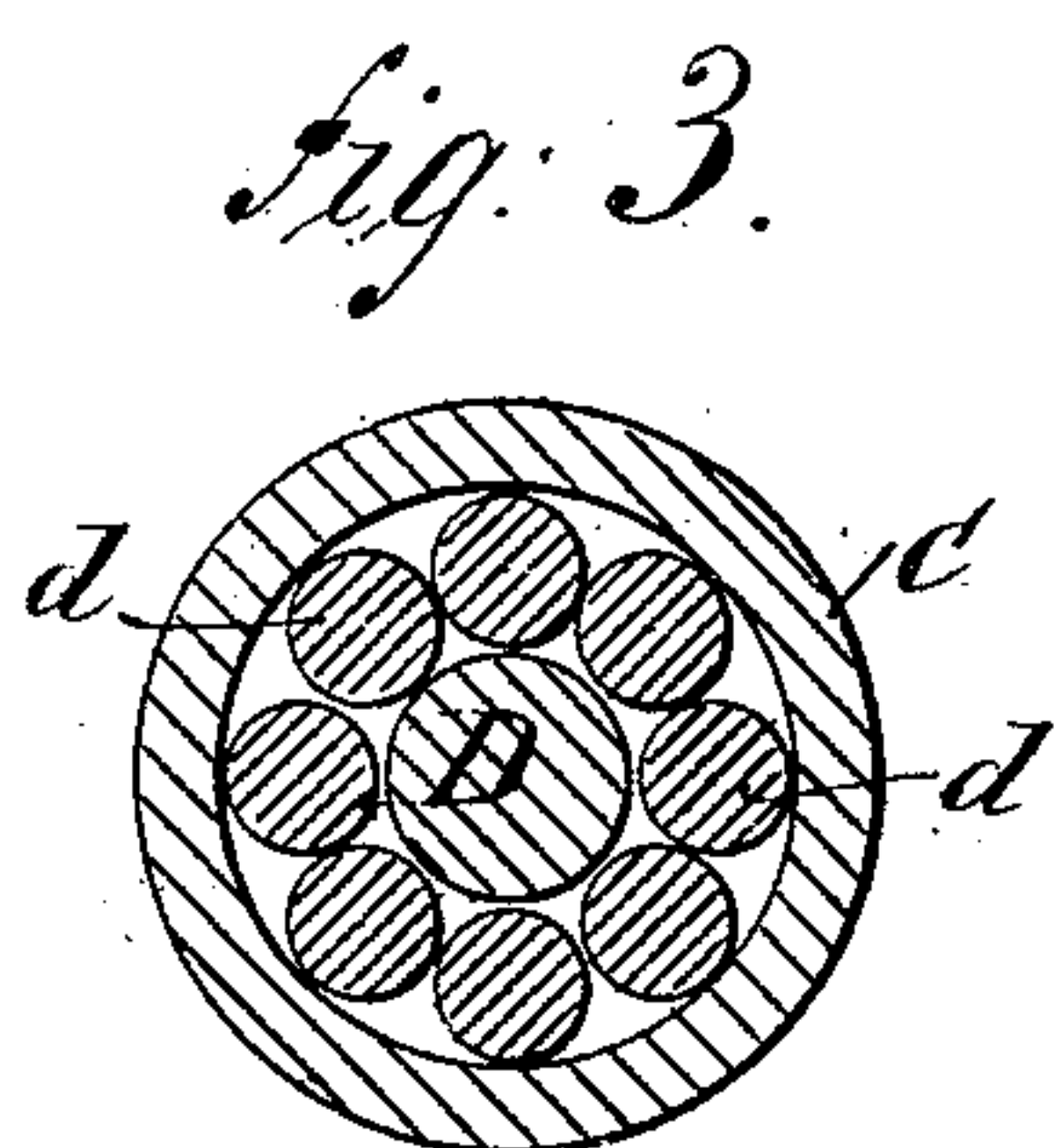
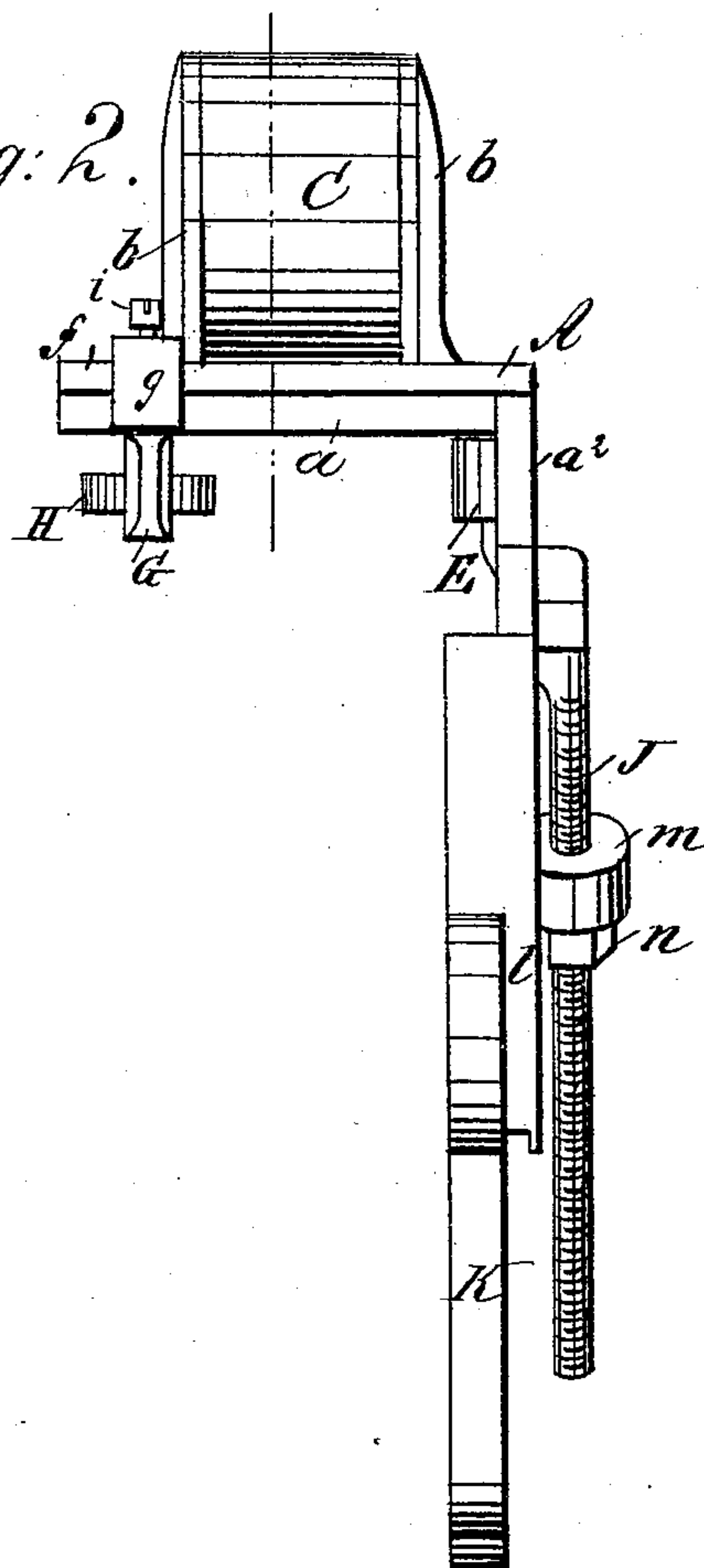
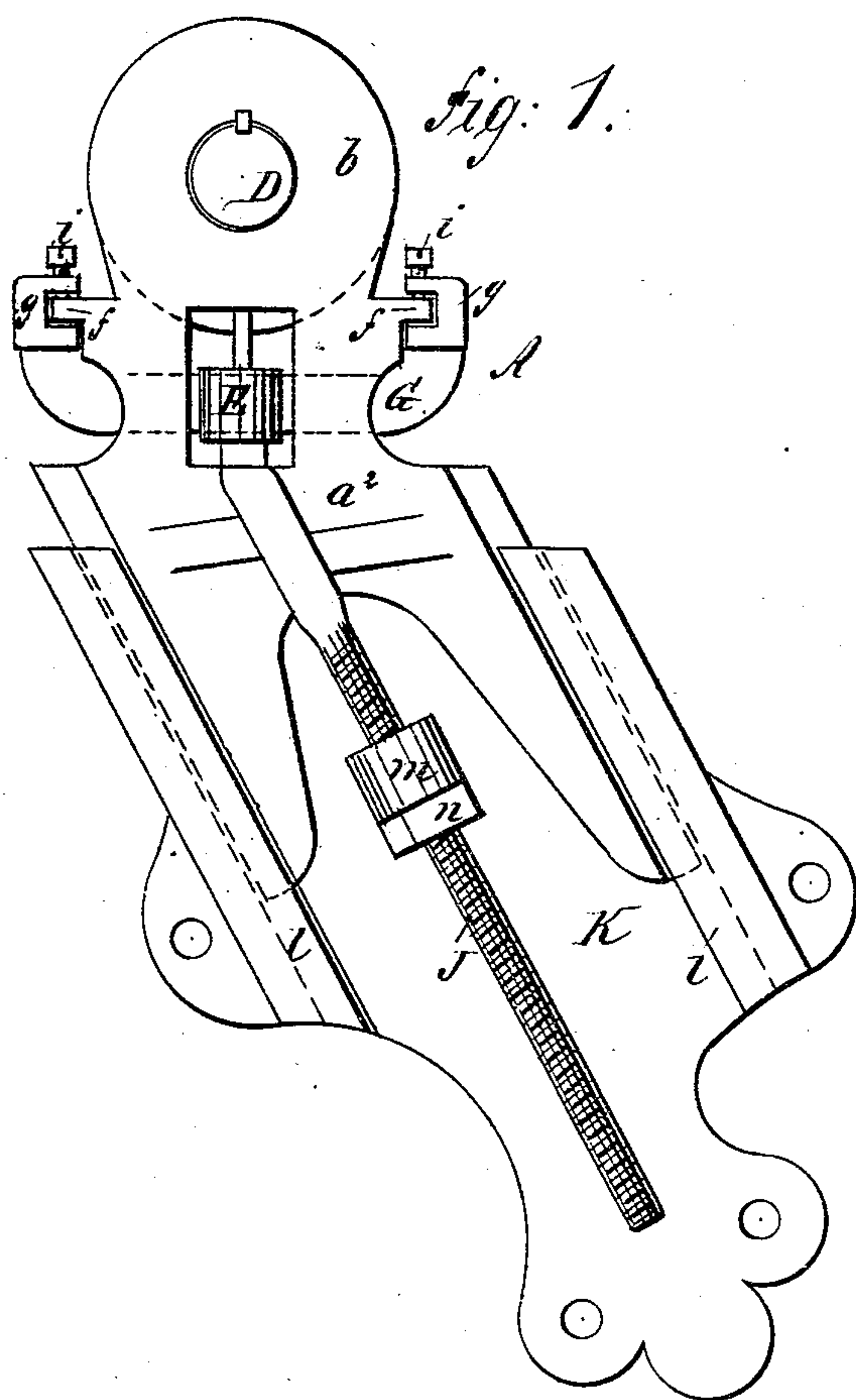


(Model.)

H. M. LANDERS.
Door Hanger.

No. 243,582.

Patented June 28, 1881.



WITNESSES:

A. Schehl.
C. Seagwick

INVENTOR:

H. M. Landers
BY *Mum Ho*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

HERBERT M. LANDERS, OF WHITNEY'S POINT, NEW YORK.

DOOR-HANGER.

SPECIFICATION forming part of Letters Patent No. 243,582, dated June 28, 1881.

Application filed March 31, 1881. (Model.)

To all whom it may concern:

Be it known that I, HERBERT M. LANDERS, of Whitney's Point, in the county of Broome and State of New York, have invented a new and useful Improvement in Door-Rollers, of which the following is a full, clear, and exact description.

My invention relates to devices which are more particularly intended for use in connection with barn-doors and other doors which are opened and closed by sliding instead of swinging on hinges.

The invention consists in a novel construction, arrangement, and combination of a roller rotating on a horizontal axis, two rollers rotating on vertical axes, an adjustable carrying-frame, a bracket attached to the door, and devices connected therewith whereby several advantages are obtained, as hereinafter more particularly described.

In the accompanying drawings, Figure 1 is a side view of an apparatus embodying my improvements. Fig. 2 is an edge view of the same. Fig. 3 is a transverse section of the main roller.

Similar letters of reference indicate corresponding parts.

A represents a frame or skeleton-plate, having its upper portion, *a*, horizontal, and its lower portion, *a*², vertical and inclined edgewise in a diagonal direction. From the ends of the horizontal portion *a* extend two vertical circular plates, *b*, which form bearings for the main or horizontal roller. This roller consists of a hollow cylinder, *C*, within which are a number of loose solid or friction rollers, *d*, arranged around a shaft or pin, *D*, having its ends fixed in the plates *b* and forming the axis of the roller. In the vertical portion *a*² of the plate *A* is journaled a vertical roller, *E*. The side edges of the horizontal portion *a* of the plate *A* are provided with ribs *f*, which engage with grooves in overhanging lugs *g*, at the ends of a curved bar, *G*, in which is journaled a vertical roller, *H*. The lugs *g* are provided with set-screws *i*, bearing on the upper surfaces of the ribs *f*. By this construction and arrangement of the three rollers the horizontal one sustains the weight of the door, and the two vertical ones bear against the sides of

the track or beam on which the horizontal one runs, and the sliding frame or bar *G* can be adjusted so as to regulate the distance between the vertical rollers *E* and *H*, according to the width of the track or beam.

The edges of the vertical portion *a*² of the plate *A* engage with grooves or overhanging flanges or ways *l* on a bracket or plate, *K*, adapted to be attached to the door by screws or bolts. From the lower end or edge of the portion *a*² extends a screw, *J*, which passes through a lug, *m*, on the plate or bracket *H*, and is held by a nut, *n*, below said lug. By this means the plate or hanger *A* may be allowed to slide in the ways *l*, so as to adjust the height of the door, as may be desired, and by arranging the parts diagonally the strain on the screw *J*, nut *n*, and lug *m* are less than if the parts were arranged vertically.

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

1. The combination, with a hanger, *A*, constructed as herein described, of a vertical roller, *H*, and adjustable horizontally-sliding carrying-frame *G*, substantially as and for the purpose herein described.

2. The combination, with a hanger, *A*, and a horizontal roller, *C*, of vertical rollers *E* and *H*, arranged to bear against the sides of the track or beam and adapted to be adjusted to correspond with the width thereof, substantially as herein described.

3. The combination, with the hanger *A*, having its horizontal portion *a* provided with rib *f*, of the curved bar or hanger *G*, carrying the vertical roller *H*, and provided with the grooved overhanging lugs *g* and set-screws *i*, for engagement with said ribs, substantially as and for the purpose herein described.

4. The combination, with the hanger *A*, having its vertical portion *a*² inclined diagonally edgewise, and provided with the screw *J* and nut *n*, of the plate or bracket *K*, provided with the grooved or overhanging ways *l* and lug *m*, substantially as and for the purposes herein described.

HERBERT MOREL LANDERS.

Witnesses:

PHILO LANDERS,
STEPHEN U. STONE.