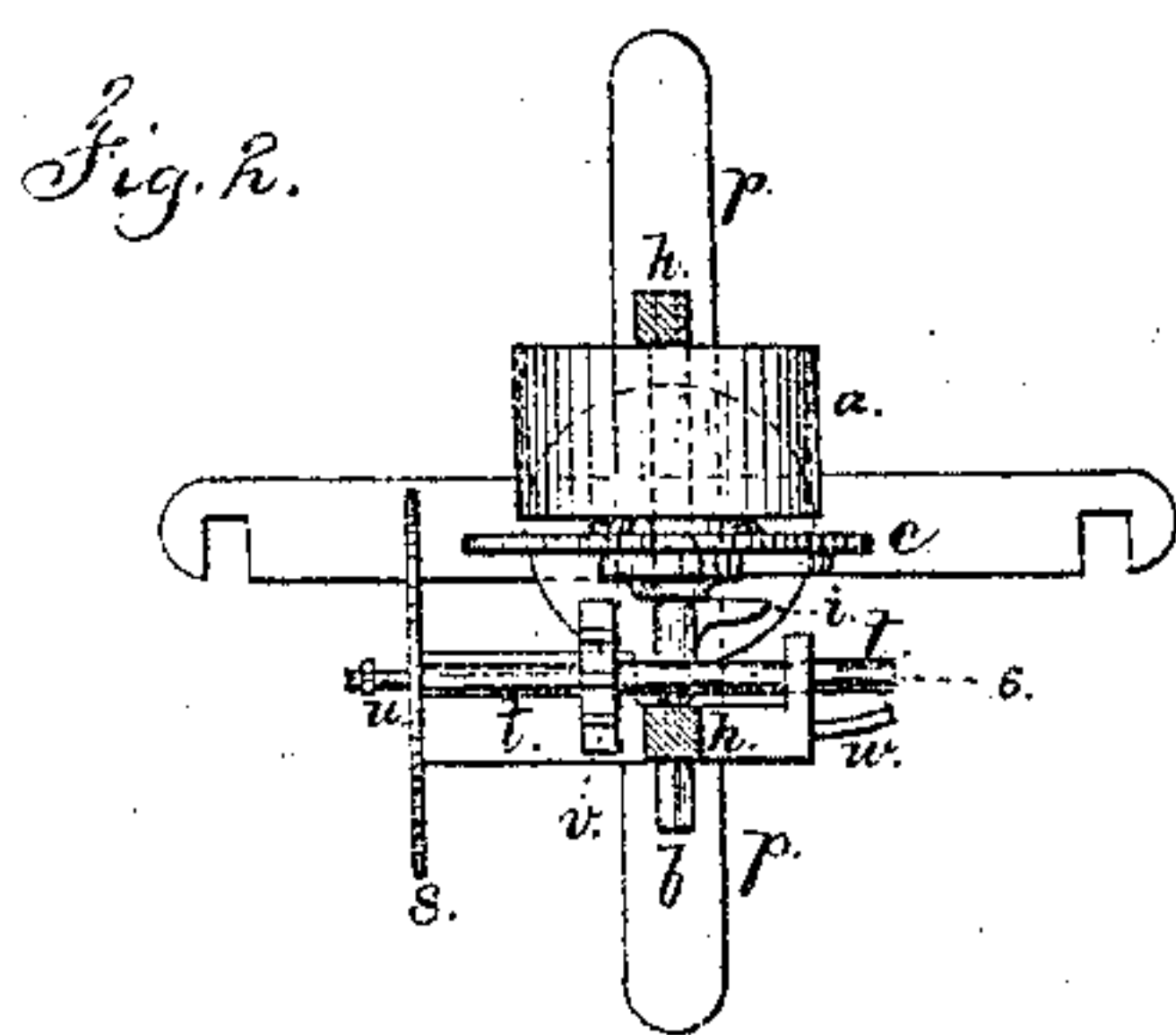
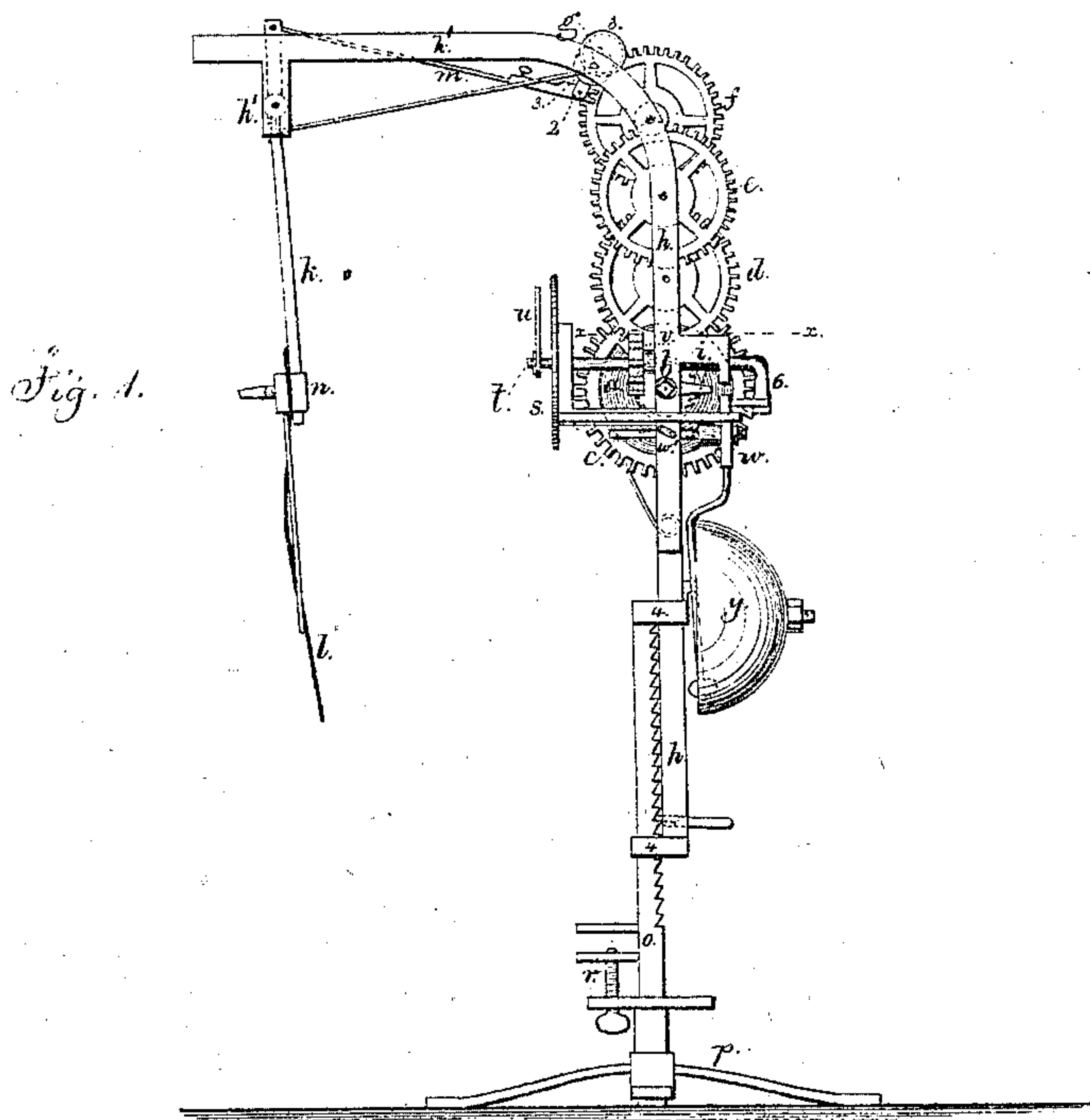


A. P. HEIDT.
Automatic Fans.

No. 134,543.

Patented Jan. 7, 1873.



Witnesses,

Chas. A. Smith
Geo. D. Walker

Inventor

Allen P. Heidt
Lemuel W. Perrell
att'y.

UNITED STATES PATENT OFFICE.

ALLEN P. HEIDT, OF NEW YORK, N. Y., ASSIGNOR TO HIMSELF AND JOHN H. HUBBELL, OF SAME PLACE.

IMPROVEMENT IN AUTOMATIC FANS.

Specification forming part of Letters Patent No. 134,543, dated January 7, 1873.

To all whom it may concern:

Be it known that I, ALLEN P. HEIDT, of the city and State of New York, have invented an Improvement in Fanning Mechanism, of which the following is a specification:

In this mechanism the fan is driven by clock-work and becomes a regulator of the speed of the train of gearing, and this is availed of in giving an alarm at a specified time, so that a person can employ the fan to produce an agreeable motion in the air contiguous to the face and head, and sleep composedly, with an alarm actuated by the fan to wake him at a definite time. This fan and alarm mechanism are upon an adjustable standard, so that the length between the stand or attaching device and the fan may be varied to suit the circumstances under which it is to be used. There is a dial and an alarm, and upon the train of gearing that drives the fan is a tooth that moves the dial-shaft around progressively, so that when the period indicated by the dial shall have elapsed the clock movement will disconnect the alarm mechanism through the agency of the dial-shaft.

In the drawing, Figure 1 is a side view of the train or clock movement and the fan; and Fig. 2 is a sectional plan below the line *x x*, showing the dial-shaft and tooth.

The clock movement or train is composed of the actuating-spring *a* upon a shaft, *b*, with wheels and pinions *c d e f* arranged to propel the shaft *g* with the required speed and power. These parts are sustained in a suitable frame, *h*, having an arm, *h'*, upon which is the axis of a pendulous rod, *k*, to which the fan *l* is connected, preferably by a slide, *n*, and clamp-screw, so that the fan may be raised or lowered and the extent of movement of the fan thereby be regulated so that the fan will swing faster when the length of its radius arm is lessened, and the reverse. The shaft *g* has a crank, 2, with a connecting-rod, *m*, to the arm or pendulous rod *k* of the fan to swing the same. There may be two cranks acting upon opposite sides of the fulcrum of the fan, or eccentrics, as at 3, may take the place of cranks. The standard *h* is connected with the standard *o* by the bands 4 4, so that they may be slid for extending or

shortening the standard, and ratchet-teeth on one of the bars or standards and a pawl or pin upon the other retain the parts when adjusted.

The apparatus may stand upon the foot *p*; or it may be attached to a chair-back, head-board, or other convenient place by means of the clamp and screw *r*.

The dial *s* is marked off into any suitable number of divisions representing hours or other periods of time, and these correspond with the time occupied by the shaft *b* in making one revolution; hence, I provide a shaft, *t*, hand *u*, and toothed wheel *v*, the latter having as many teeth as there are divisions upon the dial *s*, and the toe *i* upon the shaft *b* moves the wheel *v* one tooth each revolution of the shaft *b*. Upon the shaft *t* is an arm, 6, that operates a lever, *w*, to strike the bell *y*, or disengage any other alarm; hence, if the hand *u* is turned to the number upon the dial *s* indicating the number of hours that will elapse before the alarm is brought into action, the fan will continue to disturb the air and the tooth *i* to turn the hand progressively a notch each revolution of the shaft *b* until the arm 6 is brought to the position to disengage the alarm mechanism and sound the bell or other device.

When it is desired to disconnect the alarm, so that the fan may operate alone, it can be done by loosening the screw *w'* and sliding the alarm mechanism out of the path of the revolving arm 6 so that the same will not be moved thereby.

I claim as my invention—

1. The standard *h o*, adjustable in its length and provided with the foot *p* and clamp *r*, in combination with the fan *l* and its actuating-gearing, substantially as set forth.

2. An alarm mechanism, combined with a fan and its actuating mechanism through the intervening shaft *t*, wheel *v*, and toe *i*, substantially as and for the purposes set forth.

Signed by me this 28th day of August, A. D. 1872.

A. P. HEIDT.

Witnesses:

GEO. T. PINCKNEY,
CHAS. H. SMITH.