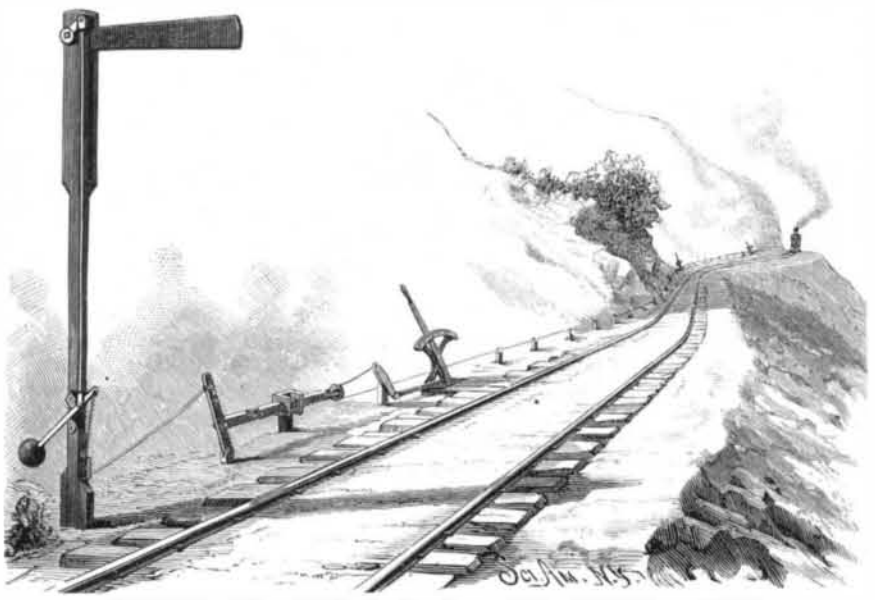
Novel Way of Advertising.

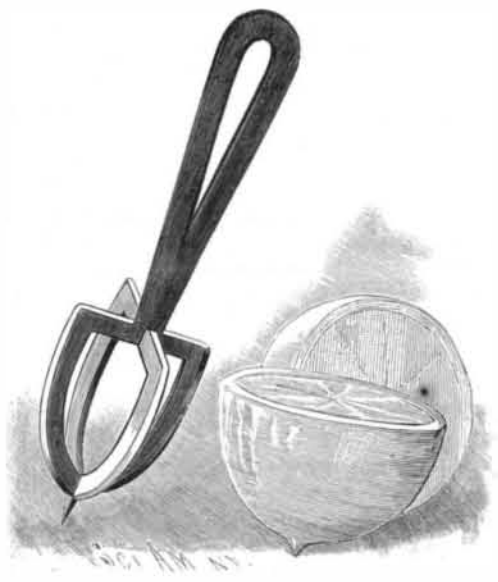
A lady going north a few days ago, says a Chicago newspaper, was stopped by a rather shabbily dressed woman, who inquired where Schultz's dye house was. "I do not know," was the reply. "Well, why don't you know? It's over corner Illinois and Clark Streets," was the apparently disgusted reply. Subsequent developments proved that this has become a new mode of advertising. It is indeed a novel one, and one that certainly leaves an impression on the person questioned



MARTIN'S OPERATING MECHANISM FOR RAILWAY SIGNALS.

FRUIT PULPER.

The object of this invention, which has been patented by Mr. Frank W. Bradley, whose address is P. O. Box 2,015, Denver, Col., is to provide a simple implement for easily removing the pulp from lemons, oranges, and similar fruit. The curved blades are united at the bottom and form a point, and their opposite ends are connected by arms with the handle. The curvature of the blades is approximately the same as that of the inside of the peel of a lemon or orange, so that when the pulper is inserted in the pulp of one-half of the fruit, and turned, it will remove the pulp without its being flavored with the oil of the peel. The blades may be made detachable from the handle, if desirable.



BRADLEY'S FRUIT PULPER.

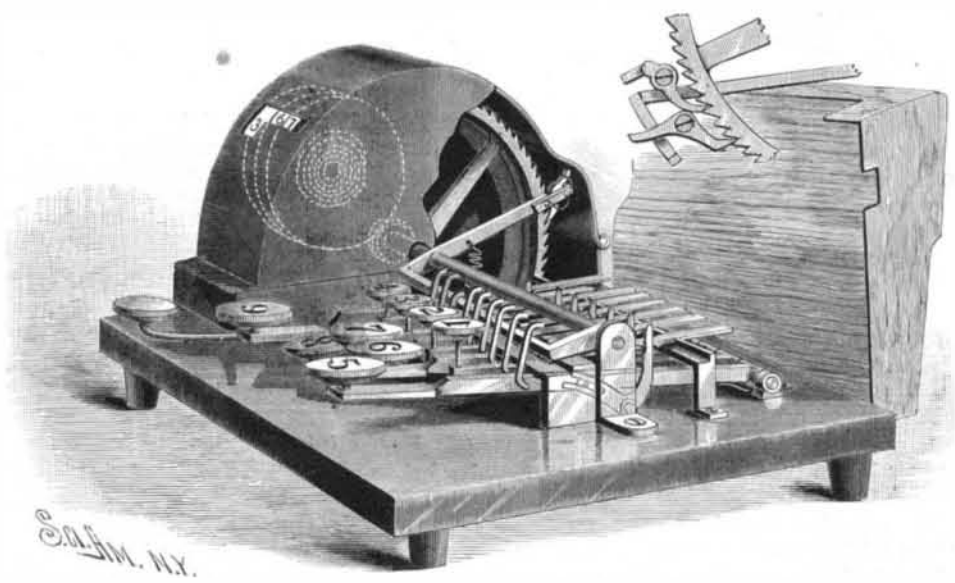
OPERATING MECHANISM FOR RAILWAY SIGNALS.

By means of the construction herewith illustrated, a single signal can be operated by a single line wire from any number of points desired, but which, having once been set to "danger" from one or more of the stations, cannot be set to open the line until all of the signal stands have been moved to "safety." In the ordinary forms of construction heretofore in use, the signal has been operated by a wire direct from the signal stand; but by this invention there may be interposed as many different signal stands as desired, at such distances apart as may be most convenient, one of these interposed signal stands, as shown in the illustration, consisting of a lever pivotally mounted on a standard, and connected by a pitman with the short arm of another lever, through which the pull of the wire is transmitted to a sliding bar, riding in slots, and thence through another pivotal lever to the signal. At each of the stands there are racks with limit pins or stops to prevent the passage of the lever arms; and the upper arm of the lever, to which is attached the wire communicating directly with the signal, has several holes, the throw of the lever being determined by attaching the wire at a proper distance from the fulcrum. When the lever is released at any one of the signal stands, it permits the levers to change and the wire to slack from such point sufficient to drop the weight at the signal post. As the weight falls, it displays the danger signal, the full rise of which is easily insured by the compensating lever. After the line has thus been closed by the setting of the danger signal, it cannot be again opened until all the parties who have given the danger signal set the levers at their respective signal stands for safety. By such an arrangement of operating mechanism, it is claimed that the number of distinct signals required for a section of road can be greatly reduced, and thus effect a saving that will be readily appreciated by railroad men.

This invention has been patented by Mr. Peter N. Martin, of Madalin, N. Y., to whom, or to Mr. Miller Longbottom, of No. 7 Fulton Fish Market, New York city, should be addressed all communications relative thereto.

ADDING MACHINE.

In the machine herewith illustrated there are nine levers, each provided at its outer end with a disk marked with a numeral. When one of the levers is depressed, a pawl carried upon the end of an arm passes up over as many teeth of a ratchet wheel as are indicated by the numeral of that particular key; the arm carrying the pawl is then drawn down by a spiral spring and turns the wheel, which is held from being turned back by the friction of the pawl by a second pawl pivoted to the bed plate. The wheel is loosely mounted upon the end of a shaft extending across the bed plate and journaled in suitable standards. There are one hundred teeth formed upon the wheel, and upon its rim is formed an annular flange marked with numerals from 1 to 100. To the outer end of the hub of the wheel is attached a small pinion wheel, with which meshes a gear wheel having a rim marked with numbers 1, 2, 3, and so on, as many division marks being used as the teeth of the gear wheel are multiples of the teeth of the pinion, so that this rim will indicate the number of revolutions of the ratchet wheel, and consequently the number of hundreds in the sum. With the journal of the gear wheel is connected the end of a spring, so arranged as to be coiled up by the forward revolution of the wheel, and having sufficient strength to turn the ratchet wheel and gear wheel back to the zero points when the pawls are raised, which is accomplished by depressing the lever having a blank disk. The mechanism is covered by a casing having apertures over the zero marks of the wheels, in order that the sum can be readily read. In using the machine, the keys representing the figures to be added are successively depressed, and the sum of the column of figures can be read through the apertures.

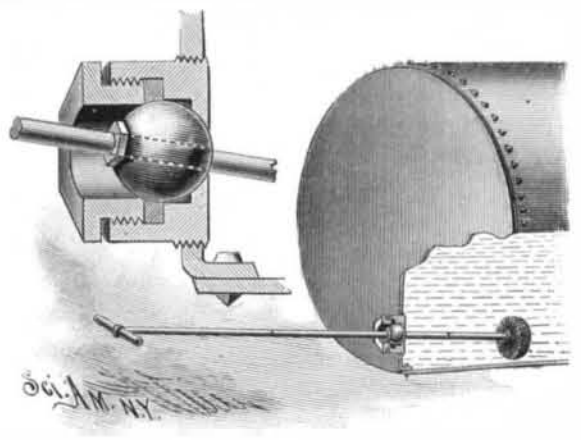


LINDHOLM'S ADDING MACHINE.

This invention has been patented by Mr. Peter L. Lindholm. Further particulars can be had by addressing Messrs. Lindholm & Peterson, of Franconia, Minn.

BOILER SWEEPER.

A sweeper for cleaning scales and sediment from boilers, tanks, and stills, that can be used while the pressure is on, is shown in the annexed engraving. In the head of the boiler, and as near the bottom as possible, is screwed a pivotal universal joint connection for the sweeper rod. The construction of the connection is clearly shown in the sectional view. The sweeper rod is made in sections screwed together to allow of its being drawn out and disconnected to prevent corrosion.



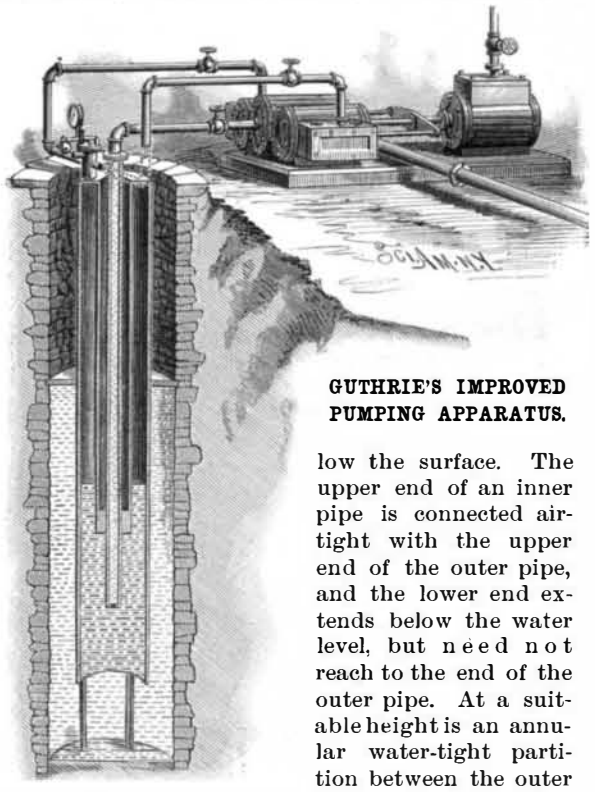
LEVI'S BOILER SWEEPER.

The last section remains in the ball, with the brush drawn up so as not to rest on the bottom and endanger its burning, and this section is made as short as possible, to prevent it projecting too far at the front of the head. With this device every portion of the bottom of the boiler can be reached and cleaned by the brush, and this sweeping operation can be performed when the boiler is under pressure, so there need be no loss of time.

This invention has been patented by Mr. William T. Levi, of Charleston, W. Va.

IMPROVED PUMPING APPARATUS.

Extending into the well, cistern, or other reservoir, is a pipe whose lower end is at a suitable distance below the surface. The upper end of an inner pipe is connected air-tight with the upper end of the outer pipe, and the lower end extends below the water level, but need not reach to the end of the outer pipe. At a suitable height is an annular water-tight partition between the outer pipe and the wall or casing of the reservoir. Connected air and water tight with the lower end of the second pipe is a third one; between the second and third pipes is an air space to prevent the second pipe from being crushed by the air pressure in the outer pipe when a vacuum is formed in the third or inner pipe, whose upper end is connected with a pump cylinder as shown. To the main piston rod is attached a cross-bar, to the ends of which are secured piston rods of two cylinders, placed at opposite sides of the pump cylinder, so that the suction pump and the two air force pumps at the sides will be operated from a common piston rod. The air chambers of the air pumps are connected with the air-tight cover uniting the upper ends of the first and second pipes. The connecting pipes are provided with proper valves. When the engine is operated, the liquid is drawn by the pump and forced through a discharge pipe, while



GUTHRIE'S IMPROVED PUMPING APPARATUS.