

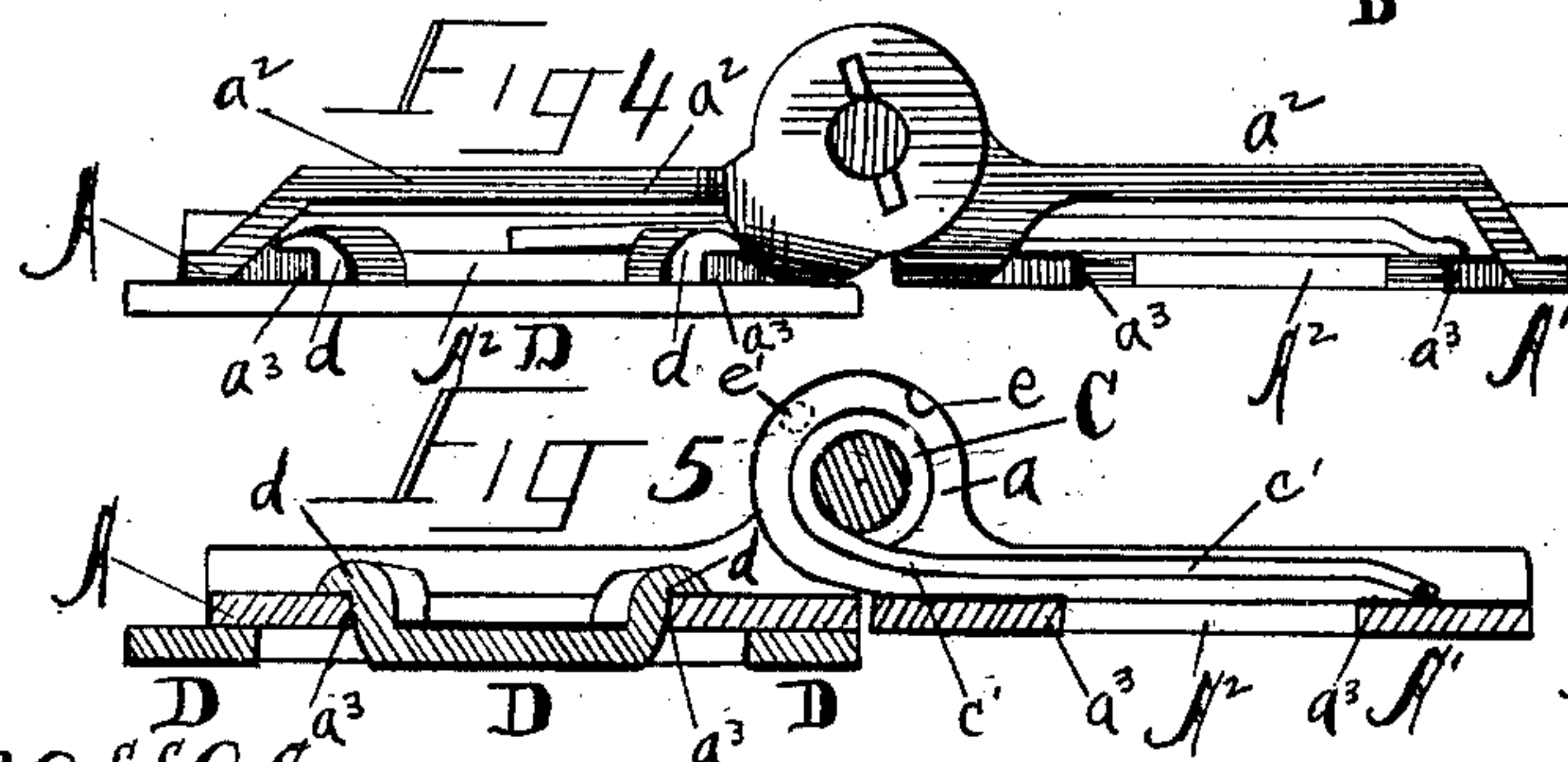
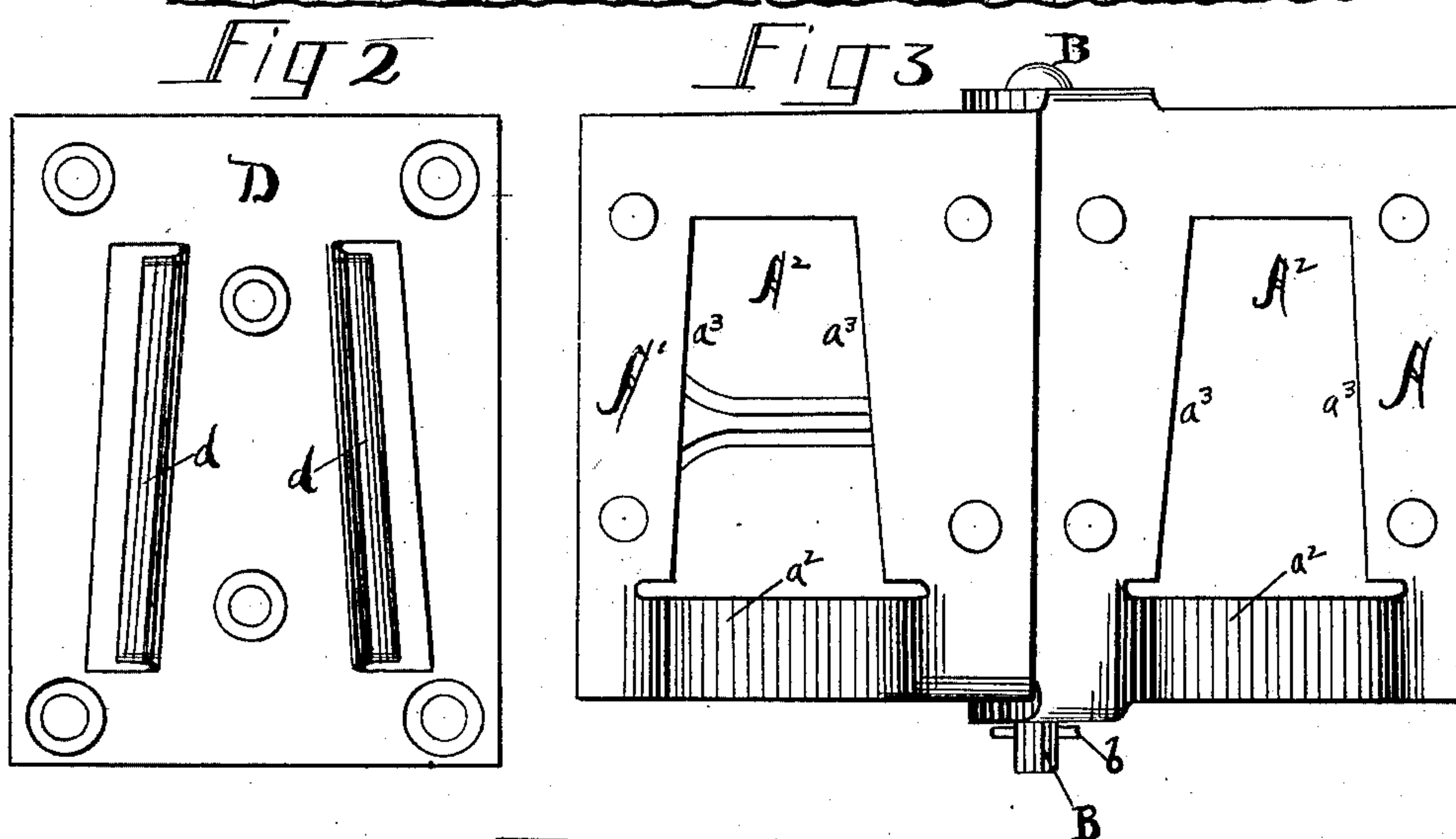
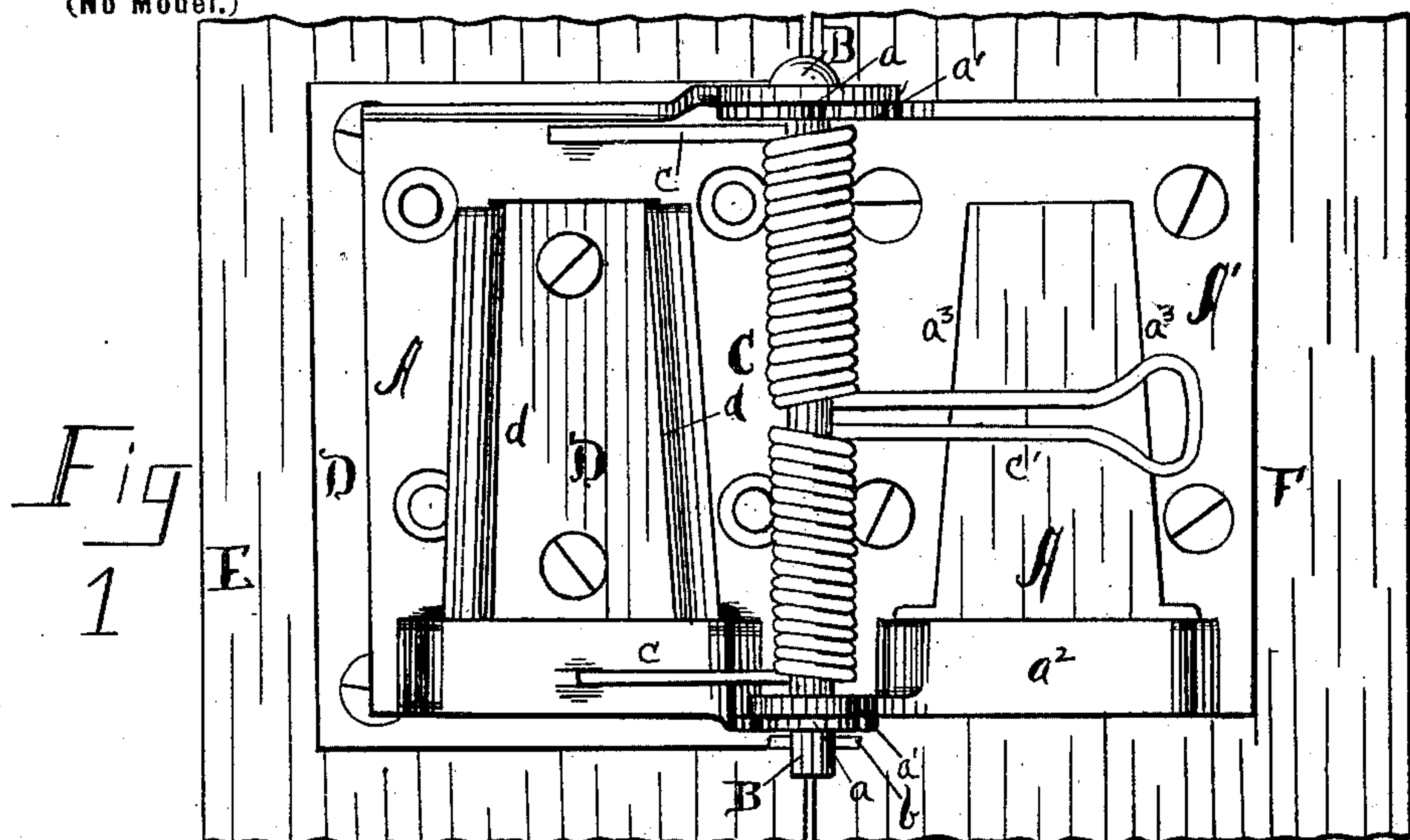
**No. 699,530.**

**Patented May 6, 1902.**

**E. H. JACKSON.**  
**DETACHABLE FASTENER FOR HINGES.**

(Application filed Jan. 28, 1901.)

(No Model.)



*Witnesses.*

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# UNITED STATES PATENT OFFICE.

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## DETACHABLE FASTENER FOR HINGES.

SPECIFICATION forming part of Letters Patent No. 699,530, dated May 6, 1902.

Application filed January 28, 1901. Serial No. 45,056. (No model.)

*To all whom it may concern:*

Be it known that I, ERSKINE H. JACKSON, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Detachable Fasteners for Hinges, of which the following is a specification.

It is necessary in the use of spring-hinges in order to remove the door or other appliance with which the hinge is connected to detach the hinge on one plate or the other from the parts to which the hinge is secured. The re-attachment or replacement of the door or other appliance is attended with more or less difficulty owing to the nature of the hinge.

The object of the present invention is to construct a spring-hinge which can be readily, easily, and quickly attached to doors or other appliances and which will enable the door or other appliance to be removed and replaced without any trouble or inconvenience; and the invention consists in the features of construction and combination of parts herein-  
after described and claimed.

In the drawings illustrating the invention, Figure 1 is a front face view showing the hinge applied to a door, showing only a portion of the door and the jamb. Fig. 2 is a front face view of the supplementary hinge leaf or plate to which one leaf or plate of the hinge proper is attached and interlocked; Fig. 3, a rear face view of the hinge proper; Fig. 4, an end elevation of the hinge and the hinge proper and the supplementary leaf or plate, showing one leaf or plate of the hinge proper interlocked with the supplementary plate or leaf; and Fig. 5, a cross-section through the hinge proper and the supplementary leaf or plate with the parts engaged or interlocked as in Fig. 4.

The hinge proper is formed of two companion leaves or plates A and A', each of a similar construction. The leaf or plate A has pivoting ears *a*, and the leaf or plate A' has pivoting ears *a'*, by means of which the two leaves or plates are pivotally connected together at their abutting sides, as usual in hinges. Each leaf or plate has at one end a raised bar or cross-piece *a*<sup>2</sup> to permit of the attachment to and detachment of the leaf or plate from the connecting or attaching sup-

plementary leaf or plate. Each plate is cut away at the center so as to leave an opening or space A<sup>2</sup>, having on each side inclined edges *a*<sup>3</sup> for engaging with the supplementary leaf or plate. The two leaves or plates are pivoted one to the other by a suitable pin or pintle B, passing through the ears *a* and *a'*, and the pin or pintle after insertion is held in place against withdrawal by a cross-pin *b* or in any other suitable manner. The spring C surrounds the pin or pintle, and is in the form of two opposite coils with the free end *c* of each coil engaged with the face of one of the hinge leaves or plates and the center or connected end *c'* of each coil engaged with the opposite hinge leaf or plate, as shown in Figs. 1 and 5, and common in the construction of spring-hinges.

The securing or attaching of the hinge to a door or other appliance is by means of a supplementary hinge leaf or plate D. This plate has formed therewith flanges *d*, one on each side of the center and longitudinal of the plate, each flange raised above the face of the plate and each flange having an incline or diagonal set converging from the bottom upward, as clearly shown in Fig. 2. The distance apart of the flanges *d* corresponds to the width of the opening or space A<sup>2</sup>, so that the side edges *a*<sup>3</sup> of the hinge leaf or plate can be slipped into the space between the flanges *d* and body of the supplementary or securing plate and engage with the flanges, thereby interlocking the hinge leaf or plate with the supplementary leaf or plate, as shown in Figs. 1, 4, and 5.

The supplementary or attaching leaf or plate D, as shown, is provided with a screw-hole at each corner and with two central screw-holes for the passage of screws, by means of which the plate can be attached to a door-jamb or other support in a fixed position, and each hinge leaf or plate is provided with screw-holes for the passage of screws, by means of which one hinge leaf or plate can be secured to a door or other appliance in a fixed position. The supplementary or attaching leaves or plates are fixed on the door-jamb or other stationary object at the desired or required place, and each fixed hinge leaf or plate is attached to the door or other appliance in proper relation to the location of



the supplementary or attaching leaf or plate, so that when the free or unattached hinge leaf or plate is slipped onto the supplementary or attaching leaf or plate, with the edges  $a^3$  in engagement with the flanges  $d$ , the free or unattached hinge leaf or plate will be interlocked with the fixed supplementary or attaching leaf or plate, hanging the door or other object in place. The attachment of the free hinge leaf or plate with the fixed supplementary or attaching leaf or plate is attained by raising the door or other object into position, where the free or unattached hinge leaf or plate can be slipped onto the fixed supplementary leaf or plate, with the edges  $a^3$  and the flanges  $d$  interlocked, and to permit the hinge leaf or plate to be slipped onto the supplementary leaf or plate the hinge leaf or plate is provided with the cross bar or piece  $a^2$ , which stands above the face of the hinge leaf or plate a sufficient distance to permit the flanges  $d$  to pass thereunder and have the flanges overlie the side edges  $a^3$  of the hinge leaf or plate. The hinge in order to permit the slipping of the hinge leaf or plate onto the supplementary leaf or plate should stand with the plates at an angle to each other, especially when the hinge and supplementary or attaching leaf or plate are used for the hanging of doors, and in order to hold the hinge at an angle one ear of a hinge leaf or plate is provided with a recess or hole  $e$  and the adjacent ear of the companion hinge leaf or plate is provided with a hole  $e'$ , so that when the two holes are brought into alinement a pin can be passed through them, locking the hinge leaves or plates in angular relation to each other. The hinge as a whole as illustrated in the drawings is shown in connection with a door  $F$ , and when so used the supplementary or attaching leaf or plate is to be attached in a fixed position to the door-jamb  $E$ , and one leaf or plate of the hinge proper is to be attached in a fixed position to the door, such attachment being by means of screws or otherwise, so as to have the parts in juxtaposition for the free or unattached hinge leaf or plate to be entered onto the supplementary or attaching leaf or plate.

The supplementary or attaching leaf or plate, in connection with a hinge having its leaves or plates formed to interlock with the supplementary or attaching leaf or plate, will be found very desirable in hanging doors and other appliances where it is required or necessary to remove the door or other appliance for any purpose, and the supplementary hinge leaf or plate and a hinge proper having its leaves or plates formed to interlock with the supplementary leaf or plate will be found exceedingly useful in the hanging of screen or storm doors, which are only used for a portion of the year and are then removed and set away until again required. The supplementary or attaching leaf or plate can be left in

place and the hinge proper can be left on the door or other appliance, as in detaching the door or other appliance all that is required or necessary is to slip the free or unattached hinge leaf or plate from the supplementary or attaching leaf or plate, which detaches the door or other appliance from the jamb or other support, leaving the supplementary or attaching leaf or plate in place on the door-jamb or other object and the hinge proper in place on the door or other appliance for the replacing of the door or other appliance when required.

The device as a whole is exceedingly simple and at the same time furnishes a ready means for the attachment and detachment of a door or other appliance to which the parts are applied, the removal of the parts from their attached position is avoided, the respective parts always remain in position and are not liable to be lost or mislaid, the removal of screws is avoided, and the attachment and detachment of the parts are accomplished without any trouble or inconvenience and without any waste of time and labor in either detaching or attaching the door or other appliance with which the hinge as a whole is used. All these advantages pertain to the construction of hinge of my invention and make a hinge which can be readily applied and which will be found effective in use. The interlock of the free or unattached hinge leaf or plate with the supplementary or attaching leaf or plate should be of a nature that will permit the separation of the parts readily and at the same time be strong and durable, and by making both leaves or plates of the hinge alike the hinge as a whole, including the supplementary or attaching leaf or plate, can be applied for either a right or left hand opening, as may be desired.

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

1. A fastener for hinges consisting of a plate having upwardly-converging grooved flanges formed on the front of its body and a hinge-leaf having in its body an upwardly-tapered longitudinal slot opening at its base near to the bottom of the leaf with its side in the same plane as the body of the leaf, substantially as described.

2. A detachable fastener for hinges consisting of a plate having upwardly-converging flanges pressed outwardly from its body, each flange having on its outer face a recess or groove and a hinge provided with two companion base-leaves, each leaf having in its body an upwardly-tapered and longitudinal slot opening at its base to the bottom of the leaf and each leaf having at the base of the slot a raised end bar extending over the slot, substantially as described.

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