

(No Model.)

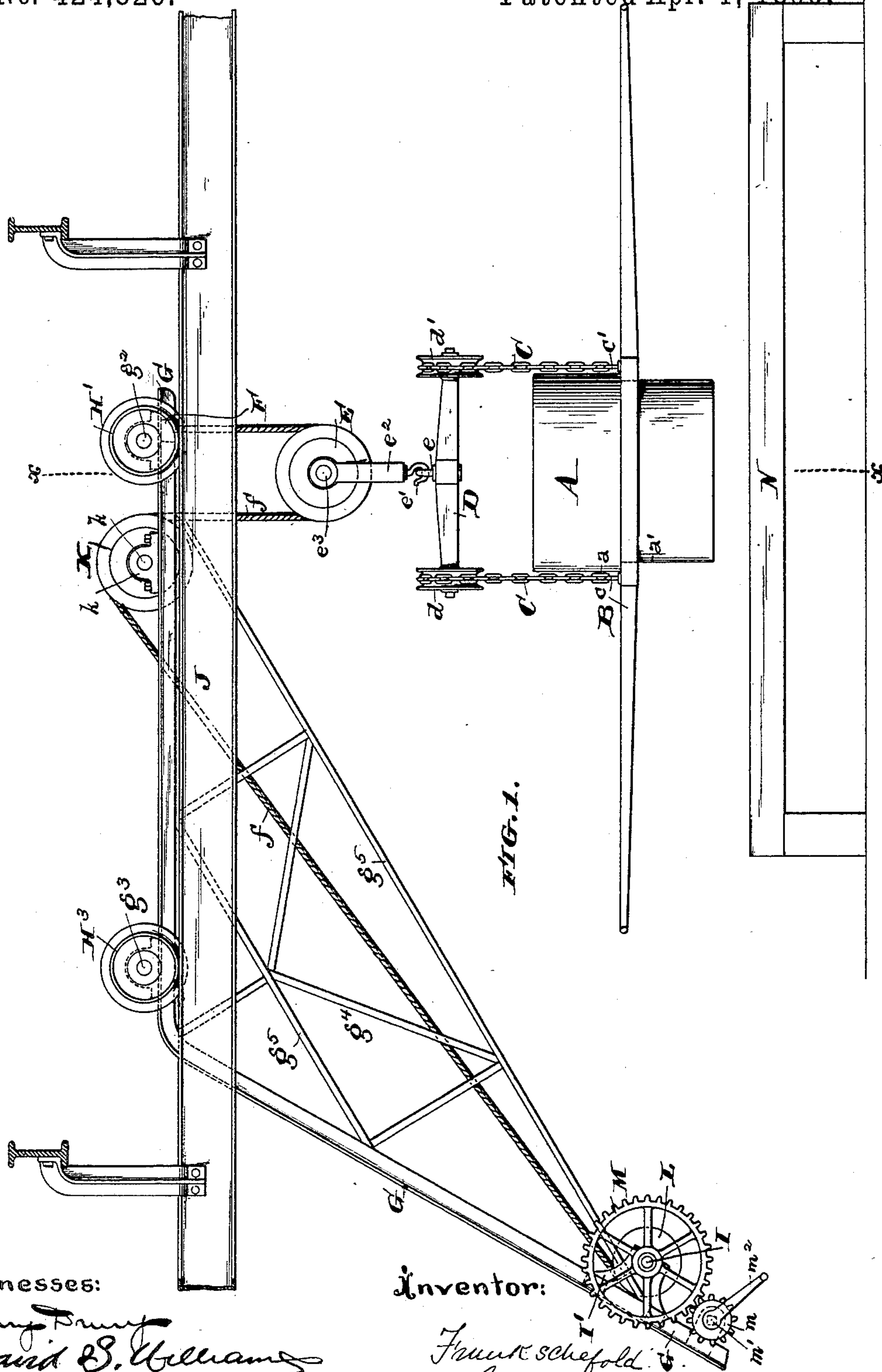
2 Sheets—Sheet 1.

F. SCHEFOLD.

MEANS FOR TRANSFERRING POTS CONTAINING MOLTEN GLASS.

No. 424,826.

Patented Apr. 1, 1890.



Witnesses:

Henry Prunty
David S. Williams

Inventor:

Frank Schefold
by his atty G F Harding

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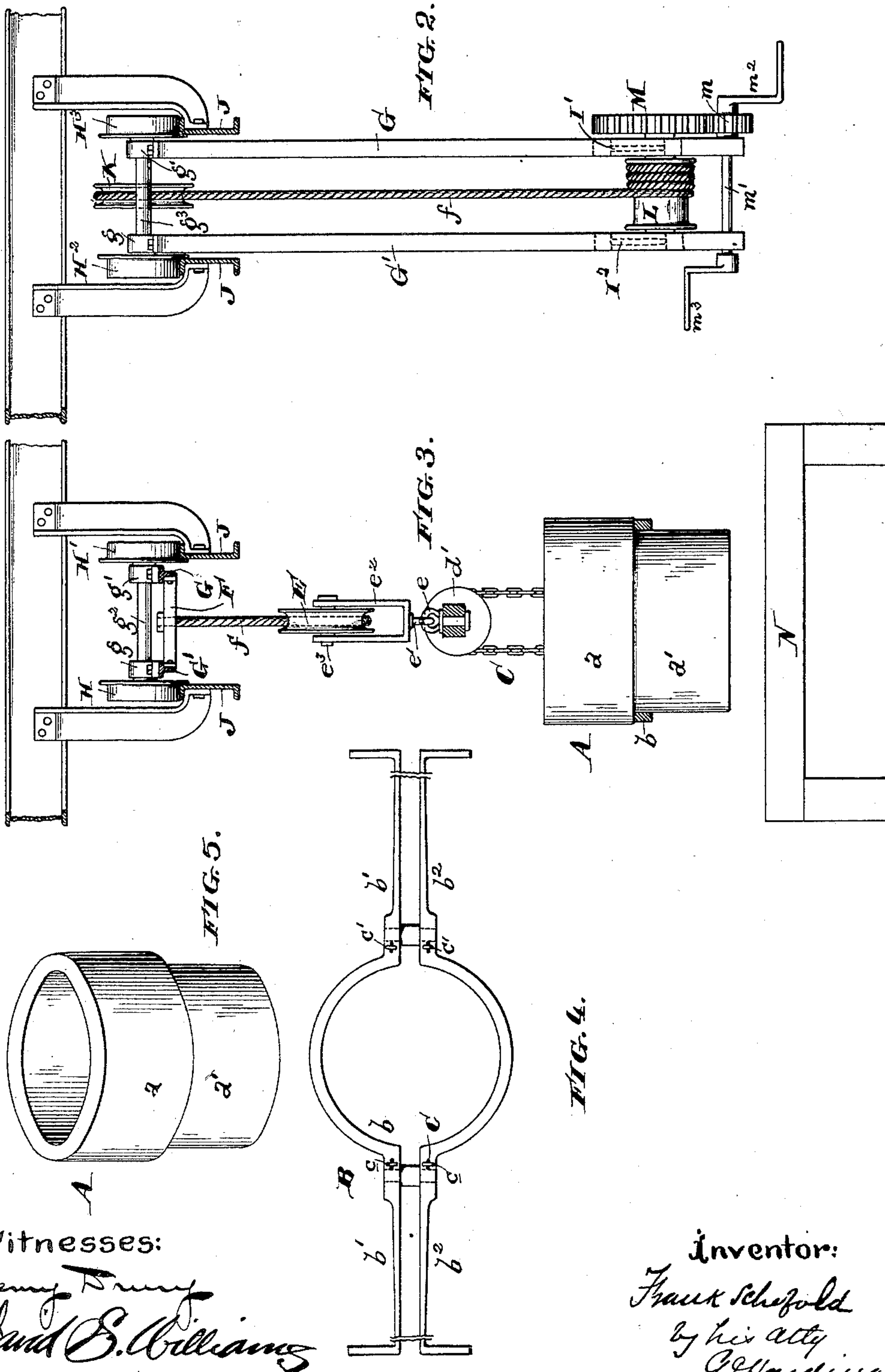
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UNITED STATES PATENT OFFICE.

FRANK SCHEFOLD, OF NEW ALBANY, INDIANA, ASSIGNOR TO THE W. C. DE PAUW COMPANY, OF INDIANA.

MEANS FOR TRANSFERRING POTS CONTAINING MOLTEN GLASS.

SPECIFICATION forming part of Letters Patent No. 424,826, dated April 1, 1890.

Application filed November 25, 1889. Serial No. 331,430. (No model.)

To all whom it may concern:

Be it known that I, FRANK SCHEFOLD, a citizen of the United States, and a resident of New Albany, in the county of Floyd and State of Indiana, have invented a new and useful Means for Transferring Pots Containing Molten Glass from the Furnace to the Casting-Table in the Manufacture of Glass, of which the following is a true and exact description, due reference being had to the drawings which accompany and form a part of this specification, and in which similar letters denote similar parts.

In the ordinary manner now in use the pots containing the molten glass are taken from the furnace and placed on little wagons and the men push or pull these wagons down the hall to a point adjacent to the casting-tables, and the pots are then raised to a proper elevation and the molten glass poured upon the table. This consumes considerable time and requires a lifting apparatus or cranes adjacent to each table, and also the pots often become chilled and go to pieces in the next melt. By my improved combination I am enabled to convey the pot from the furnace to the casting-table much more quickly and also bring it to the proper height to be tilted, so that its contents will flow upon the table.

In the drawings, Figure 1 is a side elevation of the apparatus. Fig. 2 is an end view of the same. Fig. 3 is a sectional view on the line $x x$, Fig. 1. Fig. 4 is a plan view of the pot-holder. Fig. 5 is a perspective view of pot.

The pot A, as shown in Fig. 5, is of the ordinary character, one portion a of the said pot being of greater periphery than the remainder a' of the pot.

B is the ordinary pot-holder, which consists of the ring b and handles $b' b^2$, secured to said ring, the ring b being of greater size than the portion a' of the pot A, but smaller than the portion a . When the ring is slipped over the pot and it strikes the portion a of said pot, said pot can be lifted by handles. The pot is taken from the furnace and the holder B slipped over it. Chains C are secured at one end to rings $c c'$ on said holder B, the chain passing over the guides $d d'$, attached to the frame D. This frame D has a ring e , to which is connected the hook e' , suspended

from the pulley E by the frame e^2 , said frame being connected to the shaft e^3 of said pulley E. A rope or chain f passes under said pulley, one end of said rope being secured to the rod or bar F, which is secured to the T-bars $G G'$, bent, as shown in Fig. 1, and these bars are connected together and are cross-braced by bracings g^4 and g^5 , &c. These T-bars—one on each side—are secured to sleeves $g g'$, &c., suspended from the axles $g^2 g^3$ of the wheels H and H' and H² and H³, which wheels rest on the track J. Suspended in bearings k upon shaft k' , extending between these bars $G G'$, at the upper end of said bars, is the pulley K, over which the rope f passes. This rope f is secured at the other end to the roller L, which is secured upon a shaft l , supported on brackets $l' l^2$, projecting from the lower ends of the bars $G G'$, respectively. On the same shaft l is the gear-wheel M, which gears into the gear-wheel m on the shaft m' , and provided with cranks $m^2 m^3$ on the ends of said shaft m' . The track J extends from a point near the melting-furnace to the casting-table N. When the pot has been conveyed to a point adjacent to the table, the pot is tilted and the contents poured onto the table.

The operation is as follows: The pot is taken from the furnace and the pot-holder placed around the pot and fastened and the crank m^2 or m^3 turned, which, through the medium of the rope f , &c., as hereinbefore described, elevates the pot. The frame-work is then pushed or propelled to a point adjacent to the table, and the contents of the pot poured upon the table. The pot may be elevated to the proper height at the initial point or when it is conveyed to the table, it being necessary to only elevate it free from the floor in the latter case.

By my improvement, where a number of casting-tables are used, I can use one lifting apparatus common to all, and the pot can be lifted to the proper height and transferred from the furnace to the casting-table rapidly.

Having now fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In an apparatus for conveying glass-pots from the furnace to the casting-table in the manufacture of glass, in combination, a pot

which contains the molten glass, a pot-holder in which said pot rests, a frame D, guides at the ends of said frame, chains which pass around said guides and are secured to said pot-holder, bent bars G G', said bars being connected to each other and braced, said bars being connected at their upper ends to the axles, wheels on said axles, tracks on which said wheels rest, a pulley E, said pulley being connected with the frame D, a rope which passes round said pulley E, one end of which is secured to said bent bars G G', said rope passing round a pulley K, journaled between said bent bars at their upper end and passing around and being secured to a roller journaled in brackets projecting from the lower end of said bent bars G G', and means, substantially as described, to revolve said roller.

2. In an apparatus for conveying glass-pots from the furnace to the casting-table in the manufacture of glass, in combination, a pot which contains the molten glass, a pot-holder in which said pot rests, a frame D, guides at the ends of said frame, chains which pass around said guides and are secured to said pot-holder,

bent bars G G', said bars being connected to each other and braced, said bars being connected at their upper ends to axles, wheels on said axles, tracks on which said wheels rest, a pulley E, a frame upon said pulley E, a hook connected to said frame, said hook being adapted to enter an eye in said frame D, a rope which passes around said pulley E, one end of which is secured to said bent bars G G', said rope passing around a pulley K, journaled between said bent bars at their upper end and passing around and being secured to a roller journaled on brackets projecting from the lower end of said bent bars G G', a gear-wheel journaled on the end of said shaft, a gear-wheel which gears into the first gear-wheel, and a crank which operates the second gear-wheel.

In testimony of which invention I have hereunto set my hand at New Albany, State of Indiana, this 16th day of November, 1889.

FRANK SCHEFOLD.

Witnesses:

ANDROS HUNCILMAN,
G. W. RUNDELS.