

No. 668,955.

C. E. DAWSON.
GOVERNOR.

Patented Feb. 26, 1901.

(No Model.)

(Application filed Dec. 4, 1900.)

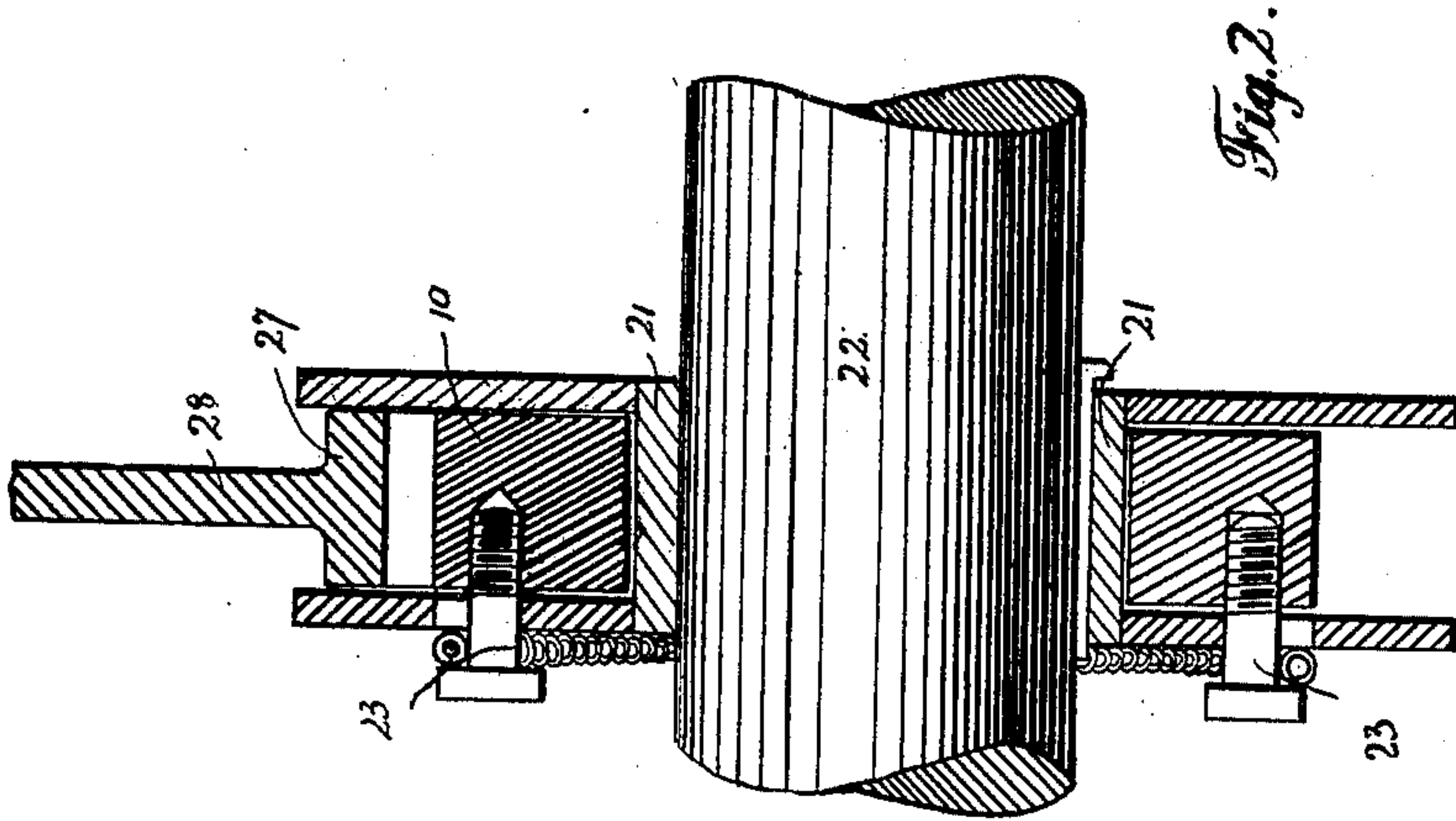


Fig. 2.

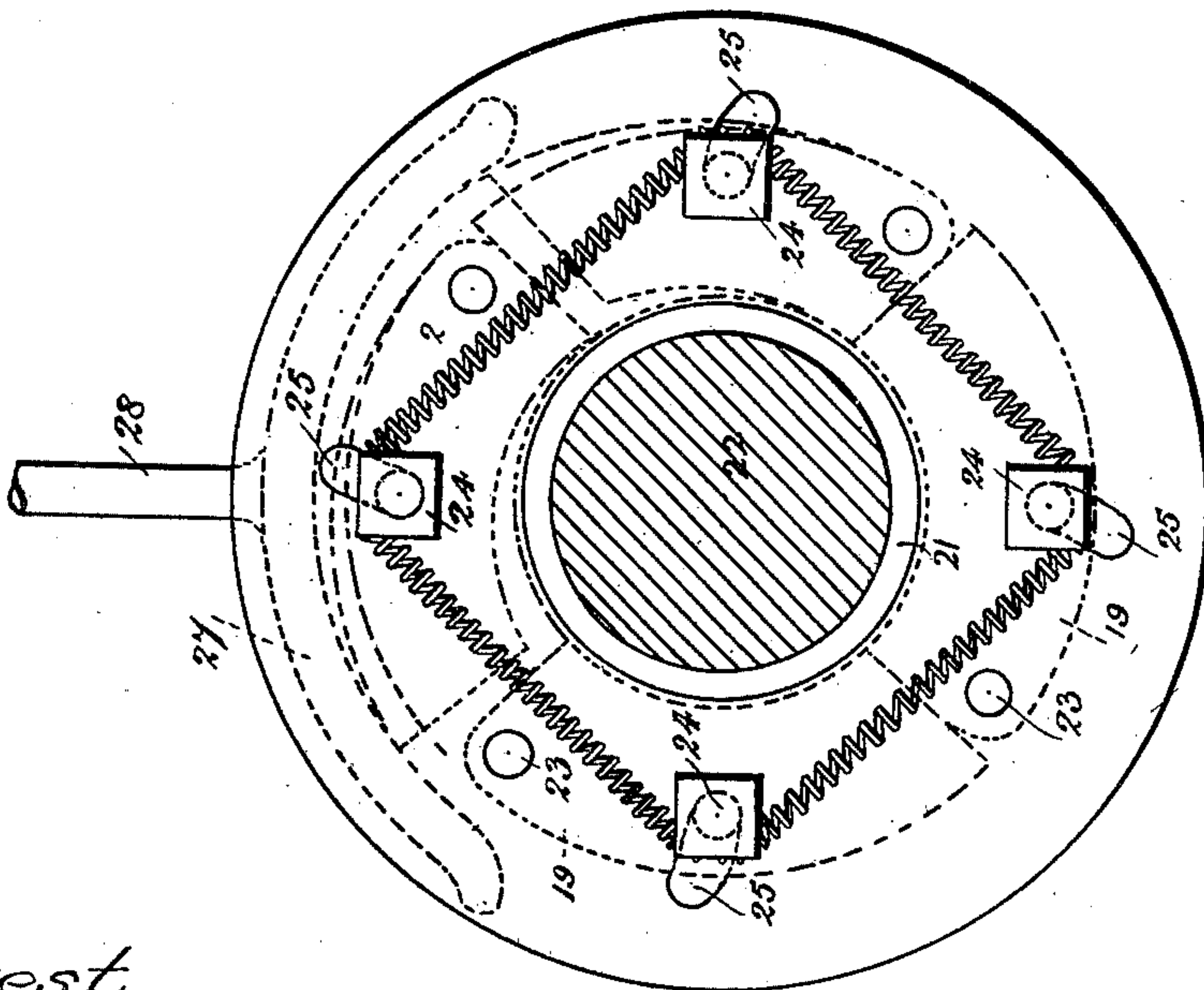


Fig. 1.

Attest
Walter Donaldson
F. L. Winkler

Inventor
Charles Ernest Dawson
By Eli Spear
ATTY.

UNITED STATES PATENT OFFICE.

CHARLES ERNEST DAWSON, OF CHISWICK, ENGLAND.

GOVERNOR.

SPECIFICATION forming part of Letters Patent No. 668,955, dated February 26, 1901.

Application filed December 4, 1900. Serial No. 38,684. (No model.)

To all whom it may concern:

Be it known that I, CHARLES ERNEST DAWSON, a subject of the Queen of Great Britain and Ireland, and a resident of Hogarth Works, Chiswick, in the county of Middlesex, England, have invented certain new and useful Improvements in Governors for Internal-Combustion Engines, (for which I have made application for Letters Patent in Great Britain, No. 22,636, dated November 13, 1899,) of which the following is a specification.

My invention relates to improvements in governors for engines.

The object of my invention is to provide a governing device which shall regulate the supply of combustible fluid in proportion to the speed of the engine.

My invention consists in a governor which is constructed of a number of sector-shaped blocks forming together in their closed position a ring and adapted to slide between a pair of guiding-disks. The movement of the blocks is controlled by means of a spring which embraces pins attached to one side of the blocks. The sectors are arranged to act against an abutment formed by a sliding rod actuating a throttle-valve or other suitable governing device.

In the accompanying drawings, Figures 1 and 2 are respectively end and sectional elevations of the governing device.

This governor is composed of a number of sector-shaped blocks 19, forming a complete ring when in their closed position. These blocks are situated between two guiding-disks 20, which are joined together by a boss or sleeve 21, keyed to the governor-shaft 22, which is driven at a suitable speed by gearing from the main shaft of the engine, or, if desired, the sleeve 21 may be secured directly to the crank-shaft, whereby gearing is avoided. Each of the blocks 19 is pivoted at one of its outermost corners on a pin or pivot 23, secured to the disk 20, and has a pin 24 attached to one side and projecting through

one of the guide-disks and free to move in a curved radial slot 25. Passing around the outside of the pins 24 is an endless spiral spring which normally holds the blocks in a closed position. As the governor-shaft 22 revolves the blocks tend to fly out against the restraining-spring, and when the speed exceeds a predetermined maximum, dependent upon the strength of the said spring, the blocks come into contact with the curved plate 27, attached to the extremity of the rod 28, which may be in direct communication with a throttle-valve upon the inlet for combustible fluid of the engine or with any of the well-known devices whereby the charge entering the cylinder may be regulated. When the rod 28 is horizontally arranged, I provide it with a spring to return it after governing has taken place. This or a similar spring may be used in a vertically or horizontally arranged governor as a means for adjustment.

I find that a governor of the type above described is extremely sensitive in its action and is exceedingly effective in governing an internal-combustion engine which is subject to sudden speed variations.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In internal-combustion engines, a governing device comprising, a number of sector-shaped blocks between two guide-disks; said blocks being pivoted at their outermost corners and provided with pins projecting through curved radial slots in one of the disks, and an endless spring embracing said pins substantially as described.

In witness whereof I have hereunto set my hand, this 2d day of November, 1900, in presence of two witnesses.

CHARLES ERNEST DAWSON.

Witnesses:

GEO. H. WELCH,
GEO. FAGAN.