AN IMPROVED GATE.

A vertically swinging gate, which can be readily raised and lowered from a convenient point on the roadway at either side, is illustrated herewith, and has been patented by Mr. Alphonso H. Broad. The top bar of the gate is pivoted in a double post at one side of the roadway, and has a weighted extension about heavy enough to balance the main portion of the gate, the horizontal bars of which are suspended by means of

BROAD'S VERTICALLY SWINGING GATE.

pivoted hangers. A toothed segmental bar is secured to the top bar of the gate, concentrically with its pivotal point, and meshing with a toothed wheel mounted in bearings at the top of the post, the shaft of the toothed wheel being extended by a jointed section to any suitable point at the side of the road, where it is provided with a crank handle and has bearings on a post. By this construction the shaft may be extended out of a straight line, or up or down hill, the gate being so balanced as to be readily raised and lowered by means of the crank handle. In order that the top bar shall not bind in the post in which it is pivoted, it is provided with a friction roller mounted in a slot adjacent to the post.

For further information relative to this invention address the inventor, or Mr. Roldin S. Robbins, Berkeley, Cal.

Dangers of the Boiling Springs.

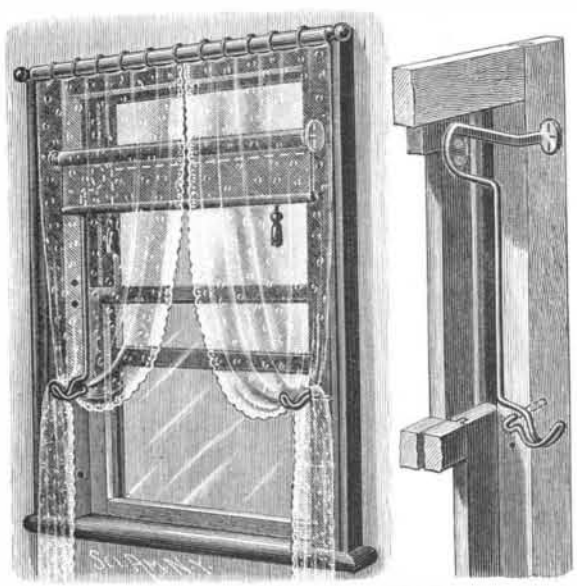
The St. Louis *Globe Democrat* says a telegraph operator by the name of Samuel C. Pratt, employed as night operator for the Southern Pacific Railroad Company at Hot Springs, Nev., while bathing recently in one of the cooler springs, accidentally fell into one which remains at the boiling point, and, although he climbed out without assistance, became unconscious immediately after. He was taken to Wadsworth, where he died. He was standing on the crust forming the brink of the spring when it gave way, precipitating him into the boiling water. His flesh was literally cooked, and his finger nails came off. Mr. Pratt was a member of the famous Pratt family in Utah. His parents reside near Ogden.

IMPROVED CURTAIN BRACKET AND SASH LOCK.

A device to be attached to the upper sash of a window for supporting a curtain roller, and at the same time designed to serve as a sash holder, lifter, and fastener, is illustrated herewith, and has been patented by Mr. Samuel H. Scott, of Chanute, Kansas. It is made with a bracket arm extended at right angles from a plate secured by screws to the upper sash, the outer end of the arm terminating in a disk suitable for attachment to the ordinary supporting plate of a curtain roller. From the attaching plate also extends a rod with a bent portion reaching downward against the lower sash, its lower portion being bent outerly to form hooks for the flowing curtains, and its end made with an angular projection adapted to engage any one of a series of holes in the inside of the casing.

By this means the curtain roller and its attachment may be secured in place without marring the casing, and the curtain lowered with the upper sash, which can be conveniently supported at any desired height.

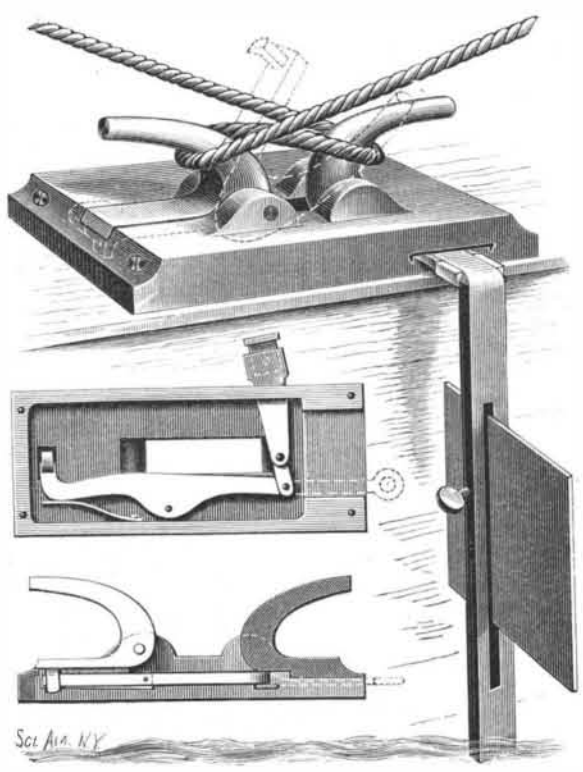
The device is substantially duplicated for each side of the window.



SCOTT'S CURTAIN BRACKET AND SASH LOCK.

AN IMPROVED CLEAT FOR VESSELS.

A cleat for holding the main sheet or other rope on the side of a vessel, and so constructed that, when the vessel keels over beyond a predetermined line, the rope secured upon the cleat will be automatically released by the action of the water, is illustrated herewith, and has been patented by Mr. John W. Foran, of St. Johns, Newfoundland. The base of the cleat has on its upper face one fixed outwardly extending horn or arm, with a central slot extending oppositely from the base of this fixed arm. In aligning ears at the sides of the central slot is pivoted an angular arm, the upper member of which curves outward in a similar manner to the fixed arm, while the bottom member normally rests upon the recessed surface, and has at its rear extremity a downwardly projecting lug having a latch head. Upon the under side of the base, as shown in the bottom plan view in the small figure, is pivoted a spring-held lever adapted to engage the latch head, the other end of the lever being connected by a link with a second lever projecting through a slot in the side of the base. If the device is to be tripped automatically, an angular arm is connected to this lever to project downward over the side of the vessel, the arm having a longitudinal slot adapted to receive a plate to be secured by means of a set screw, the slot being made sufficiently long to admit of vertical adjustment of the plate. If it is desired that the boat should keel over on its side a certain distance only, the plate is fixed at a corresponding height, to come in contact with the water at the desired time as the vessel moves ahead, whereby the lever projecting from the base of the cleat is actu-



FORAN'S CLEAT FOR VESSELS.

ated, and the headed lug of the pivoted arm is released, permitting the arm to assume the position shown in dotted lines, and releasing the rope coiled upon the cleat. When the device is to be tripped by the boatman from the helm or other point, a rope is attached to the projecting lever to lead to the desired location.

Puget Sound Salmon Fishing.

This important industry is annually gaining in volume. The catch this year, although not as large as expected on account of the delayed fall rains, will be about 15,000 cases, four dozen cans per case.

There are five factories engaged in the business. The largest has a capacity for canning twenty thousand pounds of fish per day and employs six seines, costing, with the necessary skiffs and scows, $1,500 each, manned by Indian crews. The packing is done by Chinese, of whom one hundred and fifty are employed at one dollar per day, per head, boarding themselves.

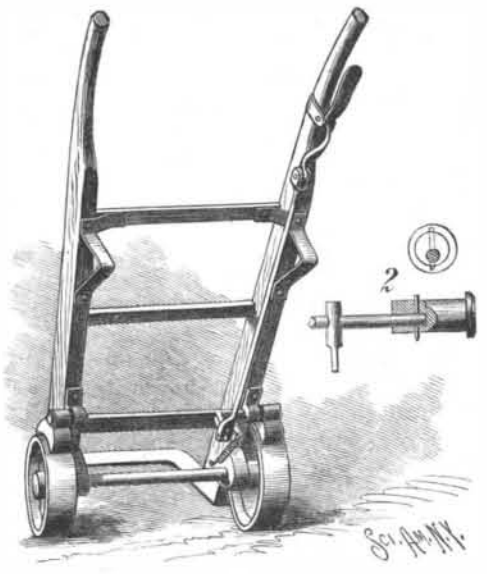
The cost of the fish is ten dollars per one hundred—ten cents each. The average weight is six pounds. Single specimens are frequently caught exceeding twenty pounds, but the smaller sizes are more palatable and more in demand for home consumption.

They are caught in the bays and harbors of the Sound. After running up into the fresh water streams to spawn, the fish soon lose their flavor.

Trolling for the fish is exciting sport, and much indulged in. They are gamey, and fight to the end, but are not as tenacious of life as the bluefish of the Atlantic coast, and are more easily exhausted.

AN IMPROVED HAND TRUCK.

A hand truck designed for use on wharves, in warehouses, or any place where freights are handled on inclines, is illustrated herewith, and has been patented

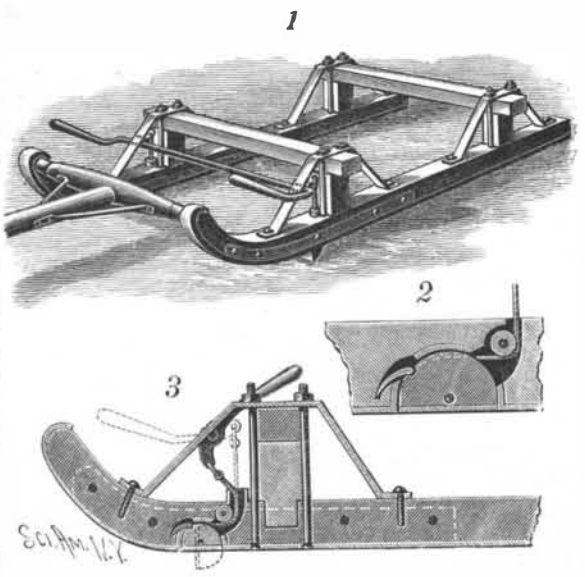


PARKER'S HAND TRUCK.

by Capt. John G. Parker, of Tacoma, Washington Territory. The invention provides a novel and simple manner of applying a brake to one or both wheels of the truck, while both hands of the operator are applied to the handles. The truck has the usual axle, wheels, and side frames, and there is a rock shaft supported in suitable bearings on the under side of the side frames, upon the projecting ends of which a cylindrical rod is eccentrically attached, these eccentrics, as shown in Fig. 2, loosely holding brake shoes for application to the wheels. Near one of the side frames a post is keyed or otherwise secured on the rock shaft, to which a brake rod is pivoted, extending up nearly to one handle, where it is pivotally united to one member of an angle lever fulcrumed on the under side of the handle. One end of a coiled spring is attached to the brake rod at the point where it is connected to the rock shaft, the other end being fastened to the inside of the truck arm; above the axle, this spring normally pulling the brake off. The application of the brake is made by means of the lever fulcrumed on the under side of the handle, as the handle is grasped, the brake being instantly applied and as quickly taken off when the lever is released.

AN IMPROVED SLED BRAKE.

A brake designed for use with any kind of a sled or sleigh is illustrated herewith, and has been patented by Mr. Anders Anderson, of Blossburg, Montana Ter. The forward part of the runners have each a semicircular recess, with a curved metallic lining, as shown in the sectional views, Figs. 2 and 3, and within the recess is pivoted a brake of corresponding shape, shod with a strip of metal, which lies in the same plane as the shoe of the runner when the brake is not in use. The brake is preferably operated by means of a cord or strap secured at one end to the forward part of its curved portion, and extending through a groove out at its rear, through an upper passageway, where it is connected to the arm of a shaft having lever handles pivoted in the frame of the sled. The brake has a spring catch to keep it closed while being backed. The circular form of the brake allows it to readily yield to any obstruction, and it may also be used as a stop in going up a hill, the cord or strap holding it in position. In the sectional view, Fig. 3, the dotted lines show the brake as applied, with the lever pushed forward, the normal position being shown in full lines.



ANDERSON'S SLED BRAKE.

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