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## RAIL-ROAD NEWS.

### Allegheny Valley Railroad.

The engineers employed to survey a route for this road, from the mouth of the Mahoning to Ridgeway, have made a report that they have examined the route of the proposed road, and estimate that the whole distance by railroad, from the mouth of Mahoning to Olean, would be about 120 miles. This makes the entire length of the new road from Pittsburg to Olean about 180 miles. They calculate on a viaduct 40 feet above low water over the Mahoning at its mouth, and another viaduct 30 feet in height over Redbank.

The Pittsburg Morning Post says that the Railroad from Pittsburg to Rochester, will soon be organized and ready for a fair commencement. The people of Rochester, and the people on the line of the proposed road in this State, have shown their approbation of this undertaking, and only ask the people of Pittsburg and Western Pennsylvania to meet them at the State line. They will do the rest.

According to Galignani, the Emperor of Russia has just ordered 6,000 carriages to be built for the different railways in his empire, in order to facilitate the conveyance of troops.

### Arrowroot in Florida.

A correspondent of the Florida Sentinel writing from Dale County, in that State, gives some interesting information in regard to the manufacture of arrowroot there—a business in which he is engaged himself. The plant from which the article is made is known by the Indian name of "Comta." It is indigenous to the State, and grows throughout the pine-wood. Wherever dug, another and more valuable crop soon and spontaneously grows up. Its manufacture has been going on for several years in the State; but although there are now several mills propelled by steam and water, the writer thinks the business is only in its infancy. With the establishments in operation a large number of people obtain employment in digging up the root, which is a business distinct from the grinding and manufacturing.

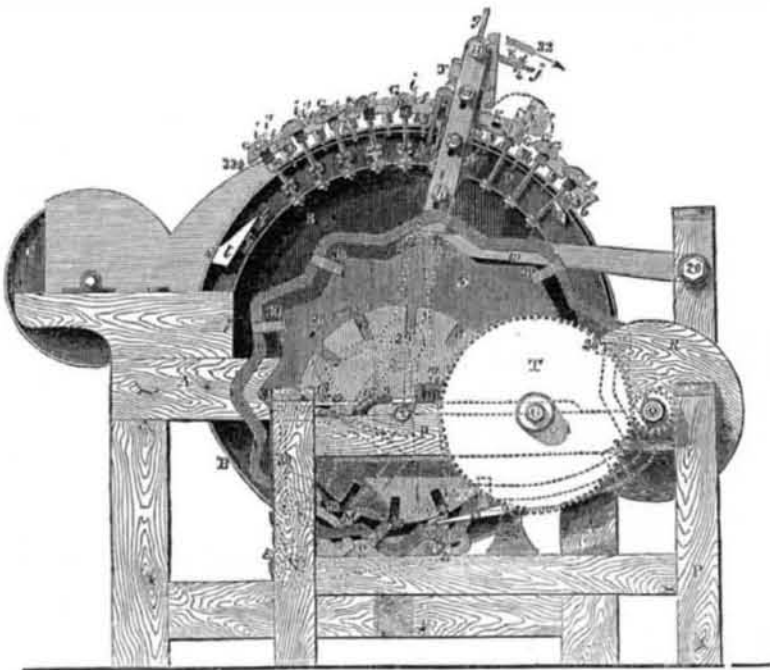
The project of transporting the celebrated Cleopatra's Needle to Hyde Park, to occupy the site of the Crystal Palace, has been renewed.

The steamship Demerara, for the West India line, which stranded on the Bristol river while on her way to Glasgow to receive her engines, had been abandoned to the underwriters. She was insured for £48,000.

This was the largest steamship ever built. Bristol seems to be a great place for making mistakes; witness the Great Britain.

The Swedish Government are about dispatching a ship on a voyage of discovery and circumnavigation with a Scientific Commission on board selected by the Royal Academy of Stockholm.

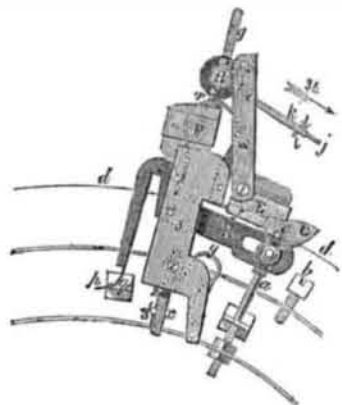
### SELF-STRIPPING CARDING MACHINE.—Fig. 1.



The accompanying engravings represent the Self-Stripping Carding Machine, invented by Messrs. Charles D. Wilcox (now deceased), Jonathan P. Stiman, and Amos Stilman, all of Westery, Washington Co., R. I. In our notices of machinery at the Fair of the Institute, our readers will recollect that we mentioned this machine particularly. Since that time measures have been taken to secure a patent for it, Mrs. Eunice Wilcox, administratrix, acting for her deceased husband.

Figure 1 is an elevation of one end of a carding machine, with the improvements attached. Figure 2 is a side view of the stripper. Figure 3 is a plan view of the machinery which operates the stripper. Figures 4 and 5 are small parts of the machine, which will be explained hereafter. Similar letters refer to like parts. As there are a great number of peculiar movements in this machine, it will require a long description to give a definite idea of its peculiarities, and at the same time it will demand the closest attention on the part of our readers. The description, therefore, is continued on the Fourth Page.

FIG. 2.



A Self-stripping Carding Machine has been a desideratum; those in common use are stripped by hand. The carding machine represented does not differ materially from other carding machines, except in the mode of attaching the top cards. A A is the framing; B is the main cylinder; D are the arches which support the cards.

This invention relates to certain mechanical means, by which the top flat cards of a single carding machine, or of any number of carding machines, may be stripped, one after the other, in regular succession, while the machine or machines are in operation, without detaching

them from the said machine or machines, and without requiring any manual aid—the operation of stripping proceeding during the whole

E E are the top cards which are of precisely the same construction as those in common use, but are attached in a different manner, being hinged or jointed by pivots, c c, at each end of their front side to the standards, a a, which carry them; resting, when in position for operating, upon screws, b b, screwed in the arches, but being capable of swinging upwards and forwards, or turning over, so as to lay on the next card in front of it, and present its teeth upwards, (fig. 1), where one of the top cards is in the act of turning over, and fig. 2, where one is represented turned over, the position of the tops or backs of the other top cards being represented on the latter figure by the line, d d. Hanging on each of the pivots, c c, of the hinges at the end of the cards, is a small tumbler, G, which is divided into two parts, the outer part being visible in figures 1 and 2, and the inner part in figures 4 and 5. The outer part is of nearly elliptical form, and the inner part of nearly the same form, but has a portion of its periphery (indicated by e in fig. 4) concentric to the pivot, c, upon which it hangs, and has angular projections, i i' at each end of the said portion, e (see figs. 4 and 5). The tumbler turns freely upon the pivot, but on being turned a certain distance in either direction, one of the angular projections will come in contact with either the upper or under side of a part of the plate, f, of the hinge, which fits close up to the part e, and by means of these projections, the top card, to which the tumbler is attached, is turned over to present its teeth upwards for stripping, and returned to its working position.

It is presumed that the construction of the carding machine is now intelligible, and the description of the means by which the top cards are stripped, the means by which the tumblers are operated upon for turning over the cards, and the means by which the stripping apparatus is operated, will now be described.

The stripping is performed by a comb or flat card, F, which is of the same length as, and suspended above the top cards, its teeth being on its under side, inclining downwards in the same direction as those of the top cards incline upwards, when turned up. This comb is secured firmly by screwed rods, g g, to a bar, H, which extends across the top of the carding machine, between two sweeps or

swinging arms, one on each side, I I, which are hung so as to turn freely on the ends of the shaft, 29, of the main cylinder. The screwed rods admit of the combs being adjusted at a proper height above the top cards: and it can be still further adjusted, as the sweeps, I I, are made in two parts, screwed together by screw bolts, h, which pass through slots in one part. In connection with the comb or stripper is a brush, j, which may be made of a strip of leather or any soft material, for the purpose of sweeping off the waste stripped from the top cards. This brush is attached to two arms, k k, which hang loosely and turn freely on the bar, H, and is confined between metal plates, l l, extending its whole length, which is equal to that of the cards. It is capable, by means hereafter described, of being swung or thrown upwards during the operation of stripping, and brought down into position for sweeping off the waste at a proper time.

The mechanism employed for the purpose of turning over the cards, is attached to a plate J, which is attached to the inner face of the front sweep, by screw bolts, m m, which pass through slots in the sweep, and admits of its sliding on the sweep; the plate itself is distinctly shown in fig. 2. A lever, K, working on a fulcrum pivot, n, secured in the plate, J, carries a stud, o, which is adjustable in a slot, and is caused by movements given to the sweep to operate on the periphery of the outer parts of the tumblers. This lever is operated

upon two springs, one, p, of which is attached to the opposite end to that where the stud, o, is placed, the last named end of the lever being bent in a hook form, and the end of the spring being bent inwards back of the lever, so as to come in contact at certain time, with studs, q q, placed around the front arcs of the frame of the carding machine at intervals corresponding with the distance between the top cards; the effect of these studs is to raise the end of the lever carrying the spring, and depress the stud, o; this depression being necessary at certain times, which will be hereafter explained, for the purpose of allowing the stud, o, to pass under the tumblers. The other spring, r, is of a hook or bow form, and is attached to the plate, J, above the lever, bearing upon the lever at the back of its hook, in a suitable manner, to raise the stud, o, the stud being prevented from rising too high by a projection—not shown, but easily understood—at the back of the plate, J.

The plate, J, is connected by a link, w, to the front arm, k, carrying the brush, or to a short lever or arm appended to k. The lower end of the screw bolts, m, is turned down at its end to form a stud, x, which extends some distance through the plate, J, and on this stud hangs a catch, z, which has two notches, 1, 2, in one edge at a short distance apart, either of which is capable of catching on a stationary stud, 3, secured in the sweep. A spring, y, is secured to the plate, which acts on the catch to keep it on the pin, and while it is so held the plate, J, will be stationary in relation to the sweep. In figure 1, the lower notch is shown on the pin, 3, that being its position during the entire operation of stripping the cards, the brush being raised, but when the cards are stripped, and the waste is to be swept away, the movement of the sweep brings the upper part of the catch, x, above the stud, z, into contact with a stop, and releases it from the pin, 3, leaving the plate, J, free to slide on the sweep; the stud, z, then comes in contact with the incline, u, (fig. 1), and in passing along it draws down the plate, J, and with it the catch. The plate, J, draws down the brush by means of the link, w, and by the time the brush is drawn into position for operation, the catch, z, passes a stop (not shown), and the spring, y, throws its lower part forward, and the notch, 2, which is now opposite to the pin, 3, catches

(Continued on Fourth Page.)