NOVEL GATE CLOSER.

The engraving shows a simple and effective device for closing gates automatically without the application of springs or weights. The gate rises bodily as it opens, and is closed by its own gravity. It is hung upon hinges having long pintles, and is supported by an inclined rod, having a bearing at its upper end in a socket attached to the gate, and at the lower end in a socket attached to the post eccentrically to the pintles of the hinges. Opening the gate causes it to rise bodily by throwing the inclined rod into a more nearly vertical position, when the gate is released its own weight closes it.

The socket which receives the upper end of the inclined rod is rigidly attached to the hinge strap, making a strong and durable bearing.

A patent for this device was recently issued to Messrs. John Köhnmann and Samuel R. Latta, of Dyersburg, Tenn., who may be addressed for further information.

KOHNMANN'S GATE CLOSER.

Philadelphia's Textile Industries.

Mr. Lorin Blodgett, who has in charge the census of the textile industries of Philadelphia, finds 460 power mills or groups of mills in the city, and about 200 hosiery and carpet manufactures, not using steam power. In a recent statement concerning this branch of industry Mr. Blodgett said:

"It is well known that Philadelphia is the greatest manufacturing center of the world, but it is not so generally known that the textile manufacturers contribute more than any other class to this marked distinction of our city. The census now being taken will show that the value of the products for the present year of the various manufactories of our city will reach the grand total of $600,000,000. To this the textile manufacturers will contribute: In woolens and cottons of the general table, $48,500,000; in carpets, $23,000,000; in hosiery and knit goods, $23,000,000; in worsted yarns, $12,500,000; in silks and mixed goods, $7,000,000—an aggregate of $115,000,000—over one sixth of the whole, an amount of which they may justly feel proud. not only on account of the position which it aids in giving to our city, but also because of the means of subsistence which it affords to so many of its people. The outlying districts, of which Philadelphia is the business center, will add $38,000,000 to this, making for Philadelphia and vicinity $153,000,000."

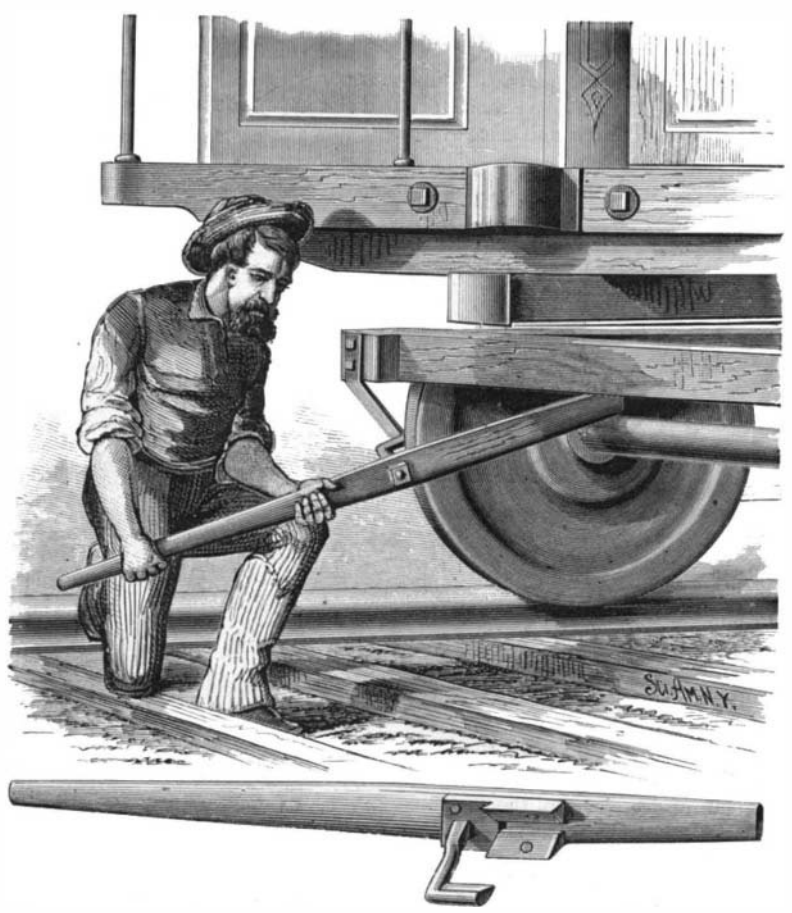
NEW CAR MOVER.

The device shown in the annexed engraving is applied to one of the wheels of a car when it is desired to move it for a short distance. It consists of a wooden lever having on one side two triangular steel bars whose edges are capable of biting into the side of the car wheel. A stout bolt bent at a right angle projects from the side of the lever near the triangular steel bars, and is threaded so that it may be adjusted to wheels of different thicknesses.

When in use one end of the lever is placed against the car axle as a fulcrum, and the edge of the wheel is clamped between the triangular steel bars and the hooked end of the bolt.

By pulling or pushing on the long arm of the lever the car wheel is turned and the car moved. When pushing, the lever is placed over the axle; when pulling, it is placed under the axle.

This device was recently patented by Mr. O. B. Blakeslee, of Rankin, Ill., and is manufactured by J. T. Mug & Co., Lafayette, Ind., who may be addressed for further information.



BLAKESLEE'S CAR MOVER.

Lake Ontario Shad.

The attempt to stock Lake Ontario with land-locked shad turns out less favorably than seemed probable a short time ago. The *Times*, of Watertown, N. Y., says that on the 19th of June the Edith Sewal, on her trip to South Bay, passed through compact masses of dead or dying fish, extending in windrows ten feet wide and miles in length, while scattered fish in countless numbers covered the waters between the rows.

The fishermen, who say that each fish has a mossy spot upon it, of a yellow cast, with a red look about the edges, have had hard work to get rid of the multitudes of dead fish, whose stench polluted the air.

MISCELLANEOUS INVENTIONS.

Mr. William V. Henry, of Sacramento, Cal., has patented an improved pumping apparatus. The object of this invention is to furnish simple and durable apparatus, especially adapted for raising large quantities of water for irrigating purposes and for draining mines. The invention consists in pump barrels suspended from a walking beam and reciprocating upon a valved piston head that is held upon a fixed rod. The barrels are fitted with check valves, and the whole apparatus constitutes a balanced force pump that may be fitted in open or bored wells and driven by horse, wind, or steam power.

Mr. Granger W. Smith, of Chili, N. Y., has invented an improvement in paper-cutting machines. The invention relates to a machine for trimming the edges of magazines, pamphlets, or books, and for cutting paper into sheets of different sizes, and for other similar purposes; and it consists in a novel arrangement of an adjustable table for holding the book or paper to be trimmed or cut, a frame for supporting said table, and an adjustable bar for clamping the book or paper, and a knife used for the trimming or cutting process.

An improved starch press has been patented by Mr. Richard Johnson, of Madison, Ind. This invention relates to means for extracting water from starch, which has heretofore been accomplished by means of ovens and other devices involving the necessity for the employment of heat.

An improvement in harrows has been patented by Mr William L. Waddy, of Peytona, Ky. The object of this invention is to enable a harrow to be reversed and slid on runners.

Mr. Silas Courtright, of Hooker's Station, O., has patented an improved tug attachment which is designed to render the tug elastic to a certain extent, and thus relieve the horses from undue strain.

Mr. John Tuggle, of New Middleton, Tenn., has invented an improved currying knife. The improvement consists in a novel construction and mode of attachment of the blade and stock of a currying knife, whereby provision is made for adjusting the blade to suit the different kinds of work.

A novel and convenient device for supporting window shades and curtains has been patented by Mr. George Baldwin, of South Manchester, Conn. The invention consists in a combination of brackets, shade rollers, curtain cornice, and curtain rod.

A button so made that the face and shank can be readily separated and again united, has been patented by Mr. Henry H. Schmitt, of South Brooklyn, N. Y. The invention, although simple, cannot be described without engravings.

Mr. William P. Owen, of Mount Pleasant, Tenn., has patented an improved folding extensible fire screen, which is composed of hinged or both hinged and sliding sections.

Mr. John L. Paxson, of New Hope, Pa., has patented an improved register adapted especially to the tallying of lumber, but applicable also to indicating the speed of machinery, or for adding a column of figures, or for measuring distances, etc.

Mr. Joseph B. Eaton, of Shamokin, Pa., has patented an improved machine for making lozenges which is simple, convenient, and effective in operation. It consists in arranging narrow belts between the cutters so as to allow the lozenges to pass through, while they hold the scrap down and feed it forward.

Mr. August Hoen, of Baltimore, Md., has patented an improved process of lithocaustic engraving, consisting in drawing parallel crossed lines on the etching ground covering the lithographic stone, for the purpose of giving a roughened surface of even texture to the stone, then applying an acid for the purpose of deepening and broadening the lines and producing pyramidal points, then covering the lines with a solution of gum arabic in water, then rubbing down or otherwise reducing the points to produce the uneven surface required for the lights and shades of the engraving.

An improvement in dividers for striking circles with chalk or pencil points has been patented by Mr. Charles F. A. Reimann, of Pine Bluff, Ark. The object of the invention is to strike two or more concentric circles at one sweep of the instrument. It consists of dividers with the pencil foot adapted to receive two points, and in providing the dividers with an adjustable arm adapted to receive several points and hold them on a level with the feet of the dividers.

An adjustable smoke stack especially designed for steam fire engines, whereby the draught from the boiler can be increased or diminished at will, has been patented by Mr. Asa W La France, of Elmira, N. Y. It consists of a section of a flanged and longitudinally-ribbed pipe, smaller than the outer section of the smoke stack set within said stack and vertically adjustable therein, whereby the exit of the smoke stack may be diminished or increased at pleasure.

Mr. William Klemm, of Pittsburg, Pa., has patented an improved curtain cord tightener, consisting of a cam pivoted in a clamp that slides on the vertically-placed rack, so that the tension of the cord that is passed around the outer end of the cam forces the inner end of the cam against the face of the rack and holds the cam and clamp immovable.

Mr. William Keane, of Stratford, Ontario, Canada, has patented an improved tow-cleaning machine. Heretofore the tow has been cleaned by hand by tow pickers and beaters, operations involving considerable expense and waste of tow, besides not being effective. For a proper understanding of the nature and objects of this invention, it should be understood that the tow is the refuse from flax scutching machines, which are made in various forms, but generally using revolving cutters, which remove the rough fibrous shives and other refuse while the flax is held by the scutcher. The tow is then partially cleaned from the shives and refuse by separate operation. In this machine the beaters of the scutching machine are used for cleaning the tow after it is removed from the flax, and deliver the cleaned tow separately from the shives and other refuse, thus accomplishing the complete operation without extra machines.

Mr William E. Huse, of Brookfield, Mass., has patented an improved cattle stanchion. The object of this invention is to furnish attachments for cattle stanchions so constructed that cattle may be released from their stanchions and from the stable in a moment and without entering the barn.