

(No Model.)

G. W. HOUSTON & E. F. MULKEY.

MOTOR.

No. 349,276.

Patented Sept. 14, 1886.

Fig. 1.

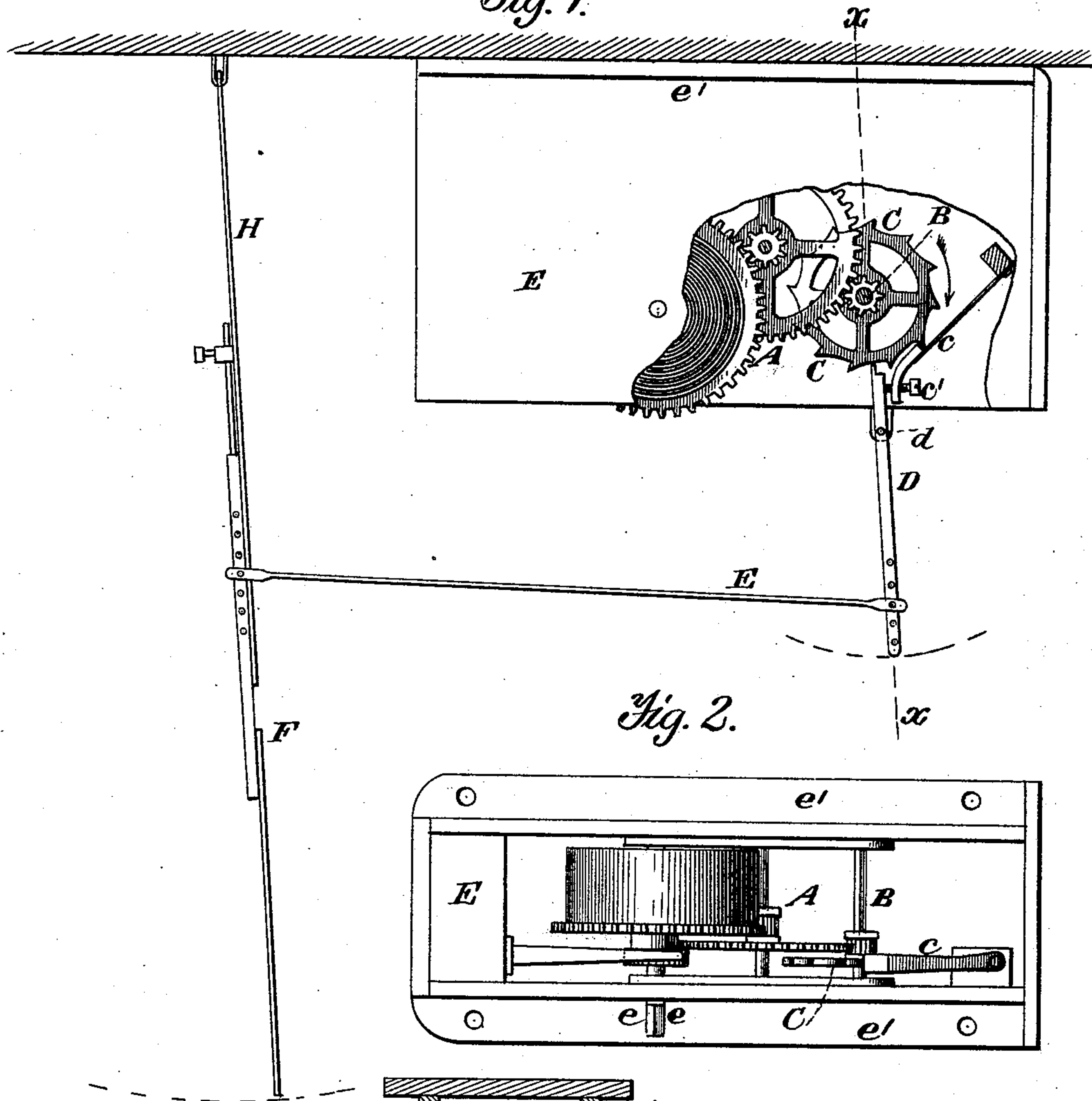


Fig. 2.

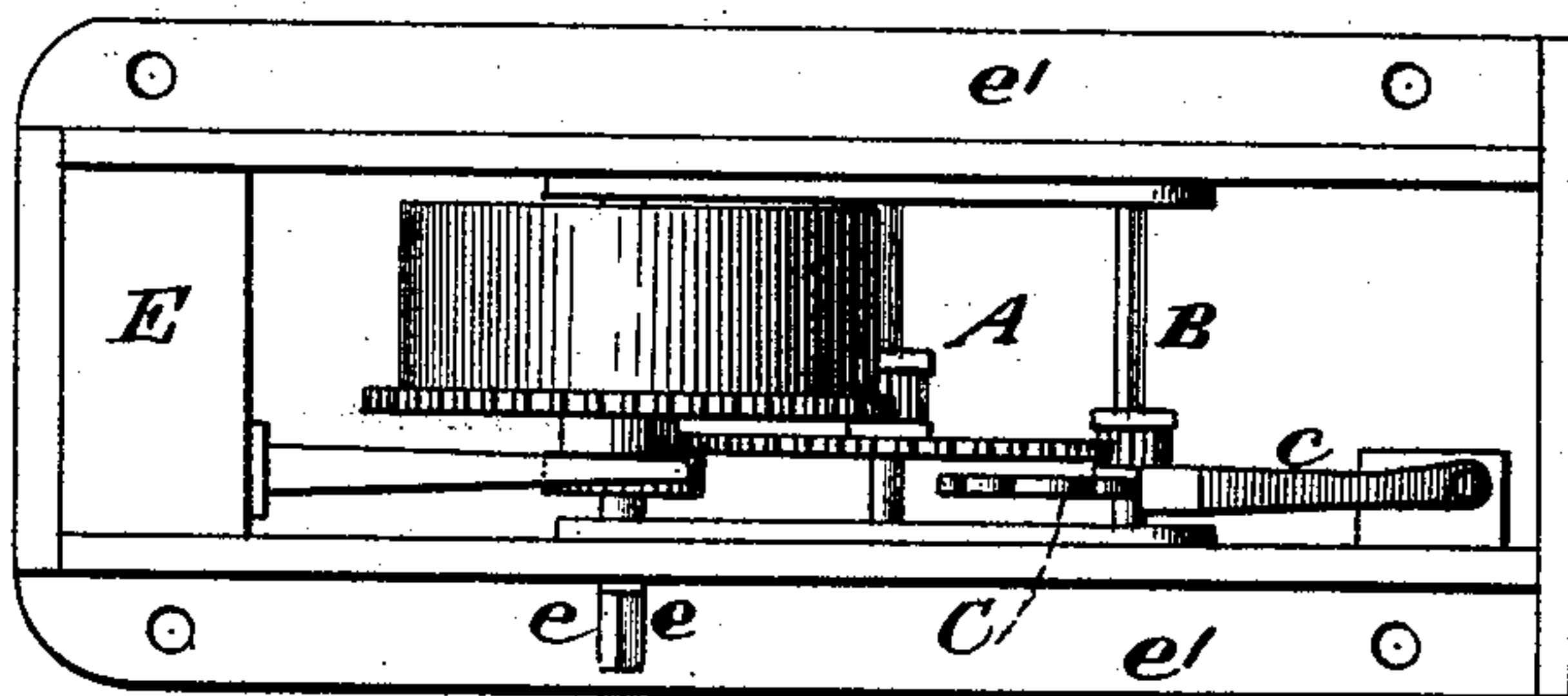
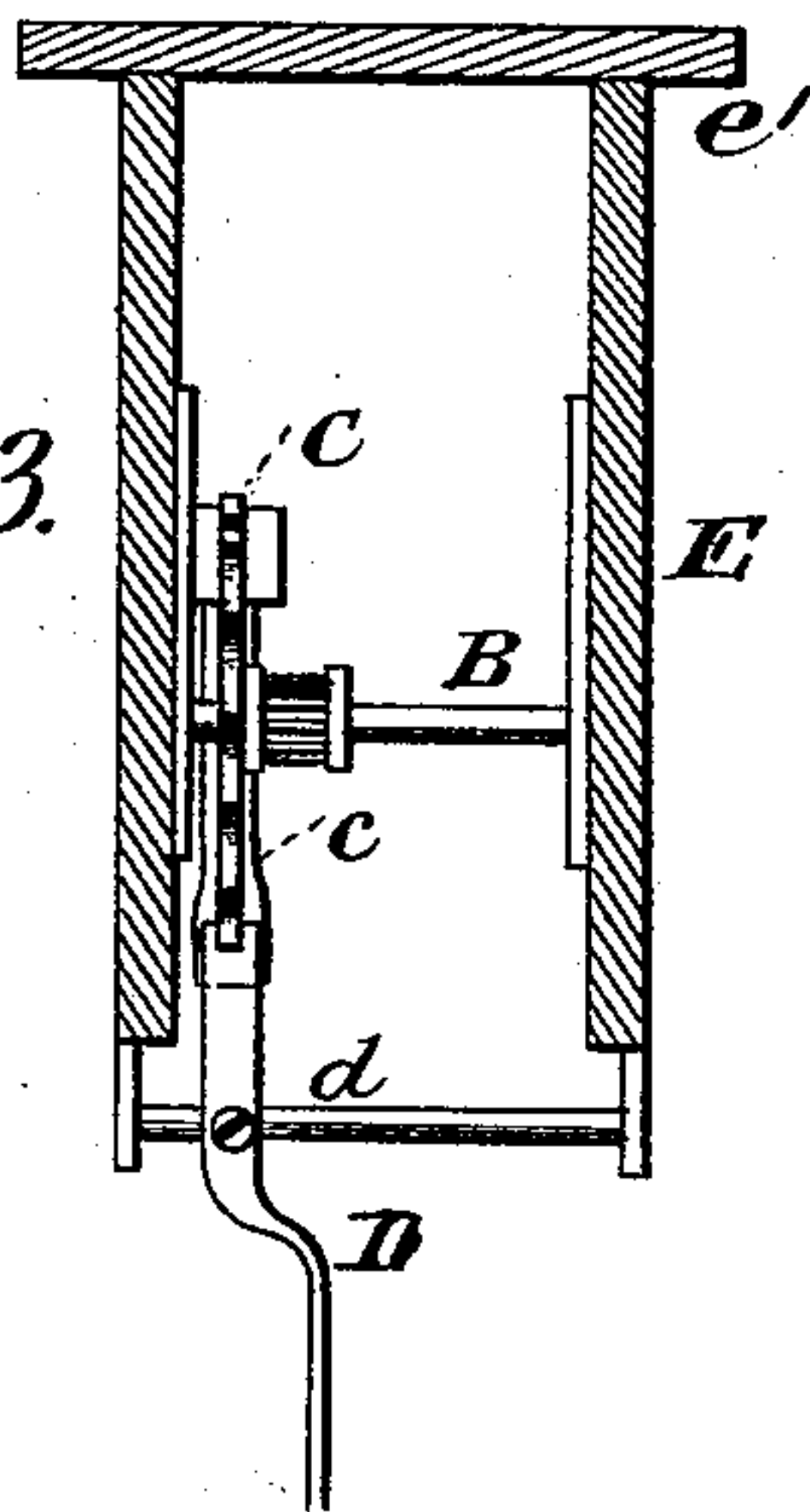


Fig. 3.



Witnesses.
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UNITED STATES PATENT OFFICE.

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MOTOR.

SPECIFICATION forming part of Letters Patent No. 349,276, dated September 14, 1886.

Application filed May 13, 1886. Serial No. 292,086. (No model.)

To all whom it may concern:

Be it known that we, GEORGE W. HOUSTON and ELIJAH F. MULKEY, citizens of the United States, residing at Savoy, in the county of Fannin and State of Texas, have invented certain new and useful Improvements in Motors; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

The invention will first be described in connection with the drawings, and then pointed out in the claim.

Figure 1 of the drawings is a side elevation showing our invention applied. Fig. 2 is a plan view of the spring-operated mechanism which drives our improved auxiliary mechanism. Fig. 3 is a cross-section on line *x x* of Fig. 1.

In the drawings, A represents the spring-actuated mechanism which rotates the shaft B, on which we make fast the ratchet-wheel C.

D is a lever fulcrumed at *d*, and provided with a series of holes at the lower end, so that the rod E, which vibrates the fan F, which is supported from the ceiling by a hanger, H, may give a greater or less stroke.

c is a spring-detent, which has an adjustable screw-stud, *c'*, which is struck by the

lever D, and causes the detent to be lifted from the ratchet-wheel. The spring-power then turns the ratchet-wheel the distance of one notch, when it is again caught by the detent. As the lever moves back on the return-stroke, it again lifts the detent, and is caught by a ratchet-tooth and caused to make another vibration. This may be continued until the driving-spring has exhausted its power. This motor is adapted to use with anything to which a vibratory motion is to be given.

We inclose the mechanism in a box, E, through which projects one end of the spring-shaft. This end *e* is squared, so as to be turned by a suitable key, and in the usual way, to wind up the spring. The box has the apertured flanges *e'' e'*, by which it may be secured to the ceiling or any other preferred support.

Having thus described our improvement of the usual verge motion, what we claim as new, and desire to protect by Letters Patent, is—

The combination, with the spring-actuated mechanism A, of the ratchet-wheel C, the spring-detent *c*, and the lever D, to operate a rod, E, in the manner and for the purpose specified.

In testimony whereof we affix our signatures in presence of two witnesses.

GEORGE W. HOUSTON.
ELIJAH F. MULKEY.

Witnesses:

T. J. PATILLO,
R. E. STRINGER.