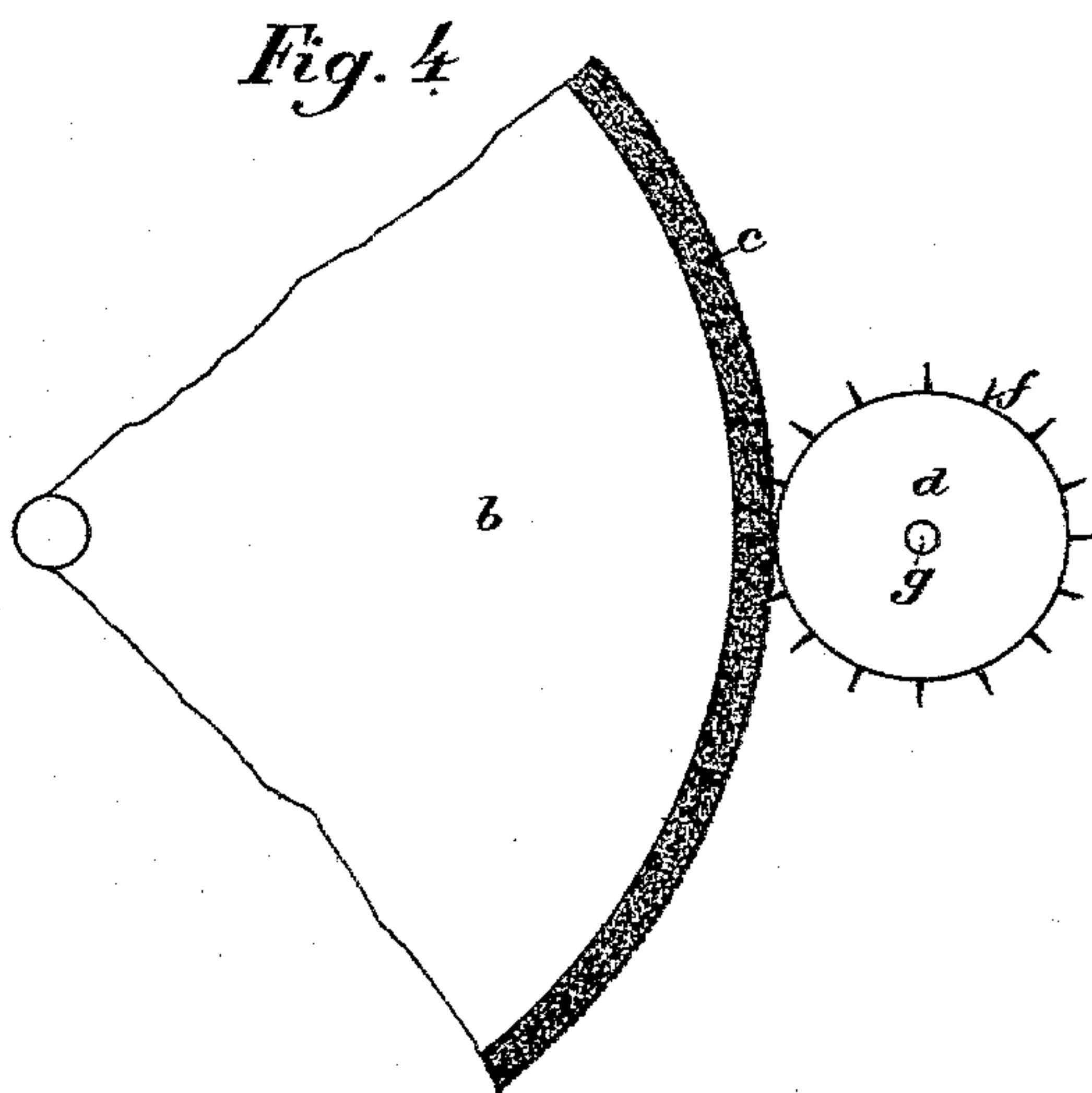
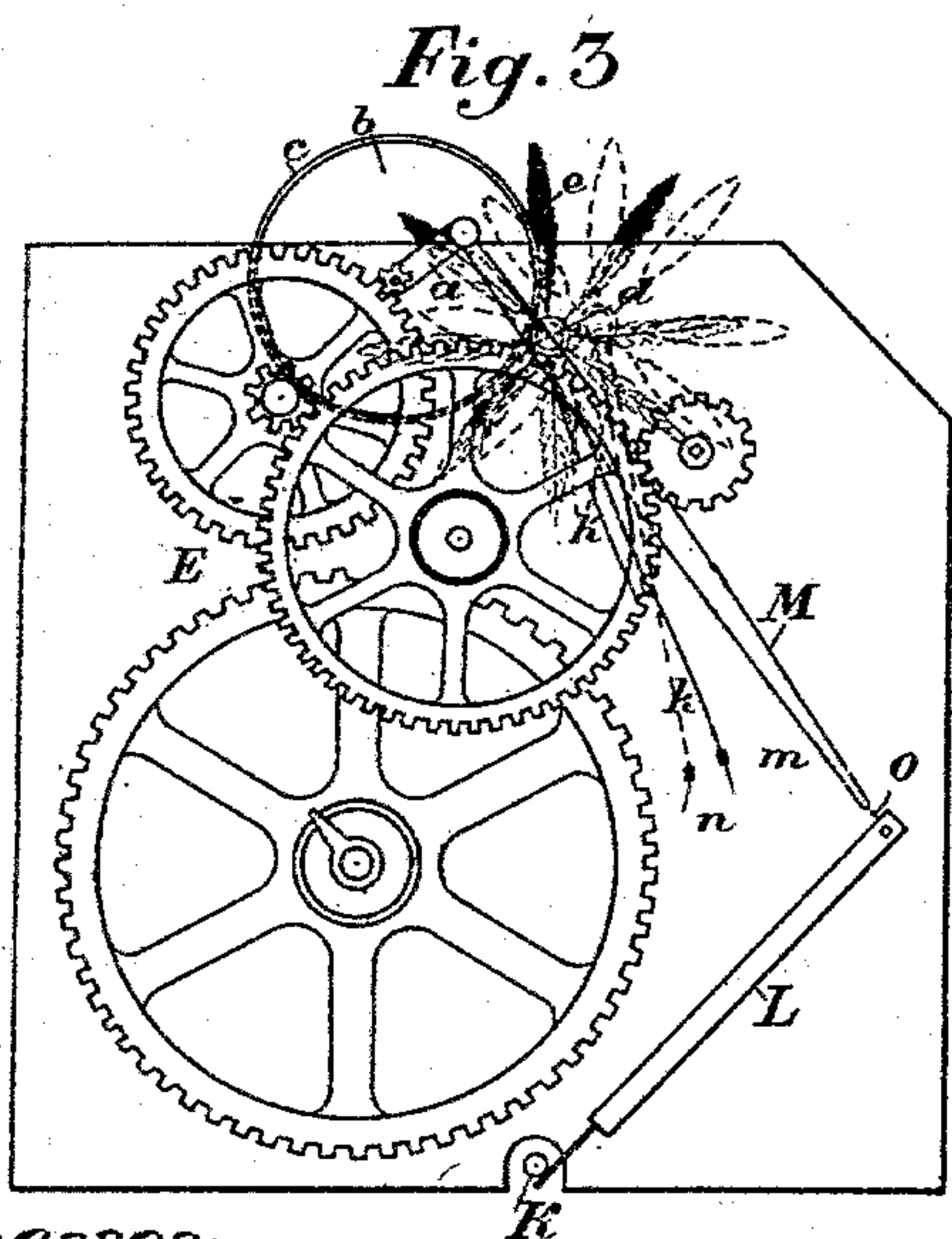
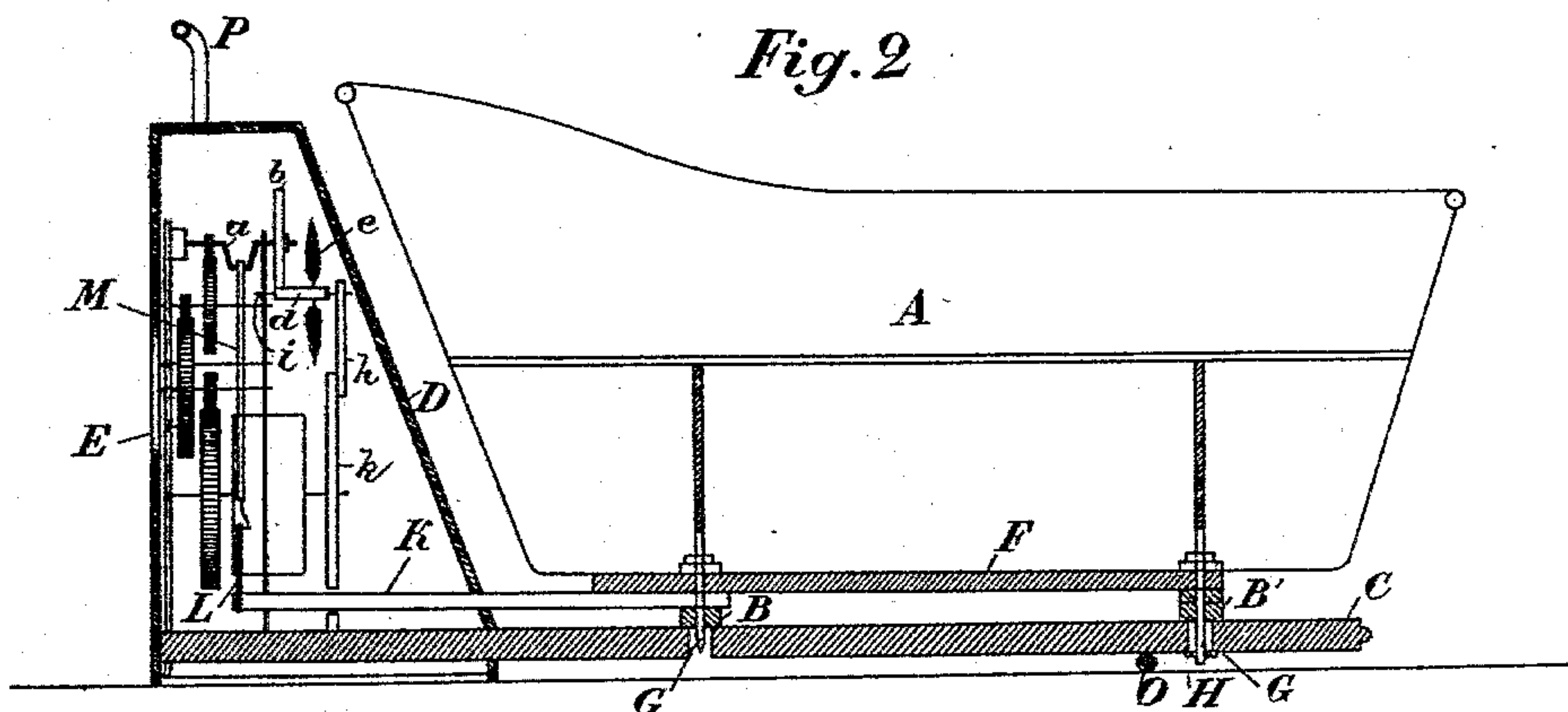
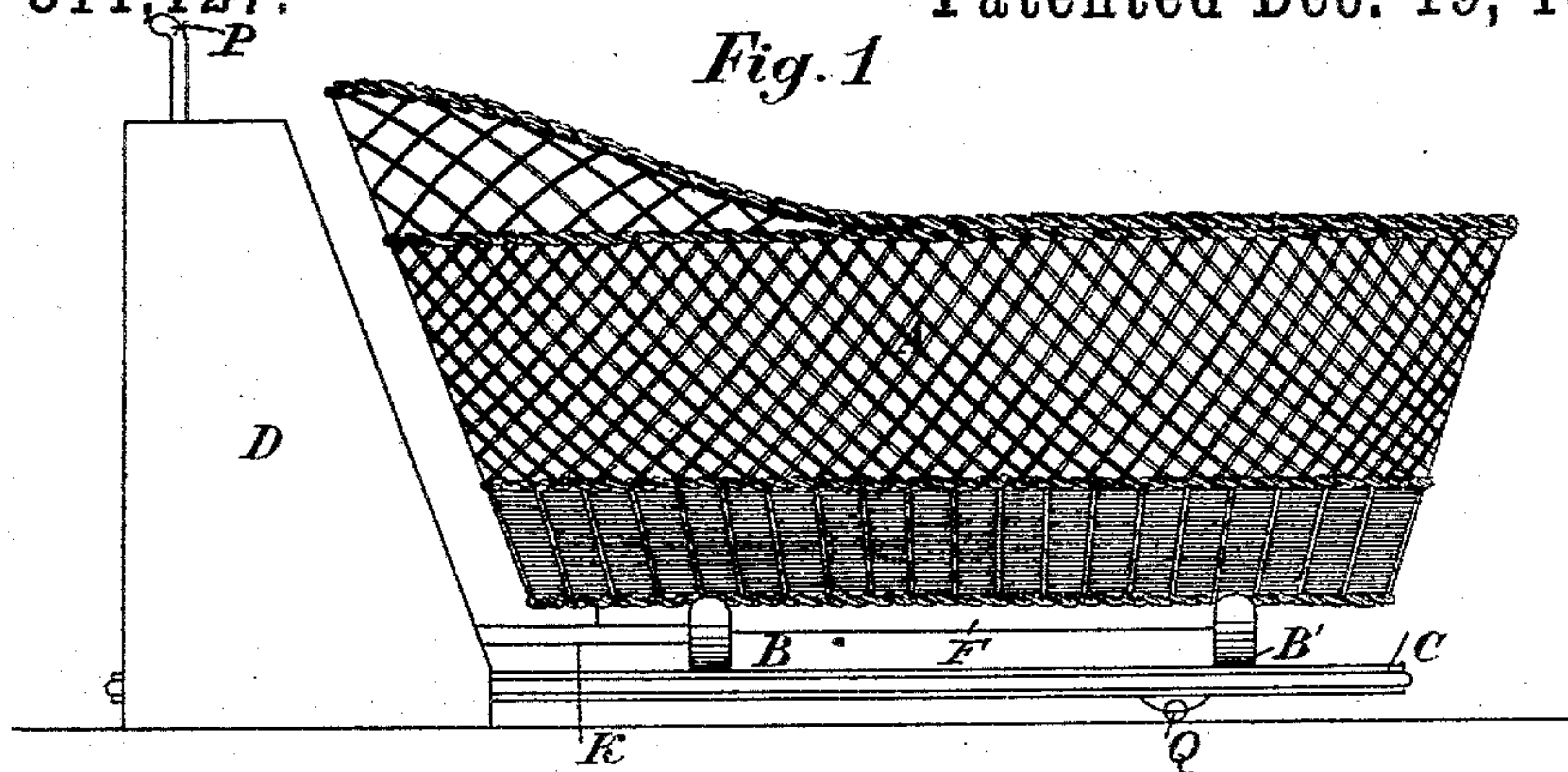


(No Model.)

G. DENEGRİ.
AUTOMATIC CRADLE.

No. 511,127.

Patented Dec. 19, 1893.



Witnesses:

J. B. McGinn.
Richard H. Dyer.

Inventor:

Giambattista Denegri

By, Frank L. Dyer, Attorney

UNITED STATES PATENT OFFICE.

GIAMBATTISTA DENEGRİ, OF ZOAGLI, ITALY.

AUTOMATIC CRADLE.

SPECIFICATION forming part of Letters Patent No. 511,127, dated December 19, 1893.

Application filed August 15, 1893. Serial No. 483,206. (No model.) Patented in Italy June 28, 1893, No. 34,348.

To all whom it may concern:

Be it known that I, GIAMBATTISTA DENEGRİ, of San Pietro di Rovereto, Zoagli, near Chiavari, in the Kingdom of Italy, have invented a new and Improved Automatic Cradle, (for which I have obtained a patent in the Kingdom of Italy, No. 34,348, dated June 28, 1893,) of which the following is a full and exact specification.

My invention relates to a cradle, the rocking movements of which are produced by a clock-work actuated by a spring.

The objects of my invention are to produce such a cradle which can be manufactured very cheaply, which will be noiseless and efficient in action, and which will be simple and compact in construction.

The particular features of novelty in my said improvement will be more fully herein-after explained, and are illustrated in the accompanying drawings forming a part hereof, and to which attention is directed.

Figure 1 represents a side view of the improved cradle. Fig. 2 is a longitudinal section of the same. Figs. 3 and 4, are details, of the clock-work.

In all of the above views corresponding parts are designated by the same letters of reference.

The ordinary cradle A, with its feet B B' forming an arc of a circle, is placed upon a wooden base C, which terminates at the rear end of the cradle in a wooden box D, containing the clock-work mechanism E, for actuating the cradle. A plate F, directly beneath the bottom of the cradle A, forms a rigid connection between the two feet B B'. Each of these feet is traversed by a guide pin G which is extended into an opening in the base C, where it is provided with a pin H, passing through the same. The guide pins G are placed so that, while preventing the cradle from being displaced relatively to the base C, they enable it to make the necessary rocking movement. To the foot B is rigidly fixed a wooden shaft K which, extending to the rear, traverses the side of the box B and passes into the interior, where it carries at its end an arm L at a right angle to it. This arm L is made for its main portion of wood, but the extremity which is fixed to the shaft K is made

preferably of metal and at the other extremity it is secured to the connecting rod M, by means of the leaf spring o, which does away with the necessity of a pivot. The upper end of the rod M engages with the crank portion of the drive shaft a, which in turning will impart a reciprocating movement to the rods M and L, causing the shaft K, to partially rotate, back and forth, and giving to the cradle the desired rocking motions as will be understood.

The clock-work may be of the ordinary kind, but in order to render its movement as silent as possible I employ a governor of special form. To the extremity of the cranked shaft a is fixed a wooden disk b covered at its circumference with cloth c, Fig. 4. This disk turns a wooden shaft d, to which are secured feathers e of fowls or other birds which extend radially so as to constitute the governor. At the part where the shaft d is in contact with the disk b it is provided with pins f, which engage with the cloth c, and serve to insure the transmission of power. One end of the shaft g, engages, at i, in the frame-work of the clock-work mechanism. The other end is carried by a supporting rod h, which is supported by a leaf spring k. When the pins f, are to engage with the cloth covered surface of the disk b, this leaf spring k, is to be held within a slotted support m, so as to be under tension, and effect the proper engagement. When, however, it is necessary to allow the clock-work mechanism to run down rapidly, the said leaf spring k, is to be shifted to a second slotted holder n, so as to not be under tension, thereby throwing the pins f, out of engagement with the disk b. Upon the box D inclosing the mechanism is placed a handle P, and below the plate C a roller Q, which serve for enabling the automatic cradle to be easily moved about.

When the spring of the clock-work has once been wound up, or put under tension, it will be sufficient to push the cradle with the hand, in order to give it the automatic rocking movement to start it, and in like manner, if this movement is to be discontinued, it will be enough to stop the cradle for a moment by hand.

Having now described and ascertained the nature of my said invention and in what man-

ner the same is to be performed, I declare that what I claim is—

In an automatic cradle, the combination with the cradle A; of clock-work mechanism 5 connected with the same, the disk *b*, mounted on the drive shaft *a*, of such clock-work mechanism, and provided with cloth *c* on its periphery, the shaft *g*, rigidly mounted at one end, and movably mounted at the other end 10 in a support *h*, a leaf spring *k*, carrying said

support *h*, and slotted supporting studs *m* and *n*, for said leaf spring *k*, said shaft *g*, carrying pins *f*, engaging with the cloth *c*, on the disk *b*, substantially as described.

In witness whereof I have signed this specification in presence of two witnesses. 15

GIAMBATTISTA DENEGRİ.

Witnesses:

G. B. ZAUARDT,

G. B. BORTOLUZZI.