(No Model.)

E. J. SCHUMACHER.

TILTING CHAIR IRON.

No. 366,262. Patented July 12, 1887.

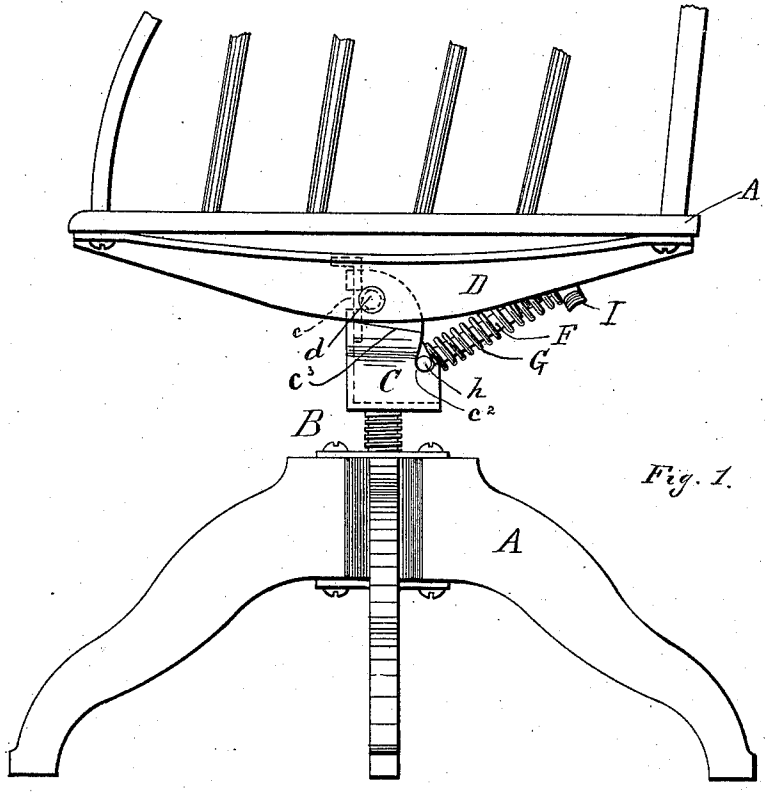

Fig. 1.

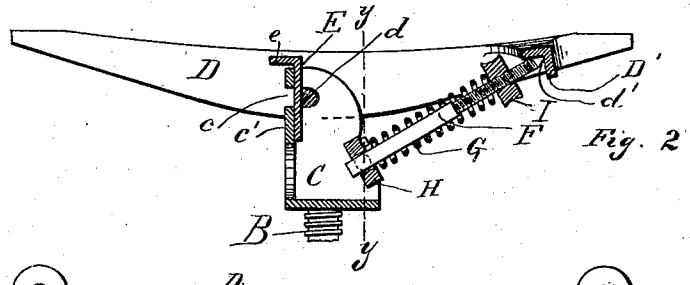

Fig. 2

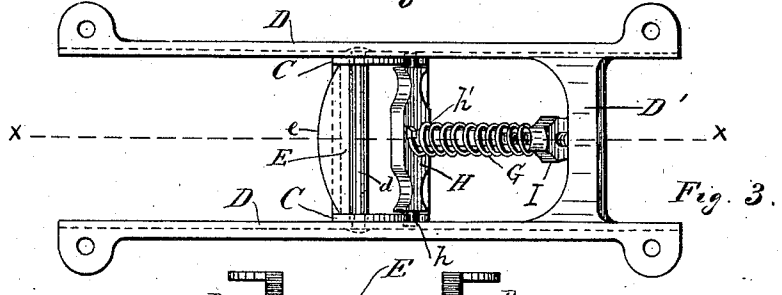

Fig. 3.

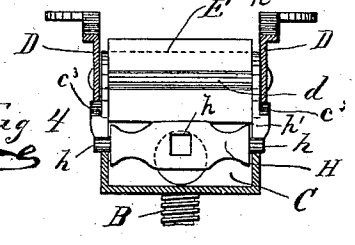

Fig 4

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EDWARD J. SCHUMACHER, OF CHICAGO, ILLINOIS.

TILTING-CHAIR IRON.

SPECIFICATION forming part of Letters Patent No. 366,262, dated July 12, 1887.

Application filed May 3, 1884. Serial No. 130,202. (No model.)

To all whom it may concern:

Be it known that I, EDWARD J. SCHUMACHER, of Chicago, Illinois, have invented certain new and useful Improvements in Irons for Tilting-Chairs, of which I do declare the following to be a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

Figure 1 is a view in side elevation of a chair having my improved irons applied thereto. Fig. 2 is a view in longitudinal section on line *x x* of Fig. 3. Fig. 3 is a plan view of the tilting-chair irons. Fig. 4 is a view in vertical transverse section on line *y y* of Fig. 2, parts being shown in rear elevation.

My present invention has relation to the improvement of the irons of tilting-chairs, and in particular does it relate to that class of tilting-chairs wherein adjusting mechanism is provided for regulating the tension of the coiled spring by which the movement of the chair is controlled.

The object of my invention is to provide an improved construction of tilting-chair irons that shall be simple, cheap, and durable, and, furthermore, to so connect the principal parts of the irons that they can be easily taken apart for shipment or storage, thus economizing much space and lessening the cost of transportation, and can, without the need of skilled labor, be quickly and securely put together for use.

To this end my invention consists in the matters hereinafter fully described and claimed.

A designates the base, and A′ the seat-frame, of a chair to which my improved chair-irons are applied. In the base A is held the usual threaded nut that receives the spindle B, by means of which the chair-seat is raised and lowered. On the top of the spindle B is fixed the supporting standard C, in the front and sides of which are formed near the top the open slots or seats *c*, that serve as bearings for the pivot-bolt *d* of the spider-frame D. This pivot-bolt is held within the slots by means of the plate E, which fits between the bolt and the front *c′* of the standard, and securely locks the parts together. The lip *e* of the locking-plate limits its descent. By thus providing for the connection of the spider-frame and standard they can be readily taken apart for shipment or storage, and can be quickly and securely put together again for use.

The spider D consists essentially of two parallel or approximately parallel bars connected together by the cross-bar D′, preferably cast integral with the side bars, and in a seat, *d′*, of this cross-bar rests the upper end of the rod F, that carries the coiled compression-spring G. The lower end of this spring bears upon a rest-plate, H, the rounded ends *h* of which plate are journaled in suitable bearings, *c*, in the rear part of the standard. Centrally of the rest-plate H is formed the opening *h′*, within which fits in a manner free to slide the squared portion of the rod F, the upper threaded portion of which fits within the adjusting-nut I, which serves to regulate the tension of the spring. On the sides of the standard C are formed the stops or shoulders c^2, against which the side bars of the spider-frame will strike to limit the tilting movement of the chair. By forming the spider-frame with the side bars, as shown, a secure union between the spider-frame and the standard is effected that will prevent any side wabbling of the chair-seat, and at the same time these bars form a firm rest for the seat.

By the construction of the chair-irons above described it will be seen that the parts are simple, can be cheaply cast, can be readily separated for shipment and put together for use, and the location of the spring is such as to receive the pressure in tilting the chair in the most direct and effective manner.

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

1. In tilting-chair irons, the standard having open bearings in its sides, said sides being connected together by the bars *c′*, in combination with the spider-frame having a pivot-bolt to rest in said bearings, a locking device fitting between the pivot-bolt and the said connecting-bars of the standard, and a spring between the spider-frame and standard on the opposite side of the standard to said bearings, substantially as described.

2. In tilting-chair irons, the combination, with the spindle, the standard, and the spider-frame consisting of two parallel members connected near the center and at or near the

rear, of the coil-spring and threaded rod having an adjusting-nut and extending from the transverse piece connecting the rear members of the spider to the rest-plate at the standard, such rest-plate having an opening through which said rod may move, substantially as described.

In testimony whereof I have hereunto set my hand this 30th day of April, 1884.

EDWARD J. SCHUMACHER.

Witnesses:
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L. HOLMBOR.