

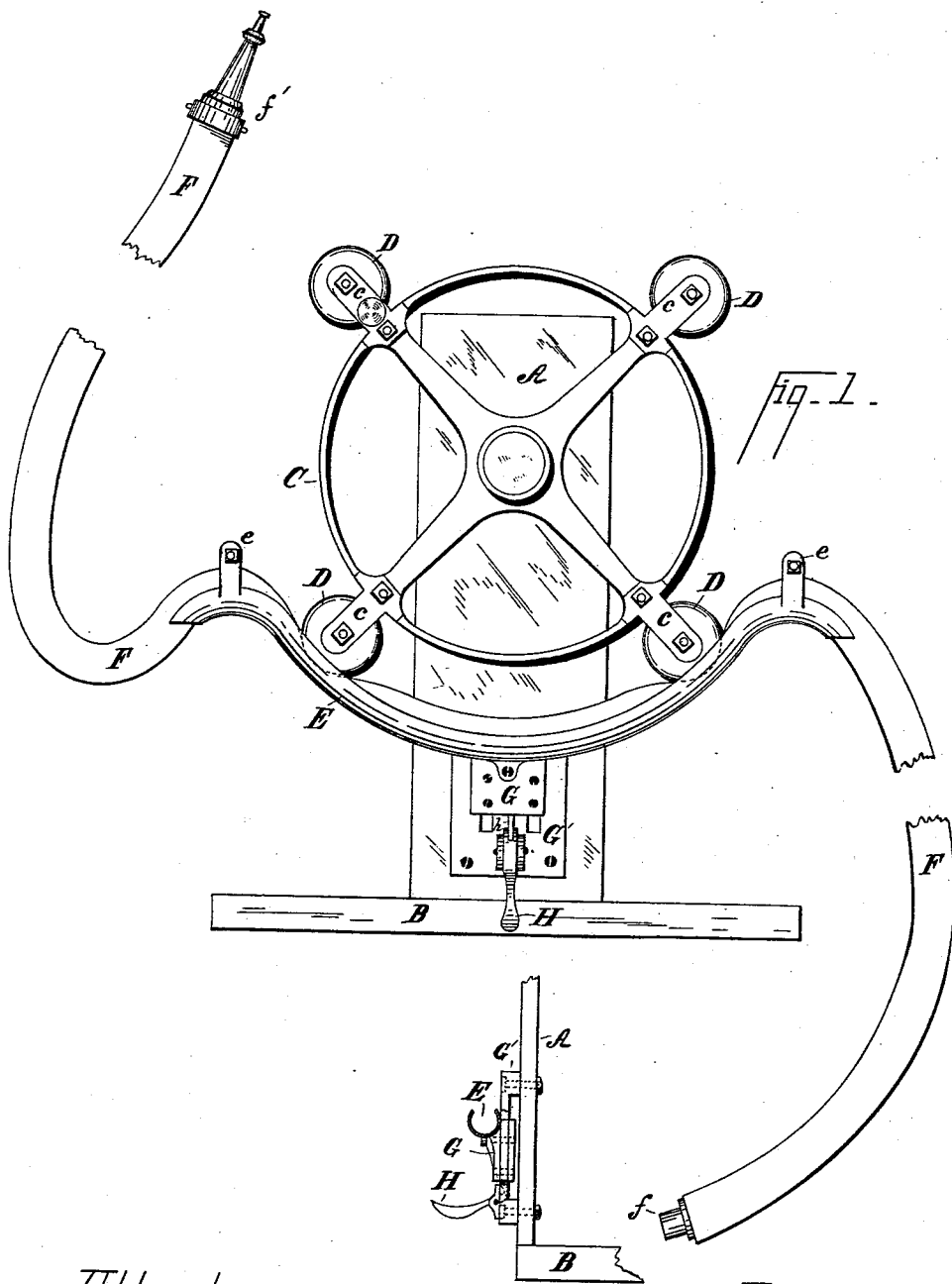
(No Model.)

J. FALLER.

PUMP.

No. 328,472.

Patented Oct. 20, 1885.



Attest —
Walter Chamberlain.
David S. Oliver.

Fig. 2 —

Inventor —
Jacob Faller
By G. S. Murray
Atty

UNITED STATES PATENT OFFICE.

JACOB FALLER, OF COVINGTON, KENTUCKY.

PUMP.

SPECIFICATION forming part of Letters Patent No. 328,472, dated October 20, 1885.

Application filed August 18, 1884. Serial No. 140,860. (No model.)

To all whom it may concern:

Be it known that I, JACOB FALLER, a citizen of the United States, and a resident of Covington, in the county of Kenton and State of Kentucky, have invented certain new and useful Improvements in Pumps, of which the following is a specification.

The object of my invention is a cheap durable pump that can be readily applied to many uses for which the pumps now in common use are not well adapted, and which may be also used to advantage in place of the common pump and at much less cost.

The invention consists of an elastic or pliable pipe with suitable means for compressing the same to exhaust it and force forward the fluid contained in a certain portion of the pipe, and thus create a vacuum when the compressed portion is released, which is again supplied from the source. The continuous compression and releasing of the pipe or hose while the backward flow is prevented forces forward to the desired height or distance a continuous stream.

It consists, also, of a means to separate the hose and bring it below the compressing-rollers, so that when not in use the hose will be released from pressure, emptied, and its elasticity preserved.

In the accompanying drawings, Figure 1 represents in front elevation a simple form of pump embodying my invention. Fig. 2 is a detail in vertical section of a portion of the same, showing the means for lowering or elevating the hose to release it from or bring it under the action of the rollers.

On the upright A, which is supported by a base, B, is mounted a wheel, C. This wheel has radial arms c, in which are mounted rollers D.

Beneath the wheel C, upon upright A, is secured a curved trough, E. This is made in two parts and secured together by lugs and screws *e e*. Within this trough E the rubber hose F is confined. This hose is provided at one end with a metal pipe, f, and at the other end with a nozzle, f'.

In use the base B is secured to some stationary object, the end of the hose having the pipe f secured in it is placed in the well, cistern, or

other source from which the fluid is to be drawn, and the end with the nozzle f' is carried to the point of discharge.

It will be seen that by rotating the wheel C the rollers D will successively compress the hose within the downwardly-curved portion of the trough E and carry the fluid in this portion of the tube forward, while the fluid from the source will follow and again fill the tube before the next roller bears upon it, provided, of course, that the body of the pump is not higher than a column of water in a tube will be forced by the pressure of the atmosphere.

The bracket G, which supports the trough E, is vertically adjustable upon the plate G, which is secured upon standard A by means of a lever, H. The purpose of this arrangement is to drop the trough and base below the reach of the rollers D and empty the tube of the fluid contained in it, and save the hose when the pump is not in use. The lever H is pivoted in lugs projecting from the plate G. To its upper end is jointed the arm h, the upper end of which bears against or is hinged to the bracket G. The bracket G has slides g, which pass through the slots in the plate G', and have plates secured to them back of plate G' to guide the bracket vertically when raised or lowered by the lever H. In the position shown in Fig. 1 the lever is thrown down, the bracket G elevated, and the pump in working condition. In Fig. 2 the lever is elevated and the bracket drawn down as it is when the hose is out of reach of the rollers D.

It is evident that, instead of the arrangement above described, the wheel C and its rollers D could be made vertically adjustable in substantially the same manner as the bracket G and its trough E, and the same result would be attained. It is also evident that there are no wearing parts of my device to get out of order, and in case the hose wears under the action of the rollers it can be moved in the trough in either direction to bring a new part of the hose under the action of the rollers, and when the hose is worn out it can be readily removed and replaced without the aid of a skilled workman.

What I claim as new, and desire to secure by Letters Patent, is—

The combination, substantially as specified,
of the standard A, having the wheel C, car-
rying the rollers D, journaled upon it, with
the vertically-sliding bracket G, carrying the
5 trough E with its hose F, and the jointed le-
ver H, for elevating or lowering said bracket
for the purpose of bringing the hose under the

action of said rollers or releasing it from press-
ure when desired.

JACOB FALLER.

Witnesses:

GEO. J. MURRAY,
CHRISTIAN F. RAPP.