

No. 859,298.

PATENTED JULY 9, 1907.

J. W. JOHNSON.
RECEPTACLE SUPPORTING DEVICE.
APPLICATION FILED JUNE 2, 1905.

3 SHEETS—SHEET 1.

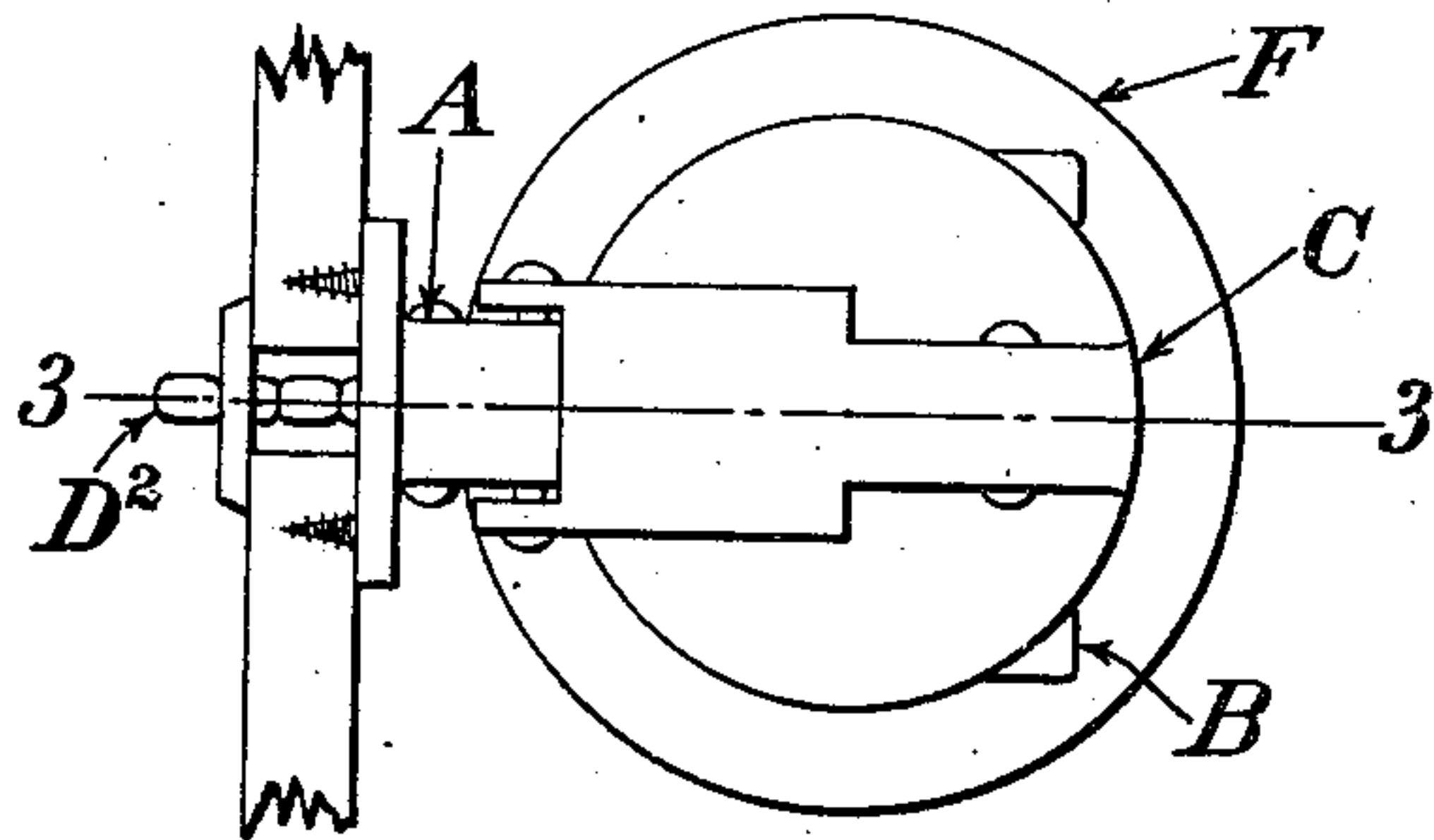


Fig. 2

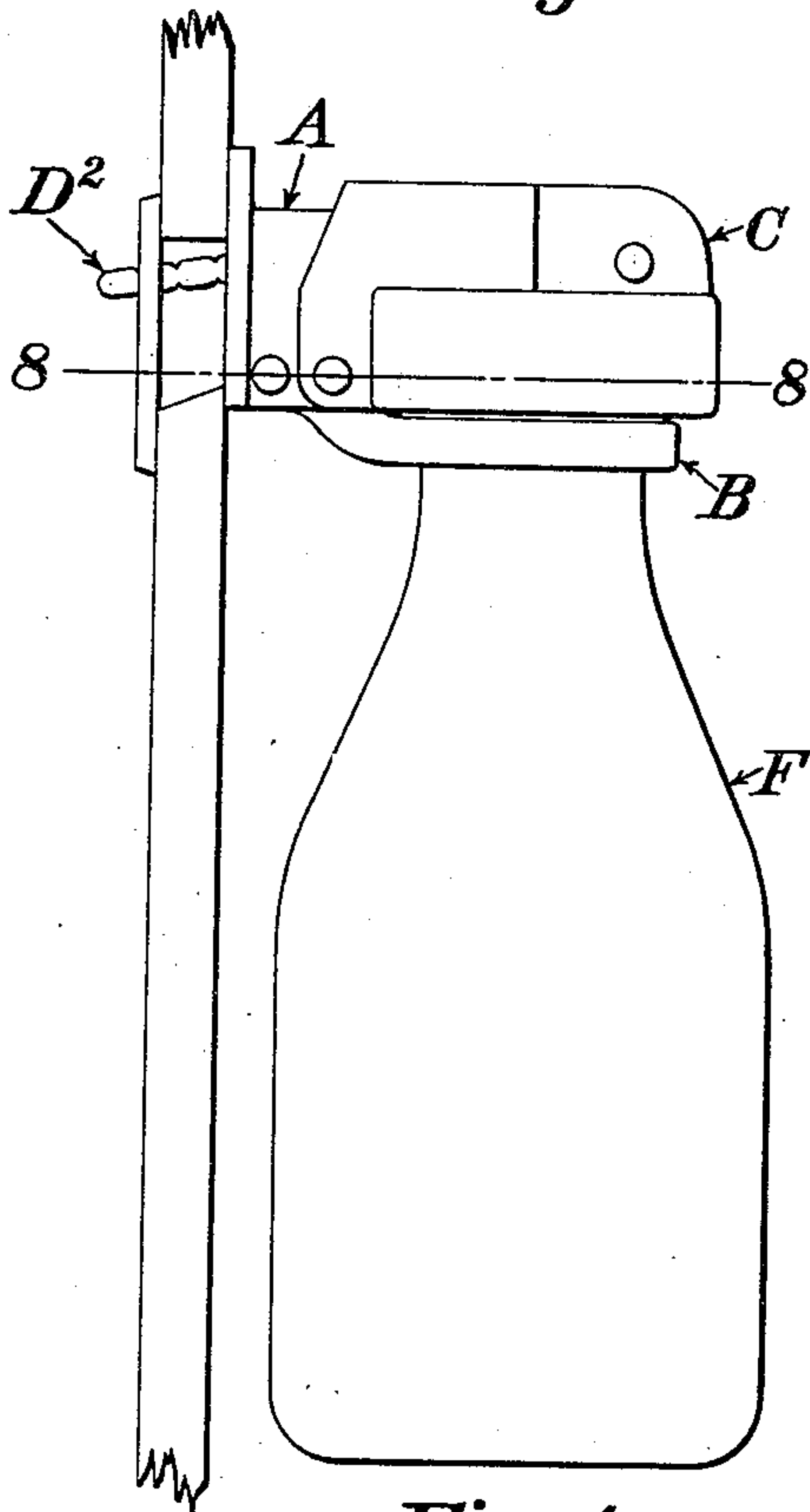


Fig. 1

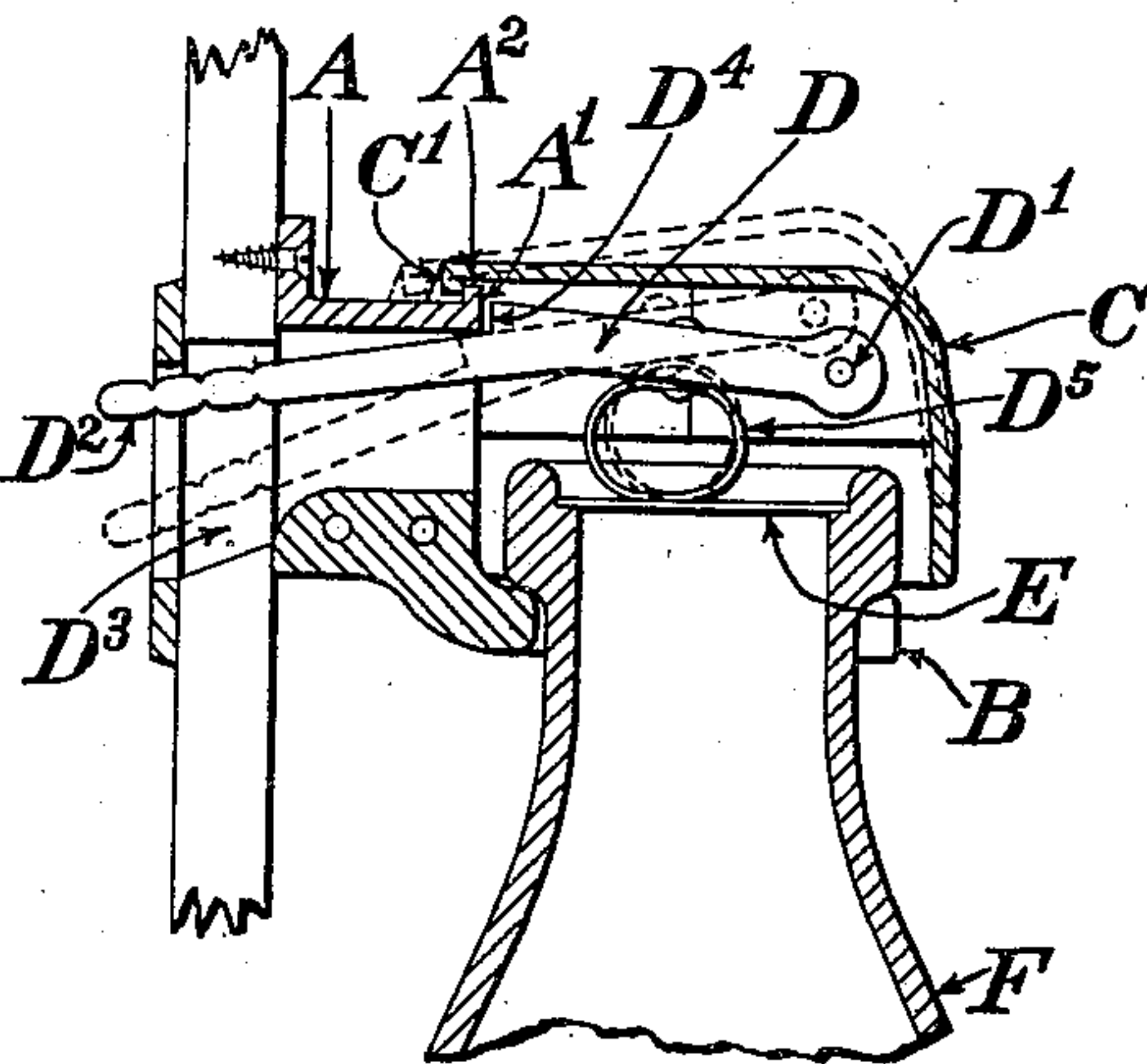


Fig. 3

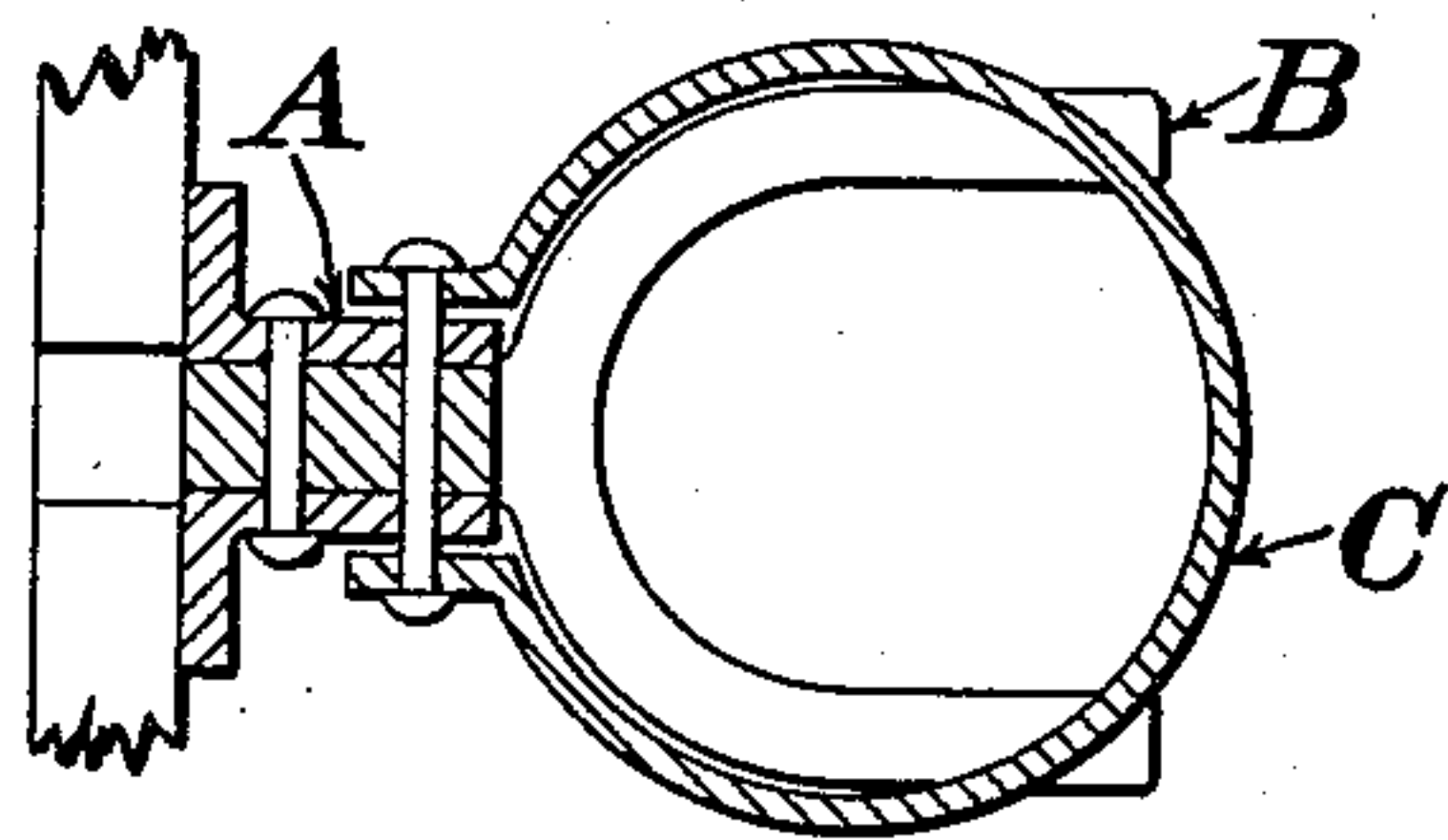


Fig. 8

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3 SHEETS—SHEET 2

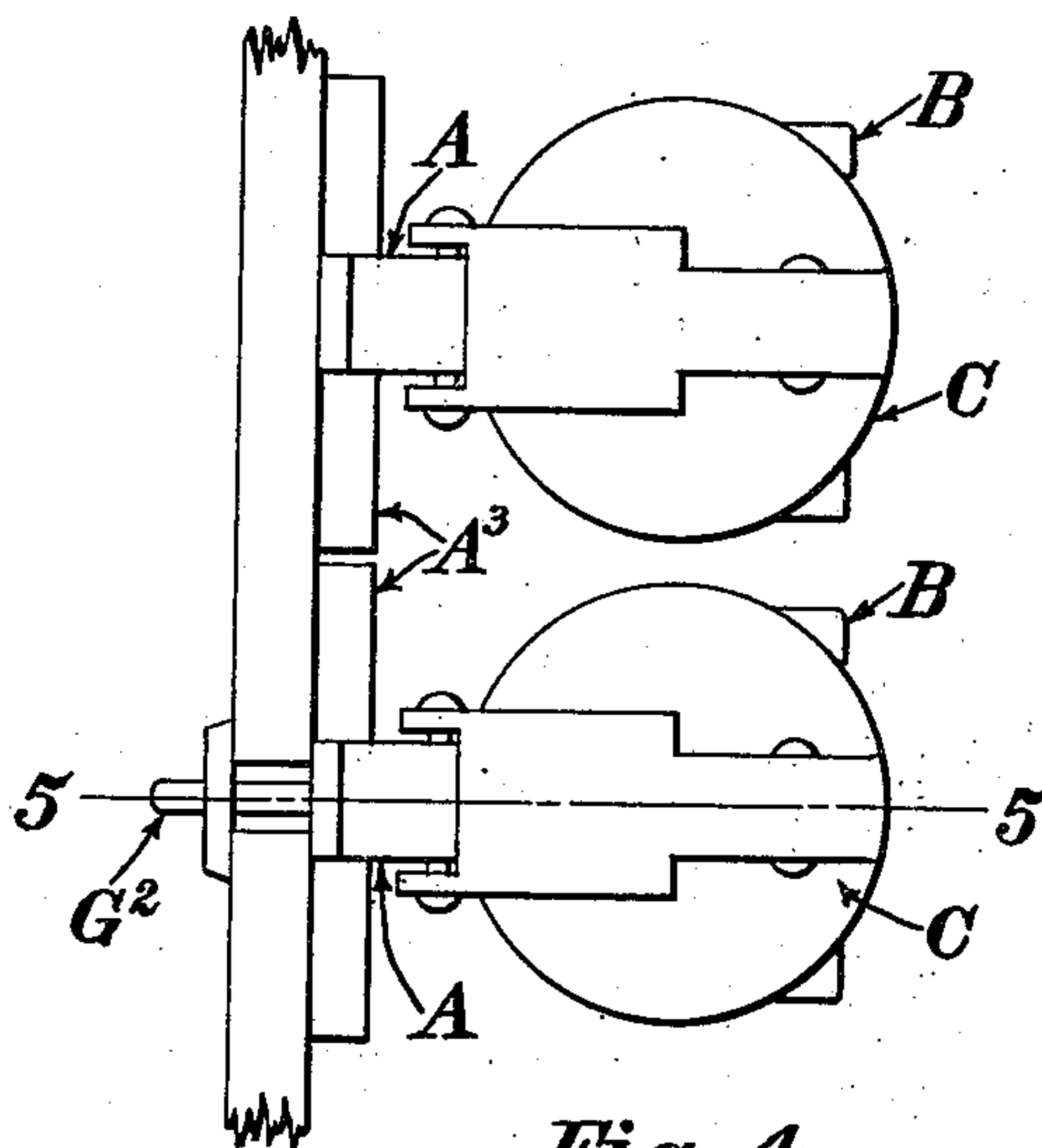


Fig. 4

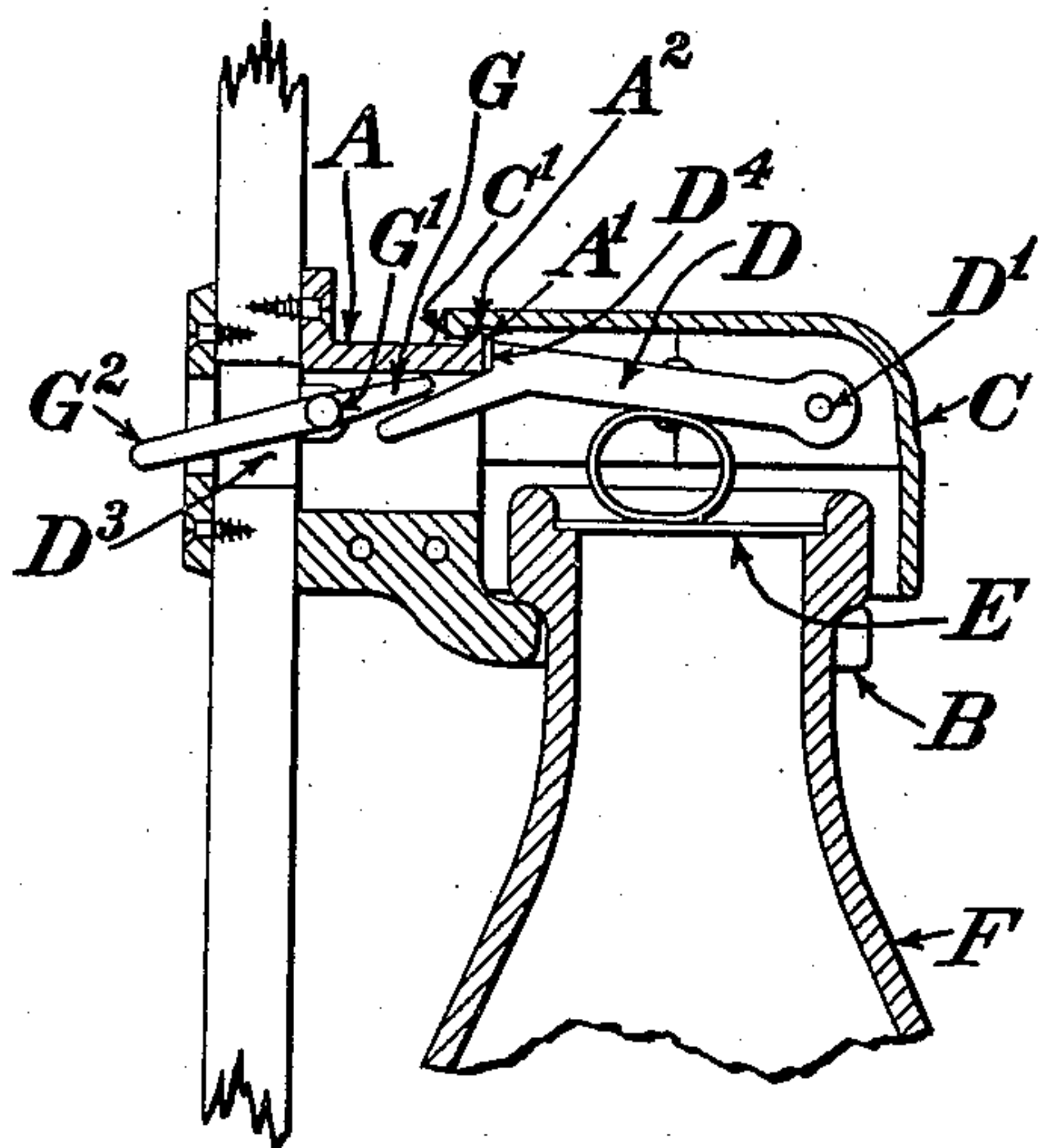


Fig. 5

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3 SHEETS—SHEET 3.

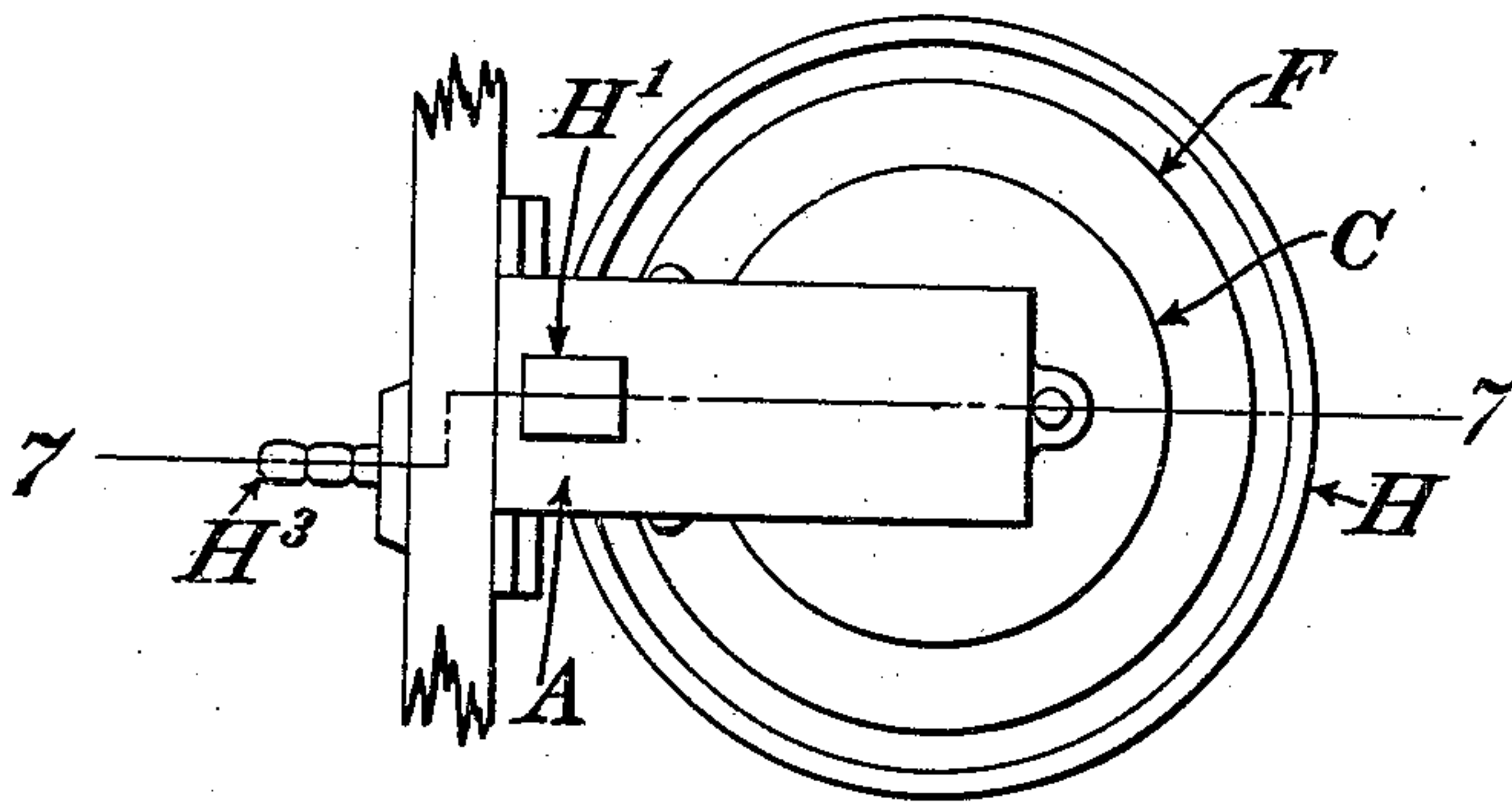


Fig. 6

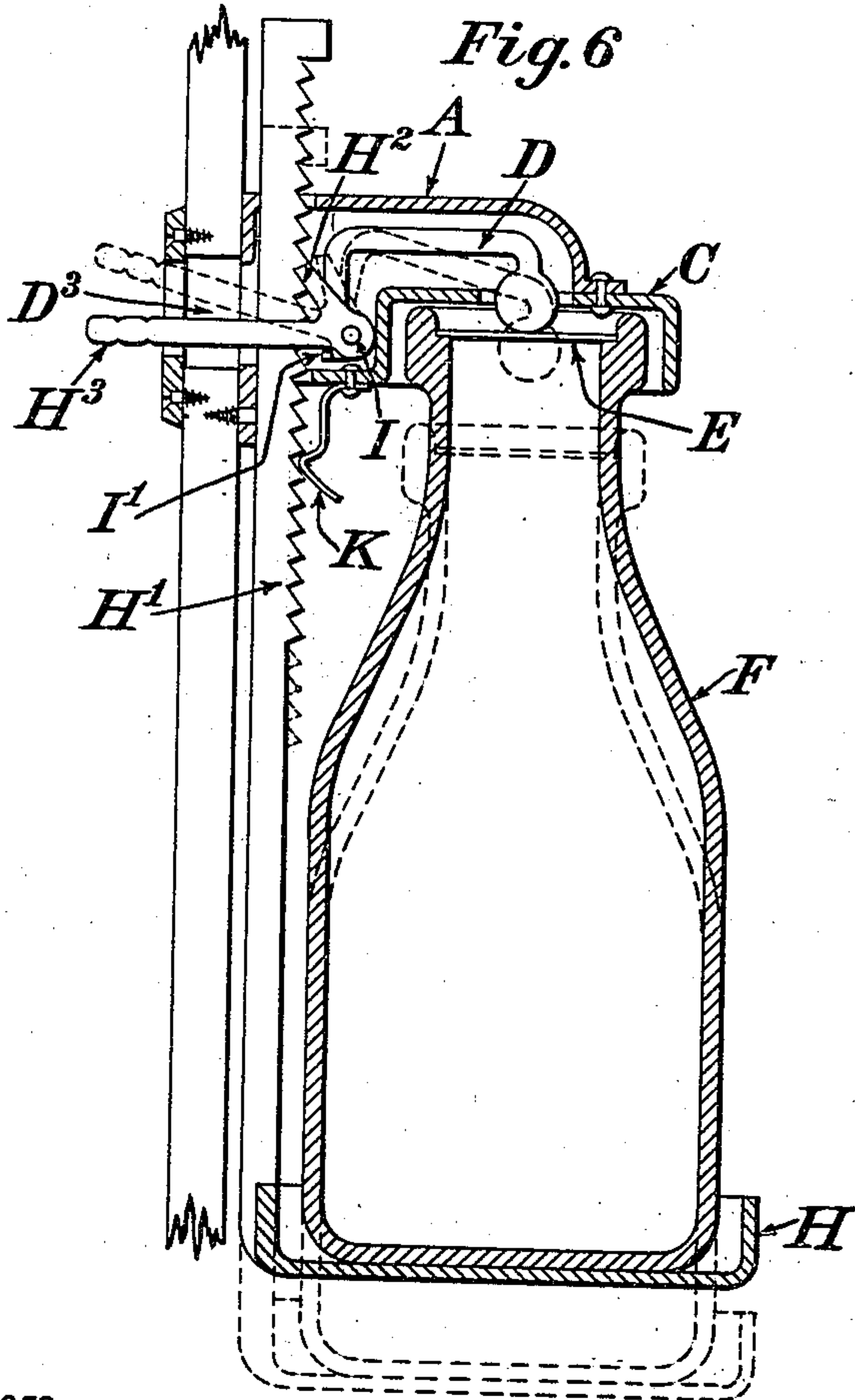


Fig. 7

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UNITED STATES PATENT OFFICE.

JAMES W. JOHNSON, OF CHICAGO, ILLINOIS.

RECEPTACLE-SUPPORTING DEVICE.

No. 859,298.

Specification of Letters Patent.

Patented July 9, 1907.

Application filed June 2, 1905. Serial No. 263,431.

To all whom it may concern:

Be it known that I, JAMES W. JOHNSON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Receptacle-Supporting Devices, of which the following is a specification.

My invention relates to supporting devices for receptacles, such as milk bottles, etc., and has for its object to provide a new and improved device of this description.

My invention is illustrated in the accompanying drawings, wherein

Figure 1 is a view of one form of a device embodying my invention, showing the parts in their locking position; Fig. 2 is a plan view of Fig. 1; Fig. 3 is a sectional view on line 3—3 of Fig. 2 with parts omitted; Fig. 4 is a plan view showing a modified construction where a series of devices are operated from one point; Fig. 5 is a sectional view on line 5—5 of Fig. 4; Fig. 6 is a plan view showing a further modification; Fig. 7 is a sectional view taken on line 7—7 of Fig. 6; Fig. 8 is a sectional view taken on line 8—8 of Fig. 1.

Like letters refer to like parts throughout the several figures.

My device is particularly adapted for holding material delivered in receptacles to users in houses, apartment buildings, and the like, and is adapted to prevent the carrying away of such material if not at once taken in by the user.

In the drawings I have shown my device as applied to milk bottles, but it is of course evident that it can be applied to various other devices.

Referring to Figs. 1, 2, 3 and 8, wherein I have shown a simple construction embodying my invention, the locking device is adapted to be connected to the outside of the door, although it may be attached to a wall or the like if desired. This device consists of a supporting piece A fastened to a support preferably by a bolt so that it cannot be removed from the outside.

Associated with the supporting piece A is an engaging piece B which may be a part thereof or separate therefrom and attached thereto. This engaging piece is here shown as a fork open at the front as shown in Fig. 8. The neck of the bottle is placed between the branches of the engaging piece and the enlarged end above the neck rests thereon so that the bottle is supported thereby.

Movably connected with the support A is a cap piece C adapted to be moved down so as to cover the end of the bottle and prevent its removal when properly locked in position.

Associated with the cap piece is a locking device comprising a locking piece D which is pivoted thereto at D¹. This locking piece has a projecting end D² which projects through an opening D³ in a suitable barrier, such for example as the door or wall or other part to

which the supporting piece is attached. It will thus be seen that the projecting end D² which constitutes the actuating part of the lock device is inaccessible from the place where the receptacle supporting device is located. The locking piece D is provided with an engaging face D⁴ which engages an opposed engaging face A¹ on the support A. The locking device is adapted to engage some part of the device to be protected. It is desirable to have the arrangement such that when the device to be protected, such as the milk bottle, is filled the locking device will be moved to its operative position when the bottle is placed in position, but will not be locked if the bottle is empty. This permits the man who delivers to take away empty bottles, and causes the device to be locked as soon as the full bottles are placed therein so that no one from the outside can remove them. This result may be secured by providing the locking piece D with a part D⁵ which is elastic and which will engage the cover E of the bottle. In the present instance this part is a spring which engages the cover E and which causes the locking piece to be moved upwardly to the position shown in full lines so that the face D⁴ engages the face A¹ and prevents the cap piece C from being lifted. It will thus be seen that when the filled bottle with the cover is placed in position and the cap piece pushed down it will be locked in this position so as to prevent the removal of the bottle. The only way in which the bottle can be removed is by some one on the inside who can press down upon the end D² of the locking piece and move it to the position shown in dotted lines in Fig. 3 so as to release the locking piece. The cover may then be lifted and the bottle removed. I prefer to provide the cap piece with a projection C¹ and the supporting piece with an opposed projection A² (see Fig. 3) so as to prevent a wire or other device from being inserted for the purpose of unlocking the locking device.

In Figs. 4 and 5 I have shown a modified construction where a series of devices may be simultaneously unlocked. In this construction the locking piece D does not project through the door or wall, but is in position to be engaged by projecting pieces G mounted on a rod or carrying piece G¹ concealed within the supporting pieces which are provided with projections A³ for this purpose (see Fig. 4). One opening is provided in the door or wall and an actuating piece G² projects therethrough so as to be within reach of the person on the inside. It will be seen that by moving this actuating piece all of the locking pieces may be moved to their unlocking position.

In Figs. 6 and 7 I have shown a further modification. In this construction the supporting piece A and the cap piece C are directly connected together; the bottle or other device rests upon a movable shelf H which is connected to a rack or other similar device H¹ and forms the engaging piece for the receptacle. This rack

passes through the supporting piece and is provided with engaging teeth adapted to be engaged by a movable dog H^2 pivoted within the supporting piece and forming part of the locking piece. This dog is provided with a projecting part H^3 which extends through the door, wall or the like. The other part of the locking piece in this case is pivoted at I on the same pivot as the dog, and is provided with a projection I^1 engaged by the lower part of the dog. The cap piece C is provided with an opening through which the end of the locking piece passes so as to engage the cover of the bottle or other device. When it is desired to insert the bottle, the shelf H is pulled downward to the position shown in dotted lines. The bottle is then placed therein and the bottle and shelf and rack are moved upwardly. When the end of the bottle has been moved up into the cap piece the cover engages the locking piece and moves it upwardly, and the dog moves between the teeth of the rack, the parts taking the position shown in full lines in Fig. 7. The bottle is now locked in position, and can only be removed by someone on the inside. To remove the bottle the end H^3 is moved upwardly to the position shown in dotted lines so as to release the dog from the rack, and the bottle and shelf can then be lowered to the position shown in dotted lines so that the bottle can be removed. The locking piece D in this case is preferably weighted at the end so that if there is no cover on the bottle it will take the position shown in dotted lines, and by means of the projection I^1 lift the dog out of engagement with the rack. Under these conditions it will be impossible to lock the device when an empty bottle is on the shelf. The locking piece D in all of the constructions is completely inclosed when the receptacle is in position so that it is inaccessible from the exterior of the wall.

Associated with the rack H^1 is a spring K fastened to the supporting piece or some stationary part and adapted to co-operate with the teeth of the rack. This spring is of sufficient strength and so shaped and positioned as to hold the rack in any given position independent of the locking device but at the same time to permit the rack to be slipped up or down. When the receptacle is on the shelf it also prevents the too rapid descent of the shelf when the locking device is released. It will, therefore, be seen that I have here a device by means of which bottles of milk and other material delivered in receptacles can be delivered in the absence of the householder or without disturbing such householder, and yet the removal of the devices by unauthorized persons prevented.

I have illustrated various forms of the device for the purpose of making my invention clear.

As hereinbefore stated, the device can be attached to a door, a wall, a partition, a floor, a ceiling, or any similar device, and the locking device may be controlled from the opposite side of the part upon which the receptacle supporting device is mounted, or from the protected side of some other part interposed between or in proximity to the receptacle supporting device or in proper relation thereto, and I have in the claims used the term wall to include any part interposed between the receptacle supporting device and the immediate controlling part actuated by the householder for controlling the locking device.

It will further be seen that the locking device is pro-

vided with a releasing part which is accessible only from the inside or protected side of the wall whatever may be the location of the receptacle supporting device.

I claim:

1. A receptacle supporting device comprising a supporting piece, an engaging piece for engaging the receptacle, a cap piece adapted when in its operative position to prevent the removal of the receptacle from the engaging piece, said engaging piece and cap piece movable with relation to each other, a locking device for locking them against relative movement. 70 75
2. A receptacle supporting device comprising a supporting piece adapted to be attached to a wall, an engaging piece for engaging the receptacle, a cap piece adapted when in its operative position to prevent the removal of the receptacle from the engaging piece, said engaging piece and cap piece movable with relation to each other, a locking device for locking them against relative movement, said locking device provided with a releasing part accessible only on the interior of the wall to which the supporting piece is attached. 80 85
3. A receptacle supporting device comprising a supporting piece adapted to be attached to a wall, an engaging piece for engaging the receptacle, a cap piece adapted when in its operative position to prevent the removal of the receptacle from the engaging piece, said engaging piece and cap piece movable with relation to each other, an automatic locking device for locking them against relative movement when the receptacle to be protected is in position. 90 95
4. A receptacle supporting device comprising a supporting piece adapted to be attached to a wall, an engaging piece for engaging the receptacle, a cap piece adapted when in its operative position to prevent the removal of the receptacle from the engaging piece, said engaging piece and cap piece movable with relation to each other, a locking device for locking them against relative movement, said locking device comprising a locking piece provided with a part adapted to engage a part associated with the engaging piece, and a part adapted to engage the cover of the receptacle whereby the cap piece and the engaging piece are locked against relative movement when the filled receptacle is in position. 100 105
5. A receptacle supporting device comprising a supporting piece adapted to be attached to a wall, an engaging piece for engaging the receptacle, a cap piece adapted when in its operative position to prevent the removal of the receptacle from the engaging piece, said engaging piece and cap piece movable with relation to each other, a locking device for locking them against relative movement, said locking device comprising a locking piece provided with a part adapted to engage a part associated with the engaging piece, and a part adapted to engage the cover of the receptacle whereby the cap piece and the engaging piece are locked against relative movement when the filled receptacle is in position, and a releasing device inaccessible from the outside of said wall, for releasing said lock. 110 115 120
6. A receptacle supporting device comprising an engaging piece for engaging the receptacle, a cap piece adapted when in its operative position to prevent the removal of the receptacle from the engaging piece, said engaging piece and cap piece movable with relation to each other, a locking device for locking them against relative movement, a releasing device therefor having an actuating part, a barrier between said actuating part and said receptacle supporting device whereby said actuating part is located in a protected position so as to be inaccessible from the place where the receptacle supporting device is located. 125 130 135
7. A receptacle supporting device comprising two relatively movable parts between which the receptacle is fastened, a locking device associated with said parts for holding them in their fastening position, a releasing device for said locking device having an actuating part located at a point inaccessible from the receptacle supporting device. 140
8. A receptacle supporting device comprising two relatively movable parts between which the receptacle is fas-

tened, a locking device associated with said parts for holding them in their fastening position, a releasing device for said locking device having an actuating part and a protecting wall between the receptacle supporting device and said actuating part.

5 9. A receptacle supporting device comprising a supporting piece adapted to be attached to a fixed part, an engaging piece for engaging the receptacle, a cap piece adapted when in its operative position to prevent the removal of
10 the receptacle from the engaging piece, said engaging piece and cap piece movable with relation to each other, a locking piece projecting into the cap piece which is recessed to receive it and adapted when in its locking position to prevent the relative movement of the parts, and a
15 releasing device provided with an actuating part on the inside of a protecting wall whereby the locking piece may be released.

20 10. A series of receptacle supporting devices each comprising two relatively movable parts between which the receptacle is fastened, a locking device for each receptacle supporting device, a connection between said locking devices, and an actuating part adapted to control all of said locking devices, said actuating part located in a protected position.

25 11. A device for receptacles comprising a movable part adapted to be closed after the receptacle is in position, a locking device for said movable part, and an elastic device

connected with said locking device and adapted to engage some part of the receptacle when said receptacle is in position and hold said locking device in its operative position. 30

12. A device for receptacles comprising means for supporting the receptacle, a movable part adapted when in its operative position to prevent the removal of the receptacle, a locking device for said movable part and an engaging device between the locking device and the receptacle whereby said locking device is held in its locking position when said receptacle is in place. 35

13. A device for receptacles comprising means for supporting the receptacle, a movable part adapted when in its operative position to prevent the removal of the receptacle, a locking device for said movable part, an engaging device between the locking device and the receptacle whereby said locking device is held in its locking position when said receptacle is in place, a releasing device for
40 said locking device having an actuating part, a barrier between the means for supporting the receptacle and said actuating part arranged so that said actuating part is inaccessible from the point where the supporting means for the receptacle is located. 45

JAMES W. JOHNSON.

Witnesses:

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EDNA K. REYNOLDS.