## T. J. SHEEHAN. PRINTERS' CHASE.

(Application filed Mar. 18, 1901.) (No Model.) Fig. I. Fig. 4. Fig. 5. Fig. 3.

Reg. J Fig. 2. Fig. 6. [k] Witnesses: Frank H. Poff.

Orthur H. Poff.

## United States Patent Office.

THOMAS J. SHEEHAN, OF BUFFALO, NEW YORK.

## PRINTER'S CHASE.

SPECIFICATION forming part of Letters Patent No. 676,921, dated June 25, 1901.

Application filed March 18, 1901. Serial No. 51,777. (No model.)

To all whom it may concern:

Beit known that I, Thomas J. Sheehan, a citizen of the United States, residing at the city of Buffalo, in the county of Erie and 5 State of New York, have invented a new and useful Improvement in Printers' Chases, of which the following is a specification.

This invention relates to an improved prin-

ter's chase.

Heretofore ordinary bars separate from the chase and clamped between its inner edge and the type have been employed as guards for preventing battering of the face of the type by the platen of the printing-press and 15 for avoiding cutting of the inking-rollers by the face of the type. Such guards are inconvenient in use, and as they occupy a portion of the type-space they correspondingly reduce the capacity of the chase.

The principal object of my invention is to combine the type-guards with the chase in such a manner that they are always at hand and so that they can be expeditiously moved into position for use or into an inoperative

25 position when not required.

The invention has the further objects to so apply the type-guards to the chase that they do not occupy any of its type-space and to provide simple and effective means for hold-30 ing the movable type-guards in either of

their positions.

In the accompanying drawings, Figure 1 is top plan view of a chase provided with my improved type-guards. Figs. 2 and 3 are fragmentary longitudinal sections in lines 22 and 3 3, Fig. 1. Fig. 4 is a fragmentary end view of the chase. Fig. 5 is a fragmentary transverse section in line 5 5, Fig. 1. Fig. 6 is a fragmentary perspective view of one of the type-guards. Fig. 7 is a fragmentary perspective view of one corner of the chase, with the adjacent type-guard removed.

Like letters of reference refer to like parts

in the several figures.

A A' are the top and bottom bars of the chase, and A<sup>2</sup> the end bars connecting the same.

B represents type-guards and roller-bearers arranged at opposite ends of the chase 50 and movably applied to its end bars in such 1 and in Figs. 3 and 5.

a manner that they can be moved into a position in which their faces project about flush with the face of the type locked in the chase or moved to a position in which they lie flush with or below the face of the chase, so as to 55 be inoperative and out of the way. For this purpose each type-guard is preferably hinged or pivoted at its upper inner edge to the adjacent end bar A<sup>2</sup> of the chase by journals or pintles c, arranged at the ends of the guard 60 and seated in sockets or bearings d, formed in the face of the chase, as shown in Figs. 1, 3, 5, and 7. Each end bar A<sup>2</sup> is provided in the outer marginal portion of its face with a pocket or recess e, which receives the cor- 6; responding type-guard B when the latter is turned into its inoperative position, as shown at the left-hand side of Fig. 1 and in Figs. 2 and 4. The type-guards extend throughout the length of the end bars A<sup>2</sup> and occupy 70 about one-half the width thereof, while the faces of the type-guards are substantially flush with said end bars when in their inoperative positions.

The pintles c are preferably retained in 75 their bearings by flat springs f, secured to the face of the top and bottom bars A A' of the chase and extending across the open outer ends of the bearings. In the preferred construction shown in the drawings these pintles 80 are oblong in cross-section and their wide dimension is greater than the depth of their bearings, while their narrow dimension is about the same as the depth of their bearings. By this construction the springs f are 85 deflected in reversing the hinged type-guards from one position to the other and serve as yielding stops which resist turning of the pintles in both directions, thereby automatically and firmly locking the type-guards in either 90

of their positions.

When the type-guards are not required, they are simply turned down into the pockets e of the chase, as shown at the left-hand side of Fig. 1 and in Figs. 2 and 4, and when 95 it is desired to protect the type the guards are turned upwardly out of the pockets e, so that their backs rest against the face of the chase, as shown at the right-hand side of Fig.

To facilitate the reversal of the type-guards from their inoperative to their operative position, the recessed portions of the chase are provided in their outer edges with thumb- $f(x) = \frac{1}{2} \int_{-\infty}^{\infty} f(x) \, dx$ 

As shown in the drawings, the end portions h of the type-guards are rounded or beveled to permit the inking-rollers of the printing-press to roll freely over the ends of the guards

10 without jar or injury to said rollers.

As the type-guards are attached to the chase, they are always in convenient reach and not liable to be mislaid or lost, and they can be readily moved out of the way or into position for use. By applying the guards to the end bars of the chase, as shown, they remain wholly outside of the type-space of the chase both in their operative and inoperative positions and do not therefore reduce the capacity of the chase, as do the ordinary guards placed within the chase.

I claim as my invention—

1. The combination with a printer's chase, of a movable guard for protecting the type, attached to the chase and extending throughout the width of its type-space, said type-guard being arranged to be shifted at will to a position in which its face is substantially flush with the face of the type in the chase, or to a position in which the type-guard lies below the face of the type, substantially as set forth.

2. A printer's chase provided in its face with a pocket or recess, and having a type35 guard constructed and arranged to enter said pocket when not in use, and to rest against the face of the chase when in use, for guard-

ing the type locked in the same, substantially as set forth.

3. A printer's chase provided with a re- 40 versible type-guard hinged to the face of the chase and arranged to project, in one position, flush with the face of the type locked in the chase, and to lie in its other position below the face of the type, substantially as set 45 forth.

4. A printer's chase provided in its face with a pocket or recess, and having a reversible type-guard hinged to the upper inner wall of said pocket and constructed to enter said 50 pocket when in its inoperative position, sub-

stantially as set forth.

5. A printer's chase provided with a reversible type-guard hinged to the face of the chase and arranged to project, in one position, flush with the face of the type locked in the chase, and to lie in its other position below the face of the type, and a locking device for retaining the type-guard in either of its positions, substantially as set forth.

of The combination with a printer's chase provided in its face with a pocket or recess and at the ends of said pocket with bearing-sockets, of a reversible type-guard provided at its inner edge with flat-sided pintles seated 65 in said sockets, and stop-springs extending across the outer ends of said sockets, substantially as set forth.

Witness my hand this 16th day of March,

1901.

THOMAS J. SHEEHAN.

Witnesses:

W. T. BUSHMAN, THEO. L. POPP.