

F. HOHENBERGER.
CLIP FOR USE WITH TYPE HOLDING RAILS.
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1,031,447.

Patented July 2, 1912.

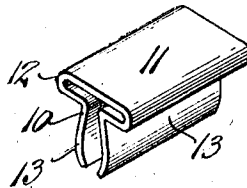


FIG. 1

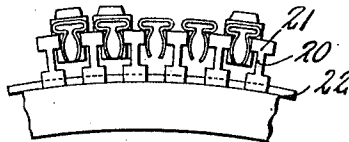


FIG. 2

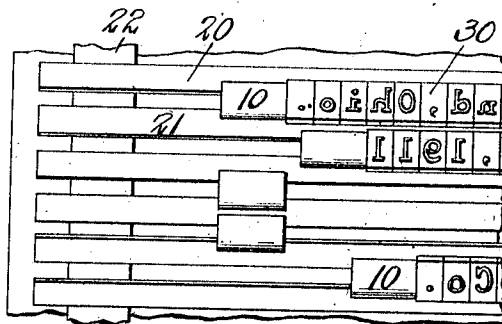


FIG. 3

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UNITED STATES PATENT OFFICE.

FERDINAND HOHENBERGER, OF CLEVELAND, OHIO, ASSIGNOR TO THE AMERICAN MULTIGRAPH COMPANY, OF CLEVELAND, OHIO, A CORPORATION OF OHIO.

CLIP FOR USE WITH TYPE-HOLDING RAILS.

1,031,447.

Specification of Letters Patent.

Patented July 2, 1912.

Application filed February 6, 1911. Serial No. 606,795.

To all whom it may concern:

Be it known that I, FERDINAND HOHENBERGER, a subject of the Emperor of Austria-Hungary, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented a certain new and useful Improvement in Clips for Use with Type-Holding Rails, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings.

This invention relates to a spring clip adapted to be used in conjunction with a typeholder composed of parallel rails.

One of the objects of the invention is to provide a very efficient and easily applied device for preventing lateral shifting of lines of individual type held by such rails.

My clip may also be effectively used to insure spacing of the rails equi-distantly in case they have any tendency to unduly bind or free the type.

My spring clip is a sheet metal stamping and accomplishes these results with great efficiency. It is shown in the drawings hereof and hereinafter described and claimed.

In the drawings, Figure 1 is a perspective view of my clip; Fig. 2 is an end view of the same in place between typeholding rails; Fig. 3 is a plan of a portion of a printing form having typeholding rails and employing my clips.

In the drawings, 10 represents the clip which constitutes the present invention. It consists of a sheet metal member having an intermediate, substantially flat portion 11 on the edges of which the metal rounds downwardly and then turns inwardly, as shown at 12, to points each side of the longitudinal central plane and then these two portions are turned downwardly in outwardly convex wings, as shown at 13.

In Figs. 2 and 3, 20 indicates parallel rails having enlarged upper or outer edges 21. My clip is adapted to be sprung into place between these rails. Before application, the greatest distance from the outer side of one wing 13 to the outer side of the other is greater than the space between these outer convex surfaces, while the shortest distance between the outer surfaces that is, at the extreme lower end of the wings, is less than the distance between the rail heads. Accordingly, the clip may be easily

placed with its free ends between the rails 55 and then an inward pressure may spring those ends inwardly enough to allow the clip to pass into the position shown in Figs. 2 and 3. In this position the convexity of the wings engaging the lower inner corners 60 of the rail heads effectively holds the clip in place.

When in place, as shown in Figs. 2 and 3, the clip may accomplish several results. In the first place, it may form a stop for a 65 line of grooved type held between such rails. In these figures, 30 indicates rows of individual grooved type which are loosely mounted in the channels provided by adjacent rails 20. One or both ends of such 70 lines of type may be easily held against shifting by abutting the clips 10.

Another use of my clip is to insure the rails being spaced equi-distant from each other. This is important where the rails 75 are held on flexible members, for the bending of such members is liable to displace rails in one direction or the other, causing a binding of the type on the side toward which the rail is displaced and preventing 80 its convenient longitudinal movement in the channel. Such flexible carrier for the rails is illustrated by the band 22 in Figs. 2 and 3 which, it may be understood, represents flexible strips of steel, or any other carrier 85 for the rails, flexible or rigid. When the clips are in use stopping the individual type line, they automatically space such rails, or they may be used to space the rails without performing their stopping operation. 90

It is to be understood that my clip is claimed herein for all purposes, and also in combination with overhanging rails, irrespective of how the rails may be held.

My clip, by engaging the inner or under 95 edges of the adjacent sides of the rail heads, as illustrated particularly, in Fig. 2, obtains a very firm hold. At the same time, the clip may be easily removed by a suitable tool (like a screw driver or hook) inserted between the rails or under the top 11 and adapted to pry or hook the clip outwardly. 100

Having thus described my invention, what I claim is:—

1. A spring clip adapted to stop a single 105 row of type held between adjacent rails, said clip consisting of an intermediate head and two projecting tongues, which tongues are

outwardly bulged transversely but are straight longitudinally to obtain a firm grip of the rails.

2. A spring clip made of a piece of sheet metal bent to make an intermediate head, and two projecting longitudinal tongues side by side, which tongues are bowed outwardly in straight lines.

3. A clip made of a piece of sheet metal and bent to make a head composed of an intermediate flat portion, two rounded edges with inwardly projecting portions substantially parallel with the flat portion, and two tongues projecting approximately at right angles to the head and side by side and made up of parallel straight lines and bowed outwardly.

4. The combination, with a pair of parallel rails with overhanging edges, of a spring clip having a head and two tongues made of straight lines and located side by side and bowed outwardly, said tongues being adapted to be pressed toward each other to be passed between the heads of the rails and thereafter held in place by engaging said heads throughout the length of the tongues.

5. A spring clip having a head and two projecting spring metal longitudinally straight tongues side by side and having their ends free and their outer sides bowed outwardly.

6. As a new article of manufacture, a

spring clip for use between a pair of parallel typeholding rails, said clip being made of a single piece of sheet metal having a flat intermediate portion, rounded edges, two inwardly projecting portions substantially parallel with the flat portion and spaced therefrom, and two tongues projecting from the inner edges of the inwardly projecting portions, said tongues extending longitudinally, their longitudinal lines parallel with said rounded edges and the tongues being formed into shallow facing trough shapes.

7. The combination, with parallel typeholding rails having overhanging edges adapted to confine between them a row of type grooved on its opposite sides, of a spring clip for stopping such row of type, said clip being made of a single piece of sheet metal and consisting of an intermediate portion from which portions are bent inwardly, and tongues projecting from the inner edges of the inwardly bent portions, said tongues being longitudinally straight but transversely bowed outwardly to obtain an effective gripping on the shoulders provided by the rail heads.

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

FERDINAND HOHENBERGER.

Witnesses:

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REGINALD G. A. PHILLIPS.