

G. E. WALLIN.
CHUTE SPRING FOR LINOTYPE MACHINES.
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970,146.

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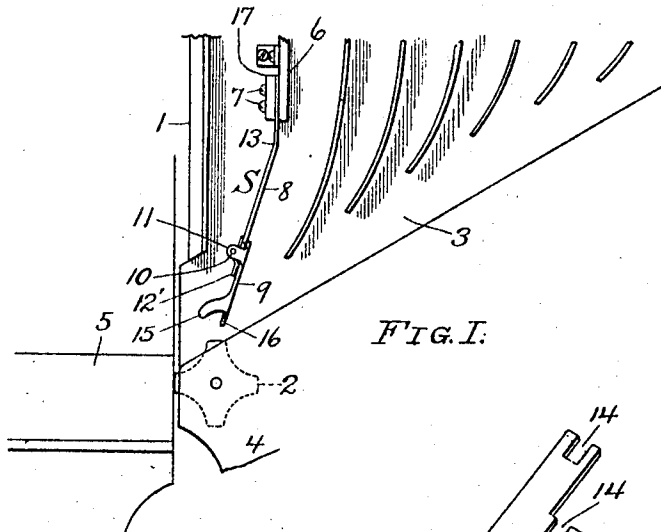


FIG. I.

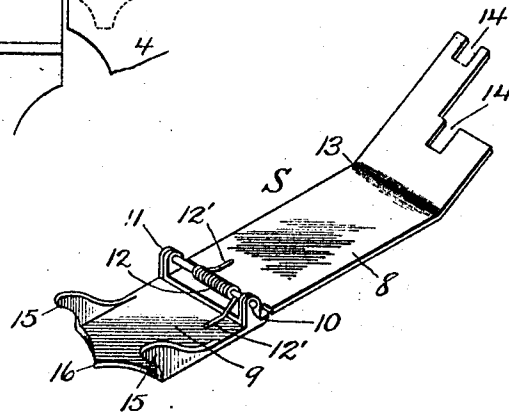


FIG. II.

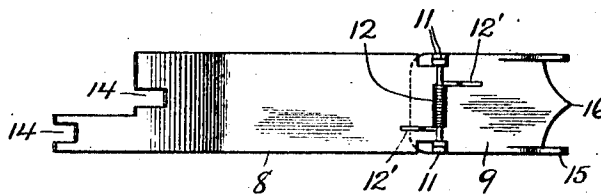


FIG. III.

WITNESSES:

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CHUTE-SPRING FOR LINOTYPE-MACHINES.

970,146.

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To all whom it may concern:

Be it known that I, GUSTAF E. WALLIN, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Chute-Springs for Linotype-Machines; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to the chute springs of linotype machines, and has for its principal object to provide a device of this class which will obviate blocking of two or more matrices when brought into impingement therewith.

A further object of my invention is to obviate breakage of the chute spring points.

A further object of my invention is to provide the improved details of construction, hereinafter described and pointed out in the claims; the preferred embodiment of the invention being illustrated in the accompanying drawing, in which:

Figure I is a front elevation of my improved spring in connection with adjacent portions of the chute and assembler of a linotype machine. Fig. II is a perspective detail view of the spring, detached. Fig. III is a plan view of the same.

Referring more in detail to the parts: In order that the location of the chute spring may be clearly understood, I have shown in Fig. I certain adjacent parts, to wit: the "space-band chute" 1, the "star-wheel" 2, the back 3 and portions 4 of the assembler chute, the assembler 5, and a bracket 6 which is rigidly secured to the chute back 3. The chute spring, designated S as a unit, is secured to said bracket 6 by the two screws 7 which fasten the chute spring in present use.

My chute spring consists of two principal members, 8 and 9, which are hingedly connected together by means of a pin 10 passing transversely through ears 11 struck up from the respective members 8, 9. Mounted on said pin 10 is a torsion spring 12, whose ends 12', bear upon the members 8 and 9.

As more clearly shown in Fig. II the inner end of the member 8 overlaps the ad-

jacent end of the lower member 9 so as to provide a stop whereby the member 9 can not be turned reversely beyond a straight alinement with the other member 8, but will be relatively movable in one direction upon the pivot pin 10. The spring 12 is sufficiently strong to overcome the friction at the pivotal bearings, and hence will always restore the member 9 to its normal relative position as shown. The upper member 8, which may be made of substantially rigid material, is bent, substantially as shown at 13, to provide for holding the lower spring member 9, and its upper end is provided with two slots 14, which are registered with the aforesaid screws 7. The lower end of the lower member 9 is provided with a pair of integral projections 15 which stand at an angle to the plane portion 9 and project leftwardly and downwardly. Their function is to engage the successive matrices in their path from the chute in such a way as to prevent the matrices from jumping out of the assembler 5. Between the projections or lugs 15, a central projection 16 may be provided for coöperation with the lugs or projections 15 in steadying the matrices. The object of this projection 16 is to prevent the matrices from turning as their lower ends pass the projections 15, and before they reach the proper place at the end of the assembler receptacle. Such turning of the matrices would block the further delivery of the following matrices and cause delay or result in transposition of the matrices. The projection 16 holds the matrices in their proper position until the pusher (not shown) begins to act on them, but it does not prevent their being turned to vertical position and advanced into the assembler receptacle, because when they have reached a certain point in their descent the projection 16 clears the well known V-shaped recess in the matrix. The mode of operation of the lateral projections 15 is well known in the art.

The operation of the device will be obvious. As each matrix slides down the bottom of the chute (from any channel thereof) it impinges upon the lower member 9 and moves same toward the left in a pivotal manner upon the pin 10; the projections 15, 16 performing their functions, and the spring restoring the part 9 to its normal position.

My improved device may be substituted for any chute spring in present use on lino-

type machines by engaging the slots 14 with the screws 7. A block or washer 17 may be inserted beneath the screw-heads, as shown in Fig. I.

5 Having thus described my invention, what I claim as new therein and desire to secure by Letters-Patent is:—

10 1. The combination, in a linotype chute for feeding matrices to an assembler of a chute spring constructed in two parts, said parts being connected by a transverse hinge, and a spring to resist the movement of one of the parts in one direction.

15 2. The combination, in a linotype chute for feeding matrices to an assembler of a chute spring comprising a fixed part adapted to be secured to a bracket, a movable part

hinged to the fixed part, and a spring to restore the movable part to initial position.

3. The combination, in a linotype chute 20 for feeding matrices to an assembler, of a chute spring comprising a fixed part adapted to be secured to a bracket, a movable part hinged to the fixed part and provided with lateral lugs adapted to engage a matrix, and 25 a spring to restore said movable part to initial position.

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

GUSTAF E. WALLIN.

Witnesses:

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