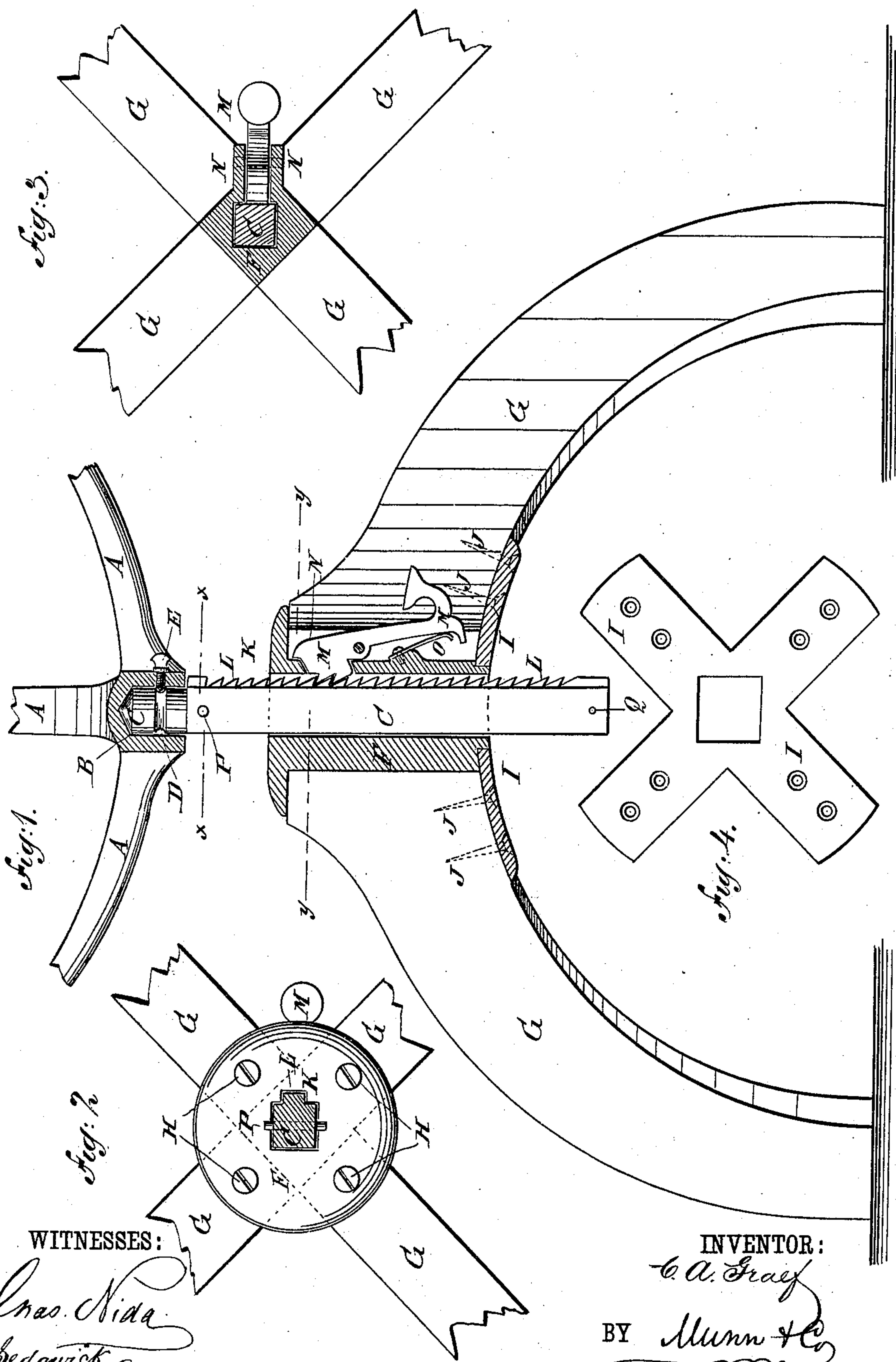


(No Model.)

C. A. GRAEF.
REVOLVING CHAIR.

No. 321,101.

Patented June 30, 1885.



WITNESSES:

Chas. Nida
C. Sedgwick

INVENTOR:

C. A. Graef

BY

Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

C. ARNOLD GRAEF, OF BAY RIDGE, NEW YORK.

REVOLVING CHAIR.

SPECIFICATION forming part of Letters Patent No. 321,101, dated June 30, 1885.

Application filed January 19, 1885. (No model.)

To all whom it may concern:

Be it known that I, C. ARNOLD GRAEF, of Bay Ridge, in the county of Kings and State of New York, have invented a new and useful Improvement in Revolving Chairs, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a sectional side elevation of the pedestal and spider of one of my improved chairs, the pivot-bar being shown in side elevation. Fig. 2 is a sectional plan view of the same, taken through the line *xx*, Fig. 1. Fig. 3 is a sectional plan view of the same, taken through the line *yy*, Fig. 1. Fig. 4 is a bottom view of the lower plate of the pedestal.

The object of this is to provide revolving chairs constructed in such a manner that they can be readily raised and lowered, and will remain at the height at which they are adjusted.

The invention relates to a revolving chair constructed with a lever-pawl pivoted to the socket attached to the legs, and engaging with side rack-teeth upon the bar, passing through the said socket and carrying the pivoted seat-spider, whereby the said bar will be securely supported, and can be readily raised and lowered. The pivot-bar is provided with an annular groove around its upper end, with which engages a screw passing in through the side of the seat-spider, having a pivot-socket, whereby the said spider will be securely connected with the said bar, and will be free to revolve upon it, as will be hereinafter fully described and then claimed.

A represents a spider, to which a seat-frame is designed to be attached in the ordinary manner, and in the center of which is formed a socket, B, having an open lower end and a closed upper end. The interior of the closed upper end of the socket B is made conical, to form a seat for the conical top of the bar C, upon the upper end of which the spider A revolves. Around the upper end of the bar C is formed an annular groove, D, to receive the rounded end of the screw E, which passes in through the side of the central part of the spider A, between two of the arms of the said

spider, so as to prevent the said spider from being raised off the said bar, while being free to revolve upon it. The bar C passes down through the socket F, against the sides of which rest the upper end of the legs G, and upon the upper end of which is formed a flange, to rest upon the tops of the said legs, and to receive the screws H, by which the legs G are secured in place. The lower end of the socket F is rabbeted, to fit into the aperture in the center of the bottom plate, I, which is made with arms fitted to the lower sides of the legs G, and perforated to receive screws J, screwed into the legs G, to connect the legs and plate and keep them in place.

In the socket F, at one side of its interior, is formed a groove, K, to receive rack-teeth L, formed upon the middle part of one side of the bar C, and with which engages the upper end of the lever-pawl M, the said upper end passing in through a slot in the side of the socket F between two of the legs G. The lever-pawl M is pivoted to and between the flanges N, formed upon the side of the socket F, and its lower end is held outward, holding its upper end against the teeth L by a spring, O, attached to the side of the said socket F. The lower end of the lever-pawl M is curved outward and upward, and has a foot-rest formed upon it, so that the said lever-pawl can be operated with the foot, to withdraw its upper end from the teeth L, and allow the bar C to be drawn upward or pressed downward, to raise or lower the chair-seat, by taking hold of the back of the chair.

The spring O is designed to have sufficient strength to press the upper end of the lever-pawl M against the teeth L with so much force that the pedestal will be raised by and with the bar C, when the chair is lifted by a person taking hold of its back. With this construction the chair-seat will revolve freely without changing its height, and can be readily adjusted higher or lower by operating the lever-pawl M. The downward movement of the bar C is limited, to prevent the spider A from coming in contact with the socket F, and preventing the chair-seat from being revolved easily by a pin, P, placed in a transverse hole in the upper part of the said bar C, with its ends projecting, so as to come in contact with

the top of the said socket F, and thus prevent the bar C from moving downward, so as to bring the spider A into contact with the socket F. A transverse pin, Q, is inserted in a hole
5 in the lower part of the bar C, to prevent the said bar from being withdrawn vertically from the socket F.

I am aware that it is not broadly new to adjust the vertically-movable seat-supporting
5 bar of a revolving chair by means of a pawl engaging teeth on the said bar, and hence I make no broad claim to the same.

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

In a revolving chair, the combination, with the bar C, carrying the revolving seat-spider A, and provided with side rack-teeth, L, and the socket F, attached to the legs G, of the lever-pawl M and the spring O, substantially as herein shown and described, whereby the said bar will be securely supported and can be readily raised and lowered, as set forth.

C. ARNOLD GRAEF.

Witnesses:

JAMES T. GRAHAM,
C. SEDGWICK.