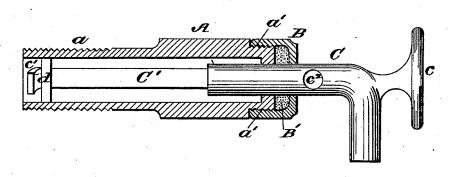
(No Model.)

M. DE L. SWANK, J. T. THORNLEY & J. A. AWALT. STEAM GAGE COCK.

No. 267,036.

Patented Nov. 7, 1882.



Witnesses: W.B.Massow. S. S. Nottinghams

Inventor:

M. D.L. Swank

J. T. Thomley

J. A. Auralt

by J.R. Lottingham

## UNITED STATES PATENT OFFICE.

MARQUIS DE L. SWANK, JASPER T. THORNLEY, AND JOHN A. AWALT, OF ANDERSON, INDIANA.

## STEAM-GAGE COCK.

SPECIFICATION forming part of Letters Patent No. 267,036, dated November 7, 1882.

Application filed July 25, 1881. (No model.)

To all whom it may concern:

Beitknown that we, MARQUIS DE L. SWANK, JASPER T. THORNLEY, and JOHN A. AWALT, citizens of the United States, residing at Angerson, in the county of Madison and State of Indiana, have invented certain new and useful Improvements in Steam-Gage Cocks; and we do hereby 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 appertains to make and use the same, reference being had to the accompanying drawing, and to the letters or figures of reference marked thereon, which form a part of this specification.

Our invention relates to a steam-gage cock; and the novelty consists in the construction and arrangement of parts, as will be more fully hereinafter set forth, and specifically pointed

20 out in the claim.

The object of this invention is to simplify and greatly cheapen the construction of a

steam-gage.

The mechanism is fully illustrated in the 25 accompanying drawing, which forms a part of this specification, and in which the figure is a longitudinal central section.

To enable others skilled in the art to which the invention relates to make and use the same, we will describe the construction and operation of the same, reference being had to the drawing, in which similar letters of reference indicate like parts.

A represents a tube, adapted to be screwed into a boiler by means of threaded portion a, and having threads a' upon its outer end to receive a threaded packing-cap, B, between which and the tube A is thus formed the pack-

ing-chamber B'.

40 C represents the cock, having handle c, and an inner arm, C', bent at c' to engage a crossbar, lug, or stud, d, in the tube A. A steampassage is formed in the cock C, running from the outer end inward, and having communication with outer air by an aperture, c<sup>2</sup>, in the side of the cock.

By this construction it will be observed that we obviate the necessity for levers, links, and bearings, but three pieces being necessary to 50 insure the successful operation of the device. The operator can readily force the cock in until the hole  $c^2$  is within the tube-chamber,

and the boiler contents pass out under force. When it is desired to stop the outflow it is only necessary to let go of the cock, when the 55 steam will force the cock outward until the hook c' engages the stud d.

We are aware that it is not new with us to provide suitable means for permitting the escape of air, gas, or liquid from barrels or steam 60 or water from boilers, for decanting liquor, or other purposes for which faucets or cocks are or may be used, as such was shown in Patent No. 199,944, of 1878; but in that construction the enlarged steam or water chamber within 65 the tube and surrounding the valve-stem, is lacking, and the closing of the valve automatically by the steam-pressure is not a portion of that invention, and the external portions of the cock are formed in two pieces.

We are also aware of Patent No. 58,179, of 1866; but in that construction, as well as No. 199,944, the valve-stem is approximately the same size throughout its length, is necessarily heavier, and occupies more of the cock-chamber. In our device the arm is a thin strip of metal, the valve-stem lightened thereby, and

the area of the chamber enlarged.

An important advantage of this construction is that we have a more free communication with the volume of steam in the boiler by reason of the enlarged cock-chamber, and we avoid the wire-drawing of the steam which results from small passages between the stem and tube.

Having thus described our invention, what we claim, and desire to secure by Letters Pat-

ent, is-

The steam gage cock herein described, composed of the tube A, having external threaded 90 portion, a, for attachment to a steam-boiler, and threaded connection a', with cap B, which incloses the packing B', the cock C, having handle c, and thin extension C', provided with hook c', all formed in one piece, and the lug d, 95 all arranged and combined to serve as set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

MARQUIS DE L. SWANK. JASPER T. THORNLEY. JOHN A. AWALT.

Witnesses:

WM. ROTH, A. CALMESE.