

(Model.)

J. W. HORNER.
PRINTING APPARATUS.

No. 316,268.

Patented Apr. 21, 1885.

Fig. 1.

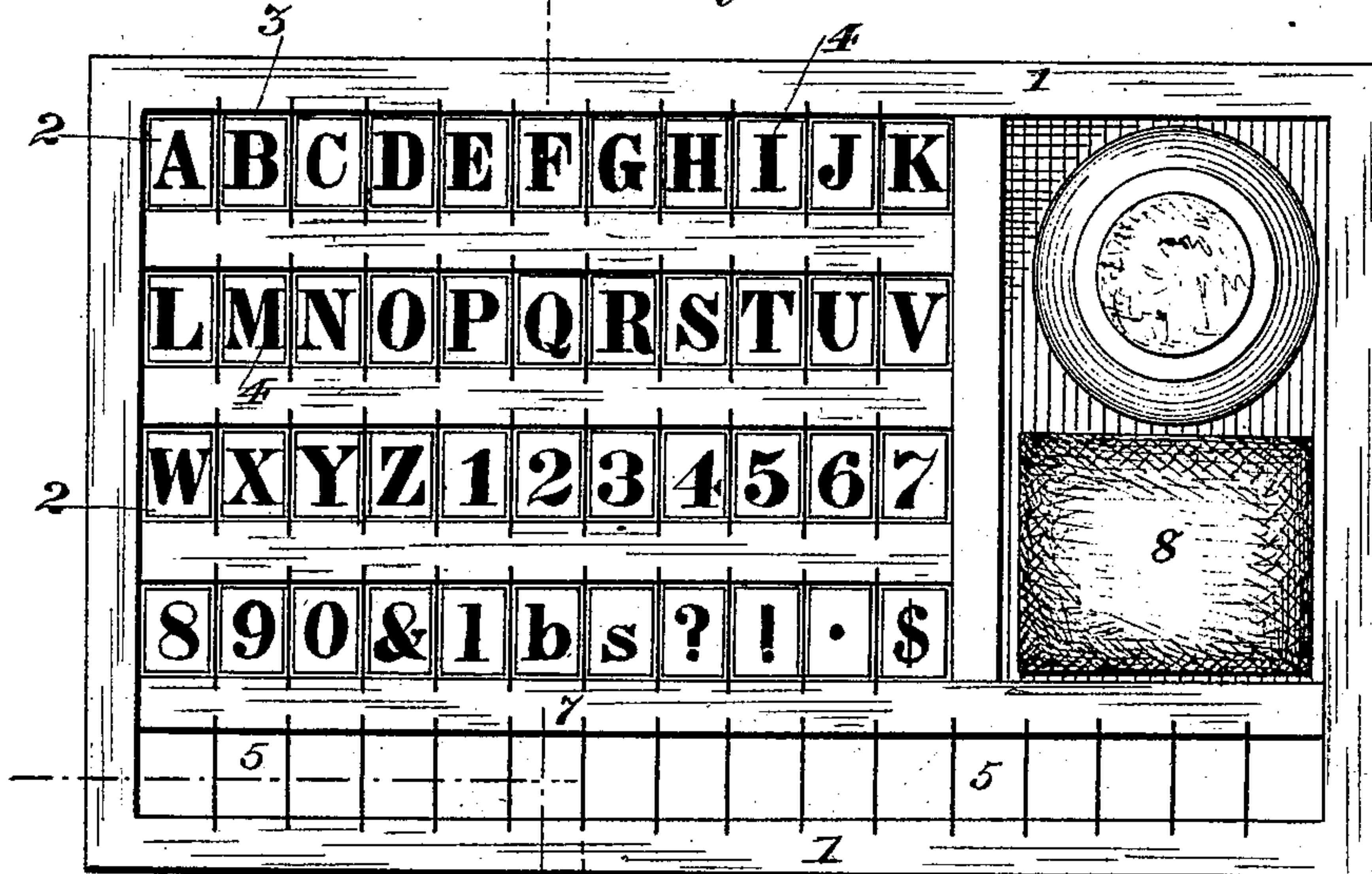


Fig. 2.

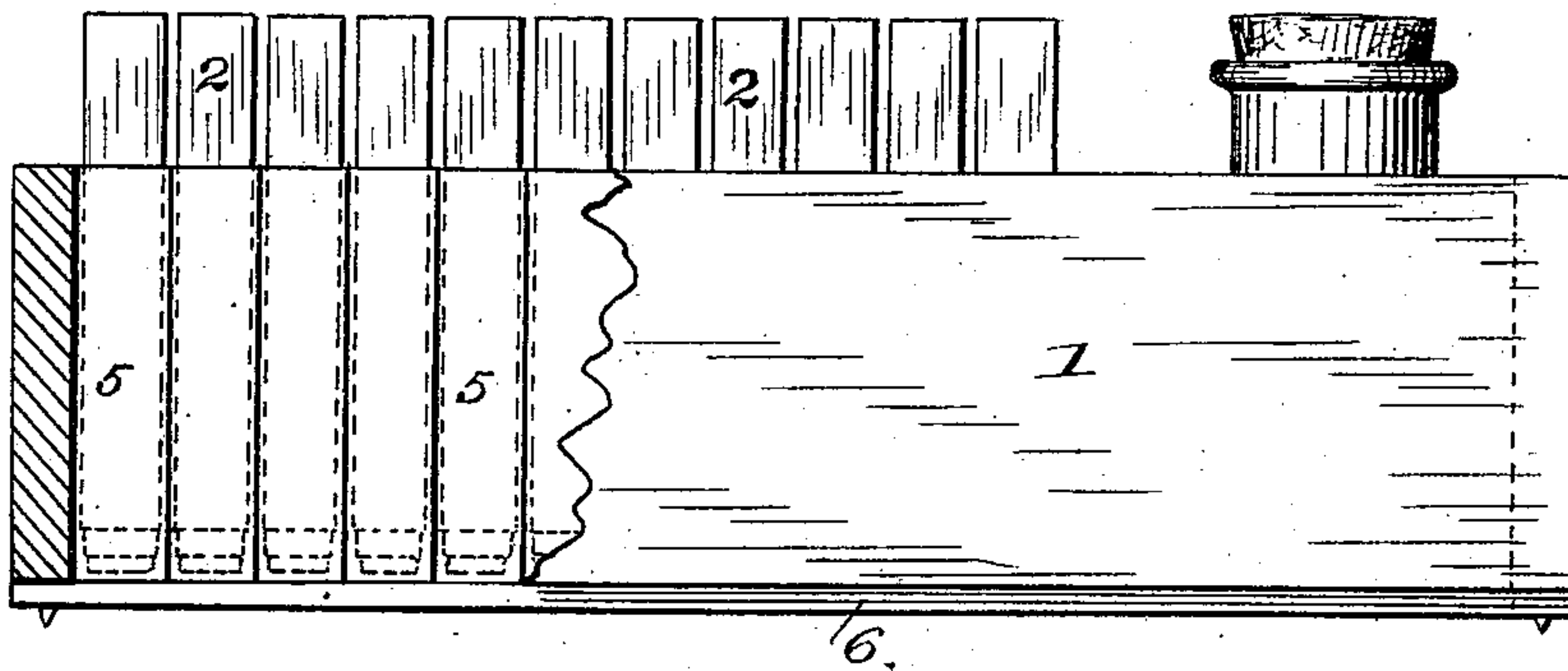
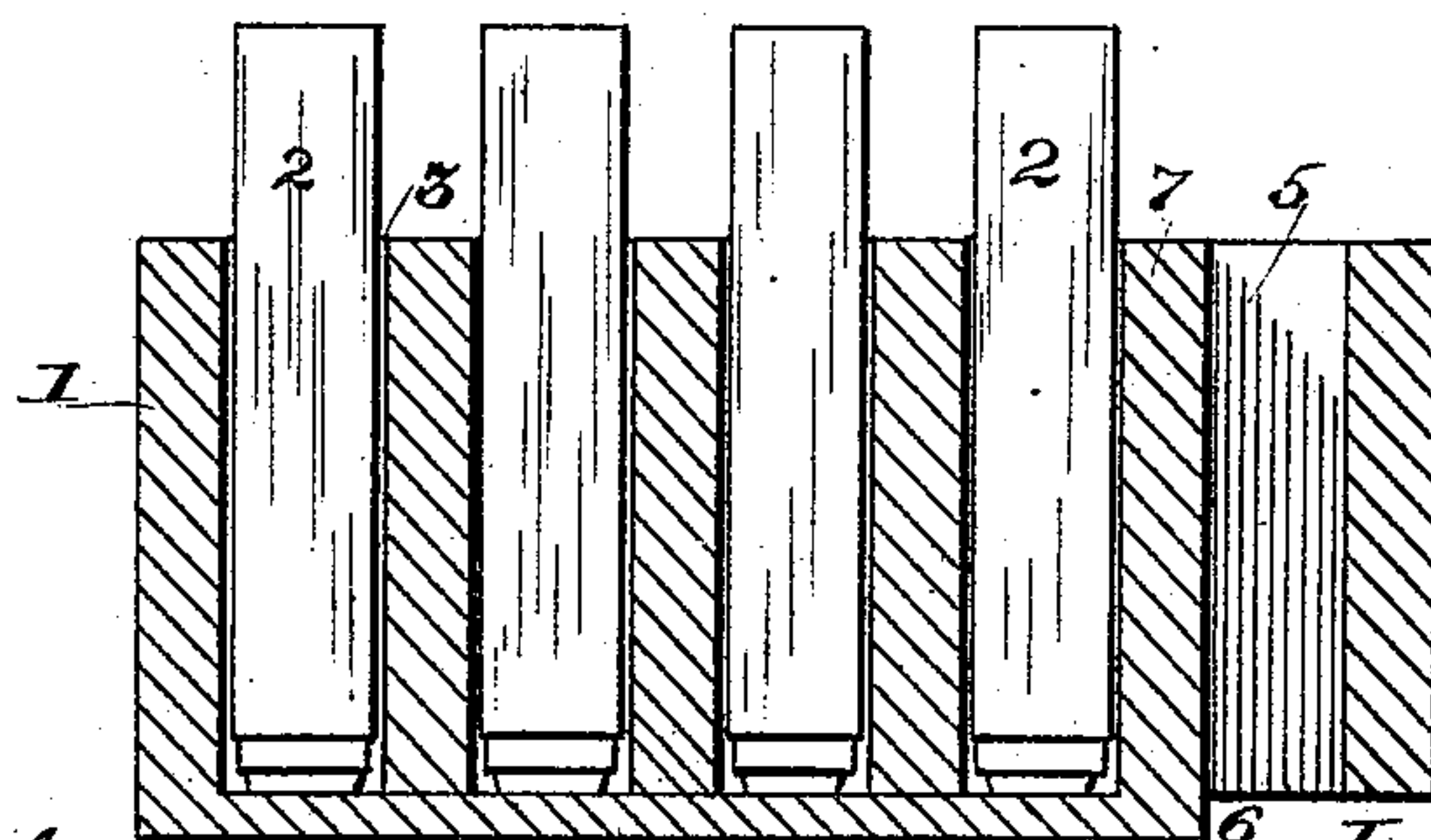


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

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PRINTING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 316,263, dated April 21, 1885.

Application filed July 10, 1884. (Model.)

To all whom it may concern:

Be it known that I, JOSEPH W. HORNER, a citizen of the United States, residing at New York city, New York, have invented new and useful Improvements in Printing Apparatus, of which the following is a specification.

This invention relates to that class of apparatus which is used for printing upon any article or surface names, numbers, or other characters for various business purposes. Heretofore this has been accomplished by stencil-plates, or by a cast-rubber printing-plate, or by setting up the type in a temporary chase having a handle, which may be used in a manner similar to that in which the ordinary hand-stamp is employed. The first two methods require that a separate plate be constructed for each mark, and the third requires that the type be set up, justified, and locked in the type stick or holder, said type being distributed after each separate series of marks is finished. The latter method also necessitates the employment of duplicate types in order to enable the operator to use the same letters repeatedly when the same are called for. This largely increases the cost of the apparatus, and renders the operation comparatively complicated. I propose to avoid all these objections, and by my invention to enable any person to print any name, address, or other mark from a single series of twenty-six types, with the ordinary punctuation types and those printing the nine digits or other necessary characters.

My invention consists in the apparatus hereinafter described and claimed for practicing said method, and in the several novel features of construction and combinations of parts hereinafter set forth, and definitely pointed out in the claims.

Referring to the drawings, Figure 1 is a plan view of one form of apparatus for practicing my invention. Fig. 2 is a front elevation of the same, part of the casing being broken away. Fig. 3 is a transverse section of Fig. 1.

In the said drawings, the reference-number 1 indicates the type-box, which is of any suitable size or form. I usually construct these boxes in such a manner that they shall contain the twenty-six letters of the alphabet, the

most necessary punctuation markings, and the digital numbers from 1 up to 9, together with the zero. These types are mounted upon blocks 2, said blocks affording a convenient means of manipulating the type, as they may be made of any suitable length, and may be provided upon their upper or exposed ends with a tag or label of any kind indicating the character of type mounted upon their lower extremities. The type-blocks are each set in a separate case, 3, the entire series being arranged in the smallest possible space in such manner that the type-symbols 4 are exposed to the eye of the operator, the types containing the numerals and the marks of punctuation being arranged in the same series with the alphabetical type. Extending along the front of the type box or case 1, I form a series of type-cells, 5, in each of which the type-blocks 2 may be inserted, and whereby the type ends of the several blocks may be accurately guided into alignment. By reference to Figs. 2 and 3 of the drawings, it will be seen that the type-cells 5 extend along the front of the type-boxes, and that by removing any one of the type-blocks, inking it, and inserting it within the type-cell, and forcing it downward an impression will be made upon the paper or other substance laid below. Immediately below the series of type-cells 5 the type box or case 1 is rabbeted, as shown at 6 in Figs. 2 and 3. This affords a space within which the paper, card-board, or other material may be inserted and accurately aligned, such rabbit also subserving the function of preventing the lower ends of the cells 5 from coming in contact with the paper which is placed beneath such cells to be printed. The rubber type will carry ink down into the cells and leave the lower edges thereof soiled; but by providing the rabbit 6 such edges will not be liable to soil the paper.

For convenience I place in the case an ink-pad, 8, to which each type may be applied as it is removed for use.

The mode of operation is as follows: The paper, card, or other article is pushed under the rabbit 6 until its straight edge comes in contact with the shoulder 7; but if desired the edge of the paper can be inserted beneath the bottom wall of the box, so that the latter will

serve as a clamp to hold the paper in proper position. The type are then withdrawn successively from the type-boxes, inked upon the pad, inserted within the type-cells 5, beginning at the left, until the entire series is exhausted, and the print finished. Should it, however, be necessary to prolong the impression beyond the length of the series of type-cells, the paper or card may be moved, 10 the position being regulated by looking through the open type-cells.

It will be seen that by this means I can print easily, rapidly, and correctly with but one set of letters or other characters, avoiding the use of numerous duplicates of each 15 type, as well as the other paraphernalia by which the cost and bulk of the apparatus is greatly increased.

What I claim is—

20 1. The apparatus herein described for hand-

printing, consisting of a box containing a series of type-cells having a space beneath to permit the insertion of the paper or other material, and a suitable series of type-cases, substantially as described. 25

2. The combination, with a series of type-blocks, of a single type-box and a series of type-cells, having a rabbet below to permit the insertion of the paper or other material, and a shoulder against which the edge of the 30 paper abuts to secure a proper alignment, substantially as and for the purposes set forth.

In testimony whereof I have affixed my signature in presence of two witnesses.

JOSEPH W. HORNER.

Witnesses:

J. H. CAIN,
SAML. W. CLARK.