

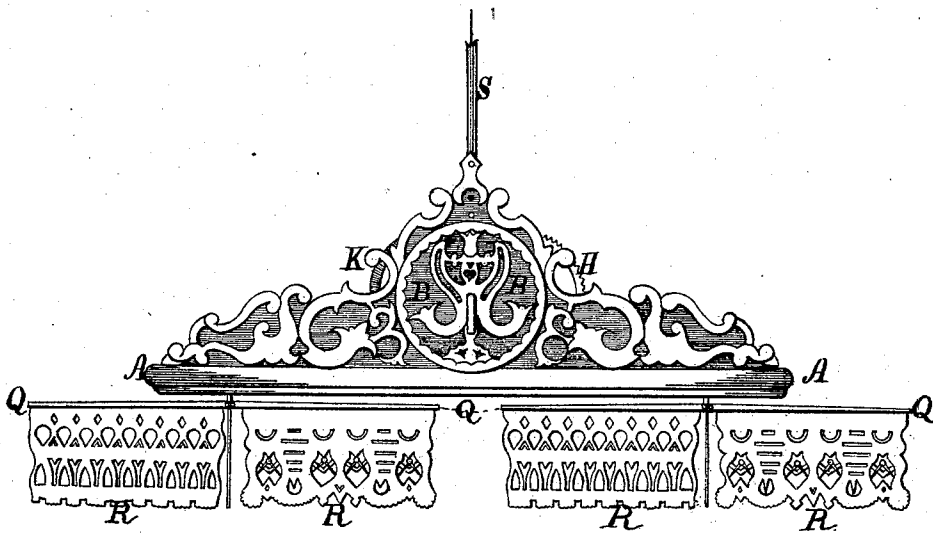
2 Sheets--Sheet 1.

G. H. THOMPSON.
Automatic Fans.

No. 151,172.

Patented May 19, 1874.

Fig. 1.



WITNESSES-

Gas. E. Hutchinson
John R. Young

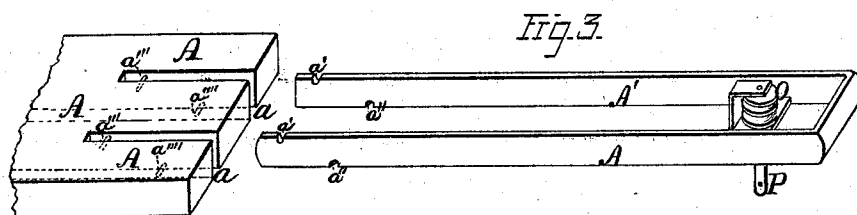
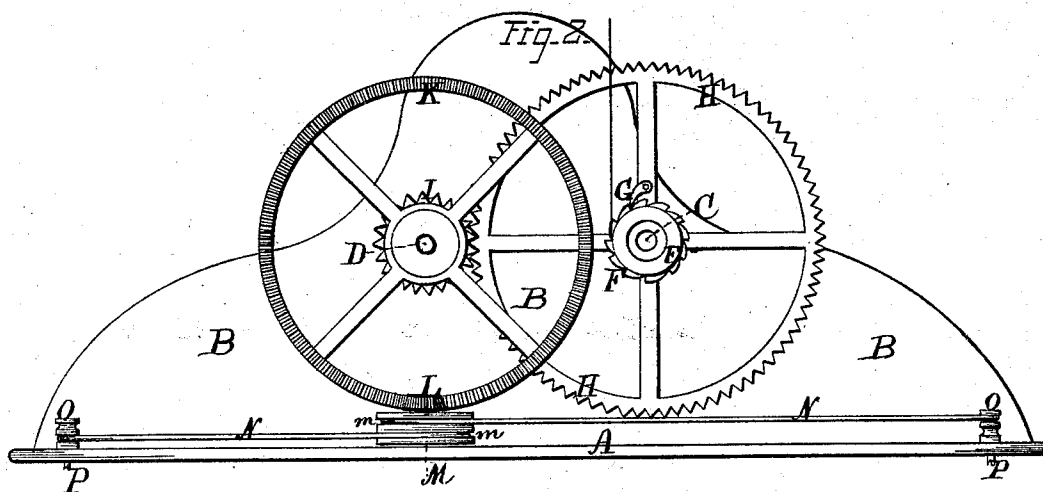
INVENTOR.

Geo. H. Thompson, by
Orrinle and Deane, his Attys

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WITNESSES-

Jas. E. Hutchinson
 John R. Young

INVENTOR.

Geo. H. Thompson, by
Prindle and Beane, his Attys

UNITED STATES PATENT OFFICE.

GEORGE H. THOMPSON, OF ATCHISON, KANSAS, ASSIGNOR TO JOHN PEN-
TON & CO., OF SAME PLACE.

IMPROVEMENT IN AUTOMATIC FANS.

Specification forming part of Letters Patent No. **151,172**, dated May 19, 1874; application filed
January 31, 1874.

To all whom it may concern:

Be it known that I, GEORGE H. THOMPSON, of Atchison, in the county of Atchison and in the State of Kansas, have invented certain new and useful Improvements in Fans for Dining-Tables; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings making a part of this specification, in which—

Figure 1 is a side elevation of my improved device. Fig. 2 is a like view of the mechanism employed for driving the fans, and Fig. 3 is an enlarged perspective view of a section for use in increasing the length of the frame.

Letters of like name and kind refer to like parts in each of the figures.

The object of my invention is to provide a simple, cheap, and efficient means for creating a current of air over and around a table, bed, &c.; and it consists, principally, in the construction and combination of the operative parts of the apparatus, substantially as and for the purpose hereinafter specified. It consists, further, in the construction and combination of the main frame and the extension section, substantially as and for the purpose hereinafter shown.

In the annexed drawings, A represents the base or frame of my apparatus, constructed, preferably, from a solid board, from the upper side of which, near its edge, extend upward, in parallel lines, two side pieces, B and B, that have substantially the form shown in Fig. 1, and serve to sustain and inclose the operative mechanism. Journaled within and extending horizontally between the vertical pieces B and B are two shafts, C and D; upon the first of which is secured a winding-barrel, E, that is provided upon one end with a ratchet-wheel, F, which latter is caused to engage with a pawl, G, that is pivoted upon a gear-wheel, H, that is in turn journaled upon said shaft. Upon the second shaft D is secured a pinion, I, that meshes with and receives motion from the gear-wheel H and a bevel-gear, K, that in turn meshes with and imparts motion to a bevel-pinion, L, which is attached to or upon the upper end of a shaft that is journaled in a vertical position within

the base A. Immediately below the bevel-pinion L is secured a double-grooved pulley, M, around or within each groove *m* of which passes an endless belt, N, that from thence extends horizontally outward to and around a grooved pulley, O, which is secured upon the upper end of a vertical shaft, P, that is journaled within the base A. As thus arranged, it will be seen that if a cord and weight, or a coiled spring, be attached to the winding-barrel, and arranged to rotate the shaft C, the shafts D and P, through the intervening mechanism, will be caused to revolve, so that if suitable horizontal arms Q and dependent fans R are attached to the lower end of said shafts P the motion of said fans will create a current of air that will correspond in velocity to the speed with which said fans are moved.

It is intended that the apparatus shall be suspended from the ceiling of a room, over a table, bed, &c., by means of a tube, S, through which, if a weight is employed, the operating-cord shall pass downward to the winding-barrel, said cord being carried from the upper end of said tube, along said ceiling, to some convenient point, and said weight attached to its outer end. The exterior of the frame is to be ornamented, and the fans made in open-work and ornamental, as shown.

For use over tables having more than ordinary length, it is desirable that the apparatus should be correspondingly extended, to effect which result the following-described means are employed.

A frame-section, A', having a length somewhat greater than the diameter of one of the fan-wheels, and a width somewhat less than the width of the frame or base A, is constructed of bars, with one end open, as shown in Fig. 3. Within the end of the base A are provided slots *a* and *a*, that receive the ends of the section A', each of which latter is provided with two notches, *a'* and *a''*, that are arranged, respectively, within its upper side near said end, and within its lower side at a greater distance outward from the same. Two pins, *a'''* and *a''''*, are placed within the base A, and, extending horizontally across each slot *a*, engage, respectively, with the notches *a'* and *a''*, and

form bearings upon which said section rests, said outer pin a'''' sustaining the downward pressure of said section, while said pin a''' sustains the upward pressure of its inner end.

The apparatus thus constructed furnishes a cheap, efficient, and durable means for creating an artificial current of air within an apartment, and is capable of affording a material increase in comfort to the occupants thereof during hot weather.

Having thus fully set forth the nature and merits of my invention, what I claim as new, is—

1. The frame A, B, and B, shafts C, D, P, and P, winding-barrel E, gear-wheels H and K, pinions I and L, pulleys M, O, and O, belts

N and N, and fans Q and R, said parts being constructed as shown, and combined to operate in the manner and for the purpose substantially as specified.

2. In combination with the base or main frame A, provided with the slots a and a and pins a''' and a'''' , the detachable section A', having within its arms the notches a' and a'' , substantially as and for the purpose shown.

In testimony that I claim the foregoing I have hereunto set my hand this 17th day of November, 1873.

G. H. THOMPSON.

Witnesses:

GEO. S. PRINDLE,
JOHN R. YOUNG.