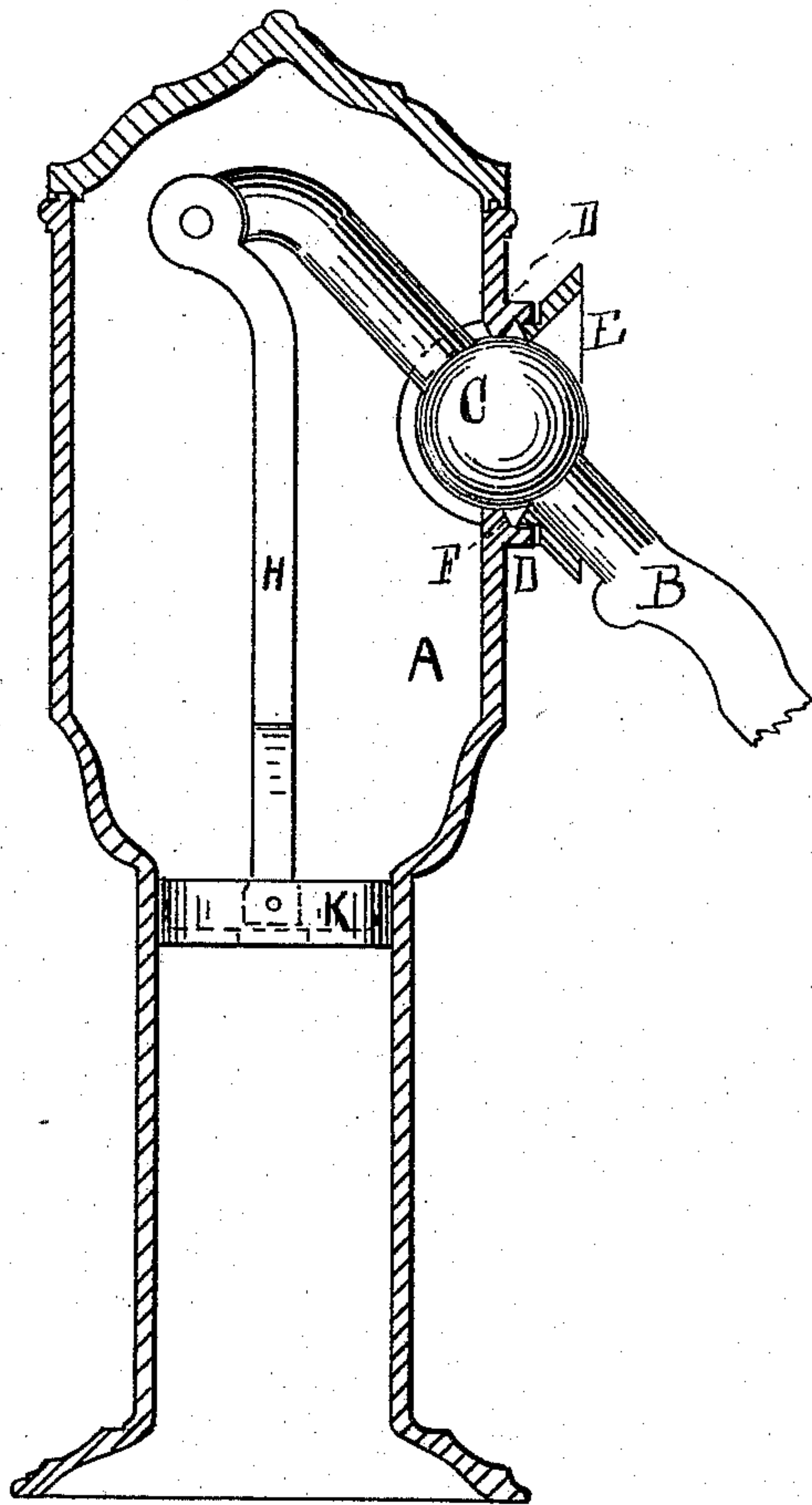


L. S. DANIELS.
Pumps.

No. 156,661.

Patented Nov. 10, 1874.



Witnesses;
Frankl. Parker
William Edison

Inventor;
Lewis S. Daniels

UNITED STATES PATENT OFFICE.

LEWIS S. DANIELS, OF FOXBOROUGH, ASSIGNOR TO JOHN F. DANIELS, OF
BOSTON, MASSACHUSETTS.

IMPROVEMENT IN PUMPS.

Specification forming part of Letters Patent No. **156,661**, dated November 10, 1874; application filed
April 29, 1874.

To all whom it may concern:

Be it known that I, LEWIS S. DANIELS of Foxborough, in the county of Norfolk, in the State of Massachusetts, have invented a certain new and useful Improvement in Pumps, of which the following is a specification:

The nature of my invention consists in combining with the brake or handle of a pump and the barrel a ball and socket, the object being to lessen friction and save expense in the construction of force-pumps.

In the drawing I have shown my pump in vertical section.

Let A represent the barrel of the pump, which may be made in any of the usual styles, and of any desired size. K is the valve, and H the valve-stem, made as shown. The brake B has a ball, C, upon it. This ball C fits into a semi-spiral seat, D D, made in the barrel A. E is a cap or follower, formed to fit the ball C,

and also the recess in D D, and thus constitute a packing-box for the ball C. F represents a space to be filled with some suitable packing material. The cap or follower E may be fastened in any suitable manner to the barrel A.

By this arrangement it may be seen that I have a very simple, cheap, and self-adjusting water-tight joint between the brake and pump-barrel. In force-pumps the upper part of the barrel forms an air-chamber for the pump.

I claim as my invention—

The combination of the brake B and ball-and-socket joint C E D D with the pump-barrel A, substantially as described, and for the purpose set forth.

LEWIS S. DANIELS.

Witnesses:

WILLIAM EDSON,
FRANK G. PARKER.