J. Degnon.

Steam Engine Governor.

No. 56,908. Patented Aug. 7. 1866.

Fig. 1.

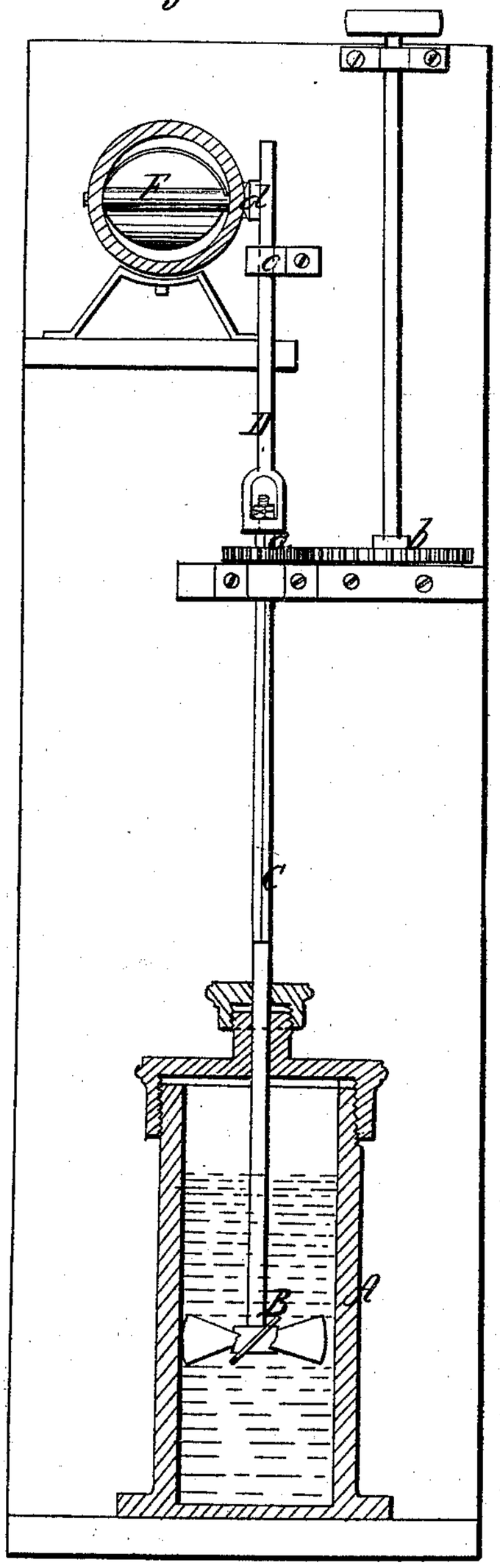
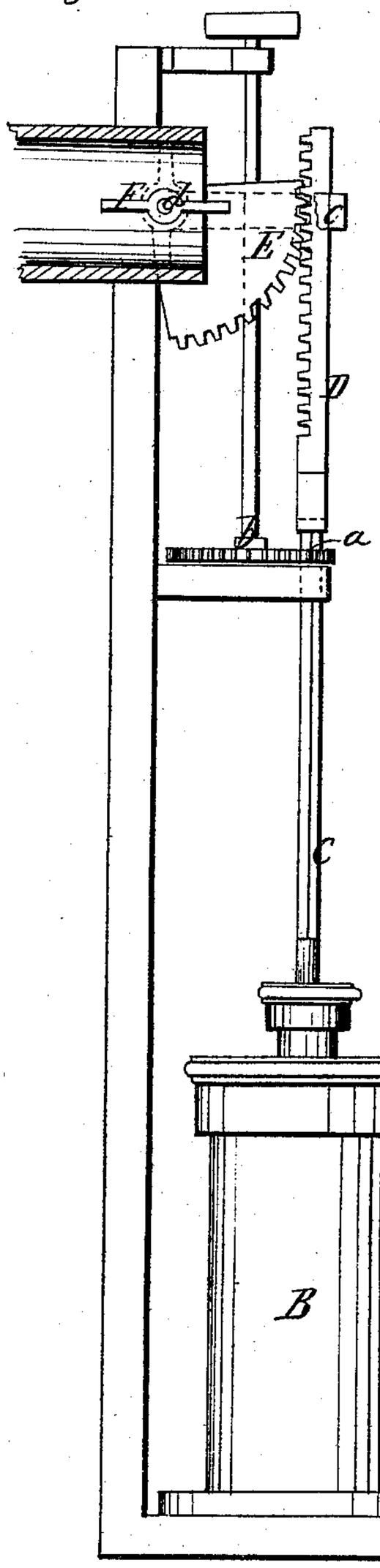


Fig. 2.



Witnesses,
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Jno B Comington.

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UNITED STATES PATENT OFFICE.

JOHN DEGNON, OF CLEVELAND, OHIO.

IMPROVEMENT IN GOVERNORS.

Specification forming part of Letters Patent No. **56,908,** dated August 7, 1866.

To all whom it may concern:

Be it known that I, JOHN DEGNON, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented a new and Improved Regulator for Steam-Engines and other Motors; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a sectional front elevation of this invention. Fig. 2 is a sectional side elevation of the same.

Similar letters of reference indicate corresponding parts.

This invention consists in the use or employment of a propeller which is made to revolve in a cylinder or tank filled with water or other liquid, in combination with the throttle-valve of a steam-engine, or with the gate of a water-wheel, or with any other equivalent part of another motor, in such a manner that by the action of the liquid in the tank against the plates of the propeller the valve or gate is closed when the speed of the propeller increases, and the valve or gate is opened when the speed of the propeller decreases.

A represents a tank or cylinder, made of cast-iron or any other suitable material, and filled partially or wholly with water or other suitable liquid. In this cylinder or tank revolves the propeller B, which is secured to a vertical spindle, C, and to which a rotary motion is imparted by means of gear-wheels *a b*, from any part of the steam-engine or other motor the speed of which is to be regulated.

In order to connect the spindle C with the cog-wheel *a*, and also allow the same to slide up or down through the wheel, the upper part of the spindle is made square and fitted in a corresponding square hole in the wheel, or it (the spindle) may be provided with a feather-key fitting in a corresponding groove in the hole of the wheel, or it may be connected to the wheel in any other suitable manner capable of producing the desired result. The upper end of the spindle C connects with a toothed rack, D, which slides up and down in suitable guides *c*, and which gears in a toothed segment, E, mounted on the end of the spindle *d* of the throttle-valve F.

If the speed of the engine increases the propeller, by the action of its blades against the liquid in the tank or cylinder A, rises, and the throttle-valve closes; and if the speed of the engine decreases the propeller sinks down by its own weight, which, if necessary, may be assisted by a spring, and the throttle-valve opens.

Instead of connecting the propeller to the throttle-valve of a steam-engine it may be connected to the gate of a water-wheel, or to the brake of a horse-power, or to the corresponding part of any other motor, and the speed of said motor will be rendered self-regulating by the resistance of the liquid in the tank or regulator against the blades of the propeller.

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

The combination of the propeller B, revolving in water in the cylinder A, the spindle C, and rack D, applied with the toothed-segment E, attached to the spindle *d*, operated through the medium of the gearing *a b*, substantially in the manner and for the purpose represented and described.

The above specification of my invention signed by me this 4th day of October, 1865.

JOHN DEGNON.

Witnesses:

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