

C. HOLTZ.
Self-Rocking Cradles.

No. 139,247.

Patented May 27, 1873.

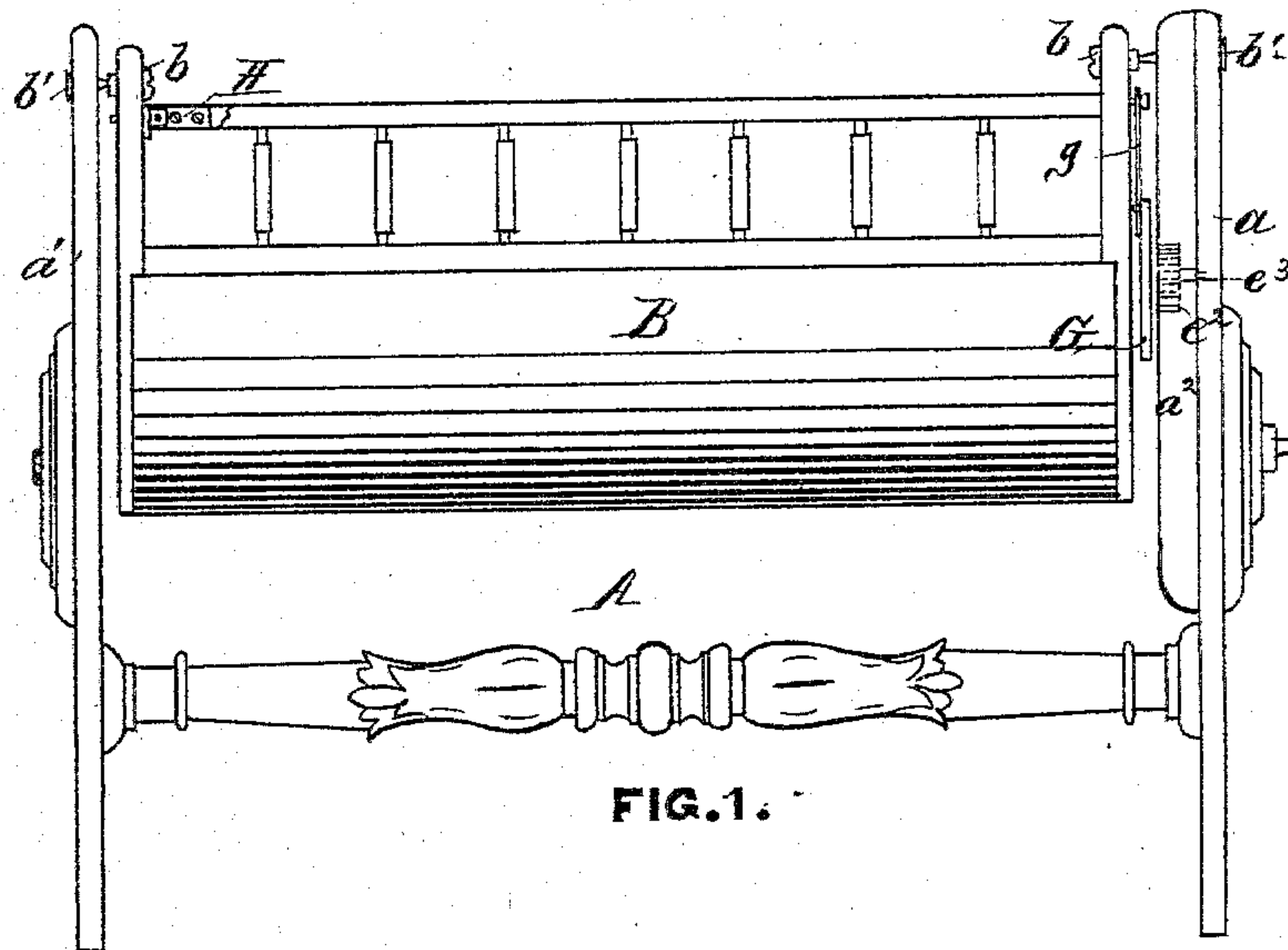


FIG. 1.

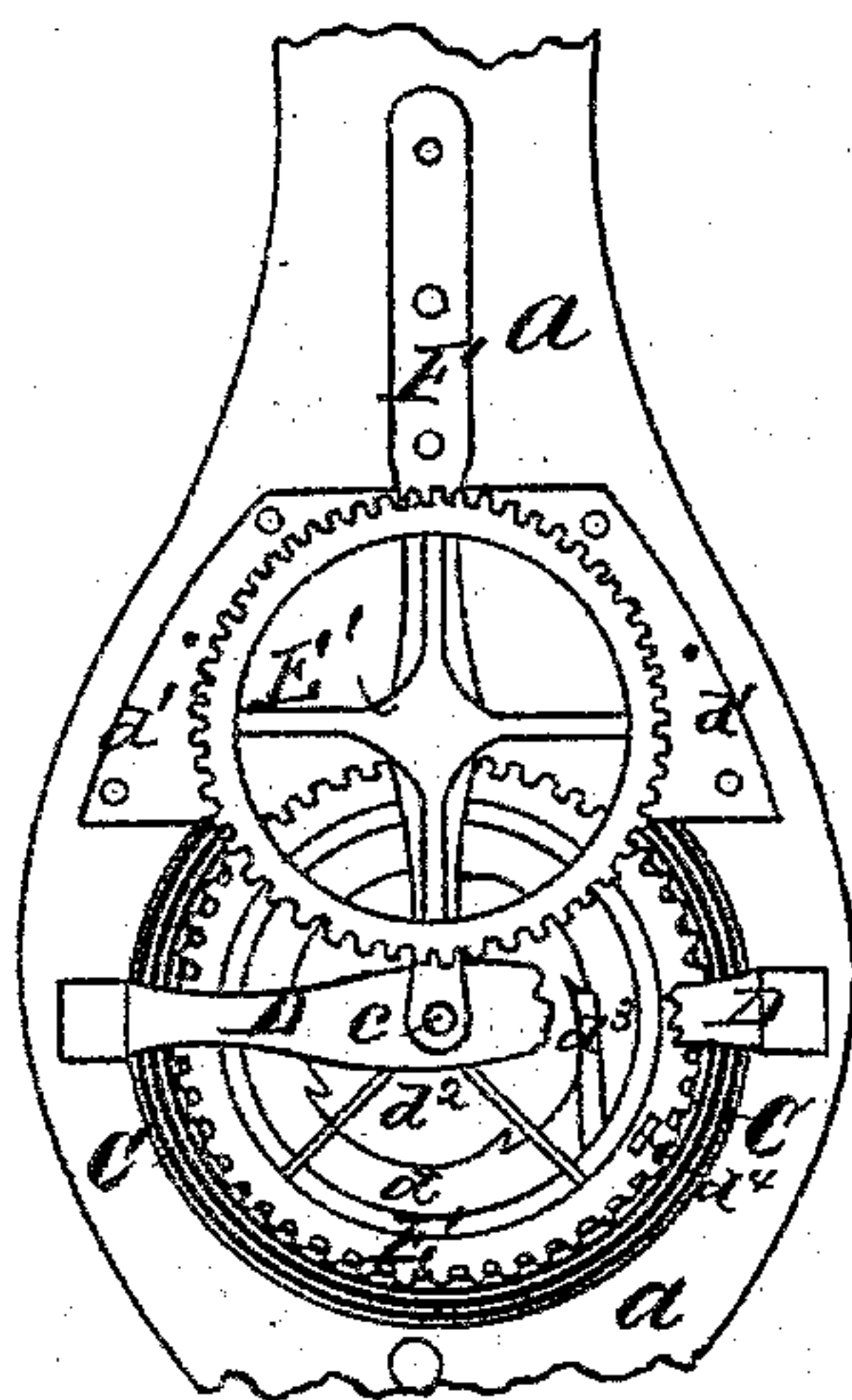


FIG. 2.

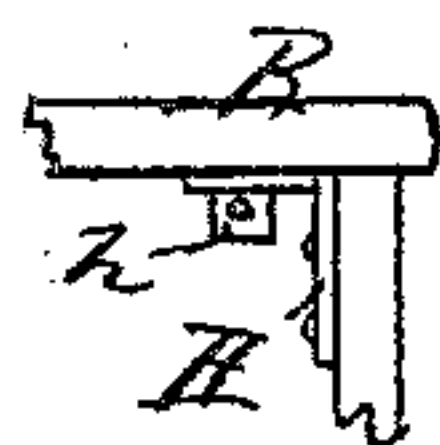


FIG. 4.

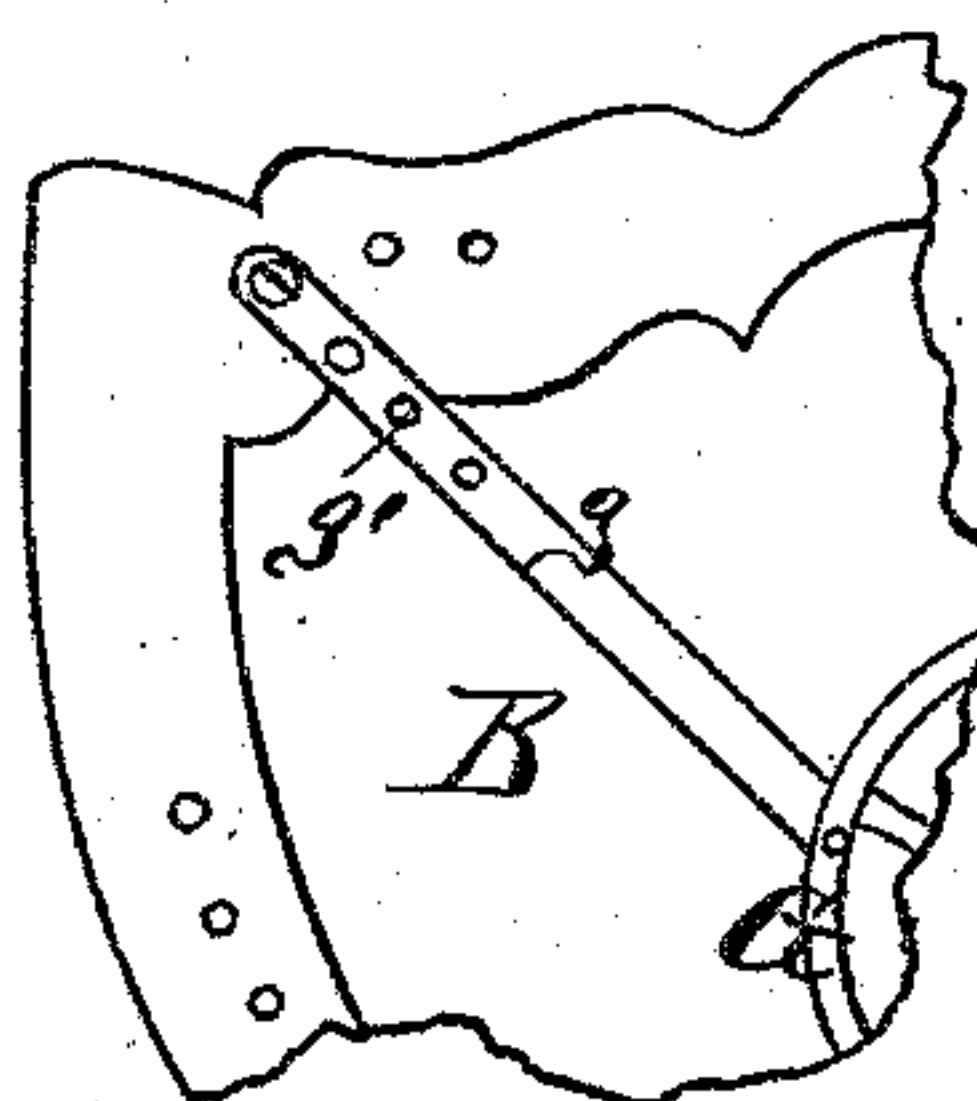


FIG. 5.

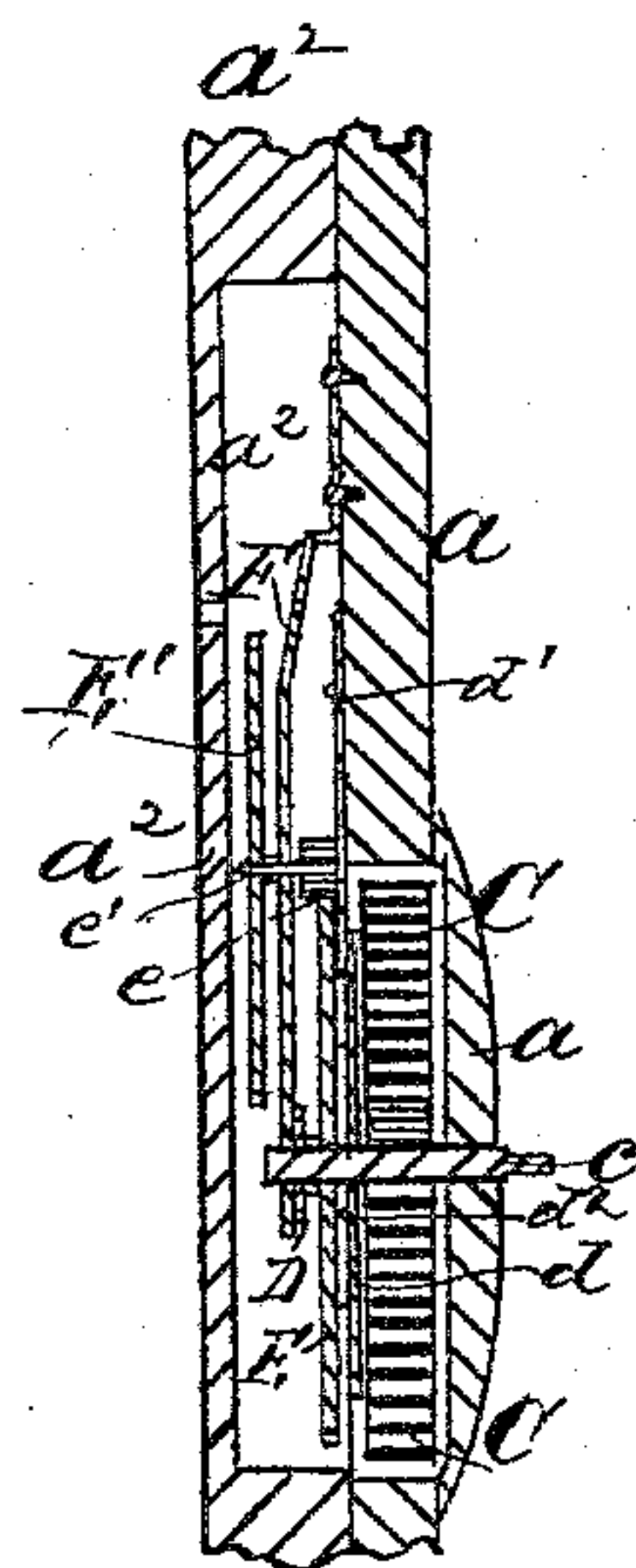


FIG. 3.

WITNESSES:

Jos. B. Soesse.

Charles Meisner.

INVENTOR:

Carl Holtz
per.
Herthel & Co

Attys.

UNITED STATES PATENT OFFICE.

CARL HOLTZ, OF ST. LOUIS, MISSOURI, ASSIGNOR TO JOHN H. VORNBROCK,
OF SAME PLACE.

IMPROVEMENT IN SELF-ROCKING CRADLES.

Specification forming part of Letters Patent No. 139,247, dated May 27, 1873; application filed
November 15, 1872.

To all whom it may concern:

Be it known that I, CARL HOLTZ, of St. Louis, county of St. Louis and State of Missouri, have made a certain new and useful Improved Self-Rocking Cradle; and I do hereby declare that the following is a full and true description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon.

The nature of this invention consists chiefly in a peculiar combination of spring and gearing devices, automatically operated like clock-work, so as to operate a crank or wheel and arm, to actuate the cradle proper, and impart thereto the required oscillating movement.

To enable those skilled in the art to make and use my said improvements, I will now more fully describe the same, referring to—

Figure 1 as a side elevation; to Fig. 2 as a face elevation, showing mechanism contained in part of the standard of cradle-frame; Fig. 3 being a sectional elevation through same parts shown in Fig. 2; Fig. 4 being a detail plan of angle-braces uniting corners of cradle; and to Fig. 5 as a detail elevation of side of cradle, showing adjustability of the connecting-arm.

A represents the cradle-frame, consisting of the standards a a^1 , formed with spreading legs, and connected as usual. B is the cradle proper. The cradle B, as well as its supporting-frame A, can be of any desired ornamental design. The top of the cradle sides I provide with pivot-bearings b , in which are fitted to turn the respective pivots b^1 , which are provided near top of the standards a a^1 of cradle-frame, as shown in Fig. 1. The cradle B is thus sufficiently supported in the cradle-frame A, in a pivoted manner, so as to be rocked with the greatest ease. In order that the rocking of the cradle can be automatically performed, I have provided the standard a with the following clock-work: The standard a is first suitably mortised or hollowed to contain the greater part of the mechanism; therefore, within the hollow of the standard a is arranged a suitable coil-spring, C, one end of which is secured to the key-shaft c , the other end being properly se-

cured to said standard. The shank of the key-shaft c projects outside of the standard a , while the inner end of said shaft is supported to turn in a transverse bracket, P, which is secured to standard a . (See Figs. 2 and 3.) The key-shaft c carries a circular plate, d , the object of which is to retain the coil-spring C in operative position, d^1 being a plate secured to the face of standard a for the same purpose. Alongside of the circular plate d (or shaft c) is a ratchet-wheel, d^2 ; engaging said ratchet-wheel is a pawl, d^3 , which is pressed down for this purpose by a spring, d^4 , both said pawl and spring being secured to the main spur-gear wheel E, clearly shown in Figs. 2 and 3. The operator, by means of a suitable key, turns the shaft c and winds the spring C, which acts as a motor to the spur-gear E. The rotary motion thus achieved is communicated by the gear-wheel E to a pinion, e , and center spur-gear E' , which are on shaft e^1 , arranged to turn in a vertical bracket, F, and as shown in Figs. 2 and 3. The rotary motion thus achieved is further communicated by the center spur-gear E' to a pinion, e^2 , which is on the upper shaft e^3 ; said shaft having its journals supported to turn in the bracket F, and the standard part a^2 . (See dotted lines, Fig. 1.) The clock-work mechanism is thus supported and contained in the standard a , while the additional standard part a^2 is provided and suitably mortised as to entirely incase said mechanism from view. To convert the rotary motion achieved to the required oscillating movement to operate the cradle B, the top shaft e^3 is provided with a wheel or crank, G, and this connected by an arm, g , to the side of the cradle. (See Figs. 1 and 5.) Further, to regulate the rocking motion of the cradle, the arm g has a series of holes, g' , so as to be adjustably secured to various holes with which the side of the cradle is provided. (See Fig. 5.) A greater or less oscillation of the cradle is thus achieved. The wheel-work will run a long time, and after starting requires no attention. The corners of the cradle B are united by an angle-brace, H, and secured by screws h . The object of thus securing the corners of the cradle is to obviate the neces-

sity of glueing or otherwise fastening the detail frame-rail parts of cradle.

An improved cradle is thus formed, cheap in manufacture, construction, and for use.

Having thus fully described my said improvement, what I claim is—

The combination of the arm *g*, crank or wheel *G*, clock-work mechanism herein shown and described, standard parts *a* *a*¹ *a*², angle-

braces *H*, and pivoted cradle *B*, all constructed and arranged to operate as set forth.

In testimony of said invention I have hereunto set my hand.

CARL HOLTZ.

Witnesses:

WILLIAM W. HERTHEL,
CHARLES MEISNER.