Oct. 23, 1923. 1,471,443

G. H. BRACHT

INTERCHANGEABLE STEEL TYPE HOLDER

Filed Jan. 27, 1923

Fig. 1.

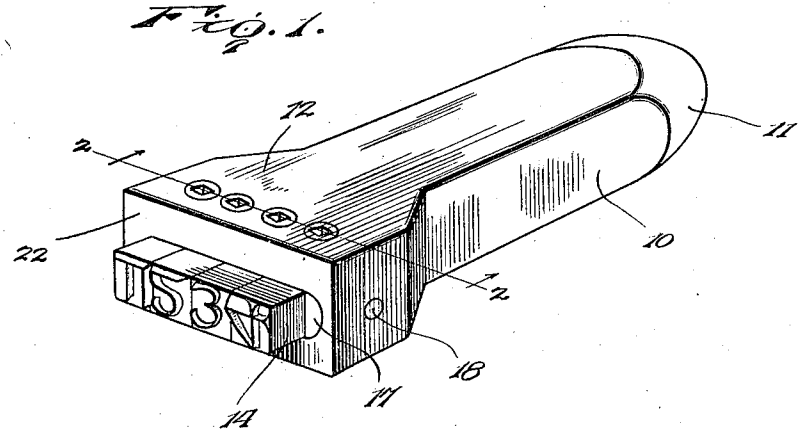


Fig. 2.

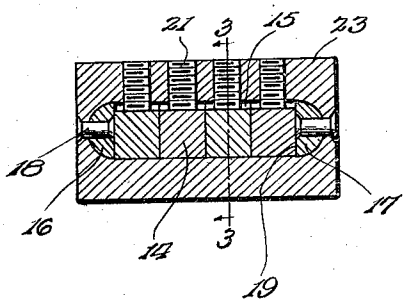


Fig. 3.

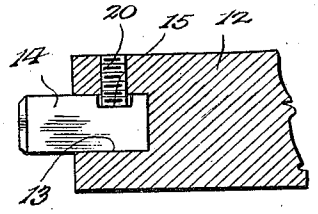


Fig. 6.

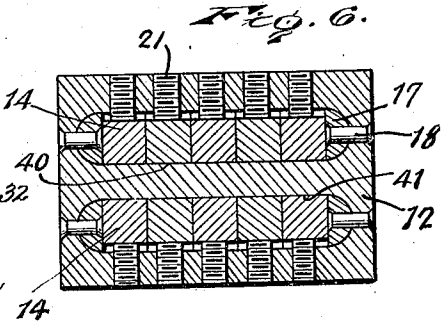
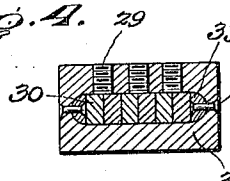


Fig. 4.



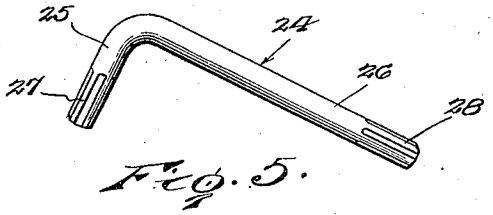


Fig. 5.

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Patented Oct. 23, 1923. 1,471,443

UNITED STATES PATENT OFFICE.

GEORGE H. BRACHT, OF CLEVELAND, OHIO.

INTERCHANGEABLE STEEL-TYPE HOLDER.

Application filed January 27, 1923. Serial No. 615,263.

To all whom it may concern:

Be it known that I, GEORGE H. BRACHT, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Interchangeable Steel-Type Holders, of which the following is a specification.

The present invention relates to steel type holders and the main object of the invention is to provide a holder of this character that will permit an easy exchange of types and yet secure the steel types very firmly in the holders during the stamping process.

By means of these holders it is possible to make good impressions upon hard metal or wood surfaces with the characters in perfect alinement and uniform depth on the article to be stamped.

Holders of this character, in which the types are assembled and retained by use of a single set screw pressing all the types towards one side of the cavity in which they are held are well known. It is evident that no individual setting of a steel type is possible in such holders as they are all dependent on the single set screw.

In the present invention each steel type is provided with a separate set screw and it can accordingly be adjusted independent of the rest of the types contained in the holders, the latter accommodating two to twenty types or more. For this reason the holders forming the subject matter of the present invention are provided with a series of threaded apertures on the front face of the holder, in which apertures the set screws are engaged so as to secure each steel type or possibly two when the types are small.

It is evident that by means of this arrangement time is gained when it is necessary to exchange the type, as for instance, if articles are to be numbered in consecutive order, the unit ordinal would have to be exchanged between each stamping and accordingly only one of the set screws would be moved to replace the unit ordinal, whereas in the other form of type holders the entire line of type contained in the holder would be disturbed and there is danger that the whole line might fall out of the holder.

Another advantage of the construction of the present holder is that the set screws when clamping the types are all flush with the front face of the holder, so that all injuries to the user's hands are avoided, there being no projecting parts on the holder during operation.

In the accompanying drawing one embodiment of the invention is illustrated, and;

Figure 1 represents a perspective view of the holder with the line of steel types in position;

Figure 2 is a transverse section along line 2—2 of Figure 1;

Figure 3 is a longitudinal section along line 3—3 of Figure 2;

Figure 4 is a section similar to Figure 2 of a slightly modified form of the holder suitable for smaller type;

Figure 5 is a perspective view of a tit wrench suitable for tightening the set screws in the type holder; and

Figure 6 is a section similar to Figures 2 and 4 showing the arrangement of the types in a two line holder.

The holder consists of a handle portion 10 of preferably square, round or hexagonal cross section with a slightly tapered hardened end 11 against which the hammer blows are applied, when the device is in use. The head 12 of the holder is preferably of the same thickness as the handle 10, but widened out in accordance with the number of types it is intended to carry. The end of the head 12 is provided with a recess 13 of sufficient depth to comfortably and securely seat the steel types 14. The steel type is preferably of rectangular cross section and each provided with a milled notch or groove 15 running transversely across its shank. The width of the recess 13 agrees closely with the height of the type, and the depth of the recess is about two thirds of the length of the type, terminating with the flat bottom against which the type is firmly seated, as seen in Figure 3.

The recess 13 is preferably produced by drilling two parallel holes, one near each side of the head 12, to the depth required by the recess and then milling out the intermediary material. The rounded ends 16 of the recess are thereupon filled by means of the half round filling pieces 17, which may be provided with short shanks 18 tapped or riveted for rigidly securing the same in the recess, or the half round filling pieces 16 may be welded in the head 12

or separate rivets may be used for the same purpose. The distance between the flat opposing faces 19 of the filling pieces determines the length of the recess 13 and should be equal to the added thickness of the types to be carried in the holder, in Figure 2, four being shown. It is evident that any other number may be seated in the recess and that the length thereof in such a case has to be modified.

At a uniform distance from the end surface 22 of the head 12 are provided threaded openings 20 adapted to receive set screws 21. These openings 20 are positioned so that, when the set screws 21 are tightened against the types, the inner ends of the screws will engage in the respective notches or grooves 15 in the steel types. These set screws are preferably of the socket head kind, adapted to receive a tit wrench and of such a length that when they are turned up tightly against the types 14 and engage in the grooves or notches 15, no part thereof will project beyond the front face 23 of the head 12, as clearly seen in Figures 2 and 3.

A convenient form of tit wrench is shown in Figure 5. This wrench 24 may be manufactured of suitable wire and bent into L-shape, with a short shank 25 and a long shank 26, the ends of which are milled as at 27 and 28 to fit the socket heads of the set screws 21. To tighten or loosen the screws, the short shank 25 is inserted in the socket head of the screws using the long shank 26 as a lever, while to unscrew the said screws, after loosening them or to quickly screw down the same, the end of the long shank is entered in the socket head of the screws using the short shank 25 as a lever.

For smaller type holders, the construction indicated in Figure 4 is preferable, in which each set screw 29 is adapted to tighten two of the types 30 in the recess of the head 31. In this case, the notches or grooves across the shanks of the types 30 may be entirely omitted. The small holder is otherwise of similar construction to what has been described in connection with Figures 1, 2 and 3, and the set screws are also in this case turned up to be flush with the front face of the holder or to come slightly below the same. Half round filler pieces 33 are also used in the smaller holder, and secured by means of rivets 32 or the like.

The type holder may be manufactured from square, round or rectangular steel blanks, one end of which is upset to form a flat broad head 12, as seen in Figure 1. In this manner the front and rear faces of the holder form flat plain surfaces, while the sides of the head project in both directions from the handle 10. After the type holder has been forged into this shape, it may be drilled and milled to provide recesses 13 for the type, as already described and the threaded apertures 20 made through the front faces into the recesses of the holder.

These holders may also be used in punch presses of machines or any other kinds of marking presses, in which case the handle or shank 10 takes the section of the socket in this press or machine.

In some cases it is desirable to make a two line marking on metal or wood and in that case two line holders are provided as indicated in Figure 6. In that case two parallel recesses 40 and 41 are furnished in the holder, each having separate clamp or set screws 21 arranged on opposite sides of the holder, as indicated in this figure. The construction is otherwise identical to that for the single line holders. It is evident that in the two line holders different sized types may be used in the recesses, for which reason the latter are made of different width. These recesses are also machined in the same manner as already described, having half round filler pieces at each end, which are preferably secured in position by means of tapped rivets.

Having thus described the invention what is claimed as new is:

1. A steel type holder comprising a handle, a head integral with the handle and provided with a recess of rectangular cross section forming a seat for a line of steel types, and means for securing the types with their adjacent sides contacting in said recess, said means comprising socket-head set screws, suitable apertures for said set screws being provided in said head between the recess and the front face thereof and said set screws having their outer ends flush with the front face of the head when in position to secure the types.

2. A steel type holder comprising a handle, a head integral with the handle and provided with a recess having flat, parallel sides and semi-cylindrical ends, correspondingly shaped fillers for said ends forming a seat of rectangular cross section between said fillers and said sides for a line of steel types, and means for rigidly securing the types in said seat, said means comprising socket-head set screws, suitable apertures for said set screws being provided in said head between the recess and the front face thereof, the inner ends of the set screws being adapted to engage in notches provided in said types and each screw engaging with one of the types when the outer ends of the screws are flush with the front face of the head.

3. A steel type holder comprising a handle, a head integral with the handle and provided with recesses having parallel sides and semi-cylindrical ends, correspondingly

shaped fillers for said ends forming a seat of rectangular cross section between said fillers and said sides for a line of steel types, suitable tapped apertures extending through the walls between each recess and the adjacent surface of the head, and socket-head set screws engaging in said apertures, said screws being flush with the outer faces of the head when engaging with their inner ends in suitable notches provided in said types thus clamping said types in the seats.

In testimony whereof I affix my signature.

GEORGE H. BRACHT. [L. S.]