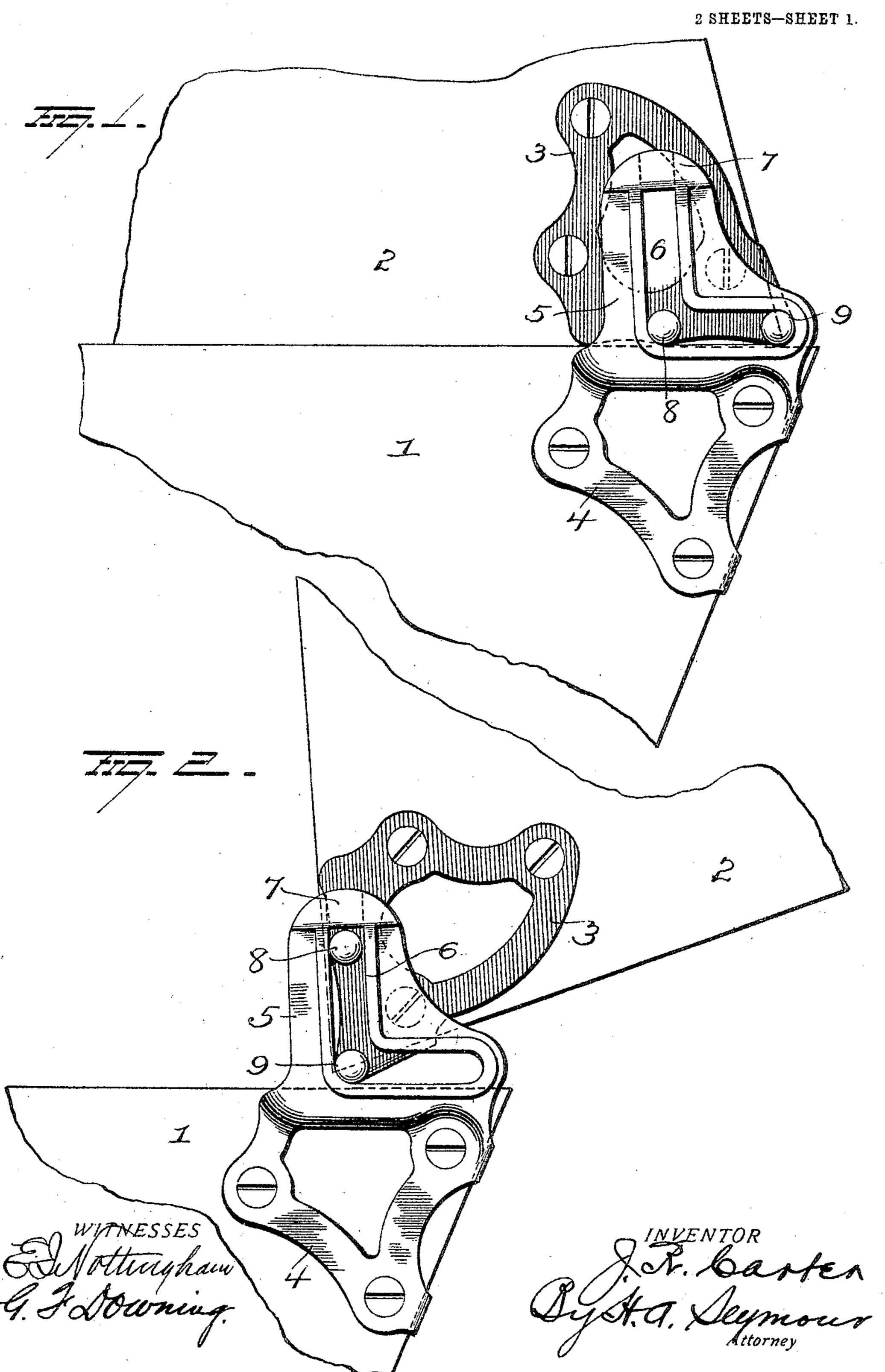
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## UNITED STATES PATENT OFFICE.

JOHN R. CARTER, OF AUGUSTA, KENTUCKY, ASSIGNOR TO ERNST H. HUENEFELD, OF CINCINNATI, OHIO.

## HINGE.

No. 822,648.

Specification of Letters Patent.

Patented June 5, 1906.

Application filed March 24, 1905. Serial No. 251,861.

To all whom it may concern:
Be it known that I, John R. Carter, a resident of Augusta, in the county of Bracken and State of Kentucky, have invented cer-5 tain new and useful Improvements in Hinges; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use 10 the same.

My invention relates to improvements in hinges, and more particularly to hinges for washing-machines, although it is to be understood that the invention is not restricted to 15 such use, but is intended to cover any use to which the hinge can be put.

The object of the invention is to provide a simple inexpensive hinge, comparatively small and compact, which can be readily as-20 sembled and which will be strong and durable in use.

A further object is to provide a hinge consingle angular slot or guide and the other 25 member made with one or more lugs or studs and movable in the slot or guide to permit the cover to open and compel its edge to move inward over the body and direct water in the cover back into the body when the 30 cover is opened.

With these objects in view the invention consists in certain novel features of construction and combinations and arrangements of parts, as will be more fully hereinafter de-35 scribed, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in side elevation, illustrating one form of my invention. Fig. 2 is a similar view showing the cover raised; and Figs. 3, 4, 5, 40 and 6 are views illustrating modifications.

1 represents a washing-machine body, and 2 a cover therefor, and 3 and 4 are the two members of my improved hinge. While I shall describe but one hinge, it is to be under-45 stood that similar hinges are at both sides of the machine.

The lower member 4 is secured to body 1 and is provided with an upwardly-projecting portion 5, bent away or offset from the cover 50 to accommodate member 3, and is made with an angular slot or opening 6, the upper end of said portion 5 being bridged over the up-

per end of the slot or opening 6, as shown at 7, for a purpose which will hereinafter appear.

The upper member 3 is provided with two studs or lugs 8 and 9, spaced the proper distance apart and adapted to enter the slot or opening 6, and when the cover is closed these lugs or studs 8 and 9 lie at the extreme ends 60 of the horizontal portion of said opening or slot. When the cover is raised, stud 8 moves up the vertical portion of the slot, while stud 9 moves forward in the horizontal portion of the slot, causing the edge of the cover to 65 move forward, and when the cover is opened to its fullest extent the stud 8 will be in the upper portion of the slot and the stud 9 will be in the forward end of the horizontal portion of the slot and hold the cover raised with 70 its edge or end projected inward over the body 1, so as to compel any water in the

cover to fall back into the body. By providing the bridged upper end 7 of sisting of two members, one of which has a | the opening 6 the members 3 and 4 can be se- 75 cured to the cover and body, respectively, and the studs 8 and 9 can when the cover is held in its open position be inserted or removed from the opening at will. In other words, by thus constructing the members of 80 the hinge the cover can be inserted and removed without removing either member of the hinge from its fixed support and does not require the hinge to be assembled and secured to the body and cover while thus as- 85 sembled. If, however, it should be desired to have the upper end of the opening closed, it could be done without departing from my invention, and the members can be reversed with the studs carried by the body member 90 and the slotted guide on the cover member.

In Figs. 3 and 4 I illustrate modifications in which the slotted guide 6 is located at a different angle from that of the preferred form, and in Fig. 3 the studs 8 and 9 are car- 95 ried by the cover member and the slotted guide by the body member, while in Fig. 4 the parts are just reversed—namely, the studs are carried by the body member and the slotted guide by the cover member.

Fig. 5 illustrates a modification in which the slotted guide 6 is located at substantially the same position as it is in Fig. 3, with the additional provision of a notch or pocket 10

at the upper rear wall of the slot, which permits stud 8 to fall back therein and throw the

end of the tub farther forward.

In Fig. 6 I illustrate a form of my improve-5 ments wherein a single elongated lug 11 is employed instead of two lugs or studs. This elongated lug 11 has rounded ends and flat sides, and when the cover is closed rests with its flat side against the flat lower wall of the 10 guide-slot 12. This guide-slot has an angular guide-wall at its forward edge, while its rear edge is shaped to permit the lid to swing from an approximately horizontal to an approximately vertical position when the cover 15 is opened and swing the end of the cover forward over the body.

By providing one member of the hinge with slots having straight guide-walls the rear edge of the cover 2 is compelled to move 20 forwardly over the upper edge of the machine-body 1 in a line parallel with said upper edge and without leaving the same at any

time when the cover is being raised.

Having fully described my invention, what 25 I claim as new, and desire to secure by Let-

ters Patent, is—

1. A hinge comprising two overlapping members, one of said members having an angular continuous guide-wall, said guide-wall 30 comprising two straight portions contiguous at their inner ends, and means projecting from the other member to ride simultaneously on both portions of said angular guidewall and cause the rear edge of the part to 35 which the upper hinge member is secured to move forwardly over and substantially parellel to the part to which the lower member is secured when the upper hinge member is swung relatively to the lower hinge member.

2. A hinge comprising two overlapping members, one of said members having an angular continuous wall, said guide having two straight portions, one of said straight portions of the guide-wall disposed to lie sub-45 stantially parallel with the edge of the part to which said member is secured, and means projecting from the other hinge member and disposed to ride simultaneously on both portions of the angular guide-wall when one 50 hinge member is being raised, and cause the rear edge of the part to which one hinge member is secured to move forwardly in a line substantially parallel with the edge of the part to which the other hinge member is

55 secured. 3. In a hinge, the combination with two members having overlapping portions, and one of said overlapping portions having an angular slot therein with straight guide-60 walls, two studs on the overlapping portion

of the other member located in said angular slot to ride on the straight guide-walls thereof, said lugs being so spread apart that with either extreme position of the hinge one of said lugs or studs will be located in the angle 65 of the slot whereby the upper member will have two bearings upon the lower member and the rear edge of the upper member will be caused to move forwardly in a line parallel with the edge of the body to which the 70 lower member is secured when the upper member is raised.

4. In a hinge, the combination of two members, one of said members having a slot or opening made with an entrance or exit at 75 one end, and lugs or studs on the other member located in said slot throughout the entire hinge movement and adapted to be entered or removed through said entrance or exit.

5. In a hinge, the combination of two 80 members, one of said members having an angular slot, one portion of said slot being approximately vertical and open at its upper end and studs or lugs on the other member located in said angular slot throughout the 85 entire hinge movement and adapted to be entered or removed through the open end of said slot.

6. In a hinge, the combination of two members having overlapping portions, and 90 one of said overlapping portions having an angular slot, a portion of said slot being approximately horizontal to lie parallel with the edge of the body to which the hinge member is secured and the other portion of said 95 slot approximately vertical, and lugs or studs on the overlapping portion of the other member, both located in said slot throughout the entire hinge movement.

7. The combination with a body and a 100 cover, of a hinge member secured to the body and having an angular slot, one portion of said slot being approximately horizontal and located at the upper edge of the body, another portion of said slot being approxi- 105 mately vertical and open at its upper end, a hinge member on the cover, and lugs or studs on said last-mentioned hinge member adapted to enter the angular slot through the open end thereof, whereby the cover can be re- 110 moved or replaced without detaching either member of the hinge from the part to which it is secured.

In testimony whereof I have signed this specification in the presence of two subscrib- 115 ing witnesses.

JOHN R. CARTER.

Witnesses:

S. W. Foster, R. S. Ferguson.