W. L. KLINE.

FAN ATTACHMENT FOR ROCKING CHAIRS.

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Fig. 3.

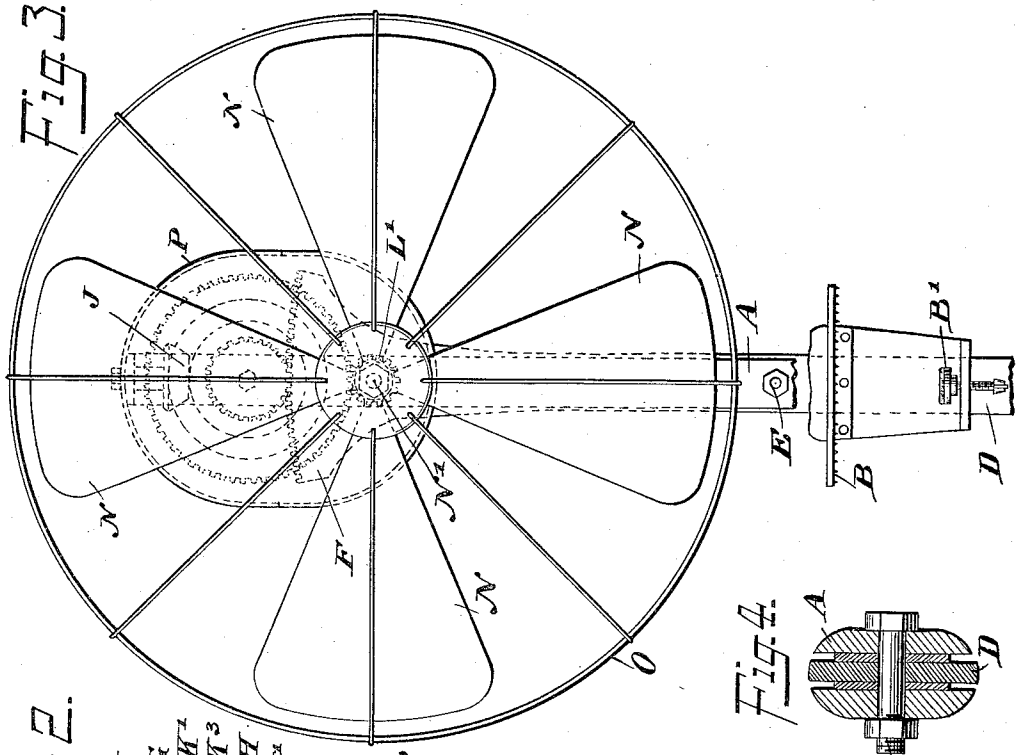


Fig. 4.

Fig. 2.

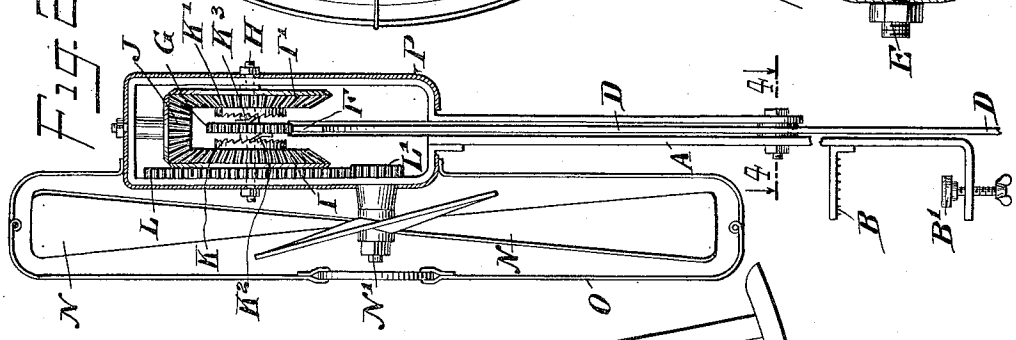
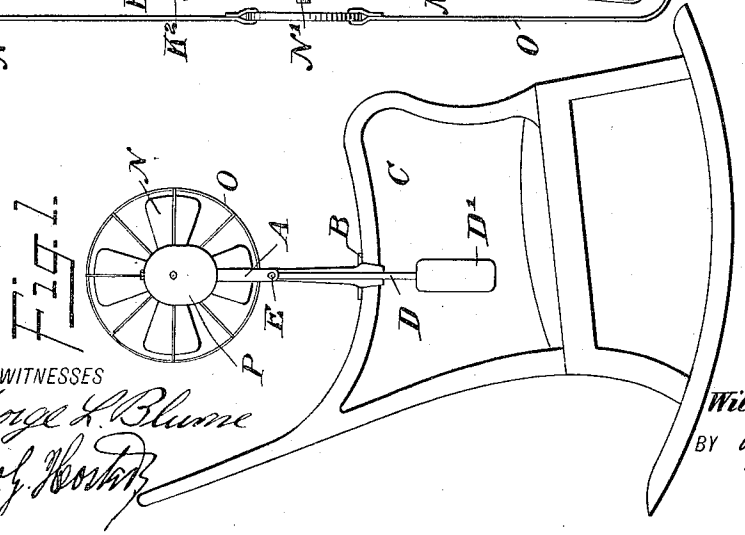


Fig. 1.



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FAN ATTACHMENT FOR ROCKING-CHAIRS.

1,139,299. Specification of Letters Patent. Patented May 11, 1915.

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To all whom it may concern:

Be it known that I, WILLIAM L. KLINE, a citizen of the United States, and a resident of Rutherford, in the county of Bergen and State of New Jersey, have invented a new and Improved Fan Attachment for Rocking-Chairs, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved fan attachment for rocking chairs, cradles and similar articles of furniture and arranged to produce a continuous current of air directed onto the occupant as long as the rocking chair or similar article is rocked.

In order to produce the desired result use is made of a frame attached to the rocking chair or similar article, a propeller or fan wheel journaled on the said frame, a pendulum mounted to swing on the said frame, and mechanism mounted on the frame and connecting the said pendulum with the said propeller wheel to rotate the latter continually in one direction as long as the rocking chair or other similar article is rocked.

A practical embodiment of the invention is represented in the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is an edge elevation of the fan attachment as applied to the side arms of a rocking chair; Fig. 2 is an enlarged edge view of the fan attachment; Fig. 3 is a front elevation of the same; and Fig. 4 is an enlarged sectional plan view of the pivotal connection of the pendulum with the main frame, the section being on the line 4—4 of Fig. 2.

The fan attachment is mounted on a suitably constructed frame A having a fixed clamping member B and a movable clamping member B′ in the form of a screw rod for clamping the main frame to the side arm or other part of a rocking chair C or other article of furniture capable of oscillating.

A pendulum D is mounted to swing on a pivot E held on the frame A, and the lower end of the pendulum D is provided with a suitable weight D′ and the upper end of the pendulum is provided with a segmental rack F in mesh with a spur wheel G mounted to rotate loosely on a rod H attached to the main frame A. The bevel gear wheels I and I′ are mounted to rotate on the rod H on opposite sides of the spur wheel G, and the said bevel gear wheels are in mesh with a pinion J journaled on the main frame A so that the rotary motion of one bevel gear wheel I or I′ is transmitted by the pinion J to the other bevel gear wheel. The inner faces of the bevel gear wheels I and I′ are provided with ratchet wheels K and K′ having their teeth arranged in opposite directions, and the said ratchet wheels K and K′ are engaged by spring pawls K^2, K^3 attached to opposite faces of the spur wheel G. To the bevel gear wheel K is attached a gear wheel L in mesh with a pinion L′ secured on the shaft N′ of a fan wheel N facing the occupant of the rocking chair C, the shaft N′ being journaled in suitable bearings arranged on the main frame A. The fan wheel N is inclosed within a suitable open guard O attached to a casing P which incloses the gearing above described and is attached to the main frame A.

The operation is as follows: When a person seated in the rocking chair C rocks the latter then a swinging motion is given to the pendulum D so that the segmental rack F imparts a forward and backward turning motion to the spur wheel G. The rotary motion of the spur wheel G in one direction is transmitted by the pawl K^2 and ratchet wheel K to the bevel gear wheel I whereby a rotary motion in one direction is transmitted by the gear wheel L and pinion L′ to the fan wheel N. When the spur wheel G rotates in an opposite direction then the pawl K^2 glides over the teeth of the ratchet wheel K while the pawl K^3 turns the ratchet wheel K′ and consequently the bevel gear wheel I′, which by the pinion J continues the rotation of the bevel gear wheel K and consequently that of the fan wheel N so that the latter continually rotates in one direction on the forward and backward swinging of the pendulum D. The rotary motion given to the fan wheel N produces a current of air directed to the head of the occupant of the rocking chair.

The fan attachment shown and described is very simple and durable in construction, can be readily attached to a rocking chair or removed therefrom whenever it is desired to do so.

It is understood that the pendulum D is

so mounted as to swing in the direction in which the chair is rocked and consequently the slightest rocking movement given to the rocking chair C causes a swinging of the pendulum to set the fan wheel N in motion as above explained.

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

1. A fan attachment for rocking chairs and similar rocking articles, comprising a frame having means for detachably securing it to the article, a fan wheel journaled in the said frame, a pendulum mounted to swing on the said frame and provided with a segmental rack, a spur wheel in mesh with the said segmental rack, loosely mounted beveled gear wheels on opposite sides of the said spur wheel, a beveled pinion in mesh with the said beveled gear wheels, a gearing connecting one of the said bevel gear wheels with the said fan wheel, and pawl and ratchet mechanisms connecting the said spur wheel with the said beveled gear wheels.

2. A fan attachment for rocking chairs and similar rocking articles, comprising a frame provided with means for attaching it to the article, a fan wheel mounted in the upper part of the frame and having a pinion on its shaft, a pendulum mounted to swing on the frame and having a segmental rack at its upper end, a stationary shaft in the upper part of the frame, a spur wheel loosely mounted on the shaft and meshing with the segmental rack, beveled gear wheels loosely mounted on the shaft on opposite sides of the spur wheel and having ratchet teeth on their inner faces, spring pawls on opposite faces of the spur wheel and engaging the ratchet teeth of the said gear wheels, a beveled pinion in mesh with the said beveled gear wheels, and a gear wheel secured to one of the bevel gear wheels and meshing with the pinion on the fan shaft.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM L. KLINE.

Witnesses:
THEO. G. HOSTER,
PHILIP D. ROLLHAUS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents. Washington, D. C."