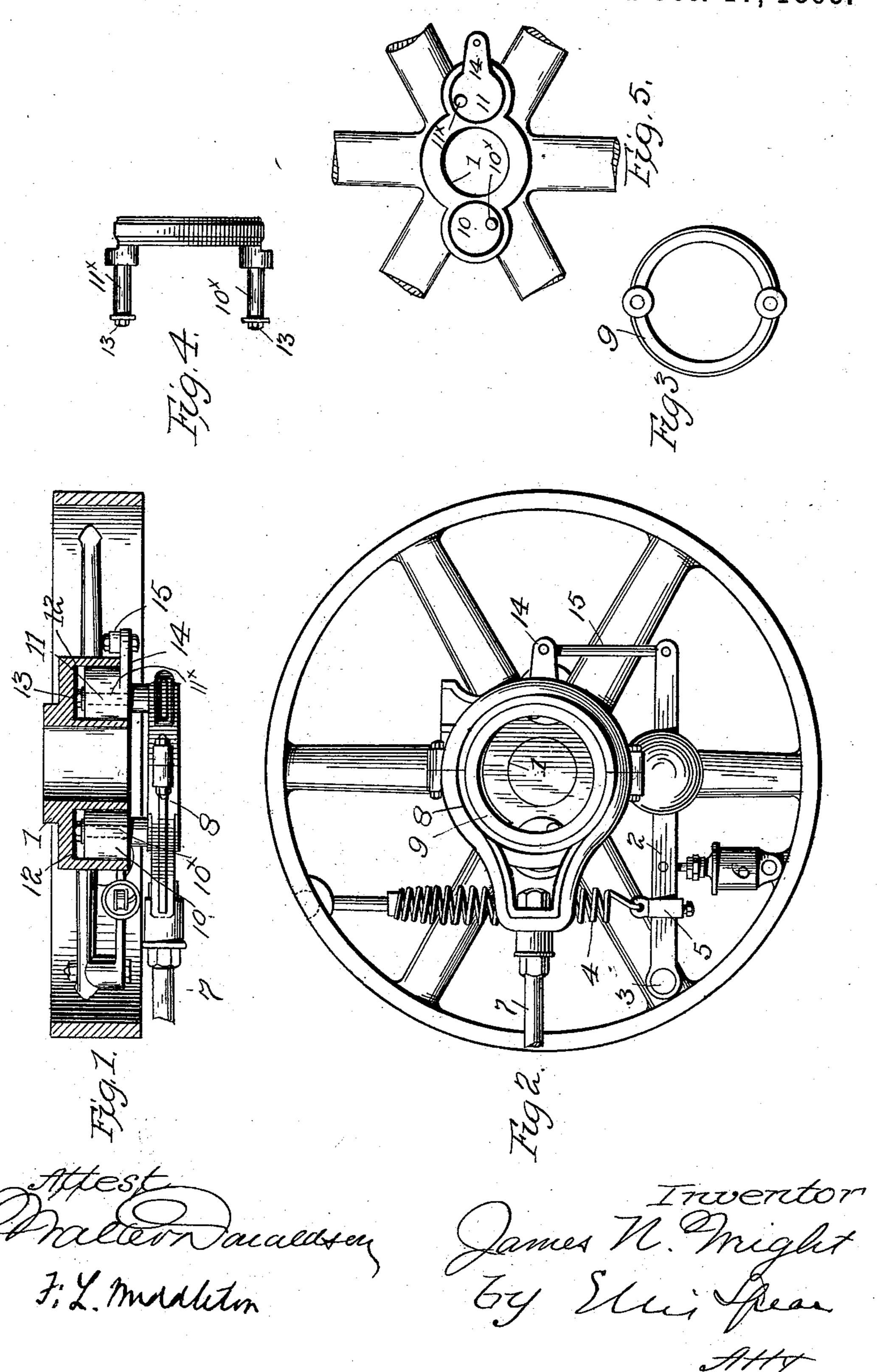
(No Model.)

## J. N. WRIGHT. GOVERNOR.

No. 506,964.

Patented Oct. 17, 1893.



## United States Patent Office.

JAMES N. WRIGHT, OF QUINCY, ILLINOIS.

## GOVERNOR.

SPECIFICATION forming part of Letters Patent No. 506,964, dated October 17, 1893.

Application filed January 19, 1893. Serial No. 458,970. (No model.)

To all whom it may concern:

Beit known that I, JAMES N. WRIGHT, a citizen of the United States of America, residing at Quincy, in the county of Adams and State of Illinois, have invented certain new and useful Improvements in Governors, of which the following is a specification.

My invention relates to that class of speed governors especially designed for steam engines in which a governor wheel is used carrying weights, the movement of which, caused by centrifugal force, is imparted to an eccentric arranged alongside the governor wheel and about the axial line thereof, said eccentric being connected with the valve gear or valve.

It is my object to provide a simple and effective governor mechanism in which the eccentric will be supported by the governor wheel and have pivotal or movable connection therewith.

In the drawings Figure 1, is a sectional view of the wheel with the eccentric and connections in place. Fig. 2, is a front view of Fig. 1. Figs. 3 and 4 are detail views of the eccentric ring, and Fig. 5, is a front view of the governor wheel hub and the connections for the eccentric ring.

The governor wheel has a central hub 1, adapted to the shaft which is to support it and is provided with one or more weighted levers 2, pivoted as at 3, and under tension of a spring 4, connected to the wheel rim at one end and at the other end to the lever by means of the adjustable collar 5. An ordinary dash pot is also provided as at 6. The eccentric rod 7, has a yoke or loop 8, embracing the ring or disk 9, which ring is intended to revolve with the governor wheel and be shifted across the axial line of the wheel to vary the eccentricity of the disk under the action of the governor weight on the wheel

and for this purpose the said ring is connected with the wheel by the trunnions 10, 11, bearing in sockets 12, on each side of the 45 wheel hub and carrying crank pins 10<sup>×</sup>, 11<sup>×</sup> having a motion concentric to the trunnion centers which pins are rigidly connected with opposite sides of the eccentric ring. The pins pass through the trunnions and are held 50 by the nuts 13, on their inner ends. One of the trunnions has an arm 14, connected by a link 15, with the end of the weighted governor lever and it will be clearly seen that movement of said lever will turn the trun- 55 nion 11, and as its pin is off to one side of the trunnion center the eccentric ring will be shifted, the opposite trunnion of course being free to move and serving to support and control the movement of the opposite side 60 of the eccentric. This connection not only serves to move the eccentric but to support the same to the wheel. It is in the nature of shifting link connections and it will be understood that I do not wish to limit myself 65 strictly to the precise form of connection shown although this considered specifically forms an important part of my invention.

What I claim is—

In combination, the governor wheel having 70 the hub with sockets formed therewith on each side of its center, the eccentric having the crank pins  $10^{\times} 11^{\times}$  projecting inwardly toward the wheel, the trunnions on said crank pins arranged in the sockets of the wheel and 75 the centrifugal operating devices connected to one of the trunnions, substantially as described.

In testimony whereof Iaffix my signature in presence of two witnesses.

JAMES N. WRIGHT.

Witnesses:

D. H. HUNT, E. C. ALLEN.