

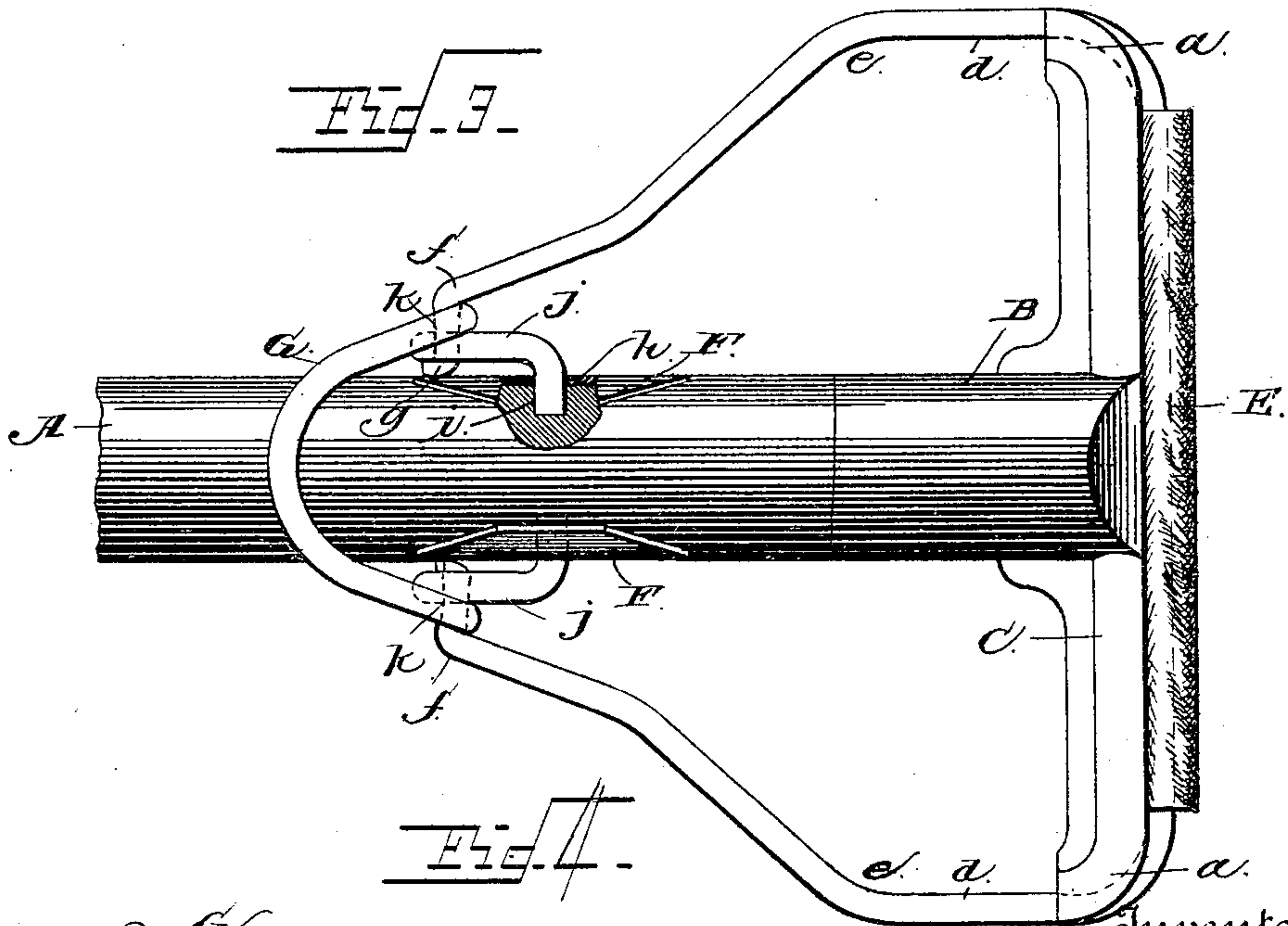
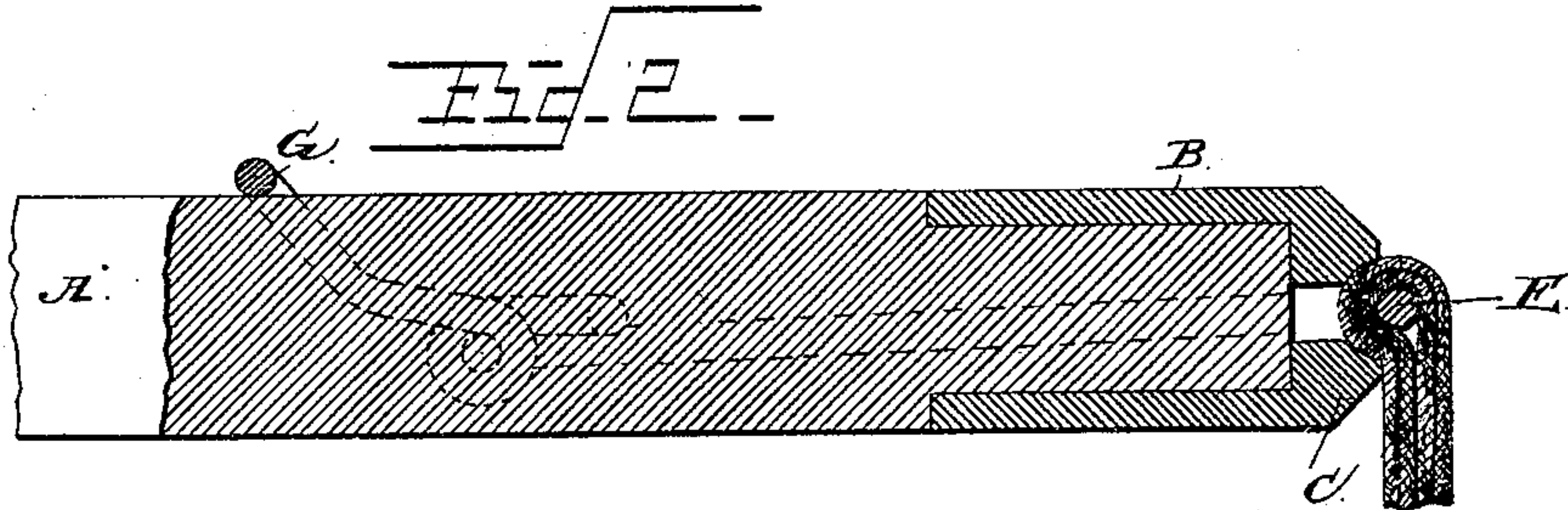
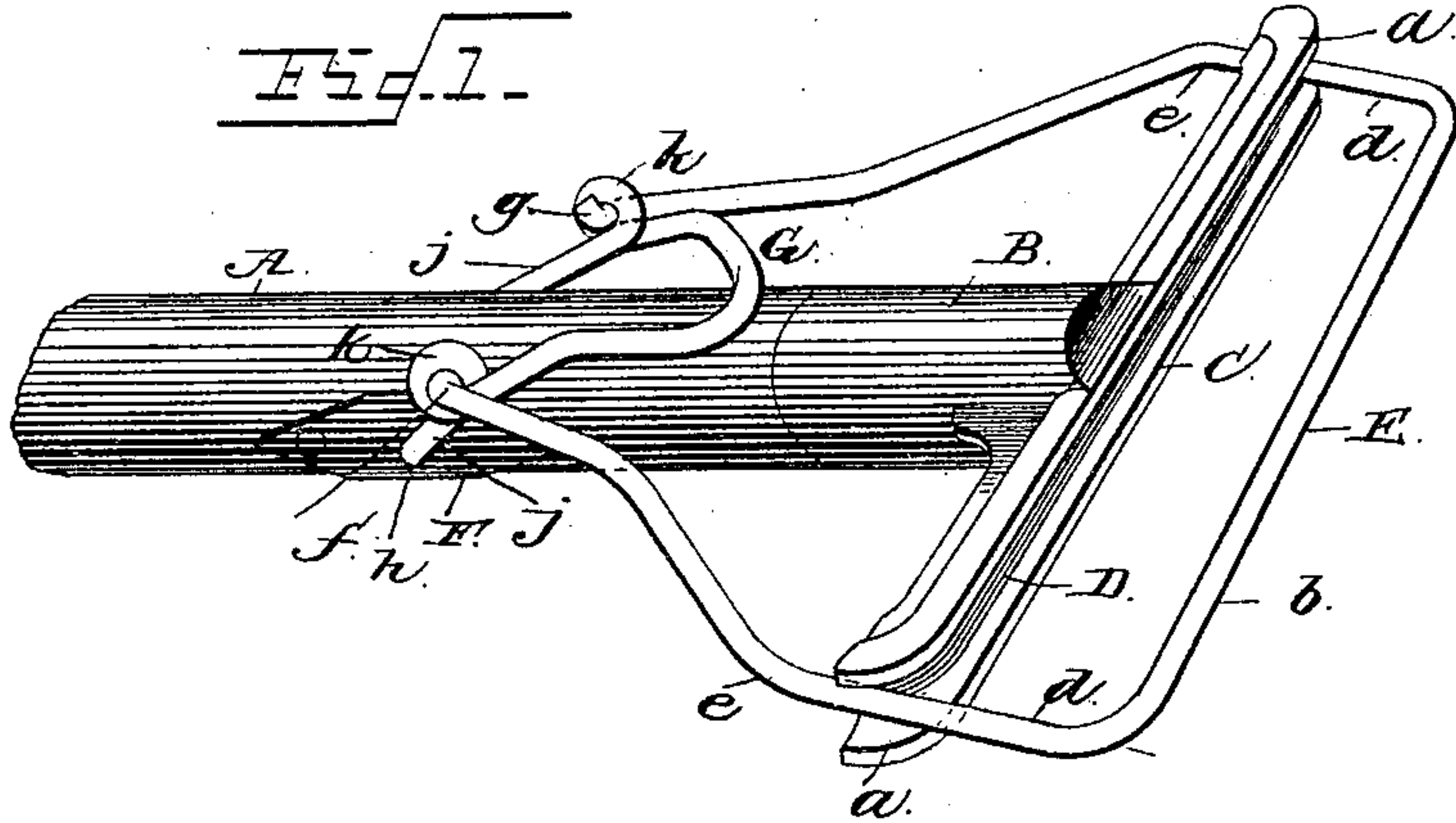
(No Model.)

J. H. OMO.

MOP.

No. 368,486.

Patented Aug. 16, 1887.



Witnesses

M. E. Fowler

E. G. Sigg

Inventor

J. H. Omo

by

C. A. Snowles

attys

UNITED STATES PATENT OFFICE.

JOSEPH H. OMO, OF TOLEDO, OHIO.

MOP.

SPECIFICATION forming part of Letters Patent No. 368,486, dated August 16, 1887.

Application filed December 16, 1885. Serial No. 185,851. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH H. OMO, a citizen of the United States, residing at Toledo, in the county of Lucas and State of Ohio, have invented a new and useful Improvement in Mops, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to mops; and it consists in the peculiar construction and combination of parts, as will be hereinafter fully set forth and claimed.

In the accompanying drawings, Figure 1 is a perspective view of my improved mop, showing the parts in the position assumed when adjusting the cloth. Fig. 2 is a longitudinal section taken centrally through Fig. 3. Fig. 3 is a plan view showing the parts adjusted in position for use. Fig. 4 is a side elevation, with the clamping-wire partly broken away.

Like letters are used to indicate corresponding parts in the several figures.

Referring to the drawings, A designates the handle of the mop, to one end of which is fitted the short tube or ferrule B of the rigid jaw C. The tube B projects laterally from one side of the jaw C at or about the middle thereof, being formed integral with the jaw, and having its front or outer end partially closed around the extremity of the handle, as shown in Fig. 2. The jaw C has its outer face concaved, to provide a longitudinal groove, D, the ends of the jaw being rounded or curved, as at *a*, the groove D also extending through the rounded ends, as will be seen.

E designates the movable clamping-jaw, made of a single piece of heavy wire and comprising the main clamping-arm *b*, arranged parallel with the rigid jaw C, the side arms, *d d*, connecting with the main arm *b* at the rounded ends *a* of the rigid jaw and bent inwardly from the point *e*, and the angular bends *f* at the extremities of the side arms, the latter being turned or bent inwardly toward the handle from the point *e*, to such a degree as to cause the bends *f* to come within an eighth of an inch or so of the handle. The bends *f* may either be provided with enlarged heads on the ends, or, as shown in the drawings, the ends may be turned back or to one side, as at *g*, for the purpose presently described. Wear-plates F are secured by screws or rivets to opposite

sides of the handle A, and are perforated at *h* to register with corresponding openings *i* in the handle.

G designates the clamping-lever, constructed of a single piece of heavy wire in the form of a U, the ends *j* of which are inserted through the perforations *h i* of the wear-plates F and handle A, so as to journal or pivot the lever in place. The side arms of the U-shaped lever G are bent to form eyes *k* below the plane of the arms, and in these eyes the bends *f* of the clamping-jaw E are received. The enlarged or turned-back ends *g* of the bends *f* prevent the clamping-jaw E from separating from the lever G. The middle or doubled portion of the U-shaped lever G is extended above the plane of the side arms, so as to fit over the top of the handle.

The operation of my invention is as follows: To insert the cloth or rag which forms the mop proper, the lever G is thrown forward by catching hold of its central doubled portion, the lever having its journals or ends *j* working in the handle, and by the forward movement pushing the clamping-jaw E outward beyond the rigid jaw C, as shown in Fig. 1. The cloth is then adjusted in position between the two jaws C E and the lever G operated in a reverse direction or thrown backward until its central doubled portion strikes the handle, the clamping-jaw E being drawn back to bind the cloth or rag in position.

It will be seen that the side arms, *d*, of the clamping-jaw E are retained at all times within the grooved ends *a* of the rigid jaw C, so that when working the clamping-jaw forward or backward it will be guided in its movements, and will also be held from springing laterally. The wire-clamping jaw E, being smaller in diameter than the groove D of the rigid jaw, will serve to bind the cloth or mop within the groove and prevent its detachment when the mop is in use.

The peculiar inward bend of the side arms, *d*, of the clamping-jaw E imparts a spring thereto, so that the main arm *b* will adjust itself to any thickness of the cloth or mop. In operation, the main arm *b* draws upon the side arms, *d*, and tends to straighten the latter horizontally by reason of the inward bend given to the side arms.

Should the clamping-jaw E become "sprung"

by constant use, or should it be desired to impart a greater binding action thereto, a series of holes may be provided along the plate F, to receive the journals or ends *j* of the clamping-lever, and thereby set the pivot-point thereof farther back, the consequence of which would be to give to the clamping-jaw increased power to hold the cloth or mop in place.

The central doubled portion of the clamping-lever *G* serves as the handle therefor, and by locating the handle end above the plane of the side arms and the pivot-point and causing it to rest on the mop-handle a cam action is given to the clamping-lever, which will materially assist in holding the parts in their adjusted positions. It will be observed that when the clamping-lever is swung down in position against the handle the resistance which the mop offers serves to force the lever in a greater degree against the handle, so that proportionately to the amount of tension applied to the mop the handle *G* will be forced correspondingly down upon the mop-handle. Thus I provide against all possibility of the detachment of the parts.

I am aware that in the patent to Davis, No. 257,294, it was proposed to provide a mop-holder comprising a rigid jaw and a pivoted lever connected to the clamping-jaw; but in this patent the pivot-point of the lever was on the same plane with the free end of the lever, so that the latter could not bind down with any force upon the handle, and thus when any strain was brought upon the clamping-jaw the lever had a tendency to swing up and release the jaw.

In the patent to Prosser, No. 72,677, the same

general features of the Davis mop are shown; but in the former case the free end of the clamping-lever was above the pivot-point thereof, but still the connection of the clamping-jaw with the lever was on the same line. In my mop I go a step farther by making the free end of the lever work down upon the handle above the pivot-point of the lever, and also above the point where the clamping-jaw is connected, so that the strain on the clamping-jaw is brought directly on a line with the pivot of the lever and not against the free end of the lever. In this manner all the tendency of the clamping-lever to work up and release the parts is entirely overcome.

Having thus described my invention, I claim—

The combination, with the handle and rigid jaw, of the keeper consisting of the clamping-jaw and the elastic limbs, and the U-shaped clamping-lever having its ends pivoted to the sides of the handle and its central portion crossing the handle and resting upon it when the clamping-jaw is locked, the sides of said clamping-lever being provided with eyes to which the ends of the keeper are loosely connected, whereby the keeper may be loosened for the insertion and removal of the mop-cloth and tightened to clamp said cloth.

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

JOSEPH H. OMO.

Witnesses:

JACOB BRAHL,
JOHN BASLER.