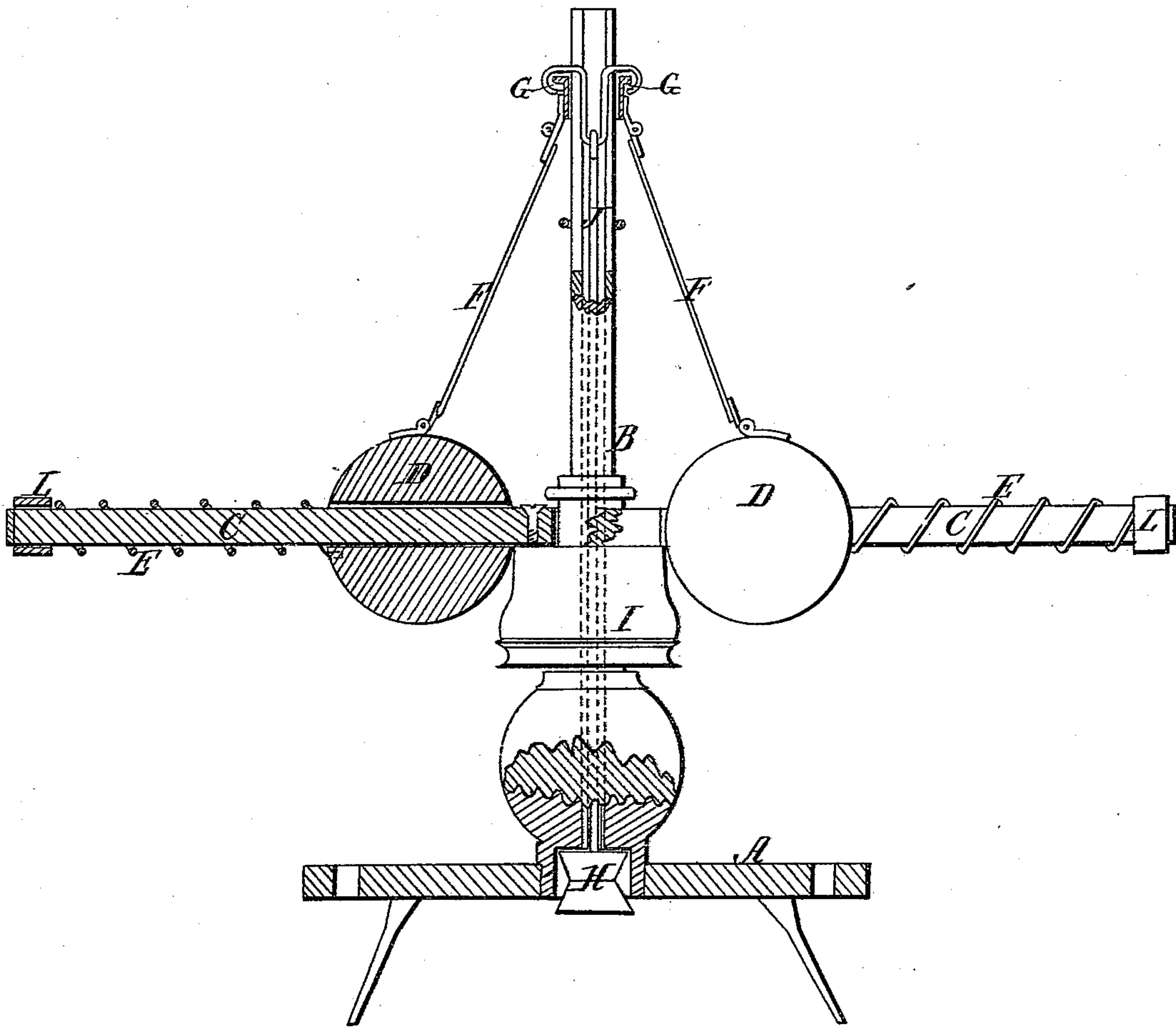


*C. Duclos.*

*Steam Governor.*

*N<sup>o</sup> 94,091.*

*Patented Aug. 24, 1869.*



*Inventor;*

*for C. Duclos  
Alexander Mazon  
Attys.*

*Witnesses;  
Harry King.  
Leopold Canby*

# United States Patent Office.

C. DUCLOS, OF NEW HARMONY, INDIANA.

*Letters Patent No. 94,091, dated August 24, 1869.*

## IMPROVEMENT IN STEAM-ENGINE GOVERNORS.

The Schedule referred to in these Letters Patent and making part of the same

*To all whom it may concern:*

Be it known that I, C. DUCLOS, of New Harmony, in the county of Posey, and in the State of Indiana, have invented new and useful Improvements in Governors for Steam-Engines; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in the construction and general arrangement of a governor for steam-engines, which will be hereinafter fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, which form a part of this specification, and which represent a side view of the governor, part in section.

A represents a plate of suitable dimensions, which is to be bolted to the steam-valve or box.

This plate is provided with an opening through its centre, over which opening an upright tube, B, is placed.

Around this tube is placed a pulley, I, which is provided with two horizontal arms, C C.

These arms pass through two balls, D D, which are pressed inward, by means of spiral springs E E, placed around the arms C C.

The springs E E, or rather the pressure of these springs on the balls, is regulated by means of taps or nuts L L, placed on the ends of said arms, and against which nuts the outer ends of the springs E E bear.

The balls D D are connected, by hinged arms F F, to a slide, G on the upper end of the tube B, and to the slide G, is connected a rod, J, running down through the centre of the tube B; which rod has, at its lower end, a valve, H, which acts as a shut-off, and closes the opening in the plate A.

The pulley I is connected, by belt or other suitable means, with the engine, and thus motion is communicated to the arms C C.

It will be evident that the balls D D will move outward on the arms C C, by the centrifugal force in proportion to the velocity with which the arms revolve, and consequently lower the slide G, (the tube B being for that purpose slotted,) which opens the valve H; and when the motion of the arms C C decreases, the springs E E will press the balls D D inward again, which then raise the slide and close the valve.

Having thus fully described my invention,

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

The vertically-slotted tube B, slide G, and rod J, in combination with the balls D D and horizontal arms C, with springs E and nuts L, when said slide is connected to the balls by means of the arms F, which are hinged to the balls and to the slide, substantially as set forth.

In testimony that I claim the foregoing, I have hereunto set my hand, this 4th day of March, 1869.

C. DUCLOS.

Witnesses:

THOMAS MUMFORD, Jr.,  
FRANK SMITH.