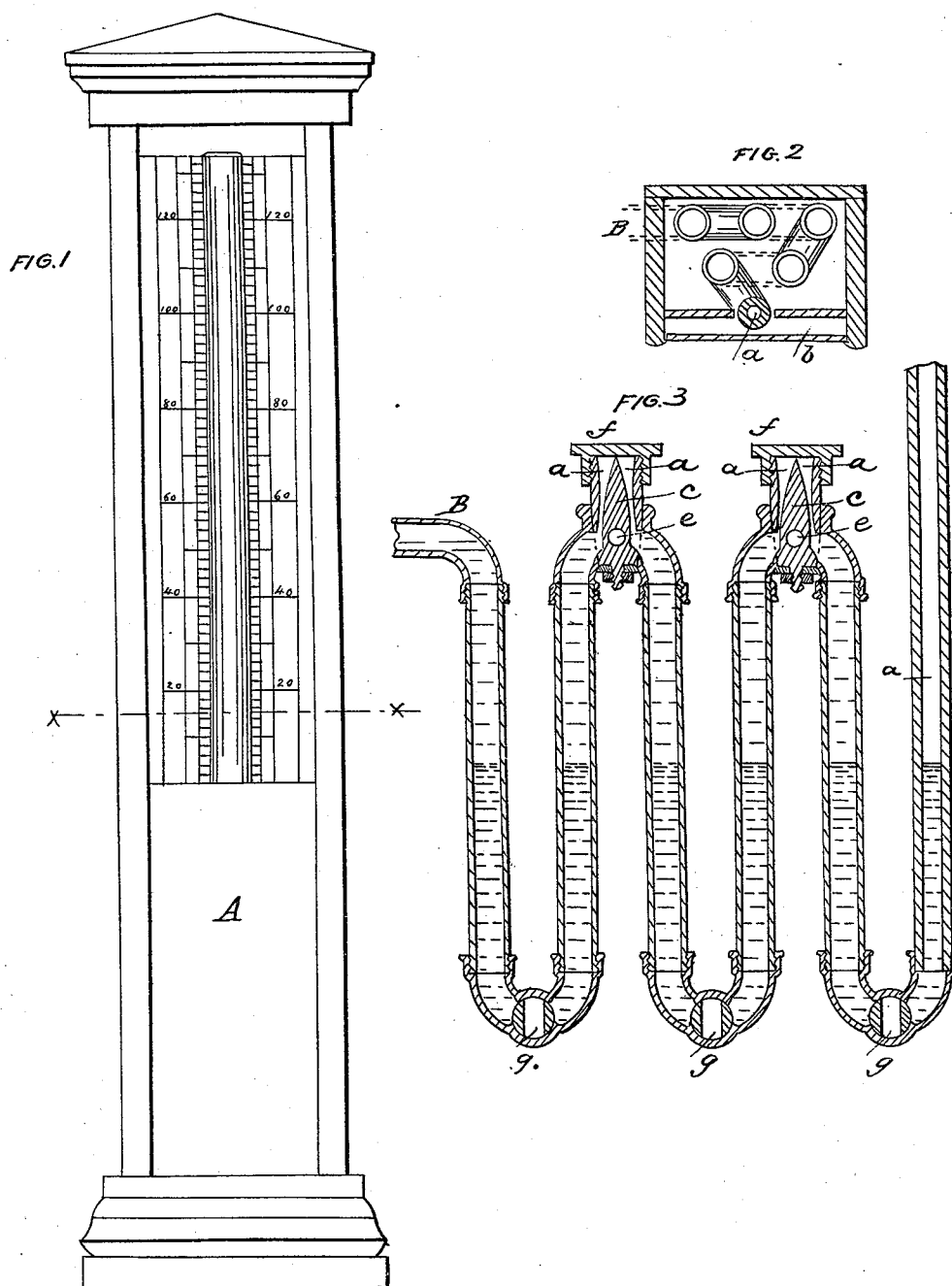


E. QUINN.

Steam Gage.

No. 53,183.

Patented March 13, 1866.



WITNESSES  
John Blou  
J. B. Conner

INVENTOR  
E. Quinn

# UNITED STATES PATENT OFFICE.

EMMETT QUINN, OF WASHINGTON, DISTRICT OF COLUMBIA.

## IMPROVEMENT IN STEAM-GAGES.

Specification forming part of Letters Patent No. 53,183, dated March 13, 1866.

*To all whom it may concern:*

Be it known that I, EMMETT QUINN, of the city of Washington, District of Columbia, have invented a new and Improved Steam-Gage; and I do hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

This invention relates to that class of steam-gages in which two fluids of different specific gravity are used to indicate the pressure of steam in the boiler; and it consists in so constructing the couplings between each upright tube that the fluids can be conveniently introduced and secured therein, a proper proportion of each remaining in each column or tube and prevented from mingling with others, and thus destroying the efficacy of the gage, and without which it could not be transported with safety.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

Figure 1 is a front elevation of the gage. Fig. 2 is a transverse section, as indicated by red line *x x*, the couplings or bends of the tube at bottom shown by shading in full lines, the top ones and the connection with the steam-pipe B by dotted lines. Fig. 3 is a vertical section of the tubes, each being in the same vertical plane instead of being arranged as in Fig. 2, for the purpose of more clearly illustrating the relative position in the tubes of the two fluids and the means of introducing it and of separating that in each tube from the others, which is essential to its safe transportation.

A, Fig. 1, is the front of the case of the gage *a a a*, Figs. 1, 2, and 3, the last or index-tube of glass, which may be longer, and the caliber or bore somewhat less than the other tubes.

The index scales or registers, Fig. 1, are protected by a plate of glass, *b*, Fig. 2. In each top coupling, Fig. 3, is a stop-cock, the key C of which, besides the ordinary port or way *e*, is supplied with two induction-ports, *a a*, running from the top and opening into the interior of the coupling on each side of the port *e* and communicating with the tubes, each on its respective side, but prevented from communicating with each other by the cap *p* secured on top of the key.

The bottom couplings are each furnished with an ordinary stop-cock, *g*.

When the gage is secured to its place ready for operation the keys of all the cocks are turned one-fourth round from the position shown, which restores communication between the tubes, but severs it between them and the ports *d d*.

It is evident that this gage can be applied to all kinds of boilers or cylinders where it is desirable to ascertain the amount of pressure, as in hydraulic presses, blowing-engines for furnaces, &c.

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

A steam-gage constructed substantially as described, as an article of manufacture.

EMMETT QUINN.

Witnesses:

JOHN D. BLOOR,  
T. C. CONNOLLY.