

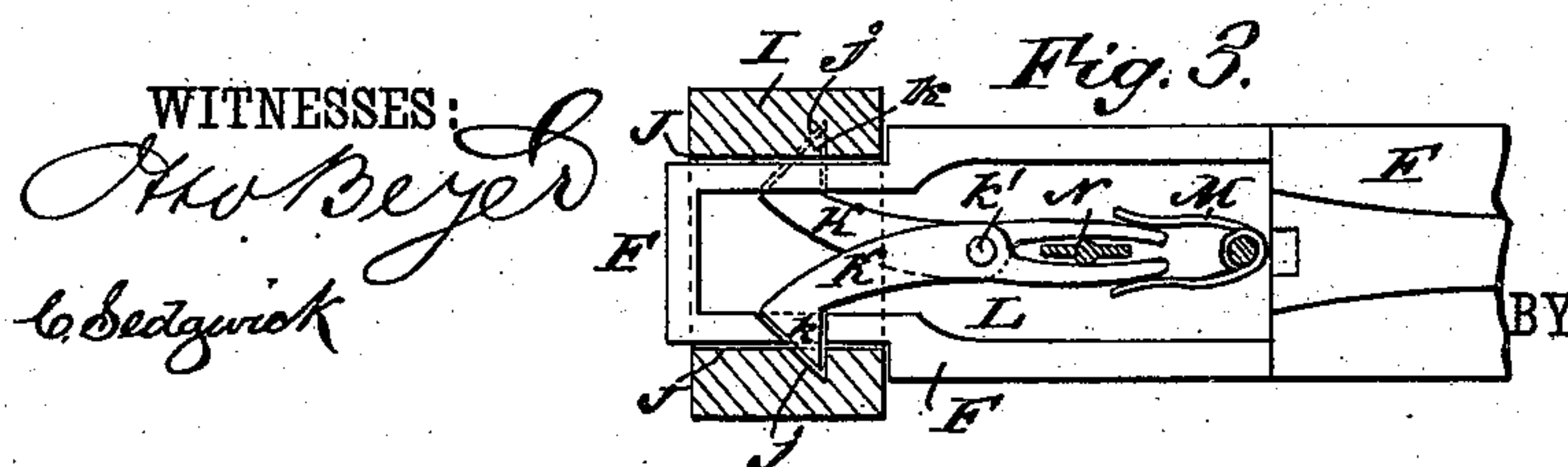
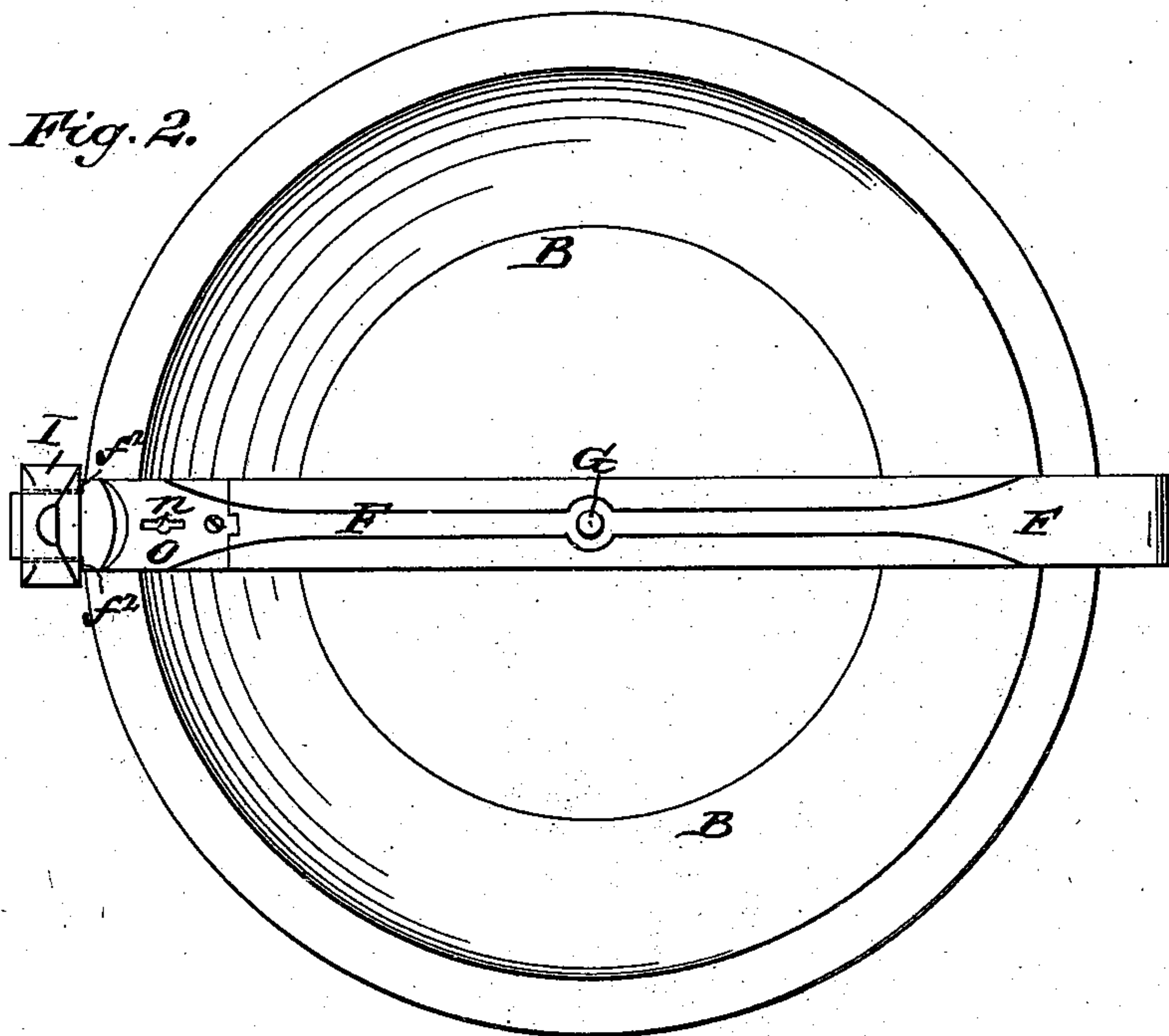
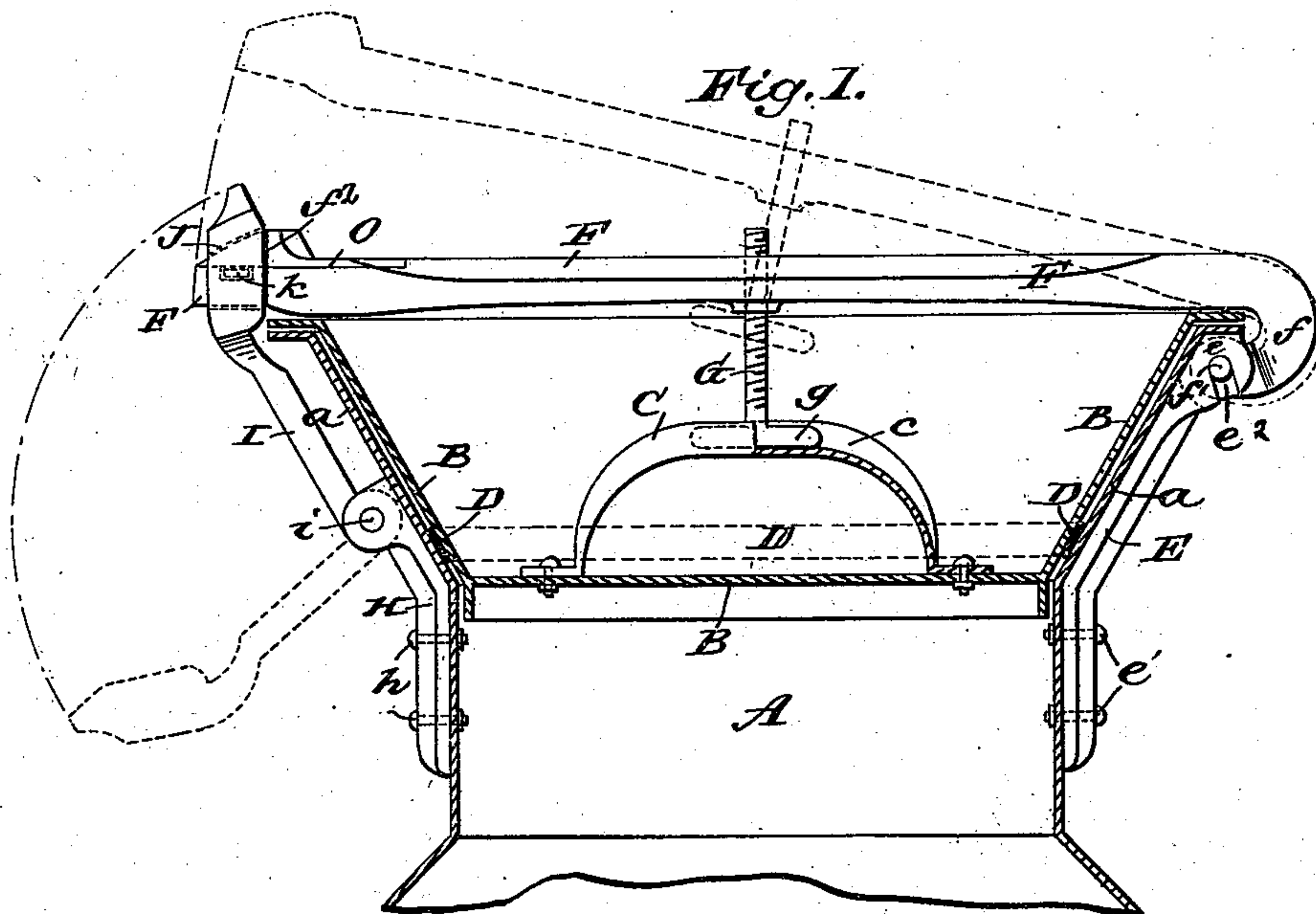
(No Model.)

E. R. BRISTOL & E. C. GRAN.

CAN COVER AND CLAMP.

No. 376,941.

Patented Jan. 24, 1888.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

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## CAN-COVER AND CLAMP.

SPECIFICATION forming part of Letters Patent No. 376,941, dated January 24, 1888.

Application filed March 16, 1887. Serial No. 231,158. (No model.)

*To all whom it may concern:*

Be it known that we, EDMUND ROGERS BRISTOL and EDWARD CHARLES GRAN, of Jordan, in the county of Scott and State of Minnesota, have invented a new and Improved Can-Cover and Clamp, of which the following is a full, clear, and exact description.

Our invention relates to a cover and a clamp adapted to hold the cover to a shipping can, vessel, or package, and lock the cover closed tightly to prevent loss of the contents of the can by spoiling or spilling or pilfering; and the invention has for its object to provide simple, inexpensive, and effective devices of this character.

The invention consists in certain novel features of construction and combinations of parts of the cover and clamp, all as hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a vertical sectional elevation of the upper part of one of our improved shipping-cans and a side view of the cover-clamp, with the clamp shown locked in full lines and unlocked and opened in dotted lines. Fig. 2 is a plan view of the cover and clamp, and Fig. 3 is an enlarged detail sectional plan view of portions of the clamp, illustrating its locking device.

The shipping-can, partly shown in the drawings, is an ordinary milk-can having a neck, A, formed with a flaring upper portion, *a*, in the usual manner, and the cover B is placed within the flared part *a* of the neck, and has fixed to it a handle, C, made with a transversely-concaved upper face or with a groove, *c*, therein, adapted to receive the head of a clamp-screw, as presently described. To the outer face of the cover B is fixed a rubber or other suitable packing-strap, D, which, when the cover is clamped to the can, makes a close or air-tight joint.

At one side of the neck A of the can is fixed, by suitable bolts, *e'*, or otherwise, a bar or plate, E, the upper end of which stands below the top of the neck of the can and is slotted vertically to form a fork, between the side parts or lugs of which a lug or tenon formed at the

extremity of the hooked end *f* of a clamp-lever, F, enters, and this tenon has side pins, *f'*, which enter slots *e''*, made in the lower parts of the lugs *e* of the bar E when the clamp-lever is swung down across the top of the cover to lock the cover firmly to the neck of the can.

It is obvious that the lever F may be swung over backward clear of the can-cover to allow removal of the cover, and the lever when swung over may also be easily disengaged from the bar E by slipping its pins *f'* from the bar-slots *e''*, and there is no projection above the top of the can which would prevent the can from resting closely upside down onto a steam-table for cleansing or warming it.

Into the center of the lever F a screw, G, is threaded, so as to be adjustable vertically, and the head or cross-bar *g* of this screw is adapted to enter and fit the recess or groove *c* of the can-cover for pressing the cover down to close it tightly onto the neck of the can, and the cover-groove at the same time prevents turning of the screw.

At the side of the can-neck A, diametrically opposite the bar or plate E, a plate, H, is fixed by bolts *h* or otherwise to the neck, and to the upper end of this plate H a latch-bar, I, is pivoted at *i*. The upper or free end of the latch-bar is provided with a slot or mortise, J, having notches *j* at each side, with which the hook ends *k k* of a pair of latches, K K, pivoted to the clamp bar F, are adapted to engage when the latch-bar is swung upward onto the clamp-bar, as shown in full lines in Figs. 1 and 2 of the drawings. The latches K K are pivoted on a pin, *k'*, within a recess, L, made in the upper side of the clamp-bar F, and the tails or back ends of the latches are pressed toward each other by a spring, M, held in the recess for locking the latch-hooks into the latch-bar notches. The tails of the latches K K are separated a little to allow a key, N, to be passed through a key-hole, *n*, in the cover-plate O of the latch-recess, which allows the latch-hooks to be drawn inward to release the latch-bar by spreading the tail ends of the latches by turning the key, as will be understood from Fig. 3 of the drawings.

It is obvious that the screw G may be quickly adjusted in the clamp-lever F to cause its head *g* to press the packing D on the cover tightly



to the neck of the can, and when the latch-bar I is swung upward to the opposite shoulders  $f^2$ , at the base of the tenon on the lever F, which enters the latch-bar slot J, the latch-hooks  $k$  will automatically engage the notches  $j$  of the latch-bar to lock the cover securely to the can. The dotted lines in Fig. 1 of the drawings show the clamp-lever partly raised and the latch-bar swung down.

When the cover is clamped to the can, as above described, the contents of the can will not be spilled should the can be upset, and milk, cream, or other produce or articles carried in the can or package cannot be spoiled by exposure to the atmosphere, and cannot be abstracted while in transit on railways or vessels to a market, and the cover may readily be removed by authorized persons using a key to release the latch-bar from the clamp-lever, as above described. With slight modifications in the proportions of the parts this improved cover clamp or fastener may be applied to all ordinary cans used for carrying milk, cream, or other liquids, and the clamp-lever and latch-bar may also be fitted to boxes, crates, or other packages for securing their covers, substantially in the manner above described.

At times the screw G may be dispensed with and the clamp-lever F will bear directly onto the cover of the can or package, and should the handle C not be used on the cover the screw G may bear directly onto the main plate of the cover and its head enter a notch or recess in the cover-plate, as will readily be understood.

Having thus fully described our invention, we claim as new and desire to secure by Letters Patent—

1. The combination, with a can and its cover having a recess, of a top cross-bar held over the cover, and an adjustable screw or pin, which is fitted to said cross-bar and enters said recess in the cover when the cross-bar is locked, whereby the cover may be closed tightly by the screw or pin, and the latter will be prevented from turning loose.

2. The combination, with a can and its cover having a recess, of a top cross-bar pivoted to one side of the neck or top of the can or package, a device fixed to the can or package to latch or retain the free end of the cross-bar, and an adjustable screw or pin, which is fitted in the top cross-bar and enters the recess in the cover when the cross-bar is locked.

3. The combination, in a can-cover and clamp, of a cover, B, fitted to the neck of the can and provided with a recess,  $c$ , a clamp-lever, F, held at one end to the can, a latch-

bar, I, pivoted at one end to the other side of the can, and having at its free end a slot adapted to receive the free end of the clamp-bar, a screw, G, fitted in the lever and having a head,  $g$ , adapted to enter the cover-slot  $c$ , and a latch device locking the parts F I together, substantially as shown and described.

4. The combination, in a cover and clamp, of a cover, B, a clamp-lever, F, a pivoted latch-bar, I, having a slot, J, receiving the free end of the lever F and provided with notches  $j$ , and a latch device consisting of spring-pressed hook-plates K K, adapted to enter the notches  $j$ , and the lever having a hole,  $n$ , to admit a key between the hook-plates, substantially as shown and described.

5. The combination, in a can-cover and clamp, of a cover, B, having a handle, C, provided with a recess,  $c$ , a packing, D, interposed between the cover and can-body, a clamp-lever, F, a screw, G, fitted in said lever and having a head,  $g$ , adapted to enter the handle-recess  $c$ , a pivoted latch-bar, I, having a slot, J, notched at  $j$  and adapted to receive the free end of the clamp-lever, and a latch device consisting of spring-pressed hook-plates K K, and the lever provided with a hole,  $n$ , to admit a key between the hook-plates, substantially as shown and described.

6. The combination, in a can-cover and clamp, of a cover, B, fitted to the neck of the can, a bar or plate, E, and a plate, H, fixed to the can, a lever, F, pivoted to the plate E, a screw, G, fitted in the lever F and adapted to bear on the cover, a latch-bar, I, pivoted to the plate H, and having a slot, J, into which the free end of the lever F is adapted to enter, and a latch device fitted in the clamp-lever F and adapted to lock it to the latch-bar, substantially as shown and described.

7. The combination, with a can, of a plate or bar, E, fixed to one side of the can and with its head portion below the top of the neck of the can, and said head portion being made forked and provided with slots  $e^2$  in the lower parts of the side lugs of the fork, in combination with a clamp-lever, F, adapted to bear onto the cover and provided with a tenon entering the fork of the bar E, and pins  $f'$ , entering the slots  $e^2$  of the bar E, and a device retaining the free or outer end of the lever F, substantially as shown and described.

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Witnesses:

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