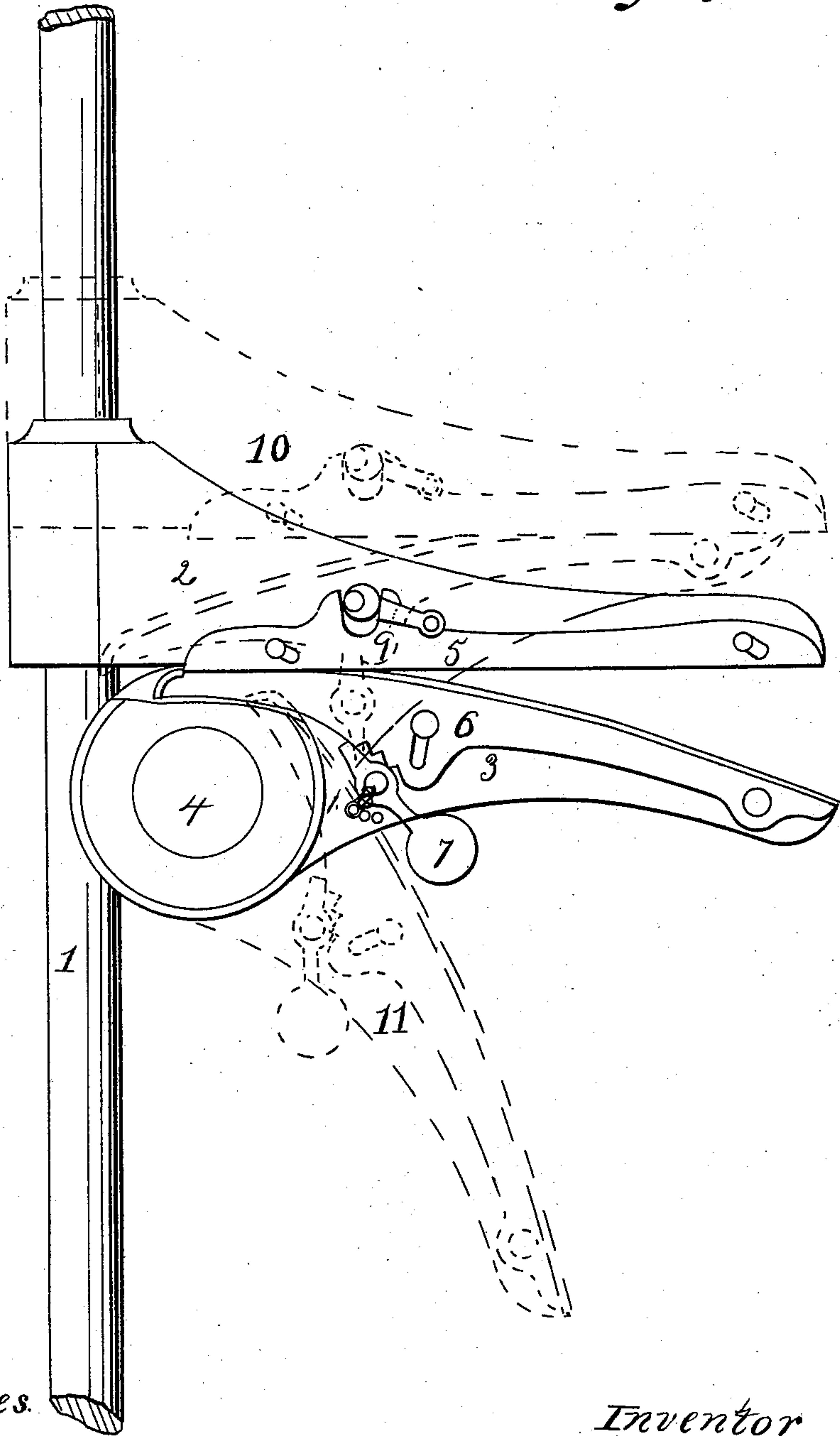


T. Hawkins,

Steam-Engine Valve-Gear.

N^o 23,839. Patented May 3, 1859.



Witnesses.

Thomas Marris
E. G. Williams

Inventor

Thomas Hawkins

UNITED STATES PATENT OFFICE.

T. HAWKINS, OF MOBILE, ALABAMA.

VALVE-GEAR OF STEAM-ENGINES.

Specification of Letters Patent No. 23,839, dated May 3, 1859.

To all whom it may concern:

Be it known that I, THOMAS HAWKINS, of Mobile, in the county of Mobile, in the State of Alabama, have invented a new and Improved Mode of Measuring Steam to the Piston of a Steam-Engine; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the figures of reference marked thereon.

The nature of my invention consists in the attachment of two plates on the toe No. 2 (of the accompanying drawing) and the other on the lifter No. 3. The plate No. 5, on the toe No. 2, I name the bearing plate and the plate No. 6, on the lifter No. 3, I name the suspending plate. The edges of these plates in contact being fitted with internal and external Vs so as to keep them working correctly together. The plate No. 5, on the toe No. 2, is movable by an eccentric (or cam) No. 9 so as to prevent bearing on the suspending plate No. 6. When the action of the steam meter is not wanted, but when the suspending and bearing plates are in contact and the toe becomes lifted up as shown by the dotted lines the suspending

plate No. 6, will be tripped up and the pendulum No. 7, will drop under the suspending plate No. 6, to either of the notches that may be desired by letting the stopper No. 8 in one of the three holes shown in the lifter No. 3. The engine in this instance is supposed to cut off steam and work expansively at half-stroke, but my improvement will measure the steam to any point that may be desired to the end of the stroke with instantaneous opportunity to change the effect of steam back to any point. The engine may be built to work expansively without stopping the engine and with the greatest ease.

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

The combination of the bearing and suspending plates one on the toe and the other on the lifter with a self acting (or pendulum) catch for the purpose of holding open the steam valve to any desired point of the stroke substantially as described.

THOMAS HAWKINS.

Witnesses:

THOMAS MARRS,
E. A. F. WILLIAMS.