

J. W. YOUNG.
 APPARATUS FOR DECORATING TILES, &c.
 APPLICATION FILED FEB. 23, 1910.

975,921.

Patented Nov. 15, 1910.

3 SHEETS—SHEET 1.

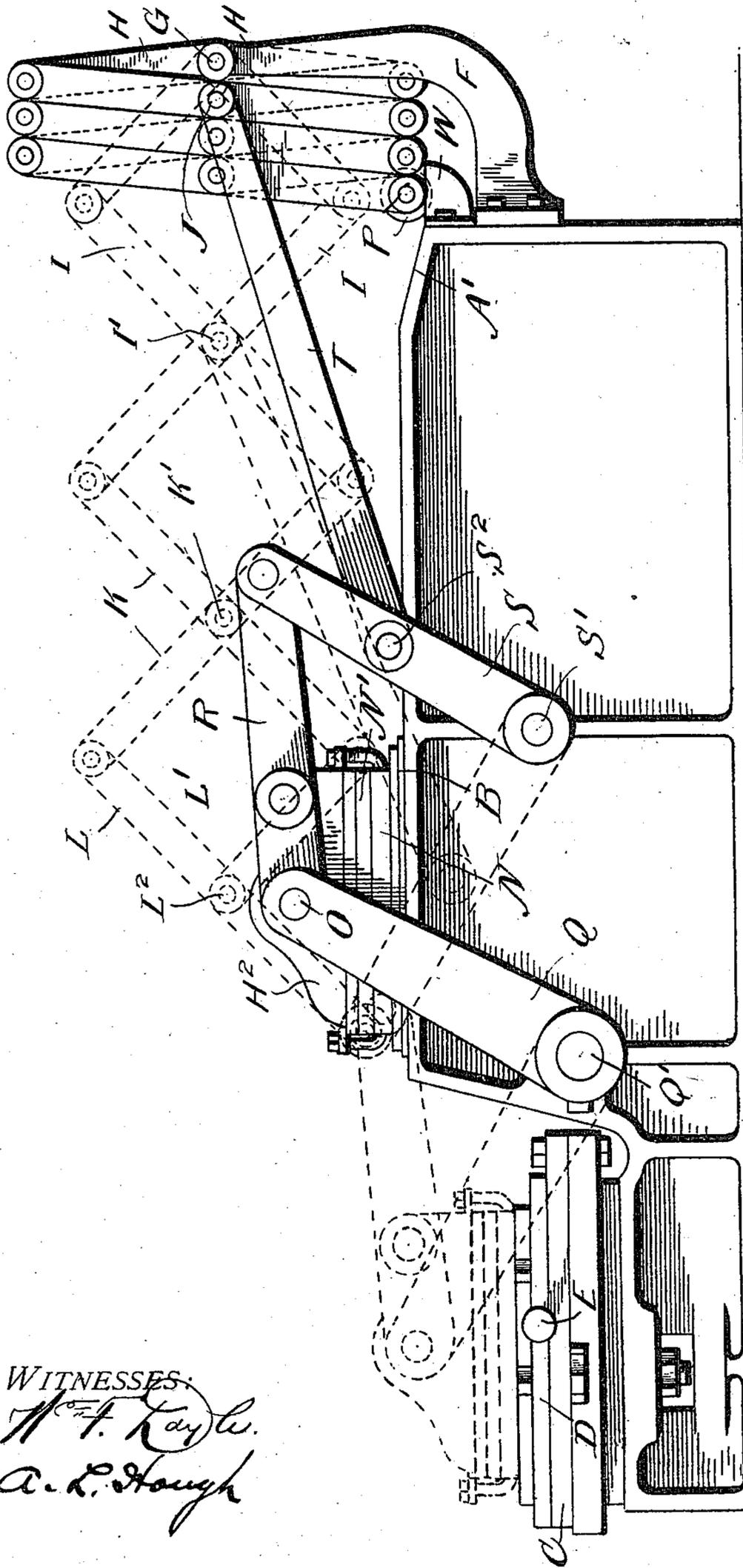


FIG. 1.

WITNESSES:
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A. R. Hough

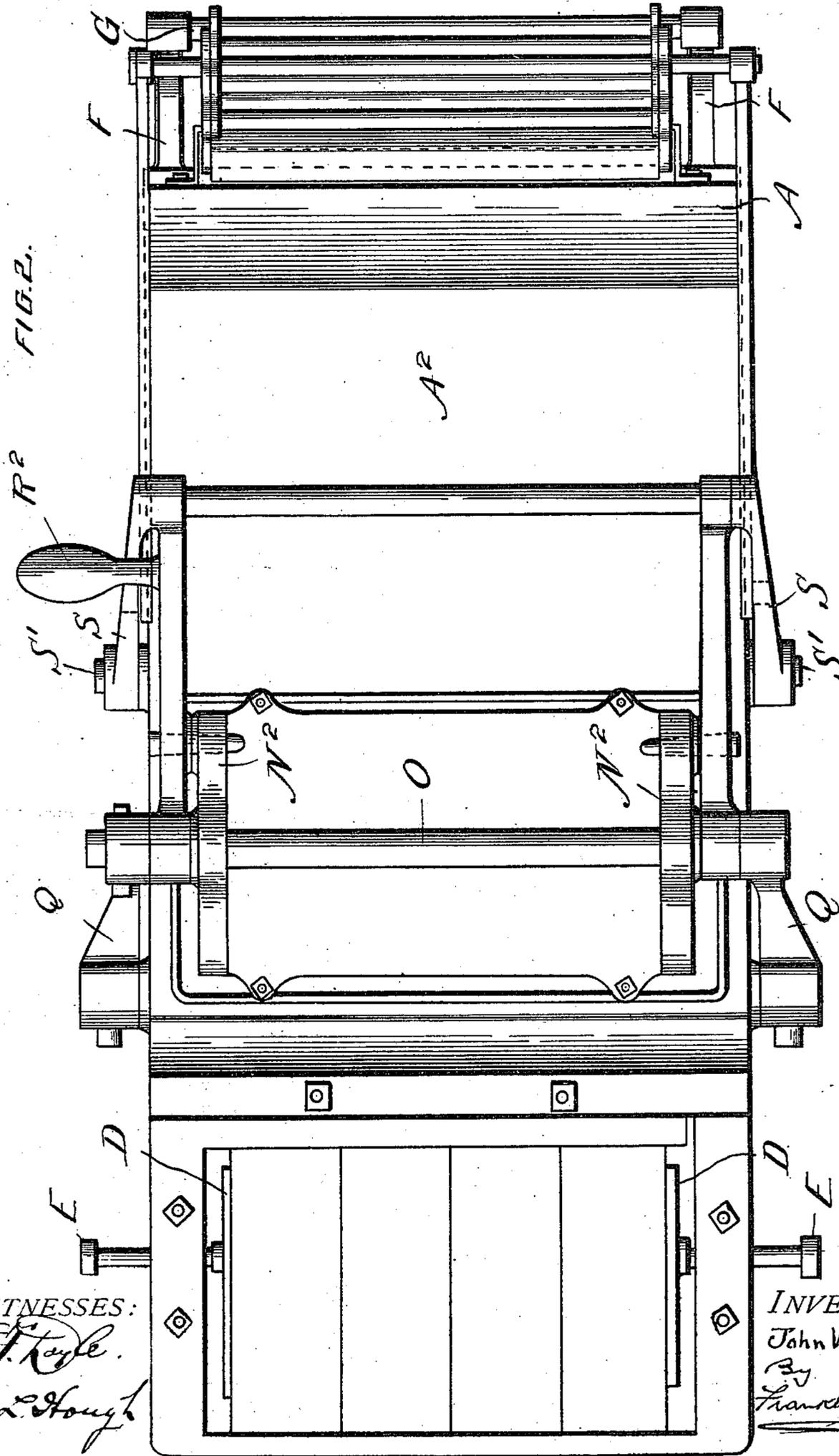
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3 SHEETS—SHEET 2.



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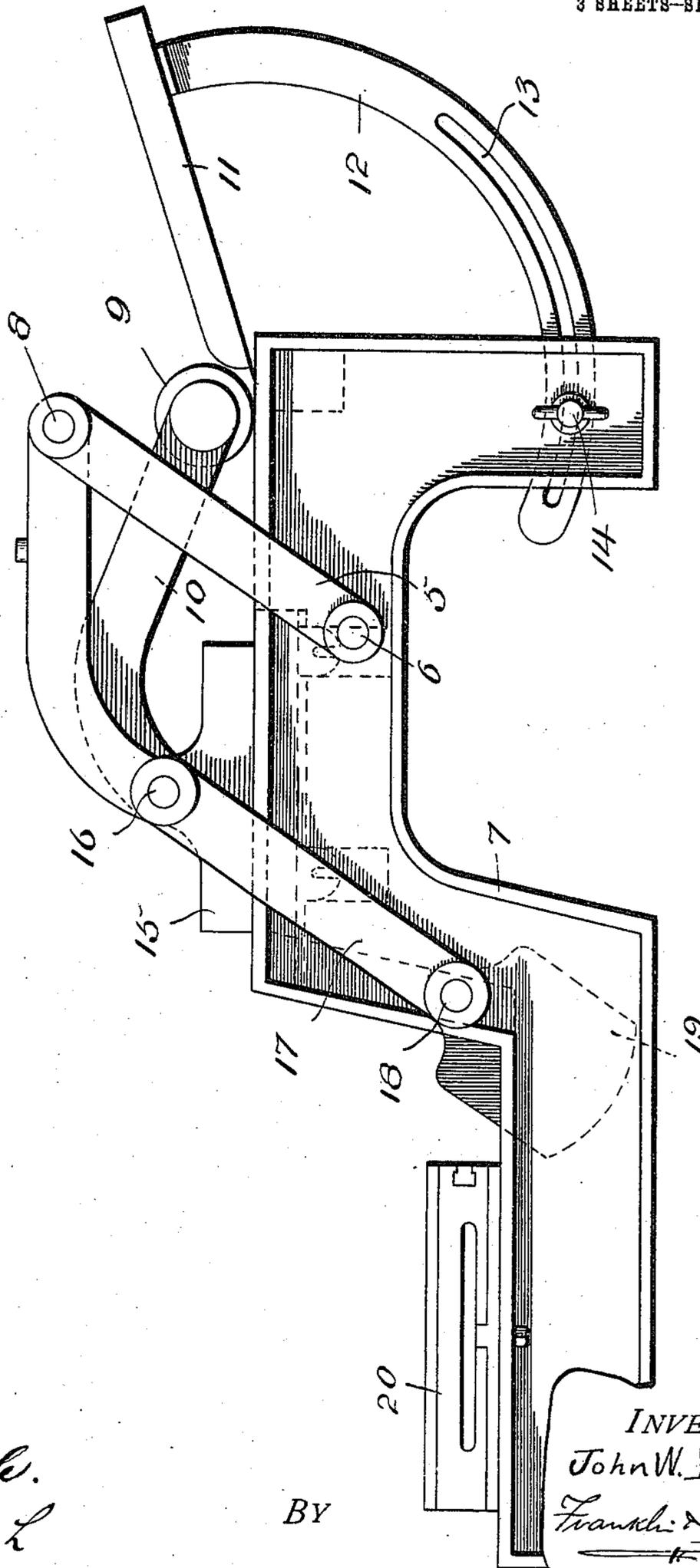
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3 SHEETS—SHEET 3.

FIG. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

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APPARATUS FOR DECORATING TILES, &c.

975,921.

Specification of Letters Patent. Patented Nov. 15, 1910.

Application filed February 23, 1910. Serial No. 545,423.

To all whom it may concern:

Be it known that I, JOHN W. YOUNG, a citizen of the United States, residing at Zanesville, in the county of Muskingum and State of Ohio, have invented certain new and useful Improvements in Apparatus for Decorating Tiles, &c.; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in apparatus for decorating the surfaces of tile, etc., and comprises essentially a means whereby the printing liquid may be evenly distributed upon the pad against which the cushion surface bearing the decoration to be given to the tile is adapted to contact.

The invention comprises various details of construction and combinations and arrangements of parts which will be hereinafter fully described and then specifically defined in the appended claims.

My invention is illustrated in the accompanying drawings, in which:—

Figure 1 is a side elevation of the apparatus showing in solid lines the printing surface against the pad and in dotted lines thrown forward against the face of the tile. Fig. 2 is a top plan view of the apparatus, showing the printing surface thrown back against the pad and other parts in relative positions, and Fig. 3 is a side elevation showing a modified form of the invention.

Reference now being had to the details of the drawings by letter, A designates the frame of the apparatus upon which is mounted a pad B. The tile to be printed upon is mounted upon the bed C and held in place by means of the clamping members D, shown clearly in Fig. 2 of the drawings, said members being moved by the set screws E.

F, F designate bracket arms which are fastened to one end of the frame, and G is a shaft which is mounted at its ends in said arms. Links H, H are pivotally mounted upon the shaft G and have pivotally connected to their ends links I, which latter intersect each other and are pivotally connect-

ed at their points of intersection by the rods I'.

K, K designate links which are pivoted to the ends of the links I and pivoted to a rod K' at their points of intersection. The link L is pivotally connected at one end to a link K and the link L' is pivotally connected to the other end of the intersecting link K and also to the link L by means of a rod L².

N designates a stamp upon which appears the design to be transmitted to the face of the tile, said stamp being made preferably of a cushion material and held in place in any suitable manner. Said stamp is mounted in a head N' having flanges N² projecting therefrom and through which latter a shaft O passes, as shown clearly in Fig. 2 of the drawings. Pivotally connected to the ends of said shaft O are the arms Q which are keyed to a shaft Q' journaled in the opposite sides of the frame. The arms Q are pivotally connected to the links R which in turn are connected to the crank arms S pivotally mounted upon the studs S' projecting from the opposite sides of the frame. One of said links R has a handle R² fastened thereto, as shown clearly in Fig. 2 of the drawings, forming means whereby the stamp may be moved from the surface of the tile and back. Bars, designated by letter T, are pivoted at their corresponding ends each to a pin S² upon the links S and their rear ends pivotally mounted upon the rod I'.

At the rear end of the frame is an ink well W with an open top, and A' designates a slight inclined portion of the frame leading to the upper marginal edge of the well W. An inking roller P is journaled in corresponding ends of the links L and is adapted, when at its farthest limit in one direction, to dip into said well W and, as the links of the lazy tong apparatus are driven forward, said roller P is adapted to roll up the inclined surface A' and forward upon the upper flat surface A² of the frame, thereby evenly distributing the ink or coloring liquid over said surface A² before the roller reaches the pad which it is adapted to ink with an evenly distributed coating.

In Fig. 3 of the drawings, I have shown a slight modification of the invention in which links 5 are shown as pivoted upon studs 6 projecting from the side of the frame 7,

said links, one upon either side of the machine being pivotally connected to a shaft 8. The inking roller 9 is journaled in the ends of the arms 10 and is adapted to receive ink from the adjustable table 11, one end of which rests upon the top of the frame and held in adjusted positions by the curved segment arm 12 having a slot 13 therein through which the shank portion of a screw 14 passes, which screw is held in a threaded aperture in the frame. The stamp, designated by numeral 15, is pivotally mounted upon the shaft 16, and 17 designates a lever pivoted upon the stud 18 having counter-balanced end 19. The tile to be printed upon rests upon the bed 20 and, when the stamp is thrown forward against the surface of the tile, the roller 9 is adapted to spread the ink evenly over the surface of the pad.

The operation of the apparatus will be readily understood and is as follows:—By moving the handle R² back and forth, the links of the lazy tong may be extended, as shown in dotted lines, to cause the stamp to be thrown against the surface of the tile or closed to assume the position shown in solid lines in Fig. 1, which will bring the stamp back upon the pad N, the inking roller each time the stamp is thrown to its limit in opposite directions being caused to dip into the well and distribute the ink evenly over the upper surface A².

What I claim to be new is:—

35 1. An apparatus for decorating tile, etc., comprising a frame having a top forming an ink distributing surface, a pad upon said frame, bracket arms fixed to the latter, lazy tong links pivoted to said bracket and to each other at their points of intersection, a stamp pivotally connected to said links, crank arms pivotally connected to the frame and to the links of said lazy tong and stamp.

40 2. An apparatus for decorating tile, etc.,

comprising a frame having an ink distribut- 45
ing surface upon its top, a pad upon the
latter, bracket arms fixed to one end of the
frame, a stamp, lazy tong links pivoted to
each other and to said bracket arms, crank
arms pivotally mounted upon the frame and 50
connected to the stamp and said links, an
ink distributing roller carried by the latter,
a well in which said roller is adapted to
dip, the latter movable over the ink dis- 55
tributing surface and pad as the stamp is
moved forward to its limit in one direction.

3. In combination with the frame of a
tile decorating apparatus, having an ink dis-
tributing top, a well at the end of the frame,
said top being inclined adjacent to one end 60
which terminates at the upper end of said
well, an ink pad upon the frame, bracket
arms upon the latter, lazy tong links piv-
otally connected to said arms, a stamp con-
nected to said links, and crank arms piv- 65
otally mounted upon the frame and con-
nected pivotally to said links and stamp.

4. In combination with the frame of a tile
decorating apparatus having a flat ink dis-
tributing top, one end of which is inclined, a 70
pad upon said frame, bracket arms fastened
to the end of the latter and extending up-
ward, a rod pivotally mounted in said arms,
a stamp, lazy tong links pivotally connected
to said rod and to one another and to said 75
stamp, crank arms pivotally connected to
said frame and to the links of the lazy tongs,
links pivotally connected to said crank arms,
an ink distributing roller pivotally connect-
ed to the latter, and a well fixed to the frame 80
and in which said roller is adapted to dip.

In testimony whereof I hereunto affix my
signature in the presence of two witnesses.

JOHN W. YOUNG.

Witnesses:

C. S. HOSKINSON,
GEO. S. MORLEY.