

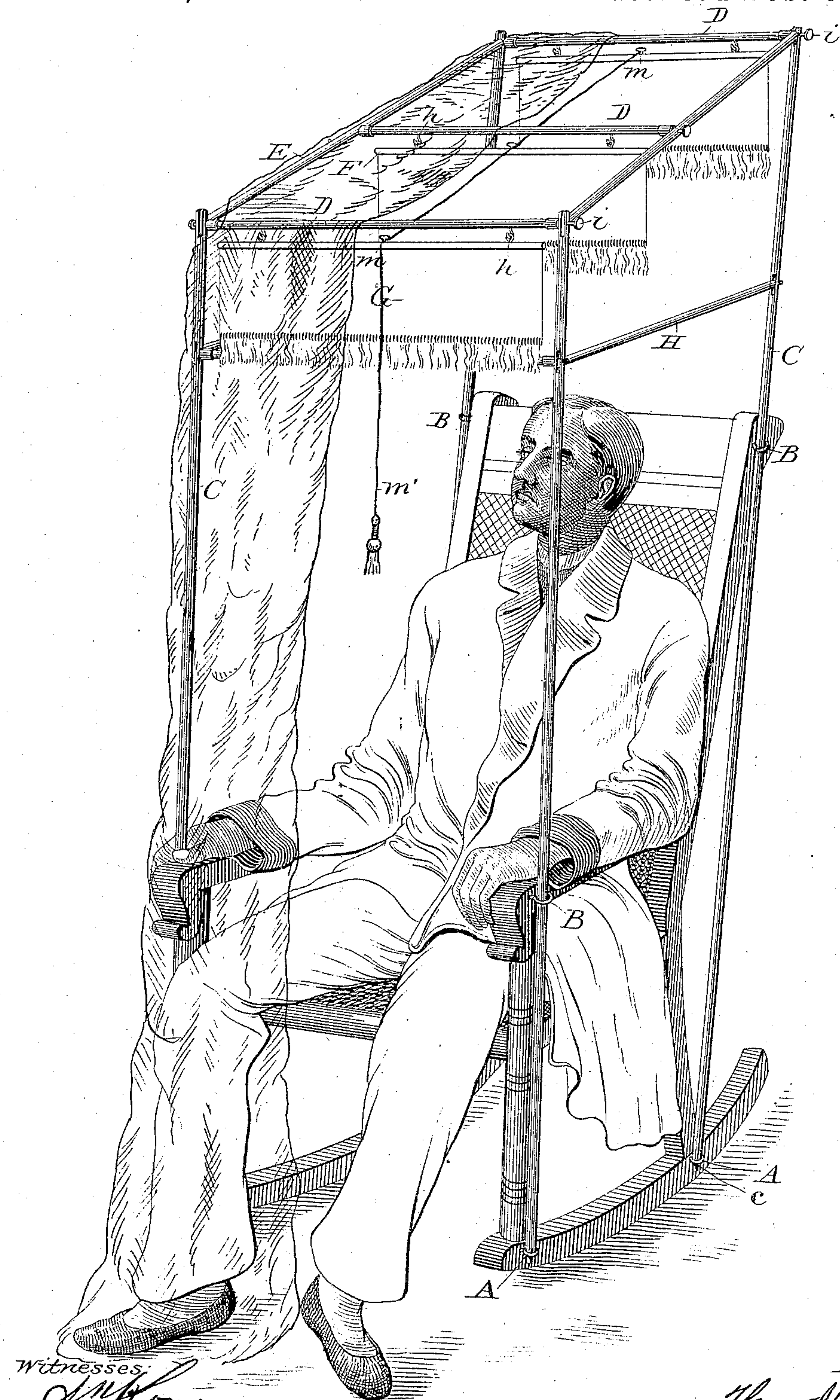
(No Model.)

H. M. BIEN.

AUTOMATIC FAN FOR FURNITURE.

No. 335,883.

Patented Feb. 9, 1886.



Witnesses:

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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. 335,883, dated February 9, 1886.

Application filed April 30, 1885. Serial No. 164,044. (No model.)

*To all whom it may concern:*

Be it known that I, HERMANN M. BIEN, of Vicksburg, county of Warren, State of Mississippi, have invented and produced a new and original machine for providing all kinds of seat-furniture with such frames and attachments as will form the holders of mosquito-nets and several sets of fans, to be worked either by the motion of rockers on all furniture provided with such rockers or otherwise by means of cords drawn by hands or feet; and I do hereby declare that the following is a full and exact description of the same, reference being had in this description to the drawing annexed hereunto.

My invention relates to a portable knock-down frame for articles of furniture adapted to be used for mosquito-bars or the like, and especially for carrying sets of fans upon seat-furniture having rockers or other means for oscillating such fans.

In carrying out my invention I provide a frame composed of detachable vertical and horizontal bars that can be readily fitted together and detached at will, all as illustrated in the drawing hereinafter fully described, and specifically set forth in the claim.

The accompanying drawing represents a rocking-chair having one of my knockdown frames attached thereto, said frame being shown as supplied with a series of strips of fabric, forming fans. Attached to the chair are screw-eyes A B, the former being smaller in circumference than the latter.

C C are uprights, their lower ends furnished with extending studs or pins *c*, to limit the downward fall of said uprights. Said uprights are at their top ends provided with lateral and transverse orifices crossing each other at right angles. At a required distance below such upper orifices said uprights are mortised, all for a purpose hereinafter set forth.

D D D represent horizontal bars, their free ends being preferably axially bored a required length to receive fastening-pins or thumb-screws *i*, which pass through the respective orifices of the uprights C and horizontal transverse rods E, the ends of which transverse rods E also take into the orifices upon the uprights C at right angles to the orifices that receive the respective ends of the bars D. Said bars D are supplied with hooks

or other suitable fastening devices, *h*, upon which to hang eyes, rings, or the like, attached to the fan-frames F. The bars D are also provided with limiting-abutments *d*, for the purpose of preventing the bars E or uprights C being bent too far inwardly, and to guard against splitting said bars D. The abutments *d* may be integral with said bars, fixed rings, or movable sleeves, screw-threaded, if necessary, in which latter case the ends of the bars D must be threaded, as will be readily understood.

H represents cross-braces, the ends of which are formed to fit into the mortise-openings upon the uprights C, thereby stiffening the whole frame when in place.

G represents strips of textile fabric, rubber, or any suitable material, fastened to rods F, screw-rings or the like being fastened upon said rods F to loosely take onto suitable hooks, *h*, and thereby permit the free oscillation of said fans when motion is imparted to the rods F.

It will be readily understood that oscillatory motion will be secured when a chair such as shown in the drawing is rocked to and fro.

In order to secure vibratory motion to the several rods F and their attached fans when my frame supplied with such fans is connected to any article that has no rockers—such as, for instance, an ordinary chair, settee, infant's crib, bedstead, &c.—I provide said fan-rods F with rings *m*, through which a cord, *m'*, can pass; and it is obvious that thereby the fans G can be swung forward and backward.

Thus far I have confined myself to a description of my invention for use on fan attachments; but I do not desire to be understood as limiting its use to such purpose, as it is equally adaptable as a mosquito-net frame, either separately or in combination with the fan devices, and I consider this combination as an important feature of my invention. In southern climates, especially, is this function of value, where siestas are indulged in, and the provision of convenient means for using a mosquito-bar on ordinary seat-furniture will be appreciated, even when it may not be desired to continuously agitate the fan appliances. The mosquito-net will fit over the top of the frame and fall down on each side, and may be made with an opening in front, in or-



der to illustrate which the drawing shows in broken lines a portion of a mosquito-bar on one side of the frame.

From the foregoing description it will be seen that I provide a very useful and cheap attachment for furniture, that when not in use can be taken apart and packed up in small compass, and when in that condition can be conveniently transported, and can even be used by travelers on cars and steamboats, or camping in the field, and that can be utilized with either mosquito-bar or swinging fans, or both combined, for the comfort of minors or adults.

I am aware that it is not new to provide a frame for furniture attachment that can be taken apart, and lay no claim, broadly, thereto; neither do I broadly claim fans to swing by means of operating-cords, as others have accomplished this before me; but, so far as known to me, it is new to arrange fans to swing overhead, in combination with vertical supports, horizontal braces, and cross-bars, as

shown and described, such devices being composed of separable members adapted to be connected together and adjusted onto various articles of furniture and removed therefrom at will.

Having now fully described my invention and its manner of construction and operation, what I claim, and desire to secure by Letters Patent of the United States, is—

A portable knockdown frame for furniture attachment, consisting of a series of vertical uprights, C, horizontal bars E and D, and braces H, adapted to interlock and compose a quadrangular frame, in combination with a series of oscillatory fans, G, depending from rods F, provided with fastening devices adapted to loosely mesh with hooks upon the cross-bars D of the device, substantially as described.

HERMANN M. BIEN.

Witnesses:

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