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## RAIL-ROAD NEWS.

### Railroads in Texas.

We hope Texas will go ahead in the railroad line at the earliest date. It is a country well adapted for railroads, and they are the very means required for developing its resources, and giving an impulse to industrial emigration. We believe that three railroads are now projected, two of which have been surveyed, and companies formed for their prosecution. The first is the Buffalo Bayou, Brazos, and Colorado Railroad; this railroad is intended to unite the navigable heads of the Brazos, Colorado, and Red rivers with the waters of Galveston Bay, at Harrisburg. There are fifteen miles graded, and in a few months the whole will be ready to the Brazos to lay the rails to connect with that river. This project is the first step for a railroad from the Gulf of Mexico to the Pacific.

The second route is the San Antonio and Gulf Railroad, to connect Harrisburg and South-western Texas with the waters of Matagorda Bay, and of course the Gulf at Indianola.

The third route traverses the above two from east to west, and cutting across the heart of Texas, at the head of navigation on all her chief rivers, is intended to join the New Orleans and Opelousas Railroad, which, it is declared, when fully completed, will carry the best trade of Texas to the "Crescent City."

### A Stately Bridge.

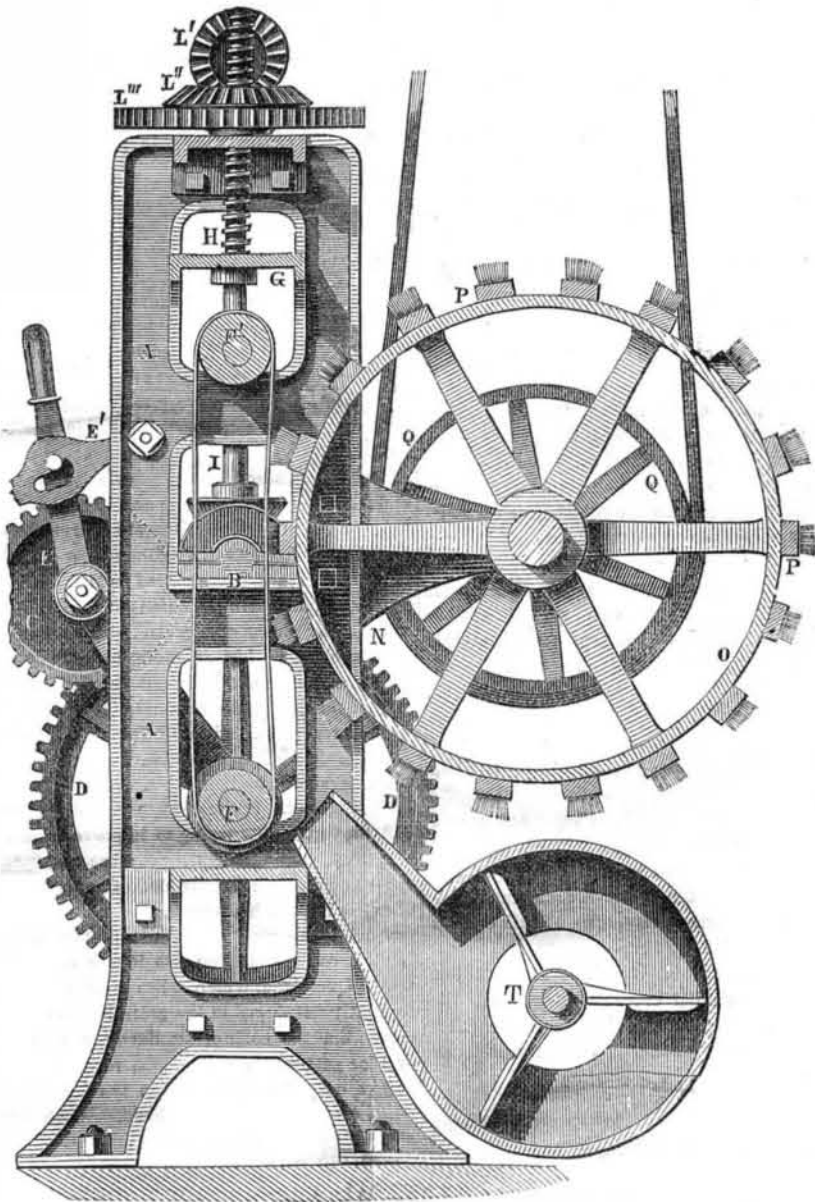
The New York and Buffalo Railroad, connecting Buffalo with the Erie Railroad at Hornellsville, via Warsaw, and Portage Falls, is now completed, and running, except the bridge over the Genesee at Portage Falls, which is to be completed on or about the 20th inst.

Of this bridge the Wyoming County Mirror, says:—

This immense structure is nearly completed. Those who have not seen it should go now, as it is worth fifty miles travel to see them raising it. It will be, if not the wonder of the world, the wonder of the thousands who will visit it annually. We are not aware that there is another bridge in the world as high and as large as this, and are confident there is not, of similar structure. It is 235 feet from the river to the track, and 240 to the top of the railing; and the length is 1,000 feet. The Suspension Bridge at Niagara Falls is 230 feet high and 795 long—so that Niagara is beat in this respect. And yet, though this work is reared to such an astonishing height it has the appearance of perfect safety. We are told, that by calculation they know that it would bear twenty times the weight of any train that can be put upon it. We think we should not fear in the least to ride over it the first time. We understand it is in contemplation to pass over it the first time with four of the heavy engines followed by a train of cars. If so, and the people have notice of the time, there will be thousands there to see it.

## MACHINE FOR FINISHING YARNS AND THREADS.

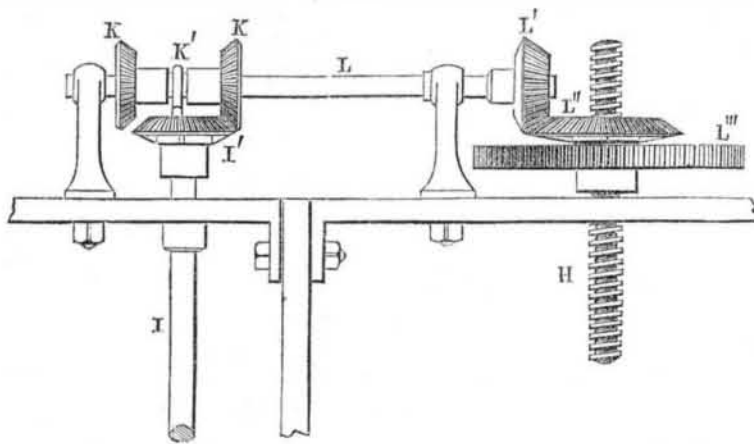
Figure 1.



The annexed engravings are views of machinery for finishing cotton, silk, and worsted yarns and threads. The inventor and patentee is Godfrey Erman, of Manchester, Eng. Fig 1 is a sectional side elevation, and fig. 2 is a front elevation of the principal gearing for

giving motion. In our country, the manufacture of cotton yarn in factories as an exclusive branch of business unconnected with weaving, is almost unknown, in England there are more than 30,000,000 lbs. exported every year. This yarn is dressed and put up in

Figure 2.



bundles for sale, and it is necessary, like the finishing of cloth, that it should look well. This machine is intended to clean, smooth, and separate the threads. It is an important machine, especially for cleaning and dressing colored yarn. There are some yarns colored with barwood, some with arsenic, potash, and the sulphate of the copper; they have all to be beaten and shaken when dry, to remove the offensive sediments of the dyestuffs out of

them, and this has always been done by hand, the work is dangerously unhealthy, especially the dressing of the arsenic greens, and besides, it never has been thoroughly done by hand; this machine will accomplish the object.—The time will no doubt arrive in the course of our progress in textile manufactures, when much yarn, green, bleached, and colored, of silk, cotton, and wool, will be made in our country, and for factories and dyeworks

this machine will form a landmark, to confer no small amount of benefit upon the manufacturers, and those who have been accustomed to finish yarns. The thread manufacture is but in its infancy among us; this machine is specially applicable to the dressing of threads in hanks like the strong linen kind, which we hope yet to see greatly improved, and rendered more perfect. There are a few factories in our country for making linen thread for shoemakers and saddlers, but there is only one factory in our whole country, with which we are acquainted, that makes linen thread for sewing; the samples of the thread which we have seen, of this home manufacture, lead us to say, that its makers have a great deal to learn yet.

The threads are submitted to the operation of the machine while in the hank, and the object of the process is to impart to the threads a smoothness and evenness not hitherto attained by any of the ordinary means employed; and also to give them a greater degree of lustre or gloss than usual. The principle of the improvements is, to submit the threads to friction, produced by a revolving brush, the threads being maintained in a state of tension, and also in motion during the operation. A is one of two side standards, which being properly connected together by cross pieces, form the framing of the machine. B is the main driving-shaft, for giving motion to the machine; it is carried by two bearings, one of which is upon the side standard, and the other upon a bracket or carriage, fixed to, and projecting from, the standard; upon this driving-shaft is fixed the driving-pulley, and also a spur-pinion, which gears into the spur-wheel, C, upon the boss of which is fixed a spur-pinion, gearing into and driving the wheel D. The wheel, C, and its pinion revolve loosely upon a pin or stud projecting from the lever, E. The fulcrum of this lever is upon the shaft carrying the wheel, D. The upper end of the lever, E, carries a pin, which passes into a slot in the lever, E'; by means of this slotted lever, the lever E can be caused to ~~move~~ move into one of two positions, nearer to or further from the driving-shaft, so as to put the wheel, C, into gear with the pinion upon the driving-shaft, B, or remove it from gear with it, and thereby stop its movements; but at the same time the pinion upon the boss of the wheel, C, is never removed from gear with the wheel, D. The shaft carrying the wheel, D, is mounted in manner similar to that of the driving-shaft, B, that is, the bearings of it are in the side standard and in the bracket or carriage. The inner end of this shaft carries upon it one-half of a toothed clutch-box, the other half being upon the end of the roller, F. This is one of the thread-rollers; the other is at F'; and it is around and between these two rollers that the hanks of thread are placed in the machine; and the bearings upon which these rollers revolve, are of such a construction as to be removed from, and replaced in, the machine with facility, the clutch being the means of connection between the roller, E, and the shaft carrying the wheel, D, so as to communicate motion to it. The upper thread-roller, F', revolves loosely in its bearings; thus it will be seen that when the thread-rollers, F, F', are mounted in the machine, and the lever, E, fixed in such a position as to throw the wheel, C, into gear with the pinion upon the driving-shaft, movement will be given to the rollers, and consequently to the threads upon them, submitting fresh portions of them to the action of the revolving brush. During the operation, the hanks of threads are maintained in a proper state of tension, as follows:—The bearings in which the upper thread-roller, F', revolves are attached to the sliding-bar or frame, G. This is attached to the ends of two screws, H, passing through nuts above, by the