

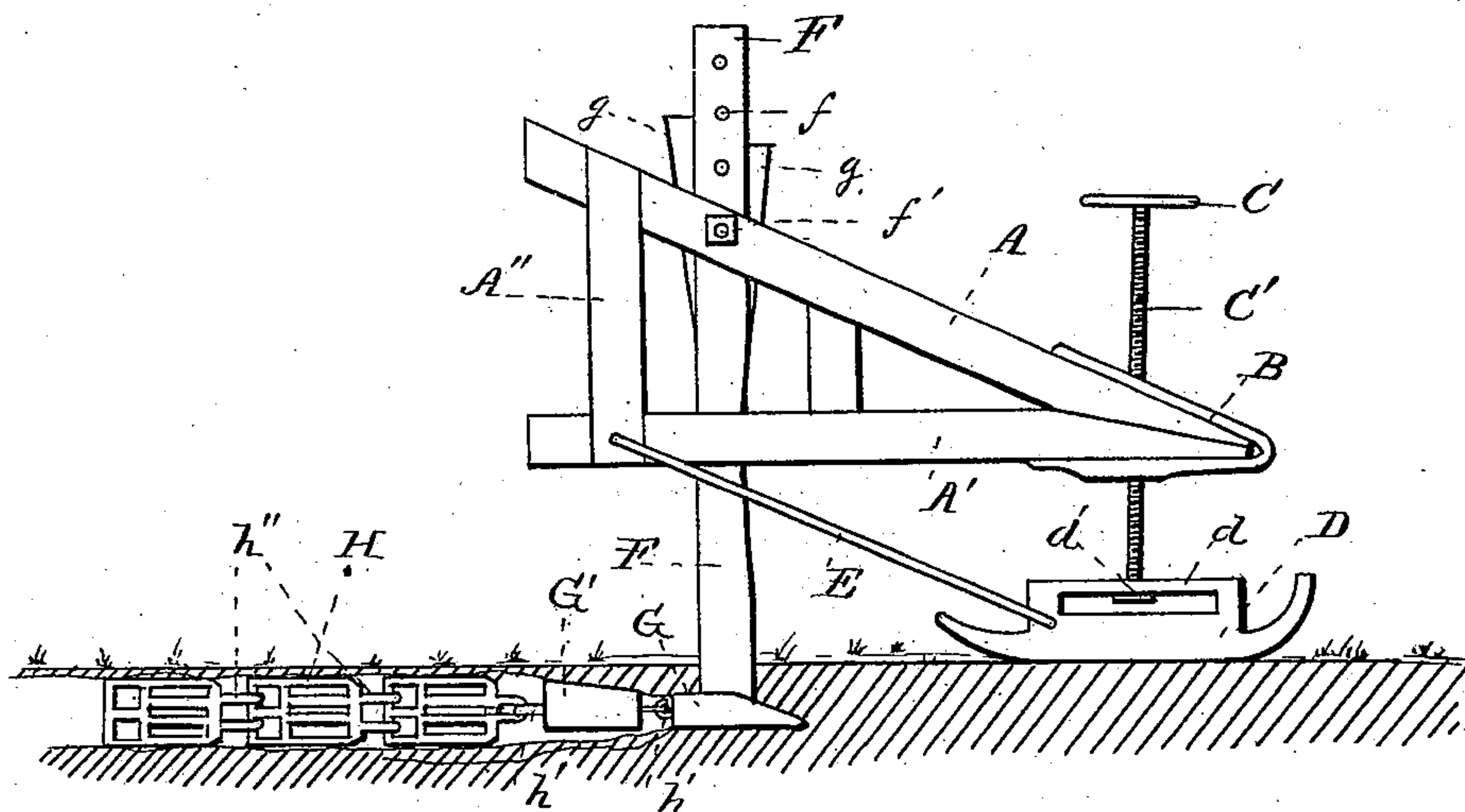
(No Model.)

J. P. WALLS & W. G. ENGLE.

TILE LAYING MACHINE.

No. 308,536.

Patented Nov. 25, 1884.



WITNESSES

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TILE-LAYING MACHINE.

SPECIFICATION forming part of Letters Patent No. 308,536, dated November 25, 1884.

Application filed June 12, 1884. (No model.)

To all whom it may concern:

Be it known that we, JAMES P. WALLS and WILLIAM G. ENGLE, citizens of the United States, residing at Paxton, in the county of Sullivan and State of Indiana, have invented certain new and useful Improvements in Tile-Laying Machines, of which the following is a specification, reference being had therein to the accompanying drawing.

10 This invention relates to improvements in tile-laying machines, and has for its object to provide means for carrying drain-tiling into a closed underground ditch, leaving the tile at any point or throughout the entire length 15 of the ditch, if desired. This object is attained by the mechanism illustrated in the accompanying drawing, forming a part of this specification, in which the figure is a side elevation.

20 The letters A A' A'' indicate the frame of the machine, made, preferably, of wood, and slotted in the part marked A A' to receive an upright bar of metal, F, having perforations *f*, by which it may be adjusted and held 25 at different heights by the bolt *f'* and wedge *g*, and having at its lower extremity the mole G, having a hook, *h*, which engages with a hook or staple in a wooden follower, G', also provided with a hook, *h'*, by means of which 30 a carrier formed of suitable links, H, of cast-iron or other suitable material, may be attached thereto. The links H are provided with hooks *h''*, which enables them to be attached to each other or to be unhooked and 35 removed.

The carrier H is intended to be used as a means of carrying the tile, which are left in the ditch at any desired point by means of a wooden stop with a groove or notch in lower 40 end only sufficiently large to allow the carrier to pass under it. This stop will be placed in holes dug at regular intervals on the line of the intended ditch. When the machine first starts out on a ditch, it will be placed in first hole or outlet of the ditch, then 45 attach the carrier and start the machine, filling the carrier with tile, laying on one after another close together as the carrier is drawn in. When the carrier is all drawn in, at 50 this point the machine will reach the second hole, then raise the first tile off of carrier next to follower G, and in its stead place the stop, allowing the string of tile behind to butt against the stop, thereby holding them in 55 place while the carrier is drawn from under

them, leaving so much of the ditch complete. The stop is held in place by serving the operator as a seat while refilling the carrier with tile as it passes on through the ditch. This stop may be made in any shape desired, as 60 all that is necessary is that it shall be provided with a notch, so the carrier can pass under it. The notch may be cut in the stop, or the stop may be a piece of timber placed over the carrier with its two ends on higher 65 ground than the carrier, but low enough to come in front of the tile behind. It must be well secured, so as to hold the tile while the carrier may be drawn from under them.

The bar or colter F and the mole G are intended to be made of steel. The forward end 70 of the frame A A' is provided with a draft-loop, B, and also a screw, C', having hand-wheel C. The lower end of this screw enters a slot in the top of a piece of iron, *d*, attached to wooden shoe or slide D, and is provided with a nut, *d'*, at the bottom. An iron 75 link, E, passes through a suitable opening in the after end of the shoe D, and is thence carried in a backward direction and passed 80 through an opening in the after end of the frame A'. This permits the shoe D to be raised and lowered by means of the hand-wheel C and screw C', whereby the depth of the ditch is regulated, and at the same time 85 maintains the shoes in a line with the frame of the machine. The screw C' and screw-socket are intended to be made of first-class iron or any other suitable material.

Having described our invention, what we 90 desire to secure by Letters Patent, and claim, is—

In a tile-laying machine, the acute-angled triangular frame A A' A'', provided with iron loop B, the hand-wheel C, and screw C', having 95 nut *d'*, and the wooden slide D, provided with iron *d*, flexibly attached to frame A'' by link E, in combination with colter F, having perforations *f* and bolt *f'*, adjusting-wedges *g*, mole G, follower G', and carrier-chain H, provided with hooks *h''*, as described, and for the 100 purposes set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

JAMES P. WALLS.
WILLIAM G. ENGLE.

Witnesses:

R. A. MOORE,
WM. CURTIS.