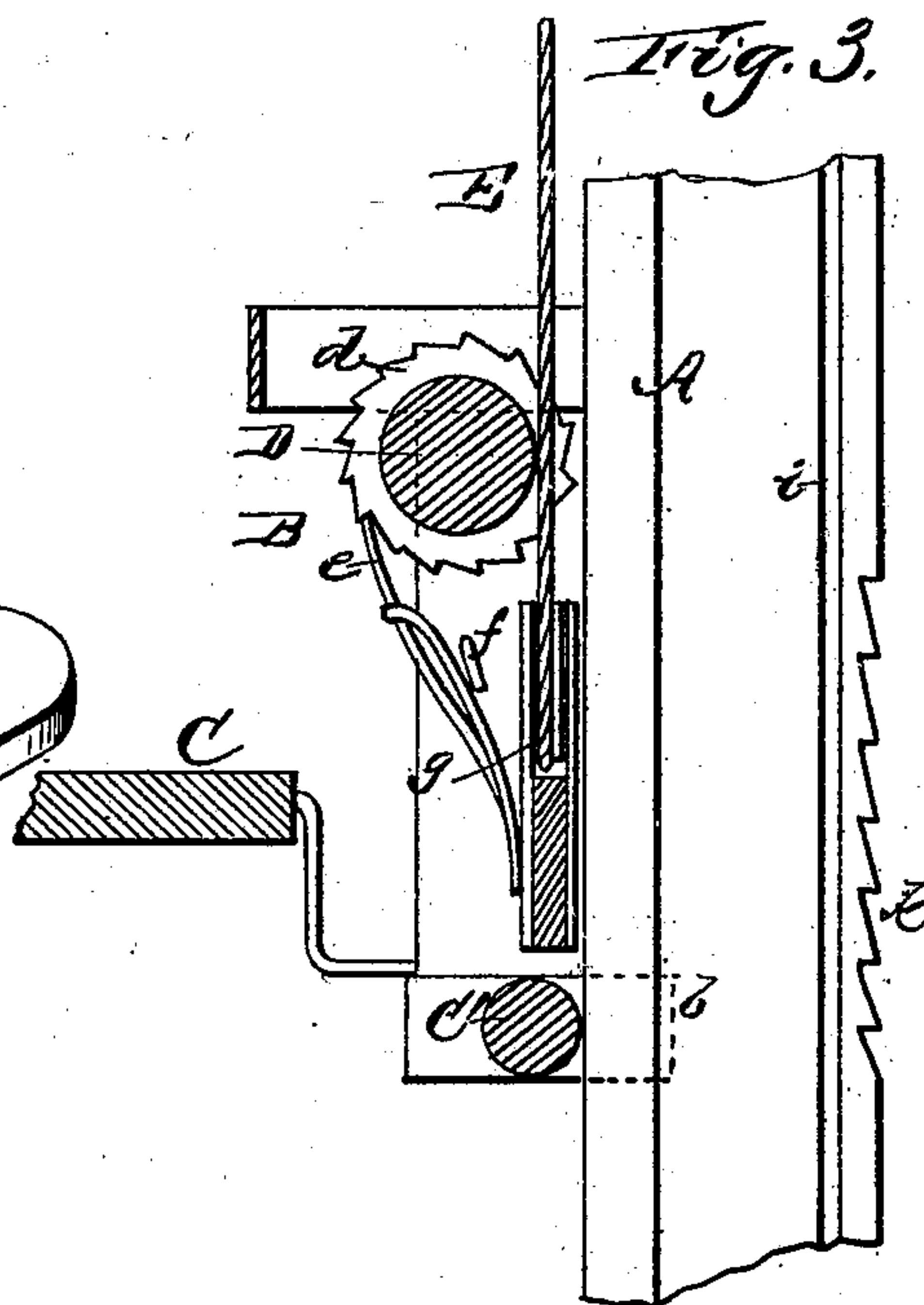
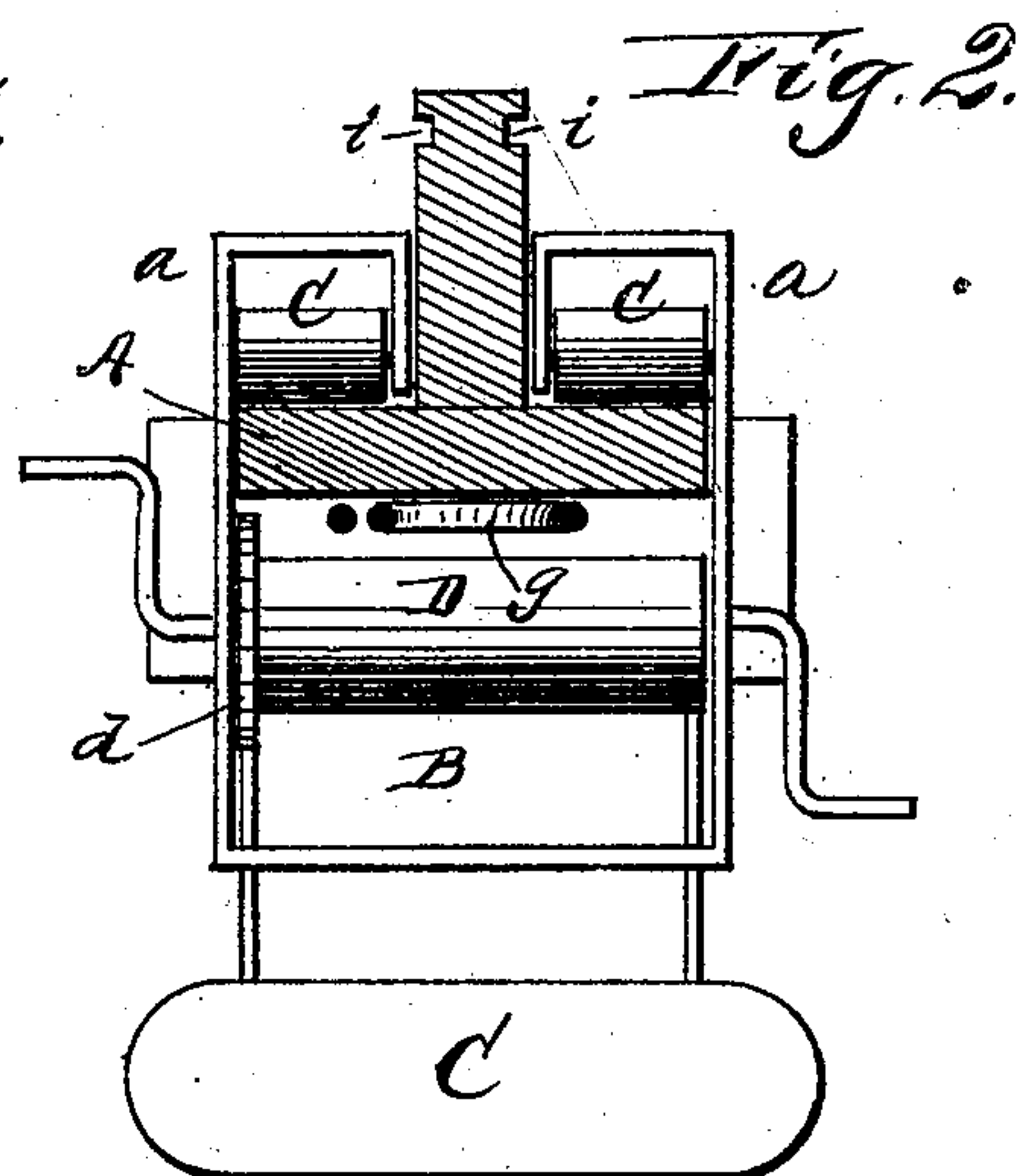
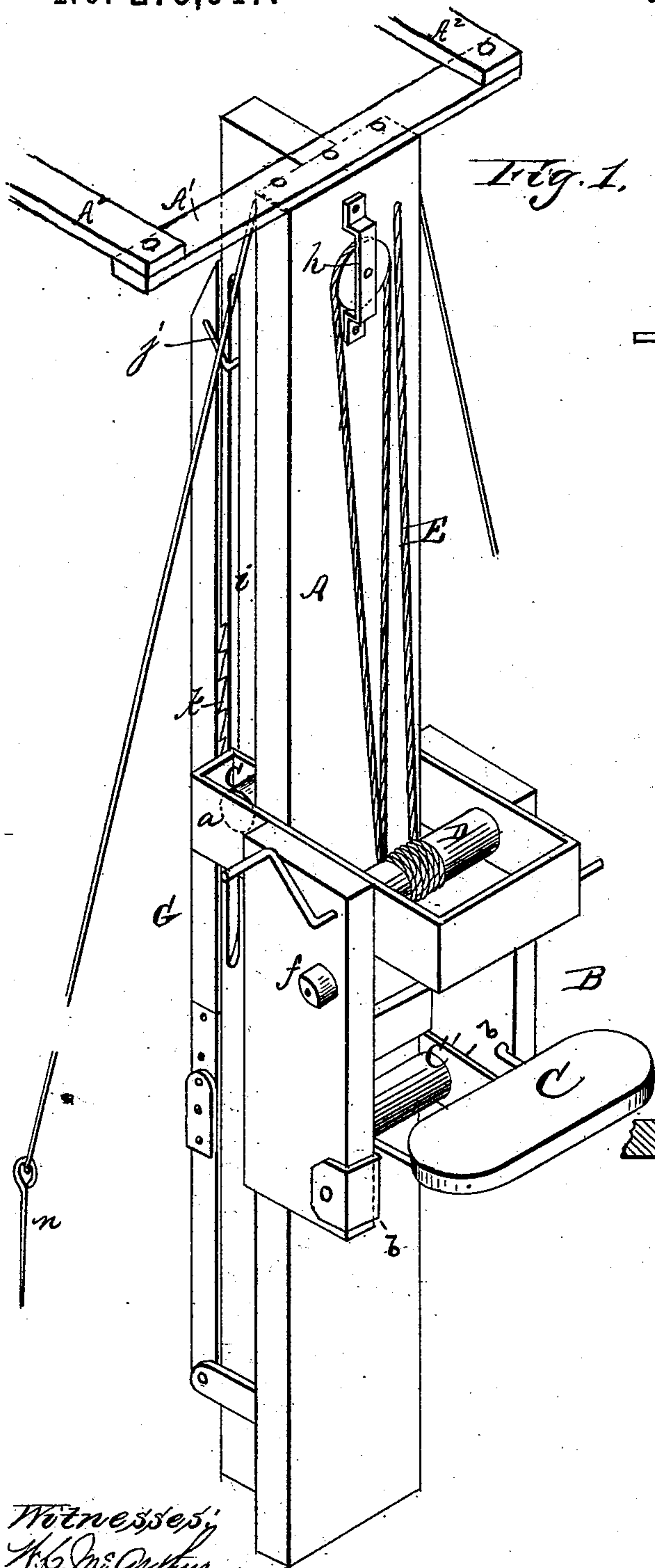


(No Model.)

J. T. HAINES.
PORTABLE ELEVATOR.

No. 275,647.

Patented Apr. 10, 1883.



Witnesses;
H. B. Co. Arthur
Wm. R. Keyworth.

Inventor,
J. T. Haines.

Is Alexander
Attorney.

UNITED STATES PATENT OFFICE.

JOSEPH T. HAINES, OF BALBEC, INDIANA.

PORTABLE ELEVATOR.

SPECIFICATION forming part of Letters Patent No. 275,647, dated April 10, 1883.

Application filed August 21, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH T. HAINES, of Balbec, in the county of Jay and State of Indiana, have invented certain new and useful Improvements in Portable Elevators; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification, in which—

Figure 1 is a perspective view of my invention. Fig. 2 is a horizontal section of the same, and Fig. 3 a vertical section of a part thereof.

This invention relates to means by which a person can raise or lower himself for the purpose of painting the outside of buildings, gathering fruit, and for other purposes; and the nature of my invention consists in the employment of a movable frame, provided with a seat, suitable guides, and a windlass, a staff or standard, ropes and pulleys, an adjustable brace, and steady-guys, all being constructed in the manner which I will describe, and represent in the annexed drawings.

The letter A designates a straight staff or standard, which may be made of wood or metal, and which is T-shaped in cross-section, for the purpose of affording lightness and the requisite strength and rigidity.

B designates a carriage, which is designed as the elevator, and which consists of two cheek-pieces provided at their upper ends with clasps *a a* and at their lower ends with clasps *b b*. The upper clasps embrace the transverse part of the standard A, and are provided with anti-friction wheels *c c*, which bear against the back of the said transverse part. At the lower ends of the cheek-pieces of the carriage B is an anti-friction roller, *C'*, which bears against the front of the standard A.

C designates a seat for the operator, which is offset from but secured to the carriage, and D is a windlass, the shaft of which is provided with crank-handles, and also with a ratchet-wheel, *d*, with which latter engages a spring-actuated pawl, *e*, that can be released from

the ratchet-wheel by means of a cam, *f*, when the operator desires to descend.

E designates a rope or a chain, one end of which is firmly secured to the standard A, near its upper end. This rope is carried down and beneath a pulley, *g*, which is suitably attached to a transverse bar of the carriage B. From the pulley *g* the rope E is carried up over a pulley, *h*, and thence carried down and around the windlass D.

It will be seen that the operator, by turning the cranks of the windlass, can easily raise or depress the carriage D while he is mounted on the seat C thereof, and that by means of the pawl and ratchet he can safely secure the carriage at any desired point on the standard.

G designates a jointed brace composed of two jointed sections, the lower one of which is located near the foot of the standard A. The upper end of the upper section is beveled like the end of a pawl, and adjustably connected to the back rib of the standard by a jointed clasp, *j*, the free ends of which play in grooves *i*, made in the sides of said back rib. The edge of the rib is serrated at *k*, to receive the beveled nose of the upper section of the brace G when the same is properly adjusted.

To the sides of the standard A, at its upper end, I secure guy-ropes, made of wire, the opposite extremities of which have long spikes *n* secured to them for safely anchoring the ropes to the ground on opposite sides of the standard. After the standard has been erected against a tree or other object, and the guys are secured to the ground, the brace G is then adjusted so as to further tighten the guys and to prevent twisting while ascending or descending the standard.

At the upper end of the standard is secured a cross-head, *A'*, of suitable length, to the ends of which I attach, by means of toothed disks or otherwise, jointed folding arms *A² A²*.

When the elevator is used in barns, the guy-ropes, the brace, and the arms are not employed.

Having described my invention, I claim—

1. The combination of the standard, the carriage constructed and adapted to operate as described, the jointed back brace, and guy-ropes, all substantially in the manner and for
5 the purposes specified.

2. The combination of a jointed cross-head with the standard, the carriage thereon, the guys, and the jointed back brace, substantially in the manner and for the purposes de-
10 scribed.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

JOSEPH T. HAINES.

Witnesses:

SCOTT WALKER,
MORRIS TAMSETT.