

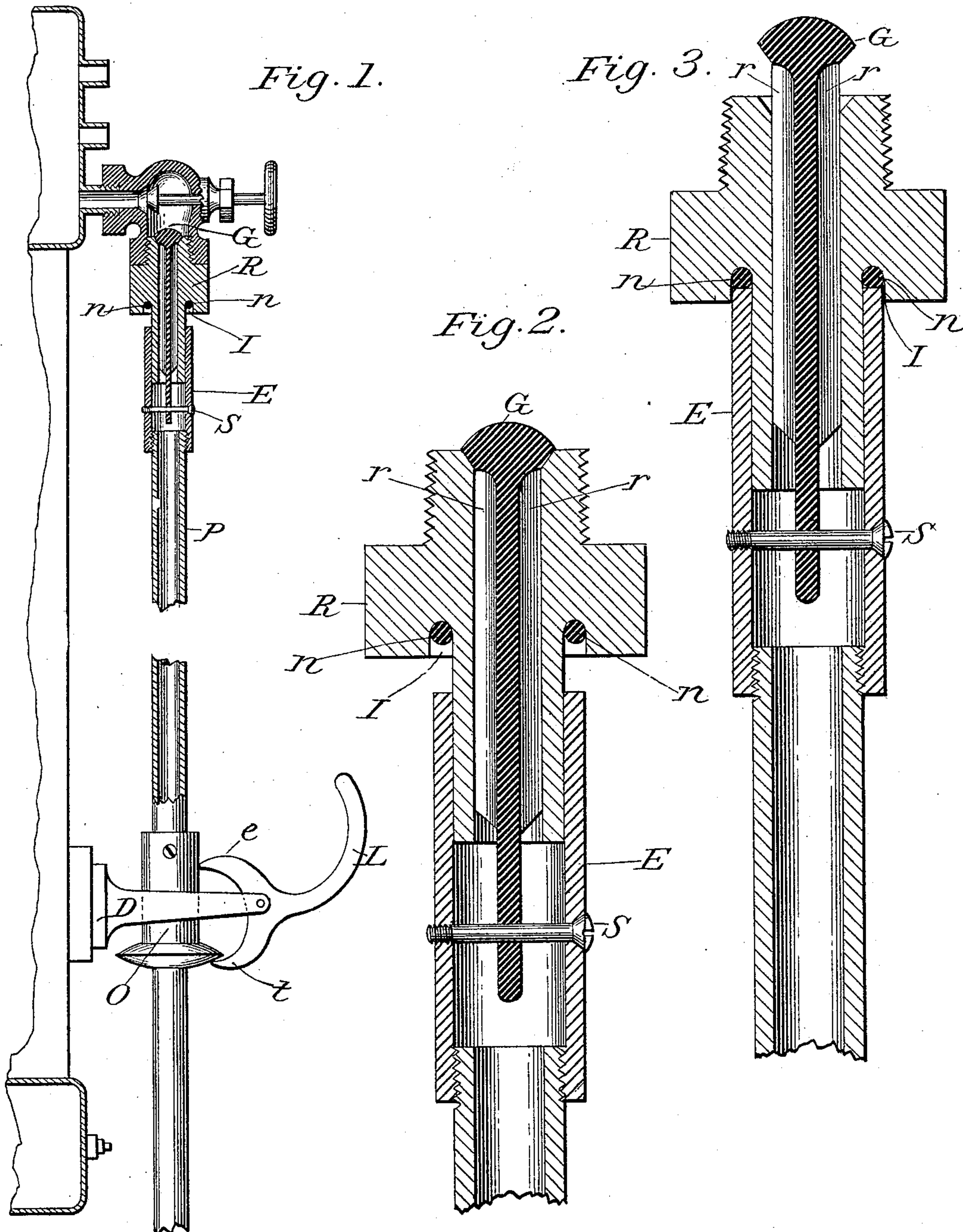
(No Model.)

C. B. ROGERS.

GAGE COCK.

No. 300,643.

Patented June 17, 1884.



Witnesses:
Benj^r Rogers.
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Inventor:
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UNITED STATES PATENT OFFICE.

CHARLES BUTTERS ROGERS, OF ST. PETER, MINNESOTA.

GAGE-COCK.

SPECIFICATION forming part of Letters Patent No. 300,643, dated June 17, 1884.

Application filed August 13, 1883. (No model.)

To all whom it may concern:

Be it known that I, CHARLES BUTTERS ROGERS, a citizen of the United States, residing at St. Peter, in the county of Nicollet and State of Minnesota, have invented certain new and useful Improvements in Gage-Cocks, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings and letters of reference marked thereon, in which—

Figure 1 is a longitudinal section through the boiler gage cock and pipe with my improvements secured thereto, and Figs. 2 and 3 are enlarged detail views showing the valve respectively open and closed.

Similar letters indicate like parts in all the figures.

My invention relates to that class of steam-boilers where it becomes necessary, on account of the height of the boiler, to lead the gage water and steam down by means of pipes attached to the gage-cocks, as hereinafter more fully set forth, and pointed out in the claims.

An angle-valve, V, leading from a steam-boiler, A, (see Fig. 1,) has screwed into it a shank, R, into which is fitted to move freely up and down a valve-stem, *g*, having on its upper end a valve, G, which is ground to its seat steam and water tight. The stem *g* has two or more grooved longitudinal passages, *r r*, for the escape of water and steam when the gage-cock is opened, as shown in Fig. 3. Upon the outer and lower part of shank R is fitted to move freely up and down a sleeve, E. The sleeve E, when pushed upward, is received at the upper end into a recess, I, containing an elastic packing-ring, *n*, thereby making a steam and water tight joint around the lower part of shank R when the sleeve is raised. The sleeve E and valve-stem *g* are connected by means of a pin or screw, S, which passes through the sleeve E, and also through an orifice in the lower part of the valve-stem *g*. A suitable length of small-sized steam-pipe, P, is screwed into the sleeve E, and also guided

and held in position by flange-collars O, secured to the pipe P, the bracket D, and lever L, with prongs *e t*, the lever L being hinged to the bracket D, (seen at *g*, Fig. 1.)

The operation is as follows: When the lever L is pulled downward, the prong *t* engages under the flange-collar O, thereby raising the pipe P, together with the sleeve E and valve G, and causing the water or steam to escape down the grooved passages *r r* of the valve-stem and through the pipe P, but preventing the same from escaping around the upper end of the sleeve E and the lower end of the shank R by the recess I and elastic packing-ring *n*, (see Fig. 2,) as described.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with the pipe P, and means, substantially as described, for operating said pipe, of the sleeve E, secured to the upper end of the pipe, and valve G, secured to the sleeve E and working in the shank of a gage-cock, substantially as shown and described.

2. The combination, with a gage-cock and a shank, R, secured thereto, and having a recess, I, in its lower face, provided with a packing-ring, *n*, of the sleeve E and valve G, secured to the sleeve, substantially as shown and described.

3. The combination, with the angular gage-cock V and shank R, secured thereto, and having a recess, I, in its lower face, provided with a packing-ring, *n*, of the sleeve E, valve G, its stem being provided with grooves *r r*, and a hole near its lower end, screw or pin S, pipe P, secured to the lower end of the sleeve, collar O, bracket D, and lever L, having prongs *e t*, substantially as shown and described.

CHAS. BUTTERS ROGERS.

In presence of—

BENJ. ROGERS,
CHAS. KAYSER.