(No Model.)

P. A. TORNWALL.

FAN ATTACHMENT FOR CHAIRS.

No. 490,234. Patented Jan. 17, 1893.

Fig. 1.

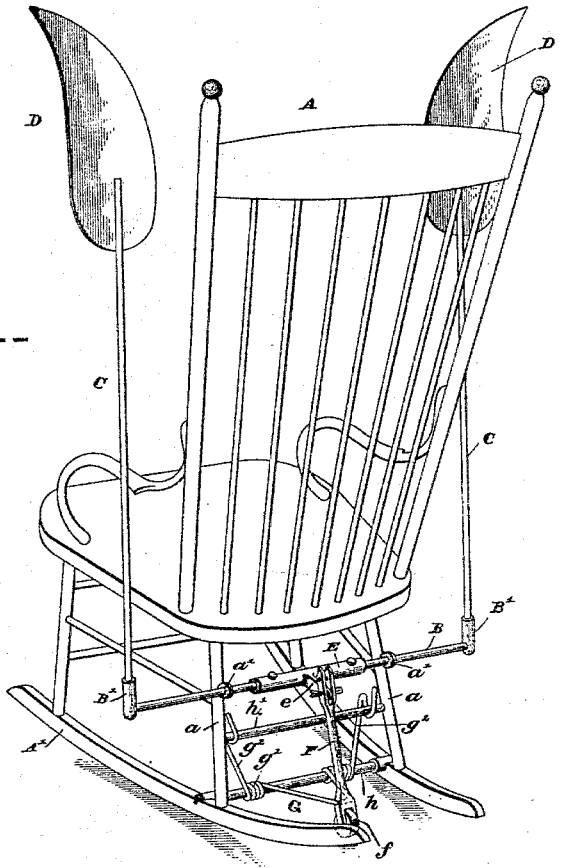
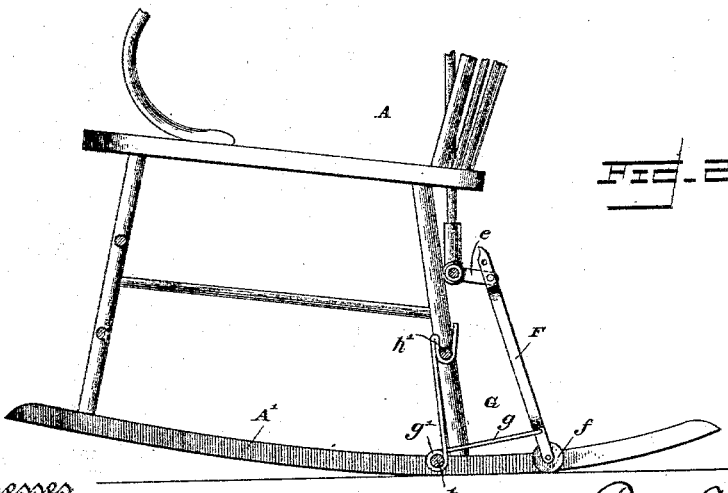


Fig. 2.



Witnesses

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UNITED STATES PATENT OFFICE.

PERRY A. TORNWALL, OF OKOLONA, MISSISSIPPI, ASSIGNOR OF ONE-HALF TO THOMAS W. BRAMLITT, OF SAME PLACE.

FAN ATTACHMENT FOR CHAIRS.

SPECIFICATION forming part of Letters Patent No. 490,234, dated January 17, 1893.

Application filed July 29, 1892. Serial No. 441,572. (No model.)

To all whom it may concern:

Be it known that I, PERRY A. TORNWALL, a citizen of the United States, residing at Okolona, in the county of Chickasaw and State of Mississippi, have invented certain new and useful Improvements in Fan Attachments for Chairs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to an improvement in a fan attachment for chairs, the object of the invention being to provide a simple and inexpensive mechanism which can be readily applied to a rocking chair without any disarrangement of the construction of the latter and which when thus applied may be automatically operated by the motion of the chair when the latter is occupied in use, and thereby the atmosphere around the chair may be agitated and a cooling effect produced upon the occupant; and the invention consists in the construction, arrangement and combination of parts, substantially as will be hereinafter described and claimed.

In the accompanying drawings illustrating my invention: Figure 1 is a perspective view of a rocking chair showing my improved fan mechanism applied thereto. Fig. 2 is a detail side elevation of the same.

Like letters of reference refer to like parts in both the figures.

A designates an example of a rocking chair to which my invention is shown as practically applied. It will be understood that I am not confined to any particular kind of chair. Any chair seat or support which moves back and forth or is capable of being oscillated to and fro, may be provided with my improved fan mechanism which is automatically operated by the motion of the chair.

D D designate two flat or suitably shaped blades or fans, located, one on each side of the chair at a point a short distance from the upper end thereof and in such convenient position that their oscillation to and fro, will create a draft of air which will affect the person occupying the chair. It will be evident that the exact location of these blades will be a matter to be decided upon during the practical use of the invention and I do not wish to be restricted to any particular location therefor, it being generally understood that they are located, one on each side of the chair. These fans or blades are carried preferably on the upright rods C C which are supported at their lower ends in sockets B′ B′ formed on the outer extremity of a horizontal rock shaft B, which is supported in suitable bearings a' a' fixed on the legs or posts a a which form a part of the bottom structure of the chair.

E denotes a sleeve or section of tube located upon the rock shaft B, between its bearings a' a' and secured by means of set screws. This sleeve is provided with a right angled projecting arm e. The sleeve E can be adjusted upon the shaft B when desired so as to cause its angular arm e to have a greater or less angle relatively to the position of the upright arms C C. The sleeve E can easily be prepared at any time for adjustment by simply loosening the set screws and after it has been adjusted it can be tightened again.

F denotes an inclined rod, one end of which is slotted to receive the arm e to which it is pivoted, the slotted end of the rod F being provided with one or more holes so that its connection with the arm e may be adjusted, and the lower end of the rod F is provided with an anti-friction roller f which rests in contact with the floor or surface upon which the chair is located.

G designates a spring which is preferably composed of several parts, it being made of a length of wire which passes through the rod F just above the roller f and then backward in the shape of the two parts g g, both of which coil around the chair round h at the points g' g' and then the two parts g^2 of the wire are looped to engage with the upper round h' of the chair. The action of this spring upon the rod F is to force it downward, that is to say, it keeps the roller f closely in contact with the floor.

I will now describe the operation of my improved fan mechanism. A person seated in the chair, as for instance, the chair A, will rock back and forth and the result of such rocking will be to cause the horizontal rock shaft B to oscillate by reason of the connection of the arm e with the rod F, which latter is

held in a comparatively quiet position by means of the spring G, and the oscillation of the shaft B, moves the fan blades D D in a direction opposite to the direction of motion of the chair. Thus the action of the occupant of the chair in rocking, develops sufficient power to drive the fan mechanism and move the fan blades for the purpose of creating a current of cooling air. During the operations of the fan it will be evident that the rod F acts as a kind of a brace, its upper end, on account of its pivotal connection with the arm *e* causing the latter to be lifted each time the chair drops backward, a movement which results in a forward throw of the fan blades D.

The roller *f* serves a useful purpose in providing a roller for the lower end of the bar F whenever the chair is moved about from place to place and also enabling the lower end of said bar to have an easy position upon the floor when the fan mechanism is in operation.

It will be evident that numerous changes and modifications may be made in the exact details of the construction and arrangement of the several parts of my invention, and I reserve the liberty of varying the same in all necessary particulars accordingly as experience may dictate.

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

1. The combination with a rocking chair or other movable or oscillating seat, of a horizontal rock shaft supported thereon and provided with a rearwardly extending arm, a spring-provided rod pivoted to said arm and having its lower end resting upon the surface which supports the chair and suitable fans carried by the rock shaft so that when the chair is oscillated the fans may be turned in the opposite direction, substantially as described.

2. The combination with a rocking chair, of a horizontal shaft provided at each end with sockets, suitable fans supported in said sockets, a roller provided rod pivoted to an arm carried by said rock shaft and a spring engaging the chair and the aforesaid rod for steadying the latter and keeping it in position, substantially as described.

3. The combination of an oscillating chair, a horizontal rock shaft supported thereon, a fan or fans carried by said shaft, an arm-provided sleeve on the shaft, a rod pivoted to said arm and having its lower end resting upon the surface which supports the chair and a spring device connected to the lower end of said rod and likewise to the chair, substantially as described.

4. The combination, with a rocking chair, of a horizontal shaft B supported in bearings on said chair and carrying the sockets B′ at each end, the fans D supported on the uprights C carried by said sockets, the rod F having the antifriction roller *f*, said brace being pivoted at its upper end to an arm *e* of a sleeve E which is secured on the shaft B and the spring G attached to the rod F and to the chair, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

PERRY A. TORNWALL.

Witnesses:
R. R. HUNTINGTON,
T. W. BRAMLITT.