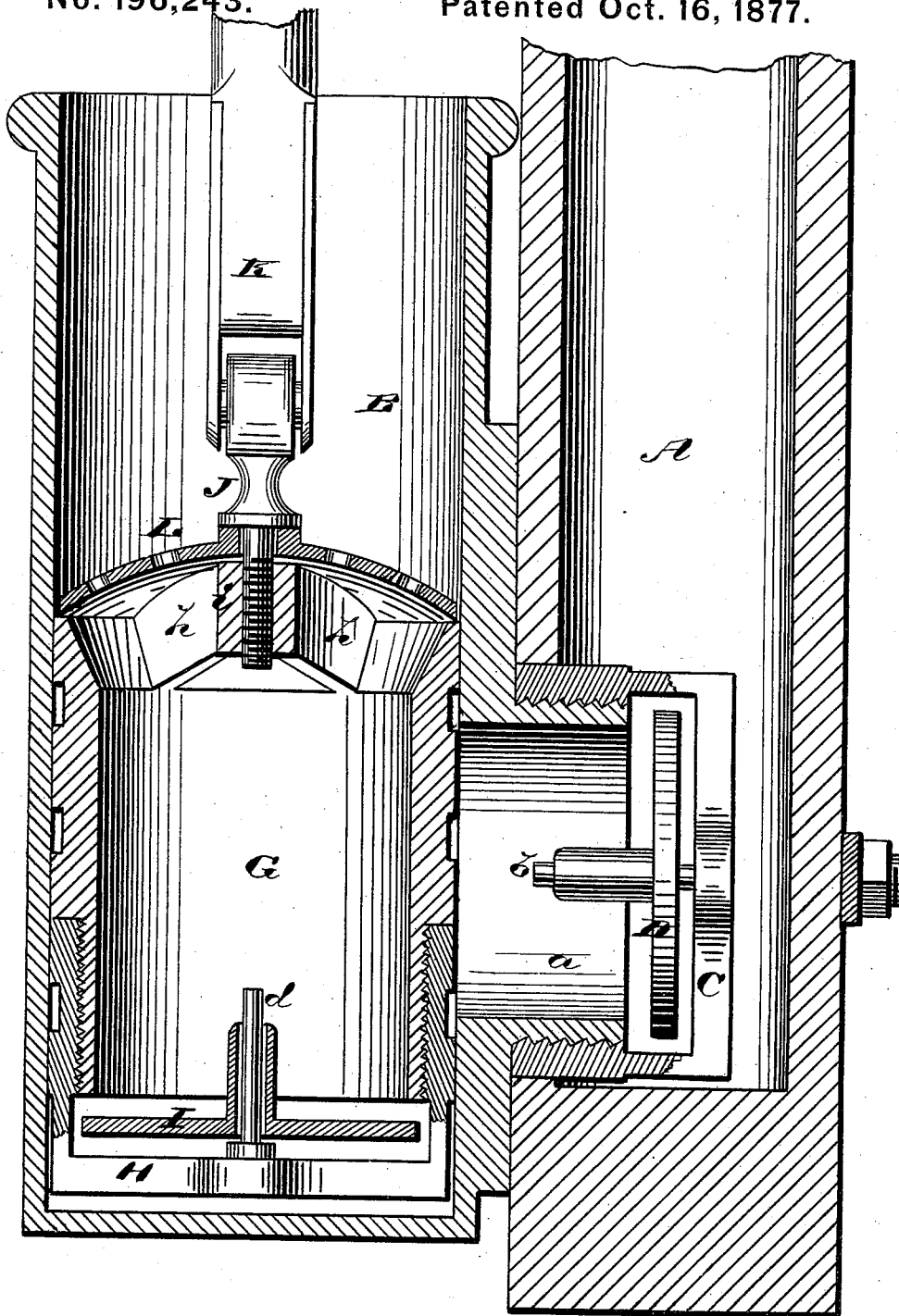


E. McCOY.  
Pumps.

No. 196,243.

Patented Oct. 16, 1877.



WITNESSES  
*H. Bates*  
*George E. Upham*

INVENTOR.  
*Eugene McCoy*  
*James S. Smith & Co.*  
ATTORNEYS.

# UNITED STATES PATENT OFFICE.

EUGENE McCOY, OF OTTUMWA, IOWA, ASSIGNOR TO McCOY & CO., OF  
SAME PLACE.

## IMPROVEMENT IN PUMPS.

Specification forming part of Letters Patent No. **196,243**, dated October 16, 1877; application filed  
September 1, 1877.

*To all whom it may concern:*

Be it known that I, EUGENE McCOY, of Ottumwa, in the county of Wapello and State of Iowa, have invented a new and valuable Improvement in Pumps; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing, making a part of this specification, and to the letters and figures of reference marked thereon.

The figure of the drawing is a representation of a longitudinal vertical sectional view of my pump.

The nature of my invention consists in the construction and arrangement of a submerged force-pump, as will be hereinafter more fully set forth.

The annexed drawing, to which reference is made, fully illustrates my invention.

A represents the pump-stock, and B the pump-cylinder, fastened thereto by a clamp, constructed in any suitable manner.

The lower end of the cylinder is closed, and the top open, so that it takes water entirely from the top. Near the bottom, the side of the cylinder B, against the pump-stock A, is made flat, and from this side projects a boss, *a*, having exterior screw-threads. This boss *a* is bored out, and opens into the cylinder. On the boss *a*, is screwed a cage, C, containing a valve, D, sliding upon a pin or spindle, *b*, in the center of the cage. The valve D closes against the end of the boss *a*, which thus forms the seat for the valve, to prevent the

return of the water from the pump-stock. The cage C, with its valve, enters a recess or aperture formed in the side of the pump-stock, and communicating with the bore therein.

G is the plunger, provided at the bottom with a cage, H, screwed thereon, said cage containing the valve I, sliding upon a central pin, *d*, in the cage. At the top of the plunger are radial arms *h h*, connecting with a central hub, *i*, into which is screwed an eyebolt, J. This eyebolt passes through a perforated cap, L, fitting on top of the plunger, and holds the same down thereon. This cap prevents any smaller foreign substances that might enter the cylinder from passing down into and through the plunger. K is the plunger-rod, pivoted to the eyebolt J.

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

1. The combination of the plunger G, cage H, valve I, perforated cap L, and eyebolt J, substantially as and for the purposes herein set forth.

2. The combination of the cylinder B with projecting valve-seat *a*, having exterior screw-threads, the cage C, and valve D, substantially as and for the purposes herein set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

EUGENE McCOY.

Witnesses:

S. E. ADLER,  
W. S. CHRISTIE.