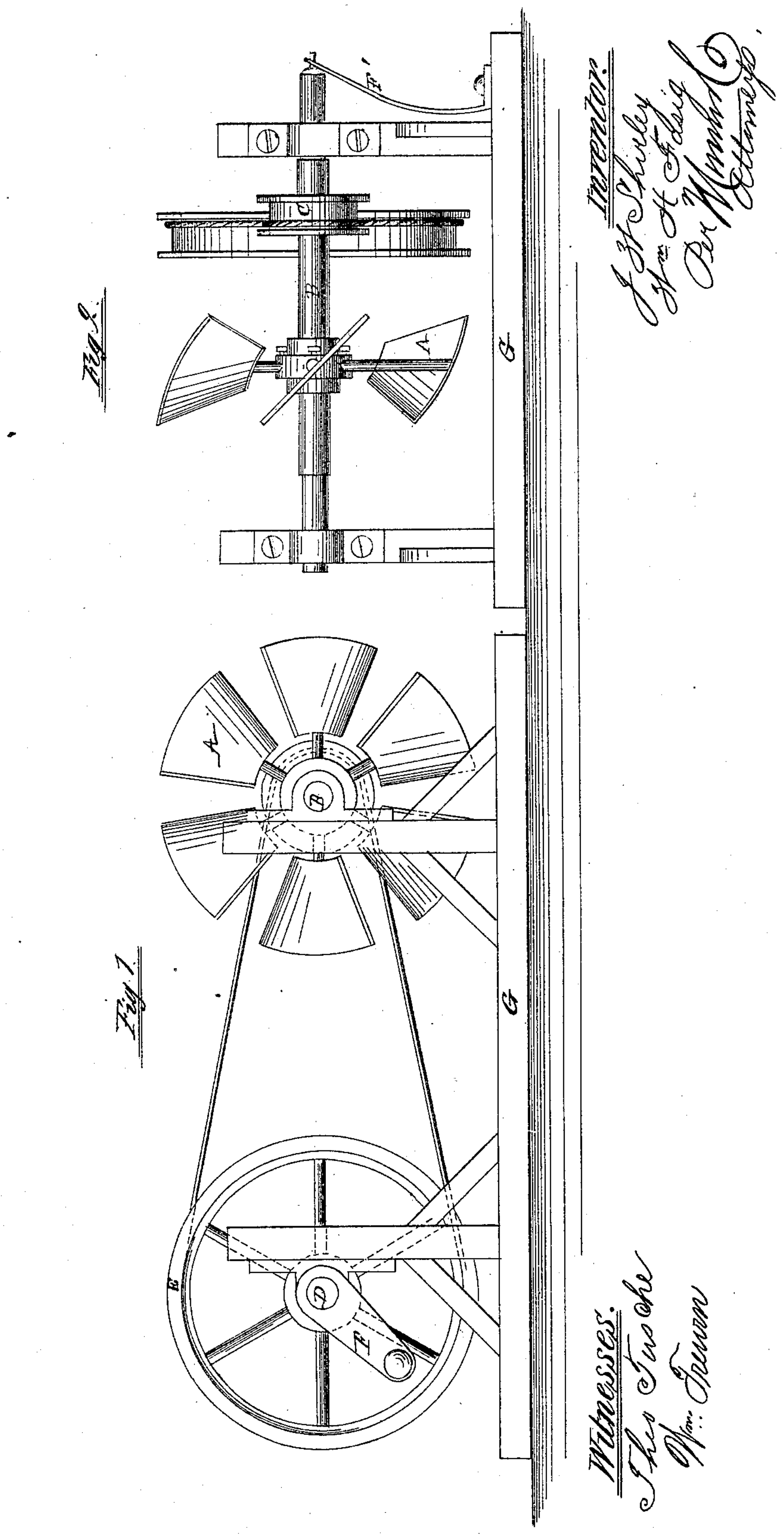
J. W. SHIRLEY & W. H. FASIG.

STEAM ENGINE GOVERNOR.

No. 65,697. Patented June 11, 1867.



United States Patent Office.

J. W. SHIRLEY AND WILLIAM H. FASIG, OF TERRE HAUTE, INDIANA.

Letters Patent No. 65,697, *dated June* 11, 1867.

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 we, J. W. SHIRLEY and WILLIAM H. FASIG, of Terre Haute, in the county of Vigo, and State of Indiana, have invented a new and useful Improvement in Governors; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to a method of operating upon the valve of a steam or other engine, and the invention consists in imparting to a horizontal shaft a lateral motion by means of the resistance of the air upon the wings of a wind-wheel, as will be described.

Figure 1 represents a side view of the governor.

Figure 2 is an end view.

Similar letters of reference indicate like parts.

A (fig. 2) is the wind-wheel. B is the shaft to which it is attached. C is a pulley on the shaft B. D (fig. 1) is a driving-shaft. E is a large pulley or band-wheel on D. F is a crank, by which the shaft is driven from an engine or other machine. G represents the bed-plate to which the posts or stands are attached which support the shafts B and D.

The driving-shaft D revolves in boxes in the usual manner. The shaft B has a compound motion, or a rapid rotary motion and a lateral motion, as it is constructed so that it slides through the boxes which support it as it rotates; and the greater the rotary speed is the greater will be its lateral action from the resistance of the air against the wings of the wheel A. These wings are placed upon the eye of the wheel like the wings of a common windmill, and the wheel operates upon the air in the same way that a propeller-wheel does upon the water. The lateral motion of the shaft is partially counteracted by a spring, F′, which acts against it, and throws it back when the speed diminishes. The motion to the governor-shaft B is imparted by a belt or band running over the pulleys C E. The proper connection with the valve of an engine is made from the governor-shaft B, and need not be described.

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

The wind-wheel A, the shaft B, and the spring F′, arranged and operating substantially as herein shown and described for the purposes set forth.

J. W. SHIRLEY,
WILLIAM H. FASIG.

Witnesses:
WM. KEYES,
ELI DAWSON.