

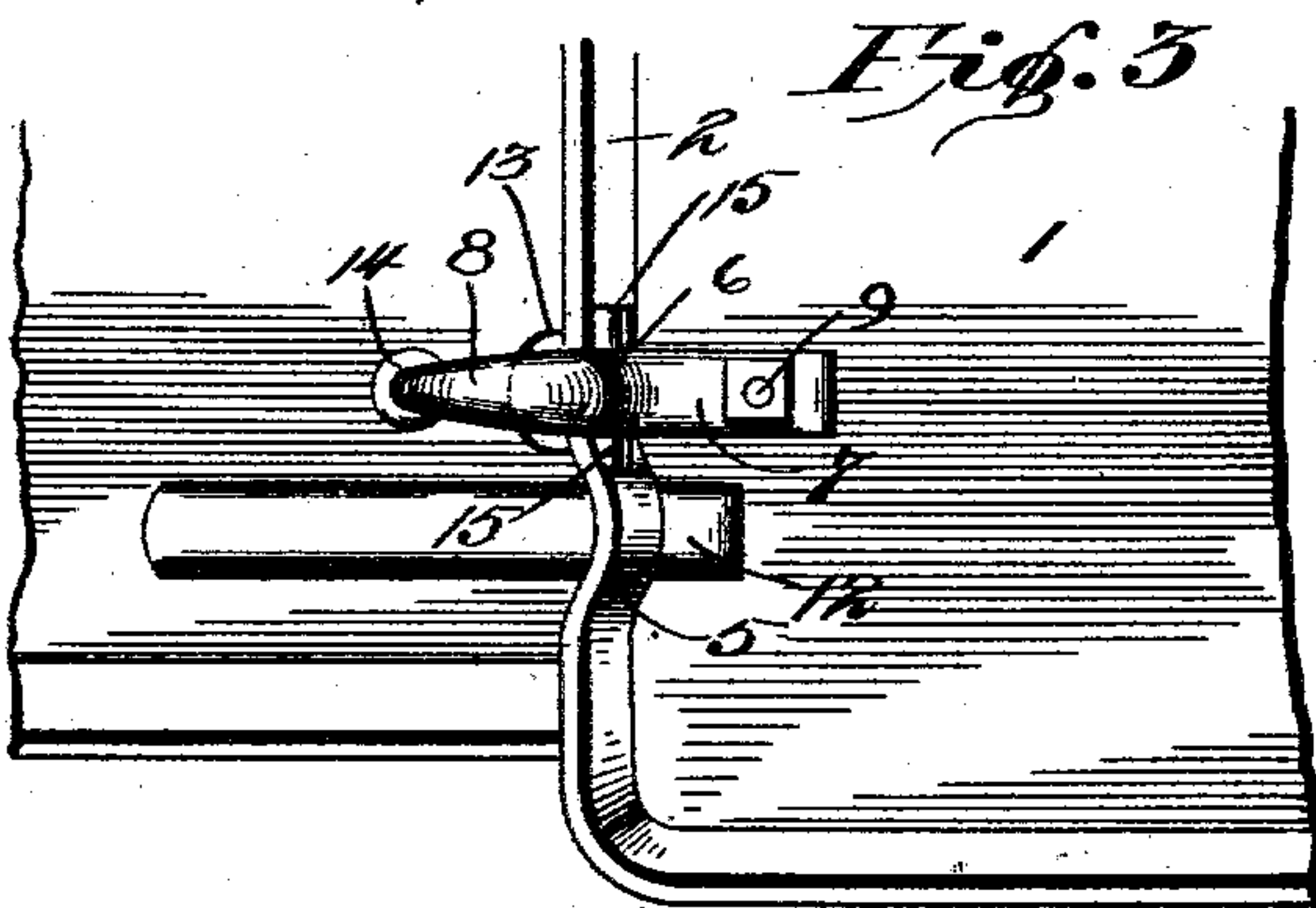
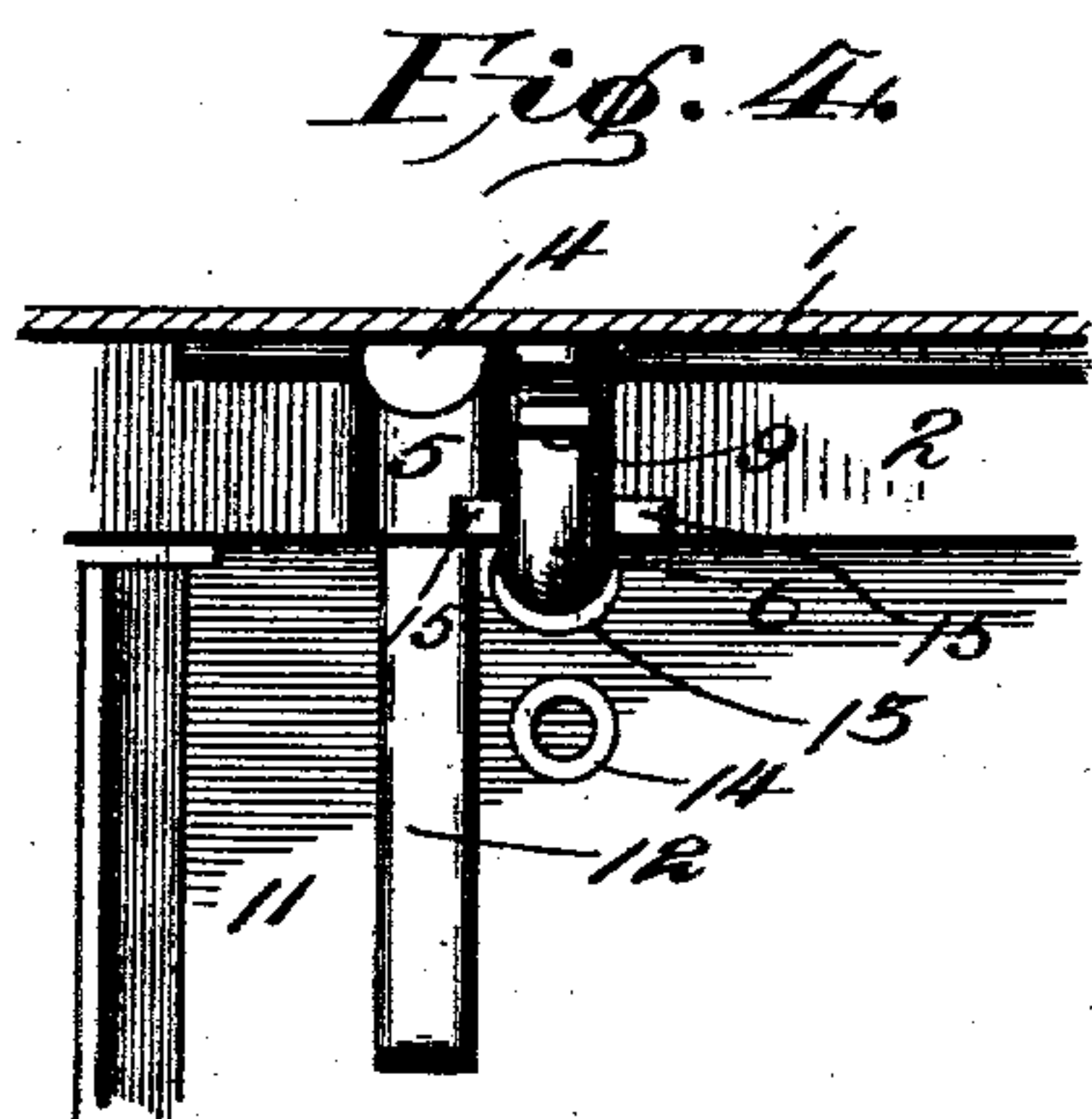
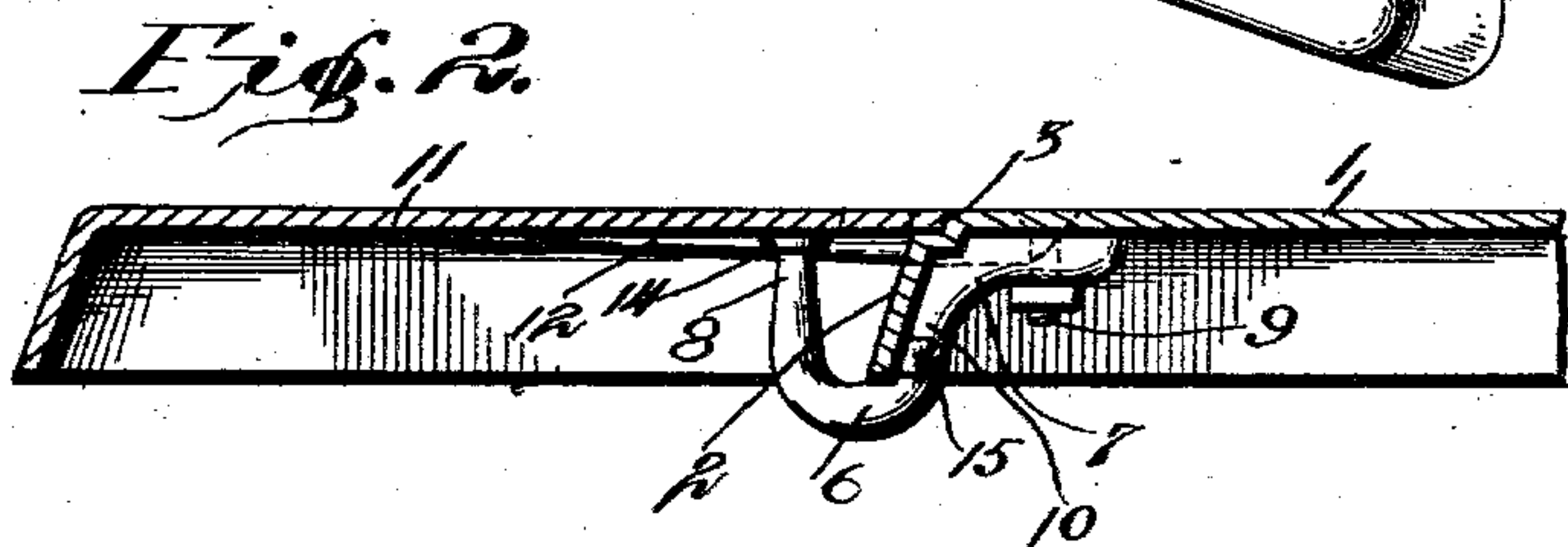
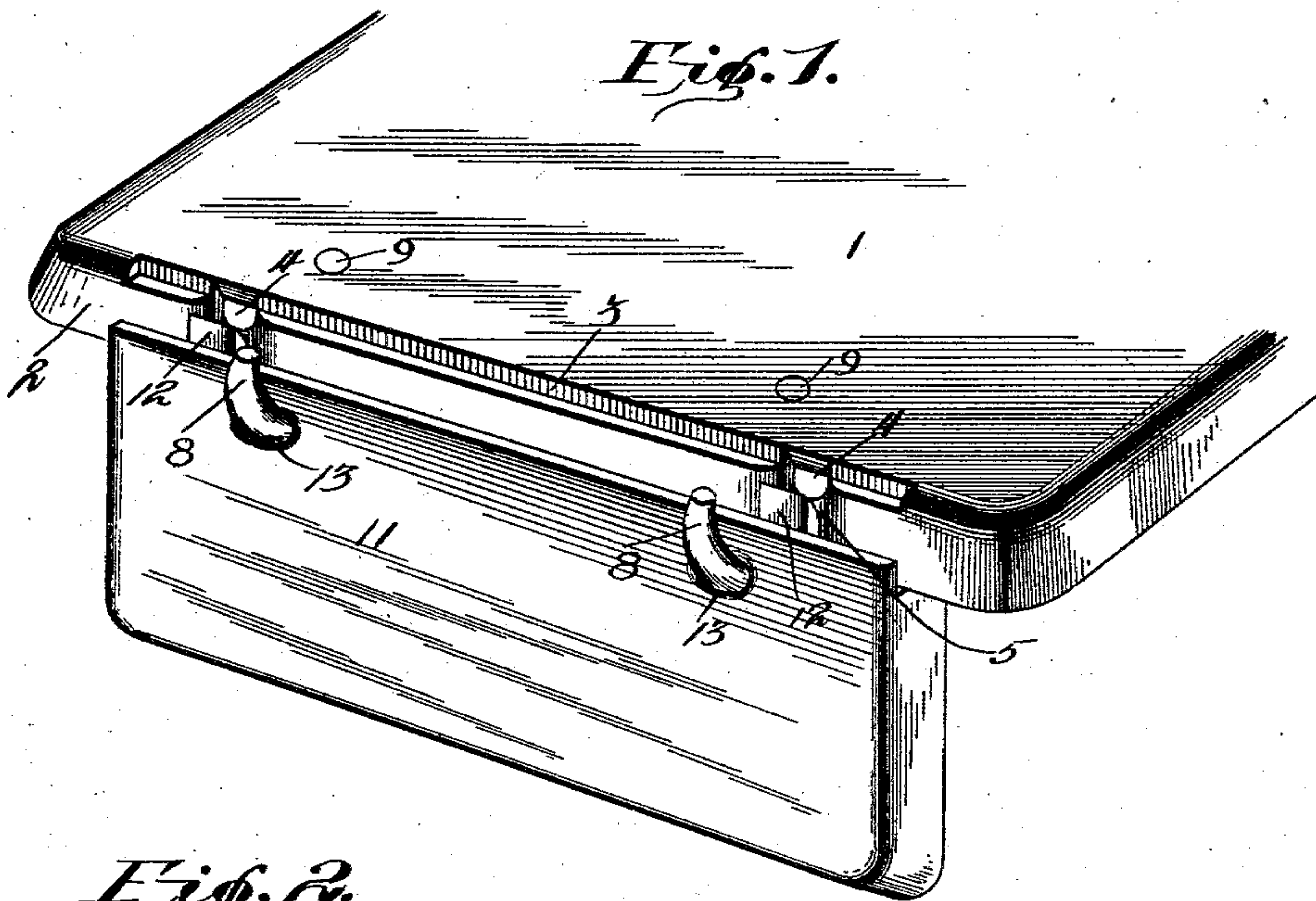
No. 629,299.

Patented July 18, 1899.

J. A. KLINE.
DROP SHELF.

(Application filed May 25, 1899.)

(No Model.)



Witnesses
Clarence H. Walker. By *his* Attorneys,
A. B. Shepard.

John A. Kline Inventor

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UNITED STATES PATENT OFFICE.

JOHN A. KLINE, OF READING, PENNSYLVANIA, ASSIGNOR TO THE READING STOVE WORKS, ORR, PAINTER & CO., OF SAME PLACE.

DROP-SHELF.

SPECIFICATION forming part of Letters Patent No. 629,299, dated July 18, 1899.

Application filed May 25, 1899. Serial No. 718,159. (No model.)

To all whom it may concern:

Be it known that I, JOHN A. KLINE, a citizen of the United States, residing at Reading, in the county of Berks and State of Pennsylvania, have invented a new and useful Drop-Shelf, of which the following is a specification.

This invention relates to drop-shelves for stoves, tables, and like articles, and has for its object to provide a simple and improved connection between the shelf and the article to which the former may be attached, whereby the shelf may be substantially supported in its operative position and also capable of being folded downwardly alongside of the said article.

To these ends the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details of construction may be made within the scope of the appended claims without departing from the spirit or sacrificing any of the advantages of the present invention.

In the drawings, Figure 1 is a perspective view of a portion of a stove-top having the improved shelf fitted thereto and shown in its folded position. Fig. 2 is a sectional view taken transversely through the shelf and the adjacent portion of the stove-top and at one side of one of the foldable connections. Fig. 3 is an underneath plan view of one of the connections. Fig. 4 is a rear elevation of one of the connections, showing the shelf in its folded position.

Corresponding parts in the several figures of the drawings are denoted by like characters of reference.

Referring to the accompanying drawings, 1 designates a portion of a top of a stove having a pendent flange 2, which is provided at its upper edge with a longitudinal angular groove 3. Intersecting the longitudinal groove 3 is a pair of openings 4, which are located near the opposite ends of the grooves and extend laterally through the flange 2 and beneath the stove-top 1. Leading downward

from each of the openings 4 is a groove or depression 5, formed in the outer face of the flange 2 and extending the entire width thereof.

Fitted to the under side of the stove-top and located intermediate of the openings 4 is a pair of hooks 6, which are duplicates, and therefore a description of one of the hooks is deemed to be sufficient. Each hook is arranged contiguous to the inner side of its respective opening 4 and comprises a flat shank 7, which is fitted flush against the under side of the stove-top, so that the bill portion 6 is adapted to embrace the lower edge of the flange 2 and the outer free end 8 thereof to extend upwardly and outwardly in front of the flange. It will be noted by reference to Fig. 2 that the flat shank 7 is removably connected to the top of the stove by means of a suitable bolt 9, and the portion 10 of the bill of the hook which is adjacent to the shank fits flush against the inner side of the flange 2, so that the hook fits snugly in the angle formed between the top of the stove and the pendent flange thereof, whereby the hook is firmly connected to the stove. By reference particularly to Figs. 3 and 4 of the drawings it will be seen that the portion 10 of the bill of the hook 6 is provided at opposite sides with outwardly-projecting ears or shoulders 15, which are adapted to engage against the inner side of the flange 2, thereby bracing the removable hook against lateral movement.

The foldable shelf 11 may be a solid plate, as shown, or formed of open-work, as desired, and is provided at its inner edge with lugs or shoulders 12, which project beyond said edge of the shelf and in a plane parallel with the top thereof. These lugs are located near opposite ends of the shelf, and suitable openings 13 are provided through the top of the shelf and adjacent to the inner sides of the respective lugs 12. Provided upon the underneath side of the shelf and just in advance of each opening 13 is a socket or recess 14.

In fitting the shelf to the stove the lugs 12 are introduced through the openings 4, formed in the flange of the stove-top, the shelf being inclined upwardly, so as to avoid the hooks

6. After the lugs have been thus engaged with the openings 4 the shelf is permitted to assume its normal position in the same plane with the stove-top, as most clearly indicated in Fig. 2, whereby the free end 8 of each hook is received within the respective socket or recess 14. Thus it will be seen that the inner edge of the shelf is situated within the groove 3. The lugs 22 project through the openings 4 and engage against the under side of the stove-top, whereby the shelf is effectually braced by being seated upon the free ends of the hooks 6, which extend a suitable distance in advance of the edge of the stove. When it is desired to fold the shelf into the position shown in Fig. 1, the outer edge of the shelf is elevated so as to disconnect the hooks from the sockets 14, and then the shelf is drawn outward until the lugs 12 have cleared the top of the stove and the openings 13 in the shelf are alined within the free ends of the respective hooks. After the shelf has been elevated in this position the outer end thereof is inclined downwardly, so as to engage the hooks 6 within the openings 13, and the top is then permitted to swing downwardly upon the hooks, as indicated in Fig. 1. It will now be understood that the grooves or depressions 5 are adapted to receive the respective lugs 12 in the folded position of the shelf, so that the latter may lie as close as possible to the side of the stove.

It will be apparent from the foregoing description that the shelf is normally carried by the stove and is also capable of being removed therefrom, as desired. Furthermore, the shelf may be readily folded by drawing the same slightly outward and then folding it downward without removing or disconnecting the shelf from the stove and readily returned to its original position by raising the shelf upwardly upon the hooks as a center and engaging the lugs 12 through the openings 4, as hereinbefore described.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a drop-shelf, the combination with a support having an outwardly-projecting hook, of a shelf having a lug projecting beyond one edge thereof, said lug being adapted to engage against the under side of the support and the free end of the hook engaging against the under side of the shelf and forming a brace therefor, substantially as shown and described.

2. In a drop-shelf, the combination with a support having a pendent flange provided with a lateral opening, of a hook having a shank fitted to the under side of the support and against the inner side of the flange thereof, the bill of the hook embracing the flange

and extending upwardly in front thereof, and a shelf having a lug projecting beyond one edge thereof and adapted to extend through the opening formed in the flange of the support, whereby the shelf is adapted to rest upon the free end of the hook, substantially as shown and described.

3. In a hinge for drop-shelves, the combination with a support having a hook projecting beyond the edge thereof, of a shelf having an opening provided therethrough and a lug projecting beyond one edge thereof, the lug being adapted to engage the under side of the support, and a shelf to rest upon the free end of the hook, whereby the said shelf is held in its operative position, and the opening in the shelf being adapted to receive the hook, in the folded position of the shelf, substantially as shown and described.

4. In a hinge for drop-shelves, the combination with a support having a pendent flange provided with a lateral opening, of a hook fitted to the underside of the support and having the bill projecting in front of the flange, a shelf having a lug projecting beyond one edge thereof, an opening formed through the top and at one side of the lug, and a socket or recess alined in advance of the opening, substantially as and for the purpose set forth.

5. In a drop-shelf, the combination with a support having a pendent flange provided with a lateral opening, of a detachable hook having a shank which is bolted to the under side of the support, whereby the bill of the hook embraces the flange of the support and projects outwardly in front thereof, and is provided with opposite ears or shoulders which are adapted to engage against the inner side of the flange and thereby brace the hook against lateral movement, and a shelf provided with a lug projecting beyond one edge thereof and adapted to extend through the opening formed in the flange and engage against the under side of the support, whereby the free end of the hook engages the under side of the shelf and forms a brace therefor, substantially as shown and described.

6. In a drop-shelf, the combination with a support having a hook projecting beyond one edge thereof, of a shelf provided with a lug adapted to engage against the under side of the support, and provided on its under side with a socket or recess adapted to receive the free end of the bill of the hook, substantially as shown and described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOHN A. KLINE.

Witnesses:

J. HARRY LONGACRE,
D. W. KLINE.