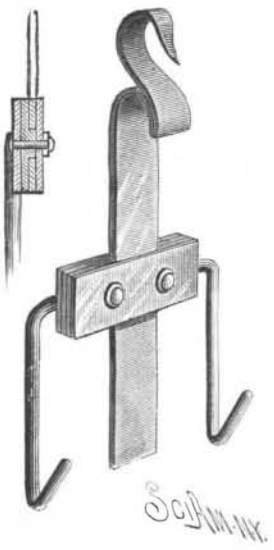
CONNECTION HANGER FOR ELECTROTYPING APPARATUS.

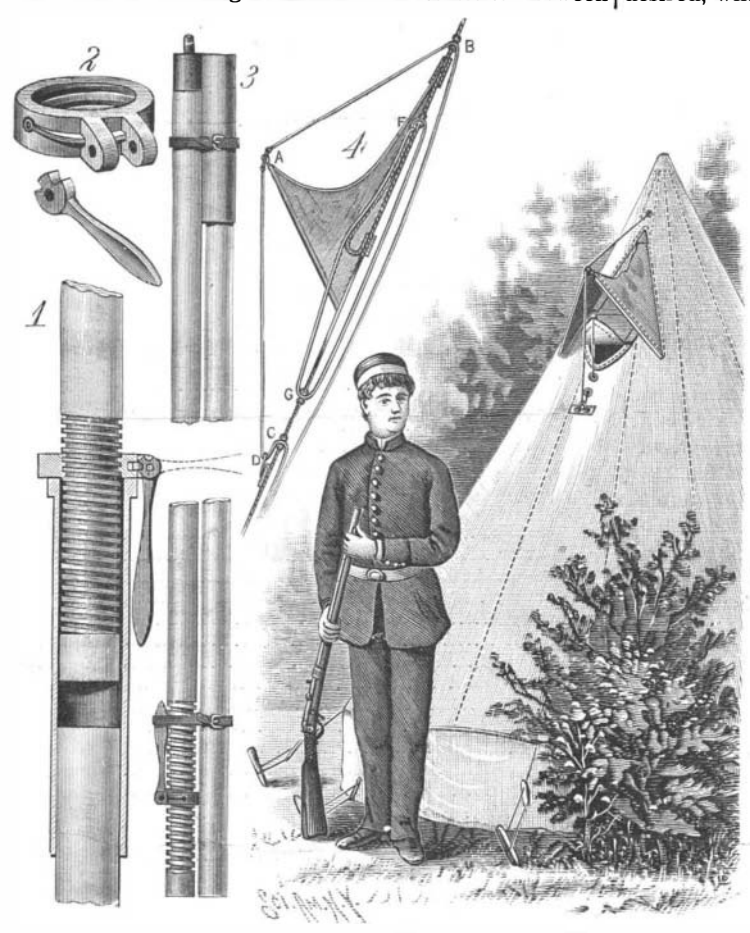
The body of the hanger is formed of a broad, flat strip of suitable conducting material, as copper, bent to form a hook at its upper end, which is received on a rod extending across the top of the depositing vat or trough of the electrotyping apparatus. The middle part of the strip is enlarged to form a rectangular plate, at the back of which is secured a similar plate carrying the sustaining hooks. These two plates are separated by an insulating plate, and the outer face of the conducting plate is also insulated by a plate, as shown in the sectional view. The four plates are held together by rivets, so insulated as not to make connection between the conducting and sustaining plates. The sustaining plate is provided with hooked arms, on which the moulding case is supported. Upon the upper supporting hook is sweated or otherwise secured a second hook, having a sharpened point, so that when the hanger with the attached mould is removed from the vat or restored thereto, the time card on the sharp pointed hook will not be displaced. This construction of the hanger does away with the plating of the moulding case and the forming of electrical connections between the conducting and sustaining hooks, and provides means for the convenient handling of the mould.



This invention has been patented by Mr. Otto S. Fertig, of 40 King Street, New York City.

IMPROVED CASH CARRIER.

The cash carrier herewith shown is simple in construction and practical in operation, and requires no extra motion to disconnect it from the stop blocks, while the car, owing to suitable buffers, can receive no injury from coming in contact with the stop blocks. To the upper surface of the car are secured uprights, in which are journaled the axles of grooved wheels running upon the overhead wire or track. In other uprights is held a rod on which are placed two coiled springs, so arranged that the rod acts as a double buffer to the carrier, each of its ends being adapted to strike a stop block, two of which are attached to the wire, one at each end. Near each end of the bar is a pawl, acted upon by a spring which lifts its free end so it will automatically engage with a lip formed on the stop block for holding the car stationary when it reaches either end of its trip. The pawls are disconnected and the car started by means of levers pivoted to the frame and connected with the pawls. When either of the levers is grasped for shoving the car along upon the wire, a slight downward pressure upon it will free the pawl from the lip, thus freeing the car, which, by a slight forward movement of the hand, may be caused to travel the wire to its opposite destination. The money is carried in a cup attached by bayonet connections to a rim secured to the under surface of the frame.



LEWIS' TENT POLE AND VENTILATOR.

This invention has been patented by Mr. Joseph Starr, of 26 State Street, New London, Conn., who will furnish any further information.

LEWIS TENT POLE AND VENTILATOR.

Those who have used tents have had a full sense of the troubles which this invention is designed to overcome. If the halyards of a tent slacken, or if the canvas becomes loose, the tightening and readjusting have hitherto been done from the outside. In stormy weather, or on a cold rainy night, it is far from pleasant to huddle on some wraps and spend a long five minutes tying and untying ropes that seem never to adjust themselves to the requirements. The tent pole shown in our cut furnishes the means of tightening up the tent from the interior. The upper section of the pole telescopes into the lower, carries a screw, and by means of a nut bearing on the top of the lower section of the pole, it can be raised or lowered as required. A jointed handle is pivoted to the nut, and is held by a spring in a position at right angles to the pole, or parallel with it. This keeps it stationary in either the working position or out of the way, as desired. Another invention in the same line is also presented in the illustration. It consists of two movable hoods that can be opened or closed from the interior of the tent. The inner one, by an endless cord, can be opened or shut or kept partially open as desired, while the exterior hood acts as an awning to exclude the sun or rain. These improvements have been patented by Mr. Patrick Lewis. Further particulars can be had from Mr. Geo. Irvine, of 92 St. Peter Street, Quebec, Canada.

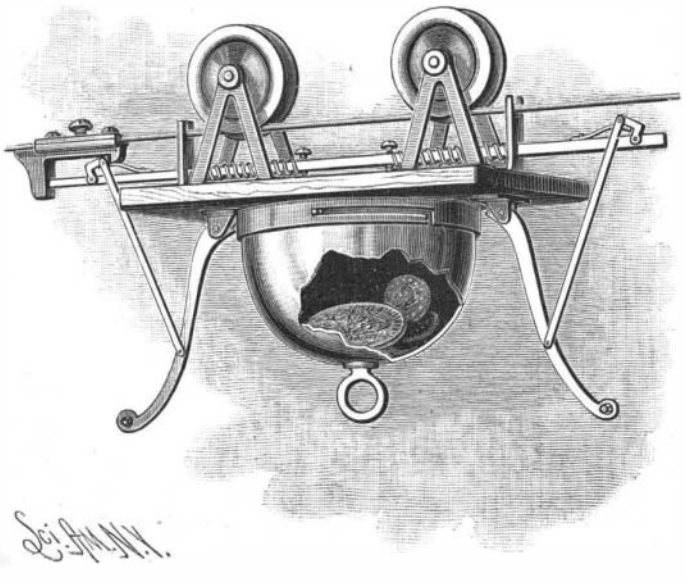
Practical Method of Thawing Earth.

It is often necessary to make excavations for pipes in very cold weather, under which conditions the operation is difficult. The trouble due to frost can only be remedied by thawing out the surface.

The *Elettricita* says that quicklime has been tried with success. The surface where the excavation is to begin is covered with alternate layers of lime and snow. The lime becomes slaked, and heats the soil so effectually that after ten or fifteen hours it can be dug up with the greatest ease, even where the cold is excessive. It goes without saying that where there is no snow, water can be used. This makes the process a little more complicated, but is just as efficacious.

As in the generality of cases urgency exists, the digging up of pipes being necessitated by some case of repairs, this method is restricted in its application to those cases in which the delay of a day or a night is not inadmissible.

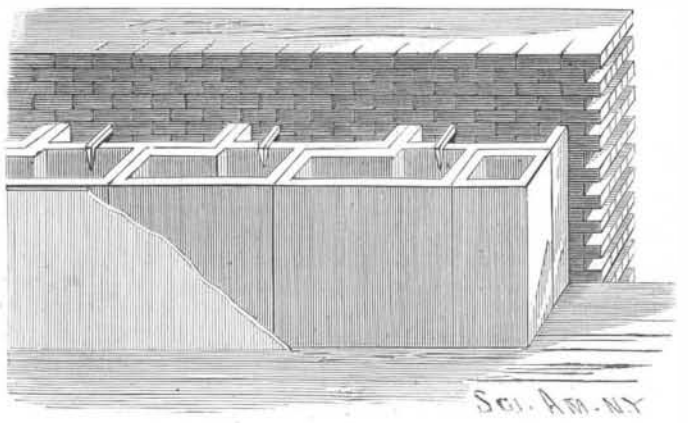
IN the opinion of the editor of the *American Druggist*, the supply of the natural oil of wintergreen or birch will soon cease to be of any commercial importance, since the artificial product (salicylate of methyl), to which reference was made recently in these columns, is now being prepared of such good and uniform quality that it will undoubtedly replace the natural oil. Moreover, the artificial article can be produced at a cost below that at which the natural oil can be distilled profitably. Here is a chance for Congress to repress the improvement, as in the oleomargarine case.



STARR'S IMPROVED CASH CARRIER.

DOUBLE AIR CHAMBER FURRING TILE.

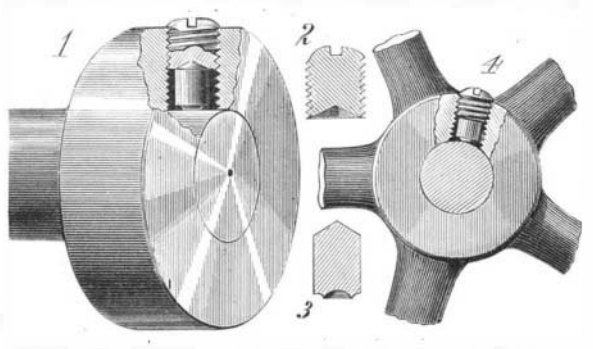
The accompanying engraving represents a double air chamber furring tile which has been recently patented by Mr. Thomas W. Snell, of 174 Howe Street, Chicago, Ill. For convenience in manufacturing, two tiles are formed together and are then separated after baking, the finished tile being of the shape clearly shown in the engraving. The flanged sides of the tiles are placed against the walls of the building, the tiles of each tier being fastened to the wall by hooks driven into the joints between the layers of brick. The tiles in each tier are so arranged as to form zigzag vertical joints. It will be observed that the tiles interlock with one another. This gives the furring great strength, while the peculiar form of the tile provides double air spaces, which effectually exclude all dampness. The outer surface of the tiles is plastered. This improved tile may be made of any suitable material, such as burnt clay, cement, or plaster of Paris.



SNELL'S DOUBLE AIR CHAMBER FURRING TILE.

SAFETY SET SCREW FOR COLLARS AND PULLEYS.

The ordinary mode of fastening collars and small sized pulleys on rotating shafts has been by means of one or a number of set screws—although it is well known that this is a most dangerous device, as the protruding head of the set screw will, as the collar rapidly revolves, inevitably entangle anything that comes in contact with it, and carry it around the shaft, and thus very often break belts, and, much worse, often endanger human life. It therefore seems strange that hardly any attempt in the way of invention has been made to obviate that dangerous contrivance; certainly no attempt has been made at all to substitute for it a safe method of fastening collars or hubs to shafts. The annexed illustrations show such a substitute, and its adaptation on a collar and on a hub of a pulley.



ROCHOW'S SAFETY SET SCREW FOR COLLARS AND PULLEYS.

The set screw heretofore used is replaced by two pieces, a short screw, Fig. 2, flush with the circumference of the collar or hub, and which is slotted on top, so that it can be set up by a screw driver, and which is countersunk on the inside where the second piece, Fig. 3, a small steel plug, fits into the countersink, and is forced against the shaft by the screw. The surface of the steel plug is serrated on the side toward the shaft, and the collar is made so that there is a clearance all around the steel plug. When this screw is set up snugly against this steel plug, so that the serrated surface of the latter is somewhat embedded into the shaft, then the plug acts like a pawl and toggle in any direction on which a strain might be brought against the collar or hub, and the greater the strain, the more will the plug embed itself in the shaft, and the tighter it will hold the object to the shaft. By means of this simple device, a collar or hub can be fastened to a shaft much firmer than by a mere set screw, and there being no projection beyond the periphery, all danger is obviated.

This invention has been patented by Mr. F. Rochow, of Bridge and Plymouth Streets, Brooklyn, N. Y.

FARMERS who raise turkeys in Lehigh County, Pa., drive them to market as they would sheep. Sometimes flocks of two hundred are thus driven along the public roads.

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