W. R. ALLEN.

HOLDER FOR PRINTING DEVICES.

APPLICATION FILED SEPT. 22, 1913.

1,122,840. Patented Dec. 29, 1914.

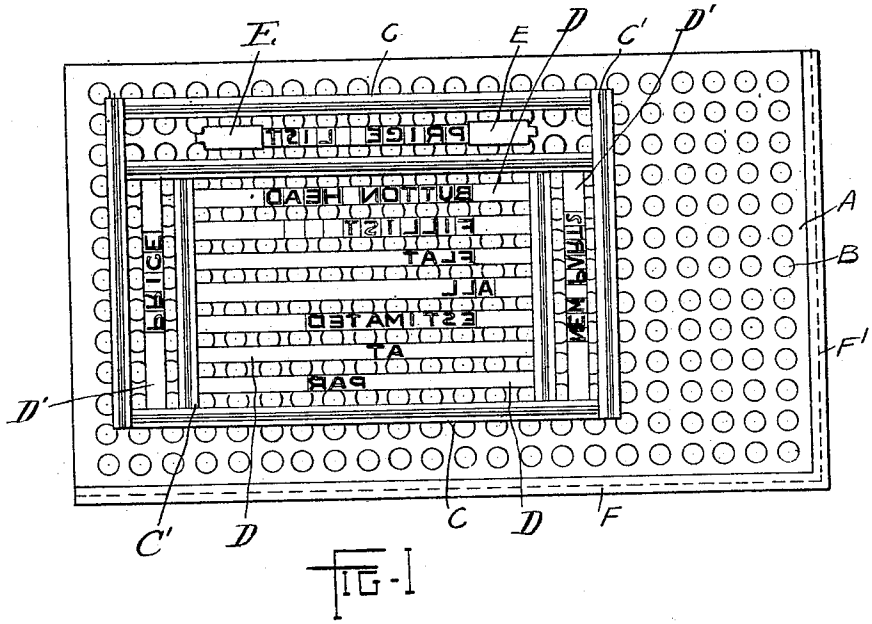


FIG. 1

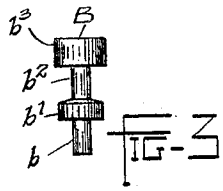


FIG. 3

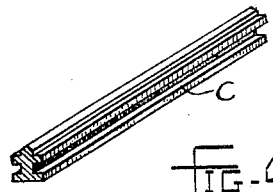


FIG. 4

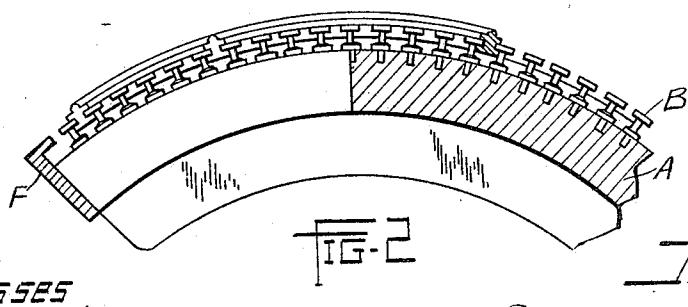


FIG. 2

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UNITED STATES PATENT OFFICE.

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HOLDER FOR PRINTING DEVICES.

1,122,840. Specification of Letters Patent. Patented Dec. 29, 1914.

Application filed September 22, 1913. Serial No. 791,000.

To all whom it may concern:

Be it known that I, WILLIAM R. ALLEN, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented a certain new and useful Improvement in Holder for Printing Devices, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings.

The object of this invention is to provide a simple and effective holder for printing devices which may extend in different directions; for example, in the form of horizontal and vertical rules, or in a printing form having horizontal and vertical type lines.

To this end my holder consists of a suitable body having pins with overhanging heads, the pins being arranged in parallel rows, the pins of each row alining with those of the adjacent row so that continuous channels or spaces are provided in two directions at right angles to each other. The printing devices held by these channels are preferably bars grooved on their opposite sides; they may be ruled strips, or cast slugs, or of other form. The body of the holder may be flat or it may be a segment. If the latter, the printing bars extending parallel with the axis are straight, while the transverse bars are concentric of such axis. Any two adjacent rows of pins, whether extending longitudinally or transversely, constitute, in effect, a type channel into which the proper shaped printing bar may be slid and held.

The invention is hereinafter more fully described and its essential characteristics set out in the claims.

In the drawing, Figure 1 is a plan of a flat type-holder or a development of an arcual holder embodying my invention, a type form of rules and character type being shown as mounted in the holder; Fig. 2 is an end view, partly sectional, of my holder in segmental form; Fig. 3 is a side elevation of one of the pins; Fig. 4 is a perspective view of one of the ruling bars.

Referring to the parts by letters, A represents the body of the holder, which, as stated, may be a plane or curved member, as desired; B represents the pins which are set in tiers of rows into the body member.

Each pin has a shank b adapted to enter and make a snug contact with a suitable socket or hole in the body member. Above the shank is a shoulder b^1; above this is a reduced neck b^2, and above this a head b^3. The pins may be most economically made round, but they may be of other form, if desired. The distance between the pins in any row is preferably the same as the distance between the adjacent pins of different rows, so that the longitudinal and transverse spaces between them are corresponding in cross section. It will thus be seen that, when the pins are in place in the tiers of rows in the holder, channels are provided extending lengthwise of the holder and transversely thereof, and grooved printing bars may be placed in these channels and held by the overhanging heads b^3.

Fig. 1 shows at C straight rule bars inserted in longitudinal channels and at C^1 rule bars inserted in transverse channels. The latter bars are straight or curved, according to whether the holder is flat or segmental. Similarly D and D^1 indicate longitudinal and transverse type slugs. In some instances the slugs are shown as of less length than the distance between the rules, in which case they are locked against longitudinal movement by suitable plugs, designated E. These plugs may conveniently be spring clips of the form shown and claimed in Patent No. 1,031,447, granted to The American Multigraph Company as assignee of Ferdinand Hohenberger.

Figs. 1 and 2 indicate at F and F^1 flanged strips at the side and the end of the holder to coöperate with the first row of pins, enabling the printing bars to be set near to the edge.

Having thus described my invention, what I claim is:

1. A holder for printing devices consisting of a body portion, and a series of pins having overhanging heads spaced from the body and carried by the body in tiers of rows, combined with slugs grooved on their opposite sides and adapted to extend beneath such heads.

2. The combination of a body, pins carried thereby in fixed tiers of rows, each pin having means for securing it to the body, an exposed neck, and an enlarged head held by the neck away from the body.

3. The combination of a holder, a series of pins carried thereby in parallel rows, the pins of adjacent rows alining, whereby rows of pins extend in two directions at right

angles to each other, each pin having a shank occupying an opening in the holder, a collar outside of the shank, a reduced neck beyond the collar, and a head beyond the reduced neck.

4. The combination of a holder, a series of pins having heads spaced from the body and carried thereby in parallel rows, the pins of adjacent rows alining, whereby rows of pins extend in two directions at right angles to each other, and printing bars grooved on their opposite sides and adapted to be inserted in channels between the pins and extend beneath their heads.

5. In a device of the character described, the combination of a segmental member, tiers of rows of pins held thereby, said pins having overhanging heads, whereby longitudinal and transverse channels are provided, and straight and arcual printing bars held in longitudinal and transverse channels.

6. The combination of a segmental body, a series of pins carried thereby in parallel rows, the pins in each row being the same distance apart as adjacent rows and alining with the pins of the adjacent row, whereby longitudinal and transverse channels are provided, and straight and arcual printing bars held in the channels at right angles to each other.

7. The combination of a body, parallel rows of individual pins with heads spaced from the body, said pins being carried by the body and spaced apart to provide channels at right angles to each other, and a flange carried by the body adjacent to the first row of pins and in alinement with the heads thereof to provide an overhanging channel.

8. The combination, with a holder, of a series of round pins carried thereby in parallel rows, the corresponding individuals in the several rows alining transversely, each pin having a reduced neck and a head spaced from the holder, whereby undercut channels are provided extending in different directions.

9. The combination, with a grooved printing bar, of a holder therefor comprising a body carrying overhanging pins alining in rows in two directions at right angles to each other, said pins having heads spaced from the holder.

10. In a device of the character described, the combination of a holder having separated pins in rows, the pins having heads which overhang their shanks and are spaced from the face of the holder, and printing bars grooved on their opposite sides and thus having ribs adapted to extend beneath the heads of the pins in adjacent rows.

11. The combination, with a body, of a series of separated pins carried thereby and arranged in rows, said pins having heads spaced from the face of the body, and a slug grooved on its opposite sides and taking its printing pressure on the outer face of the pin heads.

12. The combination of a body, a series of separated pins mounted therein in parallel rows, and a ruling device grooved on its opposite sides and mounted between said pins in adjacent rows.

13. The combination of a base, pins carried thereby and arranged in tiers of rows, the pins in each row being separated and the different rows being separated, and rules mounted at right angles to each other between the rows and transversely of rows between pins to present a box form.

14. In a device of the character described, the combination of a body, pins carried thereby in tiers of rows, the pins in each row being separated and the different rows being separated by a corresponding distance, and grooved slugs and rule strips occupying spaces between the pins of adjacent rows and transversely of several rows between different pins.

15. The combination of a base and a plurality of pins carried thereby in parallel rows, the pins of the various rows alining transversely and being separated from their neighbors by a distance corresponding to the space between the rows, said pins having their heads spaced from the base.

16. The combination of a base and a plurality of pins carried thereby in parallel rows, the pins of the various rows alining transversely and being separated from their neighbors by a distance corresponding to the space between the rows, said pins having their heads spaced from the base, and grooved printing devices extending in two directions at right angles and held between the rows of pins and between adjacent pins in different rows respectively.

17. The combination of a segmental base, a plurality of parallel rows of pins mounted on the convex side of the base parallel with the axis of the segment, each pin having a head spaced from the segment and a reduced shank, and straight and arcual printing devices grooved on their opposite sides and mounted in two directions at right angles to each other between adjacent rows of pins and between adjacent pins in different rows.

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

WILLIAM R. ALLEN.

Witnesses:
GEORGE T. TRUNDLE,
H. C. GAMMETER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."