

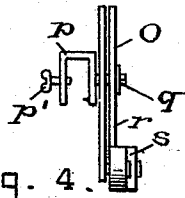
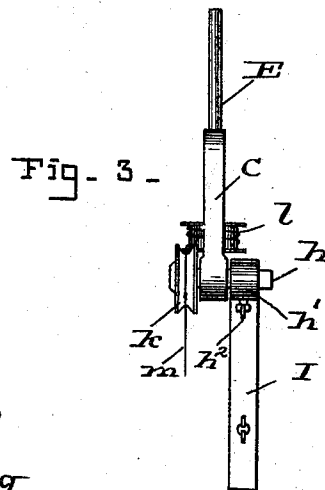
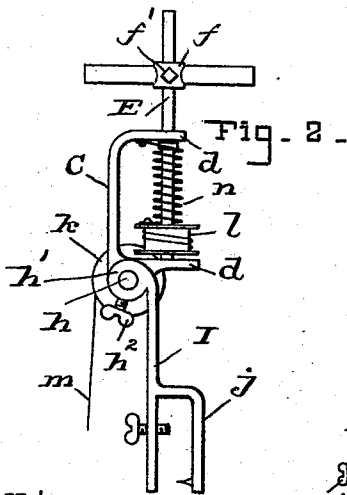
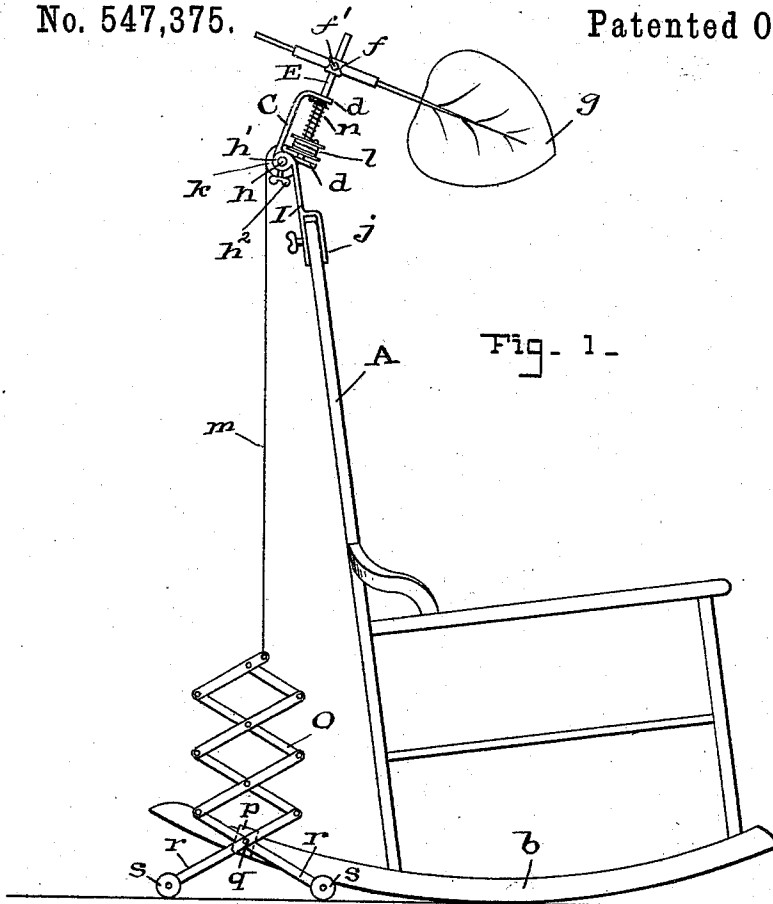
(No Model.)

2 Sheets—Sheet 1.

W. J. FERGUSON.
FAN ATTACHMENT FOR ROCKING CHAIRS.

No. 547,375.

Patented Oct. 1, 1895.



WITNESSES; -

L. J. Van Hook
Charles B. Mann Jr.

Fig. 4.

INVENTOR: -
Wm. J. Ferguson
By Chas. B. Mann

ATTORNEY.

(No Model.)

2 Sheets—Sheet 2.

W. J. FERGUSON.
FAN ATTACHMENT FOR ROCKING CHAIRS.

No. 547,375.

Patented Oct. 1, 1895.

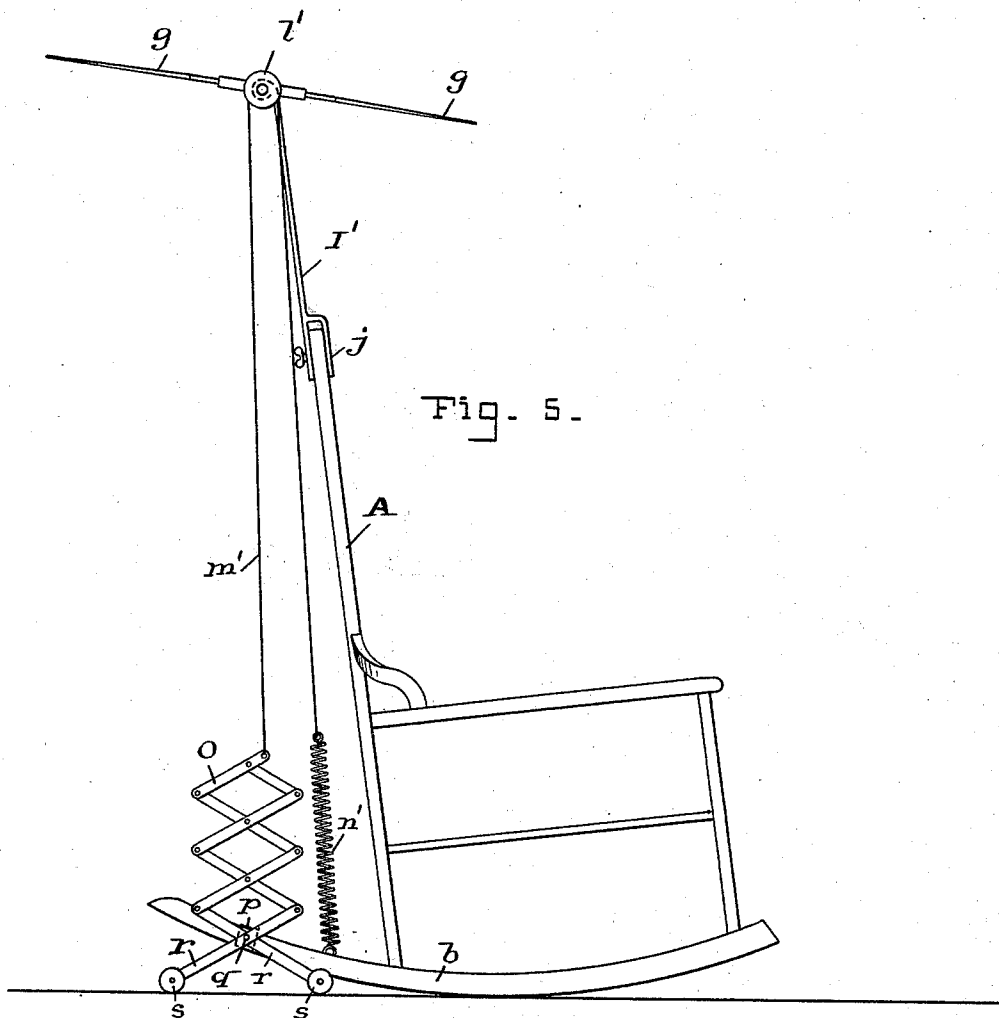
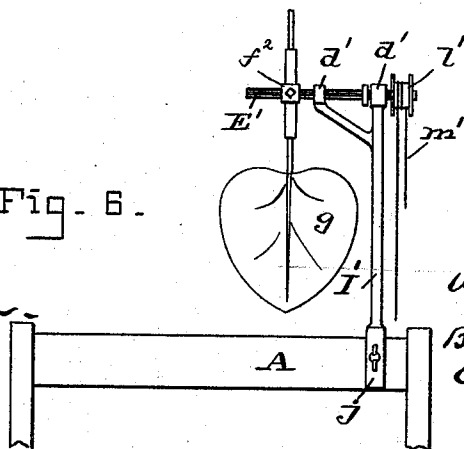


Fig. 6.



WITNESSES:—

L. J. Van Horn
Chas. B. Mann Jr.

INVENTOR:—

Wm. J. Ferguson
By
Chas. B. Mann
ATTORNEY.

UNITED STATES PATENT OFFICE.

WILLIAM J. FERGUSON, OF BALTIMORE, MARYLAND, ASSIGNOR OF ONE-HALF TO WILLIAM G. H. STUMP, OF SAME PLACE.

FAN ATTACHMENT FOR ROCKING-CHAIRS.

SPECIFICATION forming part of Letters Patent No. 547,375, dated October 1, 1895.

Application filed June 20, 1895. Serial No. 553,389. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. FERGUSON, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Fan Attachments for Rocking-Chairs, of which the following is a specification.

My invention relates to a fan attachment for rocking-chairs, and has for its object to provide a simple fan-operating mechanism comprising a lazy-tongs to move the fan when the chair tilts in one direction and a spring to move it when the chair tilts in the reverse direction.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of a rocking-chair embodying my invention. Fig. 2 shows an enlarged detail view of the bracket and operating parts of the fan detached from the chair. Fig. 3 is a view of the same parts shown in Fig. 2, as seen in the transverse direction. Fig. 4 is a view of the clip which attaches to the rocker and shows the lower part of the lazy-tongs and the rollers. Figs. 5 and 6 show a modified form embodying my invention.

The letter A designates the back of a rocking-chair of any preferred style, and *b* the rocker thereof.

Referring to Figs. 1 to 4, inclusive, bracket C has two horizontal arms *d*, each of which serves as a bearing for a shaft E, which carries a head *f*, that holds the fans *g*. The head *f* is adjustable on the shaft by a set-screw *f'*. The lower part of the bracket C is fixed rigidly on a lateral stud *h*, which fits loose in an eye *h'* on the upper end of a supporting-bar I, which has a suitable clamp *j* and set-screw by means of which it may be attached to the back of a rocking-chair, as shown in Fig. 1. It will be seen the supporting-bar I has a fixed position on the chair-back; but the bracket C, which carries the fan-shaft, may be tilted. This capacity to tilt enables the bracket to be set at any desired inclination, and a set-screw *h²* in the eye by impinging against the stud will hold the bracket wherever it may be set. By thus tilting the bracket C and fan-shaft E, as desired, the fans *g* may be set to suit the person occupying the chair. The lateral stud

projects at the opposite side of the bracket (see Fig. 3) and serves as a fixed spindle, on which is loosely mounted a grooved pulley or roller *k*, which is used to guide the cord hereinafter mentioned.

A drum or reel *l* is rigidly attached to the fan-shaft E between the two bearings *d*, and one end of the cord *m* is secured to said drum and passes around it and back over the said guide-pulley *k* and then down to the lazy-tongs.

A spiral torsion-spring *n* surrounds the fan-shaft and one end is made fast to one of the bearings *d* of the bracket and the other end made fast to the drum *l*. This spring is arranged so as to wind up or tighten when the drum turns, so as to unwind the cord and at the same time the fans are revolved in one direction—that is, when the chair tilts backward—and the spring relaxes or unwinds, and thereby turns the drum, so as to wind up the cord, and at the same time the fans are revolved in the opposite direction—that is, when the chair tilts forward.

It will be understood that when the cord *m* is pulled by the lazy-tongs at the time the chair rocks back the drum *l* is thereby caused to turn and the cord unwinds therefrom, and at this time the spring is wound up. When this backward movement of the chair ceases and the forward movement commences, the stored-up power of the spring *n* will relax and cause the fan, and also the drum, to turn in the reverse direction, and thus rewind the cord. Thus a pull on the cord turns the fans in one direction, and the wound-up spring turns the fans in the opposite direction.

A lazy-tongs device O has a clip *p* attached to the lowermost pivot *q* of said lazy-tongs. This clip fits over the rocker *b* of a chair and is secured thereto by a set-screw *p'*. The two lowermost arms *r* of the lazy-tongs are longer than the other arms, and each of these lowermost arms have at its extremity a roller *s*, which rests upon the floor where the rockers *b* also rest. The cord *m*, as already mentioned, passes down from the guide-pulley *k* and is attached to the upper end of the lazy-tongs. The lazy-tongs and its rollers are so arranged with respect to the rocker that when the chair moves backward the lazy-tongs will

close down or collapse, and thereby pull on the cord *m*. This is due to the depression of the lowermost pivot *q* and the spreading action of the rollers. When the chair moves
 5 forward, the lowermost pivot *q* is raised and the rollers *s*, acting as weights, will stay on the floor, and thereby the lazy-tongs will be extended upward, which movement slackens the cord *m* and allows it to be rewound on
 10 the drum *l*.

The modified form shown in Figs. 5 and 6 embodies the leading feature of my invention with a simpler construction. Referring to these figures, the letter A designates the back
 15 of the rocker, to which the supporting-bar *I'* is secured by a clamp *j*. At the top of this bar are bearings *d'*, in which a fan-shaft *E'* revolves. This shaft carries a head *f'*, which holds the fans *g*. The fan-shaft has a drum
 20 *l'* fixed rigidly on it. The lazy-tongs *O* are exactly the same as in Figs. 1 and 4 and are attached to the rocker in the same way and have rollers. A spring *n'* in this case is a spiral spring and is attached by one end to
 25 the chair at some suitable point—in this case to the rocker. The cord *m'* is wound once or twice around the drum *l'*, in order to give sufficient grip thereon to prevent it from slipping, and one end of the cord is attached to
 30 the lazy-tongs and the other end to the spring *n'*. This modification operates the same as the form shown in Fig. 1. When the chair tilts in one direction, the lazy-tongs act to move the fan, and when it tilts in the reverse
 35 direction the spring acts to move the fan.

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 of a fan; lazy-tongs connected with the fan to
 40 move it when the chair tilts in one direction, and a spring connected with the fan to move it when the chair tilts in the reverse direction.

2. The combination with a rocking chair of a revoluble fan carried on the chair; lazy-
 45 tongs secured to the rocker of the chair and also connected with the fan and the lowermost arms of said lazy-tongs having rollers which rest on the floor, and a spring connected with the fan, whereby when the chair tilts in
 50 one direction the collapse of the lazy-tongs will rotate the fan and when the chair tilts in the reverse direction the spring will rotate the fan.

3. The combination of a rocking chair; a revoluble shaft carried on said chair and carrying a fan and a winding drum; lazy-tongs
 55 secured to the rocker of the chair; a cord or equivalent connecting the said winding drum and lazy-tongs whereby the fan is rotated in one direction when the chair tilts one way,
 60 and a spring co-acting with said revoluble shaft and lazy-tongs whereby the fan is rotated in the opposite direction when the chair tilts the reverse way.

In testimony whereof I affix my signature 65 in the presence of two witnesses.

WILLIAM J. FERGUSON.

Witnesses:

CHARLES B. MANN, Jr.,
 GEORGE A. BOYDEN.