(No Model.) 2 Sheets—Sheet 1.

P. & K. SIMON.

GOVERNOR VALVE.

No. 431,406. Patented July 1, 1890.

Fig. I.

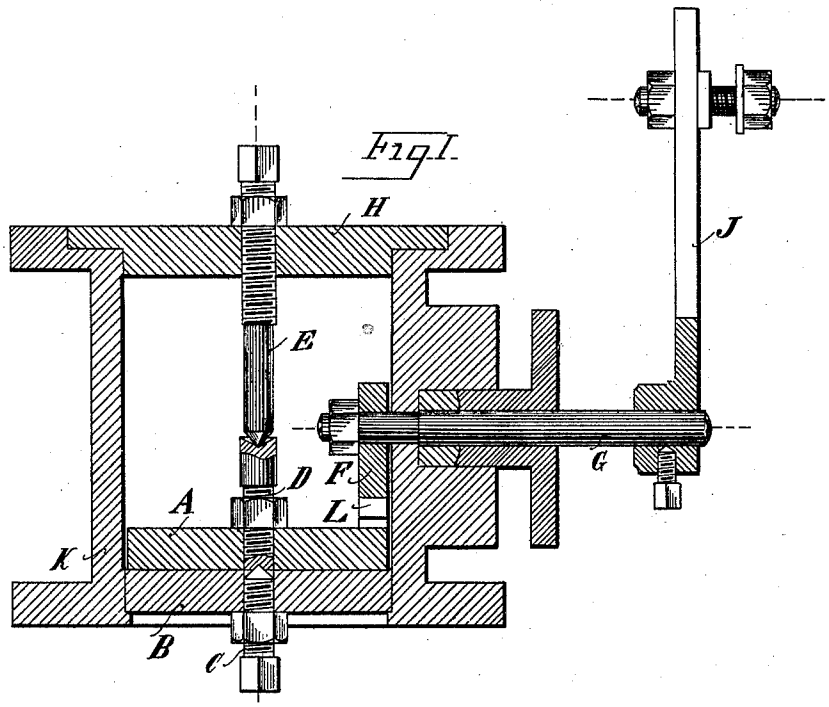
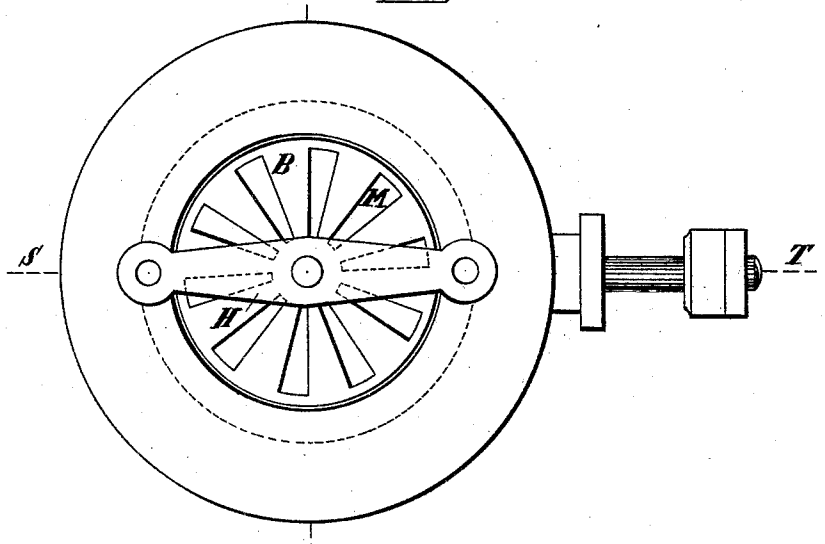


Fig. II.



Witnesses.
Walter P. Keene.
James M Shuar

Inventors,
Peter Simon
Karl Simon
By Ellis Spear Atty.

(No Model.) 2 Sheets—Sheet 2.

P. & K. SIMON.

GOVERNOR VALVE.

No. 431,406. Patented July 1, 1890.

Fig III.

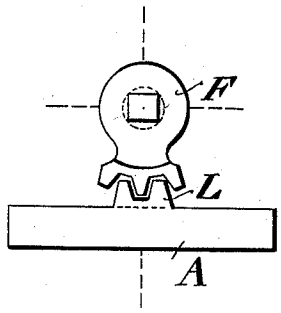
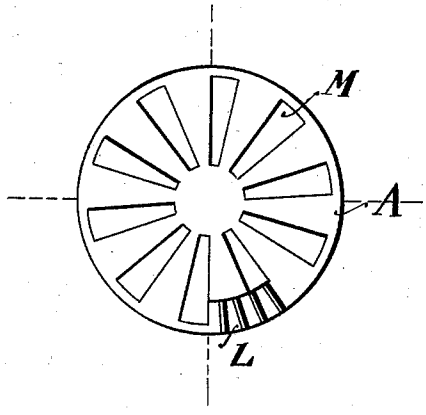


Fig IV.



Witnesses
Walter F. Keene.
James McLean

Inventors
Peter Simon
Karl Simon
By Ellis Spear Atty.

UNITED STATES PATENT OFFICE.

PETER SIMON AND KARL SIMON, OF COLOGNE, GERMANY.

GOVERNOR-VALVE.

SPECIFICATION forming part of Letters Patent No. 431,406, dated July 1, 1890.

Application filed January 23, 1890. Serial No. 337,812. (No model.)

To all whom it may concern:

Be it known that we, PETER SIMON and KARL SIMON, of Cologne, in the Kingdom of Prussia and German Empire, have invented new and useful Improvements in Governor-Valves, of which the following is a specification, reference being had therein to the accompanying drawings.

Our invention relates to improvements in steam-regulating apparatus.

The steam-regulating apparatus forming the present application for patent is characterized, compared with other similar devices, by its safe action and its great simplicity.

This apparatus may be applied easily to all sorts of steam-engines.

The construction of the apparatus is shown by the following drawings.

Figure I is a sectional side view; Fig. II, a plan view (without the rotary slide-valve;) Fig. III, a rotary slide-valve in combination with its working-lever, and Fig. IV a plan view of rotary slide-valve.

The bottom plate B, on which rests the slide-valve A, is lodged within the valve-chamber K. Both have a central aperture, which is screw-threaded. Through the bottom plate passes the screw C, being provided with a conical point, which serves the opposite screw D as bearing. This bearing is adjustable by means of the two screws C and D, in order to diminish the friction between the bottom plate B and the slide-valve A, and to ease the latter while under steam-pressure. The upper surface of the slide-valve is provided with two teeth L, Figs. 3 and 4, gearing with lever F on shaft G, which latter on rotating turns the slide-valve round its axle D. The rotation of shaft G is caused by means of lever J, which is set in to-and-fro motion by the oscillating movements of a ball-regulator according to requirement.

The bottom plate B, as well as the slide-valve A, are provided with concentric apertures M, Figs. 2 and 4, to admit the passage of the steam, the regulation of the latter resulting through the rotation of the slide-valve, enlarging or narrowing thereby the apertures. To avoid the return-stroke of the slide-valve A, which might be caused by a momentary stoppage of the engine through the steam still resting in the cylinder, the screw E is provided, passing through the cross-piece H, pressing against the bearing on the point of the screw D.

What we claim, and desire to secure by Letters Patent of the United States, is—

In a steam-regulating apparatus, the combination of the two disks A and B, situated within the cylinder K, adjustable by means of screws C, D, and E, the disks being provided with concentric uniform apertures, and of the valve A, bearing on the upper surface two teeth L, gearing with teeth in the lever F on the shaft G, by the rotation of which latter the contraction or enlargement of the apertures M, lying one above the other, is caused, substantially as described.

In witness whereof we have hereunto set our hands in presence of two witnesses.

PETER SIMON.
KARL SIMON.

Witnesses:
GUSTAVE OELRICHS,
WM. D. WAMER.