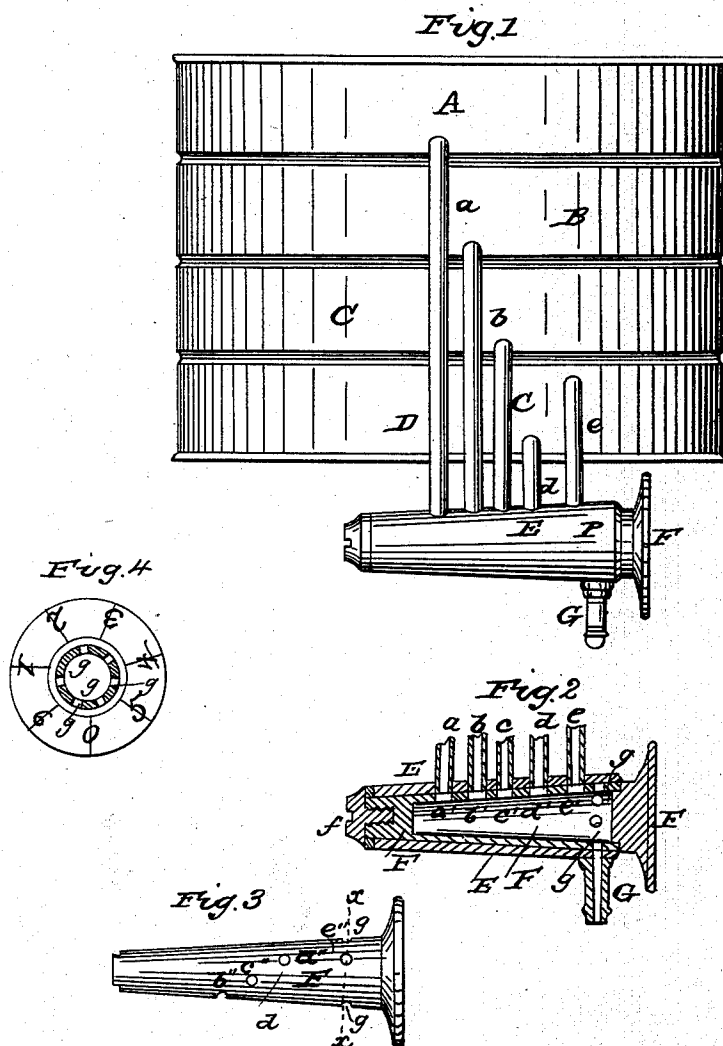


D. HURD.
Rotating Stop Cock.

No. 47,546.

Patented May 2, 1865.



WITNESSES
W. E. Mans-
L. L. Coburn,

INVENTOR
Daniel Hurd

UNITED STATES PATENT OFFICE.

DANIEL HURD, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN ROTATING STOP-COCKS.

Specification forming part of Letters Patent No 47,546, dated May 2, 1865.

To all whom it may concern:

Be it known that I, DANIEL HURD, of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Rotating Stop-Cocks; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings and the letters and figures marked thereon, which form part of this specification.

In said drawings, Figure 1 represents a side elevation of my invention. Fig. 2 is a longitudinal central vertical section of the same. Fig. 3 is a detached view of the rotating cylinder or barrel F, and Fig. 4 is a transverse sectional view of the same at the line *x* in Fig. 3.

Similar letters in the different figures denote corresponding parts of my invention.

The nature of my invention consists in so constructing a faucet or stop-cock that fluids may be drawn from different casks or vessels and at different elevations at one and the same time, or from either one of several vessels at the option of the operator.

To enable those skilled in the art to understand, construct, and make use of my invention, I will describe the same with particularity, reference being made to the aforesaid drawings.

A B C D represent a series of vessels or tubs, arranged in the manner shown, one above the other; and *a b c d* are outlet-pipes from each vessel or tub, respectively, *e* representing a pipe arranged at a different elevation in D from the pipe *d*.

E represents a hollow cylindrical case, into which each of the pipes *a b c d e* fits, as shown, and which is provided at one end with the outlet G. Within the said cylindrical case E, and fitting tightly therein, is the hollow cylinder or barrel, (marked F in the drawings,) which revolves or rotates in said case, for the purposes hereinafter specified. The said barrel F is fastened into the said case E by means of the nut *f* upon the end thereof, as shown in Fig. 2. The said rotating barrel F is provided upon one side with a longitudinal series of holes, corresponding to the series of pipes *a b c d e*, which holes are marked *a' b' c' d' e'*, as shown in Fig. 2, so that when the barrel F is revolved to such position as will bring the said series of holes therein directly beneath

the pipes *a b c d e* all said pipes will discharge at once into said rotating barrel F, whence the fluid escapes through the hole *g*, which connects with the outlet G. The said rotating barrel F is also provided with another series of holes arranged diagonally upon said barrel, as shown in Fig. 3, and marked *a'' b'' c'' d'' e''*, whereby if said barrel be rotated to a certain position one of said last-mentioned series of holes comes directly beneath the pipe *e*, and the same discharges into the said rotating barrel, while the other pipes remain closed, and if rotated to a certain other position the hole marked *d''* comes beneath the pipe *d*, while all other pipes are closed, and said pipe *d* alone is discharged, and in like manner may any one of said pipes be discharged while all others are closed. There is also another series of holes around the end of the barrel F at which the discharge-pipe G is attached, (marked *g*,) which series are so arranged that whenever the barrel F is in a position to discharge any one or all of said pipes *a b c d e*, then some one of the holes *g* comes directly over the discharge-pipe G, to allow the fluid which enters the barrel from said pipes to escape. When the said rotating barrel F is adjusted in a proper position, all the pipes are stopped. It will be observed that upon the interior face of the outer end of the said barrel there is a dial, (marked 0 6 1 2 3 4 5,) while upon the case E there is attached a pointer, (marked *p*.)

By having the hereinbefore-described holes in the barrel F properly arranged with reference to the said dial-face and pointer said dial may be made to denote the position of the barrel which may be necessary to discharge any one or all or neither of said pipes. Thus, by moving or rotating the barrel F until the index *p* points at 0 all of the pipes are closed; by turning the same until the pointer indicates 6 upon the dial, all the pipes are opened and discharged; by turning the same until the index points at 1, then the pipe *e* alone is discharged; when the index points to 2, the pipe *d* is discharged; when the index points to 3, the pipe *c* is discharged, and so on through the entire series.

It is evident that if it is desired only to draw off from all the pipes at once, only the longitudinal series of holes would be necessary, together with one hole *g* for the discharge

of the fluid from the canal F, and if it were desired to discharge from only one pipe at a time, then only the diagonal series in connection with the series *g* would be necessary.

Having fully described the construction and operation of my invention, I will specify what I claim as new therein and desire to secure by Letters Patent—

1. The combination and arrangement of the jacket E and the barrel F, provided with the

three series of holes *a'*, *a''*, and *g*, operating as and for the purposes specified and shown.

2. In combination with the above, the employment of the dial and pointer, arranged as and for the purposes described.

DANIEL HURD.

Witnesses:

W. E. MARRS,

L. L. COBURN.