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RAIL-ROAD NEWS.

Railroad Accidents.

The Committee appointed by the Legislature to inquire into the causes of Railroad Accidents, consisting of Senator Bartlett and Mr. McAlpine, State Engineer, with Senators Smith and Monroe, recently made a tour of examination over the Erie Railroad. They were accompanied by Hon. J. C. Wright, Controller; Col. Sclatter, Superintendent of the Ogdensburgh Railroad; Mr. Doxtater, Superintendent of the Watertown Railroad; Mr. Whistler, Superintendent of the New Haven Railroad; Major Morrell, Civil Engineer; several officers of the Erie Road; Mr. Minot, Superintendent; Mr. Post, Chief Engineer; Mr. Marsh, Secretary, and Mr. Warren, Auditor, were also of the party.

In the majority of cases, the causes of railroad accidents require no depth of learning or logic to point out; they are plain, palpable and transparent to the most illiterate mind. We seldom hear of an accident which requires some fine subtle theory to explain The cause of an accident, by the falling of a bridge, may lead to the discovery of a defective system in bridge building; and we cannot forget that one iron bridge failed on the New York and Erie Railroad, but the cause, so far, as we have been informed, has not been made public as a matter for scientific discussion; it led, however, to the condemnation of such structures on the said road. The committee appointed by the Legislature, and the gentlemen who accompanied them, are distinguished for professional skill and great attainments, and we confidently hope that their report will be the means of directing the attention of our next State Legislature to adopt efficient measures for the prevention of railroad accidents.

A New Locomotive.

A new locomotive has been built at Trenton, N. J., for the Trenton and Amboy Railroad, which heats the water before it enters the boiler. The tank is connected by a hose to the ash pan, which is made with a double bottom, to form a space of three inches, between the sheets, so as to contain water. From this space the water passes through an intermediate pipe, thence to the smoke box, where it passes out to the pumps, which are vertical, and fixed on the outside of the smoke box, and worked from the arm of the pendulum shaft.

Castor Oil for Railroads.

The Illinois Railroad, from Naples to Jacksonville and Springfield, use castor oil entirely on their car wheels. Considering the present high price of sperm oil, and the glutinous nature of whale and other inferior oils, this article (about 80 or 90 cents per gallon,) is well worth trying on the railroads in that region.

We hope that the accident to the Henry Clay will make our Congress act promptly on the Bill of Senator Davis for the prevention of steamboat accidents.

PATENT MEAT CUTTER.---Fig. 1.

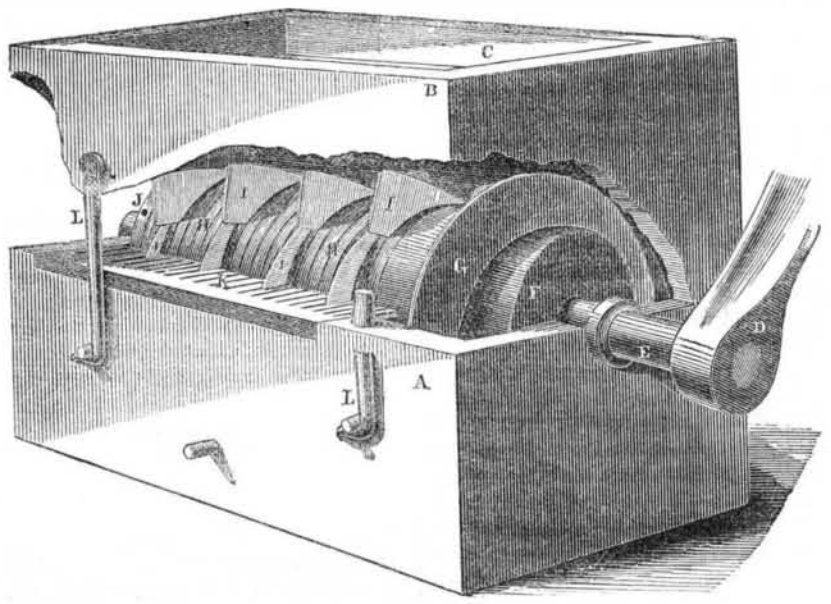
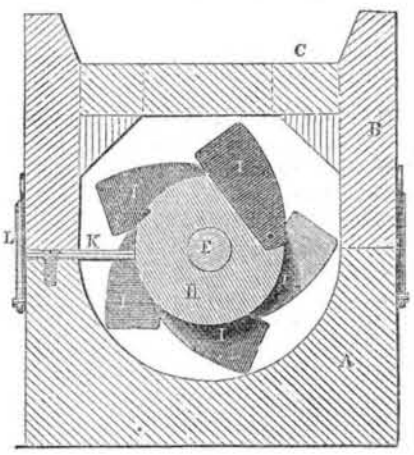


Figure 1 is a perspective view, and figure 2 is a transverse section of a machine for cutting meat for sausages, invented by Thomas Vanderslice, of Valley Forge, Chester Co., Pa., and for which a patent was granted on the 6th of May, 1851.

The principal feature of this invention consists in an arrangement for adjusting the positions of the several rotary cutters, so as to keep their edges in contact with the periphery of the cylindrical chamber within which they revolve. The casing of the machine consists of an oblong cubical trunk, A B. C is the top of this box. D is a crank handle on the end of the mandrel, E. This mandrel passes through the entire length of the box, and is supported on bearings at each end. On the near end of this mandrel there is a short boss, F, on the periphery of which there is a helical flange, or part of a screw, G, it extends to the entrance of a cylindrical chamber; the left side of the flange is at right angles with the axle, and the right side has an inclined curve from the apex of the flange to the periphery of the cylinder. Upon the mandril there is a series of circular blocks, also a series of cutters, I I, which are adjusted on the mandril between the blocks—a knife and adjusting plate, H, are placed between a pair of blocks; the adjusting plate and cutter are of equal thickness. Each cutter is mounted on a pivot pin; in the periphery of each adjusting plate, H, there is a notch, by means of which the relative position of the plate is occasionally changed, and the position of the cutter (the back of which rests upon a corner of the adjusting plate) is thereby also adjusted. A screw thread is cut upon the mandril, near the left end of it, upon which is a circular screw nut, J, by which the entire series of circular blocks, knives, and adjusting plates are firmly pressed together, and by which they are held in whatever relative position they may be placed. The use of the plates, H, is to adjust the cutters in such positions that the most prominent part of the cutting edge of each may work in close contact with the periphery of the cylindrical chamber in which the knives revolve. K is a horizontal plate secured across on the lower section of the box. It has a series of slots in it of sufficient length and breadth to allow the cutters, I I to pass through them as it revolves, and whereby the cutters are cleared from the meat. The positions of these cutters are so arranged as to succeed each other in helical order, as represented in both figures. The top part, C, is partly a cavity, with a bottom to hold the meat that may be placed upon it, and there is a small opening, as shown by the dotted lines in fig. 2, above the screw, G. The meat or other substances to be minced, passes down this opening upon the screw, which forces the same into the chamber in which the knives revolve between the slots, and is acted upon by the whole knives in succession, they being spirally set, and the flange, G, acting along with them to force the meat out at the left end of the box. It is there delivered through an opening not seen, in a finely subdivided state. The box, A, is made in two parts, with a hinge, and the hook rods, L L, are for the purpose of keeping the two parts close and firmly united together when the machine is in operation.

FIG. 2.



The claim is for the mode of adjusting the cutters by means of the adjusting plates. This meat cutter is a very simple one, and it is not liable to get out of order. All the parts can be made strong, so as to endure for a long time. It is worthy of the attention of those engaged in the business of mincing meats, vegetables, &c., and for private families it is also a commendable machine; it will save a great deal of long and arduous labor to those families who use no other machine than a common mincing knife.

More information about the sale of rights, &c., may be obtained by letter addressed to Mr. Vanderslice, at his residence in Pennsylvania.

New Marble Quarry.

The Poughkeepsie Eagle chronicles the discovery of a marble quarry in the neighborhood of that town. The marble is of four qualities; the first black, with an Egyptian yellow and white vein; the second dark blue, with light blue veins and clouds; the third pink, and the fourth black without veins constituting the principal part. Although none of it has been properly wrought, it has been found to take as handsome a polish and be susceptible of as fine a finish as the best Italian marble.

To Prepare Amber Varnish, &c.

By means of this process, the amber, which melts only at a high temperature, is placed in a strong copper vessel, closed at its upper part, and luted with clay. At its lower part, in front, is a conical pipe, before which is placed a strainer, formed of a piece of iron, pierced full of holes, by means of which the amber, when melted, may be separated from the impurities which it contains. The copper vessel rests on a furnace, its conical end being plunged some inches into it. When the temperature is sufficiently high, the melted amber flows, deprived of its impurities, into a large copper vessel or recipient placed underneath, and about two-thirds filled with the oil to be used in making the varnish. The incorporation of the melted amber with the oil is facilitated by heat. When the mixture is complete, the other necessary ingredients are to be added. This process has been found by M. Stilling, after considerable experience with it, to possess the following advantages:—1.—The amber is completely fused, without residue, and as it is contained in a closed vessel, nothing can be lost by evaporation. 2. There is no danger of fire. 3. The thick copper vessels do not, like the earthen vessels sometimes used, break and waste the contents.

To Give a Blue Color to German Silver or Argentine.

Place a plate of the metal, 3 or 4 inches square (previously thoroughly polished, so as to give it a brilliant appearance,) in a vessel containing earth, and place it in communication with a somewhat strong zinc wire, then pour into the vase a slightly concentrated solution of prussiate of potash and protochloride of iron dissolved in water. The metallic plate must be completely immersed. At the expiration of a few seconds, the argentine, which is electro-negative, will be covered with a beautiful blue color, which, though it does not stand much rubbing, is yet sufficiently adherent to render the application of the process useful.

To Make Sealing Wax.

Venice turpentine, 112 parts; shellac, 196 parts. Melt with moderate heat in an earthen pipkin and add cinnabar, 70 parts; afterwards a paste, composed of cinnabar, 70 parts; carbonate of magnesia, 3 parts; oil of turpentine, q. s. to make a paste. Stir the whole well together, until all air bubbles have disappeared, then run into moulds of tinned iron, the interior of which have previously been rubbed over with oil of almonds. When cool, polish the sticks of sealing wax, by passing them rapidly through the flame of a spirit lamp.

Fine Red.

Venice turpentine, 112 parts; shellac, 196 parts; cinnabar, 112 parts; carbonate of magnesia, and oil of turpentine, 3 parts.

Fine Black.

Venice turpentine, 126 parts; shellac, 252 parts; colophaney, 14 parts; lamp black, mixed with oil of turpentine.

Yellow.

Venice turpentine, 56 parts, shellac 112 parts; colophaney, 35 parts; King's yellow oxchloride of lead, 21 parts; magnesia, 3 parts; turpentine.

Bark Bound Trees.

Scrape with a knife and wash with very strong soap suds, once or twice during a season, and the cure will in all probability be effected; if not, tie long straw around the trunk of the tree, which is said to be an effectual cure.