

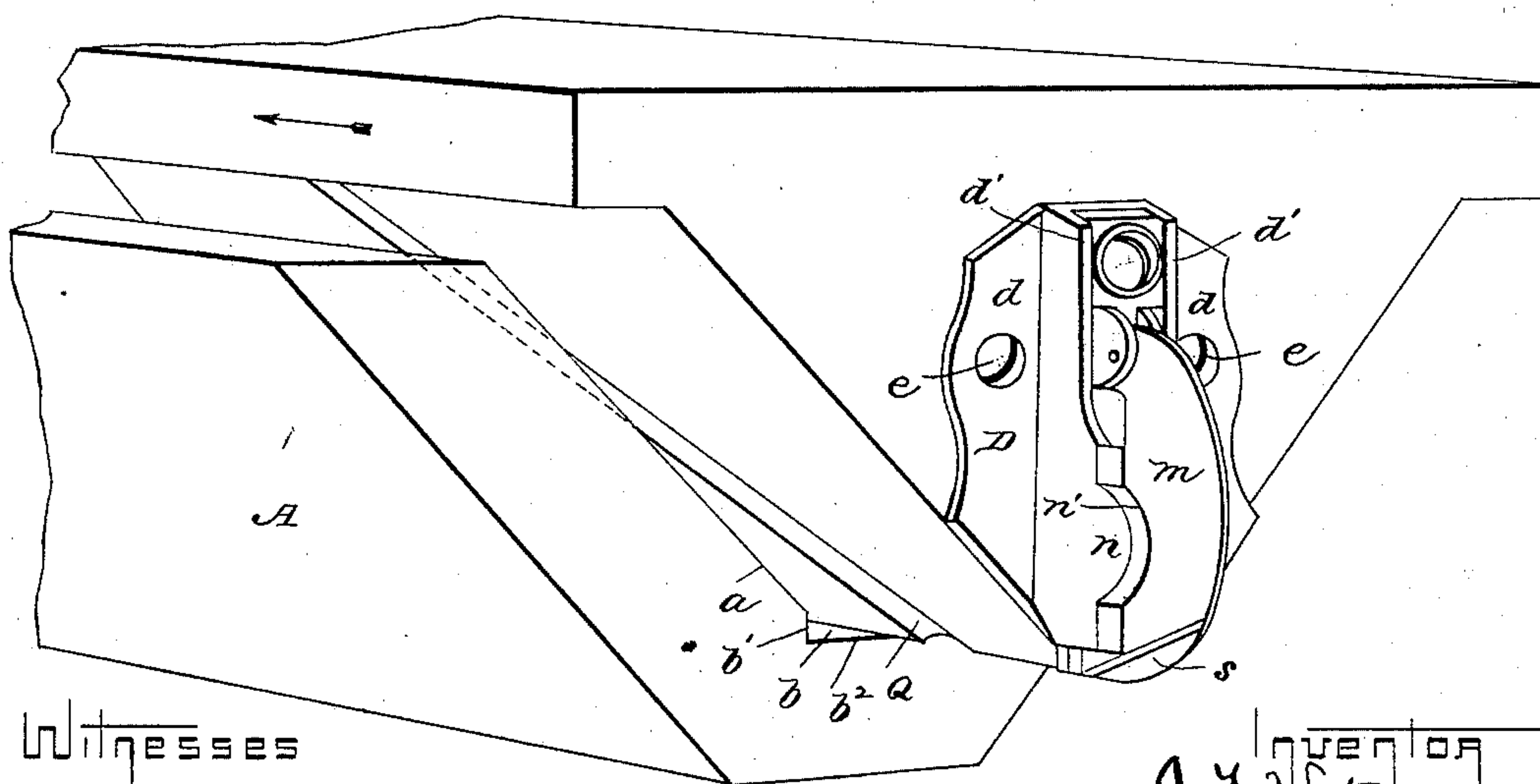
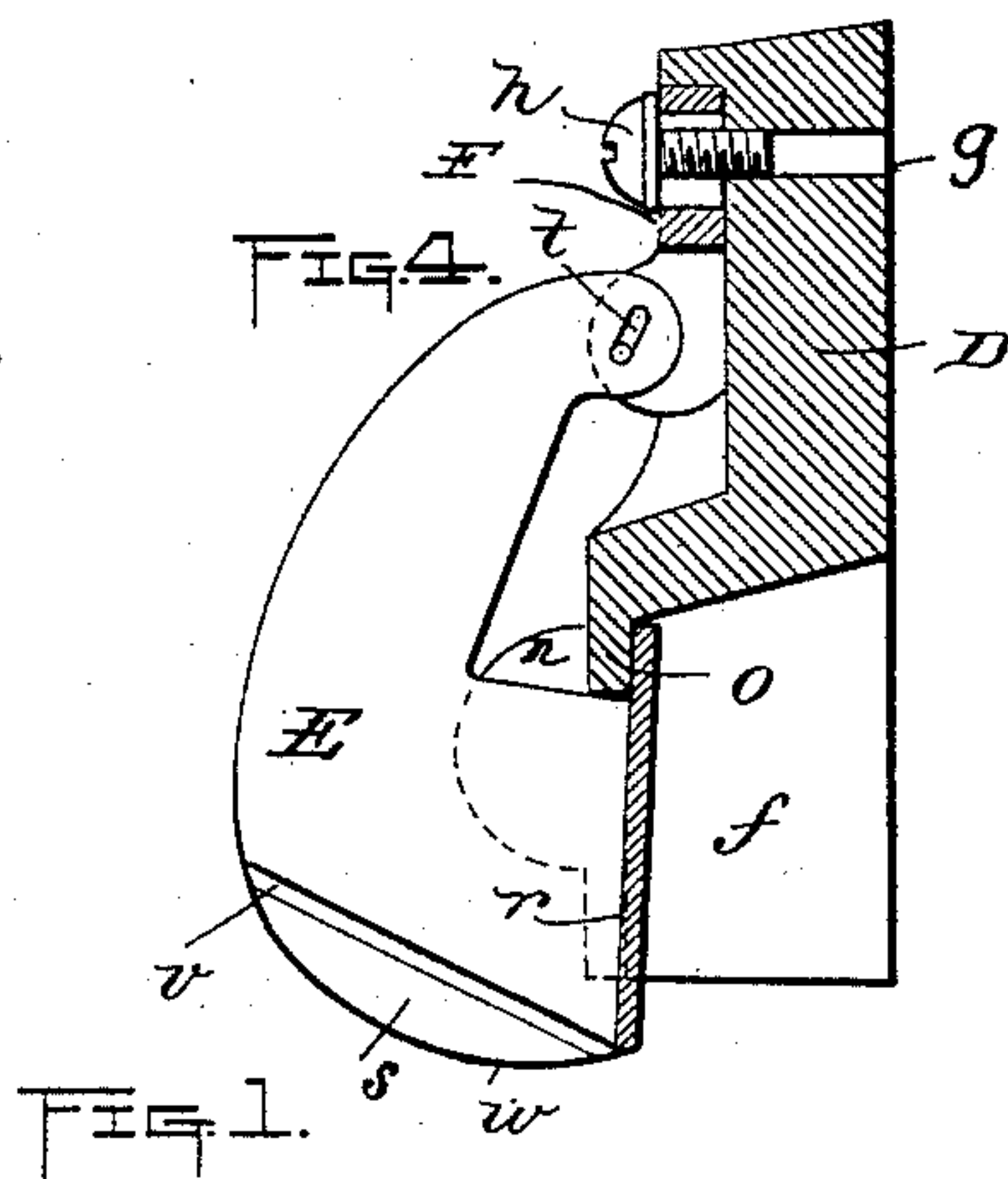
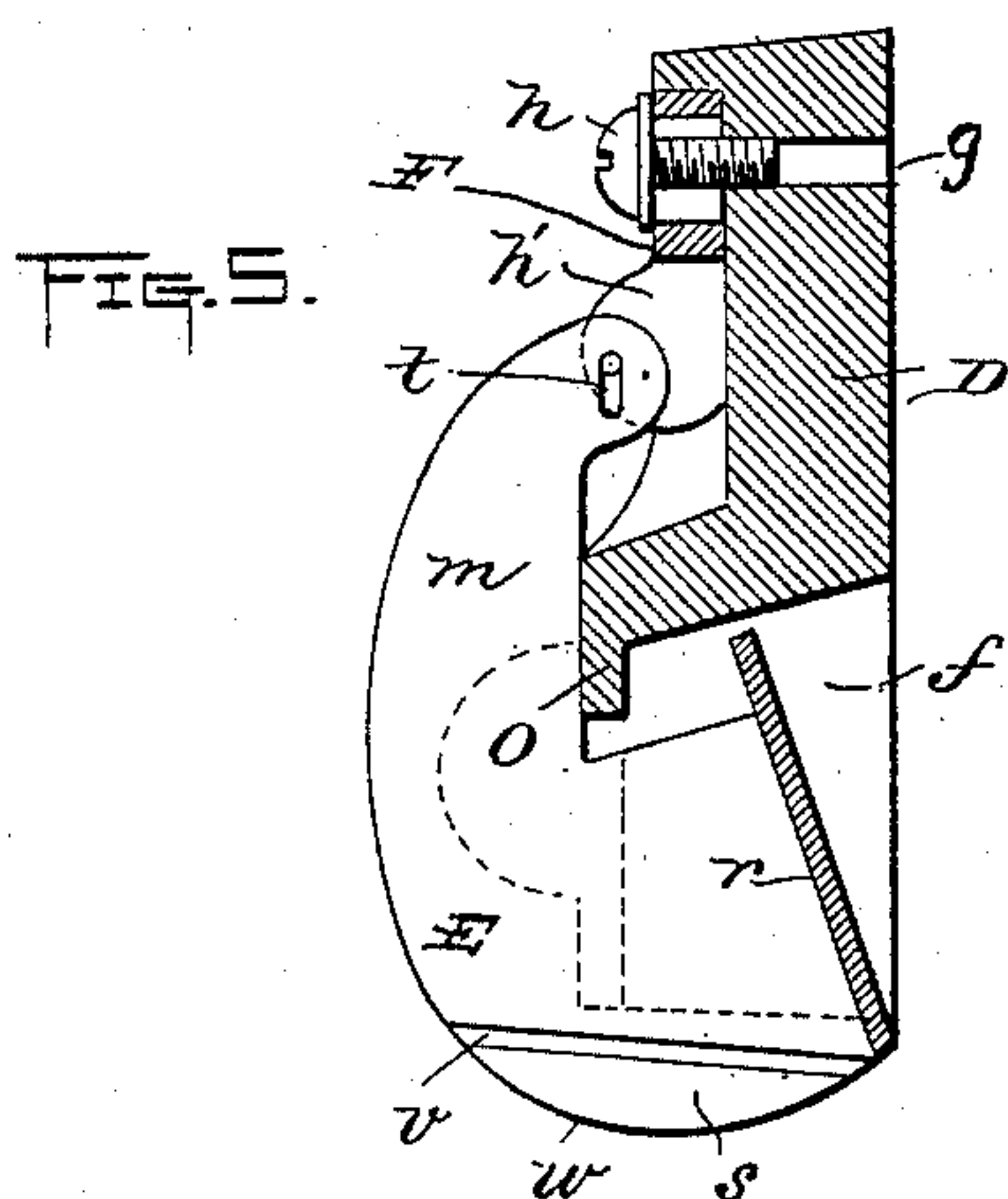
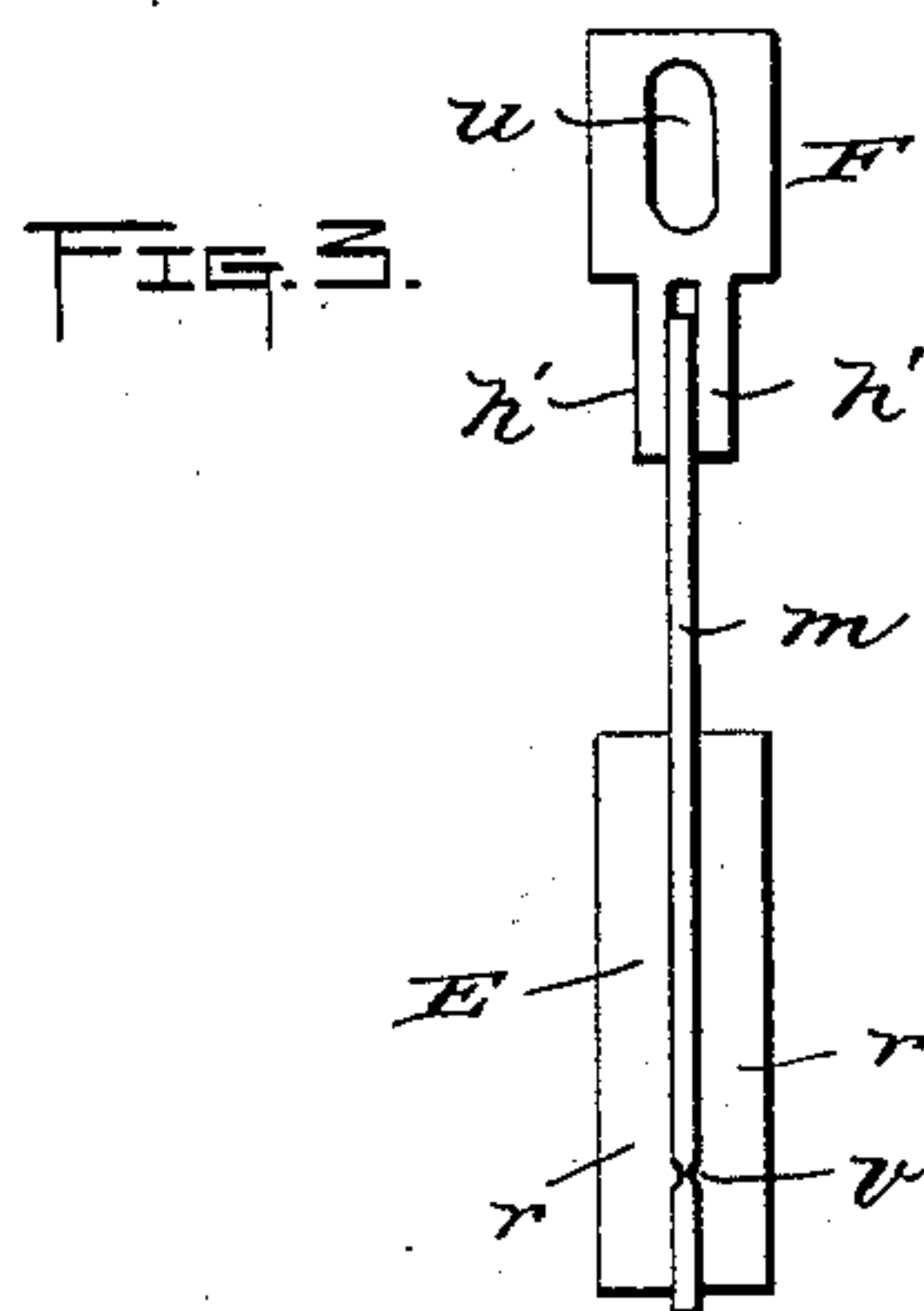
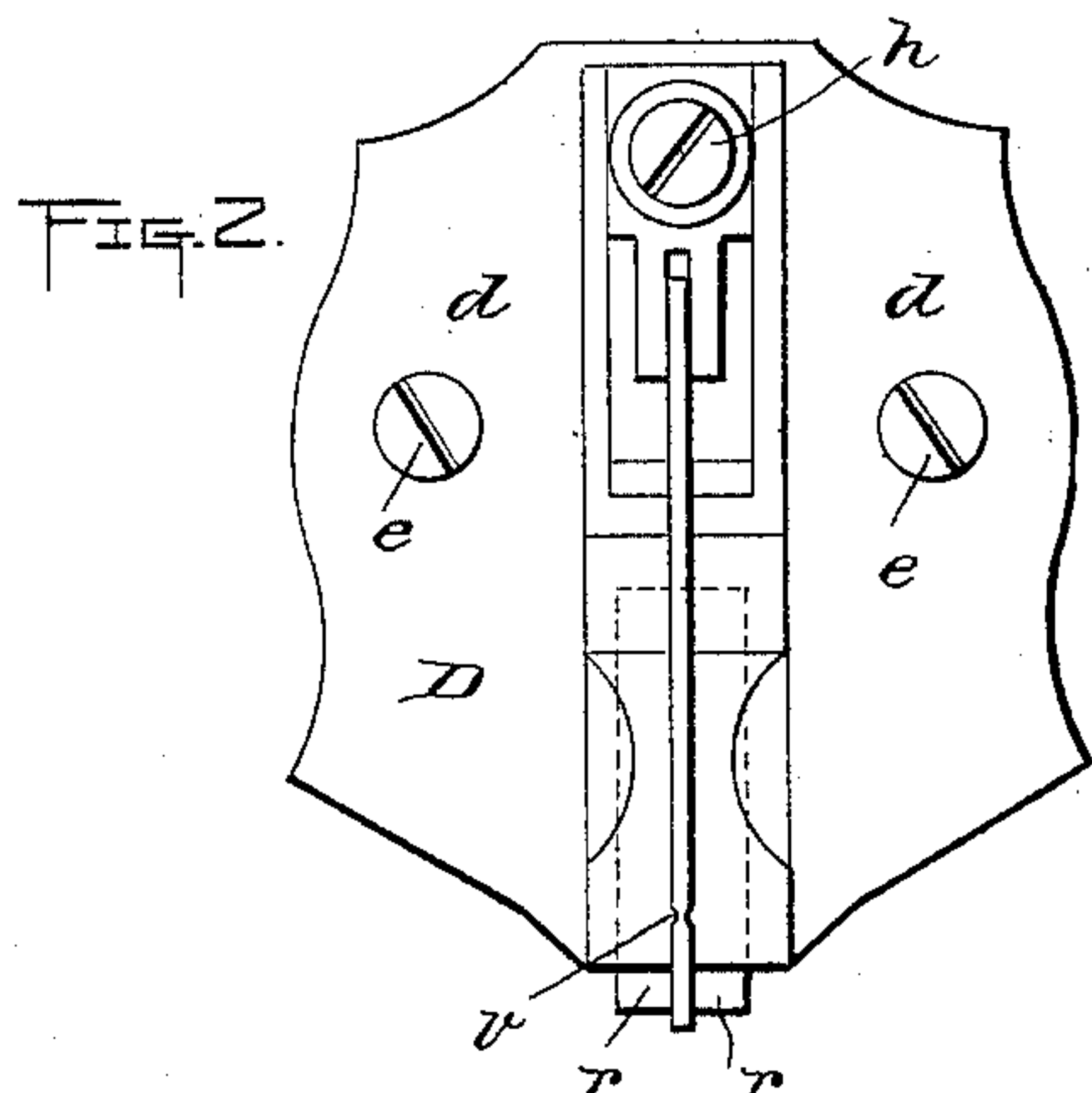
(No Model.)

J. T. WATERS.

LUBRICANT DISTRIBUTER.

No. 363,565.

Patented May 24, 1887.



Witnesses

V. G. Foster Jr.  
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# UNITED STATES PATENT OFFICE.

JOHN T. WATERS, OF MASSILLON, OHIO.

## LUBRICANT-DISTRIBUTER.

SPECIFICATION forming part of Letters Patent No. 363,565, dated May 24, 1887.

Application filed February 4, 1887. Serial No. 226,600. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN T. WATERS, a citizen of the United States, and a resident of Massillon, county of Stark, State of Ohio, have  
5 invented a new and useful Improvement in Lubricant-Distributers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification.

10 My invention relates to an improvement in lubricant-distributers, and more particularly to devices for distributing the oil or other lubricant from an auxiliary supply groove or reservoir located along the bottom of the groove  
15 in the shears of a planer upwardly along the sides of the movable platen, which is adapted to slide in the shears.

My invention further relates to and consists in the details of construction and combinations  
20 of parts, as hereinafter described, and set forth in the claims.

In the accompanying drawings, Figure 1 is a view of the end of the movable platen and a portion of the end of shears, showing the distributor attached thereto. Fig. 2 is a view of  
25 the distributor in front elevation. Fig. 3 is a detached view of the swinging abutment or scraper and the plate to which it is hinged. Fig. 4 is a vertical longitudinal section of the  
30 distributor with the abutment or scraper in position to engage the lubricant in the groove in the shears, as when the movable platen is moving in the direction of the arrow; and Fig. 5 is a similar view showing the abutment or scraper  
35 in the position which it assumes when the movable platen is returning.

As my invention relates only to means for distributing the lubricant, the planer or parts thereof will only be referred to in so far as necessary to a clear understanding of the invention and its operation.

A represents the shears of a planer, provided with the usual V-shaped groove, *a*, and B represents a movable platen adapted to fit and  
45 slide in the groove *a*.

At the bottom of the groove *a* the shear A is provided with a recess, *b*, having its sides and bottom *b'* *b''* preferably at right angles to one another, forming a space between the bottom  
50 of the platen and the bottom *b''* of the recess, in which a quantity of some suitable lubricant may be placed or may accumulate.

The converging sides of the movable platen are provided with grooves Q, extending from the lower edges of the platen near one end, as  
55 shown, obliquely upwardly and toward the opposite end of the platen.

To the end of the platen from near the bottom edge of which the grooves Q extend the supporting-frame D of the distributor is secured. The said frame D may be constructed  
60 of any suitable material, and is preferably of the form substantially as shown in the drawings, in which an upright bar or plate is provided with a pair of laterally-extending wings, *d*,  
65 through which are perforations *e* to receive securing bolts or screws. The upright bar or plate is further provided along its upper portion with a pair of forwardly-extending lips,  
70 *d'*, between which a plate, F, is adapted to slide in vertical adjustment, and along the lower portion of said upright bar or plate it is provided with a pair of forwardly-extending guide-  
cheeks, *n*, between which is a narrow slot, *n'*, opening rearwardly into a recess or chamber,  
75 *f*, located at the rear lower central portion of the said bar or plate. The chamber *f* is intended to be about the same width as the recess *b* in the shear, and affords an opportunity  
80 for the abutment or scraper to swing back and forth, as will hereinafter appear.

The plate F is provided with a vertically-elongated slot, *u*, through which a set-screw, *h*, extends into a perforation, *g*, in the plate  
85 D, whereby the said plate may be locked in the desired vertical adjustment. The plate F is further provided with a pair of ears or lugs, *h'*, between which the upper end of the abutment or scraper stem *m* is pivotally secured.  
90 The perforation *t* in the upper end of the abutment-stem, through which the pivotal bolt extends, is elongated in a vertical direction to admit of the limited rise and fall of the abutment, for the purposes which will hereinafter  
appear. The abutment stem *m* is preferably  
95 of the form substantially as shown, and is adapted to swing with an easy fit between the guide-cheeks *n*. It is provided at its lower rear portion with a pair of laterally-extending wings, *r*, which spread out a combined distance about equal to the width of the recess *b*  
100 in the shears and form the abutment or scraper E for forcing the lubricant along the said recess *b*. The abutment E is allowed a free



swinging movement back and forth within the chamber or recess *f*, and when swung to the limit of its stroke away from the end of the platen the upper end of the abutment engages a seat, *O*, on the plate *D*, and when swung to the limit of its stroke in the opposite direction the stem *m* engages the front of the plate. Thus, while the abutment is free to swing, its stroke is positively limited at both ends. The lower web-like end, *s*, of the stem *m* is of such curvature that when the abutment is swung on its pivotal point the lowermost point, *w*, of the curved end *s* will describe a larger circumference than the lower end of the abutment, and since the abutment is intended to be hung in such a position relatively to the bottom of the recess *b* that the end *s* will rest in contact with the bottom of said recess the contact of the point *w* with the bottom will tend to throw the abutment toward or away from the end of the platen, according to the direction in which the platen moves.

Grooves *v* are formed along the sides of the web *s*, as shown, to prevent the lubricant from creeping up the sides of the stem *m* and direct it along to the bottom of the abutment and beneath the same when the platen is on its return-stroke opposite to the direction of the arrow.

The operation is as follows: When the platen moves in the direction of the arrow, the abutment will be thrown into the position shown in Fig. 4, with the lower end of the abutment near the bottom of the recess *b*. The result will be the formation of a wave of the lubricant in front of the abutment and the forcing of the same up the grooves *Q* and onto the sides of the platen between the platen and the shears. When the platen moves in the opposite direction, the abutment will be thrown into the position shown in Fig. 5, which will elevate the lower end of the abutment above

or up to the surface of the lubricant, and as the abutment rides along on the web *s* as a bearing it will pass freely over the lubricant. The elongated perforation *t* in the upper end of the stem *m* will permit the free rise and fall of the stem as the abutment is swung. Thus the distributor serves to return to the sides of the movable platen the lubricant which has found its way along the sides down to the auxiliary groove or receptacle *b*.

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

1. The combination, with the slide of a planer-platen, of an oil-distributor secured to the slide on a pivotal bearing having a vertical adjustment, the said distributor at the same time being adapted to rise and fall on its bearing as the platen is moved forward and back over the planer-shear, substantially as set forth.

2. The combination, with the supporting-frame removably secured to the end of the planer-slide, of an abutment, as *E*, pivoted thereto, the lower end of said abutment having a curved web, as *s*, the lower edge of the curved web being so formed that by a forward and backward movement of the said abutment on the bottom of the oil-groove *b* it may rise and fall, and thereby engage and ride over the oil in the groove, substantially as set forth.

3. An oil-distributor consisting, essentially, of a frame, *D*, having an abutment recess or chamber, *f*, abutment *E*, and hinge-piece *F*, all combined substantially as described, and for the purpose set forth.

In testimony whereof I have hereunto set my hand this 22d day of January, A. D. 1887.

JOHN T. WATERS.

Witnesses:

CHAS. R. MILLER,  
W. K. MILLER.