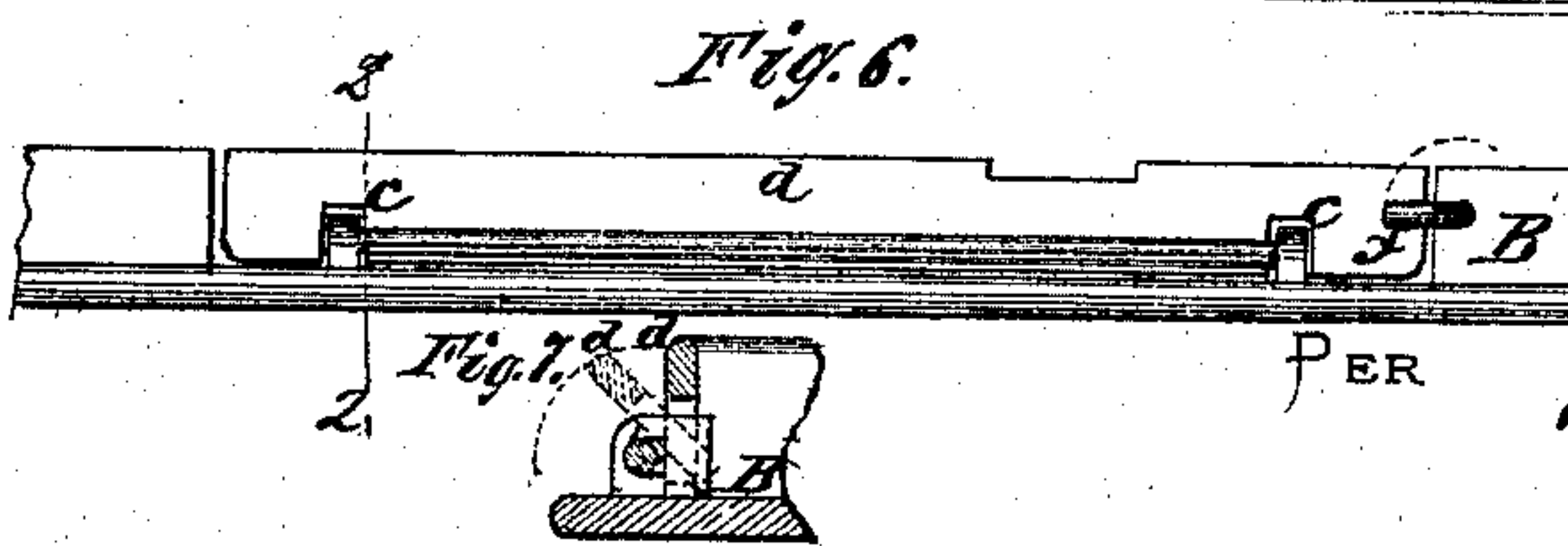
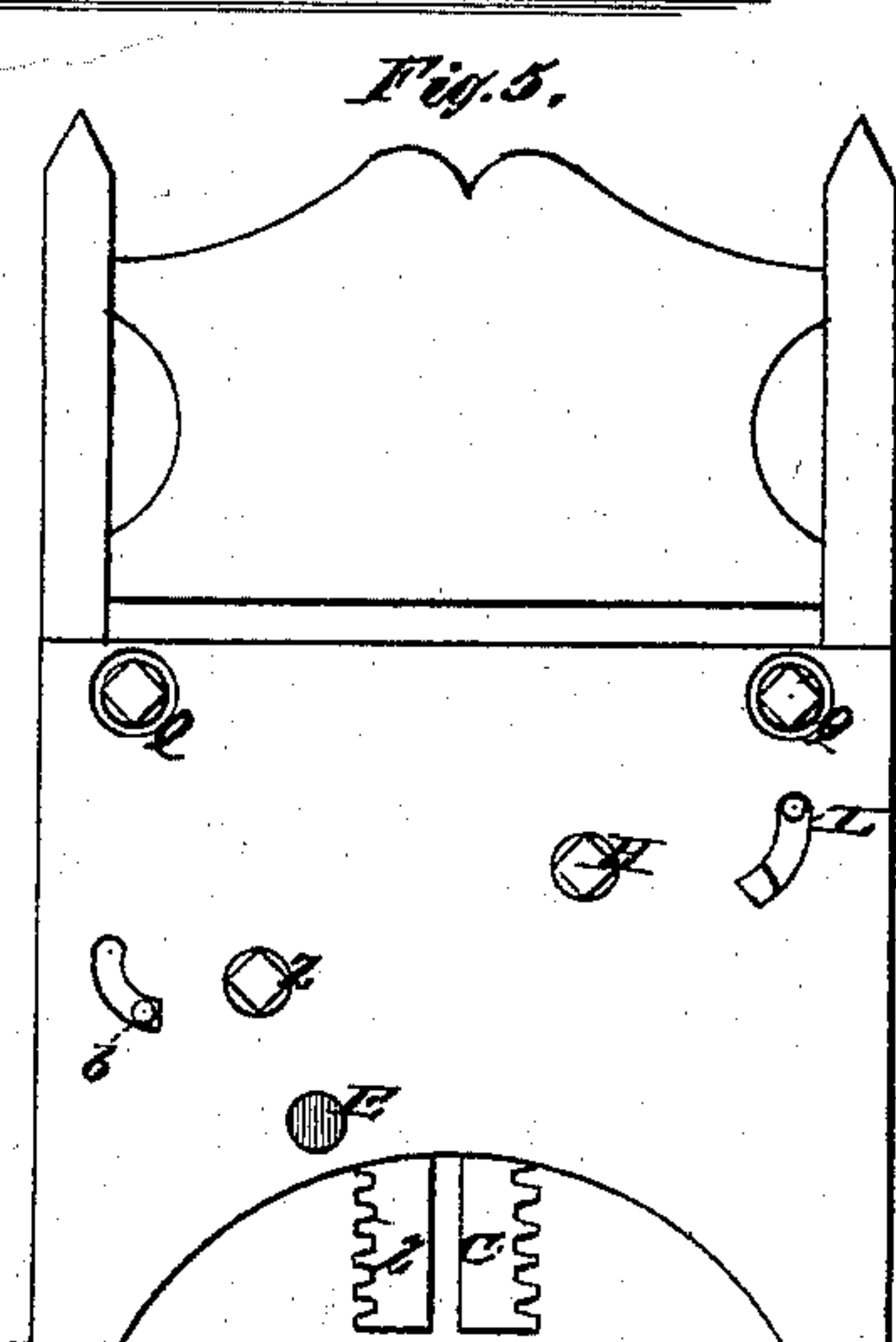
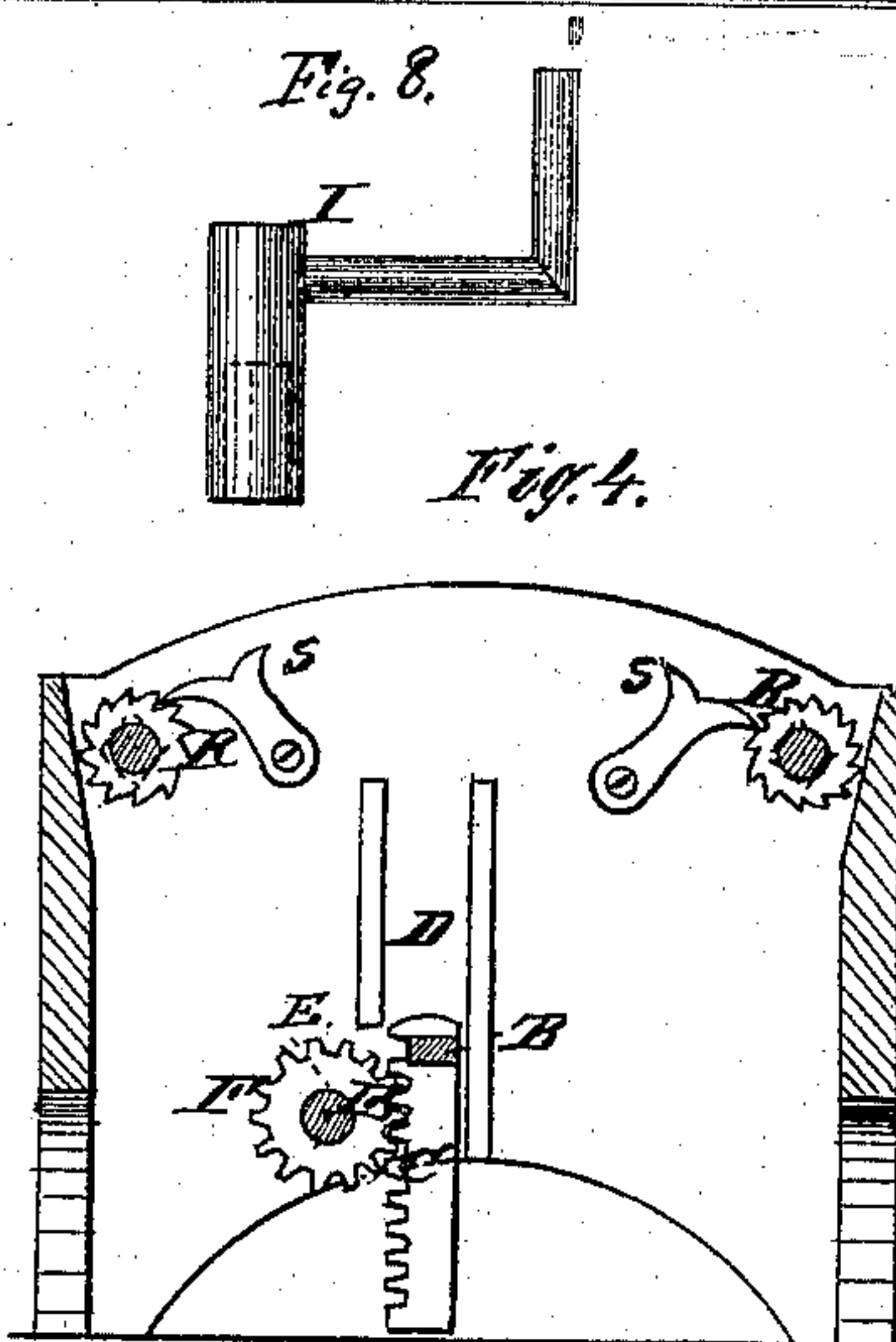
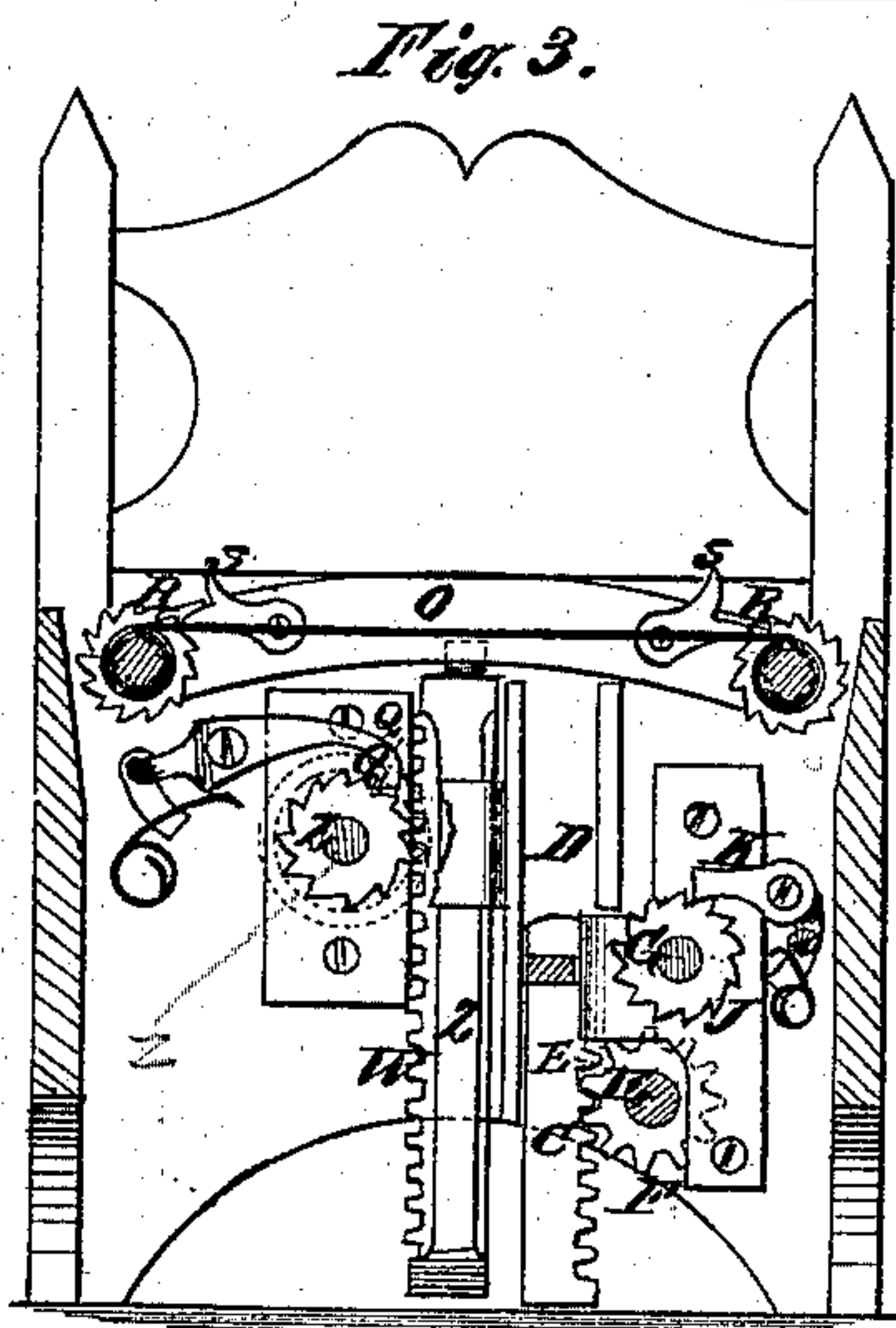
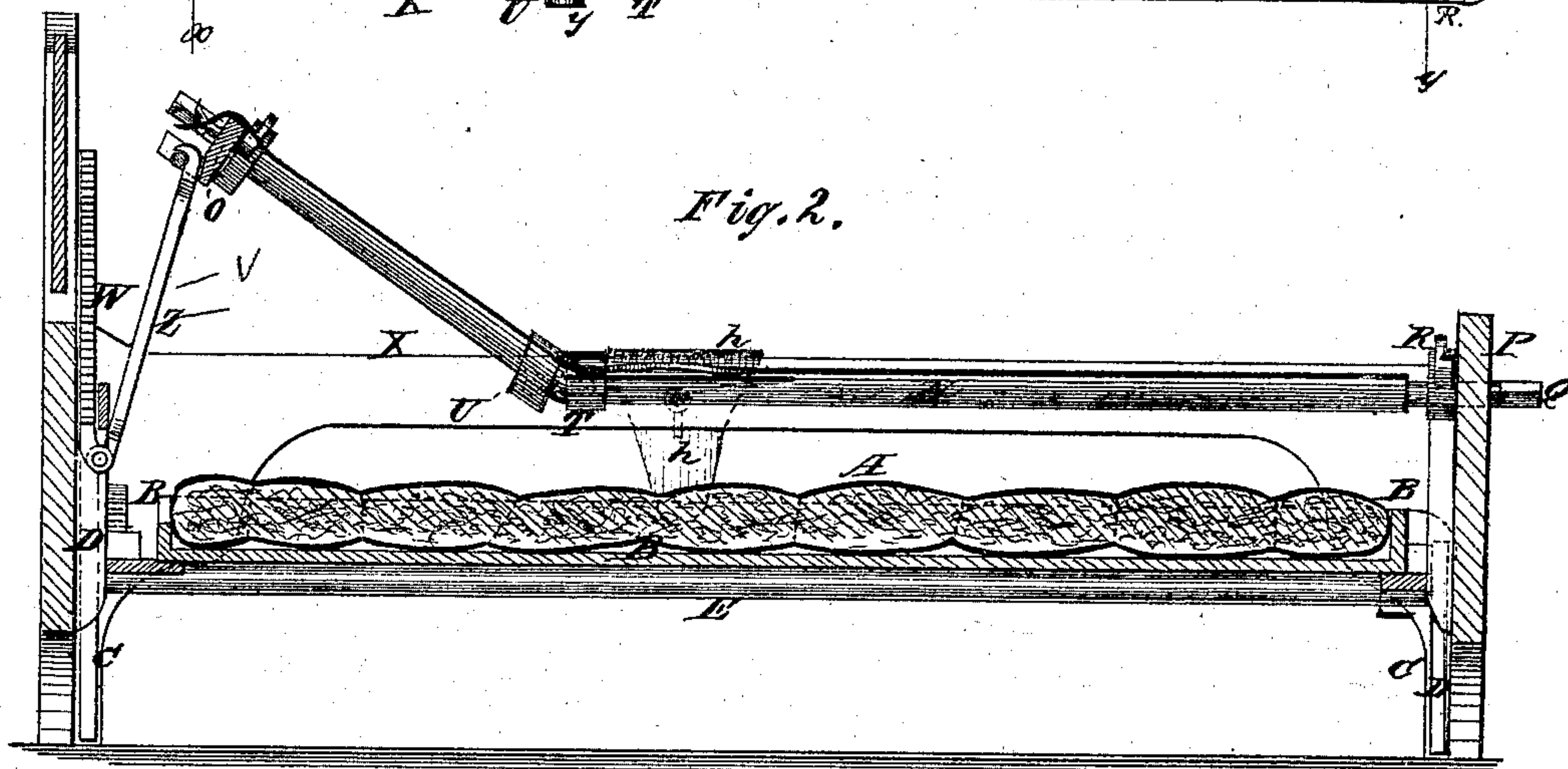
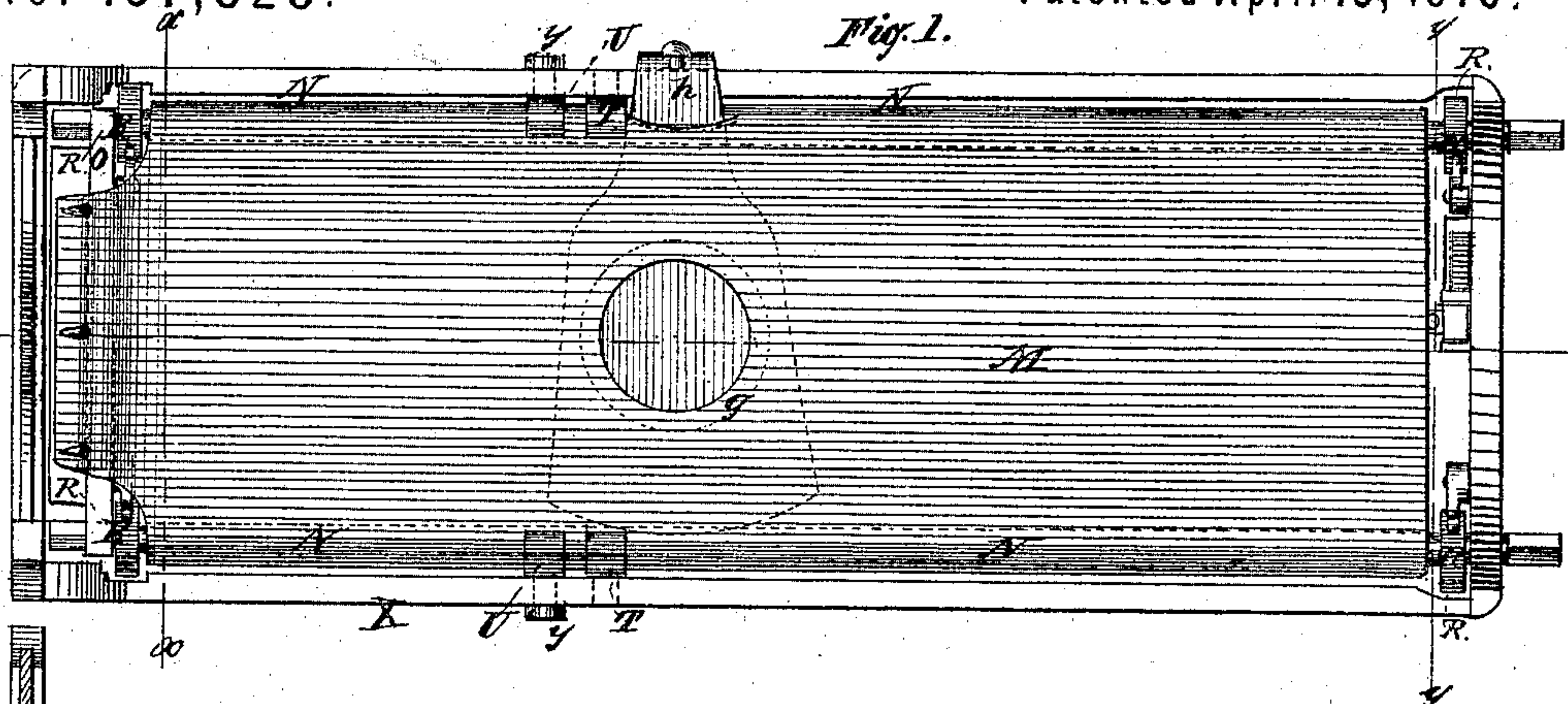


O. G. COSBY.
Invalids' Bedsteads.

No. 137,828.

Patented April 15, 1873.



Witnesses:
P. B. Gietenich
C. D. S. Quick

Inventor:
O. G. Cosby
Miner
Attorneys

UNITED STATES PATENT OFFICE.

OSCAR G. COSBY, OF RICHMOND, VIRGINIA.

IMPROVEMENT IN INVALID-BEDSTEADS.

Specification forming part of Letters Patent No. 137,828, dated April 15, 1873; application filed February 21, 1873.

To all whom it may concern:

Be it known that I, OSCAR G. COSBY, of Richmond, in the county of Henrico and State of Virginia, have invented a new and Improved Invalid-Bedstead, of which the following is a specification:

My invention consists of a bed with canvas above the mattress on rollers extending from head to foot, one on each side, so arranged as to stretch the canvas tight and hold the patient on it; while the mattress and its frame, which are suitably arranged and provided with devices for lowering it, are lowered to allow a vessel to be presented under the mattress. The rollers are jointed near the head, and provided with devices for raising and lowering that portion to support the patient in a sitting or reclining position. Gears and cranks are employed to raise and lower the mattress and its frame, also the head portion of the canvas and the rollers on which it is stretched, and ratchets and holding pawls are used to hold them in position. Ratchets and pawls are also used with the rollers for stretching the canvas, and a crank is employed for turning them so as to facilitate the stretching and releasing of it.

Figure 1 is a plan view of my improved invalid-bed. Fig. 2 is a longitudinal sectional elevation. Fig. 3 is a transverse section taken on the line *xx*, Fig. 1. Fig. 4 is a transverse section taken on the line *yy*. Fig. 5 is an end elevation. Fig. 6 is a detail of one of the sides. Fig. 7 is a cross-section of Fig. 6 on the line *zz*; and Fig. 8 is a side view of the key for turning the rollers for stretching the canvas, and the gears for elevating and lowering the bed.

The mattress A is supported on a frame, B, which is mounted at each end on a vertical-toothed bar, C, which is capable of ascending and descending in a vertical way, D, on the ends of the bedstead. These bars gear by pinions F with a shaft, E, which extends from end to end of the bedstead, and one end of this shaft gears with a shut shaft, G, which extends through to the outside and is fitted at H for the application of a wrench, I, for turning it. At the inside of the bedstead it has a ratchet, J, and a pawl, K, by which to hold the mattress up when re-

quired. This pawl has a cranked extension, L, projecting through a slot in the bedstead, to be used in lifting it to disengage the ratchet when it is desired to lower the mattress. M represents the canvas sheet above the mattress, and N the rollers on which it is stretched; said rollers are arranged along each side of the bed and journaled in the cross-bar O, at the head, and in the foot-board P at the other end; they project through the end at Q for the application of the wrench, and they have ratchets and pawls R at both ends for holding them. These pawls can be reached for lifting out of the wheels by the finger-pieces S. The rollers are made in two sections, which meet between the bearings T and U to allow the head portion of the canvas to be elevated, as represented in Fig. 2, for which the cross-bar is connected by a rod, V, with a vertical slide, W; and the bearings U are swiveled to the sides X of the bedstead, as seen at *q*. The slide W is geared with the shaft Z, to be turned by the crank for raising and lowering it, and for holding it at any point by the ratchet and pawl *a*. This pawl has a cranked extension, *b*, extending through a slot in the bedstead to be manipulated. *d* represents a door in one side of the frame B, which supports the mattress to be let down on its hinges *e* to facilitate the putting the mattress in under the canvas and taking it out; it is held up in position by a button, *f*, or any other suitable fastening. G represents a large hole through the canvas, near about the middle, through which to pass the evacuations of the patient and administer treatment. *h* is a wide strap of canvas attached to the canvas M at one side, and stretching across under it to the other side, and over one of the rollers suitably for holding a vessel up to the hole *g* for receiving the evacuation.

It will be seen that the mattress can be easily and quickly lowered away from the canvas, leaving the patient thereon, so that a vessel can be presented for his needs and for the protection of the bed, and all labor and distress incidental to the patient in an ordinary bed, on these occasions, avoided. Moreover, the patient can be supported on the canvas at any time in hot weather for cooling

and airing him and the bed, and changing the latter. Other obvious advantages will be readily perceived. The tension of the canvas will be relaxed when the mattress is raised, to allow the patient to rest safely on the bed.

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

The frame B mounted at each end in a ver-

tical-toothed slide, and the canvas M having jointed rollers combined with mechanism, substantially as described, and for the purpose set forth.

OSCAR G. COSBY.

Witnesses:

W. GODDIN,
E. R. ISBELL.