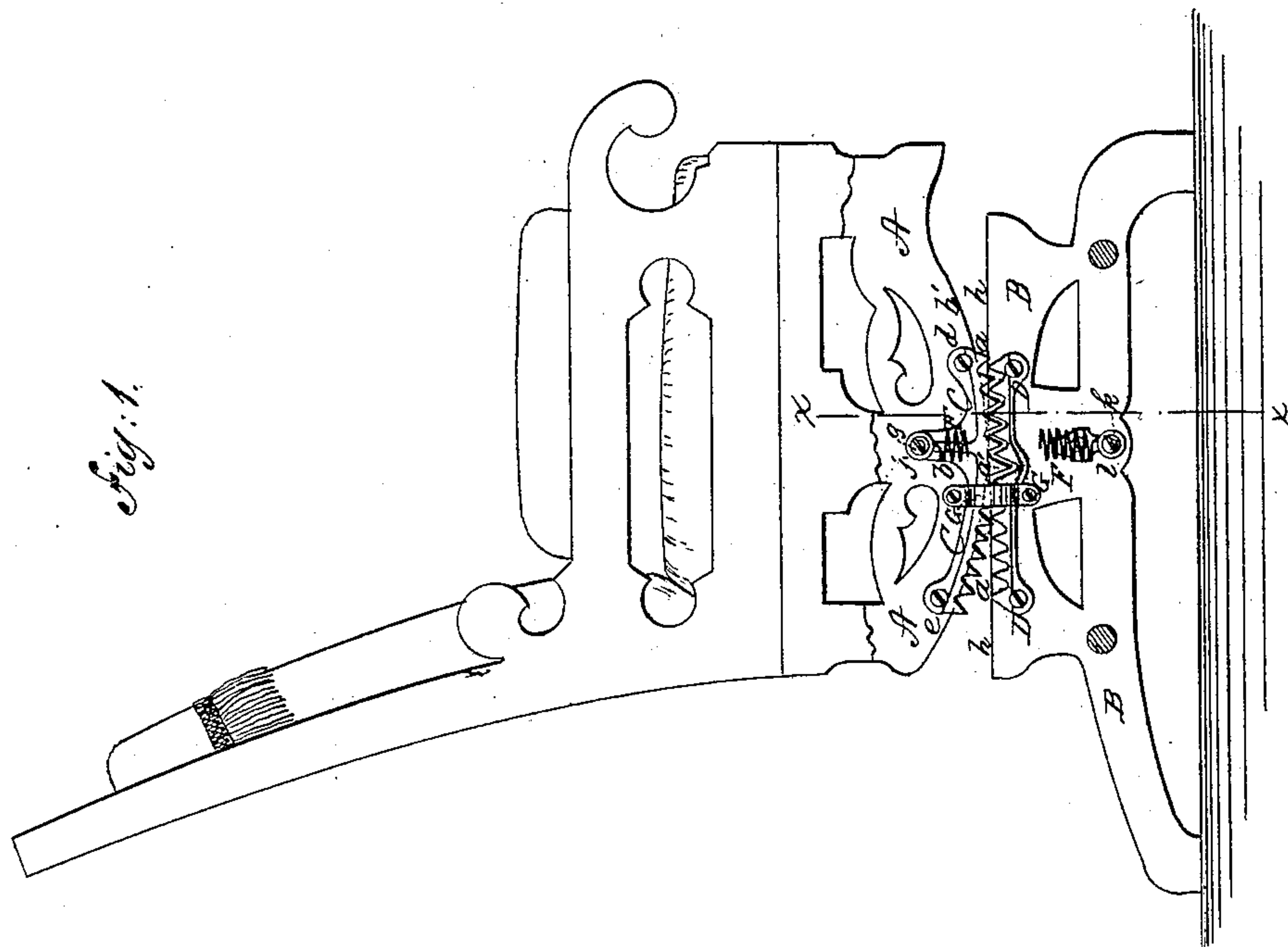
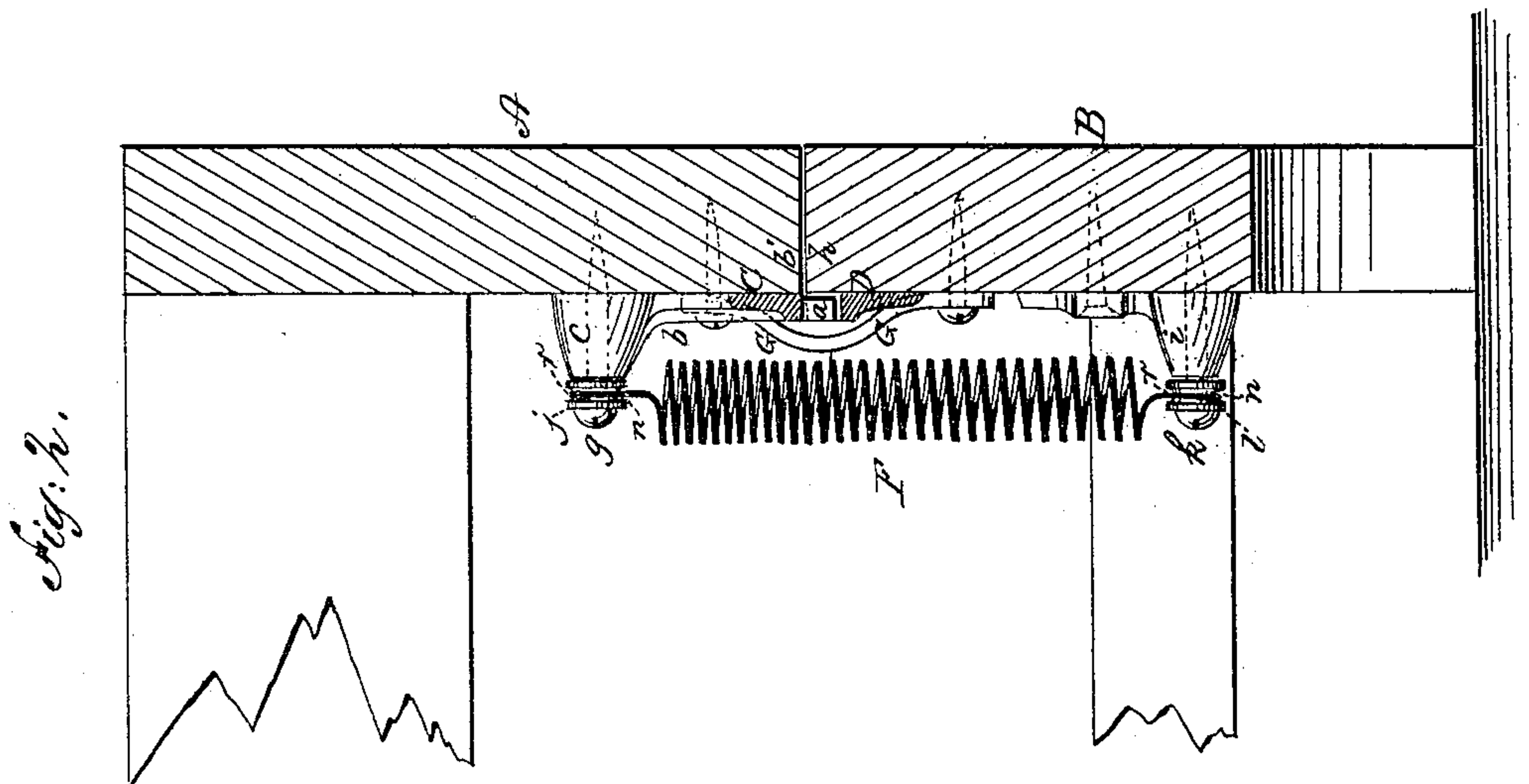


(Model.)

A. B. STEVENS.
BASE ROCKING CHAIR.

No. 273,630.

Patented Mar. 6, 1883.



Witnesses:

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UNITED STATES PATENT OFFICE.

ASHER B. STEVENS, OF STAPLETON, NEW YORK.

BASE ROCKING-CHAIR.

SPECIFICATION forming part of Letters Patent No. 273,630, dated March 6, 1883.

Application filed September 30, 1881. (Model.)

To all whom it may concern:

Be it known that I, ASHER B. STEVENS, of Stapleton, in the county of Richmond and State of New York, have invented a new and Improved Base Rocking-Chair; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making part of this specification.

This invention is in the nature of an improvement in base rocking-chairs; and the invention consists in a base rocking-chair provided with metal serrated plates, said plates having one or more teeth somewhat larger than the other teeth in the plates, the greater number of the teeth in the plates extending to the rear of the springs, with which the plates are combined, and to the rear of a line drawn midway between the ends of the rockers, the base and rockers of the chair being provided with leather or other stops of equivalent flexibility but inelasticity, all arranged and combined in the manner hereinafter particularly described.

In the accompanying sheet of drawings, Figure 1 represents a side view, partly in section, of my improved base rocking-chair; and Fig. 2 an enlarged cross-section of same in the line *xx*, Fig. 1.

Similar letters of reference indicate like parts in the two figures.

In constructing base rocking-chairs it is important that the contact of the rockers of the chair on the base of the chair should be maintained under all circumstances and without liability of derangement, either when the chair is occupied and rocked or when it is moved from place to place; and, besides this, it is necessary that the chair, when rocked, should be noiseless in its action.

To accomplish these features, I construct the rocking portion A of my chair and the base portion B thereof with serrated plates C and D. The serrations *a* in these plates are formed so that they will mesh one in the other, the teeth being all substantially of uniform size in each plate, with the exception of one, two, or three teeth, *a'*, in each plate. To each plate C is cast a bracket, *b*, extending upward and at right angles to the plate, and terminating in a projection, *c*, which projection is perforated in the direction of its length. This bracket is cast or otherwise fixed to the plate C at a point

which is somewhat nearer the front end, *d*, of the plate than the rear end, *e*, of the same. The plates C are cast with a curve corresponding to the curve of the rockers A of the chair, and the plates D are cast substantially straight, or without curve, to correspond with the base B of the chair. The plates C, in this way constructed, are screwed or otherwise secured to the inner sides of the rockers A, so that the serrations in the plates C will project below the lower or curved faces, *b'*, of the rockers, and when in place so that the projection *c* will be at a point which is in the rear of a line, *xx*, midway between the ends of the rockers, causing the serrations in the plates C to extend to the rear of this middle line, *xx*, to a great extent, if not wholly. The plates C being in this way located and secured, a screw, *g*, with an anti-friction washer, *j*, of vulcanized fiber upon it, is inserted through each projection *c* and into the rocker, confining this washer between the end of the projection and the head of the screw *g*. The serrated plates D are fixed to the inner side of the base B, immediately opposite the plates C on the rockers A; but the serrations of the plates D do not project beyond the upper edge, *h*, or face of the base; also, to the base B, on its inner side and below the plates D, are secured projections *i*, which projections, like the projections *c*, are perforated in the direction of their length, through which perforations passes a screw, *k*, which screw also confines between its head and the upper end of said projections an anti-friction washer, *l*, of vulcanized fiber. This anti-friction washer, like the anti-friction washer *j*, has a groove, *n*, in its periphery. Connecting one of these projections with the other projection, and consequently the rockers A with the base B, are coiled springs F, which springs have eyes *r* formed on their end coils, the eyes passing over the washers *j* and *l* and received into the groove *n* of the washers.

Secured at one of their ends to the rockers A and at their other ends to the base B, at a given distance to the rear of the springs F, are stops G, which stops may be made of sole-leather, or of two pieces of metal suitably jointed, so as to yield to the rocking motion of the chair.

The jointed metal stops herein mentioned will be incorporated in the claims of another

application about to be made by me for Letters Patent of the United States. The leather stops are preferred because, besides being noiseless, they are very cheap. These stops, being located in the rear of the median line or point, will permit the chair to have the long back movement, but for the same reason will check undue forward rocking.

Now, my chair and its base provided with serrated plates, projections, springs, and stops, substantially as I have above described, when rocked by the occupant, will cause the faces *b'* of the rockers to bear upon the faces *h* of the base B, and as the chair is rocked the serrations in the plates C will readily mesh or enter into the serrations in the plates D, preventing the rockers from slipping laterally on the base or working forward or backward from their given position on the base. The projecting teeth in the plates C, by coming in contact with the inner sides of the base B, prevent the displacement sidewise of the chair from the base, and the larger teeth *a'* not only insure the proper placing in position of the plates C and D in their relation to one another, since these teeth can only be received into corresponding places in the respective plates, but, by reason of their length, they act as guides, to a certain extent, thereby insuring the return of the teeth to their respective places in the plates as the chair is rocked forward or backward, and also, by reason of their length, they will not, when the chair is lifted, as in moving from place to place, be wholly withdrawn from their interlocking positions.

By placing the plates C and D so that the greater number of their teeth will be in the rear of the central point, *xx*, the teeth in these plates will, when the chair is rocked, be always more or less interlocked or meshed, since the rocking is mostly rearward. Were it otherwise, it might be that the chair would be rocked so far backward that the teeth in the plates C and D would be thrown entirely out of mesh, so as not only to interfere with the proper rocking of the chair, but cause the rockers of the chair to slide backward on the base to some extent, thereby disarranging its entire motion.

As an additional means to unite the chair to its base, and to stop or limit its backward and forward rocking, the stops G are provided, which check the undue backward or forward rocking of the chair, without, however, in any way interfering with this rocking to a limited extent. By making this stop of strong leather—such as sole-leather—it will freely yield to the rocking motion of the chair; but while so doing it will not give out any creaking or other sound—in fact, be noiseless in its action. As before stated, these flexible stops are arranged in the rear of the vertical line of rest or center of motion of the chair, and forward of a vertical line at which the chair would overturn backward, thus effectually preventing the overturning of the rocking portion in either the forward or backward directions.

As the chair is rocked on its base, in the manner before described, the spiral springs F will yield and facilitate the rocking motion of the chair, as do similar spiral springs in chairs of like construction; but to prevent the noise which would be incident to two metallic bodies working against each other, I interpose between the eyes *r* of the springs and the projections *c* and *i*, to which they are attached, the washers *j* and *l*, composed of a substance known as “vulcanized fiber.” This substance, being non-metallic, enables the springs to operate without noise at the places where it is united to the projections, and by reason of its peculiar composition it will wear for an indefinite time without breaking, in that respect differing from rubber or other washers that have been used for a similar purpose.

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

1. In a base rocking-chair, the serrated plates C D, the greater number of the serrations of which extend to the rear of a middle point, *xx*, of the rockers, combined with the stops G, also arranged in the rear of said point, substantially as shown and described.

2. In a base rocking-chair, serrated plates in which the greater number of the serrations extend to the rear of a middle point, *xx*, of the rockers, in combination with leather stops G, coiled springs, projections *c* and *i*, and washers *j l*, of vulcanized fiber, substantially as and for the purpose described.

3. In a base rocking-chair, plates with serrated teeth, one or more of the teeth being of greater dimensions than the other of the teeth in said plates, substantially as and for the purpose described.

4. In a base rocking-chair, the longitudinally-perforated projections *c i*, and screws *g k* to receive the springs, substantially as shown and described.

5. The combination, substantially as shown and described, of the rocking portion A, base B, intermeshing toothed plates C D, and the springs F, with the flexible stops G, arranged in the rear of the connecting-springs, for the purpose specified.

6. The combination, substantially as shown and described, with the base and rocking portion of a base rocking-chair, of flexible stops connecting the two, and arranged in the rear of the vertical line of rest or center of motion of the rocking portion, and in front of the point where gravity would overturn the chair backward, to positively limit the backward and forward movements of the rocking portion and prevent the overturning thereof, as specified.

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Witnesses:

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