Scientific American.

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

VOLUME IX.] NEW-YORK DECEMBER 17, 1853. [NUMBER 14.

THE SCIENTIFIC AMERICAN,

PUBLISHED WEEKLY,

At 128 Fulton street, N. Y. (Sun Buildings.)

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The Franking System versus Cheap Postage.

It appears from the Report of the Postmaster General that there is a very heavy deficiency in the revenue of the Post Office Department, and those who opposed the present Cheap Postage System are disposed to lay this deficiency to the System itself, alleging that the present postage will not pay the cost of transportation. But we are by no means willing to concede this point. We fully believe that if the mails were not burdened with any "dead-head" letters, riding in the mails without paying their fare, —and if proper means were taken to stop some of the other enormous leaks in the treasury of this Department, the present rates of postage would not only pay the cost, but prove an actual source of revenue to Government.

So long as Members of Congress and the officers of the Departments are allowed to burden the mails with their own forwarding and that of their *friends*, (of whom they seem to have many); it is not to be expected that the letters of the public can pay their own way, and carry these mammoth packages to boot.

If Members of Congress are allowed to frank their dirty linen home to be washed, we don't wish to hear any complaints about a deficiency in the Post Office revenue.

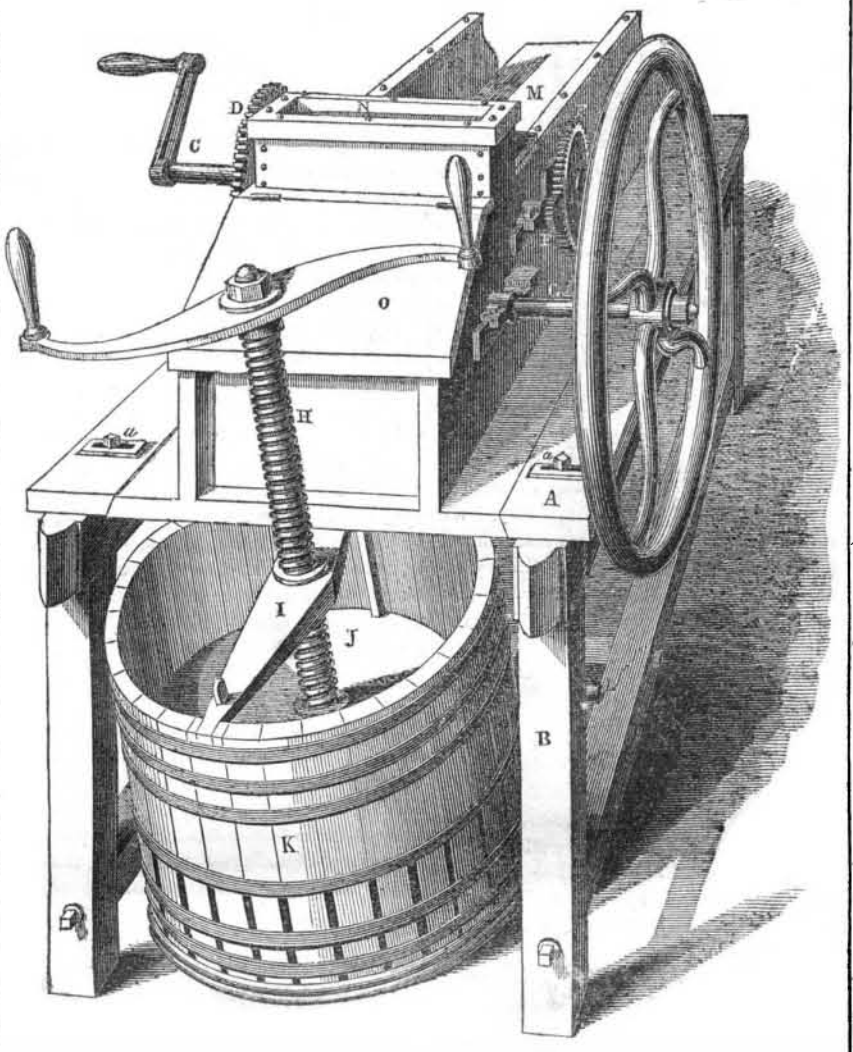
But as we intimated before, M. C.'s are in the habit of not only franking their own letters and parcels, but of extending these kind offices to their friends. We have, during the Sessions of Congress, frequently received letters from parties upon business of a private nature, the parties themselves having no connection, however remote, with Government, which letters, nevertheless, bore the frank of some obliging M. C.. And it is well known that the mails are burdened in this way to the exclusion, frequently, of matter which has been honestly paid for. If Members of Congress are bent on abusing the exclusive privileges thus granted them, it is high time the people should insist on their being taken away. The way the franking system is at present conducted, renders it a disgrace to all concerned.

Novel Steamer.

An iron vessel, named the "Enterprise," intended for the Deep Sea Fishing Association of Scotland, has been launched on the Clyde. She is about 100 feet in length, and 16 feet beam, her measurement about 100 tons, and her engines are 100 horse power. The propelling power, on a totally new principle, by Messrs. Ruthven, of Glasgow, the patentees, requires neither paddles nor screw. One important feature of the invention is, that by a simple movement the vessel can be either stopped, turned, or backed, almost instantaneously, without requiring the steam to be let off, or the machinery stopped. The principle of propulsion is the injection of water through pipes, to act upon the mass of water in which the vessel is moving. James Rumsey employed this principle, but Ruthven's improvement relates to the exit tubes.

Of two adjacent bodies, if one emits less than 1-60th as much light as the other, it becomes invisible.

CIDER MILL AND VEGETABLE CUTTER.---Fig. 1.



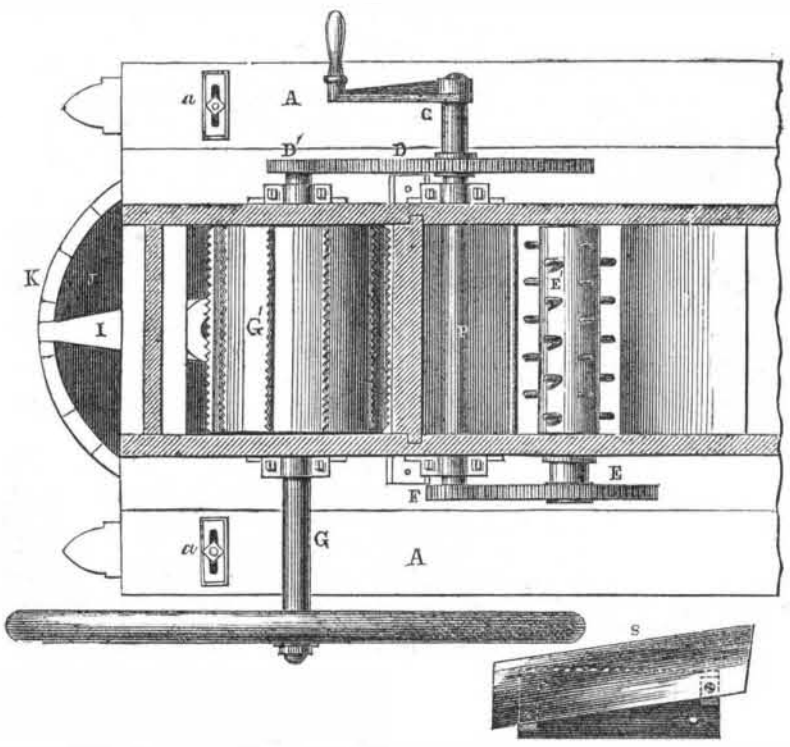
The engravings presented on this page are illustrations of an improved Cider Mill and Vegetable Cutter, patented on the 26th of July last, by F. B. Hunt, whose present address is Richmond, Ind.

Figure 1 is a perspective, and figure 2 a plan view of the machine, with the casing removed. The same letters in each figure refer to corresponding parts.

This machine is, as exhibited in the engraving, for grinding and pressing apples, but it is also so constructed that it may be change into a straw or vegetable cutter, as will be hereafter described.

When used for grinding and pressing apples, the fruit is poured into the hopper, N ; it is

Figure 2.



hen crushed by the serrated plates on the cylinder, G' (fig. 2), which is upon the shaft, G, and is rotated by the pinion, D', gearing with D, which is turned by the crank, C. The ground apples (pumace) fall from this hopper into the tub, K, and the juice is expressed by the follower, J, forced downward by the screw, H, working through the cross-piece, I.

When used as a vegetable or straw cutter the cylinder, G', is removed, and the knives, S (fig. 2), are fastened with set screws upon the shaft in its stead. The straw is then placed in the box, M (fig. 1), and is fed up by the cogged roller, E' (fig. 1), the wheel, E, on the end of the shaft of this roller receiving its motion from the driver, F, on the shaft, P.

Potatoes, turneps, and other vegetables, can be sliced in a similar manner. The object of the invention is to furnish a machine which shall be convertible into a variety of uses, thus saving to the farmer the expense of providing several machines for these purposes. As a cider mill alone, we should think it a convenient implement, enabling each farmer to make his own cider, instead of carting off his apples to a mill at some miles distance, and as it is portable, it can be carried readily from one orchard to another, more easily than the apples and cider carted back and forth.

But the great merit of the machine is, that after being used through the season of cider making, as a mill, it can then be converted into a straw and vegetable cutter or the winter.

For any further information address the inventor as above.

Telegraphs of the World.

The first American Magnetic Telegraph Line —the invention of Prof. Morse—was established in 1844, between Washington City and Baltimore, some thirty-six or forty miles in extent. One wire was put up, and the usefulness and value of the invention were at once practically established. Private enterprize has since carried this line to New York, and it is now the most perfect and reliable line of telegraph in the country, or in the world. The company have two separate and distinct lines from New York to Washington City, one with five wires from New York to Philadelphia, and four wires from Philadelphia to Baltimore and Washington, and the other with two wires, the entire distance from New York to Washington City. In nine years, the brief period since its invention, there have been 17,500 miles of telegraph put up, and in working order, under the Morse patent alone. This amount is about two thirds of the total number of miles of telegraph in operation in the United States.

The aggregate number of main and branch lines in the United States is stated at about one hundred. There are completed and in operation, 27,000 miles, and 10,000 more are in progress of construction. The route selected for a telegraphic communication to the Pacific by the Committee on Post Office and Post Roads, as appointed by Congress in the Session of 1851, commences at the city of Natchez, Mississippi, extends through Texas, crosses at the head of the Gulf of California to San Diego, and then passes along the coast to Monterey and San Francisco. The entire distance is 1,400 miles.

The extent of telegraphic lines completed and in operation throughout the world at the commencement of the present year, is estimated at 40,000 miles. Of this amount there were 4,000 miles in Great Britain, and 27,000, in America. Russia has commenced a system of telegraphs between St. Petersburgh, Moscow, Cracow, and the ports of the Baltic and Black Seas, and about 4,000 miles are shortly to be constructed in India. A line of telegraph is now in operation between Vera Cruz and the city of Mexico, with stations at all the intermediate cities and towns. A line is contemplated to extend from the city of Mexico to Acapulco on the Pacific, a distance of 300 miles. There are now in the course of construction on the Island of Cuba, telegraph lines to the extent of 1,200 miles.

The citizens of Cambridge, Mass, have voted $50,000 to supply that city with water.

A pendulum, to vibrate once an hour, must be 85 miles longer than the diameter of the earth.