

(No Model.)

J. A. VIEAN.  
MOTOR.

No. 312,307.

Patented Feb. 17, 1885.

Fig. 1.

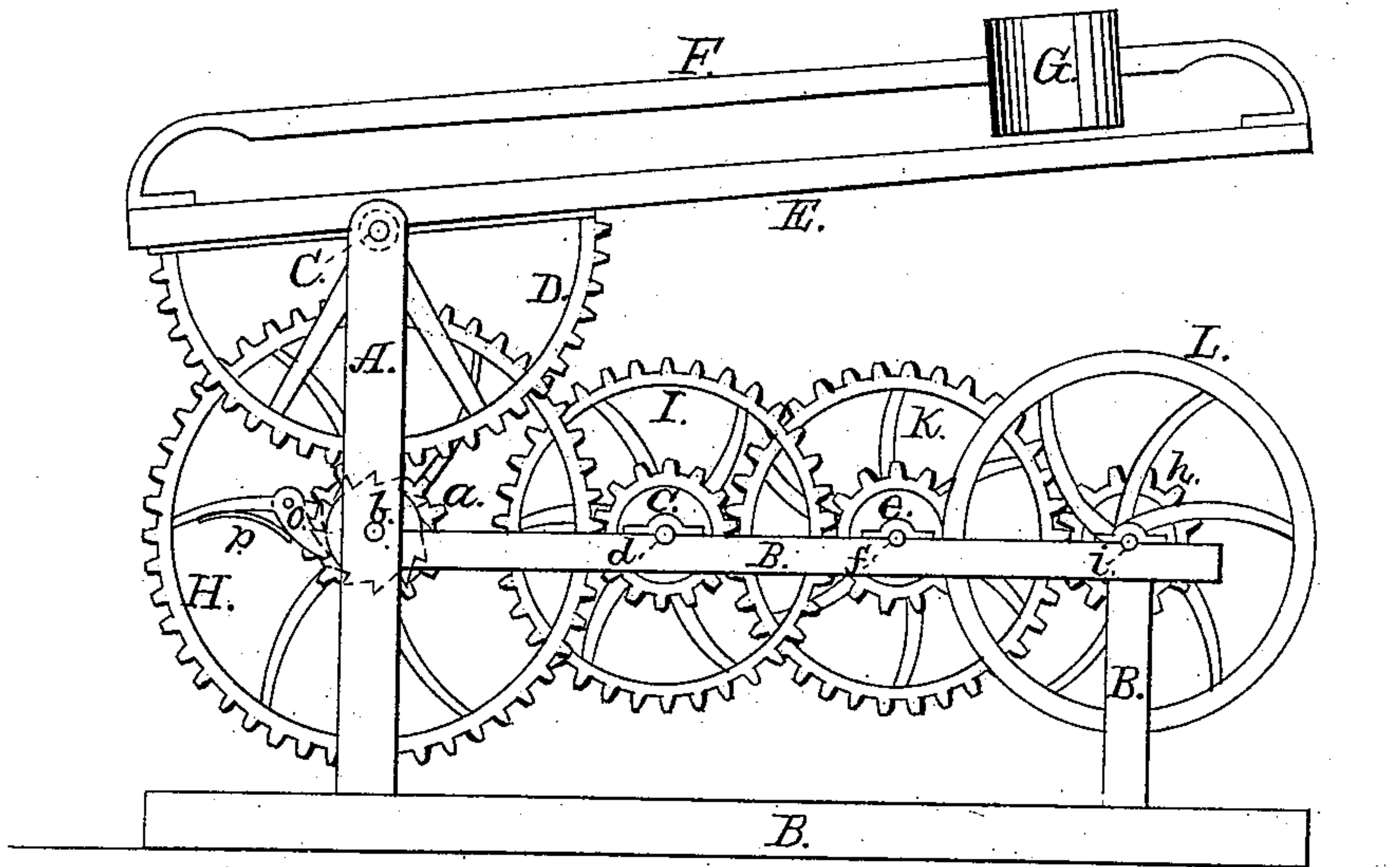
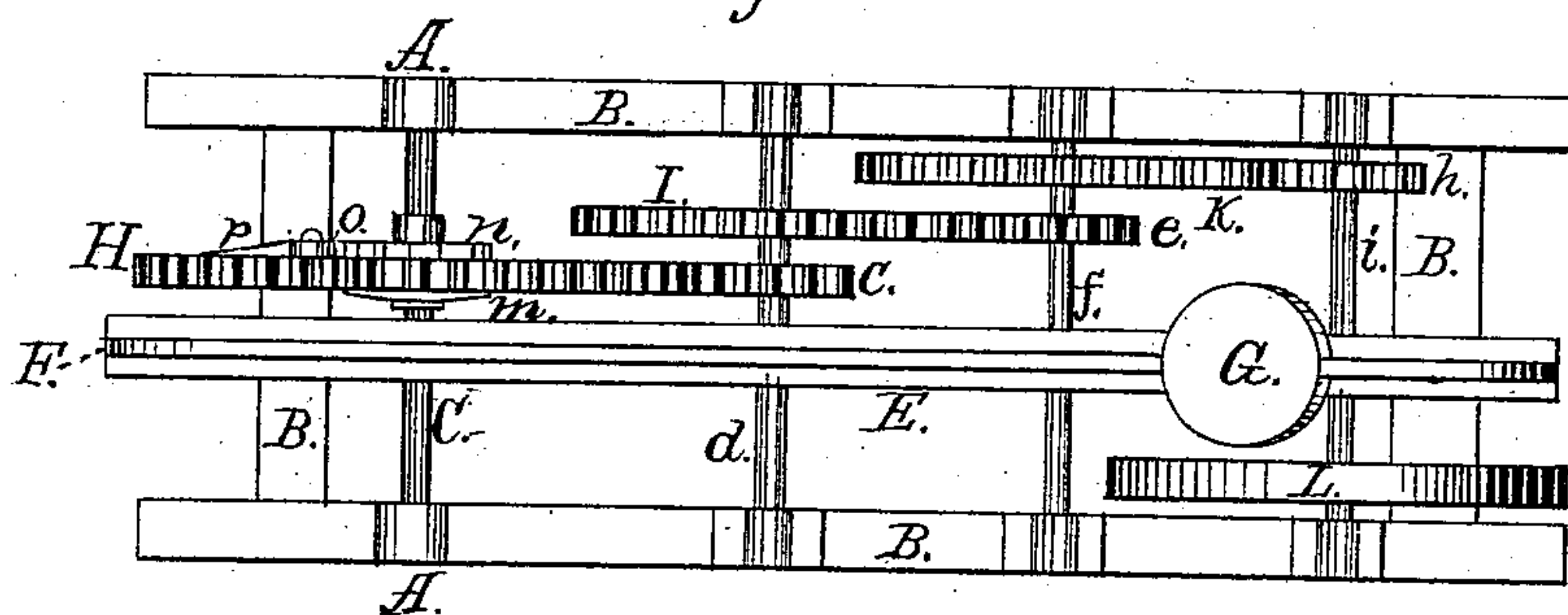


Fig. 2.



Witnesses:  
George Surratt,  
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# UNITED STATES PATENT OFFICE.

JOHN A. VIEAN, OF GAINESVILLE, TEXAS.

## MOTOR.

SPECIFICATION forming part of Letters Patent No. 312,307, dated February 17, 1885.

Application filed September 24, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN A. VIEAN, a citizen of the United States, residing at Gainesville, in the county of Cooke, and State of Texas, have invented a new and useful Motor, of which the following is a specification.

My invention relates to improvements in motors in which a weight supported on a lever operates in conjunction with a train of gearing; and the object of my improvement is the production of a power for operating sewing-machines, churns, and other machinery. I attain this object by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of the entire machine, and Fig. 2 a top view of the same.

Similar letters refer to similar parts throughout the several views.

Near the top of vertical standards A A, forming part of frame-work B, is a shaft, C, which has bearings in and turns loosely in said standards. To this shaft is secured a spur-segment, D, to which is bolted or otherwise secured an arm or lever, E. F is an iron beam running parallel with this lever, to which it is attached at either end some distance above it. This beam supports a heavy weight, G, by which motion is imparted to a train of gearing in the following manner: As the weight G descends it revolves the segment D, and this segment drives pinion *a*, secured to the shaft *b*. To this shaft is also secured a wheel, H, which drives pinion *c* on shaft *d*. To this shaft is secured a wheel, I, which drives pinion *e*, attached to shaft *f*. To this shaft is secured a wheel, K, which drives

pinion *h* on shaft *i*, to which shaft is also secured a band and balance wheel, L, which will give the machinery a steady and regular motion.

When the lever E has descended until it strikes the frame-work of the machine, the weight G is moved toward the shaft C and the lever raised, when, the weight again being moved toward the end of lever, the machinery will again be set in motion. The amount of power to be derived is governed by the distance the weight is moved outward from the shaft or fulcrum C.

The wheel H is loose upon the shaft *b*, and held in place between disk *m* and ratchet-wheel *n*, both of which are secured to the shaft. When the lever E is raised, the pinion *a* turns this shaft without turning the wheel H or any part of the train of gearing; but when the lever E descends the pawl *o* engages the ratchet *n* and is held in one of the several notches around its periphery by spring *p*, thus causing the wheel H to turn and impart motion to the whole train of gearing.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination, in a motor, of the lever E and beam F, supporting weight G, with segment D and a train of gearing, connected and arranged substantially as shown, and for the purpose specified.

JOHN A. VIEAN.

Witnesses:

GEORGE SURRETT,  
LOUIS DECAIME.