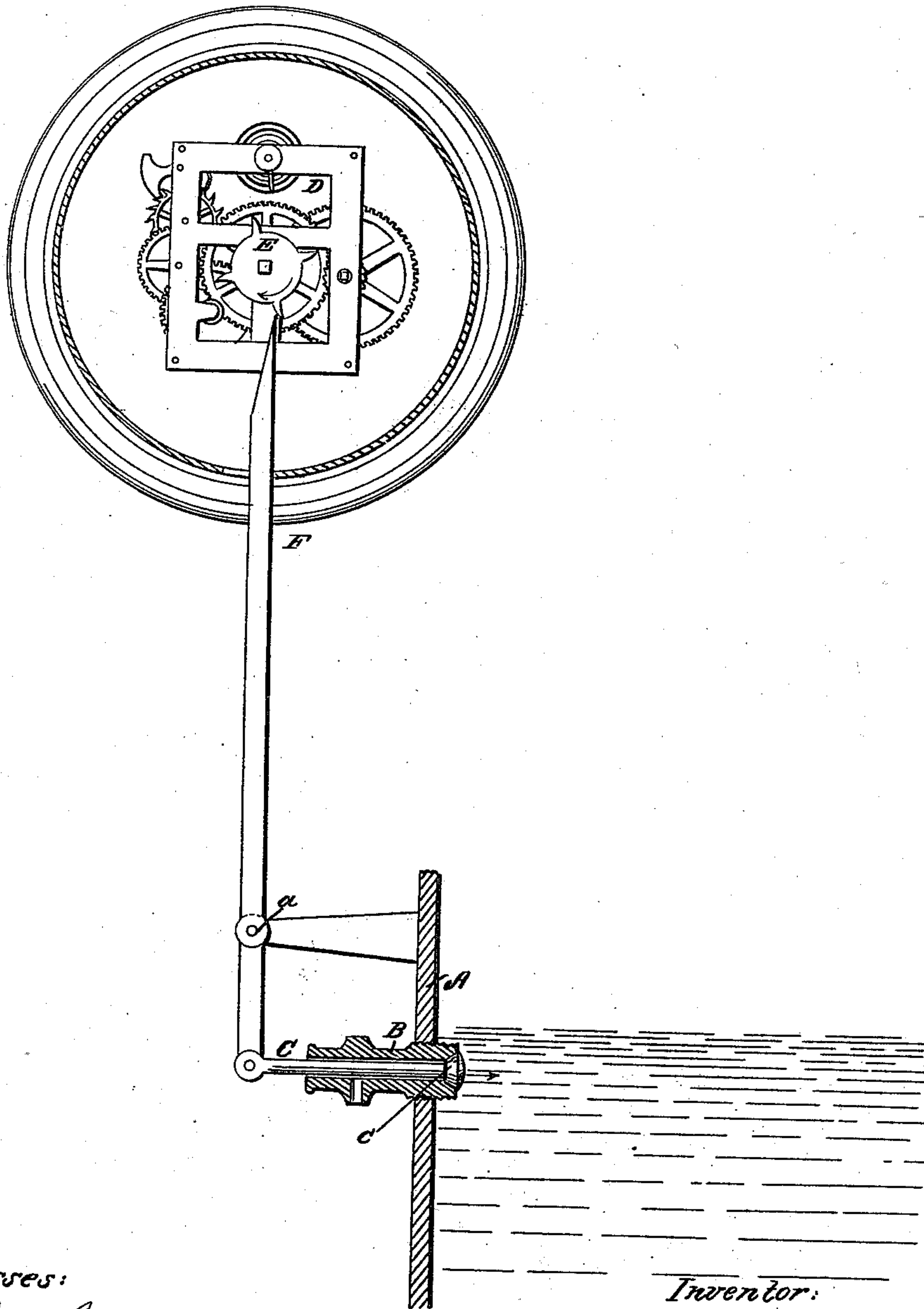


H. WILKINS.
Alarm Gage for Steam Boilers.

No. 42,425.

Patented April 19, 1864.



Witnesses:
J. W. Coombs.
Geo. W. Reed,

Inventor:
H. Wilkins.
By Munn & Co.
attys.

UNITED STATES PATENT OFFICE.

HENRY WILKINS, OF BROWNSVILLE, PENNSYLVANIA.

IMPROVED ALARM GAGE-COCK FOR STEAM-BOILERS.

Specification forming part of Letters Patent No. 42,425, dated April 19, 1864.

To all whom it may concern :

Be it known that I, HENRY WILKINS, of Brownsville, in the county of Fayette and State of Pennsylvania, have invented a new and Improved Alarm Water-Gage for Steam-Boilers; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming part of this specification, said drawing representing an elevation of the gage partly in section.

This invention consists in combining an ordinary gage-cock or suitable valve applied to the boiler just below the intended water level with a cam operated by a clock-movement or other device for producing rotary motion, in such manner that the said cam shall produce the opening of the said cock or valve periodically, and so indicate by the sound of the issuing water or steam whether the water is above or below the said cock.

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

A represents the head of a boiler.

B is the socket of the gage-cock, secured in the boiler-head in the usual manner at a suitable level; and C is the valve.

D is a clock-movement firmly secured on the top of the boiler or to any other suitably-arranged fixed support.

E is the cam, attached to one of the shafts of the said movement and deriving a constant rotary motion therefrom.

F is a lever arranged to work on a suitably-arranged fixed fulcrum, *a*, and having one end connected with the stem *c* of the valve C, and

the other end suitably arranged to be operated upon by the cam in such manner as to produce the opening of the valve at regular periods—say every quarter of an hour—keep it open for a short time, and afterward allow it to be closed, either by the pressure of the steam or by other suitable means.

Every time the valve is opened either water or steam issues, according as the level of the water in the boiler is above or below it, and in case of steam issuing the sound produced makes it known to the engineer and to other persons, even at a considerable distance, that the water-level is not up to a proper height before it can get too low to be dangerous. The gage is well adapted for steamboats, as it makes known to the captain and officers when the feed-pumps have failed to act, or the condition of the boiler, owing to the neglect of the engineer or fireman, is becoming unsafe.

The cam may be double and two levers applied in connection with it to act upon two gage-cocks or valves at different levels.

What I claim as my invention, and desire to secure by Letters Patent, is—

Combining a gage-cock or valve, applied to a steam boiler, with a cam or its equivalent, operated by a clock-movement or other device for producing rotary motion, in such manner that the said cam or equivalent shall produce the periodical opening of the said cock or valve, substantially as and for the purpose herein set forth.

HENRY WILKINS.

Witnesses:

R. M. SMITH,
THOMAS I. WALSH.