

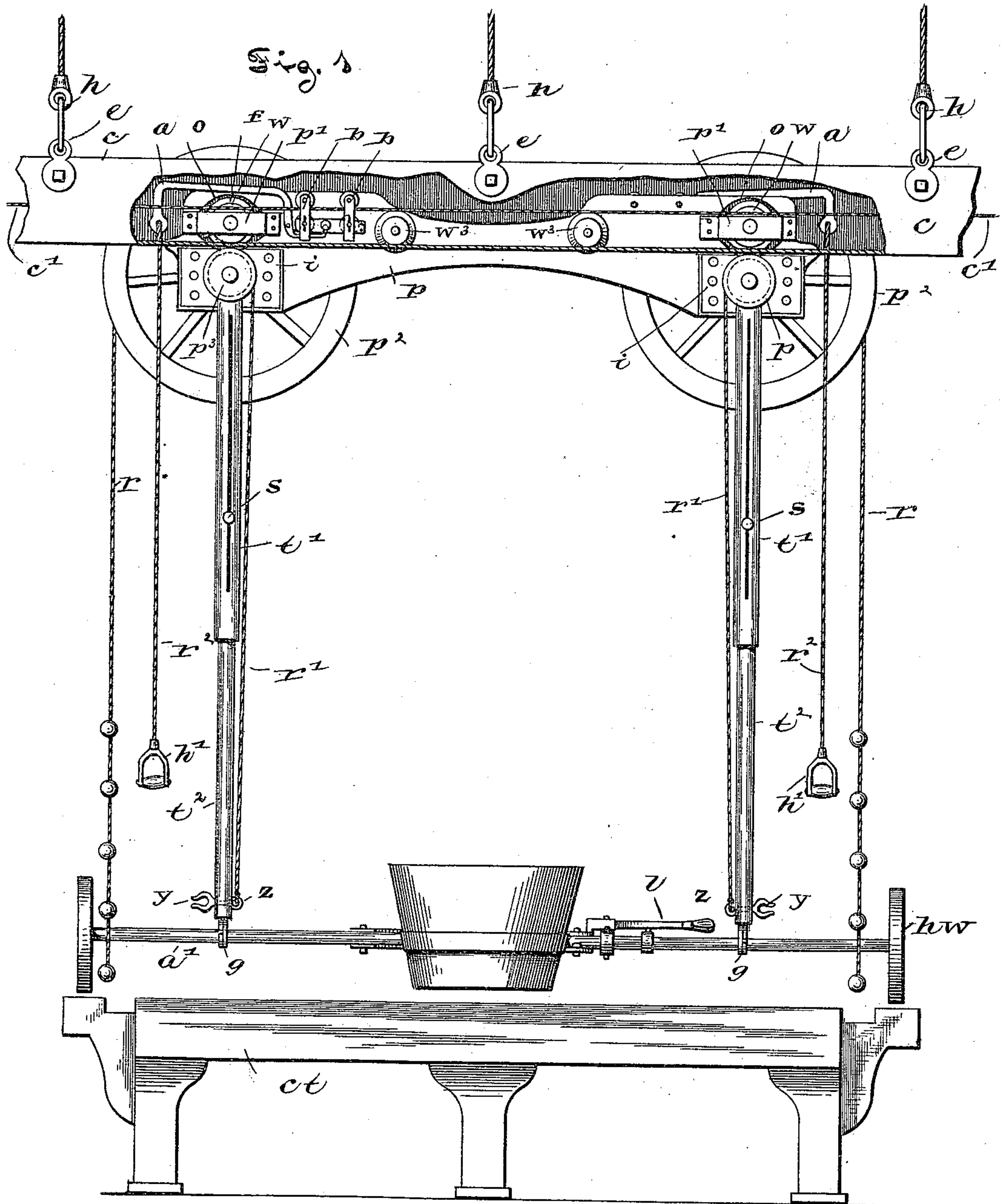
(No Model.)

2 Sheets—Sheet 1.

R. G. GUPTILL.  
TRAVELER FOR TRANSPORTING GLASS.

No. 430,284.

Patented June 17, 1890.



Witnesses

H. D. Nealy  
C. B. Griffith.

Inventor

Roderick G. Guptill,

By his Attorney

C. P. Jacobs.

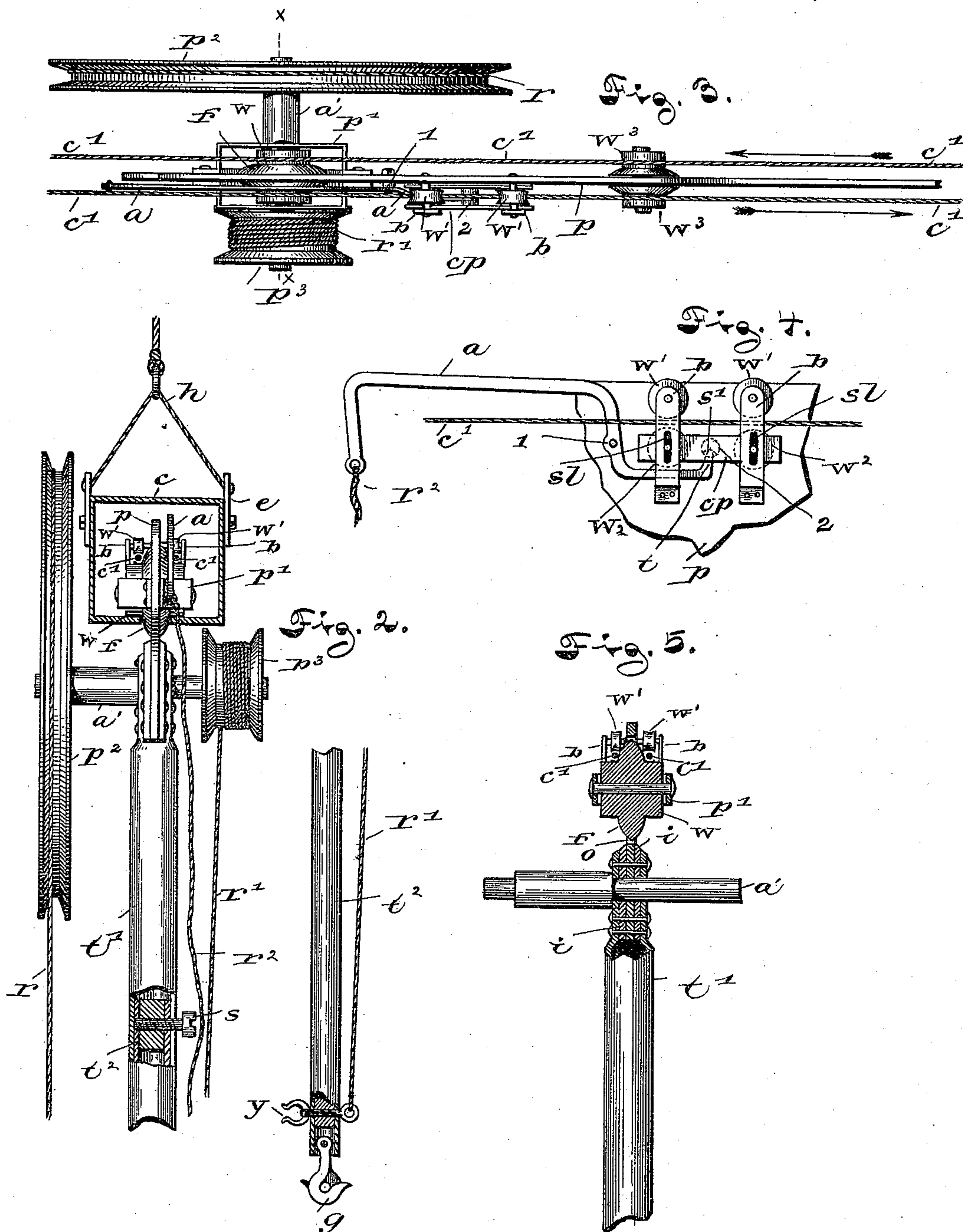
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# UNITED STATES PATENT OFFICE.

RODERICK G. GUPTILL, OF ELGIN, ILLINOIS.

## TRAVELER FOR TRANSPORTING GLASS.

SPECIFICATION forming part of Letters Patent No. 430,284, dated June 17, 1890.

Application filed December 28, 1889. Serial No. 335,289. (No model.)

*To all whom it may concern:*

Be it known that I, RODERICK G. GUPTILL, of Elgin, county of Kane, and State of Illinois, have invented certain new and useful Improvements in Travelers; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which like letters and figures refer to like parts.

My invention relates to the construction of travelers for handling pots of molten material and plate-glass during the process of its manufacture; but is adapted for a variety of other purposes, and will be understood from the following description.

In the drawings, Figure 1 is a side view of my device ready for operation, a part of the channel or way being broken out, showing the position of the carriage which moves therein. Fig. 2 is an end view of the carriage, the channel being in section, and part of the lower part of the telescopic lifting-pipe being broken off, the continuation thereof being shown at one side. Fig. 3 is a top plan view of one end of the carriage, the cables being shown in position. Fig. 4 is a detail side view of the gripping device. Fig. 5 is a sectional view on the line  $x x$ , Fig. 3, the pulley-wheels being left off.

In detail the device comprises a channel or trough  $c$ , constructed preferably of iron, which is suspended by ears  $e$  from horses  $h$ , which are fastened to beams above, at suitable distances apart, along the line it is designed to carry the material. The bottom of this channel or trough has a central opening or groove its entire length to admit the central flange  $f$  of the wheel  $w$ , which has smooth faces of less diameter on each side of the central flange, which travel upon the bottom of the channel  $c$  on either side of the open groove, through which the flange of the wheel passes. There are two of these flanged wheels—one located in the rear of the other—mounted in bearings in plates  $p'$ , bolted to the plate  $p$ , which forms the body of the carriage, this plate being cut out at  $o$  to form a seat for such wheels. A pair of moving cables  $c'$  are carried through the channel-trough  $c$  midway and are supported at either end in any convenient manner, and are kept taut while

moving by any suitable mechanism. The arrows indicate the direction of their movement. Brackets  $b$ , fastened to the sides of the carriage, provide bearings for small grooved wheels  $w'$ , which travel upon the top of the cables, and lower grooved wheels  $w^2$  are mounted in bearings in the cross-plates  $cp$ , the ends of their axles working in slots  $sl$  in the bracket  $b$  to permit their vertical movement. These wheels  $w^2$  bear against the underside of the cables, which thus pass between the two pairs of grooved wheels, and the direction in which the carriage is moved is determined by the mechanism shown in Fig. 4, which consists of the bent arm  $a$ , pivoted at  $l$  to the plate  $p$ , its inner end upturned having a tang  $t$ , which rests in a socket  $s'$ , formed in the cross-bar 2, which rigidly unites the cross-plates  $cp$ , in which the lower grooved wheels are journaled. A rope  $r^2$ , having a handle  $h'$ , is connected to the end of this bent arm, and by pulling on the rope the outer end of arm  $a$  is brought down and its inner end or tang  $t$ , bearing in the socket  $s'$  of the cross-bar 2, will force up such cross-bar, and with it the cross-plates  $cp$  and the grooved wheel  $w^2$ , which it carries, and the cable  $c'$  will thus be gripped between this grooved wheel and the one above it and the carriage will be drawn in the direction in which the cable is moving. A similar arm and gripping mechanism is connected at the opposite end and side of the carriage, so as to operate on the cable on that side, moving in an opposite direction. It will thus be noticed that the carriage may be given a forward or a backward movement at the pleasure of the operator.

The central part of the carriage-plate  $p$  is supported upon intermediate split flange-wheels  $w^3$ , mounted on axles passing through such plate, and the central flange of these wheels is split into parts which pass through the groove or opening in the bottom of the channel  $c$  in the same manner as the flanges  $f$  of the wheels  $w$ .

The plate  $p$  is thickened at each end by intermediate plates  $i$ , and these pass into a socket formed in the upper end of the tube  $t'$  and are bolted through, uniting the parts firmly, as shown in Fig. 5, and through these plates thus united passes an axle  $a'$ , on one end of which is journaled a large pulley  $p^2$



and on its opposite end a smaller pulley  $p^3$ . Connected to the large pulley  $p^2$  is a rope  $r$ , which has balls at its lower end for hand-grips and for securing the rope when pulled down in the fork  $y$ , connected at the lower end of the tube-section  $t^2$ . By pulling on the rope  $r$  the pulley  $p^2$  is revolved, and with it the inner smaller pulley  $p^3$ . Connected with this and wound about its drum is a rope  $r'$ , which is connected at  $z$  to the lower end of the lower telescopic tube-section  $t^3$ , so that by the winding of the rope  $r'$  in pulley  $p^3$  the lower tube-section is drawn up into the upper one, lifting anything that may be connected at the lower end of the lower tube-section. The lower one of these tubes has a screw moving in a slot in the upper and larger section for locking the slide at any desired point. At the lower end of the tube-section  $t^2$  are grappling-hooks  $g$  for hooking onto the load to be carried. In Fig. 1 they are shown as grappling the arms  $a$  of the pot-lifting frame, the pot being shown carried in a ring in the center.  $l$  is a lever mechanism connected therewith for releasing the pot,  $hw$  being hand-wheels fastened at the ends of the arm  $a$  for tipping the pot when it is desired to pour the contents out upon the casting-table  $ct$ , which is shown directly below and in proper relative position.

When the grapples  $g$  have been hooked onto the load, the operator taking hold of the rod  $r^2$  pulls down the curved arm  $a$  on gripping the cable moving in the direction desired, and the load is easily and readily transferred to the proper point, and when it has reached its destination by loosening the pull upon the rope the carriage comes to a rest.

What I claim as my invention, and desire to secure by Letters Patent, is the following:

1. A traveler comprising a trough, one or more cables passing through it, the bottom of the trough having a central open slit or groove, a carriage movable in such trough supported on truck-wheels having central flanges that pass through or into the slit or groove in the trough-bottom, such carriage provided with grooved wheels gripping such cables, a grappling mechanism connected to and carried by such carriage, and means for elevating and lowering the same and for moving the carriage in either direction, all combined substantially as described.

2. A traveler comprising a trough or hol-

low way, cables stretched through the same and moving therein, a carriage supported on truck-wheels having flanges that pass through an open groove in the trough-bottom, such carriage having pairs of grooved wheels on each side, the upper ones bearing upon and the lower ones beneath such cables, and a telescopic lifting-frame connected to such carriage and movable with it, in combination with means for raising the lower part of such frame and for gripping the cables, substantially as shown and described.

3. In a traveler, the hollow channel-way or trough  $c$ , having an open groove in its bottom, the cables  $c'$ , stretched and movable therein, and a carriage mounted on truck-wheels  $w$ , having central flanges  $f$ , passing through the open groove in the trough, and having grooved wheels above and below such cables, the lower ones adjustable vertically for gripping the cables between such upper and lower grooved wheels, all combined substantially as described.

4. In a traveler, a telescopic lifting-frame comprising the tube-sections  $tt'$ , having grappling-hooks  $g'$  for seizing the load, with means for lifting the lower tube-section, in combination with and connected to a movable carriage provided with grip-wheels  $w'$   $w^2$  and moving cables, and means for locking the grip-wheels of the carriage to the cables, substantially as shown and described.

5. In a traveler, a channel-way or trough suspended from above and having an open slit or central groove formed in the bottom, a carriage movable therein mounted on truck-wheels having a central flange entering the slit or groove, the face of the wheels on each side of the flange bearing directly upon the trough-bottom on each side of the slit or groove, such carriage further provided with grip-wheels running upon cables stretched through the channel or trough, a lifting mechanism connected to such carriage and movable with it, and means, substantially as shown, for raising and lowering the load and propelling the carriage.

In witness whereof I have hereunto set my hand this 16th day of November, 1889.

RODERICK G. GUPTILL.

Witnesses:

C. P. JACOBS,  
E. B. GRIFFITH.