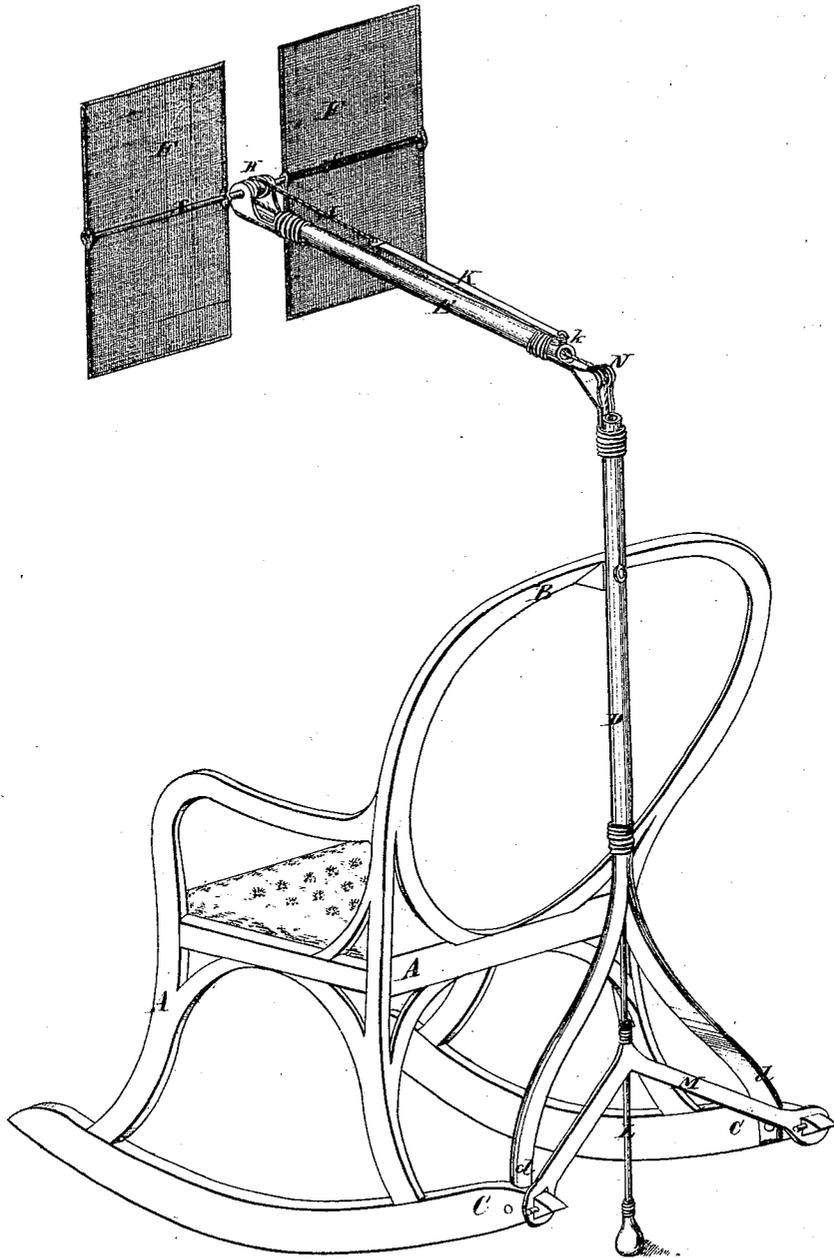


Knaffl & Schleier,

Rocking Chair Fan.

No. 109744

Patented Nov. 29, 1870.



Witnesses:
Wm. H. Breerton
Jal. meldrum

R. Knaffl M.D.
C. H. Schleier
By Knight
(Hyp)

United States Patent Office.

RUDOLPH KNAFFL, OF NASHVILLE, AND THEODORE M. SCHLEIER, OF KNOXVILLE, TENNESSEE.

Letters Patent No. 109,744, dated November 29, 1870.

IMPROVEMENT IN FAN ATTACHMENTS FOR ROCKING-CHAIRS.

The Schedule referred to in these Letters Patent and making part of the same.

We, RUDOLPH KNAFFL, M. D., of Nashville, Davidson county, and THEODORE M. SCHLEIER, of Knoxville, Knox county, Tennessee, have invented an Improved Fan Attachment for Rocking-Chairs, of which the following is a specification.

Nature and Objects of the Invention.

Our invention consists of a mode of attaching to a rocking-chair and operating a fan so that the motion of the former transmits a reciprocating rotary movement to the latter, which may be placed a little above and in front of the person in the chair.

Description of the Accompanying Drawing.

The drawing represents a perspective view.

General Description.

A, the rocking-chair, may be of the usual kind.

Our invention does not demand any peculiar construction of the chair proper.

In the illustration the fan attachment is shown as connected to the chair at three points, namely, the middle, the back B, and the ends of the rockers C O.

We consider this a convenient mode of attaching the device, but do not limit ourselves to this or any other peculiar mode.

D is a post, which, in the illustration, is shown as bifurcated at its lower portion and tubular at the remainder of its length.

The feet *d d* of the post are secured, by screws, clamps, sockets, or otherwise, to the rear ends of the rockers C O, and the stem of the post D is secured, by the described or any sufficient means, to the back B of the chair.

At the upper end of the post D is a tubular branch or arm, E, which may be articulated with the post or be permanent at a given angle.

On the end of the arm E is the axis *f* of the fan F.

The rotary reciprocation of the fan is produced by two springs, which may be of India rubber or wire coils, or they may be formed of single leaves or bars of wood or metal.

On the axis *f* of the fan F is a roller or drum, H, over which passes a cord, I.

One end of the cord connects with the upper spring K, which is fastened to the arm E at *k*; and the other end of the cord I, after traversing the tubular arm E and a portion of the tubular stem D, is united to the

upper end of the vertical rod L, whose lower end is kept constant upon the floor by means of the spring M.

The cord I runs over a sleeve, N, at the elbow, where it changes its direction of motion.

Instead of a stem, D, and arm E, a bent tubular stem may be employed.

This is a matter of detail, and we do not confine ourselves to any specific detail in this respect.

Operation.

When the person in the rocking-chair tilts it backward, the rod L is thrust upward in the stem D, slackening the cord I, and permitting the contraction of the upper spring K.

The action of the latter is to draw upon the slackened cord, whose motion over the roller H rotates the fan in one direction.

As the chair is tilted forward the dominant spring M comes into play and draws down the rod L, pulling on the cord I, elongating the spring K, and rotating the fan in a direction the reverse of the former motion, by the transit of the cord over the roller H.

When the rod L is thrust upward the spring K is allowed to act and draws the cord in one direction. When the rod L is allowed to descend the strong spring M becomes dominant and draws the cord in the other direction, elongating the spring K.

The elbow at the junction of the stem D and arm E may be jointed so as to adjust the height of the fan to suit the convenience of the person in the chair.

Claim.

We claim as our invention—

The combination of the fan-operating parts, consisting of rod L, spring M, cord I, and spring K, communicating between a relatively-fixed point on the stem D E and the floor, with which the foot of the rod is held in constant contact by the dominant spring M, substantially as shown and described.

DR. RUDOLPH KNAFFL.

Witnesses as to R. KNAFFL, M. D.,

H. ALBES,
JOHN RUHM.

THEODORE M. SCHLEIER.

Witnesses as to T. M. SCHLEIER,

WM. H. BRERETON, JR.,
EDWARD H. KNIGHT.