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RAIL-ROAD NEWS.

Ventilation of Railroad Cars, &c.

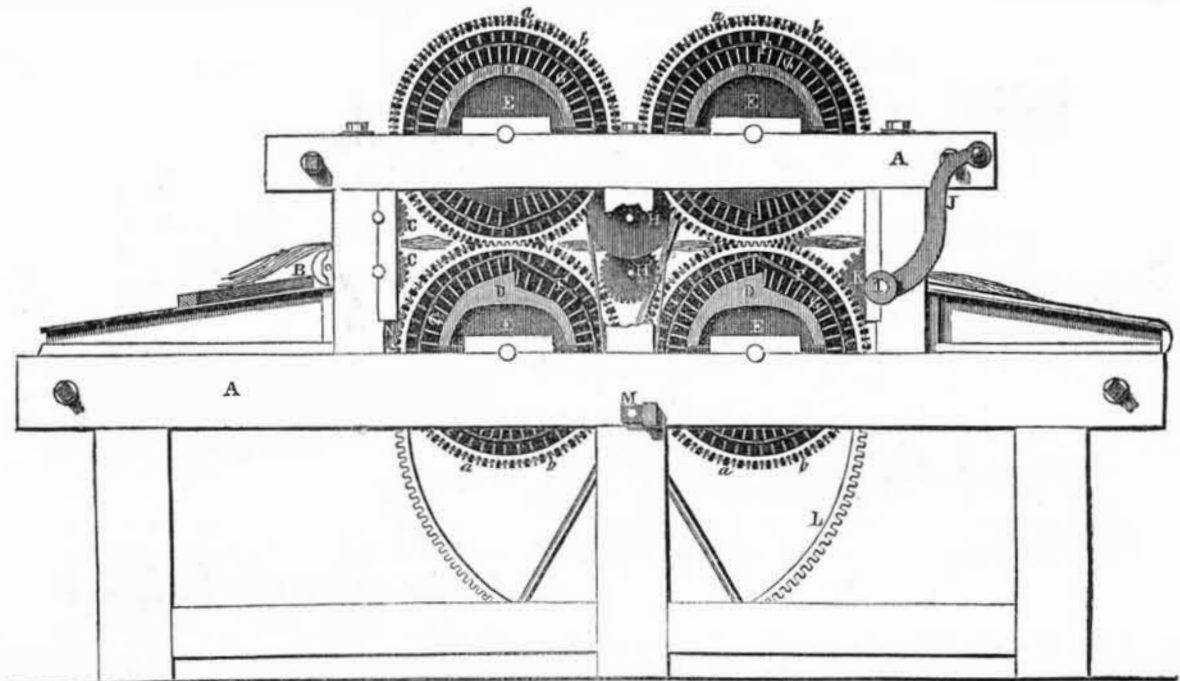
Although a great deal has been said upon the subject of ventilating railroad cars, and although a number of patents have been taken out, for the purpose of effecting this object, the evil, so far as the cars and their owners are concerned, is just as ugly and glaring as ever. There is not a single railroad connected with this city that is fit to travel on, so far as cleanliness and ventilation are embraced as objects of comfort. During the past month there has been a general drought, and the roads are no doubt dusty enough for that reason, but the same evils have always existed every summer, and always will exist unless a complete revolution is effected in some way or other. We do not care what plans are selected and adopted to get rid of the evil, only let them be no shams, but real complete remedies. It is really afflicting to ride on the Hudson River Railroad at present. The passengers, when they land in Chambers street, look as if they had been working all day in a plaster mill; their clothes are spoiled, and in every sense of the word they look as if they had been doing some dreadful penance. Every person who travels by the railroad, speaks of the want of comfort, the disagreeable dust, the abominable sparks, smoke, &c.; in short, in dry summer weather, people should travel as little as possible by railroad until the companies abate the nuisances of dust, sparks, and smoke.

We prefer the railroad for speed, punctuality, and uniformity of price, to the common trickery of steamboat companies, but there is no comparison between the pleasure of sailing in a steamboat and travelling in a railroad car. There appears also to be a great deal of carelessness and mismanagement on some of our railroads. There is a want of good and prompt action, or arrangement, or something else, for emergencies. Last week, a portion of the Hudson River Railroad was covered with a bank of sand, caused by a stream after a heavy shower flowing over it; one train from Albany was stopped on its way down, and the passengers had the miserable comfort of sitting on the rail during the night, owing to the blundering management of another train, which ran right across the track, and stuck there until it was driven off by two or three locomotives, which had to be brought into action for the purpose of pushing it into its proper place; such things should not be.

Hard Cement.

A cement which gradually indurates to a stony consistence may be made by mixing 20 parts of clean river sand, two of litharge, and one of quicklime into a thin putty with linseed oil. The quicklime may be replaced with litharge. When this cement is applied to mend broken pieces of stone, as steps of stairs, it acquires, after some time, a stony hardness. A similar composition has been applied to coat brick walls, under the name of mastic.

PATENT FLAX-DRESSING MACHINE.—Figure 1.



The accompanying engravings are views of a machine for dressing rough flax, hemp, and such like substances. It is the invention of L. S. Chicester, Mechanical Engineer, No 57 Chambers street, this city, (N. Y.) The patent for it was granted on the 3rd of February, 1852.

Flax is a substance which produces that beautiful fabric, linen, but the material as it is brought from the field looks as much like hay as a substance for making cloth. The parts which are useful, and which are employed for making thread, cords, rope and cloth, are contained in the outside of the stalks; the inside is a hard, woody, brittle matter. This

has all to be removed, and the plans for doing this are various, troublesome, laborious, and consequently expensive. To produce a good flax dressing machine is very desirable. Our country can produce any amount of flax, but whether it is owing to bad machinery or not, we cannot tell, not a single yard of good linen has yet been manufactured in the United States. If we could make good and cheap linen, a great benefit would be conferred upon our people. This machine has been invented and constructed for the purpose of facilitating the flax manufacture, by an improvement in the breaking or separating the inside woody from the fibrous parts.

Figure 2.

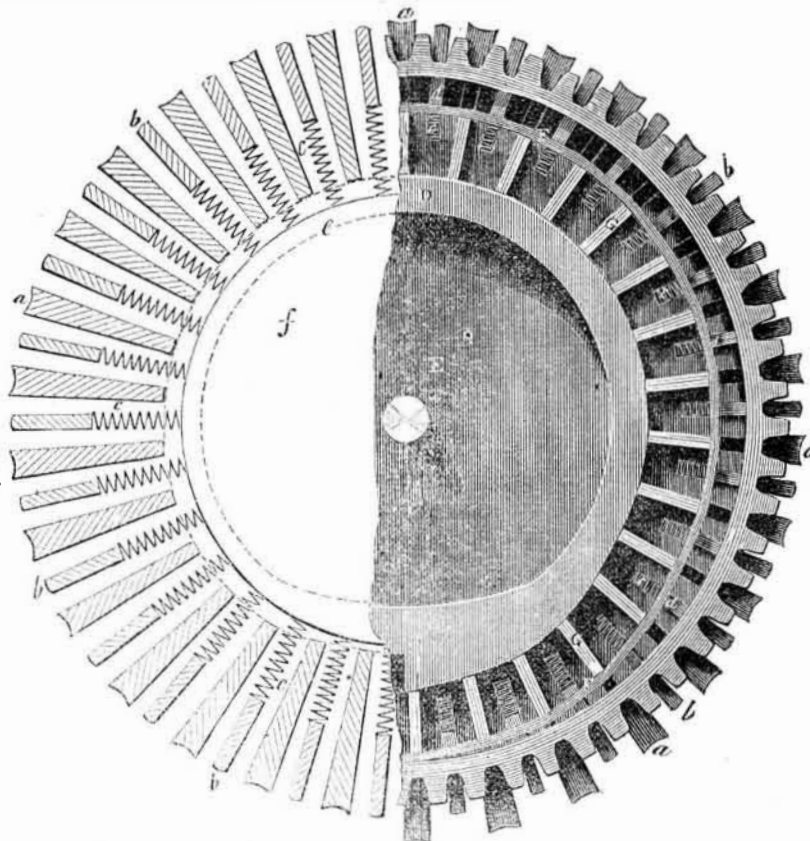


Figure 1 is a side elevation of the machine; and figure 2 is an enlarged view, partly in section of one of the cylinders so as to represent its principle of action clearly. The same letters of reference indicate like parts on both figures. The principle of the machine's ac-

tion is a very simple one, and embraces a most excellent feature. It is well known that if we take a few threads of flax and hold them with the finger and thumb of both hands, at a small distance apart and give them a rubbing doubling up and down motion, we can break

and rub off the woody parts from the fibrous of the flax, in a more perfect manner, and with less injury to the textile parts, that is, making less tow than by any other method. This machine is constructed to carry out and operate upon this principle of action.

A, fig. 1, is a strong frame made of wood or any other suitable material. B is the feed table, the rough flax being fed in under a roller; C C are liker or fluted feed rollers; E E E are dressing or breaking cylinders—the flax is made to undergo a double operation in this machine, and it can be increased indefinitely by the addition of like cylinders in the same machine. These cylinders are peculiarly constructed. The ends, E E, are iron flanges; the breaking bars, slats, or ribs, are made of metal and secured in the cylinders, but are free to act by pressure up and down. The ribs or slats, a, are pushed upwards, and the ones b—or pressure slats—are pushed downwards. Each cylinder is alike in construction. The ribs, a and b, are opposed to one another in opposite cylinders. The ribs, a are tied together at the outer ends by a band, F, of india rubber, to keep the shoulders of the bars to the cams and to make the machine operate without noise. The ribs, b, are secured by coiled springs, c c, in wooden flanges inside. The inside of each cylinder is hollow, as shown in figure 2. There are slots in the ends of the cylinders to allow the slats to work up and down. The outer ends of the ribs project below their acting edges on the cylinder.

D D D D, are iron cams made fast to the frame, A. These cams guide and direct the ribs or slats to make them act upon one another, and to act upon flax in the rubbing manner described. There is a projection on each cam of the upper cylinders, and also of the lower cylinders, set opposite one another; the notches in the lower cams are set a little in advance of the upper ones. As the cylinders revolve the cams, D D, act upon the shoulders, G G, and push the slats, a, against the spring pressure slats, b. As the flax is moved forward between the cylinders, it is rubbed and twisted or angled, between the slats with considerable pressure, and thus the pith or woody parts of the flax are broken and separated from the fibrous parts without tearing the fibres. The flax is carried from the first pair of cylinders between the central pair of rollers (one H' only seen) and then carried between the other pair of cylinders