improvement in the construction of lime kilns. Patented Sept. 4, 1847.

To James Thomas, of New York, for improvement in preparing India Rubber. Patented Sept. 4, 1847.

To H. G. Ellsworth, of Enfield, Conn., for improvement in feed roller for carding machines. Patented Sept. 4, 1847.

To George W. Tuttle, of New York, for improvement in machines for exercising children. Patented Sept. 4, 1847.

To George L. Mason, of Williston, Vermont, for improvement in preparing cotton and wool for carding. Patented Sept. 4, 1847.

To Charles L. Fleischmann, of Washington, D. C., for improvement in making mattresses, cushions, &c. Patented Sept. 4, 1847.

To Antoine Marie Felix Chevet, of St. James Parish, Louisiana, for improvement in making Sugar. Patented Sept. 4, 1847.

To George A. Philip, of New York, for improvement in Stove Grates. Patented Sept. 4, 1847.

To Wm. P. Barr, of New York, for improvement in type casting (having assigned his right to Bruce & Cortleyou.) Patented Sept. 4, 1847.

To Morton Judd, of New Britain, Conn., for improvement in Sash Fasteners. Patented Sept. 4, 1847.

DESIGNS.

To George W. Sizer and Henry Sizer, of Springfield, Mass., for Design for Stove. Patented Sept. 4, 1847.

INVENTORS' CLAIMS.

Stoves.

Re-issue.—No 99; To Samuel Pierce of Troy, N. Y., Assignor to Elias Johnson and David B. Cox, of Troy, N. Y., for improvement in Cooking Stoves. Patented 6th December, 1845. First re-issue dated 24th April, 1847; second re-issue dated 31st July, 1847. What he claims as his invention, and secures by Letters Patent, is making the top of the metal ovens of cooking stoves or fire bricks or other earthy substance, when this is combined with a stove in which the products of combustion from the fire chamber pass first over the top of the oven, substantially whereby the heat in the oven is equalized and the vapours or gasses evolved in the oven are absorbed and carried off. He also claims the arrangements of the parts by which he supplies the fire with heated air, said arrangement consisting mainly of the apertures in the front doors, in front of which the air must descend on its passage to the grate bars. The heating of the admitted air has been attempted under other arrangements, and he limits himself in this particular, therefore, to the special combination of parts by which he attains this. And finally, he claims making the plate of that part of the oven which extends under the grate, connected with the receptacle for ashes at the bottom, for the purpose of discharging the ashes that fall from the grate, whereby he is enabled to heat this part of the oven more effectually and equally, and to avoid the burning out of the grates.

"Jim, your coat is too short." "Well what of it, it will be long enough before I get another."