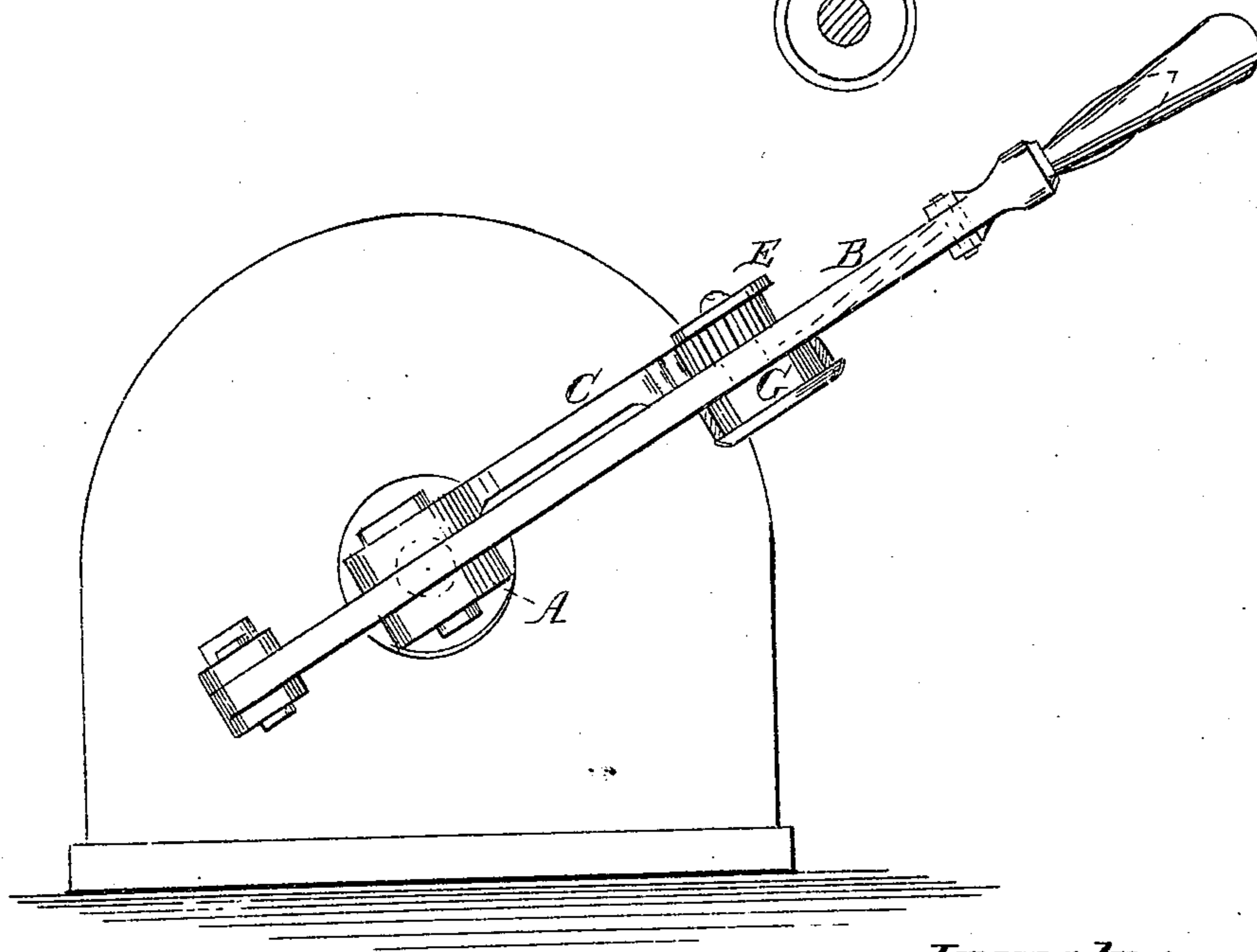
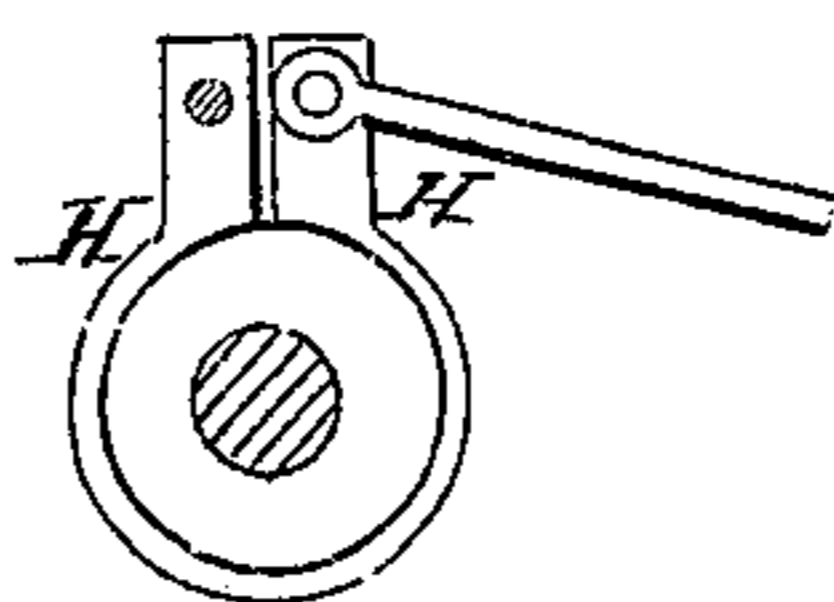
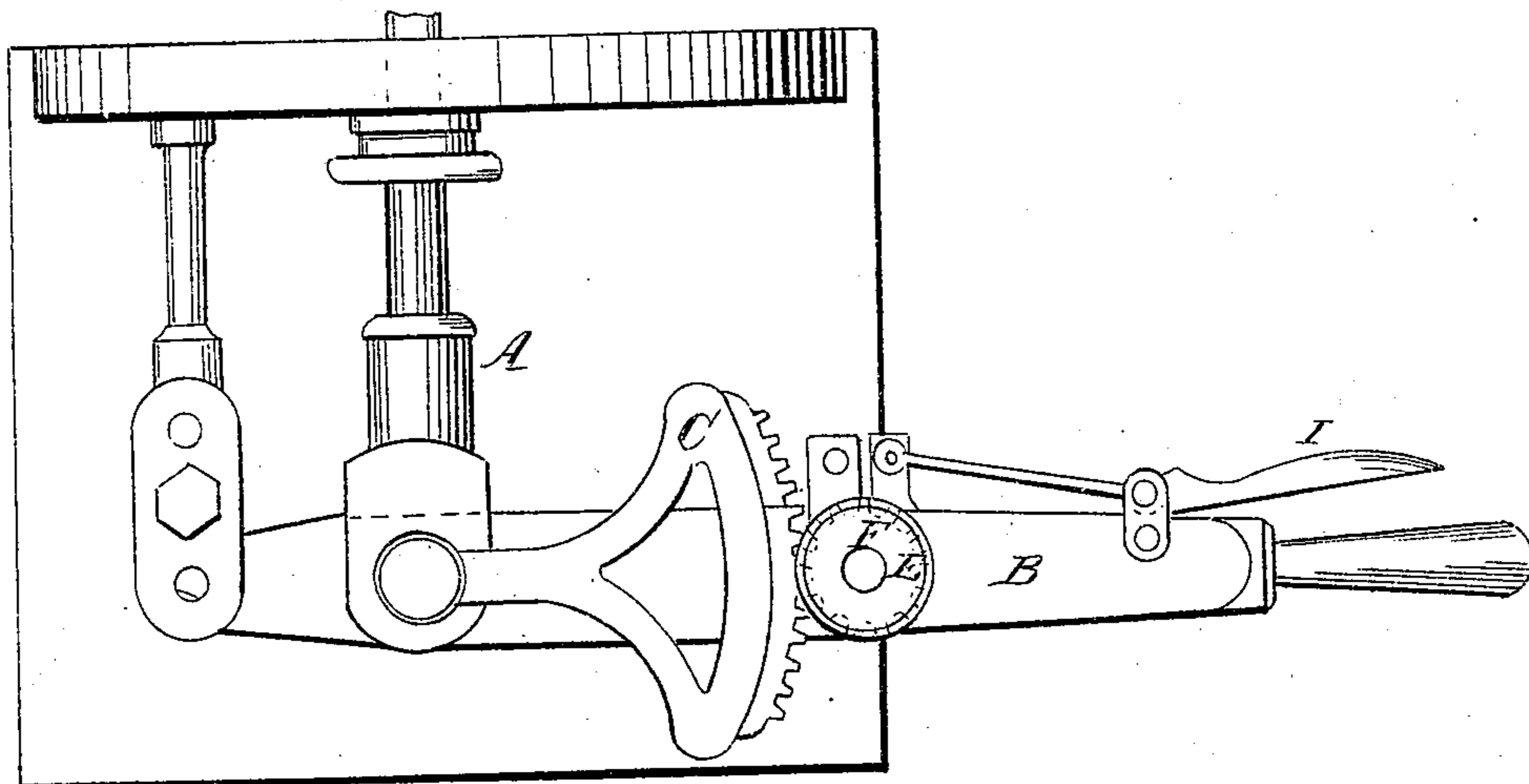


S. Moore
Throttle Valve.

No. 92,990.

Patented July 27, 1869.

Fig 1.



Witnesses.

Geo. W. Meade
John Brooks

Inventor
S. Moore.

per

Attorneys

United States Patent Office.

SAMUEL MOORE, OF PROVIDENCE, RHODE ISLAND.

Letters Patent No. 92,990, dated July 27, 1869.

IMPROVEMENT IN THROTTLE-VALVE GEAR.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, SAMUEL MOORE, of Providence, in the county of Providence, and State of Rhode Island, have invented a new and useful Improvement in Throttle-Valve Gear; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to an improved friction-attachment for the throttle-valve levers, for holding them in any required position, to prevent them from being inadvertently moved by jarring or otherwise.

The invention consists in the combination of a fixed toothed or friction-segment, with the valve-stem, and a friction-pinion on the lever, so arranged that the movement of the lever causes the pinion to revolve, which, being controlled by a friction-clamp, will resist any tendency of the lever to move, and thereby hold it as set by the attendant. A pivoted handle for the friction-clamp is provided, and so arranged as to be grasped, and the friction released when the lever is grasped for moving.

Figure 1 represents a plan view, and

Figure 2, a side elevation of my improved attachment.

Similar letters of reference indicate corresponding parts.

A represents the valve-stem;

B, the lever;

C, a toothed or friction-segment, permanently attached to the valve-stem; and

E is a pinion, working on a stud, F, on the lever B, and gearing with the segment B. This pinion carries a smooth hub, whereon a friction-clamp, H, also connected to the lever B, works.

The lever B cannot be moved without causing the pinion F to revolve, and this, being resisted by the friction-clamp, prevents the lever from being moved by gravity or by any jars to which it may be exposed, especially on locomotive-engines.

The friction-device which I have here represented, consists of a spring band, encircling the hub G, and secured by one end to the lever B, the other being connected to a lever, I, pivoted to the lever B at H, and so arranged that when the lever B is grasped by the attendant for adjustment, the friction will be released.

Having thus described my invention,

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

The combination, with the stem and operating-lever of a throttle-valve, of a segment, B, a friction-pinion and a friction-device, substantially as specified.

SAMUEL MOORE.

Witnesses:

W. B. VINCENT,
GEO. N. BLISS.