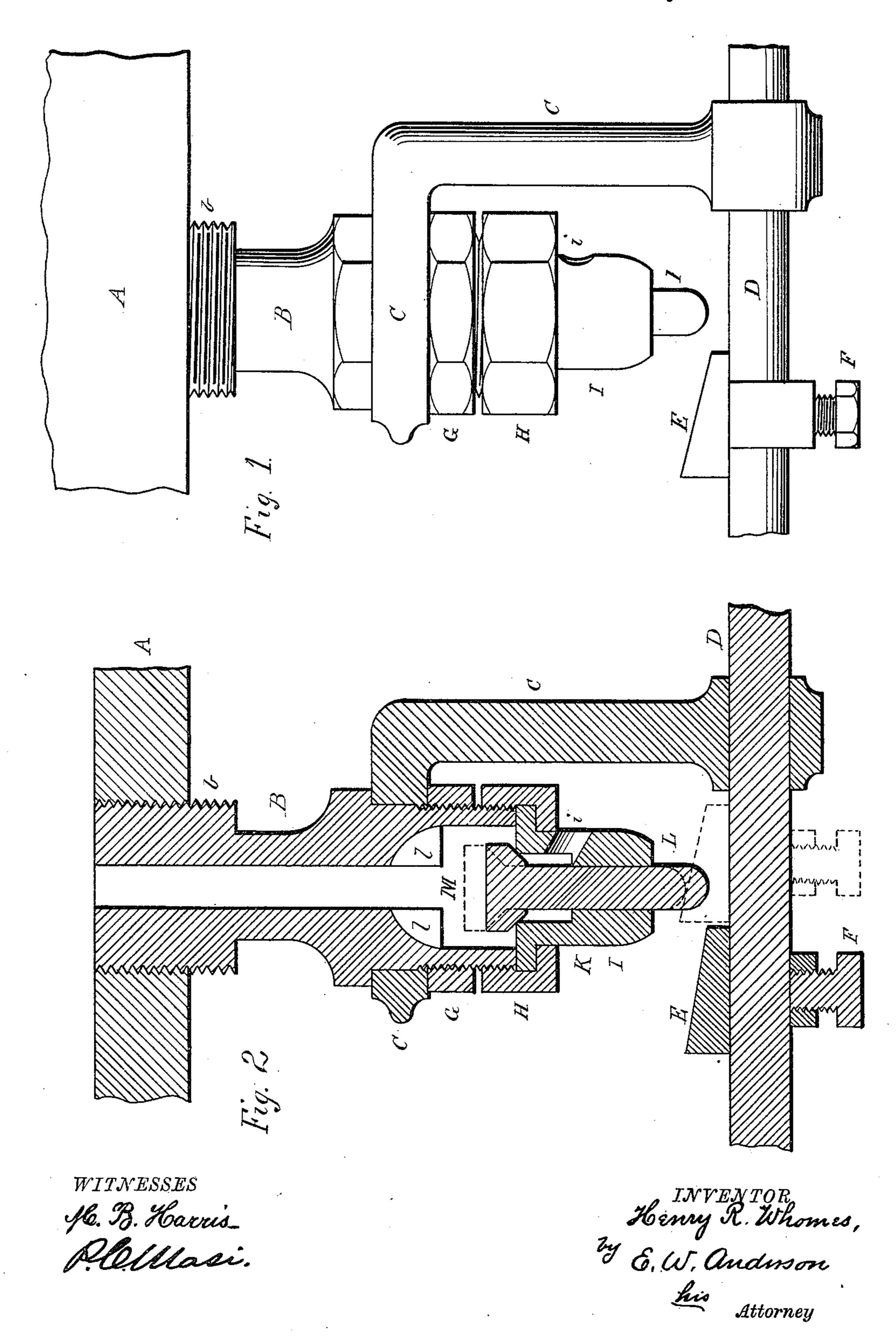
## H. R. WHOMES.

CYLINDER COCK.

No. 362,804.

Patented May 10, 1887.



N. PETERS. Photo-Lithographer, Washington, D. C.

## United States Patent Office.

HENRY RICHARD WHOMES, OF WINONA, MINNESOTA.

## CYLINDER-COCK.

SPECIFICATION forming part of Letters Patent No. 362,804, dated May 10, 1887.

Application filed March 18, 1387. Serial No. 231,420. (No model.)

To all whom it may concern:

Beitknownthat I, HENRY RICHARD WHOMES, a citizen of the United States, residing at Winona, in the county of Winona and State of 5 Minnesota, have invented certain new and useful Improvements in Cylinder-Cocks; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it ic appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a side elevation 15 of my invention. Fig. 2 is a vertical longi-

tudinal section of same.

My invention relates to cylinder-cocks designed to be used on all steam-engines; but more especially upon locomotive-engines; and 2c it consists in the construction and novel combination of parts, as hereinafter set forth.

Referring by letter to the accompanying drawings, A A designate the cylinder of the engine, in which the cock is inserted.

B is the main shell of the cock.

C is an angular arm the upper end of which entirely encircles the shell B of the cock, the depending portion C of the angular arm being provided with an eye, in which the slide D is 30 supported and works. The arm C is held in place on the shell B against the shoulder b by an internally-threaded nut, G.

H is a cap-nut, which is screwed onto the lower end of the shell B, and serves to hold the 35 flanged nipple I in place, and thereby form the

bottom of the valve.

K is a gravity-valve having a long stem, L, extending through and below the nipple I.

i is an opening in the nipple I for the escape 40 of the steam and water when the valve K is raised. The nipple I being movable, the es-

cape-hole i can be either on the right or left side, as the cock is used for a right or left hand cylinder. llare lugs cast in the chamber M on the shell B, for the purpose of preventing 45 the valve K from rising too high.

E is a bevel-faced riser or lifting-piece, which is secured to the upper side of the rod D by a

set-screw, F.

The operation of this cock is very simple, 50 and is follows: When it is desired to blow off condensed steam, the slide-rod D is pulled until the riser E occupies the position shown in dotted lines, thereby raising the valve K off its rest or seat and permitting the escape of 55

water, steam, &c., as long as desired.

The advantages of this cock over others now in use, among others, are as follows: First, its simplicity of construction; second, small cost of duplicating the pieces subjected to wear; 60 third, readiness with which valves may be ground or kept in order without disturbing other parts; fourth, the same cock may be used either right or left; fifth, no spring is required to operate the valve, and, sixth one 65 part may be duplicated without destroying other parts.

What I claim, and desire to secure by Let-

ters Patent, is--

The combination of the shouldered main 70 shell, the angular encircling arm having an eye at its lower end, the nut G, the valve K L, the flanged nipple provided with the escapeopening in its side, and the slide-rod supported by the angular arm and having the inclined 75 riser secured to it, substantially as specified.

In testimony whereof I affix my signature in

presence of two witnesses.

HENRY RICHARD WHOMES. Witnesses:

A. B. QUIMBY, J. W. MAYBURY.