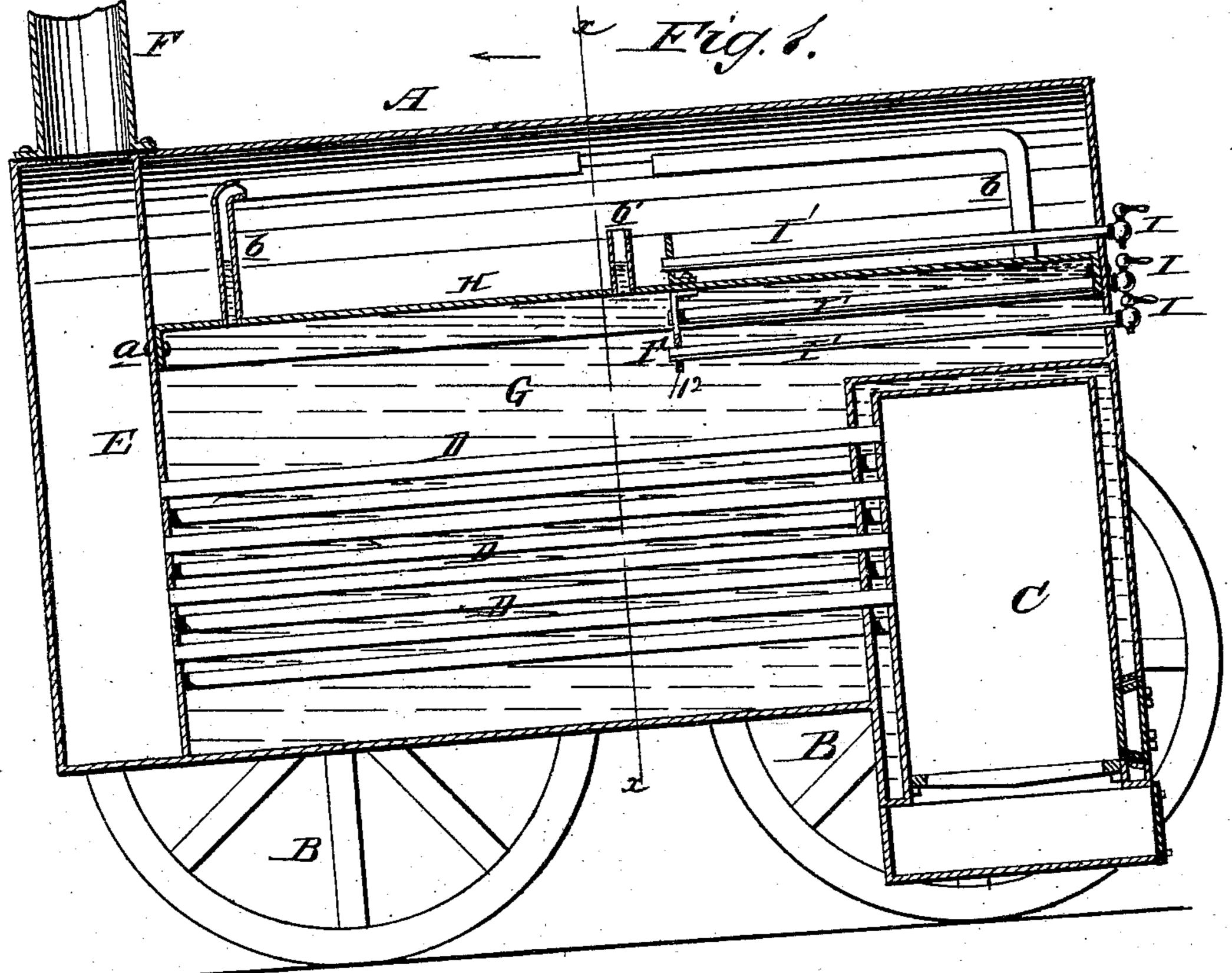
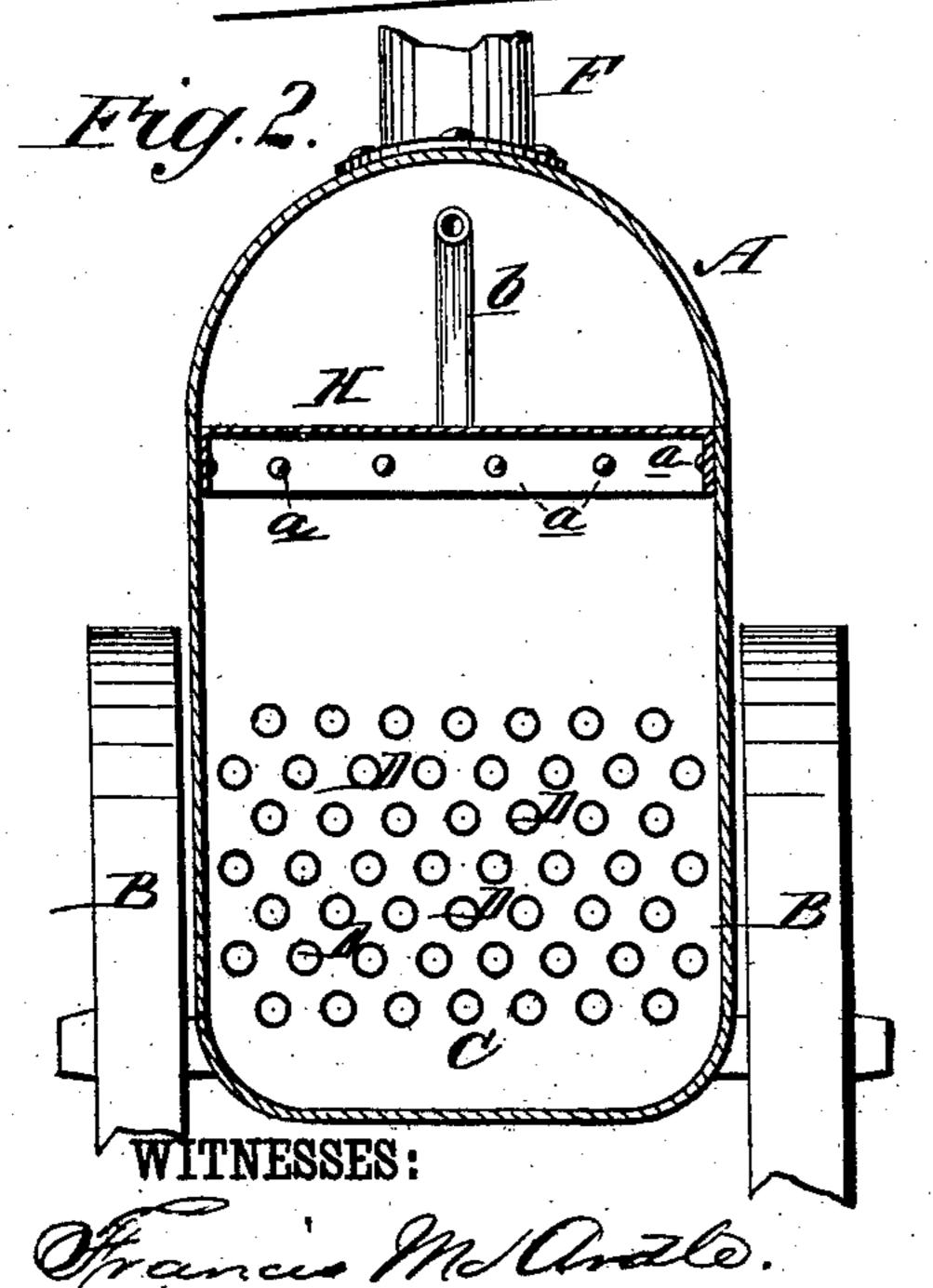
J. B. SNYDER.

WATER INDICATING GAGE COCK DEVICE.

No. 248,226.

Patented Oct. 11, 1881.





BY Conyder

ATTORNEYS.

United States Patent Office.

JOSEPH B. SNYDER, OF MONTPELIER, OHIO.

WATER-INDICATING GAGE-COCK DEVICE.

SPECIFICATION forming part of Letters Patent No. 248,226, dated October 11, 1881.

Application filed December 22, 1880. (Model.)

Tr.

To all whom it may concern:

Be it known that I, Jacob B. Snyder, of Montpelier, in the county of Williams and State of Ohio, have invented a new and useful Improvement in Water-Indicating Gage-Cock Devices, of which the following is a full, clear, and exact description.

The invention consists in combining water gages and pipes with a plate separating the steam and water chambers of a boiler, said plate being provided with upwardly-projecting tubes.

Figure 1 is a sectional side view of a boiler with the improved device attached. Fig. 2 is a sectional end elevation of the same on line x x, Fig. 1.

Similar letters of reference indicate corresponding parts.

In the drawings, A represents the boiler 20 mounted on wheels B.

C is the boiler fire-box, and D D represent the flues through which the products of combustion pass from the fire-box C into the smoke-passage E and out of the smoke-stack F.

Above the surface of the water or water-line G a horizontal flanged plate or diaphragm, H, is securely fastened by rivets a a to the sides and ends of the boiler A. This plate H is designed to be fixed about three or four inches above the top of the fire-box C. The tubes b b' passing up through the plate H serve to conduct the steam as fast as it is generated from the water-space below the said plate H to the steamspace above it. The tubes b that are nearest the opposite ends of the boiler A extend up-

ward nearly to the top of the said boiler A and are then turned inward at right angles toward the boiler center, their horizontal extensions nearly approaching each other.

I I represent the water-gages that are se- 40 cured on the outer ends of pipes I' I', which extend about half-way into the boiler A from the front thereof and have their inner ends supported by a plate or hanger, I2, which is fastened on the plate H. One of these pipes, I', 45 is designed to be above and the others below the said plate H. By entering these pipes I' to about the longitudinal center of the boiler A the engineer can always ascertain with sufficient accuracy the depth of water therein, no 50 matter how much said boiler A may be inclined endwise. These water-gages I I may be attached in proper position to a side of the boiler about midway between its ends, that the engineer may thereby determine the amount 55 of water in the boiler, whatever position the boiler may be in.

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

The combination, with the boiler A and plate 60 H, provided with steam-tubes b b', of the water gages and pipes I I', substantially as herein shown and described, whereby the depth of water in the boiler can always be ascertained, as set forth.

JACOB B. SNYDER.

Witnesses:

GEORGE STRAYER, N. O. JOHNSTON. It is hereby certified that the name of the patentee of Letters Patent No. 248,226, granted October 11, 1881, for an improvement in "Water-Indicating Gage-Cock Devices," was incorrectly written and printed "Joseph B. Snyder," whereas it should have been written and printed Jacob B. Snyder; that the proper correction has been made in the files and records pertaining to the case in the Patent Office, and that the same should be read in the Letters Patent to make it conform thereto.

Signed, countersigned, and sealed this 2d day of June, A. D. 1885.

[SEAL.]

H. L. MULDROW,

Acting Secretary of the Interior.

Countersigned:

ROBT. B. VANCE,

Acting Commissioner of Patents.