

(No Model.)

H. M. BIEN.

AUTOMATIC FAN FOR FURNITURE.

No. 385,695.

Patented July 10, 1888.

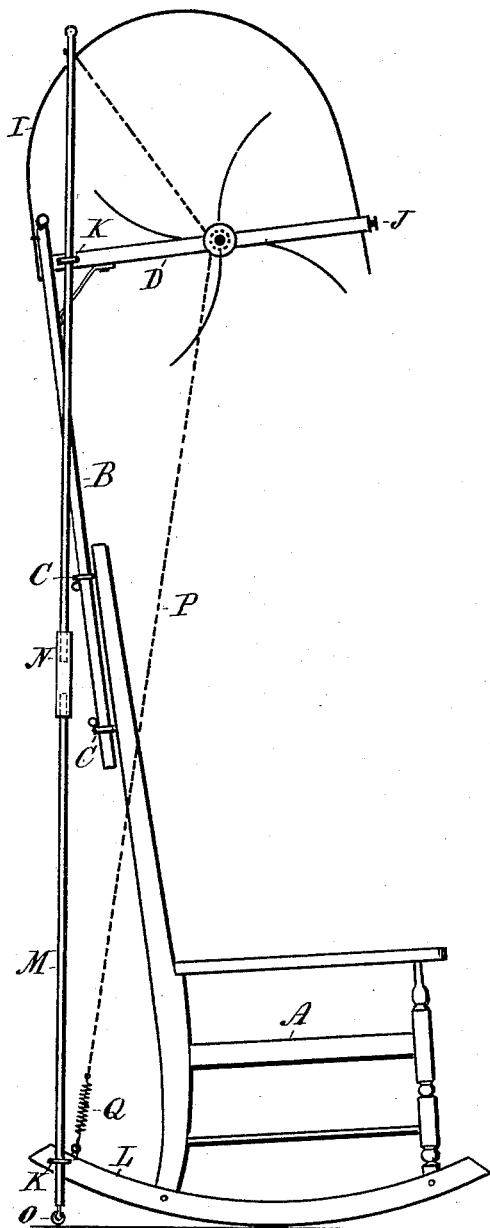


Fig. I.

WITNESSES:

Robert Kirk.  
Robt. S. Millar.

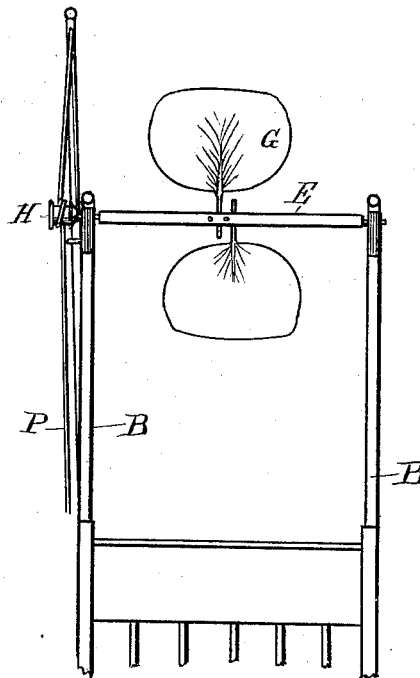


Fig. II.

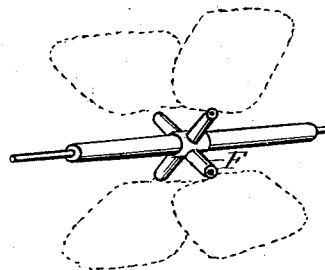


Fig. III.

INVENTOR :

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# UNITED STATES PATENT OFFICE.

HERMANN M. BIEN, OF VICKSBURG, MISSISSIPPI.

## AUTOMATIC FAN FOR FURNITURE.

SPECIFICATION forming part of Letters Patent No. 385,695, dated July 10, 1888.

Application filed December 16, 1887. Serial No. 258,123. (No model.)

*To all whom it may concern:*

Be it known that I, HERMANN M. BIEN, of Vicksburg, in the county of Warren and State of Mississippi, have invented a new and useful Improvement in Automatic Fans for Furniture, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a side elevation of a chair equipped with my detachable frame and fan. Fig. 2 is a front view of the frame and upper portion of the chair, and Fig. 3 a perspective view of the fan-carrying shaft.

This invention relates to portable knock-down frames to be attached to furniture, such as rocking-chairs, &c., which frame carries a shaft, on which is placed a fan or a series of fans, and a vertically-movable rod or bar in contact with the floor, which rod has attached thereto a cord, which is wound around the fan-shaft, so that as the chair or other article of furniture is oscillated or rocked the cord will rotate the shaft back and forth as the chair is rocked to and fro, all of which will now be set forth in detail.

In the drawings, A represents an ordinary rocking-chair, to the back of which are attached two uprights, B, one on each side. These uprights are secured to the chair-back by means of eyes C C, or by clamps especially adapted for the purpose. These uprights or posts extend upward a suitable distance, and at their upper ends are forward projections or right-angled arms D. In these arms, midway between their ends, is journaled a cross-shaft, E, which shaft carries centrally a branching fan-holder, F, as shown in Fig. 3. This holder is composed of four or more sockets, into which the handles or stems of the fans G are placed. The shaft E extends past one of the said arms D, and has on the outside a grooved pulley, H, as shown in Fig. 2.

A wire, I, has its end attached to the upper end of each post or upright B, the opposite end thereof being bent or arched over and passes through the forward end of the arm D, where it is held in position by means of set-screws J.

On one side of the frame is an eye, K, at the upper end of the upright B, and a similar eye,

K, in the side of the rocker D near its end. Through these eyes I place a vertical rod, M. This rod is preferably made in two parts and united by means of a thimble or ferrule, N, centrally, whereby the two parts can be easily separated when desired for transportation or packing away. The lower end of this rod has a caster, O.

P represents a cord, one end of which is attached to the upper end of the rod M, which cord is wrapped once around the grooved pulley H, and extends down to and is connected with a coil spring, Q, which is attached to the rocker. It will thus be observed that the rod M rests on the floor at all times, and as the chair is oscillated forward the frame moves upwardly proportionately, causing the cord P to turn the shaft E, and thus actuate the fans thereon. As the chair is moved backward the action of the cord is reversed and the fans are rotated in the opposite direction, thereby imparting a reverse rotary motion to the fan-shaft as the chair rocks to and fro. The coil-spring Q enables the cord to be readily adjusted and prevents breaking, and, the cord being attached at opposite ends to the rocker and rod, compensates for the forward and backward movement of the chair. It is obvious that this frame and the rod for rotating the fan-shaft can be attached to any other kind of furniture which has an oscillating motion without departing from the spirit of my invention.

The bent wire I is designed to support mosquito-bar or other covering which it is desirable to place thereon.

What I claim as new is—

1. In combination with the rocker A, the uprights B, adjustably secured thereto, the wire I at their upper ends, and the arms D, forwardly projecting from said uprights, the fan-shaft E, journaled therein, the rod M, attached to the arms D and chair-rocker by eyes K, in which it is vertically movable, and having a caster, O, on its lower end, and the cord P, secured at its upper end to the rod M and at its lower end to the spring Q, attached to the rocker, substantially as set forth.

2. A portable knockdown frame for furniture attachment, consisting of two vertical uprights, each provided with clamps and having

forwardly-projecting right-angled bars, in combination with a rotatable shaft for carrying fans, the vertically movable and adjustable rod having cord attached thereto and to the  
5 spring connecting with the rocker and wrapped around said fan-shaft, substantially as herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand, this 31st day of August, 1887, in the presence of two witnesses.

HERMANN M. BIEN.

Witnesses:

J. S. ZERBE,

W. S. FRIEDMAN.