

LAURA E. HAACK.  
AUTOMATIC FAN.

No. 180,337.

Patented July 25, 1876.

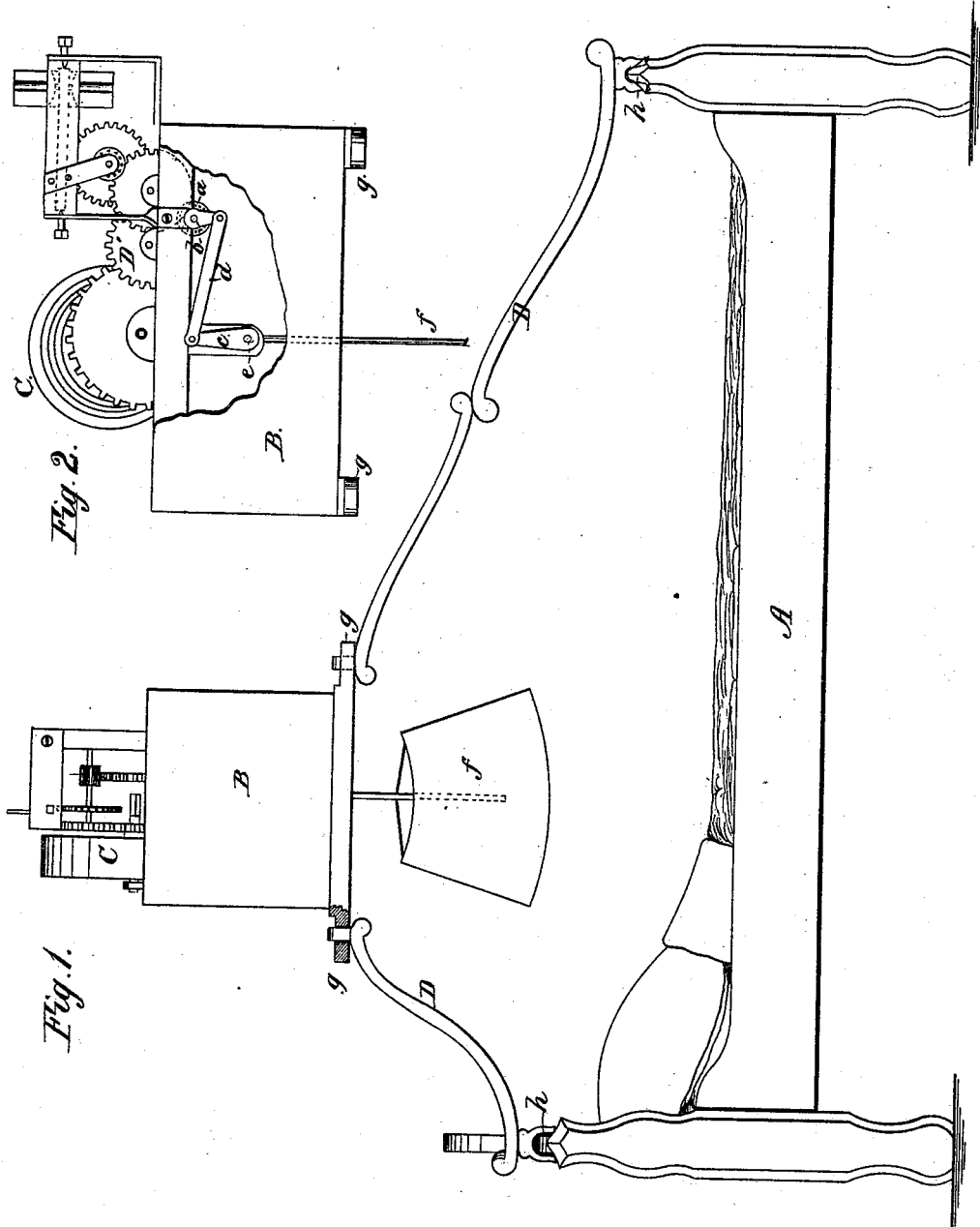


Fig. 2.

Fig. 1.

WITNESSES:

*W. W. Hollingsworth*  
*John C. Kemou*

INVENTOR:

*Laura E. Haack*

BY

*Allen P. Co.*

ATTORNEYS.

# UNITED STATES PATENT OFFICE.

LAURA E. HAACK, OF ST. LOUIS, MISSOURI.

## IMPROVEMENT IN AUTOMATIC FANS.

Specification forming part of Letters Patent No. **180,337**, dated July 25, 1876; application filed April 4, 1876.

*To all whom it may concern:*

Be it known that I, LAURA ETTA HAACK, of the city and county of St. Louis, and State of Missouri, have invented a new and Improved Automatic Fan; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming part of this specification, in which—

Figure 1 is a side elevation; Fig. 2, a detail of the mechanism operating the fan.

The object of my invention is to provide an improved automatic fan adapted to be placed above a bed or crib for the purpose of producing a change of air, and for driving away flies and other troublesome insects. The device is especially adapted for use in the sick-room for the benefit of the invalid, but is useful generally in all hot, sultry localities for producing a refreshing breeze for the sleeper.

The invention consists of a spring with a gearing of spur-wheels, contained in a box or suitable frame, and operating a hanging fan, the said box being located in a convenient position above the bed, and supported in a detachable and peculiarly-constructed frame, which consists of legs, having at the bottom forked feet, which fit upon the head and foot board, and having at the top tenons, which fit into sockets attached to the box.

In the drawing, A represents a bed of ordinary construction, to which my improved automatic fan is shown applied. B is a box, constructed in a light, but strong and durable, manner, and suitably ornamented, so as to present a finished appearance. Inside this box is arranged a frame, carrying a spring, C, and a set of spur-wheels, D, arranged after the manner of a clock-gearing, which operate through a worm upon a fly, for an escapement to regulate the speed, which may be varied by turning the vanes of the fly, so as to alter their plane in passing through the air. Upon the shaft of one of the spur-wheels *a* is arranged a crank, *b*, which is connected with a second crank, *c*, by a rod, *d*. This latter crank *c* is larger than crank *b*, so that it does not revolve, but simply rocks a shaft, *e*, to which

the fan *f* is attached. When, therefore, the spring is wound up by means of a key fitting upon the main shaft, the fan, which hangs above the occupant of the bed, is moved back and forth, producing a refreshing breeze, and effectually driving away all flies, mosquitoes, or other troublesome insects.

The box containing the mechanism is slotted at its bottom to allow the stem of the fan sufficient room to work, and the base is provided with extensions *g*, having sockets. In these sockets are detachably fitted the tenons of the supporting-legs D, which are four in number, and rest two upon the head-board and two upon the foot-board of the bed. These supporting-legs are preferably of an ornamental character, and have forked feet *h*, which fit upon opposite sides of the head and foot board, so as to maintain the fan and its operating mechanism in an elevated position. These feet rest freely upon the upper edges of the head and foot board, and should be padded upon the inside, so as to prevent scratching of the varnish and disfiguring the wood-work.

The fan, as thus described, may be regulated to run at any speed, and, by making the legs with suitable joints, can be adjusted in position so as to be near the occupant of the bed or farther away, as is desired.

It is evident that the fan with supports, as thus described, may be equally as well located in a frame above a chair.

Having thus described my invention, what I claim as new is—

The box B, having sockets, and carrying a spring with gear-wheels operating a fan, in combination with the supporting-legs D, having tenons at their upper ends, fitting in the sockets of the box, and forked feet below, adapted to rest upon the head and foot board of a bed, as described, and for the purpose set forth.

LAURA ETTA HAACK.

Witnesses:

JOHN DIRHOLD,  
ANTON J. MICHEL.