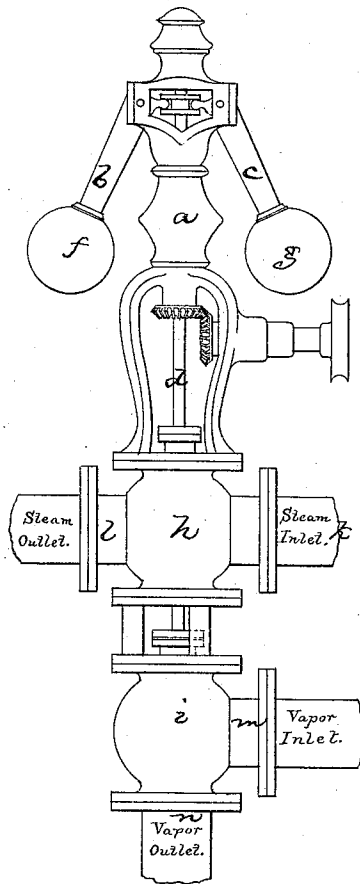


JOHN F. HASKINS.

Improvement in Engine-Governors.

No. 127,602.

Patented June 4, 1872.



Witnesses.

W. W. Frothingham.
J. B. Kidder.

Inventor.

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UNITED STATES PATENT OFFICE.

JOHN F. HASKINS, OF FITCHBURG, MASSACHUSETTS.

IMPROVEMENT IN ENGINE-GOVERNORS.

Specification forming part of Letters Patent No. 127,602, dated June 4, 1872.

To all whom it may concern:

Be it known that I, JOHN F. HASKINS, of Fitchburg, in the county of Worcester and State of Massachusetts, have invented an Improvement in Engine-Governors; and I do hereby declare that the following, taken in connection with the drawing which accompanies and forms part of this specification, is a description of my invention sufficient to enable those skilled in the art to practice it.

My invention relates to the arrangement of governor mechanism for that class of engines which are driven by the expansive force of two different vapors, the mechanism being designed to govern the speed of two engines connected to one shaft. The invention consists in placing two governor-valves upon the same valve-stem, (or connected valve-stems in line,) so that the governor controls the passage of either fluid to its engine, the valve-cases being arranged one directly over the other, or in the same line one with the other.

The drawing illustrates a governor mechanism embodying my arrangement.

a shows the upright sleeve or stand, to which the governor-arms *b c* are jointed. *d* is the valve-stem, to which the arms *b c* are connected and upon which they act, the arms *b c*, balls *f g*, sleeve *a*, and valve-stem *d* being constructed, arranged, and connected as in other governors, or in any suitable manner. The valve-stem passes through one valve-case, *h*, into or

through another valve-case, *i*, placed directly below or in line with the valve-case *h*, the stem or connected stems bearing two valves, one in the case *h*, which regulates the passage through it of steam to one engine or cylinder, and the other in the case *i*, and similarly regulating the passage through it of the other vapor to the other engine or cylinder.

It will be readily seen that, whether both of the engines be at work or one alone, (as may be in case of accident,) the strain upon neither is unduly increased, as the same governor controls the valves of both upon the same or connected stems, so that, if the load be taken from either engine suddenly, or their power is not equal, no excess of strain is thereby brought upon the other.

In the drawing, *k* represents the steam-inlet to one case and *l* the outlet thereof, and *m* the inlet and *n* the outlet for the other vapor passing through the case *i*.

I claim—

A governor arranged to govern the valves of two engines, substantially as described, when the governor, the valve and governor spindle, and the valves are in line, substantially as shown and described.

JOHN F. HASKINS.

Witnesses:

FRANCIS L. HILLS,
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