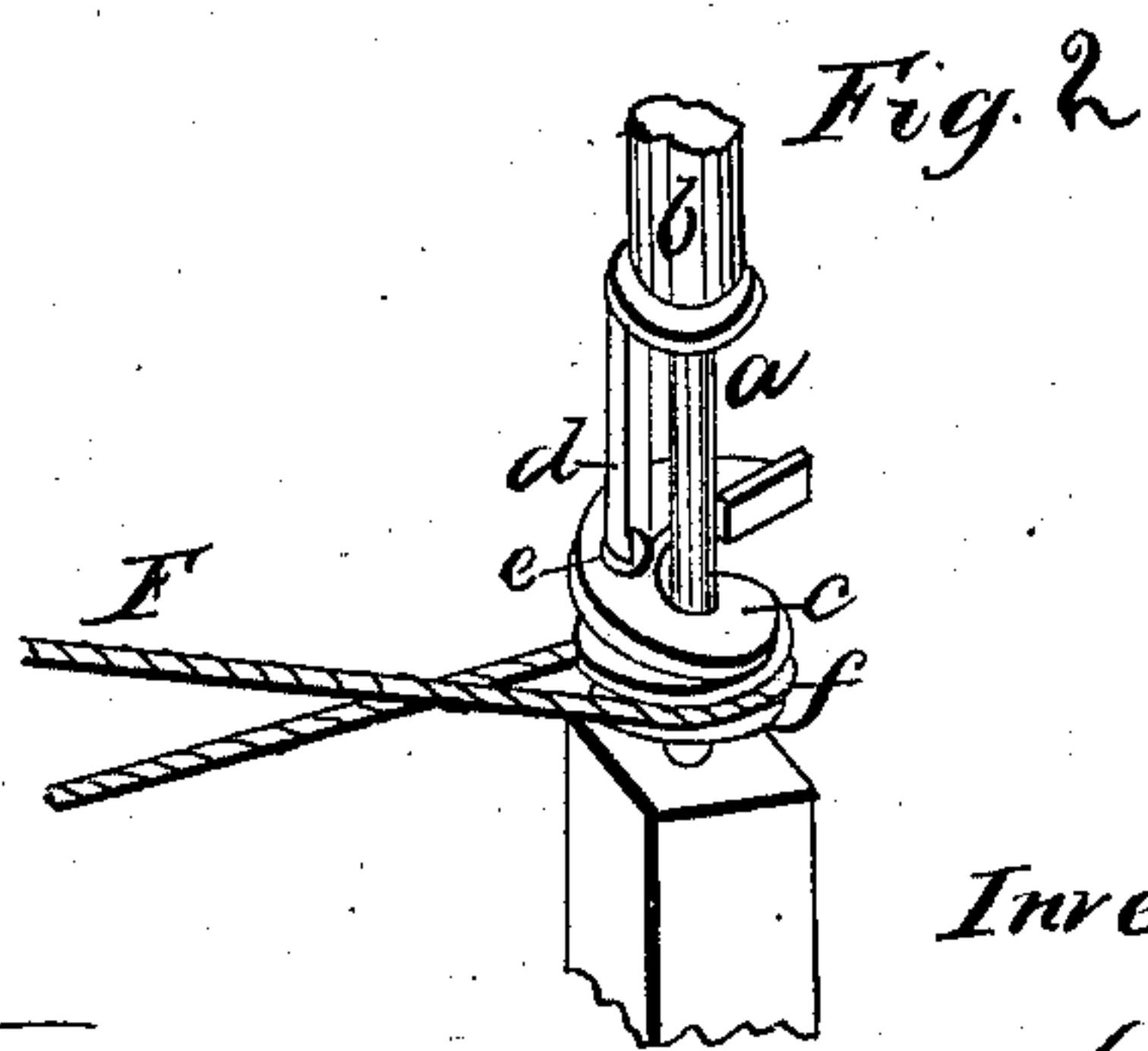
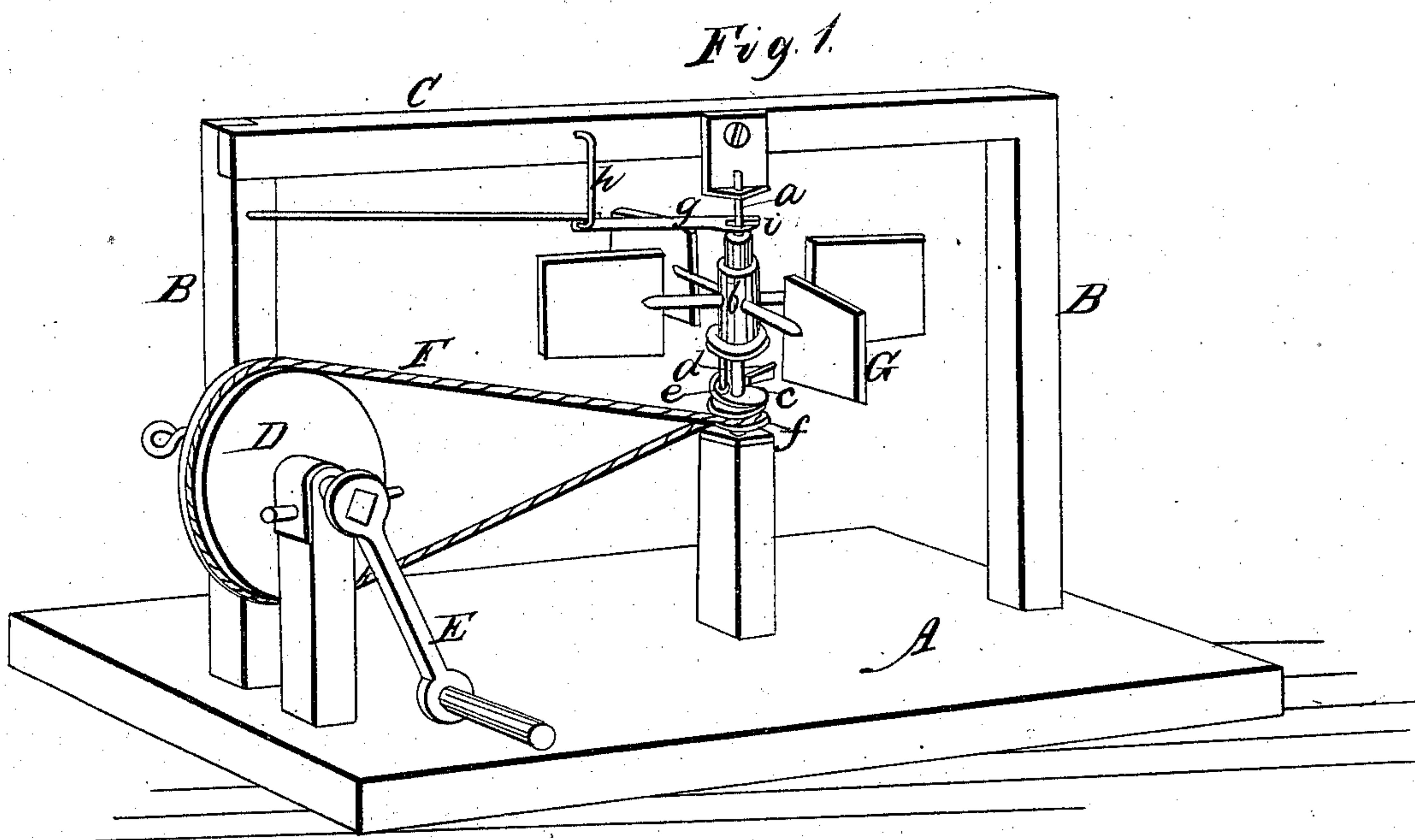


E. H. Parker,

Governor.

N^o 83,655.

Patented Nov. 3, 1868.



Witnesses
C. L. Mauston
H. H. Porter

Inventor
E. H. Parker
By T. W. Porter
His Atty

United States Patent Office.

ELIPHALET H. PARKER, OF BUCKSPORT, MAINE.

Letters Patent No. 83,655, dated November 3, 1868.

IMPROVEMENT IN STEAM-GOVERNOR.

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, ELIPHALET H. PARKER, of Bucksport, in the county of Hancock, and State of Maine, have invented a new and useful Steam-Governor; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of my invention, and

Figure 2 is a detached perspective view of the incline.

Similar letters indicate corresponding parts in the several figures.

The nature of my invention consists in a steam-governor, driven by a belt, in the usual manner, the retardation being obtained by a fan thus driven, this fan being automatically raised or lowered, according to the speed at which it is driven, by means of a small truck attached to it, which travels up and down a spiral incline, the rising and falling of the fan serving, through proper mechanism, to open and close the throttle-valve.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

In the drawings—

- A is a bed-plate;
- B B are uprights;
- C, a cross-bar;
- D, a pulley;
- E, a crank; and
- F, a band.

G is a fan, which revolves freely upon the vertical spindle *a*, which passes through the hub *b* of the fan.

Upon the lower end of spindle *a* is secured the grooved pulley *f*, in which the band *F* runs; and immediately above pulley *f* is also secured to spindle *a*, an incline or spiral flange, *c*, upon which travels a small truck, *e*, which is secured and revolves in the lower end of stud *d*, attached to and projecting downward from hub *b*.

In practice, when belt *F* is set in motion by a pulley on the main shaft, it revolves the spindle *a* with a

rapidity proportioned to the relative size of the pulleys, and in the same direction as the formation of screw *c* may be.

In the drawings, the screw *c* being what is termed a left-hand screw, the motion of the spindle is given in the same direction.

As the spindle *a* revolves, it carries the fan *G* with it, at a certain velocity; but when the speed of the spindle is greater than the friction between it and hub *b* can maintain upon the fan, then, the resistance of the air upon the fan retarding it, the action of truck *e* upon the screw *c* carries the fan upward upon the spindle, thereby raising the end of horizontal rod *g*, which is pivoted in the bracket *h*, and which, being forked at *i*, and placed astride spindle *a*, bears upon the hub *b*.

As the forked end of rod *g* is raised, the other end is, of course, lowered; and, by connecting this outer end, by any suitable means, with the throttle-valve, the increase of speed in spindle *a* serves to close the valve; and, by the employment of weights either upon the fan, the lever *g*, or the lever attached to the throttle-valve, the required velocity of the engine may be readily adjusted and obtained.

The spiral flange *c* may be carried around the spindle *a* any desired number of times, according as it may be necessary to raise the fan; but if it be more than one circuit, then the stud *d* must pass down outside the flange, the lower extremity being curved inward, to bring the track in the proper position.

Having thus described my invention,

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

A steam-governor, constructed with fan *G*, spindle *a*, spiral flange *c*, truck *e*, or other suitable bearing for the fan upon the flange, pulley *f*, or its equivalent device, for imparting motion, and the rod *g*, or its equivalent, for connecting the governor with the valve, all arranged substantially as described and shown.

ELIPHALET H. PARKER.

Witnesses:

DANIEL ROMICK,
JOHN BUCK.