

C. K. GILES.

Clock.

No. 69,561.

Patented Oct. 8, 1867.

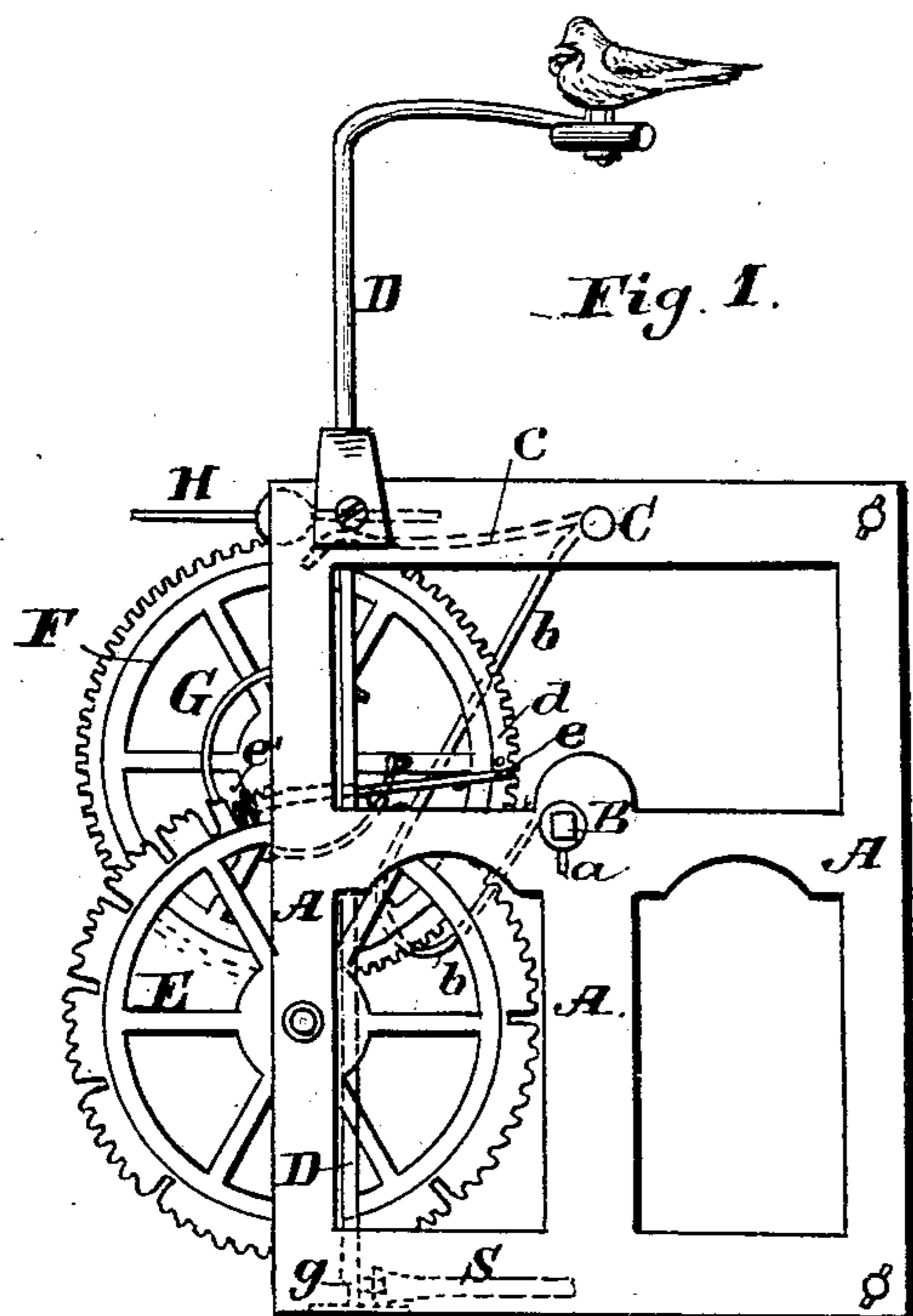


Fig. 1.

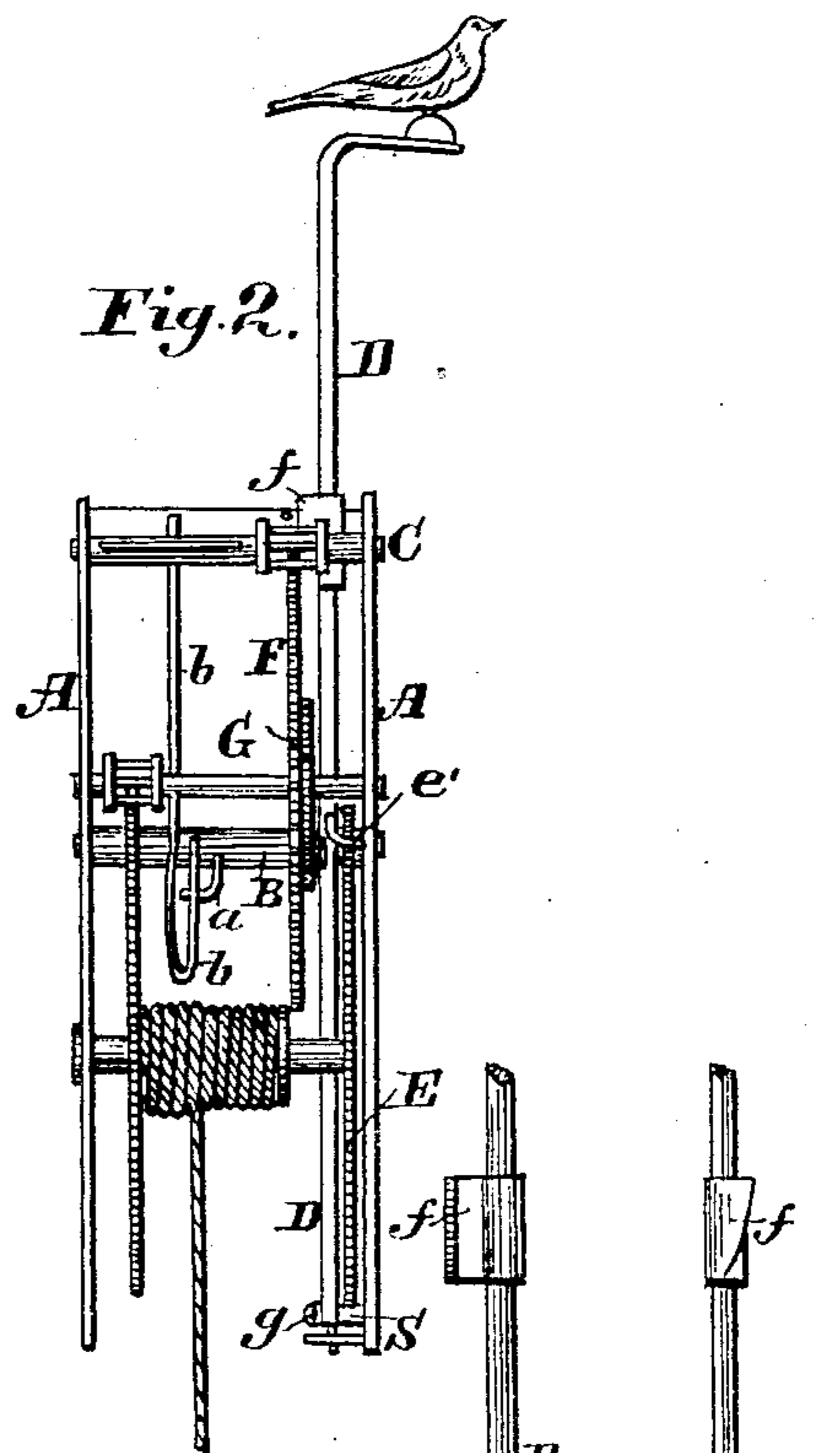


Fig. 2.

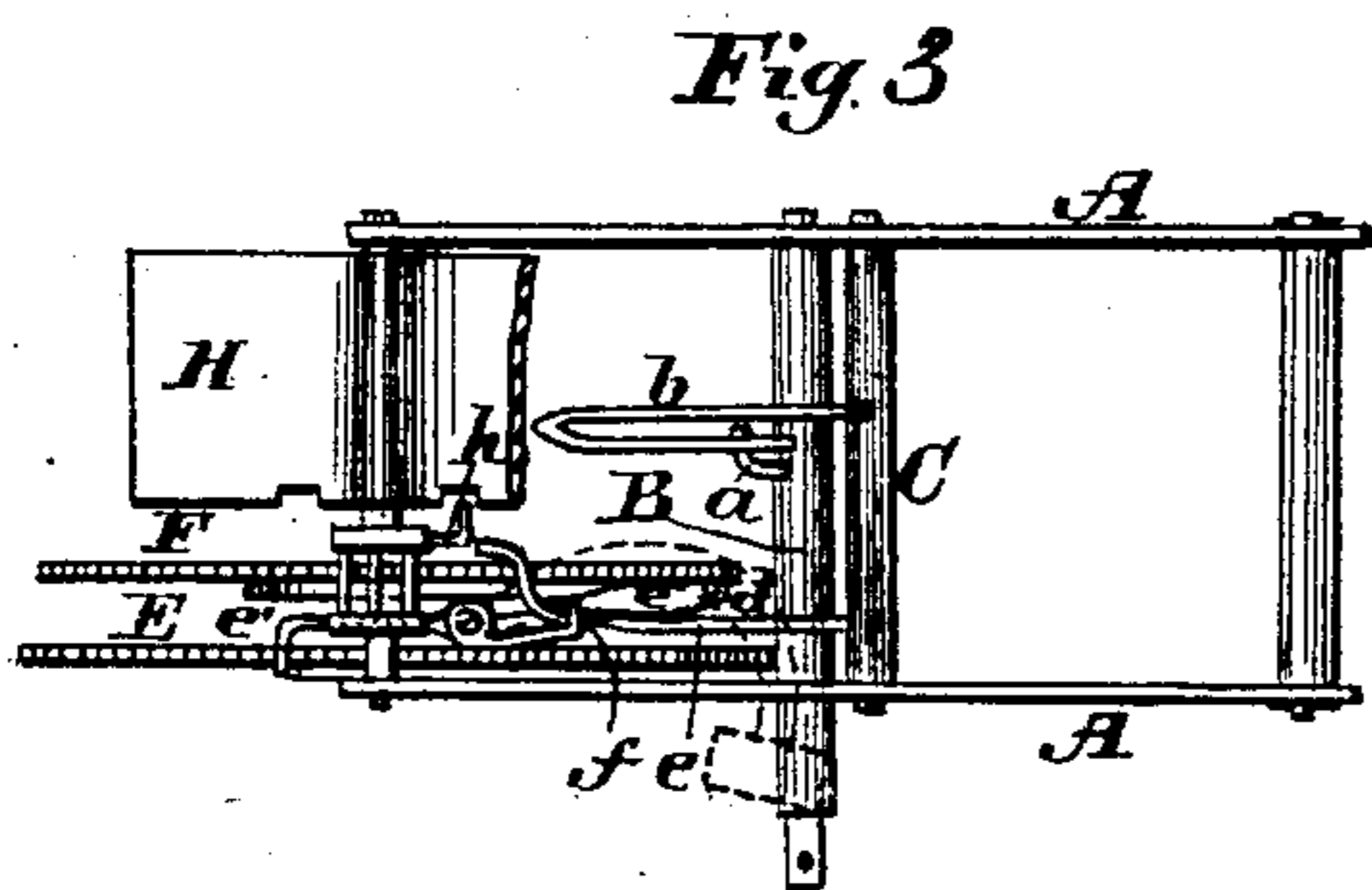
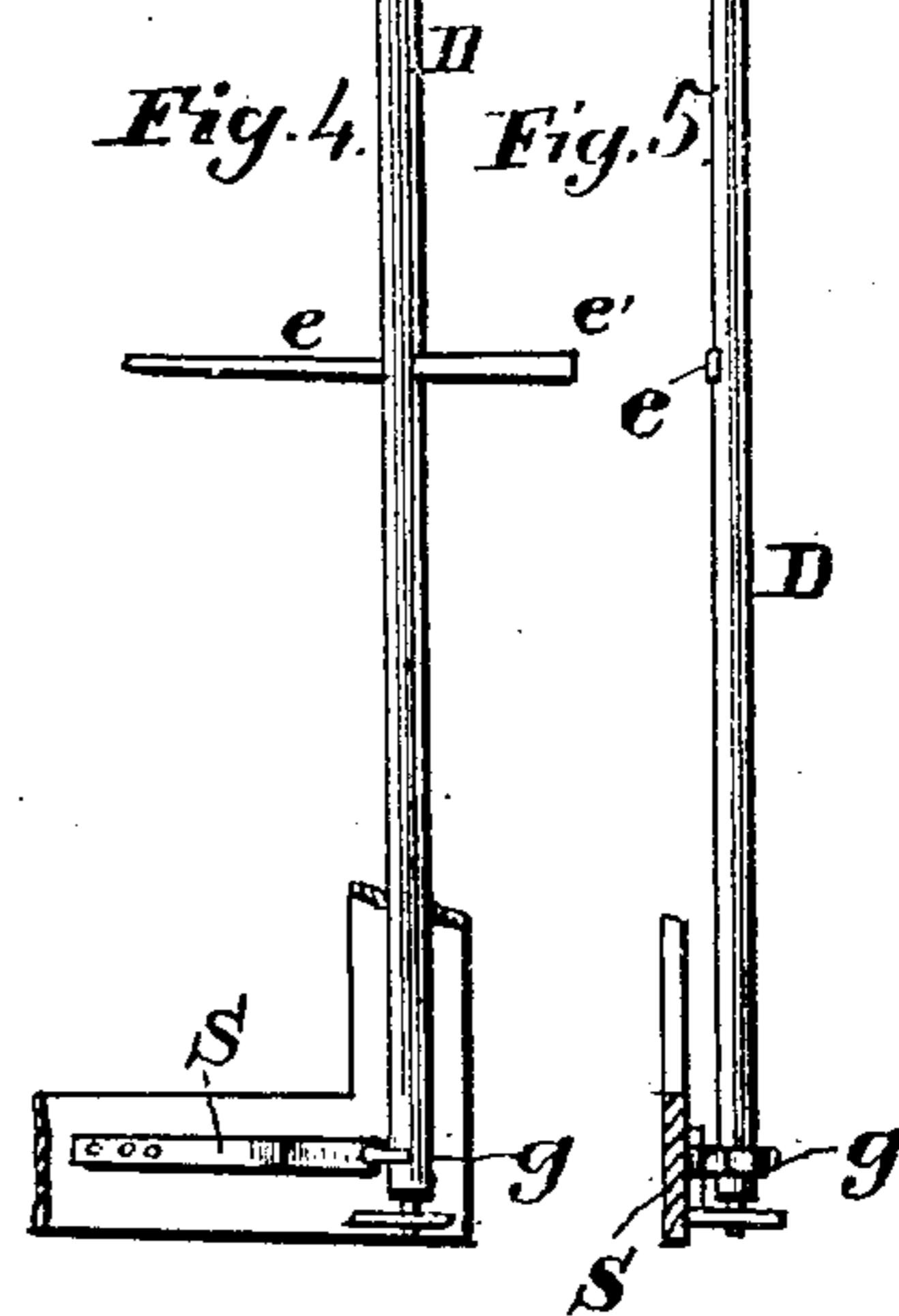


Fig. 3.

Fig. 4.

Fig. 5.



Witnesses:

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CHARLES K. GILES, OF CHICAGO, ILLINOIS.

Letters Patent No. 69,561, dated October 8, 1867.

IMPROVEMENT IN CUCKOO-CLOCKS.

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, CHARLES K. GILES, of Chicago, in the county of Cook, and State of Illinois, have invented a new and useful Improvement in Cuckoo-Clocks; and I do hereby declare and make known that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and the letters and figures marked thereon, which form part of this specification.

My invention consists in a novel, cheap, and simple method of attaching and operating what is known as the cuckoo-works of cuckoo-clocks; and to enable those skilled in the art to understand how to construct and use my said invention, I will now proceed to describe its construction, arrangement, and operation with particularity, making reference in so doing to the aforesaid drawings, in which—

Figure 1 represents a front elevation of my invention.

Figure 2 is a side elevation of the same.

Figure 3 is a plan or top view thereof.

Figure 4 is a rear view of the post upon which the cuckoo stands; and

Figure 5 is a side view thereof, as seen in fig. 2.

Similar letters of reference in the several figures denote the same parts of my invention.

The drawings represent nothing but the frame of the clock-works and such parts as are immediately concerned or connected with my improvement.

A represents the frame of the clock-works, and D the post or standard upon which the figure representing the cuckoo is placed, which is secured to the frame in suitable bearings, so as to be susceptible of rotation, as hereinafter described. Upon the lower part of the said post, or at any other suitable and convenient point, is arranged a pin or projection, *g*, upon which a spring, *s*, attached to the frame, operates to keep the post turned in such position as that the cuckoo is concealed within the case of the clock, when not in operation, as hereinafter set forth. There is also attached to said post a bar, marked *e*, one end of which, when the cuckoo-works are at rest, lies under a pin, *d*, upon the wheel F, locking said wheel and preventing the same from revolving, while the opposite end *e'* is bent so as, under like circumstances, to rest in one of the slots in the count-wheel or its equivalent, and thus locks the count-wheel also. Above the bar *e* there is attached a triangular plate or cam, marked *f*, upon which a rod operates, as hereinafter specified, to revolve the rod D enough to move the end of the arm *e* out from beneath the pin *d* upon the wheel F, and withdraw the opposite end from the slot in the count-wheel, thereby unlocking said wheels and permitting them to revolve. Upon the wheel F is arranged a cam, marked G in the drawings, which, as the wheel revolves, presses against the said arm *e* and turns the post D, so as to move the cuckoo forward through an opening door in front, as desired. During the movement of the said works the end of the arm *e*, marked *e'*, rests against the rim of the count-wheel, and holds the opposite end away from the pin *d* until the required number of strokes or sounds is given to indicate the hour, when the end *e'* is thrown into the next slot in the count-wheel, and the opposite end is thrown under the pin *d* upon the wheel F, and the works are locked until the succeeding hour, when they are again put in motion, as before. B represents the arbor, upon which the minute-hand is arranged, revolving once each hour, and has upon it a cam, marked *a*, which hourly strikes upon the wire *b*, and, raising it up, rotates the shaft C, to which said wire *b* is attached, thereby raising up the end of a wire, *c*, also attached to the shaft C, which, pressing against the cam *f*, upon the rod D, revolves the said rod, as and for the purposes before described. At the same time that the said wire *c* turns the rod D and unlocks the wheels E and F, as before mentioned, its extreme end is so high as to catch the projection *h* upon the shaft of the fly-wheel H, which is geared in the usual manner with the wheel F, and thus locks the works at that point and prevents the movement of the wheels E and F until the proper moment arrives, when the cam *a* releases the wire *b*, and allows the wire *c* to drop back to place, when the striking or cuckoo-works begin to move, as desired.

Having described the construction and operation of my invention, I will now specify what I claim and desire to secure by Letters Patent:

1. I claim supporting the cuckoo or its equivalent upon a single vertical post, arranged as described and shown, and provided with a cam, *f*, and cross-arm *e*, substantially in the manner and for the purposes specified.
2. In combination with the post D and arm *e*, I claim the arrangement of the cam G and wheel F, or its equivalent, substantially as and for the purposes specified and shown.
3. I claim the arrangement of said arm *e e'* and post D, with the count-wheel, substantially as herein set forth.
4. I claim, in combination with the post D, provided with a projection, *g*, the arrangement of a spring, *s*, operating substantially as shown and described.

Witnesses:

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