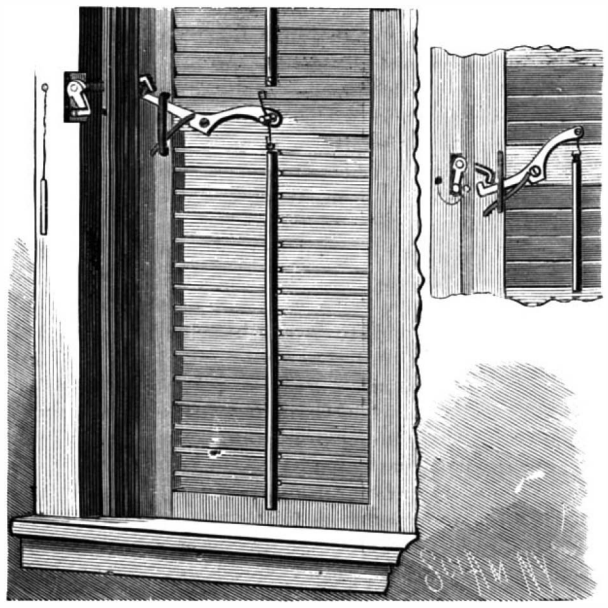
NOVEL BLIND STOP

The engraving represents a device for operating and fastening blind slats which is the invention of Mr. Abraham Pugsley of Jamestown, R. I. This device is intended for operating all of the slats of a blind simultaneously, or for operating a portion of the blind slats independently of the others.



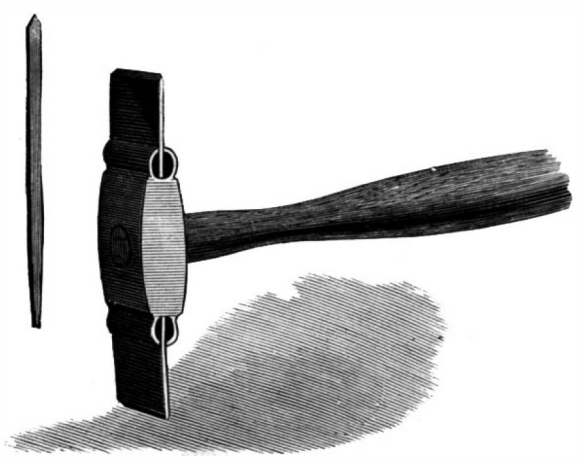
PUGSLEY'S BLIND STOP.

The blind to which this improvement is applied is of the ordinary construction, and is hinged to the window frame in the usual way. To the central rail of the blind is pivoted a lever which extends to a point opposite the rods which work the slats. These rods are provided with staples, and the end of the lever is furnished with hooks, which may be brought into engagement with the staples. If the hooks enter the staples of both the rods, the upper and lower sections of the blind will be operated when the lever is moved. A rock shaft is journaled in the window casing and provided at the end adjoining the blind with a curved arm, which extends over the lever pivoted to the blind. The rod is furnished on its inner end with a thumb piece or handle, by means of which it may be turned so as to operate the blind without the necessity of opening the window. A spiral spring surrounds the rock shaft, and tends to hold the curved arm out of engagement with the slat-operating lever, so that the slats may be freely operated by hand when desirable. The casing is bored to receive a pin which serves to hold the thumb piece of the rock shaft in the position it must take when the blind slats are closed.

This device locks the slats so that they cannot be opened from the outside of a building. It thus acts as a safety guard to the window, preventing burglars from inserting implements for unlocking the blinds or opening windows. The slat-operating lever, as will be seen in the engraving, is provided with a spring for holding the blind slats normally open.

NEW FORM OF MILLSTONE PICK.

In the millstone pick shown in the annexed engraving, provision is made for conveniently inserting or removing the blades as occasion may require. The body of the pick is formed of a single piece of steel, furnished with a central eye for receiving a handle, and having at its ends semi-elliptical spring jaws which are adapted to receive the blades. To insure a perfect fit of the blade in the jaw, each blade is made wedge shaped, or thinner upon one edge than upon the other, so that as it is forced into the spring jaw it will be held securely in the position of use. The blades are readily removed for sharpening or renewal, by placing the body of the pick on a fixed support with the spring jaws projecting over, then giving the blade a strong blow upon its thinner edge, thus turning the blade in the jaw. A wedge inserted behind the blade, and driven in, readily forces the blade out.



TRUAX'S MILLSTONE PICK.

Although the inventor has described this useful tool as a millstone pick, he proposes to modify it slightly to adapt it for other uses, such, for example, as the loosening of boiler scale, and similar purposes.

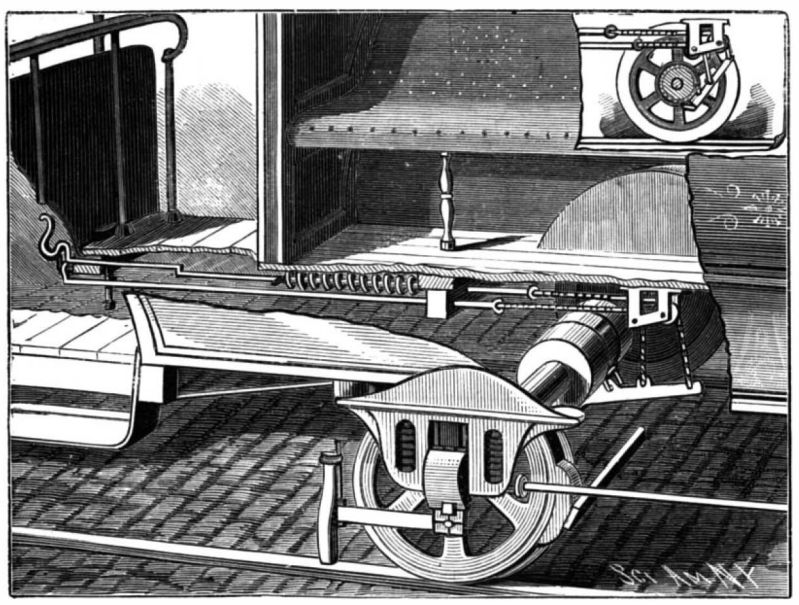
This invention has been patented by Mr. Jacob W. Truax, of Essex Junction, Vt.

A NEW CAR STARTER.

In the annexed engraving is illustrated a new car starter designed for application to ordinary street cars, the object of the invention being to relieve the horses from the great strain usually put upon them while starting a car. This invention not only serves to facilitate the starting of the car, but it answers as an efficient brake for holding the car while stopping upon a down grade.

Upon each axle of the car is arranged a friction drum surrounded by a metal strap, the ends of which are connected with a lever which is capable of tightening the strap upon a drum. To the lever are attached two chains, one at its free extremity, the other about midway between the extremity and the point of connection with the metal strap. The chain at the outer end of the lever extends over a pulley attached to the car bottom, and forward to the drawbar, to which it is attached. The other chain extends over a pulley, then forward, where it is attached to a rod extending toward the end of the car. The arrangement is the same for both axles and for both ends of the car.

As only one set of apparatus is brought into action at a time, the other is thrown out of gear by drawing the rod connected with the middle part of the lever forward, so as to lift the lever bodily, thereby allowing the metal strap to expand so that the drum will turn freely therein. When, however, the apparatus is in use this rod is released from its fastening at the end of the car, and the drawbar alone acts upon the strap brake. When the car is stopped, the drawbar is retracted, and the lever of the starting apparatus drops. As the horses pull to start the car, the first operation is the tightening of the metal strap on the friction drum, and the second the turning of the drum and the axle to which it is applied, by the movement of the lever. The forward pull of the horses in this manner, in addition to drawing the car forward bodily, causes the axle to turn, and thus renders the operation of starting the car very light and easy.

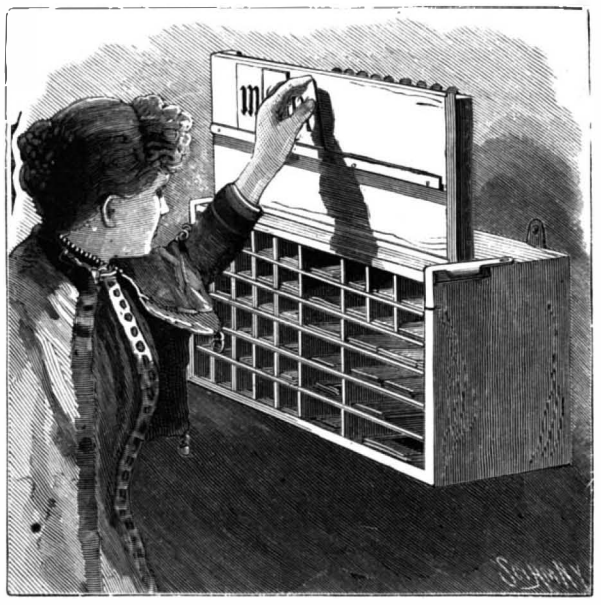


AN IMPROVED CAR STARTER.

This useful invention was recently patented by Messrs. Louis Seebach, Conrad George, and Lewis Bush, of Listowel, Ontario, Canada.

AN IMPROVED EDUCATIONAL APPLIANCE.

A combined spelling case and numeral frame, in portable form, adapted to be hung on the walls of the school room, is shown in the accompanying illustration. It has been patented by the Rev. Reinhard Wobus, of St. Charles, Mo. The interior of the case is divided into large and small compartments, adapted to receive card tablets on which are printed letters and figures, and all signs employed in reading and writing. The case has a front-closing sliding lid, on one side of which is strung a series of wires with wooden balls for the conducting of a numeral lesson, while on the reverse side of the lid are shelves to hold the printed card tablets as placed by the teacher in conducting a spelling lesson, these shelves being metal strips held in place by screws. The top piece of the case does not extend forward flush with the sides, room being left to permit a seating piece attached to the front-closing sliding lid to close this portion of the top when the case is closed. When the lid is withdrawn and mounted to conduct a lesson, as shown in the illustration, the seating piece of the lid is placed in this front top recess, and there firmly held by means of laterally swinging angle clasps pivoted to the top of the case, each of these clasps having a flange on its outer side to embrace the outer edge of the case, and a front flange passing into a slot in each vertical side of the front edge, the inner side of each clasp also passing into a slot in the side of the sliding lid. When the case is closed these clasps hold the sliding lid in its position. With this appliance the teacher may explain by comparison, by contrast, and by analysis, and bring the powers and uses of letters and marks vividly before the mind of the pupil.



WOBUS' TEACHER'S ASSISTANT.

NEW TUBULAR PACKING FOR STEAM CONDENSER TUBES.

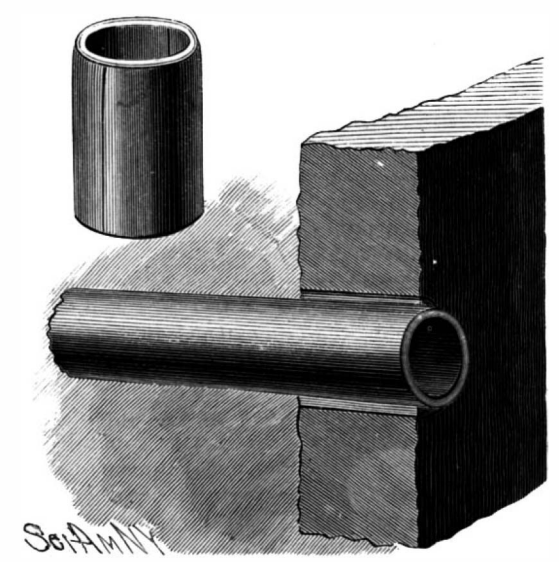
Considerable trouble has been experienced in the construction of steam condensers, in making the joints between the condenser tubes and the head sheet air tight under the varying conditions to which the joint is subjected.

Mr. Terrence P. Ford, of 95 and 97 Liberty Street, New York City, has recently patented a simple but effective device that overcomes this difficulty.

This improvement, which is shown in the engraving, consists of a tubular packing formed of a strip of fibrous material, such as burlap, linen, or manila paper, the latter being preferred. This packing is made by forming the paper into a tube by wrapping or spirally rolling the material around a mandrel, a thin pellicle of glue or cement having been previously applied to one surface of the strip, to make its folds adhere. The tube is then heated in an oven until the moisture is thoroughly evaporated, when it is immersed in a mixture which fills its pores thoroughly, and makes the packing impervious to water and air. After the treatment with this mixture the tubes are allowed to cool. They are applied to the head sheet in the usual way, that is to say, the tubes are placed in the annular recess in the head sheet, as shown in the engraving.

It is claimed that this packing will not rot, and that it will not be affected in any way by the steam or water of the condensers.

AN order has been given for 10,000 cars for the Pennsylvania west of Pittsburg. The Union Pacific has also ordered 5,000 cars; the Missouri Pacific, 3,000; the Baltimore and Ohio, 4,000; the Hocking Valley and the Ingalls Syndicate, 3,000 each; and the New York Central 3,000.



FORD'S TUBULAR PACKING FOR STEAM CONDENSER TUBES.