

No. 698,468.

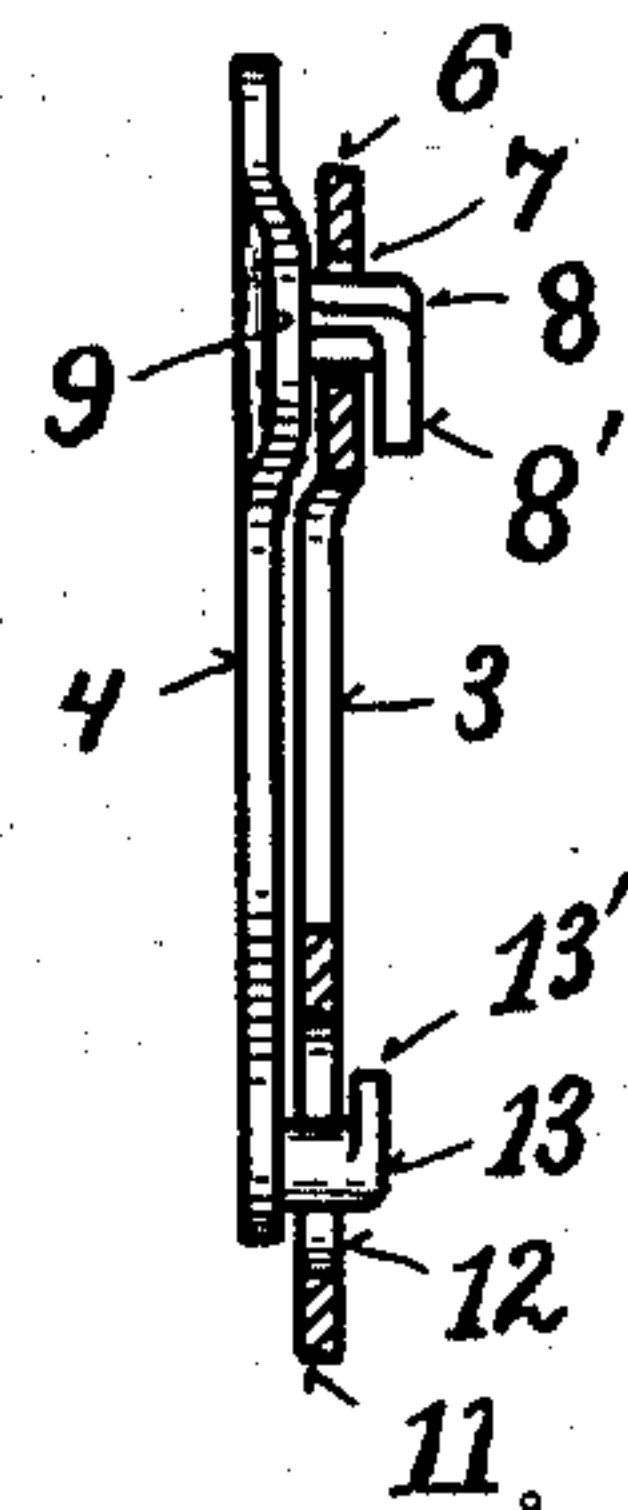
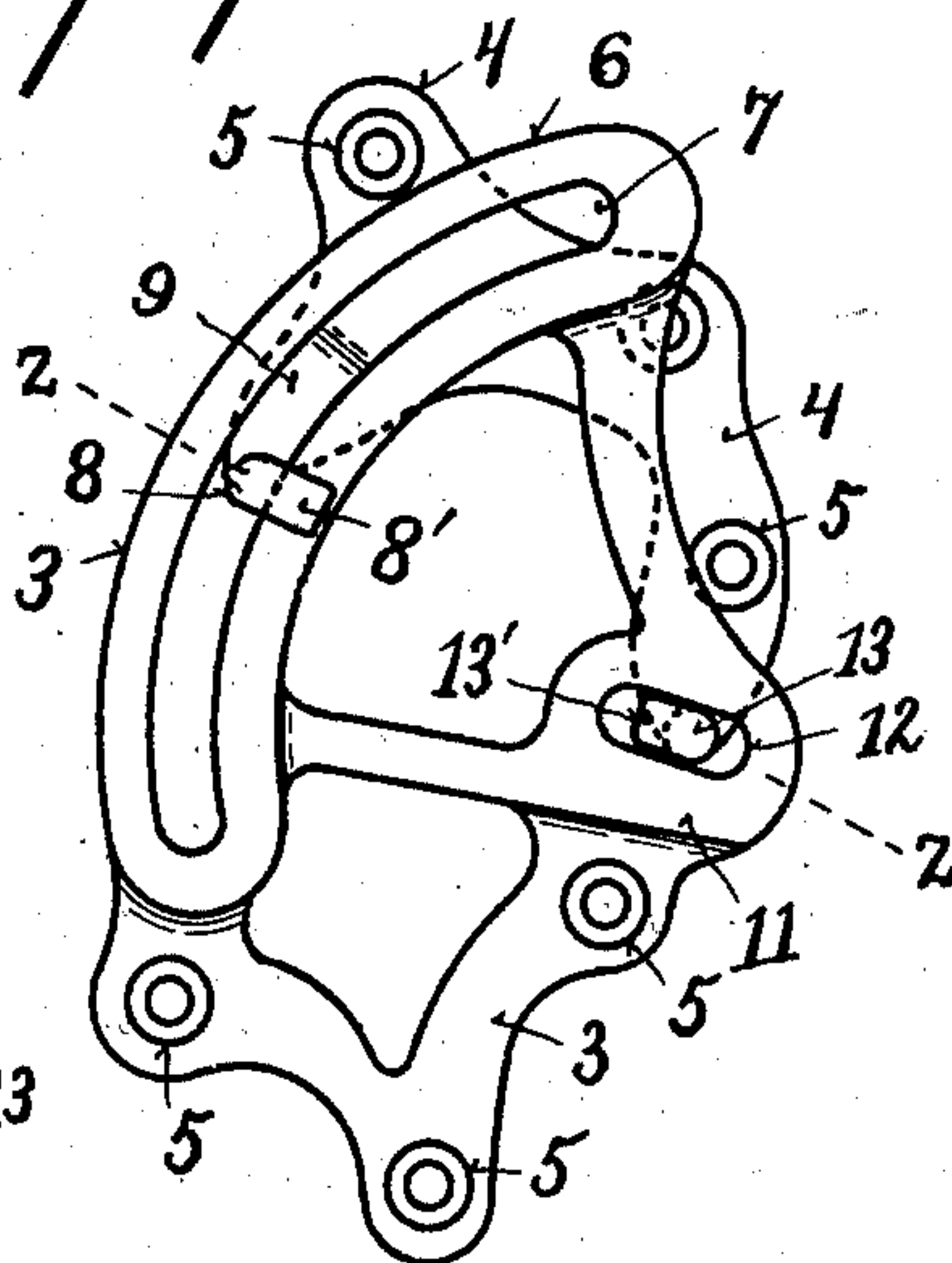
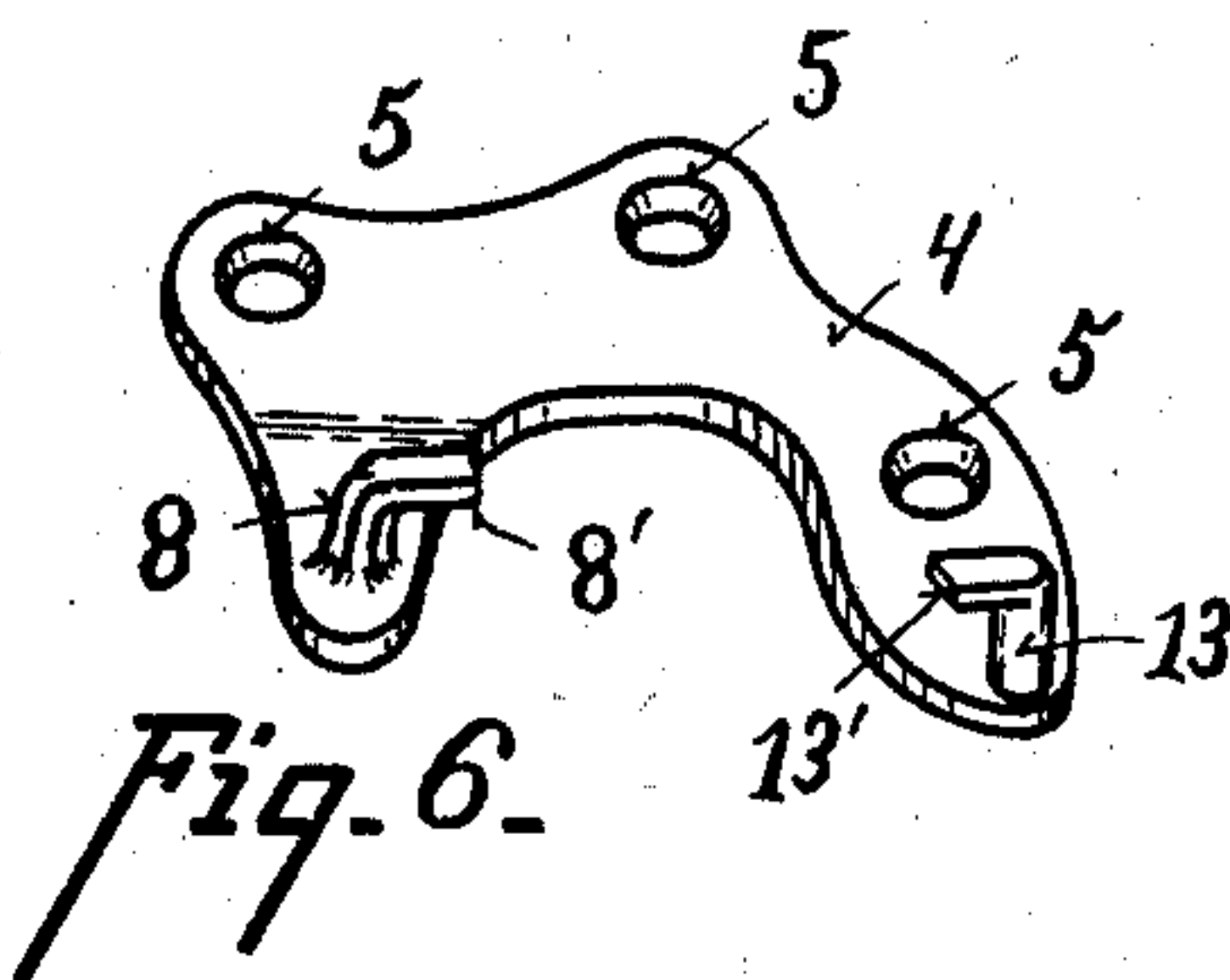
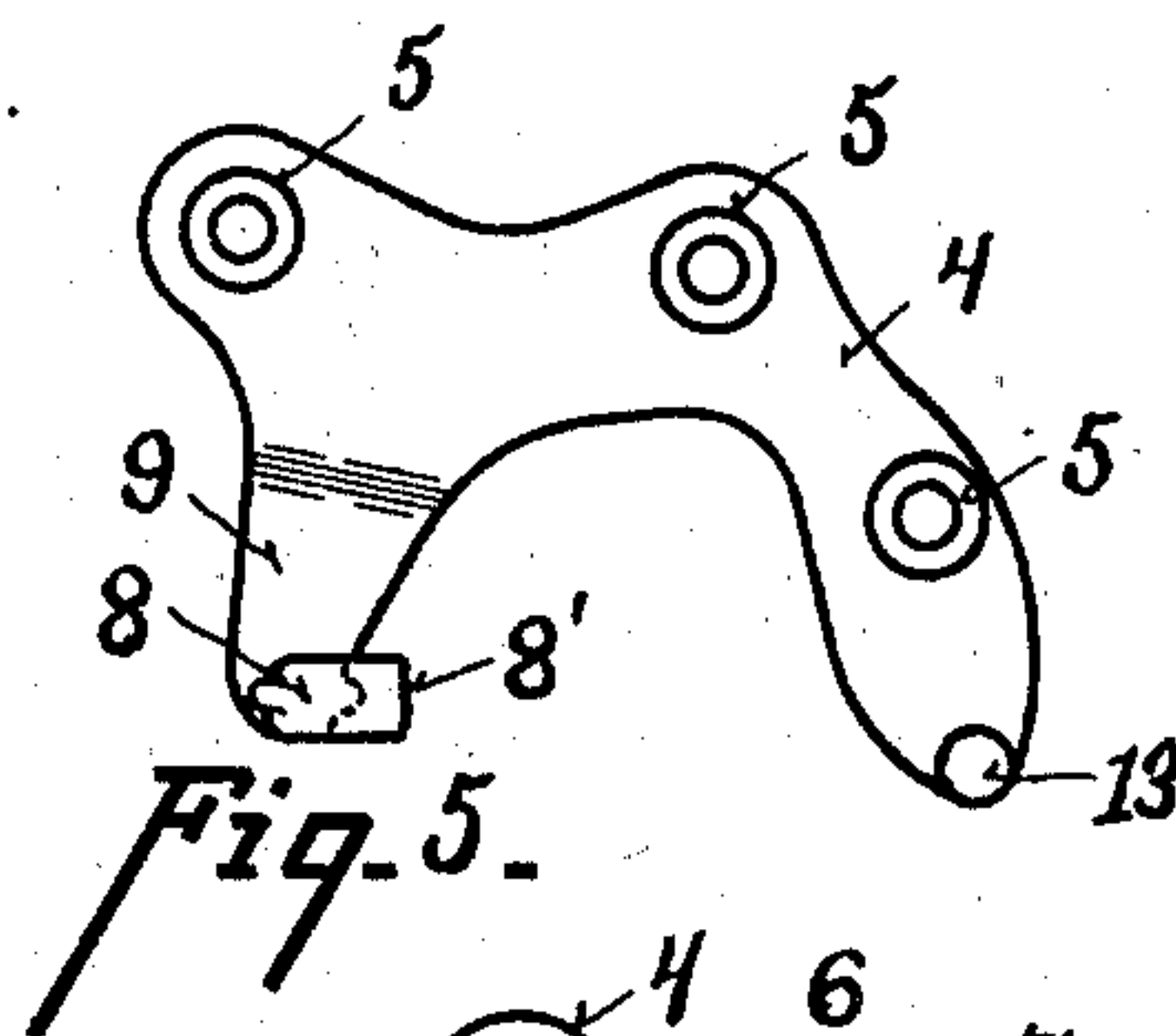
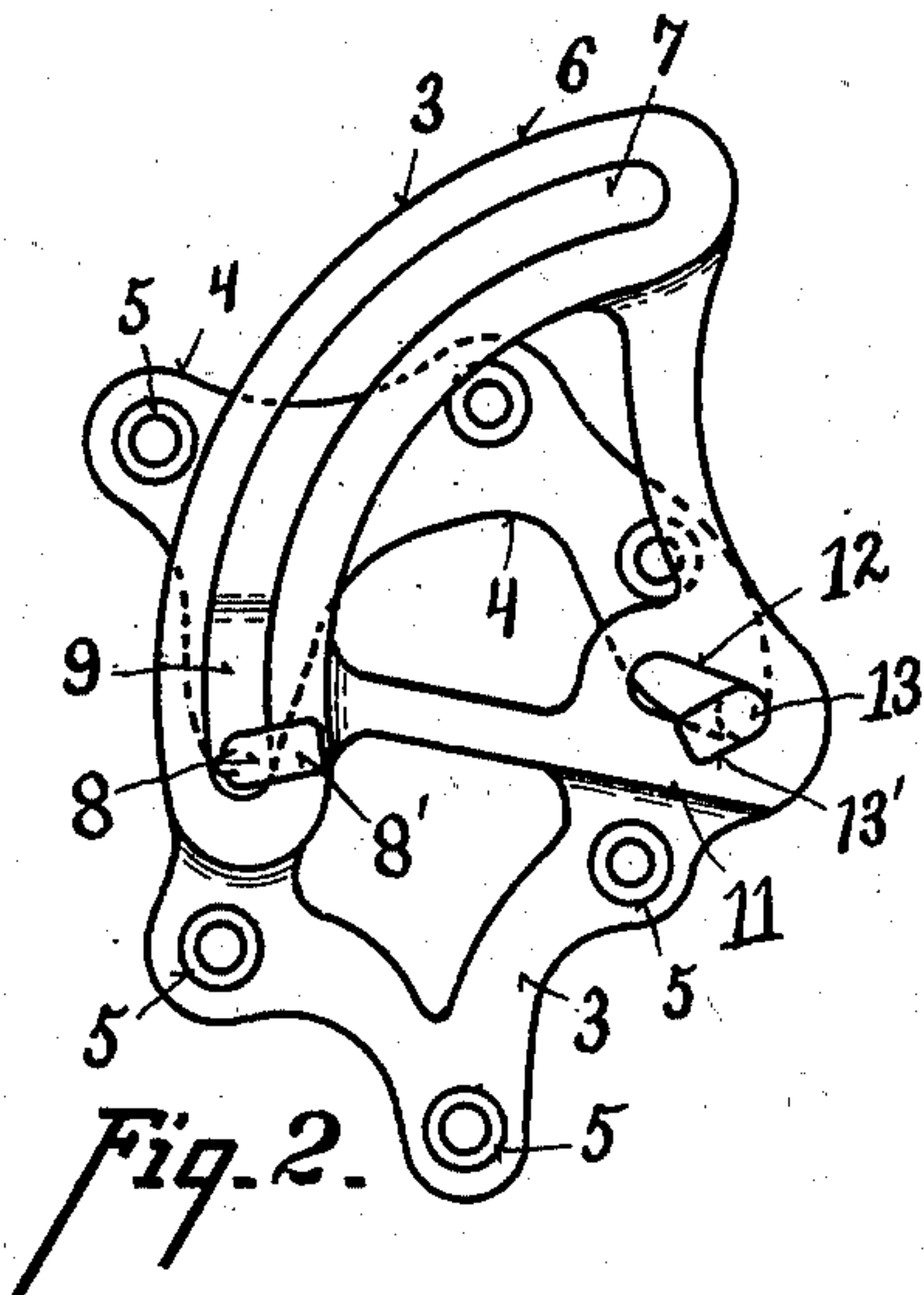
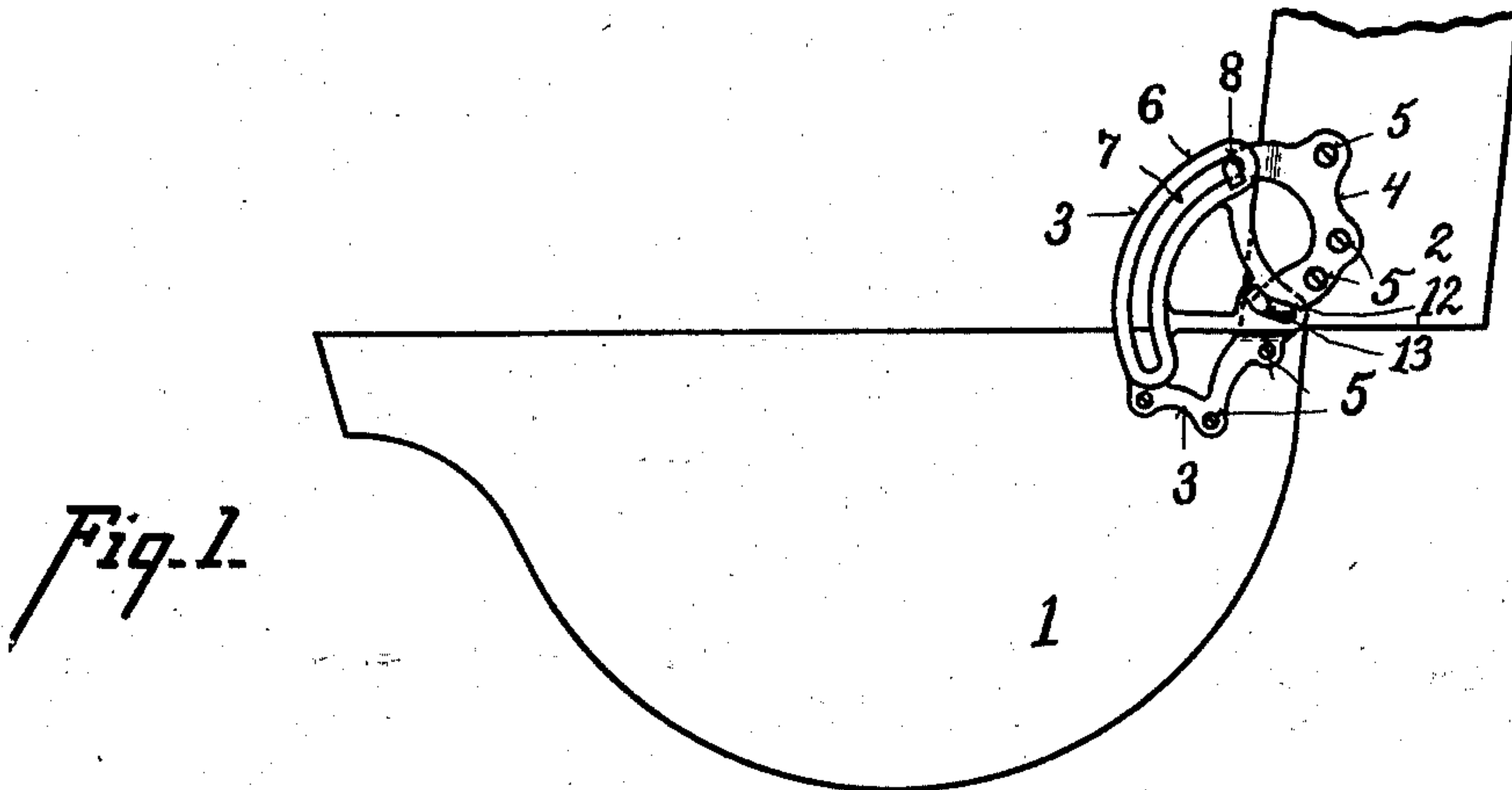
Patented Apr. 29, 1902.

C. DIETZ.

HINGE.

(Application filed Sept. 26, 1901.)

(No Model.)



Witnesses
Wm C. Peirce
D. Thew Wright

Inventor
Conrad Dietz
By *James A. Ramsey*
Attorney

UNITED STATES PATENT OFFICE.

CONRAD DIETZ, OF CINCINNATI, OHIO.

HINGE.

SPECIFICATION forming part of Letters Patent No. 698,468, dated April 29, 1902.

Application filed September 26, 1901. Serial No. 76,631. (No model.)

To all whom it may concern:

Be it known that I, CONRAD DIETZ, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Hinges, of which the following is a specification.

My invention relates to improvements in that class of hinges which have the parts or members in sliding engagement with each other and which are especially adapted to throw the hinged end of the lid of the device, when opened, within the body or casing to which it is hinged, but may relate to any hinge consisting of a plurality of members which have either pivotal or sliding engagement, or both, with each other.

The object of my invention is to provide a structure which will prevent the members composing the hinge from spreading, springing apart, or becoming otherwise accidentally disengaged and whereby a stronger, firmer, and more secure union of the lid with the body is secured and maintained.

My invention consists in providing one or more of the pivotal or sliding pins or studs of the hinge with a lateral lug or keeper to maintain the parts composing the hinge and to which said parts are secured in their proper position and prevent unintentional disengagement or disarrangement of the parts forming the hinge.

The novel features of my invention will be particularly pointed out in the claims.

In the accompanying drawings, which serve to illustrate the preferred form of my invention, Figure 1 is a side elevation of the casing of a washing-machine, showing a portion of a lid or cover secured thereto by my improved hinge, the lid or cover being shown in raised or open position. Fig. 2 is an enlarged view showing a hinge constructed according to my invention in closed position. Fig. 3 is a similar view showing the hinge partly open. Fig. 4 is a transverse section of Fig. 3 on the line *z z*. Fig. 5 is a plan view of one member of the hinge, and Fig. 6 is a perspective view of the same.

The type of hinge to which my improvements are specially adapted is shown in my Patent No. 620,572, in which the hinge com-

prises two pivotally-connected parts or members, one of which is adapted to be secured to the body 1 of the casing and the other to the lid or cover 2 thereof. The hinges are preferably formed of two parts or members 3 and 4, one member 3 being secured to the body 1 of the casing, while the other member 4 is secured to the lid or cover 2, the attachment being effected by means of screws or the like passed through the perforations 5 in the members. The lower member 3 has a rearwardly-curved and upwardly-projecting guide or brace 6, which is preferably formed with a curved slot 7, along which is adapted to move as the cover is raised or lowered a pin or stud 8, projecting laterally from one end of the upper member of the hinge, said member 4 being provided with an offset arm 9 to fit flush against the inner face of said guide or brace 6. The rear portion of the lower member of the hinge is preferably formed with another and shorter guide 11, having a slot 12, inclined upwardly from its rear to its forward ends with reference to the meeting edges of the body and cover of the casing, and in said inclined slot is arranged to work as the lid or cover is raised and lowered a pin or stud 13, which projects laterally from the rear of the upper member 4 of the hinge, the slot 12 being made eccentric to the curved slot 7, in which the pin or stud 8 works, so that as the lid or cover is raised or lowered the pins will simultaneously traverse their respective slots, as shown in Figs. 1, 2, and 3. If preferred, either or both of these slots may be omitted. When it is not desired to throw the end of the cover within the casing when the cover is raised, the slot 12 may be omitted, in which case the pin or stud 13 will be pivotally mounted only.

My invention consists in providing either or both of the studs or pins 8 and 13 with lateral lugs or keepers 8' and 13', each adapted to engage with the part of the guide adjacent thereto and to keep and hold the two parts of the hinge in proper position, so as to prevent spreading or unintentional disengagement thereof, as well as being cheaply and easily made and conveniently put together and taken apart. There is more need for the lug or keeper 8' than the lug or keeper 13', since there is greater danger of springing apart

without it, especially when in its extreme open position, as shown in Fig. 1; but it is also desirable to provide the hinge with lug or keeper 13' to insure against all contingencies.

5 In order to couple the parts together in operative position, place the lug 8' parallel with the slot 7 and insert it so that when the member 4 is turned to the position shown in Fig. 3 the lug or keeper will take over and engage
10 said guide. When in that position, the lug or keeper 13' will be parallel with slot 12, so that the rear parts of the hinge can then be readily connected together. To take apart, simply reverse the operation.

15 It is obvious that my improvements are capable of some modification without material departure from the scope of my invention, and for this reason I do not wish to be understood as limiting myself to the precise form
20 and arrangement thereof nor to the special form of hinge to which I have shown my invention applicable—as, for instance, a pin or stud may be placed upon each member to engage with a corresponding guide upon the
25 other member, and my improved lug or keeper may be formed or secured to either or both of said studs in any shape or manner desired.

I claim—

1. A hinge comprising two parts or mem- 30
bers one of which has two guides and the other a pin or stud adapted to engage with each guide, one of said pins or studs having a lug or keeper adapted to detachably and remov-
ably interlock and engage its adjacent guide. 35

2. A hinge comprising two parts or mem-
bers, one of which has a guide and the other a corresponding pin or stud having a lug or
keeper thereon adapted to engage said guide and hold the parts of the hinge in proper rel- 40
ative position to each other, and means for pivoting the two parts of the hinge together.

3. A hinge comprising in its construction
two members adapted to be respectively se-
cured to a box and its cover, the box member 45
being provided with guide-slots, the one being eccentric to the other, and the cover member having guide-pins each provided with a
lug or keeper and adapted to be seated in,
take over and engage the edges of the respec- 50
tive guide-slots of the box member.

CONRAD DIETZ.

Witnesses:

JAMES N. RAMSEY,
C. W. EARNIST.