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Rail Road News

New Jersey Railroads.

We have received the letters in pamphlet form, which appeared in the Burlington Gazette, N. J. under the signature of "A, citizen of Burlington," exposing the Railroad monopoly of that state. We read the majority of these letters before, and became convinced of the necessity of the reforms he advocated, "the abolition of the monopoly." If there is any thing more pointed than another, to prove the mighty influence of an honest public press, and the power of one able man with truth on his side, it is these letters. They have already destroyed the monopoly. The public have been enlightened—a convention of respectable citizens of New Jersey, have met and deliberated on the evils of the Railroad system of that state, which used to levy on passengers from other states, a poll tax for travelling by Railroad through it. The fare between this city and Philadelphia, has been reduced \$1 already, and the evils of management, so effectually exposed by Mr. Carey the "citizen," will be reformed, and the whole household of abuses will no doubt, be soon swept clean and garnished.

Foreign Railroad Iron.

English Railroad iron which has been bought for some of the Pennsylvania roads has been found to be very poor stuff—dearer than ours at \$50 per ton, although purchased for \$40. It is not the lowest priced article, that is the cheapest. Some people purchase iron, as if its value was in its name—that iron is iron, no one doubts, but an egg is an egg, be it fresh or rotten, and many of our companies, may find out that their cheap railroad iron, like eggs, has the qualities with the price of their far-fetched profits.

Great Tunnel.

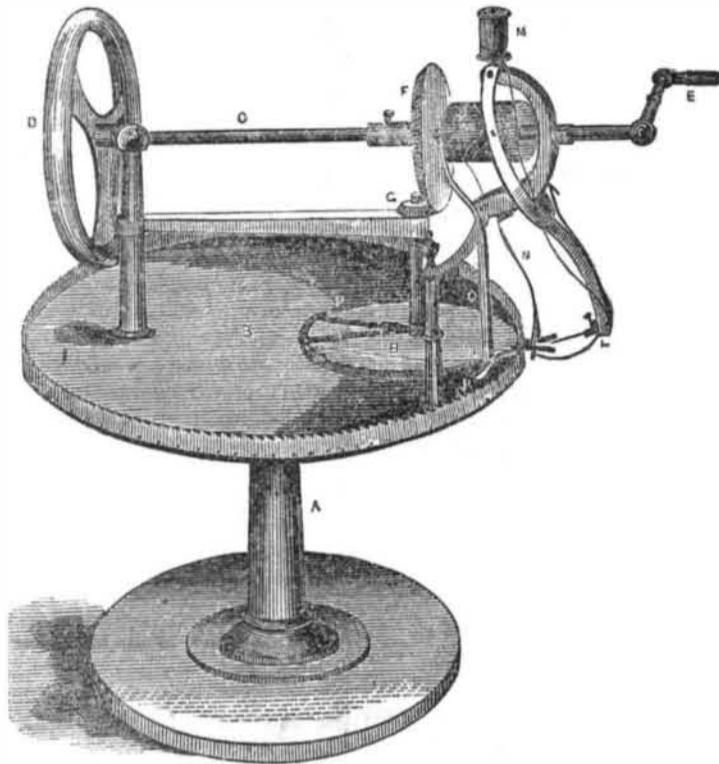
Proposals are solicited for the construction of the great tunnel through the Blue Ridge, by which the Louisiana Railroad will be prolonged into the great valley of Virginia, near Staunton. The tunnel will be 4260 feet long, 16 feet wide and 20 feet high, with a ditch on each side; it will slope eastwardly, at the rate of 66 feet to the mile, and pass 700 feet below the top of the mountain.

New York and Hudson Railroad.

The prospects of this road are brightening, and there is every appearance of its pleasingly disappointing many who were doubtful of its success. The stock has improved 4 percent. In one week, a locomotive will be thundering over it to Peekskill.

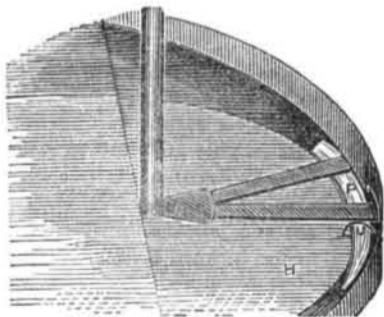
The Michigan Central Railroad has engineers between New-Buffalo and Michigan city, surveying a route for the extension of that road—an arrangement having been completed by which the Michigan Central Railroad Company have contracted to extend and construct that road to Michigan city, by the 1st of November, 1850.

LEROW & BLODGETT'S ROTARY SEWING MACHINE. Figure 1.



Every sewing machine that has yet been bought before the public, both at home and abroad, has been described in our columns; and two of these machines—Johnson & Morey's, American one, and Mangin's French one, were illustrated in our last volume. We commence this volume with the illustration of the most perfect of these machines—one which has unquestionable merit, because every stitch in it is self-bound, and the seam will not rip out, if one stitch is missed or broken, which is the great evil of the hoop stitch sewing machines. The patent for the machine will soon be issued, and a number of rights have already been sold. It is a simple machine, yet its action will not be easily understood. The reader will therefore have to be attentive and studious while perusing this description. Figure 1, is a perspective view of the machine, and figure 2, is a section of the shuttle traversing its circular path, and figure 3, is a view of the interior of the shuttle.

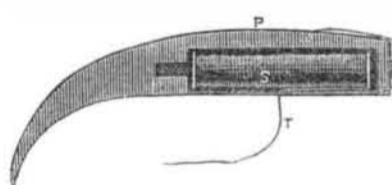
FIG. 2.



A, is a small pillar fixed on a base which may be screwed to any table, B, is a top plate fixed on the pillar and turned up at the rim like a frying pan. A and this rim is a circular or hoop ratchet, which moves round on a small recess in the rim. In this ratchet hoop, there are a series of pins or needles, indicated by the round dots. On these, the cloth is secured to be sewed. C, is an axle to drive all the machinery. It is secured on a post at one end at the small fly wheel, D, and at the other end on a frame extending up from two small side posts at the right hand side one of these small posts, is not seen; F, is a bevel wheel on the shaft C, and G, is a bevel pinion on a small vertical axis in the middle of the circular shut-

tle path. This vertical axis has two spring arms, H, extending from it and pressing upon the shuttle, P; J, is a cam cylinder. It is formed with an eccentric waving groove, which gives the quick reciprocating motion to the needle, L, by the needle being secured by a screw in the lower end of a bent arm, the upper end of which is secured on an axis pin below the spool, M, and it is of a fork shape around the cam cylinder, J, having two knobs or pins projecting into the eccentric groove of the said cylinder; therefore when the cylinder is revolved by the handle, E, the needle is forced in and out, by its arm above, in the dark groove represented in the cylinder, J. While the needle sews, the cloth must be moved in unison. This is done by a ratchet rod, O, secured on an axis pin on the small arm of the frame spoken of, the upper end of which, leans against the edge of the cylinder, J, on which are projections that vibrate the ratchet rod re-

FIG. 3.



gularly, and operate ratchet, O, which takes into the teeth on the rim, moving it and the cloth regularly around. It now remains to be explained how the stitch is formed and the cloth sewed.

Fig. 3 shows the thread, T, upon a spool, S, inside of the shuttle, P. This thread passes out of the side of the shuttle, trailing close to the rim inside. There is also a thread from the spool, M, which comes down and passes through an eye near the point of the needle. The needle passes through the cloth to the inside, below the track of the shuttle by a small orifice in the rim. When it has passed in the full length of the stroke, the eccentric groove in J is so made as to give, at that moment, a short stroke to the needle, the thread of which is then held back by spring lips, on the lower end of N, through which the needle must pass outside, and the thread is doubled up above the shuttle's track; at that moment the shut-

tle comes along, (its bevel pinion being made to revolve the shuttle in correct time) and passes under the needle thread loop u, as faithfully represented in fig. 2., forming a double chain loop with the two threads crossing one another in the hole formed by the needle. There is therefore a fair stitch formed on both sides of the cloth, in appearance, like a saddlers stitch, and which makes a stronger seam than can be formed by hand work. While the shuttle is passing through the loop, there is a cam inside of the rim, which lifts one of the spring arms, H, off the shuttle (one after the other) to allow the thread to pass under it. All the details of this machine are very perfect. We believe that with the foregoing description, any person, will be able to understand its action. The price of a single machine is \$100, with the right to use it. Orders may be left for the owners at this office.

Useful Receipts.

Marine Glue.

Dissolve 4 parts of India rubber in 34 parts of coal tar naphtha—aiding the solution with heat and agitation. The solution is then thick as cream, and it should be added to 64 parts of powdered shellac, which must be heated in the mixture till all is dissolved. While the mixture is hot, it is poured on plates of metal in sheets like leather. It can be kept in that state, and when it is required to be used it is put into a pot and heated till it is soft, and then applied with a brush to the surfaces to be joined. Two pieces of wood joined with this cement can scarcely be sundered—it is about as easy to break the wood as the joint.

To Destroy the Smell of Musk.

Some years ago, the Emulsion of Bitter Almonds was found to possess the property of annihilating the smell of Musk, and most of the cyanic preparations evinced the same power. According to M. Mertot, a Pharmaciaen of Bayeux, in Normandy, Ergot of Rye will produce the same effect. "I had," says he "to prepare a number of pills, containing both Musk and Ergot,—hardly were the two substances mixed, than the smell completely went off, so much so, that the patient, who was not aware of the nature of the pills only noticed the Musk by the effects of flatulency.

To make Panada or Bread Jelly.

Cut a wheaten roll or loaf into slices, toast them on both sides, and boil in a quart of water until the whole forms a jelly, adding more water if required; then strain, and flavor with one pound of white sugar, four ounces of red wine, and one ounce of cinnamon. Very nutritious. It may also be made with broth from which the fat has been skimmed instead of water.

Biscuit Jelly.

Take of white biscuit, crushed beneath, the rolling pin, four ounces; cold water, two quarts; soak for some hours, boil to one half, evaporate to one pint, and flavor as above. Given in weakness of the stomach, dysentery, and diarrhoea.

Cement for Mending Steam Boilers.

Mix two parts of finely powdered litharge with one part of very fine sand, and one part of quick lime, which has been allowed to slack spontaneously by exposure to the air. This mixture may be kept for any length of time without injury. In using it a portion is mixed into a paste with linseed oil, or still better, boiled linseed oil. In this state it must be quickly applied, as it soon becomes hard.