

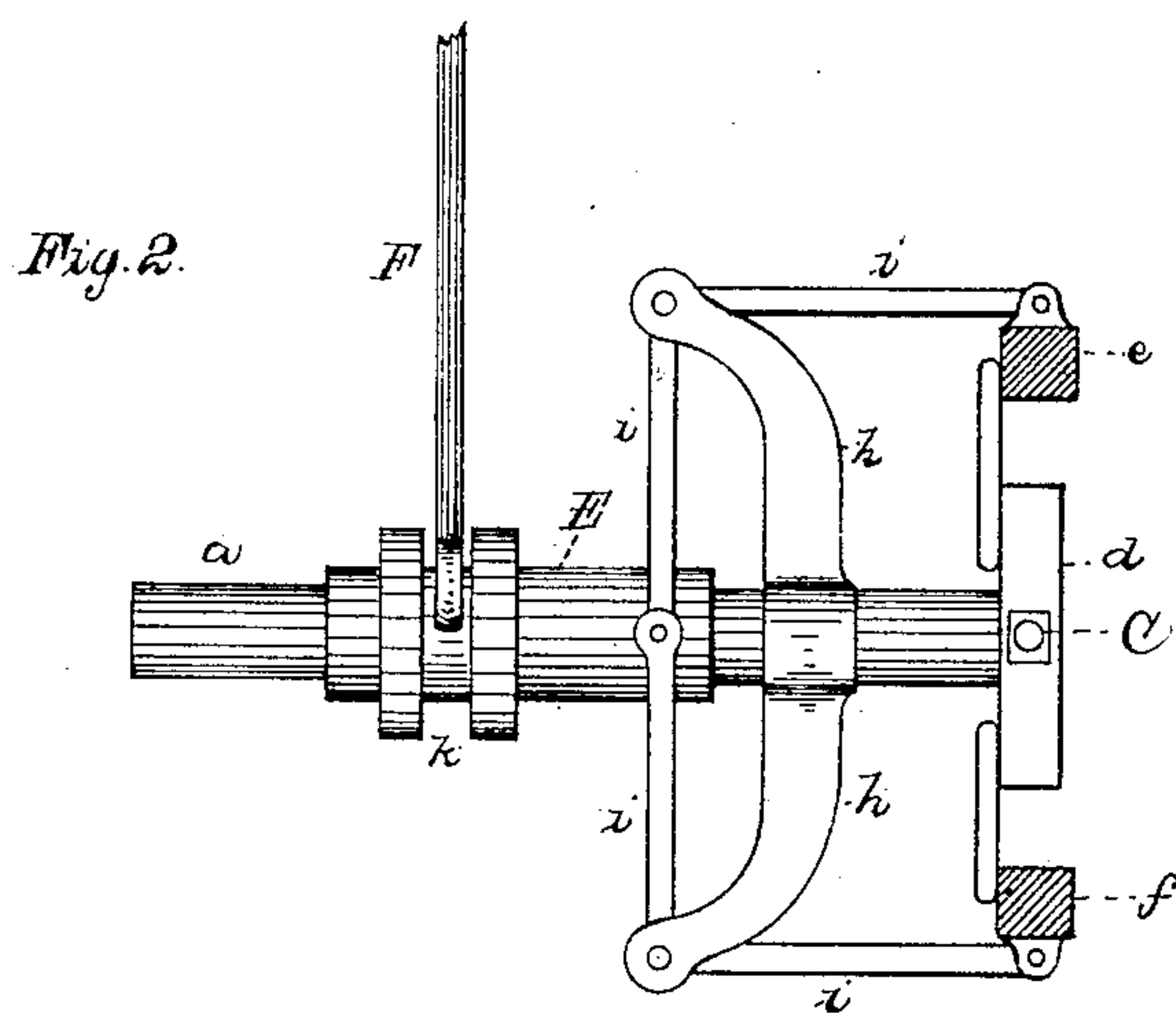
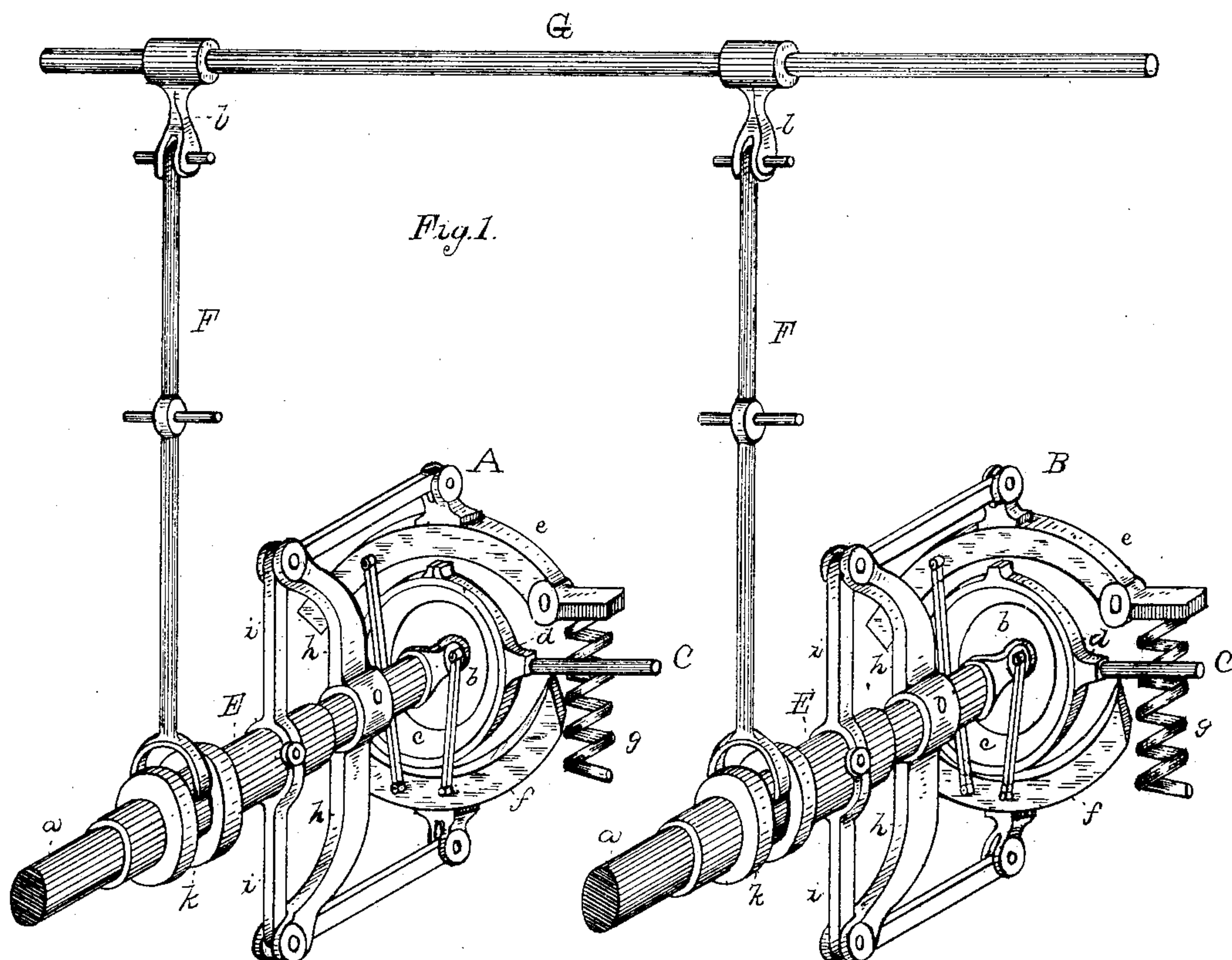
(No Model.)

T. A. EDISON.

GOVERNOR FOR DYNAMO ELECTRIC MACHINES.

No. 271,615.

Patented Feb. 6, 1883.



ATTEST:

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# UNITED STATES PATENT OFFICE.

THOMAS A. EDISON, OF MENLO PARK, NEW JERSEY.

## GOVERNOR FOR DYNAMO-ELECTRIC MACHINES.

SPECIFICATION forming part of Letters Patent No. 271,615, dated February 6, 1883.

Application filed November 9, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS A. EDISON, of Menlo Park, in the county of Middlesex and State of New Jersey, have invented a new and useful Improvement in Governors for Dynamo-Electric Machines, (Case No. 501,) of which the following is a specification.

The object I have in view is to produce simple and efficient means for connecting together, so that they will work in unison, the automatic cut-off mechanisms of a number of engines, such cut-off mechanisms being composed of loose valve-eccentrics and wheel-governors adjusting such eccentrics. The invention is especially applicable to such engines when they are used to run dynamo or magneto electric machines feeding into the same conductors or system of conductors.

In my application No. 500 (Serial No. 75,203) I have shown and described means for connecting the cut-off mechanisms of engines of this character, my present invention relating to other means for accomplishing the same purpose.

In carrying out my invention I mount a sliding sleeve upon the shaft of each engine, and connect it by bell-cranks with the weights of the wheel-governor, so that the movement of such weights will give the sleeve a longitudinal sliding movement upon the engine-shaft. The sliding sleeves of the several engines being connected together, the cut-off mechanisms will be forced to work in unison. To make this connection each sleeve is provided with a grooved collar engaging the forked end of a pivoted lever, the pivoted levers of the several engines being removably connected with arms from a common shaft. This shaft moves only as the cut-off mechanisms are varied in unison by the combined action of the wheel-governors.

In the accompanying drawings, Figure 1 is a perspective view of the cut-off mechanisms of two engines, with connections embodying my invention; and Fig. 2, a vertical section of one of the wheel-governors and the loose eccentric.

A and B represent the cut-off mechanisms of two engines, which run dynamo or magneto electric machines feeding into the same conductors, and having means for regulating them, as required, by the addition or removal of translating devices, as described and shown in my application before referred to. The shaft *a* of each engine has a loose eccentric,

which may be in one part, but is preferably in two parts, *b c*, as shown. The eccentric-sleeve *d* is connected with the valve-rod *C*. The fly-wheel of each engine (not shown) has weights *ef* pivoted thereto, and thrown inwardly toward the shaft by springs *g*. Secured to shaft *a*, near the weight *ef*, are arms *h*, in which are pivoted bell-cranks *i*, connected with the weights and with a sleeve, *E*, feathered upon the shaft *a*. This sleeve has a grooved collar, *k*, with which engages the forked end of a pivoted lever, *F*. At its other end the lever *F* is connected removably with an arm, *l*, projecting from a shaft, *G*. The cut-off mechanisms of all the engines are connected with the shaft *G* in a similar manner, and the engines forced to work in unison.

What I claim is—

1. The combination, with two or more separate engines having automatic cut-off mechanisms composed of loose eccentrics and wheel-governors adjusting such eccentrics, of a sliding sleeve feathered on the shaft of each engine, means connecting such sleeve to the governor-weights so as to be moved thereby, and means connecting the sliding sleeves of all the engines together, substantially as set forth.

2. The combination, with two or more separate engines having automatic cut-off mechanisms composed of loose eccentrics and wheel-governors adjusting such eccentrics, of a sliding sleeve feathered on the shaft of each engine, means for connecting such sleeve to the governor-weights so as to be moved thereby, a pivoted lever engaging a collar on such sleeve, and means connecting the levers of all the engines together, substantially as set forth.

3. The combination, with two or more separate engines having automatic cut-off mechanisms composed of loose eccentrics and wheel-governors adjusting such eccentrics, of a sliding sleeve feathered on the shaft of each engine, bell-cranks connecting the sleeve and governor-weights, a pivoted lever engaging a collar on the sleeve, and a shaft connecting the levers of all the engines together, substantially as set forth.

This specification signed and witnessed this 19th day of October, 1882.

THOS. A. EDISON.

Witnesses:

H. W. SEELY,  
EDWARD H. PYATT.