

(No Model.)

J. R. HODGES & W. M. DAVIE.

GAGE COCK.

No. 385,052.

Patented June 26, 1888.

Fig. 1.

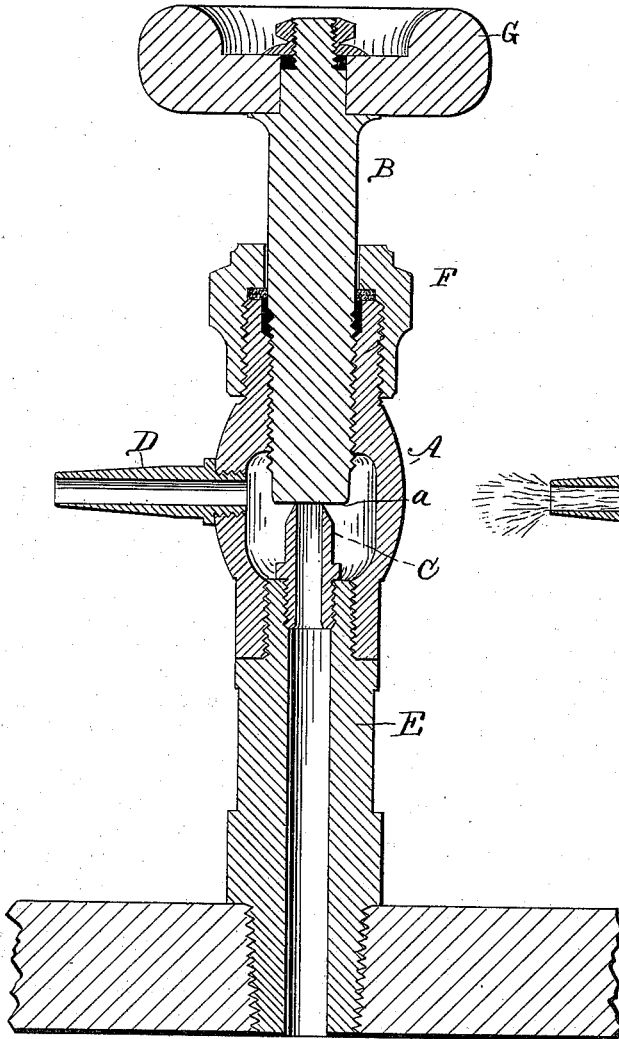
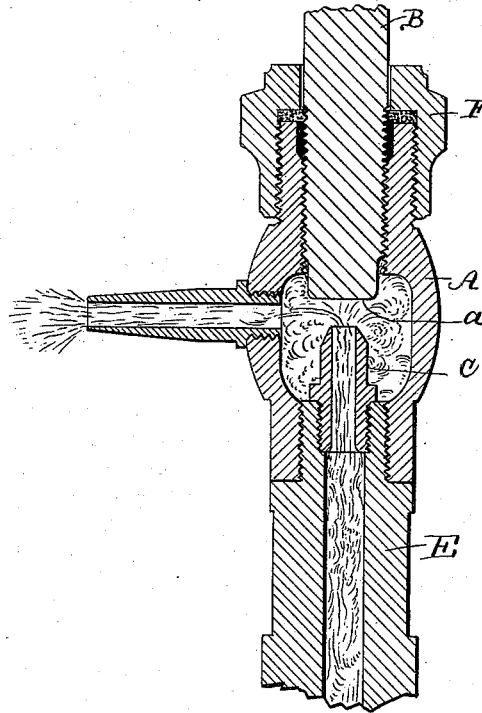


Fig. 2.



Witnesses  
Thos. Houghton.  
Geo. H. Woodhead.

Inventor.  
John R. Hodges.  
William M. Davie.  
By their Attorney  
Henry B. Munn.

# UNITED STATES PATENT OFFICE.

JOHN R. HODGES AND WILLIAM M. DAVIE, OF PORTAGE, WISCONSIN.

## GAGE-COCK.

SPECIFICATION forming part of Letters Patent No. 385,052, dated June 26, 1888.

Application filed June 24, 1887. Serial No. 249,403. (No model.)

*To all whom it may concern:*

Be it known that we, JOHN R. HODGES and WILLIAM M. DAVIE, citizens of the United States, residing at Portage, in the county of Columbia and State of Wisconsin, have invented certain new and useful Improvements in Gage-Cocks; and we 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 appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

The object of our invention is to produce a gage-cock with a light and durable valve; and it consists of the combination of a steel cone-shaped valve-seat and solid screw-stem plug, of metal softer than the steel cone, arranged to meet in the chamber of the cock.

In the drawings, Figure 1 is a sectional elevation showing the valve closed, and Fig. 2 is a sectional elevation of a part showing the valve open.

The gage-cock is constructed of a solid screw-stem, B, provided with a knob or wheel, G, for operating it, a central tubular chambered body, A, provided with a discharge nozzle, D, and a tubular connecting-section, E, having a tubular steel cone-shaped valve-seat on its inner end. These parts are all made of metal, except the knob or wheel G, which may be of wood or other material. The solid screw-stem is connected to the body A by means of a cap stuffing-box, F, through which it passes freely, as clearly shown in both figures, and by external screw-threads along its lower end, which engage in corresponding threads on the inner side of the upper tubular end of the body A, as shown in the figures.

The body A of the cock has tubular ends and a central spherical enlargement to form a chamber, *a*, as shown in both figures. Into one side of this chamber is screwed a discharge-nozzle, D, as shown in both figures. In its end,

directly opposite the one in which the solid screw-stem B is arranged, the tubular section E is screwed by means of external screw-thread upon its end fitting into corresponding threads on the inner end of the body A, as shown in the figures. The outer end of this tubular section E is provided on its exterior with a screw-thread to connect it with any vessel as desired, as shown. A steel cone-shaped valve-seat, C, made tubular and with its opening tapering to a thin hard-edged lip, is screwed into the inner end of the tubular connecting-section E, and is of such length that when the parts of the gage-cock are put together its inner end will be about in the center of the chamber *a* on a line with and opposite the discharge-nozzle, and also directly opposite the end of the solid screw-stem B. The end of this screw-stem consists of metal softer than that of the lip of the steel cone and is made correspondingly true.

To operate the cock thus constructed, it is only necessary to turn the knob G, and thus screw the stem B backward and forward against the end of the steel cone-shaped valve-seat, when the pressure of the soft metallic surface of the end of the screw-stem against the hard sharp end of the cone-shaped valve-seat causes the latter to sink partially into the former and thus make a perfectly tight valve.

Having thus described our invention, what we claim is—

In a gage-cock constructed as herein described, the combination of the removable steel cone shaped-edged valve-seat C with the screw-stem B, of softer metal, as and for the purpose set forth.

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

JOHN R. HODGES.  
WILLIAM M. DAVIE.

Witnesses:

G. J. COX,  
J. H. ROGERS.