

Scientific American.

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

Vol. 3.

New York, June 3, 1848.

No. 37.

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.

THE BATTLE OF OUR LIFE

BY REV. E. C. JONES.

Up to the strife with care,
Be thine an oaken heart,
Life's daily contest nobly share,
Nor act a craven part;
Give murmurs to the coward throng,
Be thine the joyous notes of song.

If thrown upon the field,
Up to the task once more.
'Tis worse than infamy to yield,
'Tis childish to deplore:
Look stern misfortune in the eye,
And breast the billow manfully.

Close in with every foe,
As thickly on they come,
They can but lay the body low,
And send thy spirit home:—
Yet may'st thou stout it out and view
What giant energy can do.

Soon shall the combat cease,
The struggle fierce and long,
And thine be true, unbroken peace,
And thine the victor's song:—
Beyond the cloud will wait for thee,
The wreath of immortality

KITCHEN SONG.

Ho, ho, Hum! how I wish
That each kettle and dish
Could be cleansed by some Yankee machine;
It would save such a sight,
Of work, morn and night,
To have one that would scour wash and clean.

I should think that they might,
With their noddles so bright,
Add much to our comfort and ease,
And a dish-water make,
That would beat the horse-rake,
Or the things to make butter and cheese.

They've machines to cut glass,
And machines to cut grass,
And machines to fulfil all their wishes;
But they never once think,
While their own healths they drink,
Of poor women who have to wash dishes.

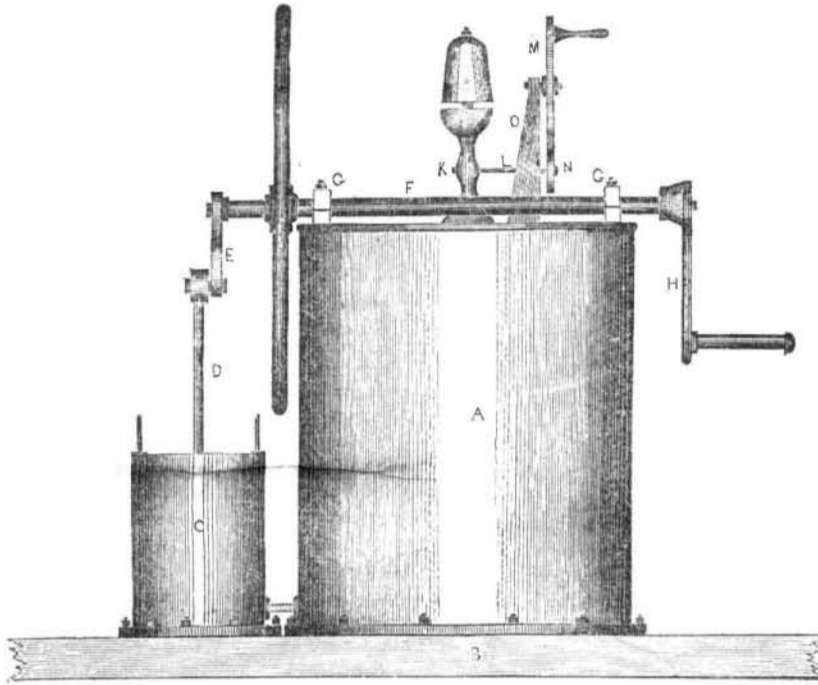
It must have a strong hand,
That will not show the brand
Of the stove door, or frying pan hot:
And never once flinch,
But with resolute clinch,
Lay right hold of each kettle and pot.

And when 'tis completed,
The inventor 'll be greeted
With praises from all that lack wealth—
And every good lass
Will fill up a glass
Of bright water to drink to his health.

A GEM.

The flower beheld the star above,
And longed to reach its airy love,
But longed in vain. A dew-drop fell,
Into the rich and fragrant bell;
And then the star was imaged there,
As though it dropped from upper air,
And glancing down from heaven had come
To seek on earth a kindred home.

RAILWAY AND STEAM BOAT WHISTLE.



This is the invention of an engineer, named Alexander Douil, of Euston Grove, Middlesex, England, and relates to the employment of a compressed atmospheric air apparatus, for producing audible railway, steamboat, and other signals, in a similar or somewhat similar manner to that in which sounds are ordinarily produced by the steam-whistle of locomotive engines; and also to a mode or modes of varying the sound, and producing several distinct sounds, by rapidly opening and shutting the communication between the reservoir containing the compressed atmospheric air and the whistle: and further to a mode or modes for combining two or more whistles which produce similar sounds, and by that means obtain an extended scale or gamut of distinct signals. The annexed cut represents an elevation of this apparatus which consists of a receiver A, placed on a pedestal or frame work B; the receiver has atmospheric air forced into it by an air pump C, and is maintained at a maximum pressure that will ensure the action of the whistle; the air-pump C, may be either single or double-acting, as may be found most suitable in practice; the piston of the pump is actuated by means of a connecting rod, D, and crank E, on a shaft F, fixed in bearings, G G, on the receiver; the shaft F, where the apparatus is applied to a railway train, may be driven from any moving part of the carriage to which it is affixed; and in the case of its application to steamboats, power may be communicated from the engine, but in all cases it should be so attached that it may be readily disconnected in the event of the moving power stopping, so as to admit of its being actuated by the handle H, air having been forced into the receiver A, until a pressure is thus attained therein that will ensure the action of the whistle I, which is of the kind ordinarily used as a steam whistle, the shape of which may be varied for the purpose hereafter explained. In or-

der to prevent the bursting of the receiver A it should be furnished with a safety-valve, loaded to the extent of pressure necessary; air may be admitted by the cock or valve K, to the whistle I, so as to produce a continuous sound, as in the ordinary steam-whistle, but by rapidly opening and shutting the cock or valve K, continuous thrilling sound is produced, which can be varied so as to attain a considerable extent of scale or gamut, so as to produce various distinct audible signals; this is effected by causing the plug L, of the cock K, to rotate rapidly by means of a wheel M, gearing into a pinion N, on the spindle of the cock; the wheel M, which is driven by hand, rotates on a stud, fixed to a triangular frame O, erected on the top of the receiver: by varying the velocity of this wheel, the difference of sound before mentioned will be produced, thereby admitting of considerable variation of sound, and consequently of separate distinct signals; but in order to obtain a still more extended scale, two whistles of different size or shape is employed, so that they will produce dissimilar sounds. By rapidly opening and shutting the communications between the whistles and the receiver, as before described, (both of the pinions gearing into the same wheel) a scale will be obtained by which a still greater variety of changes may be effected, and consequently a greater number of signals may be given; the pinions should be so placed on their spindle, as to admit of being thrown out of gear, so that one whistle may produce a steady sound and the other the thrilling sound before mentioned.

A Caveat has been filed in the Patent Office at Washington for the application of compressed air to produce by machinery different sounds by an alarm trumpet; rather a better plan we think than a whistle. Elbrage Webber, of Gardiner, Maine, is the inventor of the compressed air trumpet.

To Preserve Beef Steaks.

As the warm season is fast approaching, when meat cannot be kept for more than a day or two in a fresh state, it will be of no inconsiderable benefit to many to be informed, that if fresh meat is rolled up in indian corn meal, it will keep fresh for four or five days. The steak should be laid down in pieces from one to three pounds and each piece covered entirely with the meal.

Canada Maple Sugar.

Great quantities of maple sugar is produced in Canada. In the parishes of St. Joseph, and St. Francois, many farmers have made from 3 to 5,000 pounds, and 300,000 pounds have been made in those two parishes.

The Chinese have a notion that the soul of a poet passes into a grasshopper, because it sings till it starves.

RAIL ROAD NEWS.

Sackett's Harbor and Saratoga Rail Road.

At the last session of the Legislature a company was created with power to form a road from Sackett's Harbor in Jefferson Co., to Saratoga Springs. This road will open a direct communication between Lake Ontario and Boston, as well as New York. It will pass through a country now thinly settled but the lakes and creeks will supply New York with salmon and trout for a century to come. The State has sold to the company 250,000 acres of land at an extremely low price with a view of aiding the enterprise. It will be a means of bringing down immense quantities of fine lumber. The distance from Sackett's Harbor to Saratoga Springs is about 140 miles.

Progress of the Philadelphia Road.

The company which has this great work in charge appear to be pushing it with considerable energy. The contracts are all progressing as rapidly as is consistent with economy, and the road will be put in action as far as Lewistown during the ensuing winter. The line to Huntingdon will be ready for the rails early next summer. The light work between Huntingdon and Hollidaysburg will be contracted for in time to be completed as soon as the points now being commenced are ready. This arrangement for the work has been made in order to bring capital expended into activity with as little loss of interest as possible. It is expected that the road will be ready to Huntingdon in the summer following the present, and to the portage by the opening of navigation the ensuing spring.

Mobile and Ohio Railroad.

The books of subscription to stock in the Mobile and Ohio railroad were open three days in Mobile, and the amount subscribed already exceeds \$250,000. And this has been taken almost entirely by men of moderate means, in sums of five to fifty shares. The large holders of real estate are yet holding back, with a few exceptions. But the public spirit evinced by the masses generally renders it absolutely certain that the required amount for getting the work fairly started will be raised without difficulty in Mobile, notwithstanding the extraordinary embarrassments in monetary affairs.

Albany and Buffalo Line.

The Syracuse and Auburn Railroad Company are now engaged with a strong force in substituting the heavy iron rail for the miserable flat bar now in use. The Superintendent informs us that he will have the whole road laid by the middle of the next month.

The Syracuse and Utica Co. are also busy in putting down the heavy iron, but their progress is slow, in consequence of the large amount of labor to be performed.

Jersey Railroads.

The cars from Jersey City for the Camden and Amboy Railroad now leave at 6 A. M. instead of 7 as before. A new line for Philadelphia, will leave Jersey City at one o'clock P. M.

Shortening the Mississippi.

The process of shortening a river, may appear something new under the sun, but it has actually been accomplished in the Mississippi, one of the largest rivers in the United States. During a recent freshet the river made a "bolt" through its banks at Raccourci, where there was a considerable turn, and took a straight course for the nearest point of the stream, cutting off twenty-eight miles in the length of the stream. The largest class of steamboats pass through up and down, without any difficulty. It is about four hundred yards wide, and the banks constantly caving.