

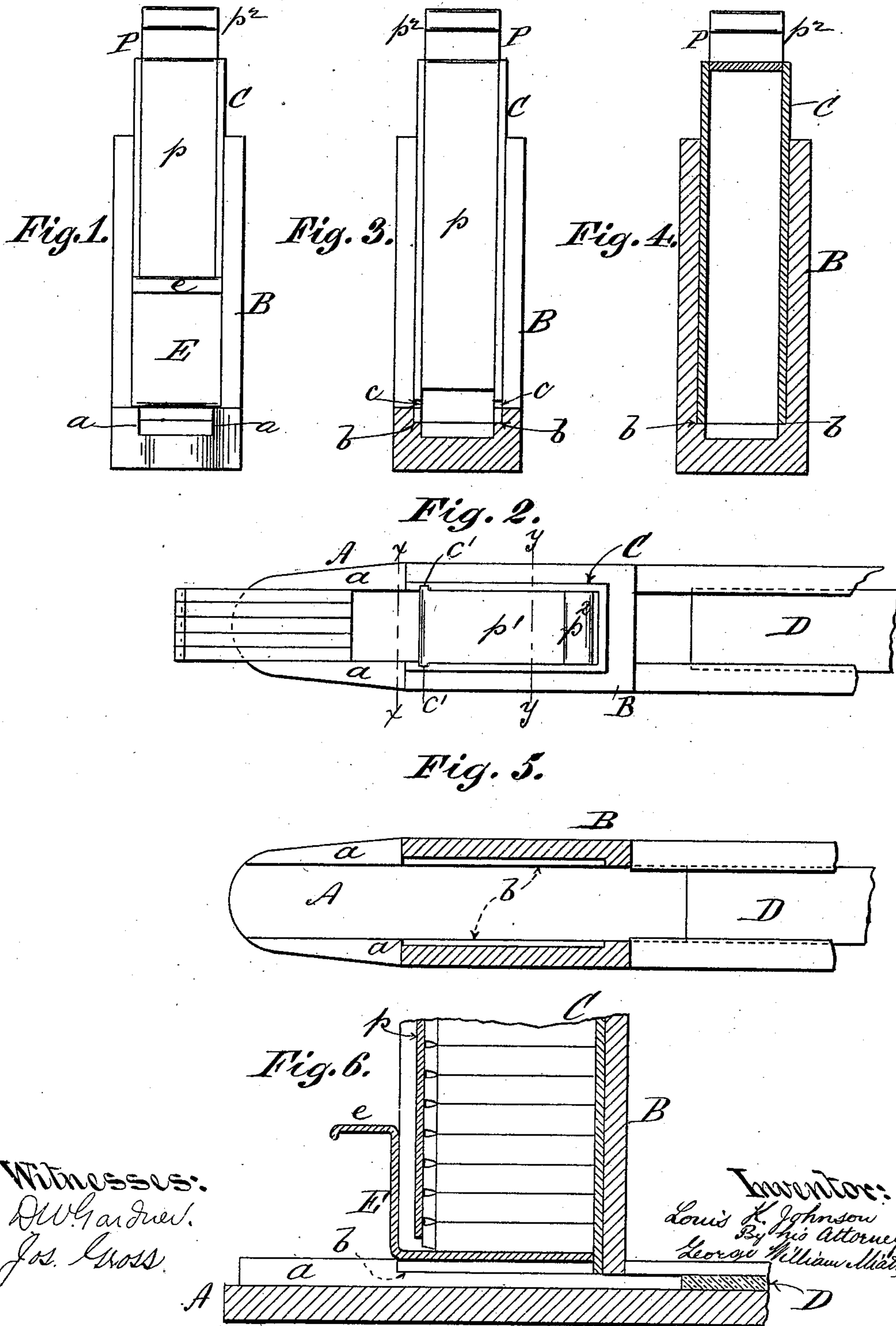
(No Model.)

2 Sheets—Sheet 1.

L. K. JOHNSON.  
TYPE CONTAINING CHANNEL.

No. 534,439.

Patented Feb. 19, 1895.



(No Model.)

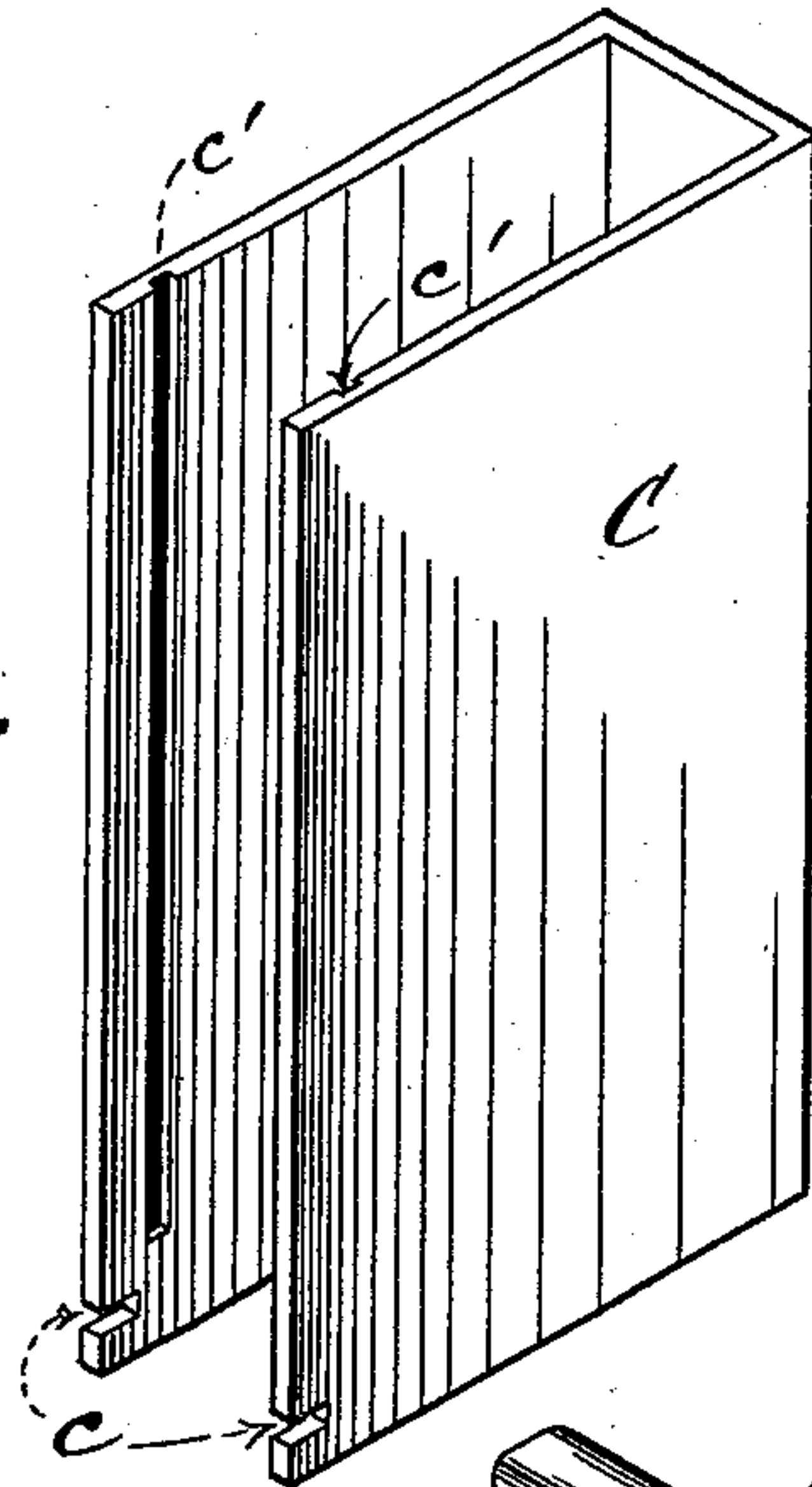
2 Sheets—Sheet 2.

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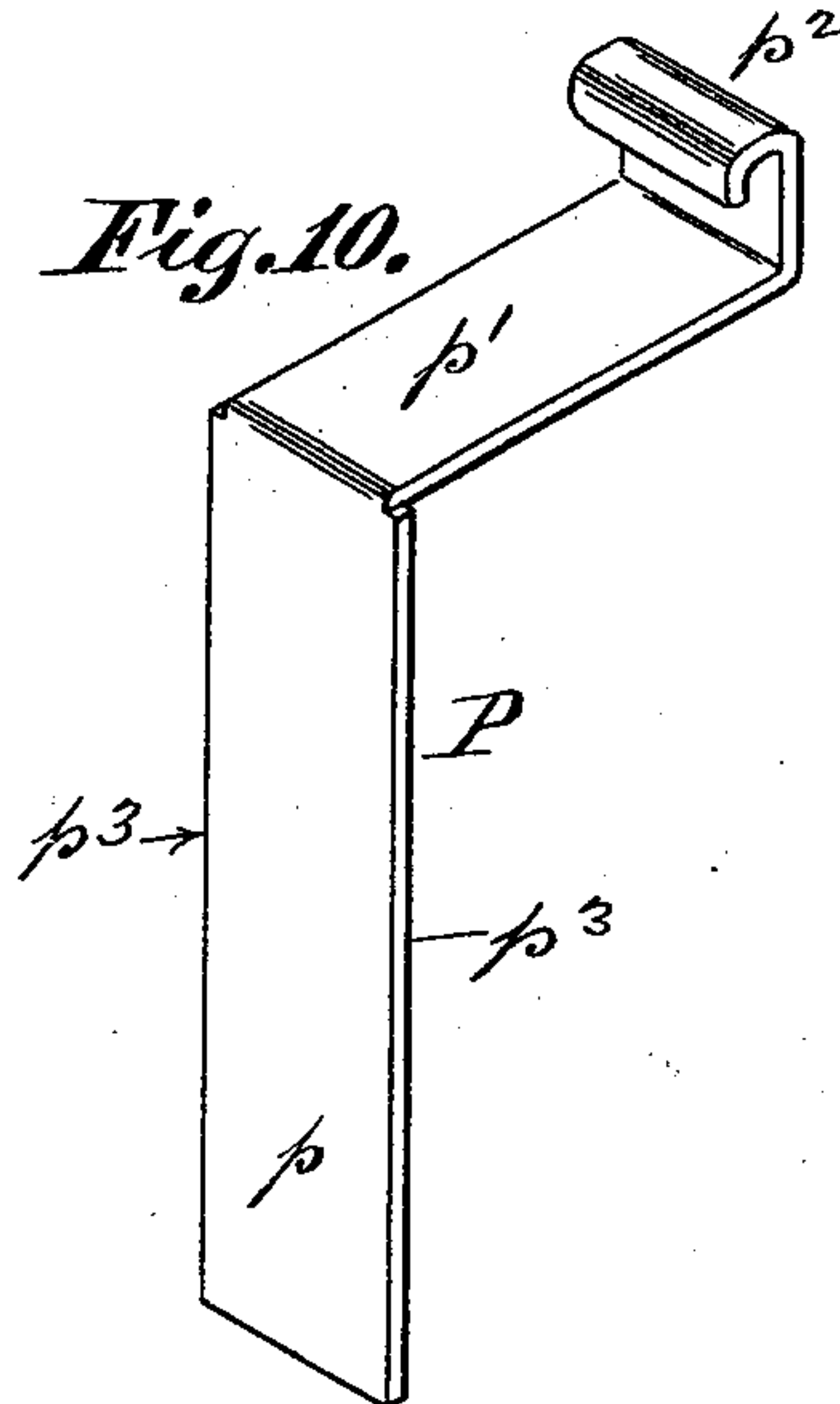
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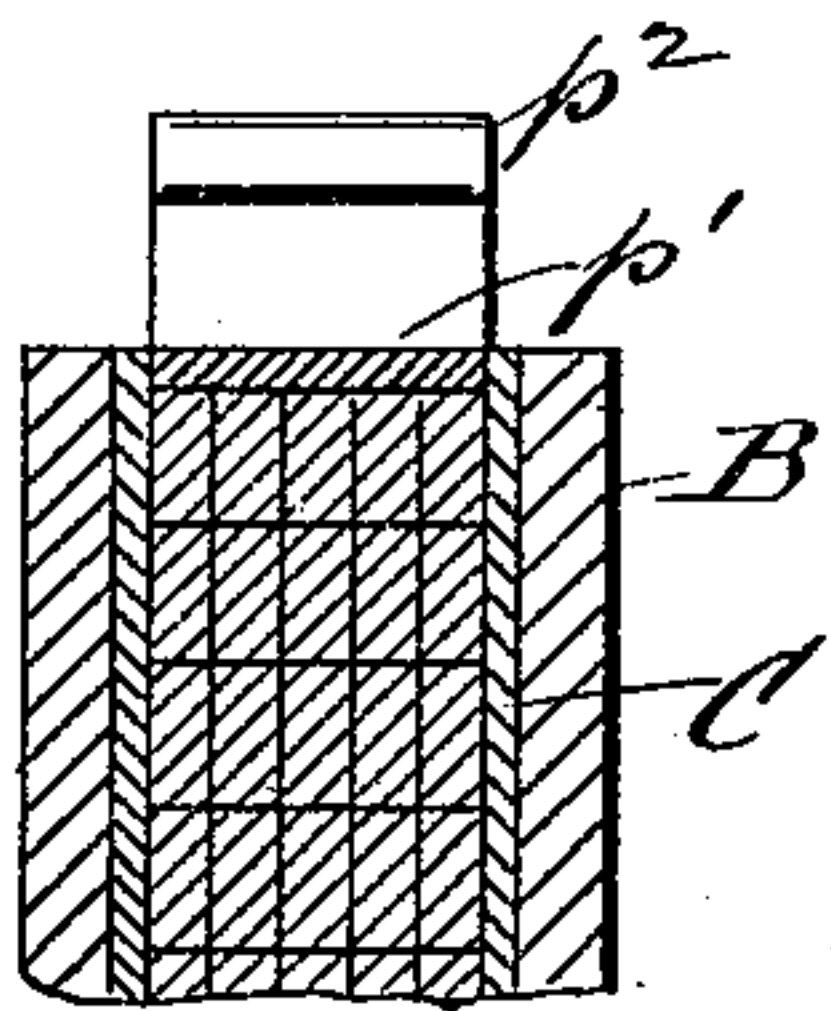
*Fig. 8.*



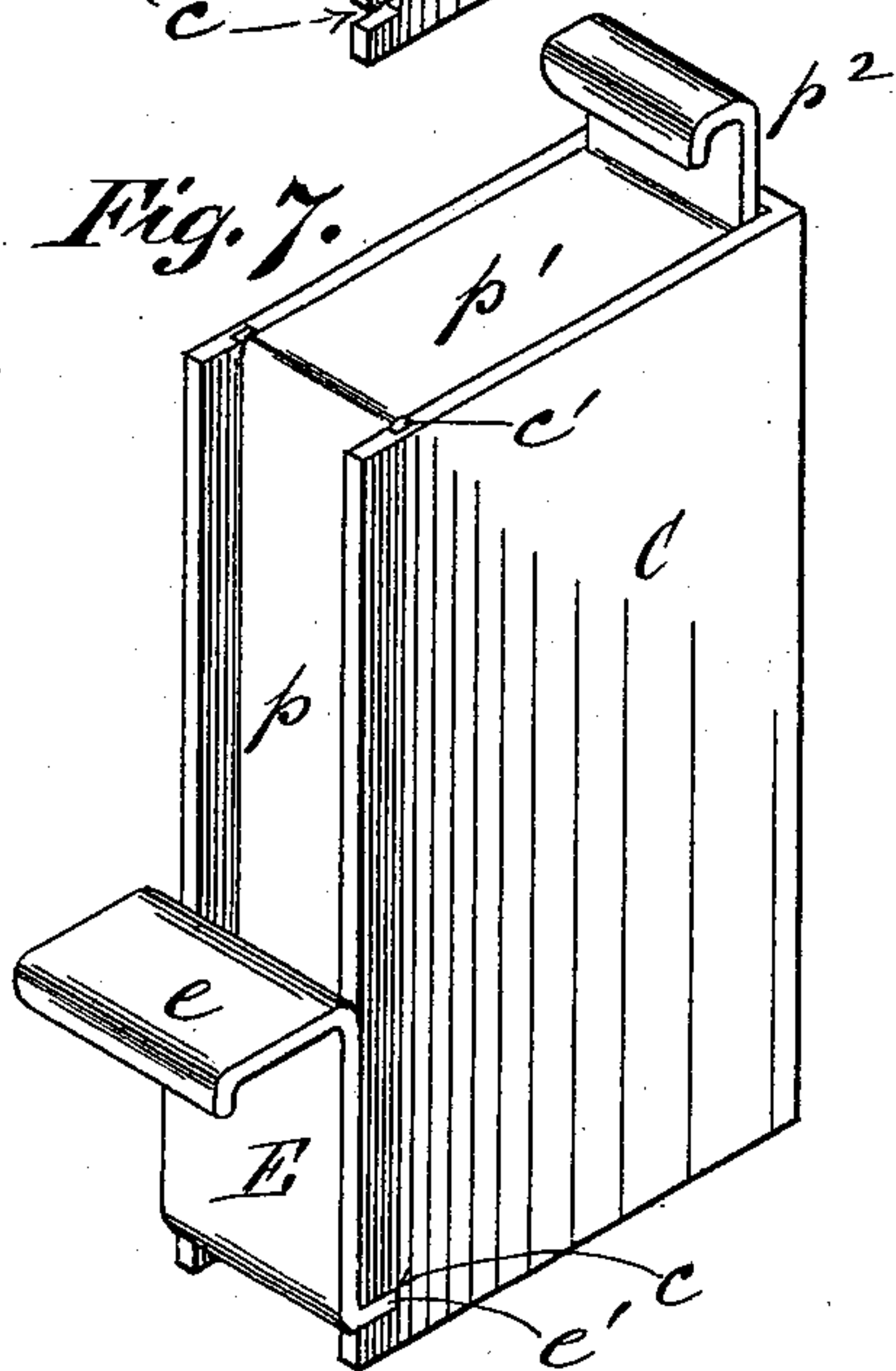
*Fig. 10.*



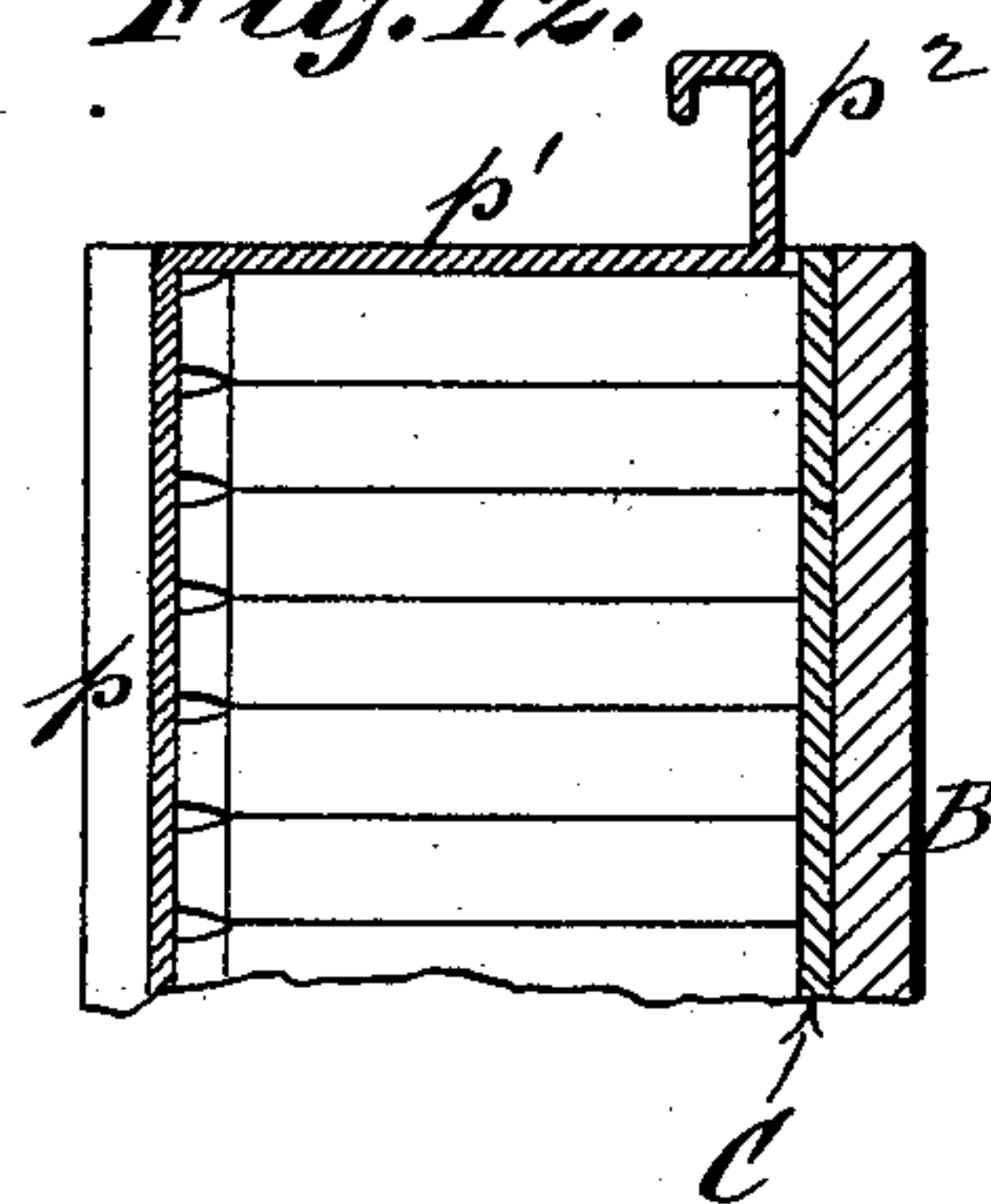
*Fig. 11.*



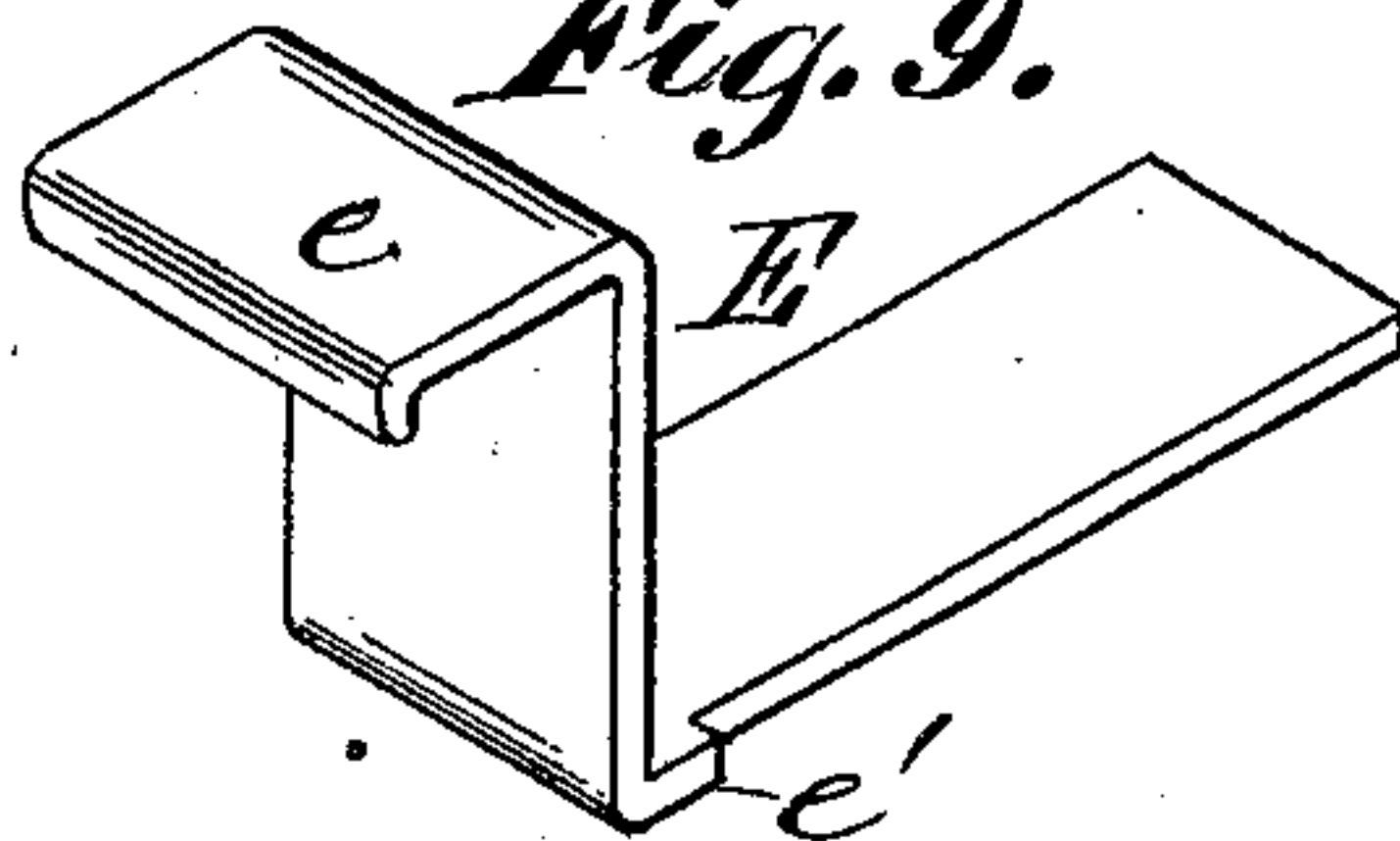
*Fig. 7.*



*Fig. 12.*



*Fig. 9.*



Witnesses:  
D. W. Gardner,  
Jos. Gross

Inventor:  
Louis K. Johnson,  
By his Attorney  
George William Hiett



# UNITED STATES PATENT OFFICE.

LOUIS K. JOHNSON, OF BROOKLYN, ASSIGNOR TO THE ALDEN TYPE MACHINE COMPANY, OF NEW YORK, N. Y.

## TYPE-CONTAINING CHANNEL.

SPECIFICATION forming part of Letters Patent No. 534,439, dated February 19, 1895.

Application filed June 14, 1894. Serial No. 514,505. (No model.)

*To all whom it may concern:*

Be it known that I, LOUIS K. JOHNSON, a citizen of the United States, residing in the city of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Type-Containing Channels, of which the following is a specification sufficient to enable others skilled in the art to which the invention appertains to make and use the same.

My invention is designed especially for use in connection with apparatus for forwarding a plurality of types into position to be simultaneously grasped and withdrawn by the fingers of the compositor.

Heretofore the several types forming the component parts of a word have been held in separate channels, the side walls of which occupied more or less space laterally and necessitated the grouping or converging of the types together after they left their respective channels.

My improvements are designed to obviate this feature of convergence, and to afford a convenient channel in which a plurality of types may be stored, transported, or inserted in the setter case for use; and the invention consists in a channel of a width sufficient to accommodate two or more columns of type, provided with a detachable bottom or floor, and with a detachable front and top guard, the whole being used in conjunction with a type platform above which the channel is supported independent of the types when the channel is placed in position for use and its detachable floor or bottom withdrawn.

In the accompanying drawings, Figure 1, is a front elevation of my improved channel in position upon a type platform. Fig. 2, is plan of the same; Fig. 3, a vertical section upon plane of line *x, x*, Fig. 2; Fig. 4, a vertical section upon plane of line *y, y*, Fig. 2. Fig. 5, is a horizontal section through the channel holder showing the seats for the side walls of the channels. Fig. 6, is a vertical section of the type platform channel holder, and lower part of the channel. Fig. 7, is an isometrical perspective of my improved channel, closed, and removed from the holder; Fig. 8, a perspective view of the channel with

the type guards removed. Fig. 9, is an isometrical perspective of the detachable type floor; Fig. 10, a similar view of the front and top guard; Fig. 11, a transverse section of the upper end of the channel; and Fig. 12, a central vertical section of the same, taken at right angles.

The type platform A, is formed with the guide walls *a, a*, and with channel holder B, and seats *b, b*, which support the lower edges of the side walls of the channel C.

D, is the type forwarder by which the lowest types are advanced into position upon the platform A shown in Fig. 2, ready for removal by the compositor.

The channel C is made of sufficient width to accommodate two or more characters placed side by side, that in the drawings holding five columns of types, as, for instance, the types for the word "these," when taken horizontally.

The types are sustained in the channel C, by the floor piece E, until the channel C is inserted in the holder B, when said floor piece E is withdrawn by means of its raised handle *e*, and the types allowed to descend so that the bases of the columns rest upon the type platform A. The handle *e*, of the detachable floor piece E, is made so as to project well above the type platform in order to facilitate the withdrawal of the plate E, and so that the latter may, when partly withdrawn, be used in gently lowering the types to the upper surface of the type platform. For the latter reason the plate E, is held in position in the channel C only by comparatively short flanges *e', e'*, which enter the front ends of the slots *c, c*, in the front side walls of the channels. Thus the floor plate E, is detached while the main portion of the plate E, is still under the type, and the latter may be supported in their descent,—the thickness of the plate, only, representing the actual fall, and this being so slight as to obviate all danger of distortion or displacement of types in the columns.

The front and top guard plate P is made preferably in one piece consisting of the vertical member *p*, and the horizontal member *p'*, which latter is formed with a handle *p<sup>2</sup>*. The front plate *p*, is slightly wider than the



top plate  $p'$ , so as to afford flanges  $p^3$ ,  $p^3$ , which enter the vertical grooves  $c'$ ,  $c'$ , in the side walls of the channel C.

5 The seats  $b$ ,  $b$ , for the lower edges of the side walls of the channels C, are sufficiently above the type platform to support the channel above the path of the type forwarder D.

What I claim as my invention, and desire to secure by Letters Patent, is—

10 1. A channel for containing two or more columns of types formed with a removable type floor plate in combination with a type supporting platform formed with a holder which supports the said channel independ-  
15 ently, substantially in the manner and for the purpose described.

2. A channel for containing two or more columns of types formed with a removable type floor plate having an elevated handle,  
20 in combination with a type supporting plat-

form formed with a holder which supports the said channel independently, substantially in the manner and for the purpose described.

3. The combination of the channel C, for containing two or more columns of types, 25 formed with the slots  $c$ ,  $c$ , the removable floor plate E formed with the flanges  $e'$ ,  $e'$ , and the type platform A, formed with the holder B and seats  $b$ ,  $b$ , for supporting the channel independently, substantially in the manner and 30 for the purpose described.

4. The combination of the channel C for containing two or more columns of types, the removable floor plate E, and the front and top guard P made in one piece, substantially 35 in the manner and for the purpose described.

LOUIS K. JOHNSON.

Witnesses:

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