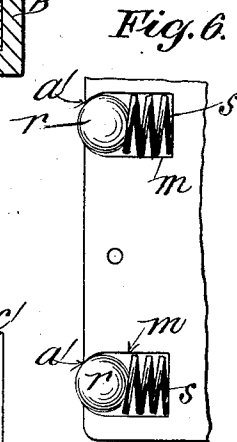
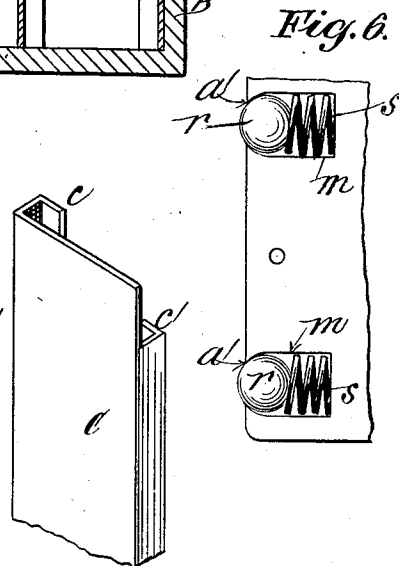
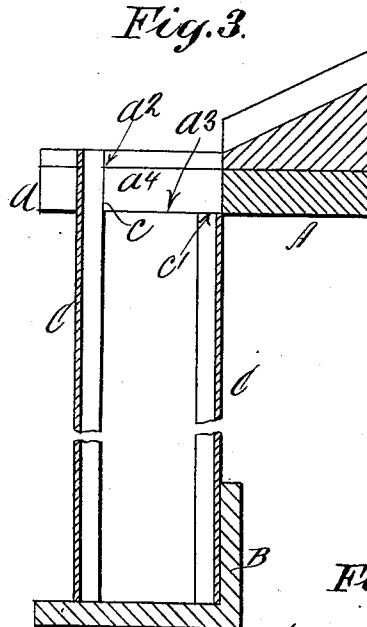
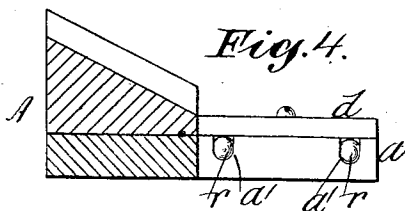
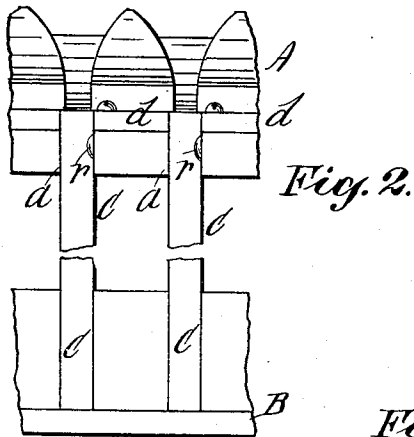
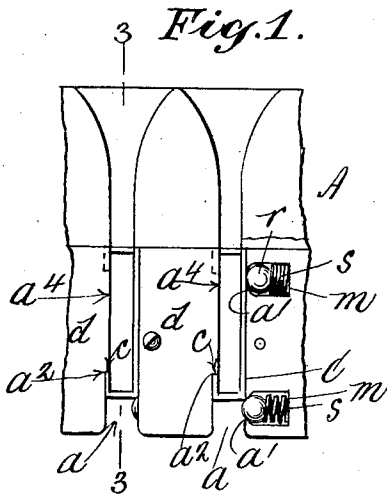


A. A. LOW & L. K. JOHNSON.
 HOLDER FOR TYPE CONTAINING CHANNELS.
 APPLICATION FILED JUNE 20, 1910.

988,274.

Patented Mar. 28, 1911.



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UNITED STATES PATENT OFFICE.

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HOLDER FOR TYPE-CONTAINING CHANNELS.

988,274.

Specification of Letters Patent. Patented Mar. 28, 1911.

Application filed June 20, 1910. Serial No. 568,012.

To all whom it may concern:

Be it known that we, ABBOT AUGUSTUS LOW and LOUIS KOSSUTH JOHNSON, citizens of the United States, residing, respectively, at Horseshoe, St. Lawrence county, State of New York, and at New York city, borough of Brooklyn, county of Kings, and State of New York, have invented certain new and useful Improvements in Holders for Type-Containing Channels, of which the following is a specification.

Our invention relates to holders for channels used in type setting and distributing apparatus, and consists in the specific construction and arrangement of parts herein described and claimed.

In the accompanying drawings, Figure 1, is a top view of a portion of a channel holder illustrating the practical application of our invention, one of the cap plates being broken away; Fig. 2, is a front view of the parts shown in Fig. 1; Fig. 3, is a vertical section upon plane of line 3—3—Fig. 1, looking toward the left side; Fig. 4, is a similar section of the upper portion of the holder looking toward the right side; without the channel; Fig. 5, is an isometrical view of one of the channels; Fig. 6, is a top view upon an enlarged scale of one of the anti-friction roller sockets and contents.

Our invention is designed primarily to dispense with the latches heretofore used for the purpose of retaining the channels in their holders, and is shown herein as applied to the holders in such manner as to act upon the upper portions of the channels, although we do not limit ourselves in this respect, since other portions of the channel may be so supported. By our present form of channel detent, *i. e.*—by dispensing with the latches heretofore used, we leave the channel sockets free and unobstructed under all conditions of use.

In the drawings A, represents the upper portion of a channel case into which the types are distributed by hand, to be depressed into the channels C, by means not shown, but well known in the state of the art. The lower ends of the channels C, rest upon a shelf or support B; their upper ends being inserted in the sockets *a*, in the upper part A, of the case. One side wall of each of these sockets *a*, is formed with mortises *m*, having openings *a'*, through which latter, portions of the peripheries of the anti-fric-

tion rollers *r*, protrude, the said rollers being forced outward by springs *s*, in the recess *m*, as shown clearly in Fig. 6.

Caps *d*, cover the recesses *m*, and retain the ball bearings and springs in position.

The ball bearings are arranged as shown in Fig. 1, one being arranged to bear upon the rear of the channel and the other against the edge thereof after the channel has been pushed into position, thereby locking the channel and holding it against accidental displacement.

On the side of each socket opposite to that on which the ball bearings are arranged, a vertical shoulder *a*², is formed for contact with the edge of the member *c*, of the channel, as well as a horizontal shoulder *a*³, for contact with the upper edge member *c'*, of the channel,—the members *c* and *c'*, constituting longitudinal flanges on the open side of the channel as heretofore, and the surface *a*⁴, of the socket between the vertical and horizontal shoulders *a*², *a*³, constituting a type guiding surface which insures the alinement of the type in the channel and prevents their contact with the vertical shoulder *a*².

What we claim as our invention and desire to secure by Letters Patent is,

1. In a channel holder of the character described, an upper socket member formed with a vertical shoulder and with a horizontal shoulder which constitute rests for the opposed edges of the channel, the surface between said shoulders constituting a guiding surface which insures the alinement of the type as they are projected into the channels, and prevent their engagement with the vertical edges of the channel, substantially as set forth.

2. In a channel holder of the character described, the combination of an upper socket member having one side wall formed with a vertical shoulder and with a horizontal shoulder, said shoulders constituting rests for the edges of a channel, and with a plane surface between said shoulders constituting a guide surface which insures the alinement of the type as they are projected into the channels and prevents their engagement with the vertical edge of a channel, the opposite side of said socket being mortised for the reception of ball bearings, said mortises being formed with contracted openings through the side wall of the socket, ball bear-

ings in said mortises arranged to protrude through said contracted openings in the side wall of the socket, springs in said mortises bearing against said ball bearings, and caps
5 covering the said mortises, whereby a channel is pressed and held against the first mentioned shouldered side wall of the socket,

substantially in the manner and for the purpose set forth.

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