

Scientific American.

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

VOLUME IX.]

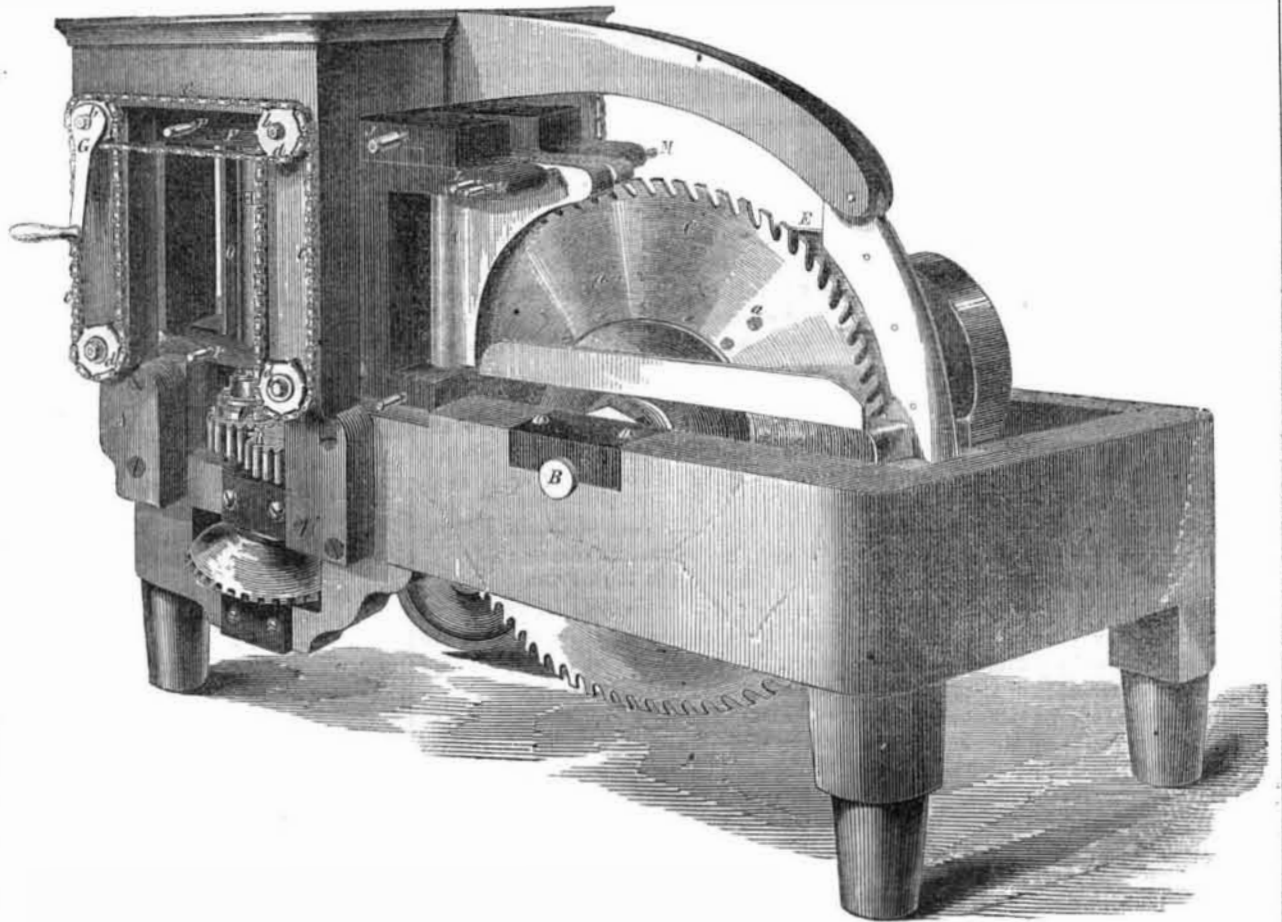
NEW-YORK MARCH 11, 1854.

[NUMBER 26.

THE SCIENTIFIC AMERICAN,
PUBLISHED WEEKLY.
At 128 Fulton street, N. Y. (Sun Buildings.)
BY MUNN & CO.

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EUNSON'S SAWING MACHINE.—Fig. 1.



Improvement in Sawing Machinery.

We herewith present two illustrations of an improvement in sawing machinery, on which application for a patent has been recently made by John Meyers, and Robert G. Eunson, a notice of which appeared in our columns last week.

Fig. 1 is a perspective view, and fig. 2 a plan, the same letters referring to corresponding parts.

A is the frame which may be constructed in any proper manner; B is a shaft running transversely across the front part of the frame, on which shaft is placed a circular saw, C, formed of thin steel plate, such as is used for sawing veneers, on one side of the saw a circular plate, D, is secured by rivets or screws, *a a*, the plate being somewhat less in diameter than the saw. This plate stiffens the saw and without its use, a comparatively much thicker saw would be required.

Two deflecting plates are placed one at each side of the saw, one of which covers the upper part of the stiffening plate, D, the inner end does not project outward from the saw, C, quite as far as the outer end. The other deflecting plate on the opposite side of the saw, is rather smaller in diameter than this one, and projects from the saw at about an equal distance at both ends; F, F, are two feed roller beds placed vertically in the back part of the frame, A, and parallel with each other. Both of these beds are made adjustable by means of screw rods, *b*, which bear against the sides of the beds, the screw rods of each bed being operated simultaneously by means of chains, *c*, passing around small toothed wheels, *d*, at the ends of the screw rods; G G are cranks, one of which is attached to one of the toothed wheels, *d*, of each bed. The beds also have a lateral elasticity given them, by means of india rubber or other springs attached to them in any proper manner; H H are feed rollers placed in the beds, F F, two rollers in each bed. They project some distance beyond the inner edges of the beds; I I are clamps attached to the inner ends of the beds, F F. At the back part of each clamp there are two journals, *e e*, one at the top and one at the bottom. These journals fit in boxes, *f f*, which work or slide in recesses in the top and bottom pieces of the beds; J J are set screws which pass transversely through the top and bottom pieces of each bed. The inner ends of these set screws bear against india rubber springs, *g*, which are placed directly back of the boxes as shown.

K K are india rubber springs at the top of the clamps, which are placed between them and set screws, L L, which pass transversely through the top pieces of the beds, F F; M M are stops which pass through the top pieces of the beds, one through each top piece. The stops regulate the distance of the lateral vibration of the clamps; O O are knives or cutters placed vertically in the beds, F F—one knife or cutter in each bed. The top and bottom of the cutters are fitted in slides, *h h*, which fit in the top and bottom pieces of the beds and are regulated by set screws, P P. The cutting edges of the knives or cutters are on a line with the edges of the feed rollers, H. Motion is

given the rollers by proper gearing, R, at the lower part of the rollers. The beds, F F, are adjusted relatively to the saw, C, so that the stuff may be sawed into the desired thickness. Either side of the saw may be made the "line side" by fixing permanently or destroying the elasticity of the proper roller bed. The stuff, S, is placed between the feed rollers, H, in the beds, F F, and motion being communicated to the saw and feed rollers, the stuff is fed towards the saw and cut by it, the two pieces being prevented from bearing against the sides of the saw by means of the deflecting plates. When the outer end of the stuff has passed the innermost feed rollers, the clamps, I I, bear against and hold

it in a proper relative position to the saw. A fresh piece of stuff is now placed between the feed rollers, the latter piece forcing forwards the preceding piece. If the last piece is rather thicker than the preceding one, it merely acts upon the beds and forces the elastic one further from the permanent one, without affecting the clamps, which have an independent elasticity owing to the springs, *g*, K. The knives or cutters, O O, cut or smooth off to an equal thickness, the extreme ends of the stuff which is split and not sawed, the usual practice in saw mills.

We will suppose that the stuff, S, is two inches in thickness, and it is desired to saw it

may be made the line side by permanently fixing the opposite roller bed, and allowing the other one to remain elastic.

New Galvanic Power, for Propelling Ships.

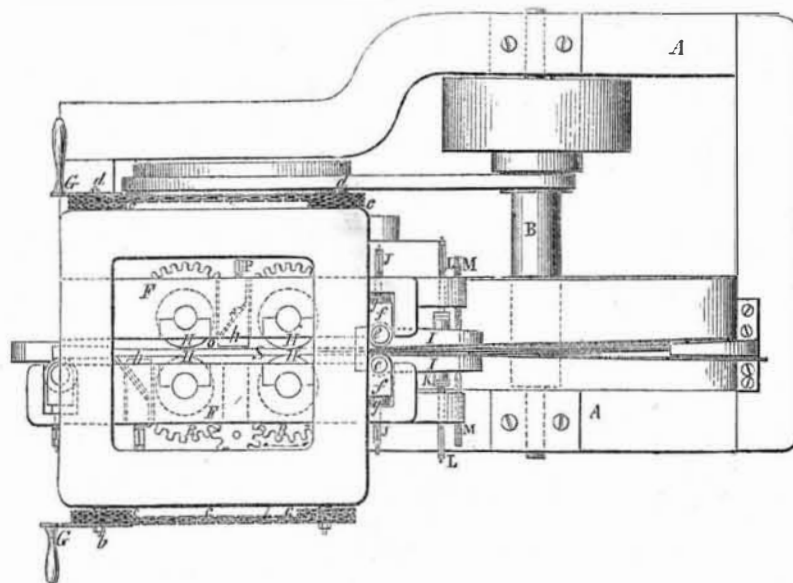
After a while we shall cross the ocean quick enough to make London a suburb of New York. Many ingenious savans are at work devising new and more rapid means for propelling ships. Among the rest, a French physician is now in Liverpool, for the purpose of applying galvanism to the propulsion of ships. The discovery of the doctor consists in lining the vessel with zinc and copper, according to a given plan, and in forming, by them, an immense series of galvanic piles, or batteries, of which the liquid electro-motor shall be the salt water of the sea. The immense battery acts upon the electro magnets, of which the movement of attraction and repulsion much surpasses, it is said, the force of our greatest steam engines.—[Exchange.

[We do not see a single new feature in the above plan. The power of electro magnetism to propel machinery is not new, and the proposal to convert the lower part of the interior of a ship, into a huge galvanic trough is also not new. On page 211, vol. 2 Glasgow Mechanics "Magazine," published 1825, a correspondent proposes the same plan. He says the vessel to be propelled, is to be converted under the flooring into one great galvanic trough, or furnished with a series of smaller ones, and I propose to charge the troughs with sea water to save the expense of acid.]

For the want of a knowledge of what other inventors have done, many old inventions are reinvented every year. It cannot be otherwise. There are few who have had the opportunity, from experience and study, of becoming well acquainted with the history of inventions.

The use of Grapes, as an article of food, is much recommended in case of consumption.—They contain a large quantity of grape sugar, the kind which most resembles milk sugar in its character and composition.

Figure 2.



into two strips, one of which is to be one quarter inch in thickness. The one quarter inch strip being the thinnest may be deflected by the plate, E, as it is inclined or projects outward from the saw further than the plate, E'. The roller bed in line

with the deflecting plate, E, is permanently fixed at one-quarter of an inch from the side of the saw, the opposite bed being elastic. The side of the saw on which the thin strip passes is the "line side." The opposite of the saw