

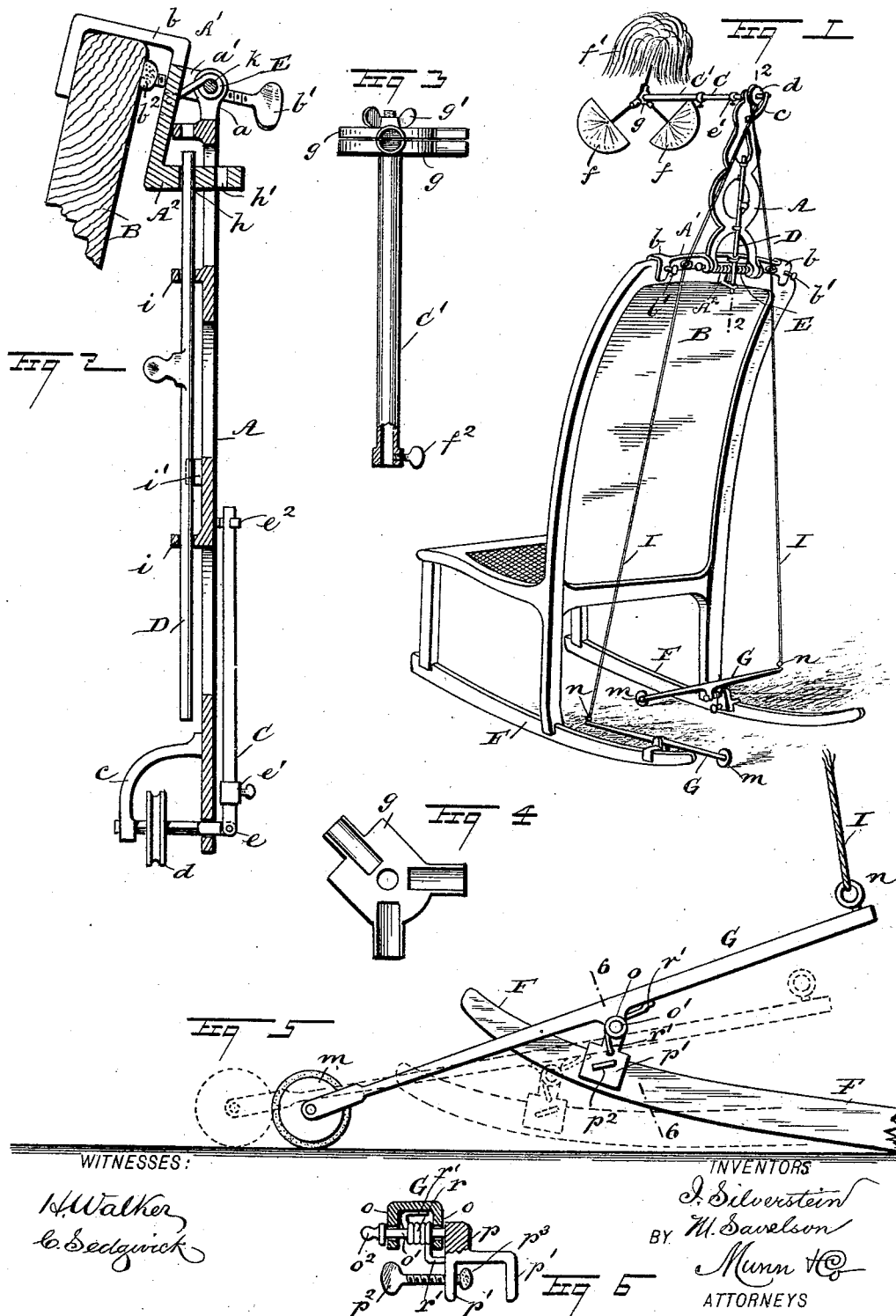
(No Model.)

2 Sheets—Sheet 1.

I. SILVERSTEIN & M. SAVELSON.
FAN MOTOR.

No. 453,921.

Patented June 9, 1891.



WITNESSES:

H. Walker
C. Sedgwick

INVENTORS

I. Silverstein

BY M. Savelson

Munn & Co

ATTORNEYS

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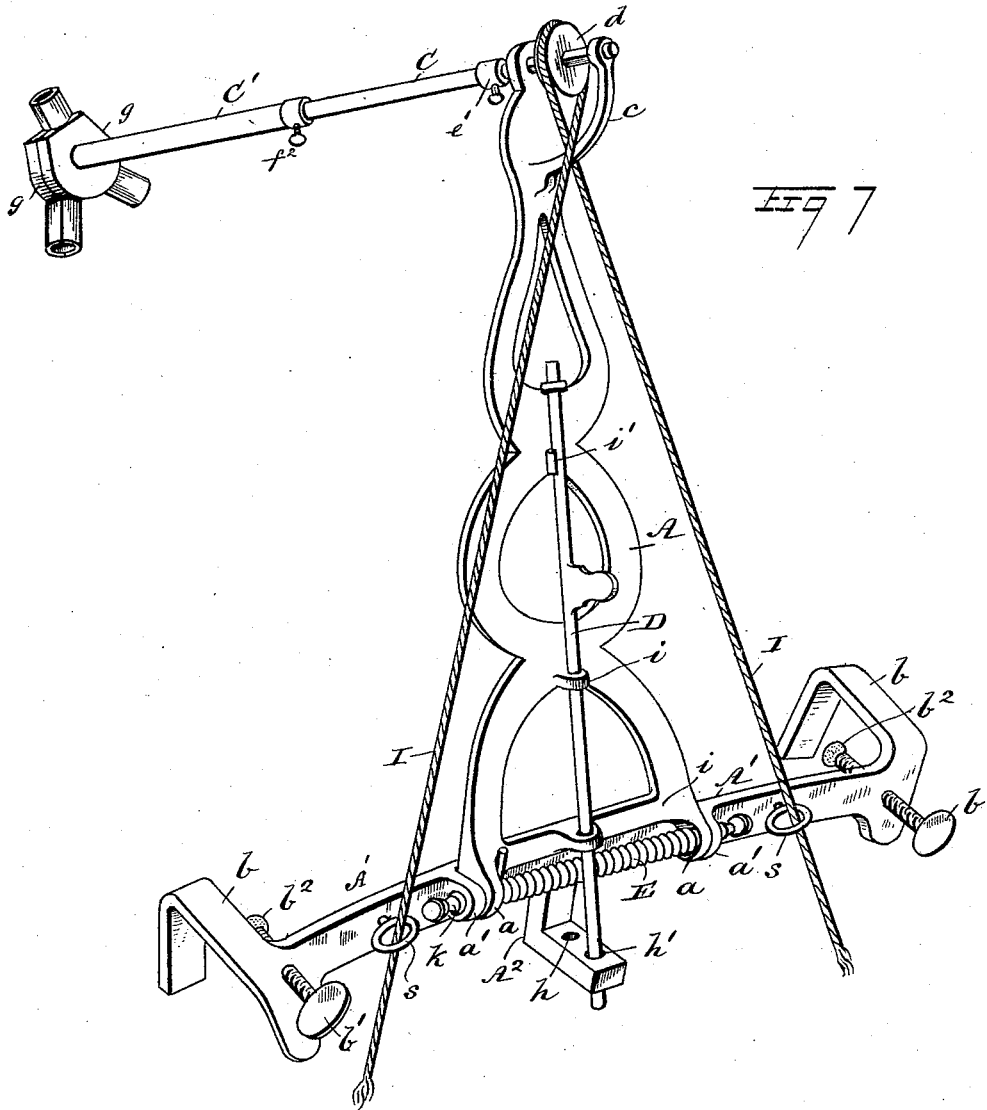


Fig 7

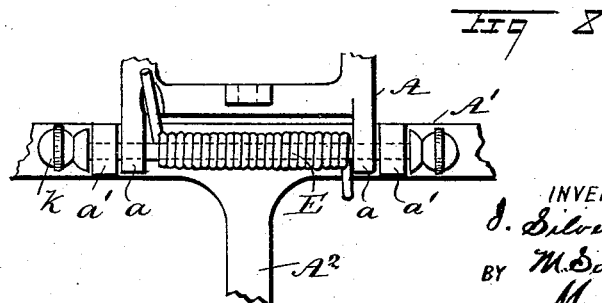


Fig 8

WITNESSES:
H. Walker
& Bedgwick

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UNITED STATES PATENT OFFICE.

ISIDOR SILVERSTEIN AND MORRIS SAVELSON, OF NEW YORK, N. Y.

FAN-MOTOR.

SPECIFICATION forming part of Letters Patent No. 453,921, dated June 9, 1891.

Application filed February 3, 1891. Serial No. 380,011. (No model.)

To all whom it may concern:

Be it known that we, ISIDOR SILVERSTEIN and MORRIS SAVELSON, both of New York, in the county and State of New York, have invented a new and useful Fan-Motor, of which the following is a full, clear, and exact description.

The object of this invention is to provide a fan attachment for a rocking-chair which will be actuated by a rocking movement of the chair and revolvably move one or more fans conveniently located to produce a current of wind and cause it to impinge on the person of the occupant of the chair, a further object being to produce an attachable fan-motor for a chair which will admit of a close folding adjustment of its parts when not in service.

To these ends our invention consists of certain features of construction and combination of parts, as hereinafter described and claimed.

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 perspective view of a rocking-chair and of the improvement removably secured upon the chair. Fig. 2 is an enlarged vertical section of the upper portion of the device, taken on the line 2 2 in Fig. 1, showing the parts mounted on a chair-back broken away, said parts being in a depending folded condition. Fig. 3 is an enlarged detached view of the hollow arm whereon the fans are secured by a clamp, also shown. Fig. 4 is an enlarged detached view of a half-section of the fan-clamp. Fig. 5 is an enlarged side view of a chair-rocker, broken, and one of two vibratory levers in place upon the rocker, which levers are simultaneously actuated by the motion of the chair-rockers. Fig. 6 is a transverse section of the vibratory lever shown in Fig. 5 detached from the rocker, the section being taken on the line 6 6 in said figure. Fig. 7 is an enlarged detached perspective view of the fan-supporting portion of the device; and Fig. 8 is a broken enlarged view of the foot of the folding bracket and an engaged clamping-bar, also shown broken, with a spring in position engaging these parts.

There is a bracket-arm A provided, which is bifurcated at its lower end, the limbs *a* thus produced having a hinged engagement with

two ears *a'*, that project from the side of a clamping-bar A', which bar extends on each side of the bracket-arm a proper length to afford stability to the connection with the chair-back B, and is provided at the ends with clamping-jaws *b*, removable attachment being effected by the adjustment of the similar clamping-jaws *b* and their screws *b'*, these latter having gum tips *b²* on their free ends that press on the chair-back and prevent indentation, while a secure attachment is produced.

Upon the upper end of the bracket-arm A a laterally and upwardly projecting limb *c* is formed or secured, which is perforated at its upper end in axial alignment with a similar perforation in the upper end of the bracket-arm proper, thus affording two separated points for the revoluble support of the laterally-extending fan-driving shaft C.

Between the arm A and its lateral limb *c* a grooved pulley *d* is secured upon the shaft C, which is jointed at *e* to permit said shaft to fold, as shown in Fig. 2, there being a short sleeve *e'* mounted on the shaft, which, when slid over the joint *e*, will retain both portions of the shaft aligned and flexure of the joint will be prevented, as indicated in Figs. 1 and 7. When the shaft C is folded, it is retained in place by a latching-spring *e²*.

An elongated tubular extension-piece C' of the fan-driving shaft C is furnished of a proportionate length and a diameter which will cause it to fit and slide neatly upon the shaft, thus affording means for the correct location of the fans *f* and fly-brush *f'*, which are secured to the outer end portion of the tubular extension-piece C' by two mating clamping-plates *g*, that are loosely mounted upon a reduced solid portion of the extension-piece, and are clamped together, so as to retain the handles of the fan and fly-brush between them properly spaced apart by the adjustment of the binding-nut *g'*.

From the center of length of the clamping-bar A' a depending and outwardly-projecting lug A² is extended, which lug is perforated at two points *h h'* for the reception of the end portion of the locking-rod D, that is loosely inserted in the perforated ears *i* and bears upon a grooved guide-block *i'*, which are formed upon the side of the bracket-arm A

at properly-separated points, whereby the locking-rod is adapted to slide and enter either of the holes h h' , the hole h being engaged when the arm is folded downwardly, as represented in Fig. 2, and the hole h' similarly entered by the rod end when the arm A and parts supported on it are elevated for service. The spiral spring E encircles the pintle-bolt k , that affords a pivotal connection between the bracket-arm A and clamping-bar A', having one end in contact with the outer side of the arm and its other extremity in engagement with the bar named, so that the torsional strength of the spring will aid in elevating the bracket-arm and its attachments to the position shown in Figs. 1 and 7.

The device provided to communicate motion to the fan-driving shaft C is shown connected therewith in Fig. 1 and detached in Figs. 5 and 6, and consists, essentially, of two levers G, which are each adjustably attached to the rockers F of the chair by a screw-clamp, and as these levers and attaching devices are the same in construction a description of one will apply to both. As indicated in Figs. 5 and 6, the lever G is an elongated bar made of any suitable material, having a roller m , secured pivotally at one extremity, the other end being provided with a ring n . At a proper point near the longitudinal center of the lever G a pair of opposite ears o are formed, which project from the lower side of the lever and are perforated transversely to receive a pintle-bolt o' , that has a head o^2 on one end and engages with its other end the side of a clamping-block p , which is furnished with two parallel jaws p' , and a binding-screw p^2 , whereon an elastic pressure-cap p^3 is placed. The coiled spring r is located upon the pintle-bolt o' and has its ends r' interlocked with the block p and lever G, so as to exert torsional force on the lever. The duplicate levers G are clamped upon the chair-rockers F, as represented in Fig. 1, near the center of rocking movement of the latter, one roller m and the end of the lever it is pivoted upon being projected toward the front of the chair and the other lever end and attached roller oppositely extended, so as to locate the roller near the rear terminal of the rocker said lever is clamped upon, both rollers resting and traveling on the floor when the chair is rocked. A strong cord or twisted-wire strand I is secured by its ends to the rings n and made to engage the grooved pulley d , the cord also passing through the guide-rings s , which project from the clamping-bar A', and to insure proper contact of the cord with the pulley it is preferably crossed below said pulley, as represented in Fig. 7.

In use the device, when properly connected to the chair-back and secured in elevated adjustment, as shown in Fig. 1, will receive motion if the chair is rocked, as the vibratory movement of the levers G (indicated by dotted lines in Fig. 5) will communicate a revolvable movement to the shaft C and rock the

same in opposite directions alternately. The agitation of the fans f and fly-brush f' by the means just indicated will create an air-current in front of the upper portion of an occupant of the chair while it is rocked.

The hollow extension-piece C' can be longitudinally adjusted upon the shaft C to locate the fans f and fly-brush f' at any desired distance from the person in the rocking-chair by the set-screw f^2 , and the rapidity of motion communicated to the fans may be graduated by the speed of rocking movement, a change of position of the levers G toward or from each other also effecting a corresponding alteration in the vibration of said levers and oscillation of the fans, so as to regulate the strength of the wind-current produced by the fans.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a fan-motor attachment for a rocking-chair, the combination, with a clamping-bar adjustably secured upon a rocking-chair back, of a folding bracket-arm, a locking-rod which will secure the arm elevated or folded downwardly, a laterally-extensible fan-driving shaft revoluble on the arm, fans adjustably secured on the shaft end, and a device which will revolve the fans when the chair is rocked, substantially as set forth.

2. In a fan-motor attachment for a rocking-chair, the combination, with a folding bracket-arm and a clamping-bar on which the arm is hinged, of a revoluble driving-shaft on the arm, a tubular extension-piece adjustable on the driving-shaft, a clamp on the extension-piece, and fans and a fly-brush held by the clamps, substantially as described.

3. In a fan-motor for a rocking-chair, the combination, with a bracket-arm securable upon a rocking-chair back, of a fan-driving shaft that is adapted to revolve and is provided with a folding joint, and a sleeve on the shaft which will prevent flexure at the joint when located over it, substantially as described.

4. In a fan-motor for a rocking-chair, the combination, with a folding bracket-arm that is spring-pressed in one direction, a clamping-bar whereon the bracket-arm is hinged, and a locking-rod therefor, of a jointed driving-shaft, a sleeve to render said shaft rigid at its joint, a tubular extension-piece on the shaft securable thereto, a clamping device on the free end of the extension-piece, fans held by the clamping device, and a pair of similar vibratory levers on the chair-rockers, which are adapted to transmit motion to the driving-shaft, substantially as described.

5. In a fan-motor for a rocking-chair, the combination, with a clamping-bar provided with a clamping device at each end, a bracket-arm hinged to the clamping-bar near its center, so as to swing in a vertical plane on a chair-back, and a locking-rod therefor which will hold the arm erect or pendent, of a laterally-

extended revolubly-mounted fan-driving shaft on the upper end of the bracket-arm, an extension-piece therefor, fans clamped on the free end of the driving-shaft, a grooved
5 pulley on the other end of the shaft, two spring-pressed levers removably secured on the chair-rockers, each having a roller on one end that engages the floor, and a flexible con-
nection between the other ends of the levers and the grooved pulley on the driving-shaft, so substantially as described.

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