

1,000,922.

Fig. 1.

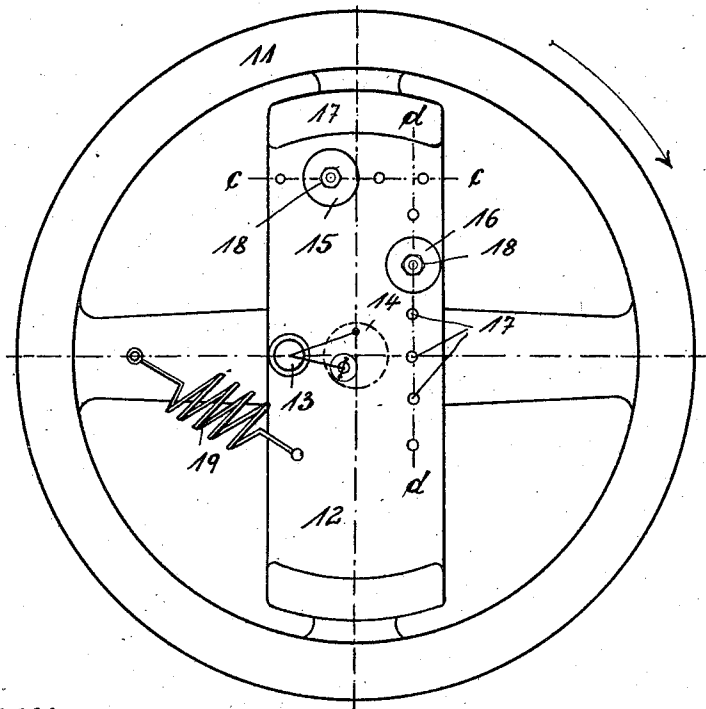
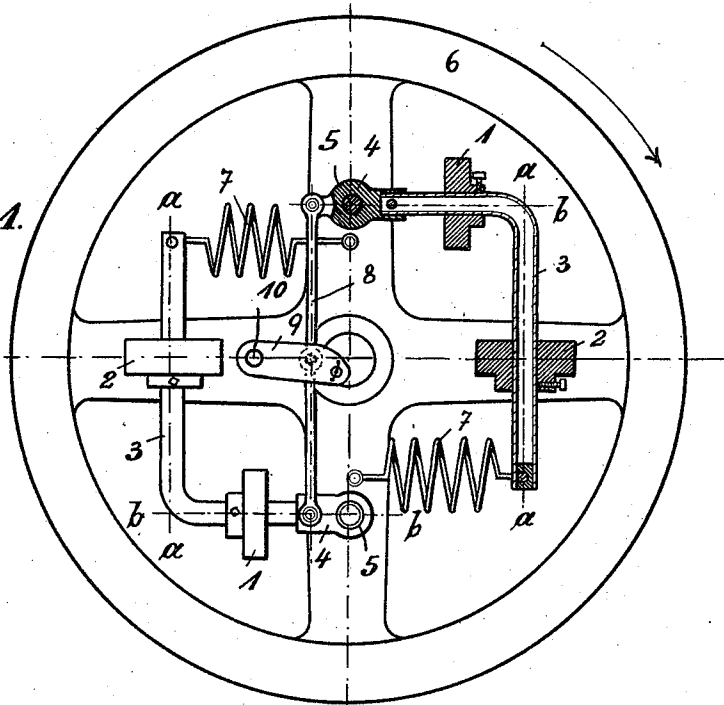


Fig. 2.

Witnesses:
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UNITED STATES PATENT OFFICE.

MAX KIBLBECK, OF FREIMANN, GERMANY.

SHAFT-GOVERNOR.

1,000,922.

Specification of Letters Patent. Patented Aug. 15, 1911.

Application filed October 18, 1910. Serial No. 587,762.

To all whom it may concern:

Be it known that I, MAX KIBLBECK, a subject of the German Emperor, and resident of Freimann, Germany, have invented certain new and useful Improvements in Shaft-Governors, of which the following is a specification.

This invention relates to an improved shaft-governor with or without inertia body, which is distinct from the known shaft-governors in that the displacement of the point of gravity of the fly-body is effected by the adjustment of sliding-weights in directions which are rectangular to each other.

The accompanying drawing shows a diagrammatical arrangement of the improved shaft-governor in Figure 1 without and in Fig. 2 with an inertia body.

Referring to Fig. 1, the governor comprises two fly-bodies, of which each consists of a sliding-weight 1 and a sliding-weight 2, each of which is arranged on one arm of a rectangularly bent rod or pipe 3, on which it can be adjusted and fixed by means of a set-screw or the like. One end of said pipe is fixed to a lever 4 fulcrumed on a bolt 5 which is fixed on the fly-wheel 6, while the other end is connected with a spring 7 designed to balance the centrifugal force of the fly-body, the apparatus turning in the direction of the arrow shown. The two fly-bodies are in communication with each other by a rod 8 connecting the two levers 4 and engaging the eccentric lever 9 which turns on a bolt 10 fixed on the fly-wheel. By the adjustment of said sliding-weights the point of gravity can be displaced, as desired, within the plane laid at right angles to the crank shaft, whereby the speed and the degree of regulation of the engine can be altered. By adjusting the sliding-weight 2 in the direction $a-a$, parallel to the radius drawn from the middle of the shaft to the middle of bolt 5, the degree of regulation is altered, while the speed remains the same as before. By adjusting the sliding-weight 1 in the direction $b-b$, the speed is

altered. Hereby, the required or desired average speed and the required or the most favorable degree of regulation can be attained at any time.

Referring to Fig. 2, the same shows the idea of the invention as applied to an inertia governor of the following known arrangement:—11 is the fly-wheel, 12 the inertia body of plain shape, 13 the pivot of the same, which is again fixed on the fly-wheel 11, the inertia body being at the same time employed as eccentric lever. 14 is the point of gravity of the inertia body 12, the position of which can be altered by the adjustment of the sliding-weights 15 and 16. By adjusting the sliding-weight 15 in the direction $c-c$ the degree of regulation is altered, the speed remaining the same as before. By adjusting the sliding-weight 16 in the direction $d-d$ the speed is altered. The adjustment of the sliding-weights 15 and 16 may also in this case be effected on rods or pipes, which are fixed on the inertia body, or in slots of the latter, this being not shown as it is clear without further illustration. In the example shown, a stepwise movement in holes 17 by screws 18 is indicated. 19 is the spring which balances the centrifugal force of the fly-body.

I claim:

In a shaft governor, a movably suspended and spring-controlled fly body comprising two sliding-weights adapted to be adjusted at right angles to each other, one parallel to the radius drawn from the middle of the shaft to the middle of the suspension-point of said body and the other in direction at right angles thereto, for the purpose set forth.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

MAX KIBLBECK.

Witnesses:

A. VERE W. COTTER,
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