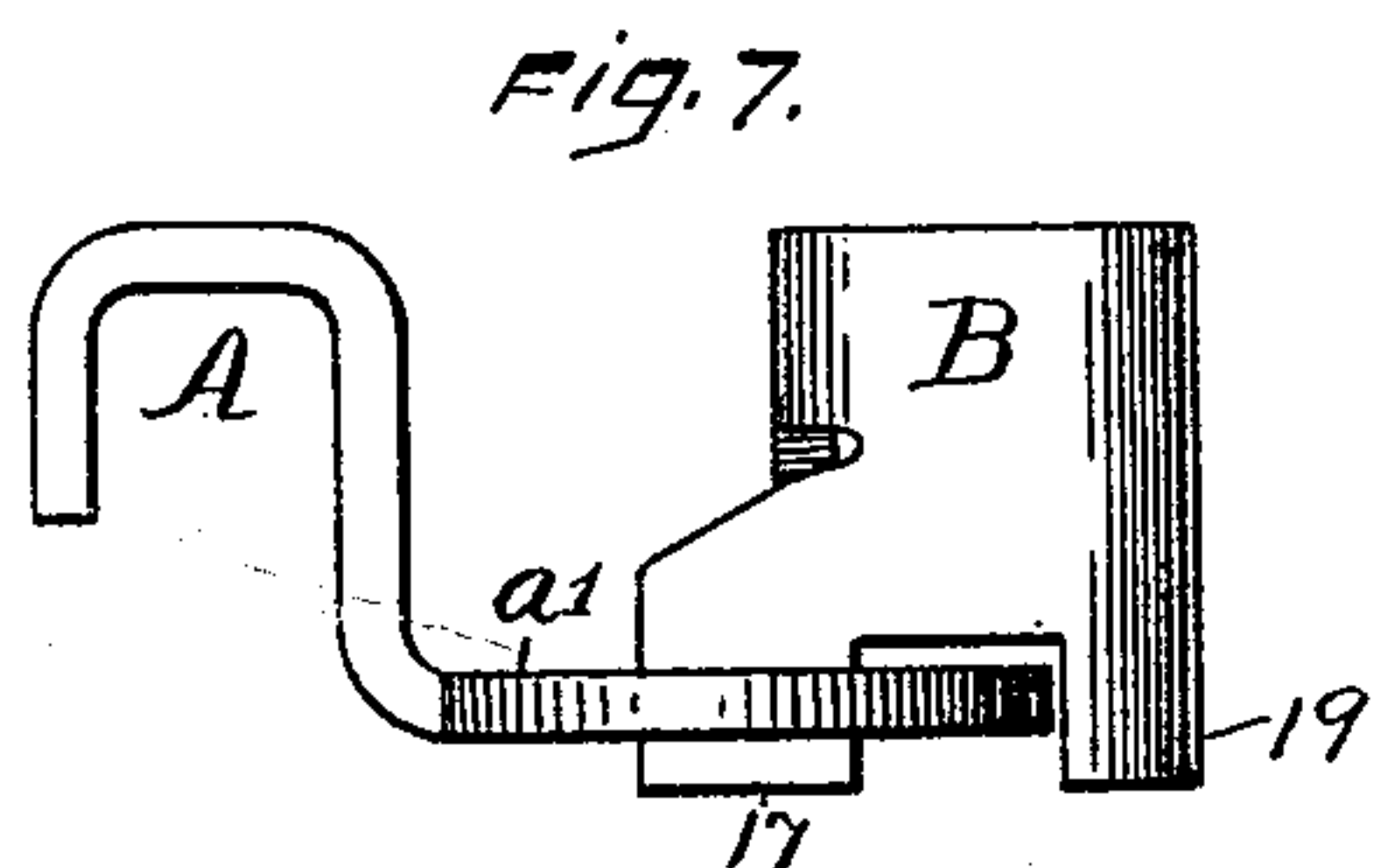
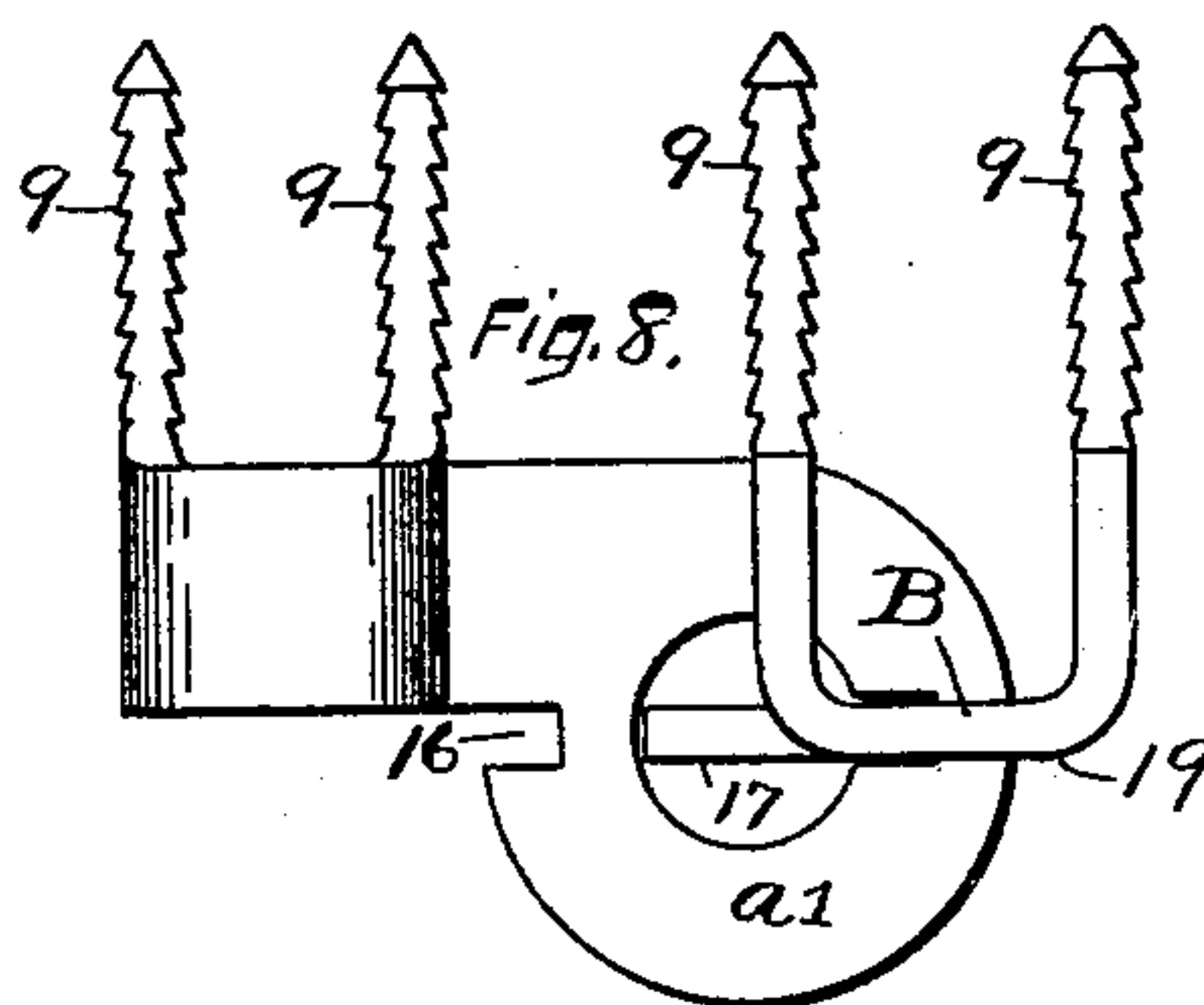
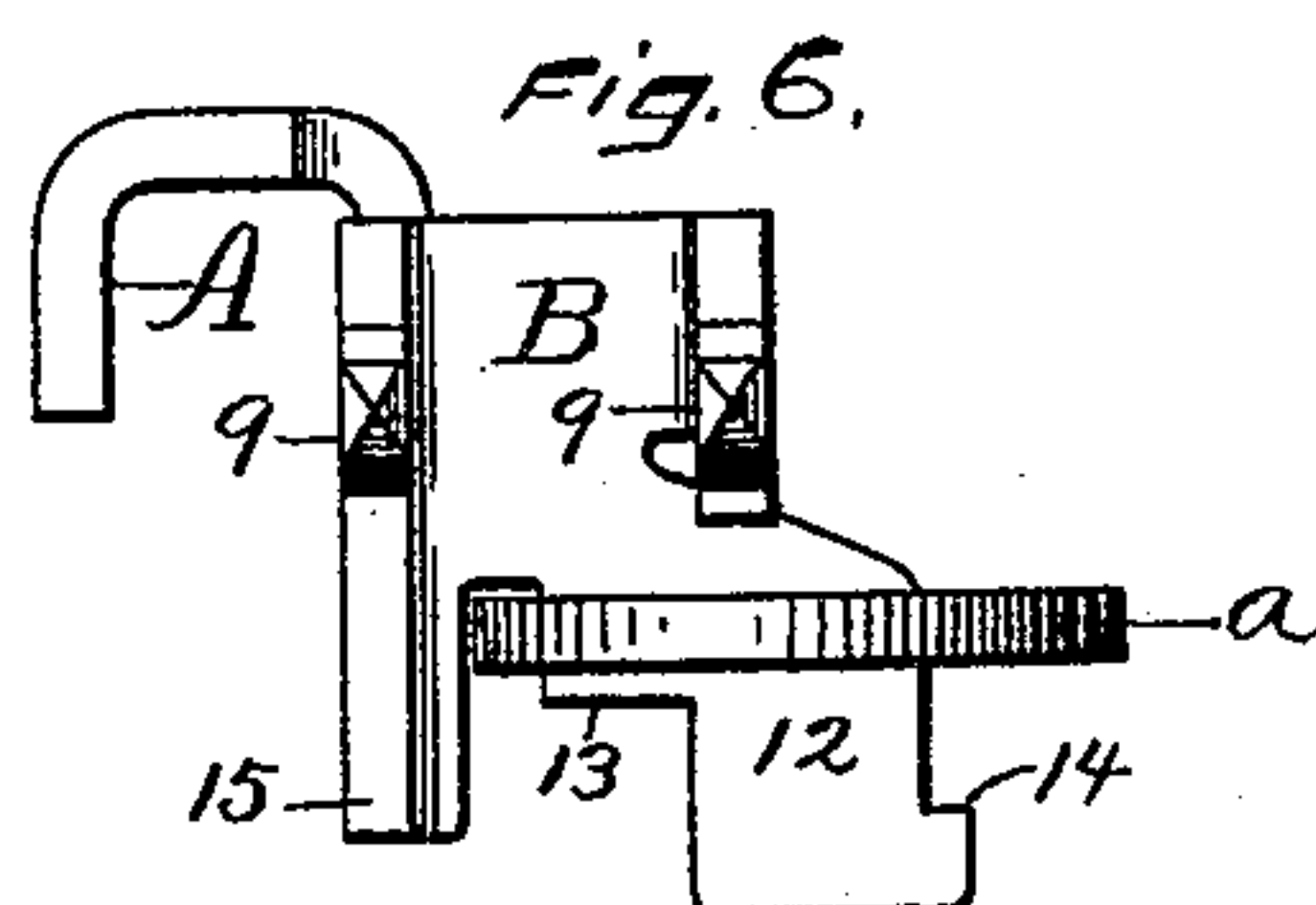
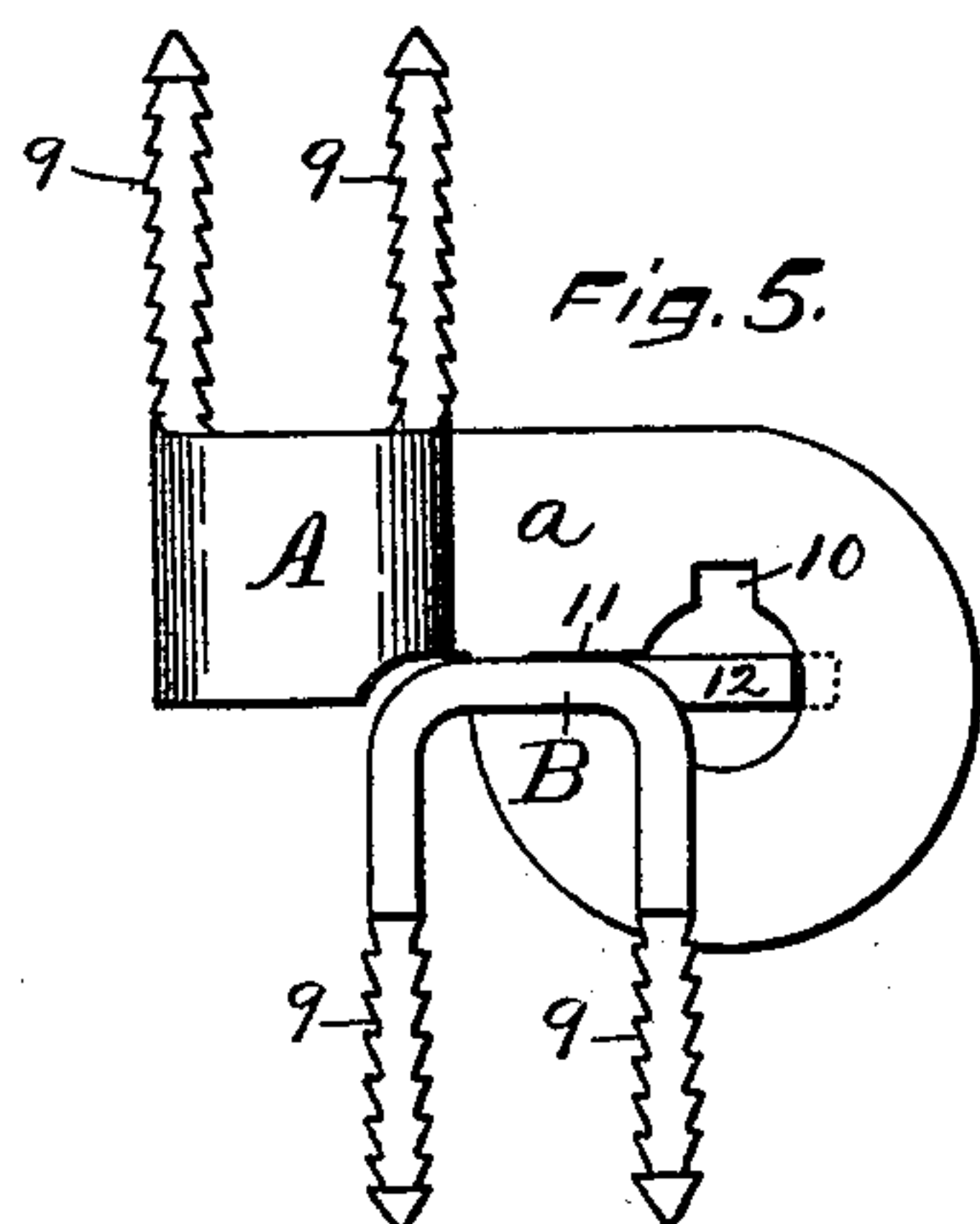
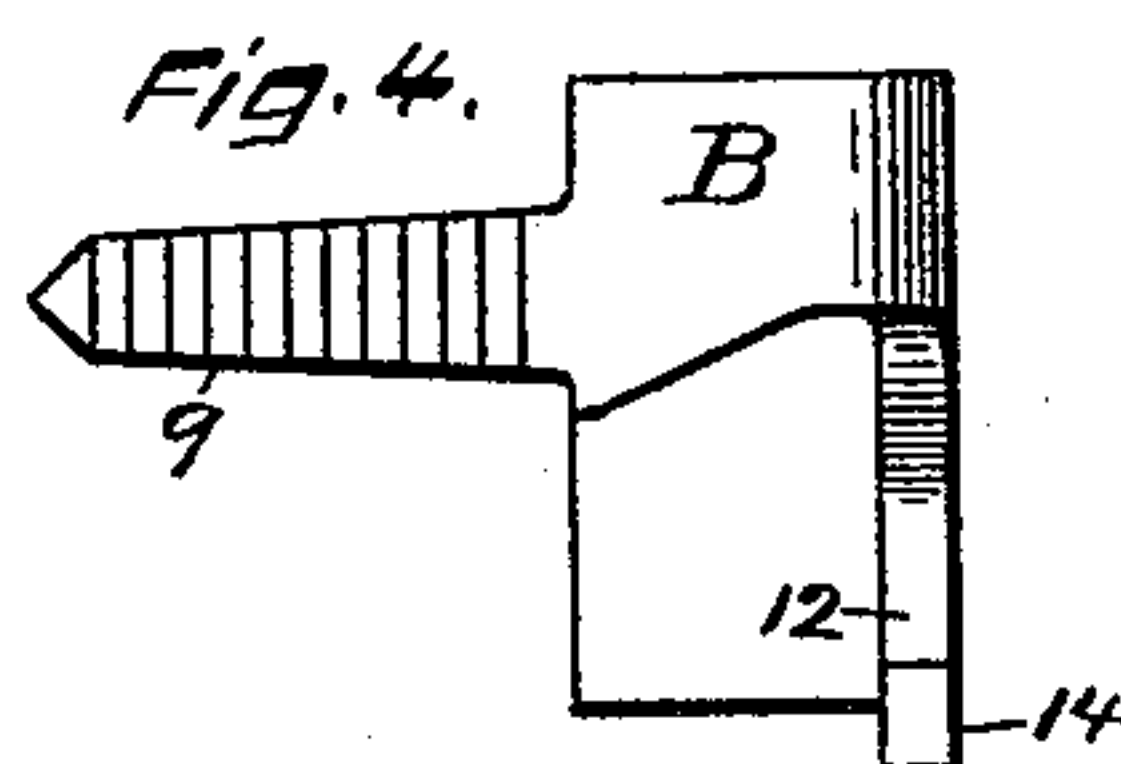
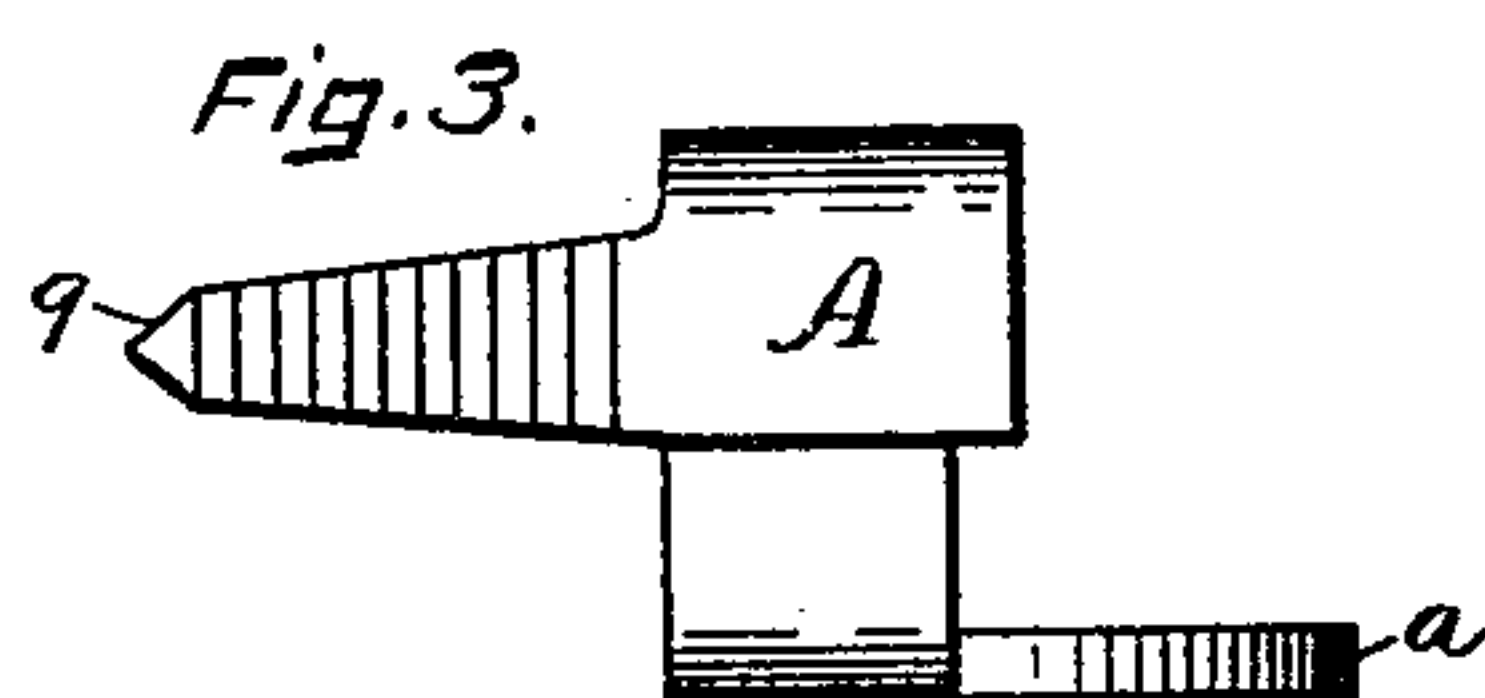
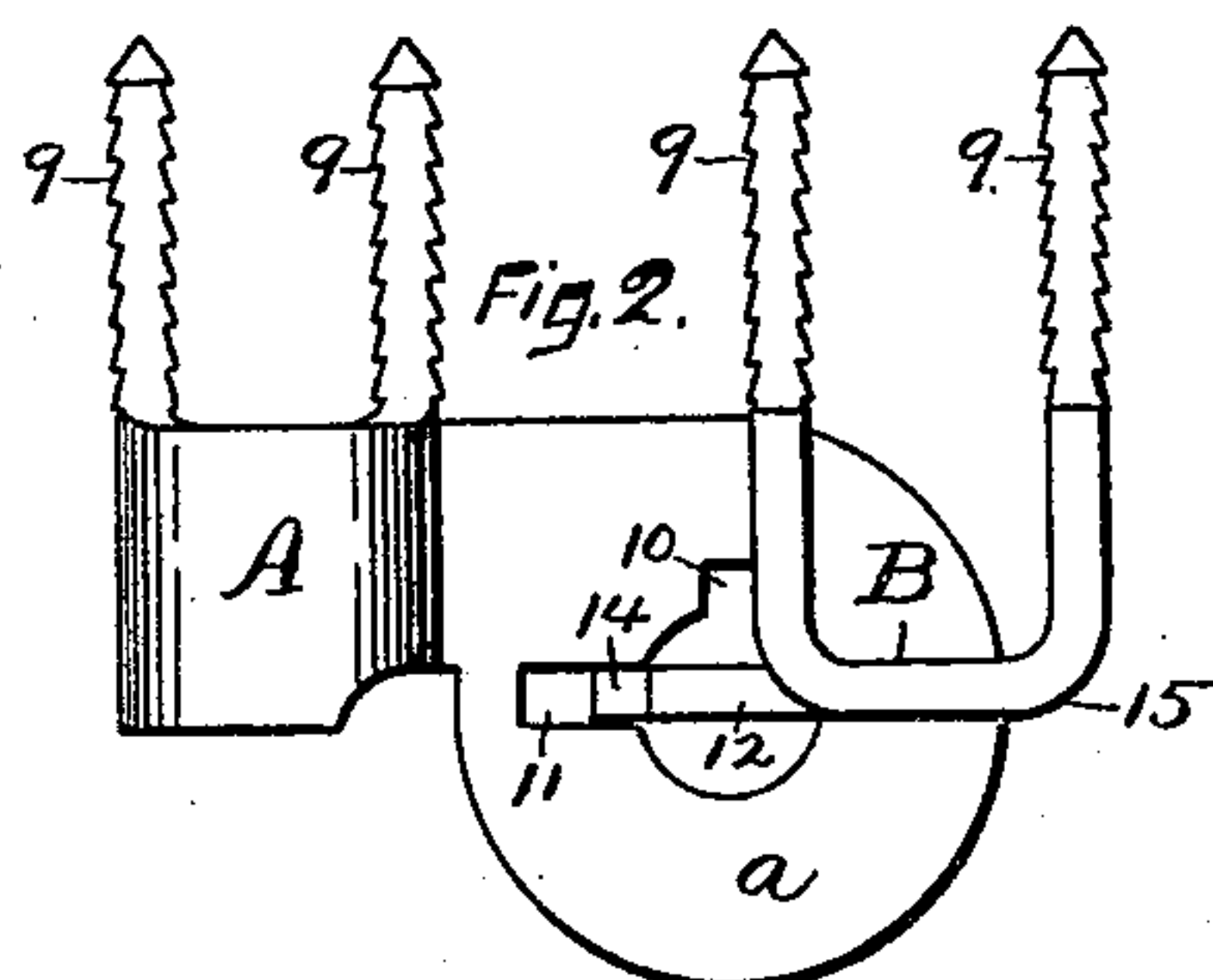
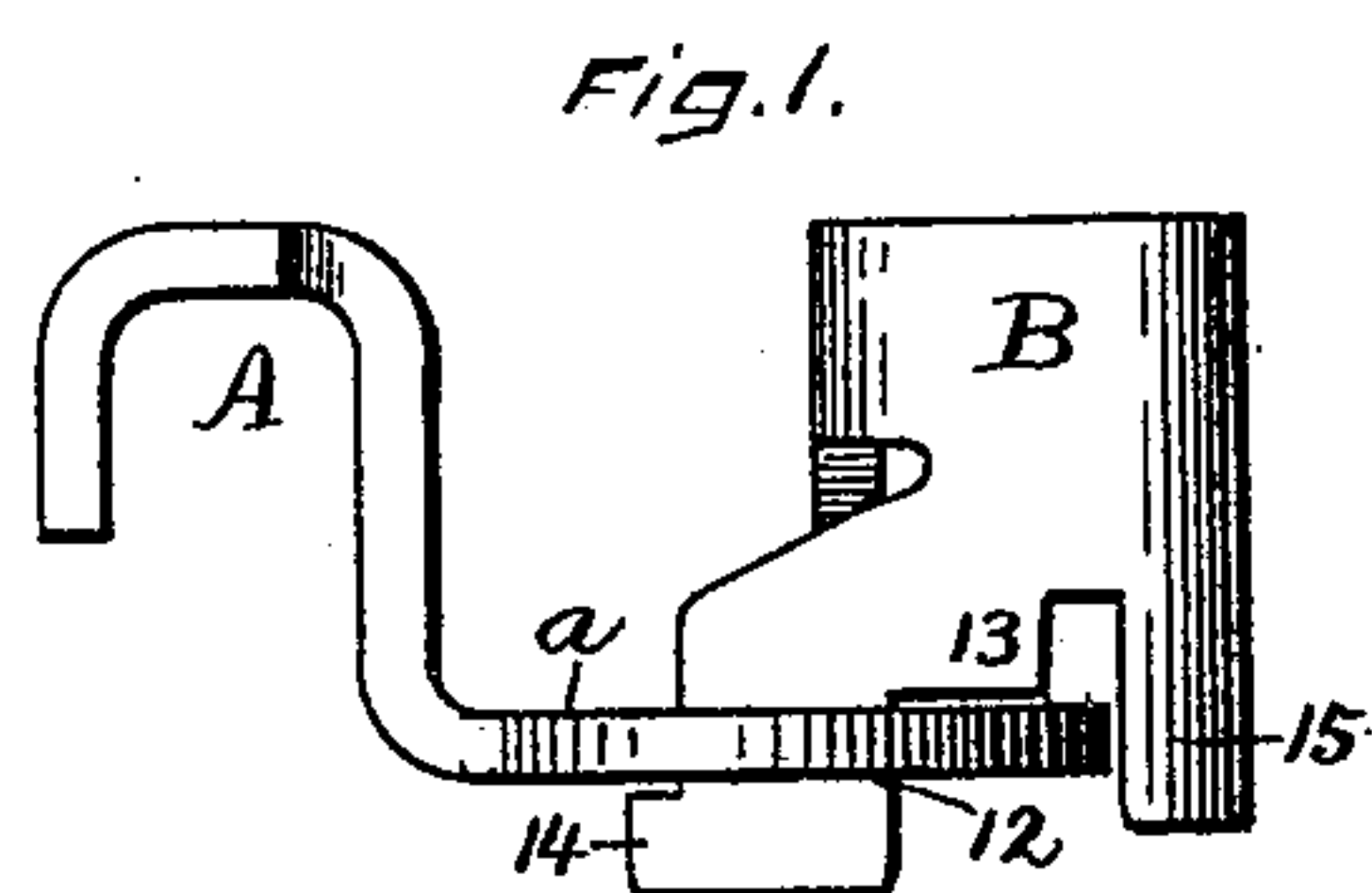


(Model.)

T. CORSCADEN.  
LOCK HINGE.

No. 460,678.

Patented Oct. 6, 1891.



WITNESSES.  
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W. H. Whiting.

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By James Shepard  
Att'y.

# UNITED STATES PATENT OFFICE.

THOMAS CORSCADEN, OF NEW BRITAIN, CONNECTICUT.

## LOCK-HINGE.

SPECIFICATION forming part of Letters Patent No. 460,678, dated October 6, 1891.

Application filed October 17, 1890. Serial No. 368,380. (Model.)

*To all whom it may concern:*

Be it known that I, THOMAS CORSCADEN, a citizen of the United States, residing at New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Blind or Shutter Hinges, of which the following is a specification.

My invention relates to improvements in blind or shutter hinges; and the objects of my improvement are to provide integral fastening devices for a sheet-metal blind-hinge, to make a new form of hinge-leaves, and to produce an improved form of gravity drop-hinges.

In the accompanying drawings, Figure 1 is a front elevation of one of my blind-hinges, the same being in the position that they will occupy when the blind or shutter is closed. Fig. 2 is a plan view of the same. Fig. 3 is a side elevation of the hinge-leaf or part that is designed to be secured to the window-frame. Fig. 4 is a side elevation of the hinge-leaf or part designed to be secured to the blind or shutter. Fig. 5 is a plan view of the complete hinge in the position it will occupy when the blind or shutter is open. Fig. 6 is a front elevation of the same in the same position. Fig. 7 is a front elevation of a sheet-metal blind-hinge having a part only of my present improvement, and Fig. 8 is a plan view of the same, both figures being represented in the position the hinge will have when the blind or shutter is closed.

The leaf A is made substantially in the form of an inverted U, with barbed fastening-shanks 9 9, extending from its rear edge, and a horizontal disk-shaped knuckle *a*, extending horizontally to one side from the lower end of the side members of the leaf. The center of this knuckle is perforated to form a pintle-hole and is provided with a rearwardly-extending slot 10 and a lateral slot 11 on the side which faces the body of the leaf A. This part of the hinge is all formed from a flat piece of sheet metal of the proper form, and bent into shape substantially as shown, the barbs being formed on the shanks 9 in any suitable dies.

The companion leaf B is substantially in U form in plan view, and it is likewise provided with rearwardly-extended barbed shanks 9. Depending from the front end or bottom of

the U-shaped portion of the leaf is a flat plate, a portion of which forms the pintle 12, at the upper end of which pintle portion there is a locking-shoulder 13 and at the lower end of which there is a holding-shoulder 14. I also form upon said hinge-leaf B a bearing-lug 15 for bearing upon the outer edge of the disk *a*, as hereinafter described. This part of the hinge, like the leaf A, is also formed from a single piece of flat sheet metal of the desired shape and bent into the form shown.

The hinges at the upper and lower ends of the shutter may be and preferably are the same.

The two parts of the hinge are secured in place by driving the barbed shanks into the wood until the body of the leaf at the junction of said shanks rests upon the surface of the wood. To connect the two parts of the hinge the leaf B is turned around with the shutter standing at an angle of about ninety degrees to the window frame, so that the flat sides of the pintle 12 extend from front to rear and the shoulder 14 may drop down vertically through the slot 10 in the disk-shaped knuckle *a*, so as to bring said shoulder under the disk and allow the shoulder 13 to rest upon the upper side thereof. The bearing-lug 13 will prevent the rear edge of the pintle proper 12, above the shoulder 14, from ever being caught in the slot 10. The two parts are now pivoted together to form a proper hinge, and will act as an ordinary hinge until the blind or shutter is swung fully open, as represented in Figs. 5 and 6. The shoulder 13 is then brought into a position coincident with the slot 11 and the whole blind and hinge-leaf B dropped downwardly, so that the shoulder 13 rests in the slot 11 and locks the hinge against rotation, as most clearly shown in Fig. 6. In order to open the blind, it is necessary to lift it to withdraw the shoulder 13 from the slot 11. In case the blind or shutter should be lifted higher than is necessary to withdraw the shoulder, the shoulder 14 will catch upon the lower side of the disk *a* and prevent the pintle from being wholly withdrawn. When the edge of the pintle is passing the slot 10, the bearing-lug 15 engages the outer edge of the disk and prevents the edge of the pintle from being caught within said slot. It is evident that the slot 10 and shoulder 14 may be dis-



pensed with, although I prefer to employ them. When said slot and shoulder are dispensed with, it is also evident that the bearing-lug 15 may be omitted.

5 In Figs. 7 and 8 I have shown my hinge, with the hinge-leaves A and B, provided with the barbed fastening-shanks 9 9, but with the hinge joint and lock of the form shown and described in my prior application, Serial No.  
10 361,616, filed August 11, 1890. In this construction the horizontal disk *a'* is provided with a pintle-perforation, slotted at one side, and a slot 16 in the outer edge of the disk, so that the flat pintle 17 and bearing-lug 19 may  
15 engage said slots by moving laterally under the weight of the blind when the blind is fully open, all as more fully described in my aforesaid application. I have herein illustrated said hinge merely to show that a portion of my in-  
20 vention—to wit, the hinge-leaves A B, with the barbed fastenings 9 9—may be applied to hinges in which the joint is of a different construction from that shown in the preceding figures.

25 My improved hinge is not only substantial and efficient, but it is very easily and conveniently secured in place, and there is a material saving in cost over perforated hinge-leaves provided with separate screws.

30 While I prefer to make my hinge of sheet metal, the particular form shown is adapted to be made of cast malleable iron.

I am aware that a prior patent shows a hinge formed of two, four, or more narrow  
35 strips of sheet metal pointed at one end and bent flatwise of the strip at the other end around a joint-pin, said pointed strips projecting alternately from opposite sides of the joint-pin and having their outer portions  
40 bent at right angles to the portion next the joint-pin, said pointed outer portions having cut or otherwise formed on their corners, edges, or sides one or more barbs or pointed projections; also, that a prior patent shows  
45 a wire hinge made in two parts, each part of U shape, the bar portion of one part closed around the bar portion of the other part, whereby the bar portion of one part serves as the pintle for the other part and the legs of

each part serve as fastening-shanks; also, 50 that another patent shows a hinge in which the pintle is provided with a projection or lip, whereby the eye portion of the hinge is prevented from separating from the pintle por-  
tion, except when a recess formed in the eye 55 is brought in line with the lip on the pintle. All of said prior art is hereby disclaimed.

I claim as my invention—

1. The herein-described hinge, consisting of two leaves pivotally connected, the body 60 portions of said leaves extending at right angles to the axis of said hinge and having integral fastening-shanks and stop-shoulders at the junction of said two parts, said shanks and adjacent portions of the body being in  
65 alignment with each other, substantially as described, and for the purpose specified.

2. The herein-described hinge, consisting of two leaves having a body of substantially a U form, rearwardly-projecting fastening-  
70 shanks in alignment with the adjacent portion of said body, and a stop-shoulder at the junction of said shank and body, substantially as described, and for the purpose specified.

3. The herein-described hinge, with a hori- 75 zontal knuckle *a* formed on one leaf, having the slot 11 at one side of its pintle-hole, and the companion-leaf having the pintle 12, surmounted by the shoulder 13, the same being located and combined for having said shoul-  
80 der ride on the upper face of said horizontal knuckle until the hinge is opened and then to register with and drop into said notch to lock the hinge, substantially as described, and  
85 for the purpose specified.

4. The herein-described hinge, one leaf of which is provided with a perforated horizon-  
tal knuckle *a*, having the slots 10 and 11 at the sides of the pintle-opening, and the compan-  
90 ion leaf having the bearing-lug 15 and pintle 12, with the shoulders 13 and 14 respectively above and below the bearing portion of said pintle, substantially as described, and for the purpose specified.

THOMAS CORSCADEN.

Witnesses:

JAMES SHEPARD,

JOHN EDWARDS, Jr.