

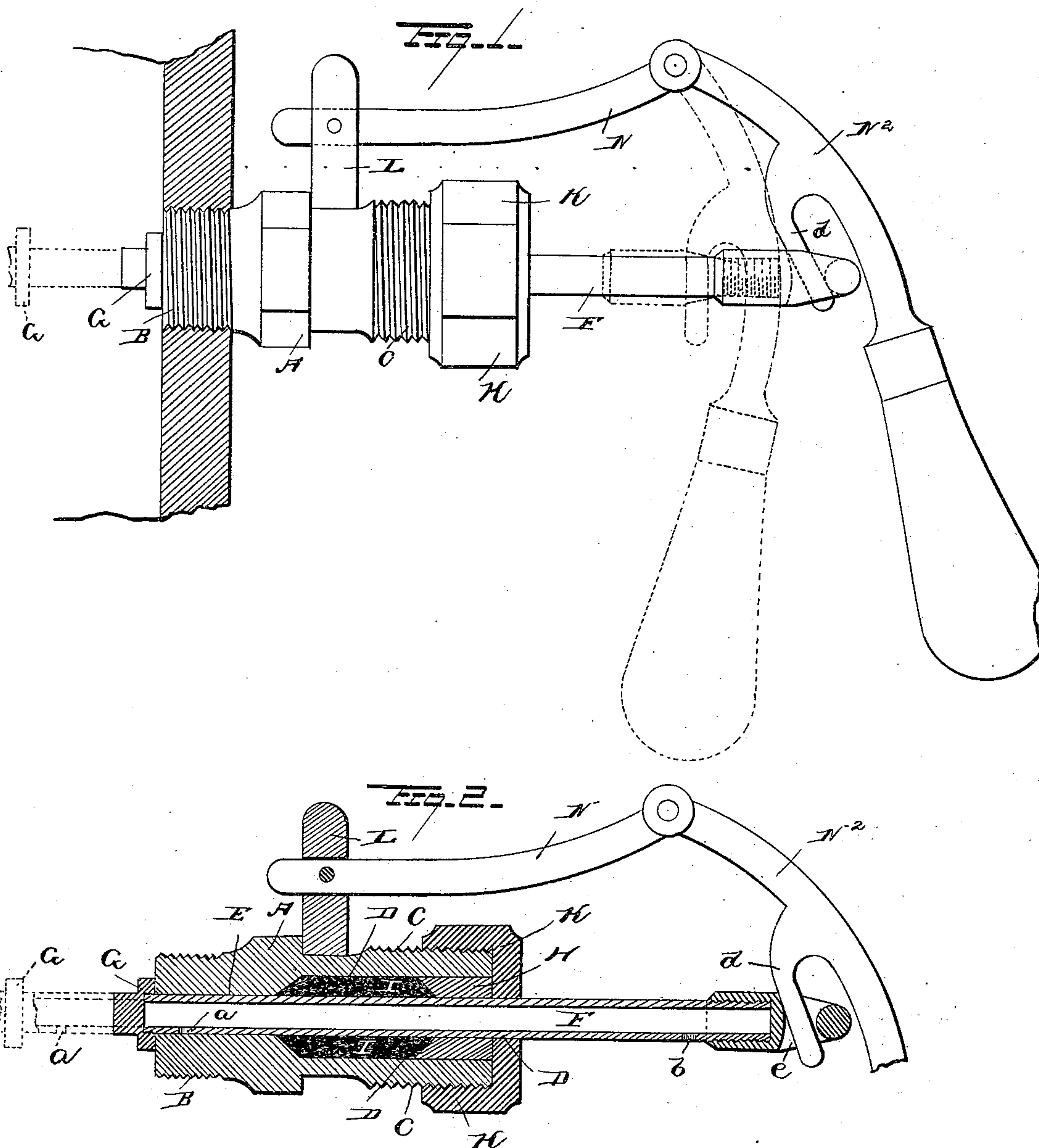
(No Model.)

G. W. RODGERS.

TRY GAGE FOR STEAM BOILERS.

No. 355,886.

Patented Jan. 11, 1887.



Witnesses

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# UNITED STATES PATENT OFFICE.

GEORGE W. RODGERS, OF BELLEFONTE, PENNSYLVANIA.

## TRY-GAGE FOR STEAM-BOILERS.

SPECIFICATION forming part of Letters Patent No. 355,886, dated January 11, 1887.

Application filed September 4, 1886. Serial No. 212,735. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE W. RODGERS, a citizen of the United States, residing at Bellefonte, in the county of Centre and State of Pennsylvania, have invented a new and useful Improvement in Try-Gages for Steam-Boilers, of which the following is a specification.

My invention relates to an improvement in try-gages for steam-boilers; and it consists in the peculiar construction and combination of devices that will be more fully set forth hereinafter, and particularly pointed out in the claims.

In the drawings, Figure 1 is an elevation of a try-gage embodying my improvement. Fig. 2 is a vertical sectional view of the same.

A represents the body or barrel of the gage, which is cylindrical, and is provided at one end with the screw-threads B. The end provided with the threads B is reduced in diameter and enters the threaded opening made in the boiler below the water-line. The outer end of the body of the gage is provided with screw-threads C. In the interior of the gage is a cylindrical opening, D, and through the reduced portion of the gage is a similar opening, E, which is of less diameter and communicates with the opening D.

F represents a hollow tube or stem which passes through the openings D and E. On the inner end of the said hollow tube or stem is screwed a shoulder or disk, G, which closes the said inner end of the hollow tube or stem, and is adapted to close the outer end of the opening E when the said disk or shoulder bears against the inner end of the gage.

H represents a gland which fits in the outer end of the opening D, and through which passes the tube or stem F. I represents a packing in the opening D, against which the inner end of the gland presses. A sleeve, K, which is interiorly threaded, is screwed onto the threaded end C of the valve-body and forces the gland inwardly against the packing, so as to firmly pack the latter in the opening D around the hollow tube or stem, and thus prevent leakage. The outer end of the hollow tube or stem is closed, and the said tube or stem is provided, at a suitable distance from its inner end, with an inlet-open-

ing, *a*, and near the outer end of the said tube or stem is an outlet-opening, *b*. The said openings communicate with the interior bore of the tube or stem.

From the upper side of the body of the gage projects an ear, L, to which is attached an outwardly-extending rod, N. To the outer end of this rod is pivoted a handle-lever, N<sup>2</sup>, and the said handle-lever has a curved finger, *d*, to fit in a loop, *e*, on the outer end of the stem or tube.

From the foregoing description it will be readily understood that the stem or tube may be drawn outwardly through the gage, so as to cause the disk or shoulder at the inner end of the stem to close the opening at the inner end of the gage, and also move the opening *a* to the interior of the gage, so as to prevent the escape of water from the boiler. The gage is illustrated in this position in Fig. 1.

In order to permit the escape of water from the boiler when it is desired to ascertain the quantity of water therein, the handle-lever is moved inwardly, thereby causing the hollow tube or stem F to be moved inwardly in the gage, so that the opening *a* will be beyond the inner end of the gage, when water from the boiler will immediately enter the tube or stem through the said opening *a* and escape through the opening *b*, as shown in Fig. 2.

Having described my invention, I claim—

1. In a try-gage cock, the combination of the body A, fitted to the boiler, the longitudinally-movable hollow tube F, extending through the body, and having the openings *a* and *b* near its extremities, and the lever N<sup>2</sup>, having the finger *d* engaging a loop at the outer end of the tube, substantially as described.

2. In a try-gage cock, the combination of the body A, having the enlarged opening D at its front end, and the reduced opening E communicating therewith and extending to the extreme rear end of the body, the longitudinally-movable tube F, extending through the body and fitting snugly in the reduced opening E, the said tube having the openings *a* and *b* near its extremities, and the disk or shoulder G, secured to its inner end and adapted to strike against the extreme rear

end of the body when the tube is drawn out-  
ward, for the purpose set forth, the packing  
in the opening D around the tube, the gland  
in the front end of the said opening, and the  
5 cap K, screwed on the outer end of the body  
and bearing against the gland, substantially  
as described.

In testimony that I claim the foregoing as  
my own I have hereto affixed my signature in  
presence of two witnesses.

GEORGE W. RODGERS.

Witnesses:

BOND VALENTINE,  
JOHN POWER.