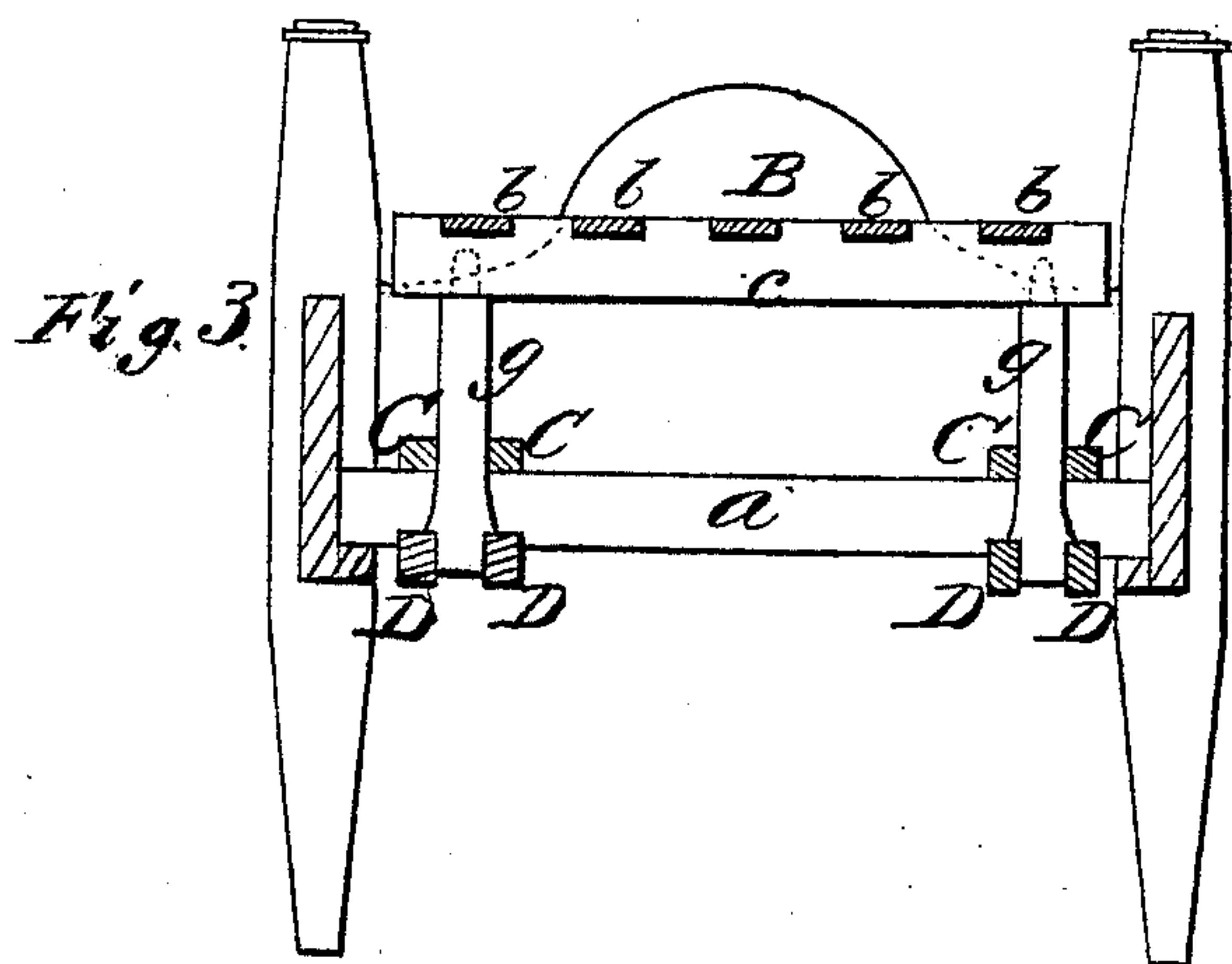
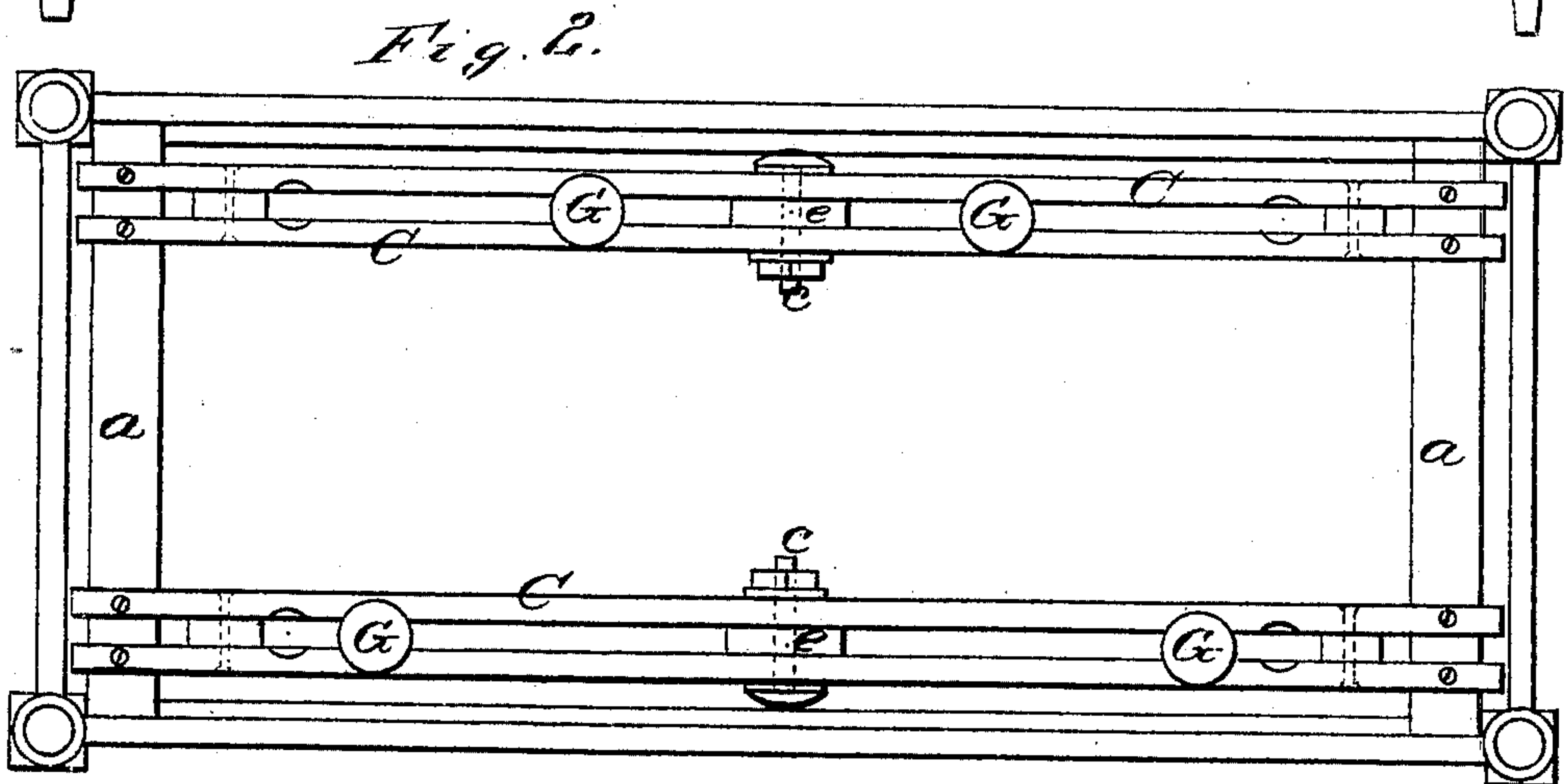
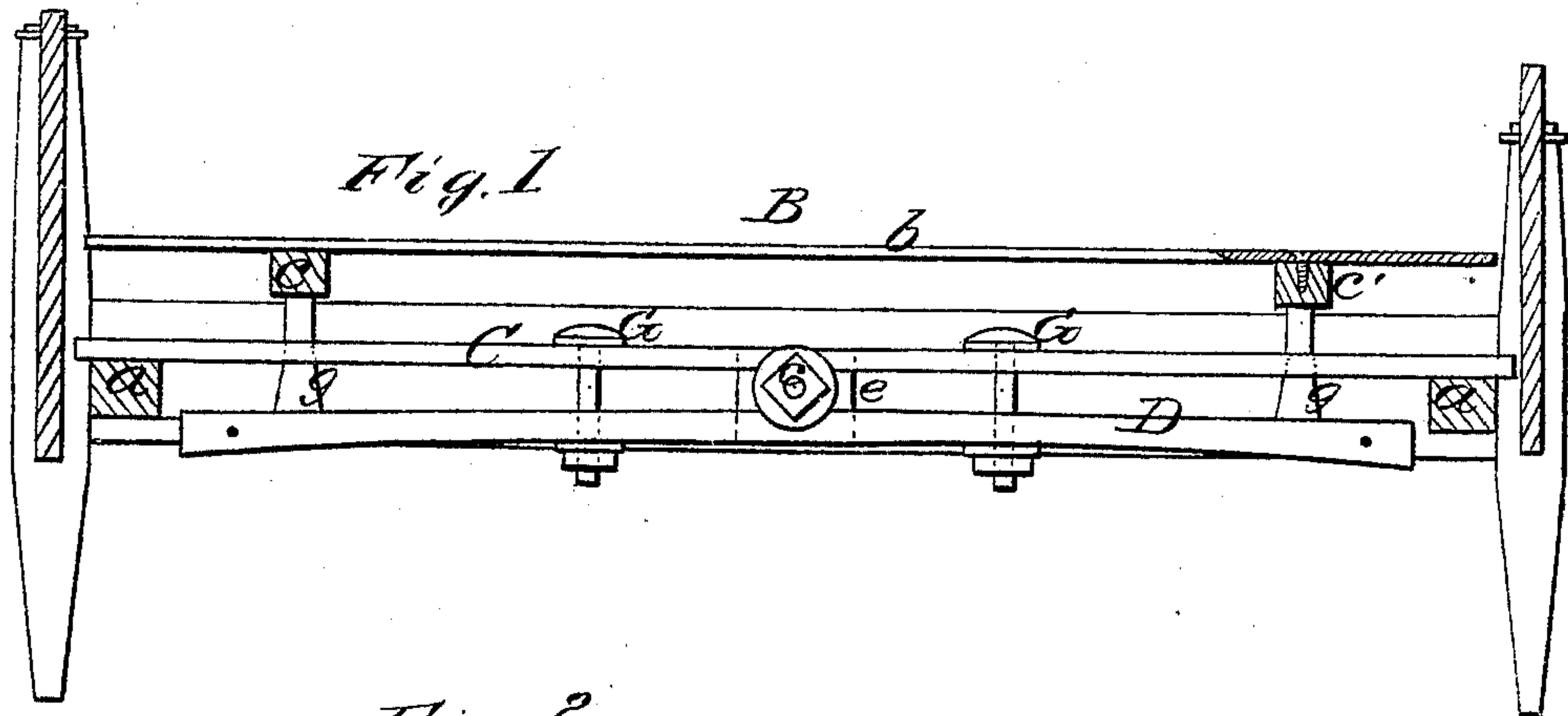


W. M. TROBAUGH.
Spring Bed-Bottoms.

No. 149,547.

Patented April 7, 1874.



WITNESSES
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By

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WILLIAM M. TROBAUGH, OF INDIANAPOLIS, INDIANA.

IMPROVEMENT IN SPRING BED-BOTTOMS.

Specification forming part of Letters Patent No. 149,547, dated April 7, 1874; application filed February 2, 1874.

To all whom it may concern:

Be it known that I, WILLIAM M. TROBAUGH, of Indianapolis, in the county of Marion and State of Indiana, have invented a new and valuable Improvement in Spring Bed-Bottoms; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a longitudinal vertical section of my spring bed-bottom. Fig. 2 is a plan view of the same. Fig. 3 is a transverse vertical sectional view of the same.

This invention has relation to spring-supports for bed-bottoms; and consists in a novel construction of compound springs, whereby the springs on which the bed-bottom rests, by means of legs, are arranged beneath other springs, which are sustained, at their ends, upon head and foot rails of the bedstead, and centrally connected to the supporting-springs first named by bolts and elastic packing, as will be hereinafter explained.

The following is a description of my invention:

In the annexed drawings I have represented my invention applied to a well-known kind of bedstead, of which *a a* designate the head and foot rails. *B* designates the bed-bottom, which may be composed of longitudinal spring-slats *b*, secured to cross-bars *c c'*. The two side slats *b* are secured to both of the bars *c c'*; but the intermediate slats are secured at one end only to the cross-bars, the other ends being free to play in notches when these slats are sprung. To maintain this bed-bottom in a horizontal position, should a weight on one side of it preponderate over a weight on the other side, I employ, at each side of the bedstead, a compound spring, to which adjusting-slides are applied. I construct each one of these springs as follows: *C C* are two parallel bars, which are made of some suitable springy material, and which are supported at their ends upon the head and foot rails *a a*. *D D* are two parallel bars, which are also made of a springy material, and which are secured together, and

to the bars *C C*, at the middle of their length, by means of a bolt and nut, *e*, with a piece of india-rubber, *e*, interposed, for the purpose of preventing noise when the springs are moved.

The drawing represents the bars *C C* and *D D* secured together by a single horizontal bolt; but, in practice, I shall employ horizontal bolts on opposite sides of a vertical bolt, which will clamp the four bars laterally as well as vertically. The free ends of the spring-bars *D D* are secured together by means of transverse bolts and interposed springs; and these ends are thickened vertically to give them the required strength. At the four corners of the bed-bottom *B* I secure legs or posts *g*, the lower ends of which rest upon the free ends of the springs *D D*, and are allowed to play freely between the bars *C C*, where notches are cut for this purpose, as shown in Fig. 2. The bed-bottom is thus rested on the lower springs, which are secured, at the middle of their length, to the upper springs, as above described.

G G designate slides, which connect the upper and lower springs together, and which are adjustable in a direction with the length of the springs. It is by means of these slides that the elasticity of the springs can be increased or diminished; for it will be seen that when the slides are adjusted toward the ends of the springs the latter will be stiffened, and, when adjusted near the bolts *e*, the springs will have greater elasticity or yielding action. The latter adjustment will be made for a light person, and the former adjustment for a heavy person. The bed-bottom can be, in this manner, kept horizontal, whatever may be the weight put upon one side of it.

I am aware that adjustable springs for bed-supports, consisting of two slats or boards resting one upon the other, and united by pins, and made adjustable by means of sliding clamps, are common. It is apparent, however, that my compound springs, made adjustable by the slides with flattened heads, and with interposed rubber packing, secures results which are not attainable by the spring-supports first mentioned. My device secures not only noiselessness, or freedom from squeaking, but it gives, by means of its four bars, greater elasticity than is possible by the same quantity of

timber or material united in a less number. It is also obvious that, by utilizing, as I do, the space between the bars for holding and actuating the slides, labor is saved in the construction, and the fibers of the timber are preserved in their full strength.

It will be observed that in all similar inventions heretofore made, the pins by which the bed-bottom is supported upon the lower spring-bars are arranged in pin-holes formed in the latter. By my method of construction no such pin-holes are required, the space between the lower spring-bars being utilized for that purpose.

I do not claim, broadly, the invention of adjustable springs; but

What I claim as new, and desire to secure by Letters Patent, is—

The spring-bed-bottom support, consisting of the compound spring-bars C C and D D, united by bolts *c*, with interposed rubber packing, and having combined with them the slides G, working between the bars, and the pins *g*, arranged as described, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

WILLIAM M. TROBAUGH.

Witnesses:

PHIL. C. MASI,

GEORGE E. UPHAM.