

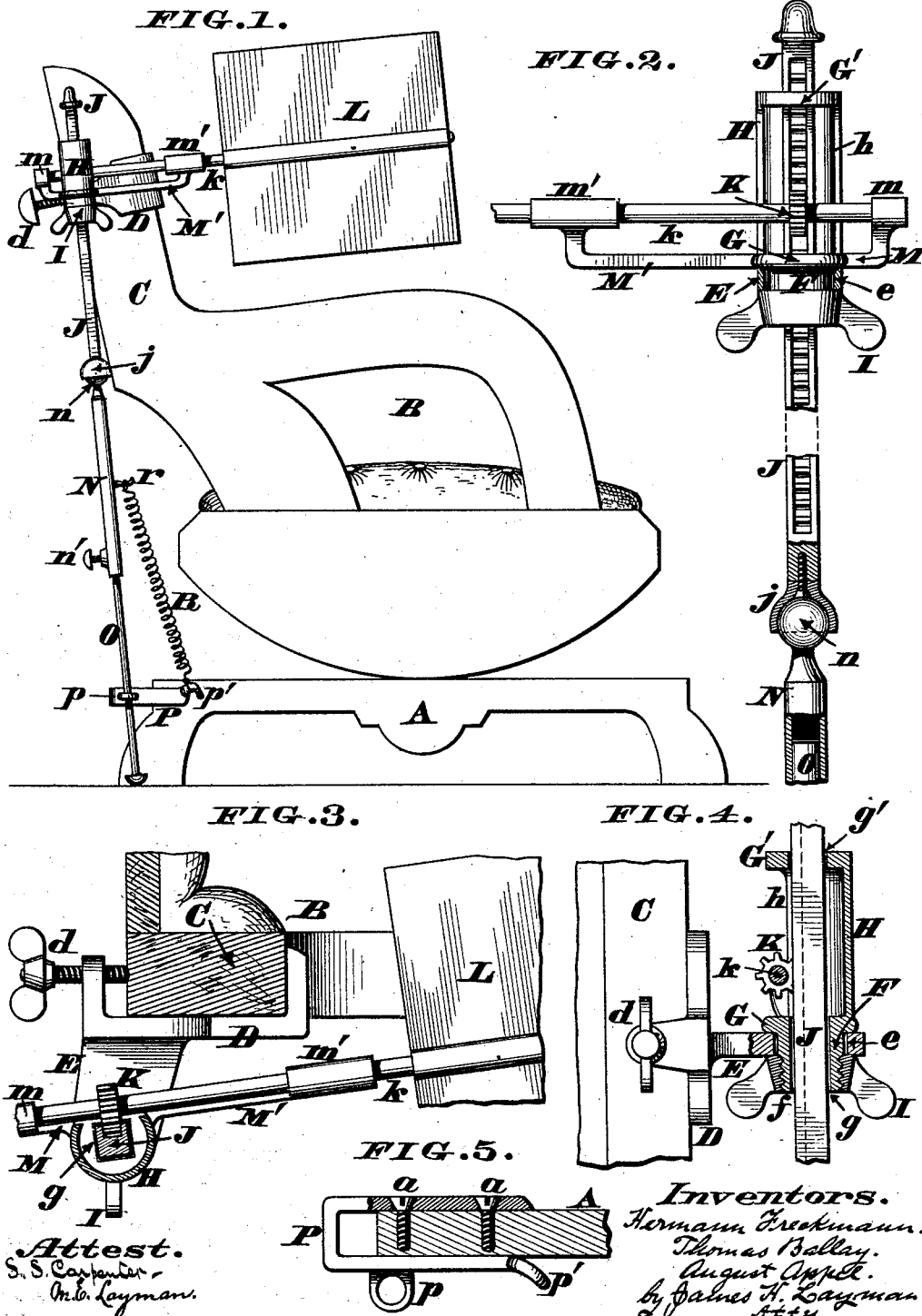
(No Model.)

H. FRECKMANN, T. BALLAY & A. APPEL.

ATTACHMENT FOR ROCKING CHAIRS, CRADLES, &c.

No. 422,390.

Patented Mar. 4, 1890.



UNITED STATES PATENT OFFICE.

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COVINGTON, KENTUCKY.

ATTACHMENT FOR ROCKING-CHAIRS, CRADLES, &c.

SPECIFICATION forming part of Letters Patent No. 422,390, dated March 4, 1890.

Application filed June 6, 1889. Serial No. 313,337. (No model.)

To all whom it may concern:

Be it known that we, HERMANN FRECKMANN, THOMAS BALLAY, and AUGUST APPEL, citizens of the United States, residing at Covington, in the county of Kenton and State of Kentucky, have invented certain new and useful Improvements in Fan Attachments for Rocking-Chairs, Cradles, &c.; and we do declare the following to be a full, clear, and exact description of the invention, reference being had to the accompanying drawings, which form a part of this specification.

Our invention comprises certain novel combinations of devices for operating those fans which are applied to chairs and cradles that rock upon supporting stands or bases, the details of said combinations being hereinafter more fully described, and then pointed out in the claims. The general arrangement of these devices is such that when the chair is rocked forward the rack drives the pinion and fan in one direction; but when the chair is rocked backward the rack turns said pinion and fan in an opposite direction. Consequently as the chair swings to and fro the fan is revolved at an effective velocity without imposing any extra labor on the person who rocks the chair or cradle, as hereinafter more fully described.

In the annexed drawings, Figure 1 is a side elevation of a rocking-chair with our fan attachment applied thereto. Fig. 2 is an enlarged sectional elevation of the various devices that drive the fan-shaft pinion. Fig. 3 is a horizontal section of these devices taken in the plane of said shaft. Fig. 4 is a vertical section of said devices. Fig. 5 is a horizontal section of the guide and a portion of the base-piece.

As seen in Fig. 1, A represents a supporting base-piece, and B is a chair adapted to rock thereon.

C is one of the side pieces to which the upholstered back is attached, and D is a frame or plate secured to said side by a clamping-screw *d*, or otherwise, as more clearly shown in Fig. 3.

E is a lug projecting laterally from said frame and having near its outer end a circular opening *e*, to admit a cylindrical neck F, depending from the lower head G of a cylindrical

housing H, said housing being open on its inner side, as more clearly seen at *h* in Figs. 2 and 4. The lower end of neck F is screw-threaded at *f* for the engagement of a thumb-nut I, wherewith the housing H is clamped to the lug E.

g is a square hole passing through the lower head G and neck F, and *g'* is a similar hole in the upper head G', said holes *g g'* being traversed by a rack J, gearing with a pinion K, secured to a shaft *k*, that carries any suitable form of fan L. This fan-shaft *k* is journaled in bearings *m m'* at the end of arms M M', projecting from the lower head G. The lower end of rack J has a socket *j*, that grasps a ball *n* on the upper end of a tube N, which latter is traversed by a rod O, whose lower end rests upon the floor. *n'* is a screw that retains rod O to any specific adjustment within the aforesaid tube N, the lower end of said rod being free to play within a staple or similar guide *p*, projecting from a bent plate P, which may be secured to the base A by screws *a* or otherwise, as seen in Fig. 5. Furthermore, this plate P has a hook *p'*, to which is attached one end of a spring R, the upper end of the latter being secured to a projection *r* of the tube N.

Our fan is applied to a chair by first securing the frame D to the side piece C at any suitable elevation, and then adjusting the rod O so as to bear upon the floor, after which act the screw *n'* is tightened, thereby preventing any accidental slipping of said rod within the tube N. Thumb-nut I is then slackened to permit the housing H to be turned around for the purpose of disposing the fan-shaft *k* parallel with the side of the chair, or to arrange it at an angle thereto, as seen at Fig. 3. Nut I is then screwed up to prevent accidental turning of said housing. The cradle or chair B is now rocked to and fro in the usual manner, and as it swings forward the rack J turns the pinion K, shaft *k*, and fan L in one direction; but when the chair swings back said rack turns said pinion, shaft, and fan in the opposite direction, the spring R serving at all times to keep the rod O in contact with the floor. It will thus be seen that the simple act of rocking revolves the fan first in one direction and then in an

opposite direction without imposing any extra labor on the operator. Finally, the universal joint *j n* permits the tube N and rod O to give in every possible direction and yet
5 be securely coupled to the rack J.

We claim as our invention—

1. The combination, in a fan attachment for rocking-chairs, cradles, &c., of frame D, clamp-screw *d*, lug E, perforated at *e*, neck F,
10 screw-threaded at *f*, swivel-housing H, secured to said lug, nut I, engaged with said screw *f*, bearings *m m'*, carried by said swivel-housing, fan-shaft *k*, journaled in said bearings
15 *m m'*, a pinion K, attached to said shaft, and a rack J, that traverses said housing and gears with said pinion K, all as herein described, and for the purpose set forth.

2. The combination, in a fan attachment for rocking-chairs, cradles, &c., of a swivel-

housing secured to a supporting-frame and 20 carrying a fan-shaft provided with a pinion, a rack J, engaged with said pinion, a ball-and-socket joint *j n* at the lower end of said rack, a tube N, coupled to said rack by said ball-and-socket joint, a rod O, inserted within 25 said tube and retained at any adjustment by a screw *n'*, a fixed guide *p*, traversed by said rod, and a retracting-spring R, that pulls the rack J down to its normal position, all as herein described, and for the purpose stated. 30

In testimony whereof we affix our signatures in presence of two witnesses.

HERMANN FRECKMANN.

THOMAS BALLAY.

AUGUST APPEL.

Witnesses:

JAMES H. LAYMAN,

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