No. 682,467.

Patented Sept. 10, 1901.

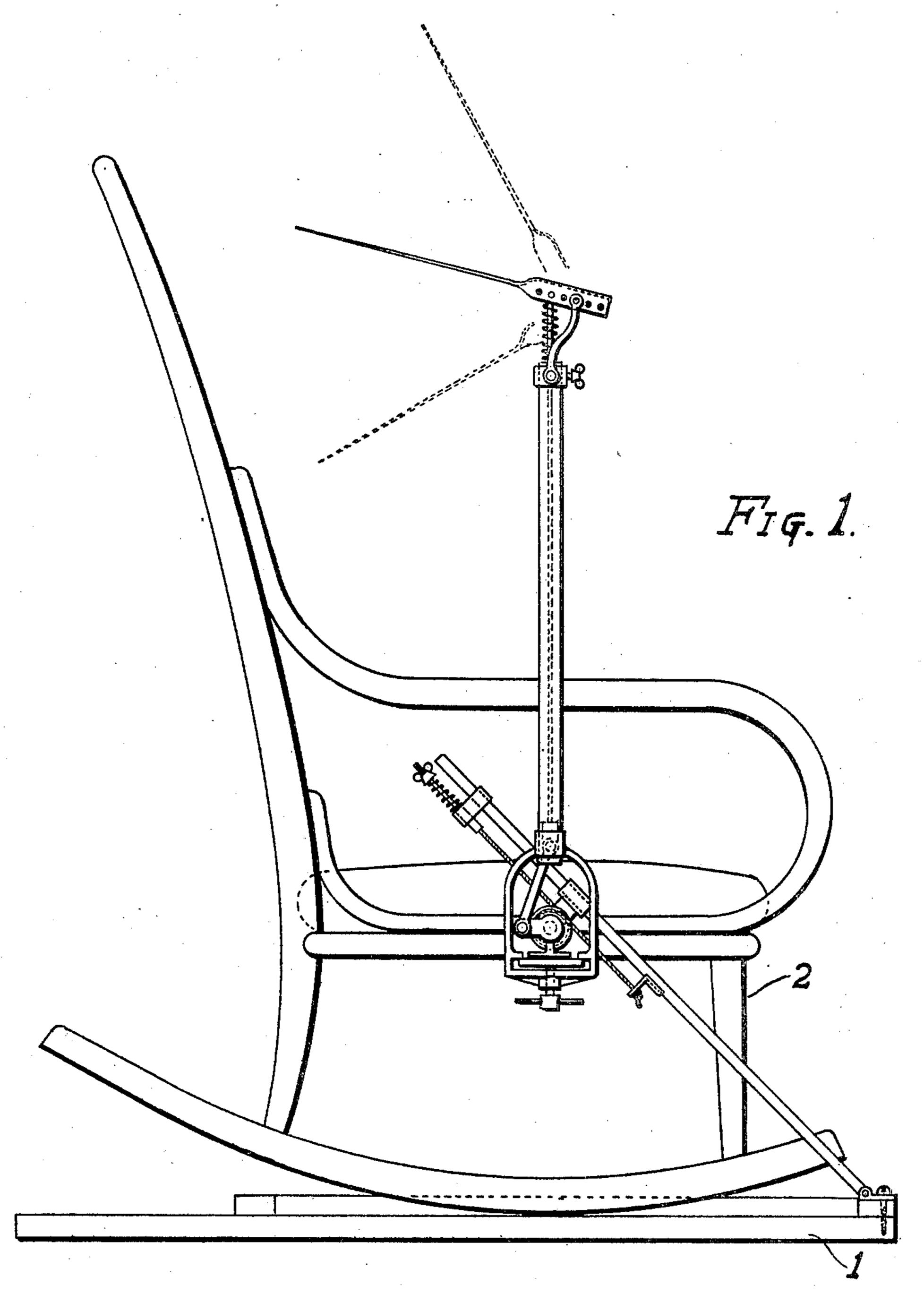
## G. A. HEIMBUCHER.

### DEVICE FOR OPERATING FANS ON ROCKING CHAIRS.

(Application filed Nov. 13, 1899.)

(No Model.)

2 Sheets—Sheet 1.



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### G. A. HEIMBUCHER.

## DEVICE FOR OPERATING FANS ON ROCKING CHAIRS.

(Application filed Nov. 13, 1899.) (No Model.) 2 Sheets-Sheet 2. Fig. 3. WITNESSES:

# United States Patent Office.

GOTTLIEB A. HEIMBUCHER, OF CHICAGO, ILLINOIS.

## DEVICE FOR OPERATING FANS ON ROCKING-CHAIRS.

SPECIFICATION forming part of Letters Patent No. 682,467, dated September 10, 1901.

Application filed November 13, 1899. Serial No. 736,730. (No model.)

To all whom it may concern:

Be it known that I, GOTTLIEB A. HEIM-BUCHER, a citizen of the United States, residing at Chicago, in the county of Cook and 5 State of Illinois, have invented certain new and useful Improvements in Devices for Operating Fans on Rocking-Chairs, of which the following is a full, clear, and exact specification.

My invention relates to that class of devices designed to be operated by the natural rocking movement of a rocking-chair, whereby the occupant thereof may receive the benefit of the fan without the expenditure of ex-15 tra effort or the exercise of special attention for its operation.

The primary object of my invention is to provide an improved and simple device whereby a fan may be kept in motion on a 20 rocking-chair as long as the occupant thereof rocks back and forth.

A further object of the invention is to make the device noiseless, easily adapted and adjusted to the chair, and adjustable to suit

25 occupants of various heights.

With these ends in view my invention consists in certain features of novelty in the construction, combination, and arrangement of parts by which the said objects and certain 30 other objects hereinafter appearing are attained, all as fully described with reference to the accompanying drawings, and more particularly pointed out in the claims.

In the said drawings, Figure 1 is a side ele-35 vation of a rocking-chair with my improvements applied thereto. Fig. 2 is a side elevation of the device on an enlarged scale, partly in vertical section and partly broken away. Fig. 3 is a front elevation, partly in 40 vertical section; and Fig. 4 is an enlarged detail vertical sectional view of the supportingtube and operating-rod, hereinafter described, showing a double turnbuckle-joint for adjusting the two said parts simultaneously and 45 increasing or decreasing their length.

I have shown my invention as applied to that type of rocking-chair in which a base portion is provided for the chair to rock on; but it will nevertheless be understood that 50 my invention is not limited to this particular

style of chair. 1 represents the base of the chair, and 2

the rocking-chair supported thereon. To the under side of the bottom of the rocking-chair I secure a board 3, which projects slightly 55 from the side of the chair and forms a bracket or ledge for the support of a drum or pulley 4, mounted upon a shaft 5 in suitable standards 6, which are secured by screws 7 or other suitable devices to the upper side of the pro- 60 jecting end of the board 3. Around this drum or pulley 4 is taken one or more turns of a cable or cord 8, whose lower end is attached by means of lug or bracket 9 to a rod 10, while its upper end is also secured in any 65 convenient way to the upper end of such rod. The lower end of this rod 10 is connected by hinge-joint 11 to the base 1 of the chair, so that when the chair rocks back and forth the cord or cable 8 will be compelled to remain 70 at rest with the rod 10 and as a consequence impart a rotary motion to the pulley or drum 4 and its shaft 5. In order to properly support the rod 10 with relation to the drum 4, I sleeve upon the shaft 5 a collar 12, which 75 oscillates around the pulley 4, concentrically therewith, and through which collar 12 passes the rod 10, thus holding the rod at a uniform distance from the periphery of the drum or pulley at all times, while permitting the pul- 80 ley to go and come with the rocking movement of the chair. In order that the slack of the cord or cable 10 may at all times be taken up automatically, I prefer to attach its upper end by means of a yielding connection, 85 preferably consisting of a threaded rod 13, passing through an adjustable bracket 14 on the upper end of the rod 10 and having a spiral or other suitable spring or cushion 15 sleeved thereon between the bracket 14 and 90 an adjustable nut 16, the tendency of the spring 15 being to pull the rod 13 through the bracket 14, and thus keep the cable 8 taut. By this means it will be seen that I provide a very simple and efficient device for impart- 95 ing a to-and-fro rotary movement to the drum 4 and its shaft 5 and a device which at the same time is noiseless and does not require the presence of grease or oil, which in some cases might be objectionable.

The outer end of the shaft 5 is provided with a crank 17, which is connected by a pitman 18 to a sliding cross-head 19, arranged in the lower end of a tubular guide 20, which

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also serves as a support for the fan 21. The fan 21 is provided with a stem or handle 22, preferably formed of a channel-bar, as shown in Fig. 2, and provided with a series of per-5 forations 23, through one of which passes a pin 24, which secures the stem 22 to the upper end of an operating-rod 25, whose lower end has a piston or head 26 secured in an elastic packing 27, contained in a chamber in to the cross-head 19, such chamber being closed by a screw-cap 28, thus forming a yielding connection between the cross-head and the rod 25. As the shaft 5 rotates the cross-head 19 will impart a rising-and-falling movement 15 to the rod 25 and as a consequence a vibratory movement to the fan 21. The stem of the fan is supported by a pair of pivoted links 29, whose upper ends are connected by pin 30 to the stem of the fan, while their 20 lower ends are pivoted, by means of screws or other devices 31, to a collar 32, sleeved on the upper end of the tube 20, the collar being held by a set-screw 33, whereby it may be adjusted up and down to vary the inclination 25 of the fan or rotate it to change its position with relation to the sitter. In order that the elevation of the fan may be varied to suit the height of the sitter, I provide the rod 25 and the tube 20 each with a turnbuckle, as more 30 clearly shown in Fig. 4. The turnbuckle of the tube 20 consists of a sleeve 34, threaded at both ends to upper and lower sections of the tube 20 and having an internal web 35, in which is loosely arranged a squared por-35 tion 36 of a sleeve 37, which is threaded at both ends to upper and lower sections of the rod 25, so that by rotating the sleeve 34 the same rotation will be imparted to the inner sleeve 37, and as the sleeves are threaded 40 right and left at opposite ends and at the same pitch it follows that the rotation of the outer sleeve will adjust the length of the rod 25 and tube 20 equally. I prefer to sleeve upon the upper end of

the rod 25 a coil-spring 38, which bears against the pin 24 and upon the upper end of a guide 39, formed on or secured to the upper end of the tube 20, so as to balance the mechanism. The lower end of the tube 20 is attached to a yoke 40, formed on a casting 41, having a pair of lugs 42, which engage over the board 3, while a set-screw 43 impinges the under

3, while a set-screw 43 impinges the under side of the board for firmly clamping the

mechanism thereto.

While I have shown and described the fan and the combined parts for imparting the motion of the crank-shaft 5 thereto, I have not claimed the same in the present applica-

tion, because the same constitute the subjectmatter of the claims in my pending application, Serial No.  $727,640\frac{1}{2}$ , filed August 18, 1899.

Having thus described my invention, what I claim as new therein, and desire to secure by

Letters Patent, is—

1. In a device for the purpose described the 65 combination of a rocking-chair, a fan, a tubular support for said fan secured to said rocking-chair and comprising two sections and a threaded sleeve connecting said sections together, a rod arranged in said tubular sup- 70 port, connected with said fan and comprising two sections threaded at their contiguous ends, a portion threaded to each of said sections and arranged concentrically in and having operative connection with said sleeve 75 whereby the rotation of said sleeve will also rotate the last said threaded portion, and means operatively connected with said rod for oscillating the fan by the rocking movement of the chair, substantially as set forth. 80

2. In a device for the purpose described the combination of a rocking-chair, a fan, a tubular support for said fan on said rocking-chair, comprising two sections adjustably connected together, an operating-rod arranged in said 85 tubular support and comprising two sections also adjustably secured together, means for adjusting said tubular sections and means for adjusting said rod-sections operatively connected with said first means whereby the 90 same will be actuated to adjust the tubular sections and rod-sections simultaneously, means for connecting the fan with one of said rod-sections by the rocking movement of the 95

chair, substantially as set forth.

3. In a device for the purpose described the combination of a rocking-chair, a fan, a tubular support for said fan upon said chair comprising two sections threaded at their con- 100 tiguous ends, a sleeve threaded on said contiguous ends of said support and having an internal web provided with a squared aperture, a rod connected with said fan and comprising two sections threaded at their con- 105 tiguous ends and arranged in said support, a member having a squared exterior passing through the squared aperture of said web and threaded at opposite ends to said rodsections respectively and means for oscillat- 110 ing said rod-sections by the rocking movement of the chair, substantially as set forth. GOTTLIEB A. HEIMBUCHER.

Witnesses:

F. A. HOPKINS, EDNA B. JOHNSON.