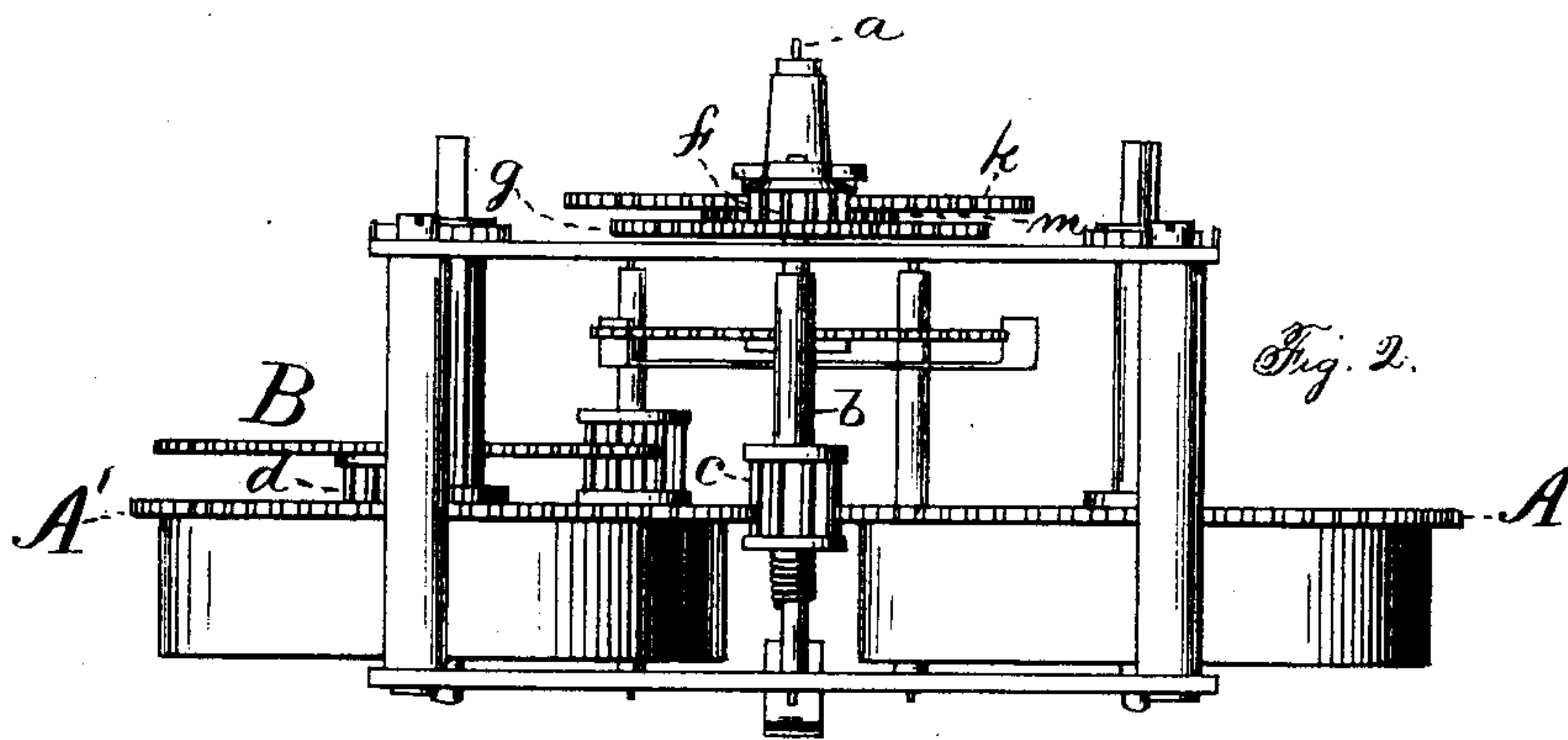
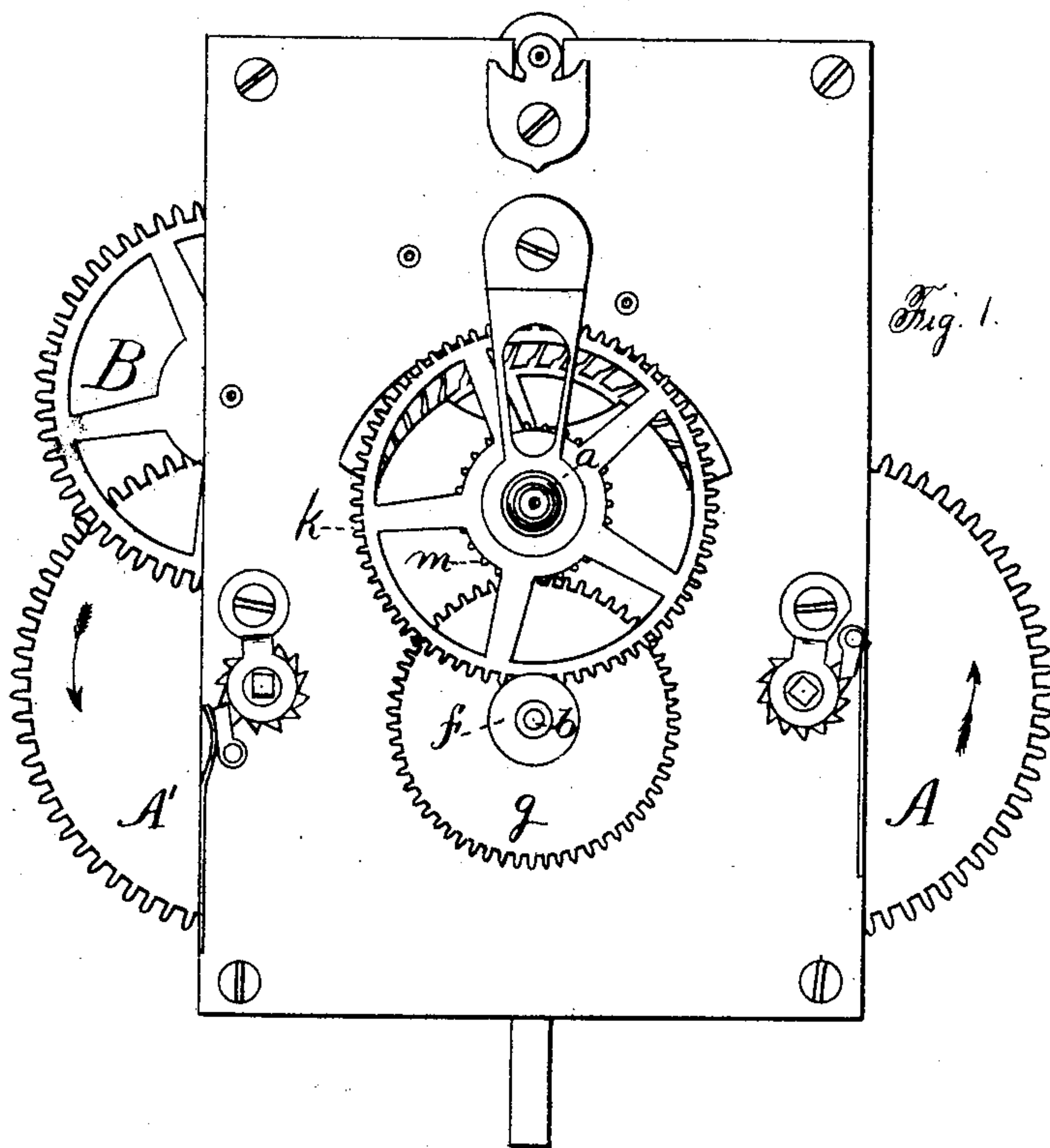


(Model.)

B. B. LEWIS.
CLOCK MOVEMENT.

No. 252,589.

Patented Jan. 17, 1882.



Witnesses
John Edwards Jr.
Lyman T. Burr

Inventor.
Benjamin B. Lewis
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att'y.

UNITED STATES PATENT OFFICE.

BENJAMIN B. LEWIS, OF BRISTOL, CONNECTICUT.

CLOCK-MOVEMENT.

SPECIFICATION forming part of Letters Patent No. 252,539, dated January 17, 1882.

Application filed October 24, 1881. (Model.)

To all whom it may concern:

Be it known that I, BENJAMIN B. LEWIS, of Bristol, in the county of Hartford and State of Connecticut, have invented certain new and
5 useful Improvements in Clocks, of which the following is a specification.

My invention relates to improvements in clocks in which two driving-wheels mesh into and are connected by an intermediate pinion
10 mounted on the shaft which drives the dial-wheels, while one of said driving-wheels meshes into the next pinion in and drives the remainder of the train; and the object of my invention is to make a first-class time-train with two
15 driving-wheels, all arranged in a very compact form. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a front elevation, and Fig. 2 is a
20 bottom view.

The time-train herein illustrated is one that beats seconds, and the verge-wheel makes a revolution once a minute, so that the shaft *a*, on which it is mounted, is also the shaft to
25 which the second-hand is attached.

A *A'* designate the two driving-wheels, both driven by springs, but may be driven by weights, if desired, which springs or weights are attached in any ordinary manner, but so
30 as to revolve the wheels in the direction indicated by darts in Fig. 1. Between these wheels I place the shaft *b*, and upon said shaft I mount the intermediate pinion, *c*, with both of the driving-wheels meshing into it. The power of
35 the wheel *A* and its spring or weight will,

through this pinion *c*, be communicated to the wheel *A'* and to the rest of the train. The wheel *A'* meshes into the pinion *d*, mounted on the same shaft with the wheel *B*, and this wheel drives the remainder of the train. The
40 shaft *b*, which bears the intermediate pinion, *c*, has the pinion *f* and wheel *g* secured to it upon the front side of the movement-plate, which wheel and pinion constitute a part of the ordinary dial-wheels, the remainder of
45 which are made up of wheels *k* and *m*, meshing into *f* and *g*, and carrying respectively the hour and minute hands. By this arrangement of the parts the clock has a retaining power to act while one spring is being wound.
50 The driving-wheels, both acting simultaneously on the pinion *c*, hold the shaft *b* steadily in place, and the disposition of the dial-wheels makes room for the extra driving-wheel and brings the train into a very compact form for
55 a clock-movement having wheels of the same size.

I claim as my invention—

The time-train herein described, in which the two driving-wheels mesh into and are connected by the intermediate pinion mounted
60 on the shaft which drives the dial-wheels, while one of said driving-wheels meshes into the next pinion in and drives the remainder of the train, substantially as described, and
65 for the purpose specified.

BENJAMIN B. LEWIS.

Witnesses:

M. M. WOODFORD,
C. H. PLUMB.