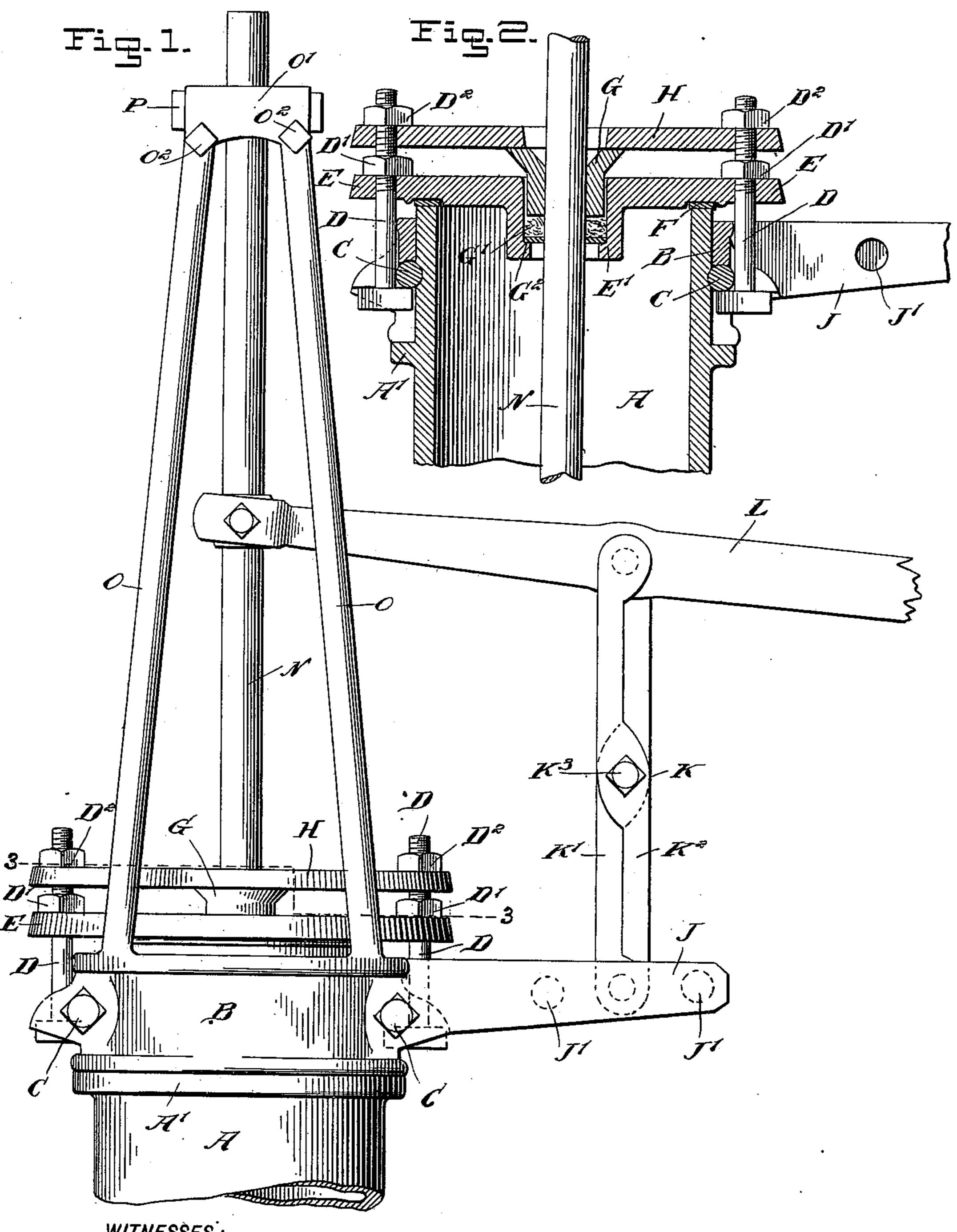
### A. GUSTAFSON. PUMP CAP.

(Application filed Oct. 23, 1900.)

(No Model.)

2 Sheets—Sheet 1.



WITNESSES:

INVENTOR August Gustatson

BY

must\_ No. 675,210.

Patented May 28, 1901.

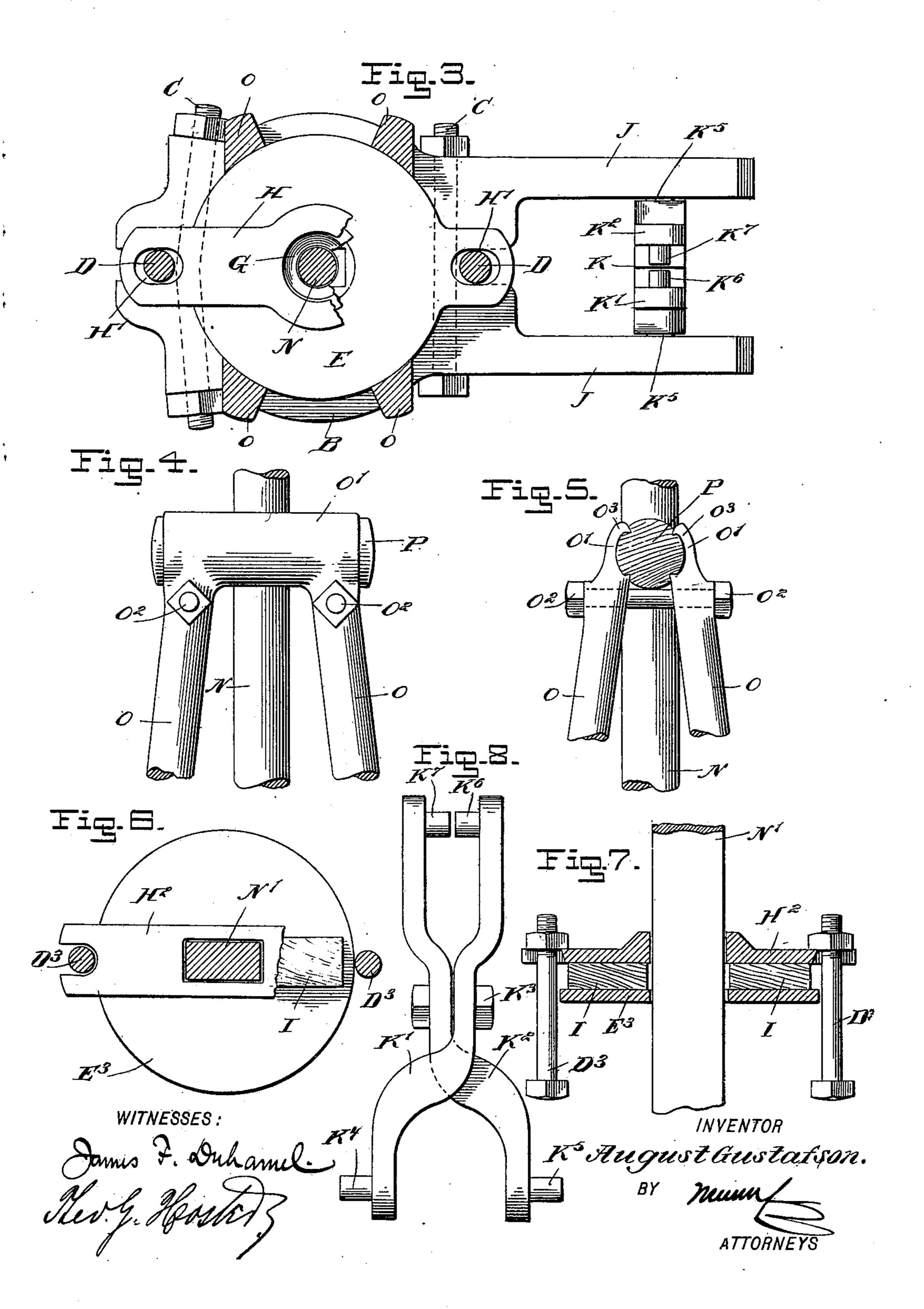
## A. GUSTAFSON.

PUMP CAP.

(Application filed Oct. 23, 1900.)

(No Model.)

2 Sheets—Sheet 2.



# INITED STATES PATENT OFFICE.

### AUGUST GUSTAFSON, OF CHEROKEE, IOWA.

#### PUMP-CAP.

SPECIFICATION forming part of Letters Patent No. 675,210, dated May 28, 1901.

Application filed October 23, 1900. Serial No. 34,031. (No model.)

To all whom it may concern:

Be it known that I, AUGUST GUSTAFSON, a citizen of the United States, and a resident of Cherokee, in the county of Cherokee and State 5 of Iowa, have invented a new and Improved Pump-Cap, of which the following is a full, clear, and exact description.

The invention relates to pumps; and its object is to provide a new and improved pump-10 cap which is simple and durable in construction and arranged for convenient and secure attachment to a new or old hand-pump or force-pump.

The invention consists of novel features 15 and parts and combinations of the same, as will be fully described hereinafter and then pointed out in the claims.

A practical embodiment of the invention is represented in the accompanying drawings, 20 forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a side elevation of the improvement as applied to a force-pump. Fig. 2 is a 25 sectional side elevation of the same. Fig. 3 is a sectional plan view of the same on the line 3 3 in Fig. 1. Fig. 4 is an enlarged side elevation of the guide in the upper ends of the standards. Fig. 5 is a transverse section 30 of the same. Fig. 6 is a sectional plan view of the improvement as arranged for use on an ordinary hand-pump. Fig. 7 is a sectional side elevation of the same, and Fig. 8 is an end elevation of the rocking link.

35 On the upper end of the pump barrel or cylinder A is fastened a sectional clamp B by means of transverse bolts C, and on the sides of said clamp B are held upwardly-extending bolts D for fastening the cover E upon a 40 packing-ring F, held on the top of the pumpbarrel A, as is plainly indicated in Fig. 2.

The cover E is formed at its middle with a gland-box E', into which extends a gland G, engaged at its head by the under side of a 45 yoke H, engaged by the extreme upper ends of the bolts D, it being understood that nuts D', screwing on said bolts D, hold the cover E to its seat on the packing F, while nuts D<sup>2</sup> engage the top of the yoke H to press the 50 gland G in firm contact with the packing G', contained in the gland-box E', said packing |

resting on a washer G<sup>2</sup>, held in the bottom of the gland-box. The bottom of the gland-box E' has a cut-out portion for the passage of a flat slide-rod in case the same is used instead 55 of the ordinary round pump-rod shown in the

drawings.

From one side of the sections of the clamp B extend sidewise the lugs J, formed at their inner faces with sets of registering recesses 60 J', of which one set forms at the time a fulcrum for a link K, made in sections K' K2, connected with each other at their middle by a bolt K<sup>3</sup>. (See Figs. 1 and 8.) The lower ends of the link-sections K' K<sup>2</sup> are formed 65 with outwardly-extending trunnions K<sup>4</sup> K<sup>5</sup> for engagement with a set of recesses J', and on the upper ends of said link-sections are formed inwardly-extending trunnions K<sup>6</sup> K<sup>7</sup> for forming the fulcrum for the lever L. The 70 latter is connected in the usual manner with the pump-rod N or the slide-bar previously mentioned. The clamp B is further provided with upwardly-extending standards O, preferably two standards for each clamp-section, 75 the standards of a clamp-section being rigidly connected with each other at their upper ends by a connecting-piece O', containing a guide P, preferably made of wood, and through which extends the pump-rod N. Bolts O<sup>2</sup> 80 connect the standards O with each other, and the connecting-pieces are preferably provided with inwardly-extending hooks O<sup>3</sup> for engaging the guide P, and thereby securely holding the latter in position. (See Fig. 5.)

By the arrangement described the sectional clamp B can be readily secured in position on the upper end of the pump cylinder or barrel A, the lower end of the clamp resting on an external flange A' of said barrel.

By the use of the cover E the upper end of the barrel is securely closed, and leakage is prevented along the pump-rod N by the gland G and packing G', the gland being held in position by the adjustable yoke H.

When the device is used on an ordinary hand-pump, I prefer the construction shown in Figs. 6 and 7, in which the cover E<sup>3</sup> is not engaged by bolts, but simply rests on the upperend of the cylinder or barrel. (Not shown.) 100 The yoke H<sup>2</sup> rests on guide-blocks I and is held to the clamp (not shown) by bolts D<sup>3</sup>.

The slide-rod N' in this case is made rectangular and extends through correspondingly-shaped openings in the cover E<sup>3</sup> and yoke H<sup>2</sup>, it being understood that the blocks I can be shifted between the cover and yoke when the bolts D<sup>3</sup> are loosened to bring the blocks in position for properly guiding the flat pump-rod.

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

10 Patent—

1. In a pump, spaced lugs or brackets projected from the pump-barrel and provided with alining recesses, a link consisting of two crossed members having at their lower ends fulcrum-pins projecting away from each other into said recesses, and at their upper ends pins projecting toward each other, and a lever embraced by the upper ends of the link members and engaged by the upper set of

pins, said lever being operatively connected 20

with the pump-rod.

2. In a pump, a cap or cover for the pump-barrel, provided with an opening for the passage of the pump-rod, a yoke located on the outer side of the cover and spaced therefrom, 25 separate blocks located between the cover and the yoke, at opposite sides of said opening, and adjustable toward and from said opening, and means for pressing the yoke and cover toward the pump-barrel.

In testimony whereof I have signed my name to this specification in the presence of

two subscribing witnesses.

AUGUST GUSTAFSON.

Witnesses:
GEO. L. BEARDSLEY,
JOHN PETERSON.