S. B. HOPKINS AND C. JELINEK.

STEREOTYPER'S AND PRINTER'S TOOL.

APPLICATION FILED DEC. 14, 1920.

1,421,689. Patented July 4, 1922.

FIG 1

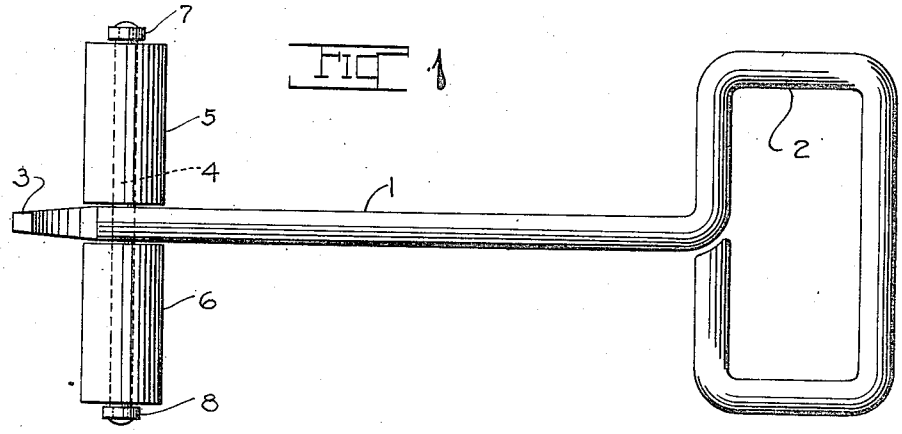


FIG 2

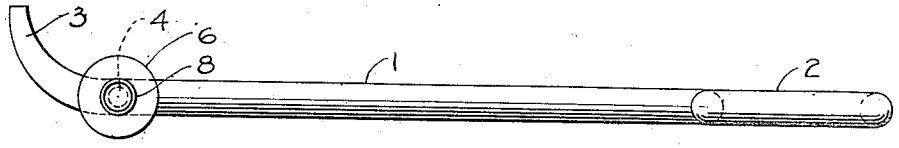


FIG 5

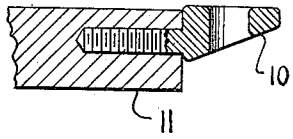


FIG 3

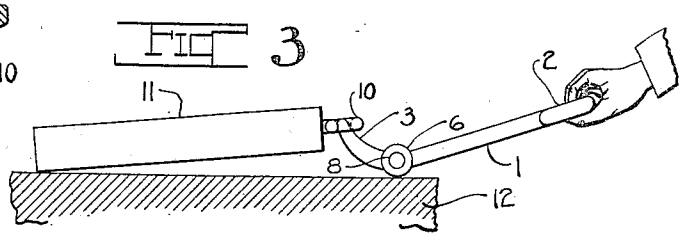
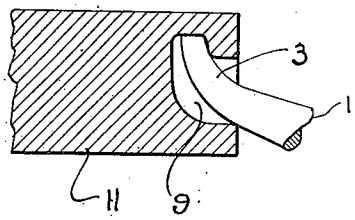


FIG 4



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STEREOTYPER'S AND PRINTER'S TOOL.

1,421,689. Specification of Letters Patent. Patented July 4, 1922.

Application filed December 14, 1920. Serial No. 430,777.

To all whom it may concern:

Be it known that we, SYDNEY B. HOPKINS, a subject of the King of Great Britain, residing at Summit, in the county of Union and State of New Jersey, and CHARLES JELINEK, a citizen of the United States, residing at Richmond Hill, in the county of Queens and State of New York, have made certain new and useful Improvements in Stereotypers' and Printers' Tools, of which the following is a specification.

The invention relates to a novel stereotyper's and printer's hand tool for handling slabs or chases holding forms during the process or procedure of making the matrix sheets from which stereotype plates are made, or for the handling of forms from truck to stone, or otherwise.

Objects and advantages of the invention will be set forth in part hereinafter and in part will be obvious herefrom, or may be learned by practice with the invention, the same being realized and attained by means of the instrumentalities and combinations pointed out in the appended claims.

The invention consists in the novel parts, constructions, arrangements, combinations and improvements herein shown and described.

The accompanying drawings, referred to herein and constituting a part hereof, illustrate one embodiment of the invention, and together with the description, serve to explain the principles of the invention.

Of the drawings:—

Fig. 1 is a top plan of a stereotyper's and printer's tool embodying the invention;

Fig. 2 is a side elevation looking at Fig. 1 from the bottom;

Fig. 3 is a side elevation, more or less diagrammatic, illustrating the use of the tool; and

Figs. 4 and 5 are enlarged fragmentary sections showing the engaging device for the tool formed in the chase or slab.

An exemplary use of the tool will be described in connection with the work of making stereotype plates from either electrotypes, linotypes or hand-set type, a matrix sheet is made from any of these and the stereotype plate, either flat or hemi-cylindrical, is cast from this matrix sheet.

Linotype or hand-set matter is usually locked in a chase, and electrotypes are usually placed upon a "slab," that is, a flat plate of metal, for the making of a matrix or matrices therefrom. In the appended claims the word "chase" has been used for the sake of brevity, but it will be understood, that the term so used includes a "slab" of the kind just described and any other or like carrier for the form of type or plates from which a matrix or matrices are to be made.

Several electrotypes are usually placed upon a metal plate or slab, sufficient in number to fill a page and a single page-size matrix sheet is made therefrom.

A common form of layout or arrangement of the matrix making apparatus consists of a relatively long table or "apron" with a molding machine at one end thereof and usually several steam tables, or drying tables arranged at the side of the apron. The "apron" and the beds of the molding machine and of the steam tables are usually flat metal plates arranged on a common level, and form in effect a continuous surface along which the slabs or chases may be slid.

The "slab" or chase is placed on the molding machine and is covered with a flong, or sheet of papier-mâché, over which a blanket is placed. It is run into the molding machine and then out again, and is then pushed or pulled onto the apron and into position to go into the steam table.

The slab or chase with the plastic "flong," now called a "mold," adherent upon its face is pushed or slid from this position upon the apron into the steam table, and there the "mold" is dried to a hard or indurated condition, substantially ready to be put into the casting box. The slab or chase is then drawn or pushed out of the steam table back upon the apron, and the indurated matrix is stripped therefrom.

The present invention provides a handy and efficient tool whereby the workman may easily, rapidly and efficiently slide the slab or chase from the apron to the molding machine and back on to the apron after the molding operation, and then from the apron into the steam table and back again upon the apron. This work when done manually is difficult, wearisome and relatively slow, and when a plurality of duplicate matrix sheets are made from a single form or group of plates in a chase or on a slab, the entire

device become so hot, from the repeated operations of the steam table, as to be additionally difficult to handle.

In the present preferred embodiment of the invention, the tool comprises a relatively long stem portion 1, which may be of ordinary round iron rod of about a half-inch in diameter, although specific dimensions are immaterial except as to securing a sufficiently sturdy construction of the device. At the outer end thereof, the stem 1 is provided with a hand grip 2 of suitable or convenient form.

The other end of the tool engages with a properly formed recess in the chase or slab or in a ring projecting from the end thereof, or with any suitable engaging device formed in or affixed thereto. As embodied, this end of the tool is formed into a hook 3 curved or bent upwardly from the stem 1.

Suitable rolling means, or a rolling support, is provided located at or near the juncture of the stem and hook portions of the tool. As embodied, a rod or shaft 4 is arranged at right angles to the stem 1 at the juncture of the stem and hook, and rollers 5 and 6 are mounted upon the rod 4 at either side of the stem. Suitable means for retaining the rollers in position are provided, and as shown washers 7 and 8 are mounted on the rod 4 outside the rollers 5 and 6, the ends of the rod being slightly upset outside the washers.

In Fig. 3 the manner of using the device is shown. The tool is grasped in the hand of the workman and is held more or less approximately vertically, in which position the hook enters the recess 9 or ring 10 in the chase or slab 11, which rests flat upon table 12. The tool is then drawn downwardly or backwardly, the hook passing thereby into secure engagement with the recess or ring, and lifting that end of the chase or slab from the table, the rollers 4 and 5, in this position resting upon the table 12 and holding the tool just clear of the table.

The chase or slab may then be readily pulled or pushed along the table 12 in the manner and for the purposes already described or indicated, or for other convenient or necessary purposes.

The labor and time involved in pushing the slabs or chases in the usual way are very greatly reduced, and the suction which commonly holds a slab or chase to the molding table is immediately and easily broken. The trouble and delay due to handling hot slabs or chases is avoided, and the use of cumbrous, bulky and expensive kicker mechanisms and like devices is done away with.

What we claim is:—

1. A stereotyper's and printer's hand tool adapted to engage and raise one end of a chase or slab and slide it in and out upon the steam table, said tool having a longitudinally extending stem with a hand grip at the top thereof, the lower end of the stem terminating in an upwardly curved portion adapted to engage with the chase or slab, and a pair of outwardly extending rollers, one at either side of the stem, at the beginning of said upwardly curved portion.

2. A stereotyper's and printer's hand tool adapted to engage and raise one end of a chase or slab and slide it in and out upon the steam table, said tool having a longitudinally extending stem with a hand grip at the top thereof, the lower end of the stem terminating in an upwardly curved portion adapted to engage with the chase or slab, and a rolling support at the beginning of said upwardly curved portion.

3. The combination with a chase having a hook-receiving device at one end thereof, of a stereotyper's and printer's tool having a longitudinally extending stem with a hand grip at the outer end thereof and a hook curving from the opposite end of the stem and adapted to engage the hook-receiving device on the chase while the chase is lying on the table and to raise said end of the chase and to slide the chase along the table supported upon the tool and upon the opposite end of the chase.

4. The combination with a chase having a hook-receiving device at one end thereof, of a stereotyper's and printer's tool having a longitudinally extending stem with a hand grip at the outer end thereof and a hook curving from the opposite end of the stem, a rolling support at the juncture of the hook and stem, the hook being adapted to engage the hook-receiving device on the chase while the chase is on the steam table and to raise said end of the chase and to slide the chase along the table supported upon said rolling support and upon the opposite end of the chase.

5. A stereotyper's and printer's tool adapted to slide a chase or slab along a steam table or other support, said tool having a longitudinally extending stem with a hand grip at the top thereof, the bottom of the stem terminating in an upwardly curved portion adapted to engage with one end of the chase or slab to lift said end from said support with the tool extending away from the chase, the tool having an intermediate portion upon which the tool is supported to slide the chase with one end resting upon said support and with its opposite end supported by the tool.

In testimony whereof, we have signed our names to this specification, in the presence of two subscribing witnesses.

SYDNEY B. HOPKINS.
CHARLES JELINEK.

Witnesses:
WALTER E. POWERS,
GEORGE W. SPURGEON.