Scientific American.

THE ADVOCATE OF INDUSTRY, AND JOURNAL OF SCIENTIFIC, MECHANICAL AND OTHER IMPROVEMENTS.

VOLUME VII.] NEW-YORK, MARCH 13, 1852. [NUMBER 26.

THE
Scientific American,
CIRCULATION 16,000.
PUBLISHED WEEKLY
At 128 Fulton street, N. Y., (Sun Buildings)
BY MUNN & COMPANY.

Hotchkiss & Co., Boston.
Dexter & Bro., New York City.
Stokes & Bro., Philadelphia.
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RAIL-ROAD NEWS.

Arkansas and Internal Improvements.

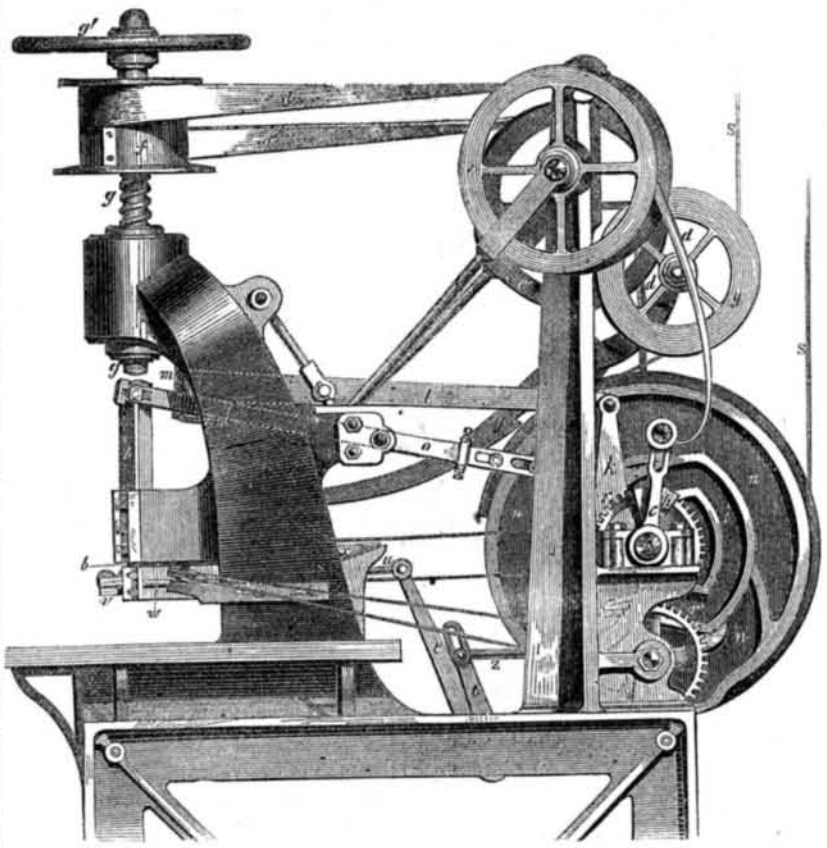
The people of Arkansas are waking up to a true sense of their own interests. We have been informed that a charter has been obtained, under the General Charter Law, for a railroad from Memphis, Tenn., via Little Rock, to Fulton, Ark., on Red River. There is a feeling, both spirited and commendable, among a great portion of the people of that State, to construct a system of railroads. At Little Rock, the capital of Arkansas, a Permanent Central Committee of gentlemen has been chosen, by the citizens, to further the object of "Internal Improvements," and in an address to the people, they state that "the prosperity of Arkansas is based upon the rapid developement of her commercial, agricultural, manufacturing, and mineral resources, which exist in extent and variety unequalled, perhaps, by any State tributary to the Mississippi river."

The people of our Southern and South-Western States have too long neglected their best interests in not devoting more attention to the construction of good railroads. We look upon railroads not merely as beneficial for rapid passenger conveyance, but also for the economical carriage of goods, agricultural products, &c., of all kinds. All our Southern States are rich in natural resources, but as the best and most thrifty trade is between town and country, bad roads and a great distance from market, tend to repress the spirit of agricultural industry. No farmer will bring produce to market, if the cost, on account of bad roads, is more for carriage than the price of the produce when brought to market. No farmer has an incentive to raise a surplus crop, when the cost of bringing it to market is great; reduce the transport cost, and he then has. This our railroads certainly do, consequently they tend to develope the internal resources of every country through which they pass. Good railroads and plank roads will yet do wonders for our Southern and Western States, and the sooner every State leaps into the trenches, with hearts, hands, and pockets, the sooner will all the people win for themselves enduring benefits.

The Pennsylvania Central Railroad.

An agreement between the managers of this railroad and the merchants, of Philadelphia, has been entered into, the result of which is, that the said railroad will not carry goods purchased in New York. This policy is to force the Western merchants to buy in Philadelphia. It is a mean business, anti-democratic in spirit and principle. It will work to the injury of said road if the policy of the directors is not changed. The railroads in New York dare not do the like of this. If the merchants in Philadelphia cannot compete with those in New York, but by a resort to such contemptible policy, they deserve to break down, and sink into obscurity. The conduct of the Central Railroad, is a disgrace to the good people of Pennsylvania.

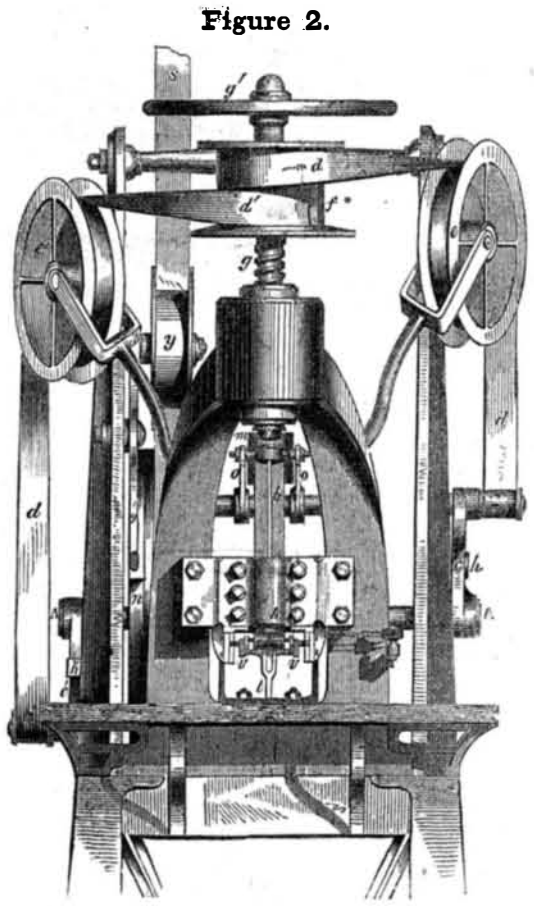
HILL'S EMBOSSING PRESS.---Fig. 1.



The accompanying engravings are views of an embossing press constructed by Edwin Hill, of London, and employed for embossing envelopes and government stamps. It was on exhibition during the World's Fair, and a number of such presses have been constructed for the Prussian Government. Fig. 1 is a side and fig. 2 an end elevation. The same letters refer to like parts.

The machine consists of a strong fly-and-screw press, with an inking apparatus, including a peculiar contrivance for accelerating the rate of stamping, without accelerating the angular motion of the fly and screw. The envelope is placed under the stamp by an attendant at the precise moment when the stamp is being inked; the position of the envelope being determined by guides, so that the impression may be in the same place in all the envelopes. When the die descends and makes the impression, it immediately rises again preparatory to another blow; a second attendant removes the stamped envelope, and the first attendant puts a blank envelope in its place. So rapidly are these motions performed, that a blank envelope is placed under the die, stamped, and removed, sixty times a minute. The main spindle is driven by a strap, at the rate of one turn of the machine per second; each turn producing an embossed medallion stamp. From the main spindle, motion is communicated first to the fly and screw, which of course rise and fall alternately; and secondly, to the bolt of the press, at the lower end of which the die is attached. In the third place, motion is communicated to a very strong steel punch, which, at the moment the blow is given, is interposed between the end of the descending screw and the head of the bolt, thus transmitting the force of the screw to the bolt. When the impression is completed, this punch is withdrawn, and the bolt ascends, in order that the die may receive its supply of ink. Fourthly, motion is given to the inking apparatus, which consists of a doctor, an inverted inking-table, and a sliding frame, carrying the four composition rollers. The machine, when in motion, can be stopped by means of an apparatus so constructed that when pressed down, the principal cam, upon arriving at a certain point of its revolution, is at once arrested. It is necessary to stop the machine in one particular position, so as to allow the dies and the inking apparatus to be readily got at.

Figure 2.



A A is the main spindle, and S is the driving-strap; c and c' are two cranks, one at each end of the main spindle, which, by means of the two straps, d and d', passing over the pulleys, e and e', and attached to the drum, f, which is fixed upon the screw, g, turn the screw, together with its fly, g', backwards and forwards alternately, producing thereby its alternate rise and fall. These two cranks, however, are not made fast upon the main spindle, but are operated upon, each at its proper time, by two other cranks, h and h' fixed to the main spindle. This provision of loose and fast cranks is rendered necessary by the rebound of the screw and fly from the blow which outruns the cranks, and would break the straps but for this precaution. Upon the main spindle is a cam, i, which moves the lever, k, backwards and forwards, and, through a horizontal bar, l, the punch, m, is moved backwards and forwards, and thus interposed between the screw, g, as it descends, and the bolt, b, at the moment when the blow is given; n is a second cam upon the main spindle, A A, which, by alternately raising and depressing the levers, o o, raises and depresses the bolt, b, to the lower end of which the die is attached; r and r' are toothed wheels, for driving the inking apparatus; r' has a crank-pin, which, by means of the link, z, sways backwards and forwards the arm, t, and through that the arm, t', fixed upon the same spindle. This last arm, t', through the link, u, draws backwards and forwards the inking-frame, v, with its four composition rollers, which ink the die by running under it when the bolt is in its raised position, as shown in the figure. w is the inverted ink-distributing table; it is circular, and is acted upon by a slack band, which turns it round feebly whenever the inking-rollers lose contact with it. x is the doctor, furnished with a roller which is constantly turned round by a band; y is a slacking pulley fixed to the arm, y', on which arm is also a break which binds against the main driving-wheel, and a strong tooth, catching a projection on that wheel, and bringing the machine to a dead stop always in the same position, *i. e.* nearly in the position shown in fig. 1.

Mr. Charles Mare, the eminent ship-builder of Blackwall, has challenged the Americans to run a vessel against any one that they can produce for a thousand guineas. The tonnage of the ship to be from 50 to 380 tons.—London Times.

[Well, he will be taken up. Com. Stevens challenged all England for £10,000 with the yacht America, but he could not get one to take him up.