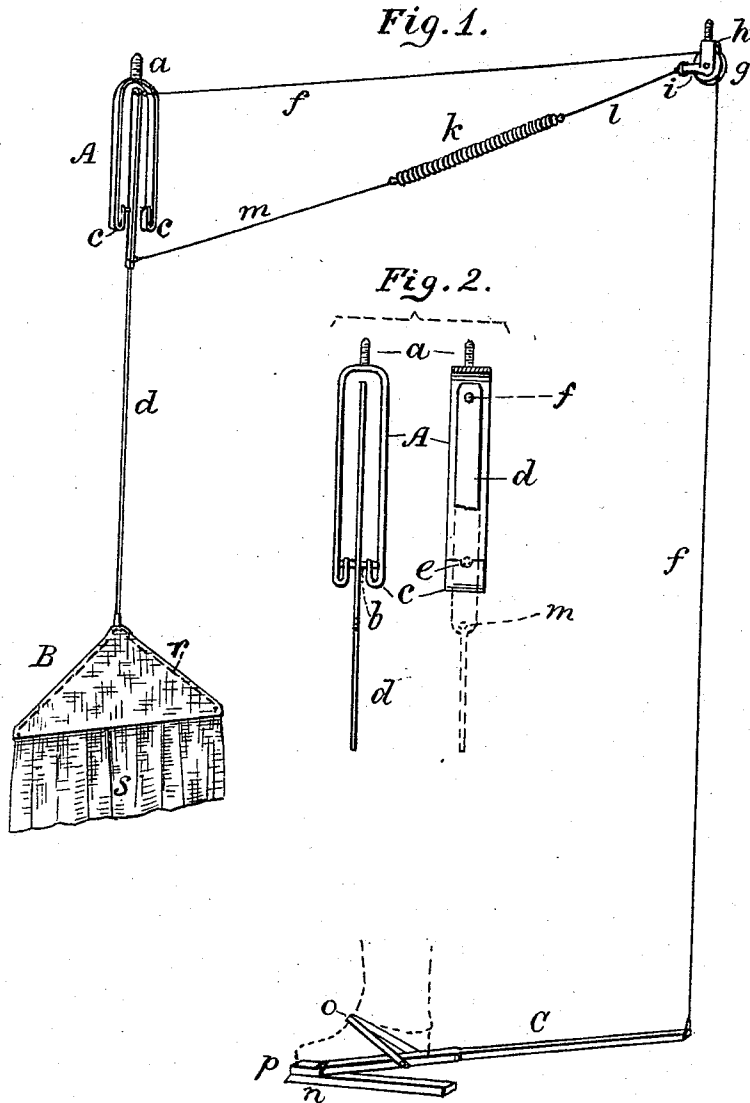


(No Model.)

G. W. GRIMES.
FAN.

No. 499,421.

Patented June 13, 1893.



Witnesses:

W. A. Robbins.
James B. Coit.

Inventor :
George W. Grimes
By A. A. Daniels
Attorney

UNITED STATES PATENT OFFICE.

GEORGE W. GRIMES, OF MURFREESBOROUGH, NORTH CAROLINA.

FAN.

SPECIFICATION forming part of Letters Patent No. 499,421, dated June 13, 1893.

Application filed December 19, 1892. Serial No. 455,630. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. GRIMES, a citizen of the United States of America, residing at Murfreesborough, in the county of Hertford and State of North Carolina, have invented certain new and useful Improvements in Fans, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to fans, such as are commonly used for dining tables, and consists in certain improvements in the construction of such fans, as hereinafter described and claimed.

15 In the accompanying drawings—Figure 1 represents a perspective view of a fan provided with my improvements. Fig. 2 illustrates a hanger, with which the fan-rod is connected, in front view and vertical section.

20 A designates a bifurcated hanger, from the top of which extends a screw *a* for securing the hanger to the ceiling of a room.

In forming the hanger, A, its two prongs are notched in their lower extremities, and said extremities are then bent inward and upward, as seen at *c* in Fig. 2, so that the notches *e* form open bearings for the ends of a pin *b* which forms a pivotal connection of the fan-rod *d* with the hanger. The pin *b* is passed through the rod *d* and is rigidly secured thereto, and the ends of the pin rest in the notches *e*. The rod *d*, to the lower end of which is secured the fan B, has a flat portion at its upper end, the flat part extending downward below the pivotal connection *b*, as shown. By this construction of the hanger and rod *d*, the latter is prevented from any lateral or irregular movement, the pin *b* being prevented by the prongs of the hanger from any movement endwise.

35 To the upper end of the fan-rod *d*, is attached one end of a cord *f* which is passed from thence over a pulley *g*, and downward to a treadle C, and connected therewith. The pulley *g* is mounted in a sheave or hanger *h* which is provided with a screw, for connecting it with the ceiling, and an arm or loop *i* to which is attached a cord *l*, connecting with a retracting spring *k*, which is connected by

a cord *m* with the fan-rod *d* at a point a suitable distance below the pivotal connection of said rod with the hanger A. The treadle C, to one end of which the cord *f* is secured, is hinged at its opposite end to a base plate *n* which rests on the floor and is thickened at *p* to form a bearing for the toe of the operator, who places his foot with the toe on the bearing *p* and the heel on the operative part of the treadle, the latter being actuated by the pressing movement of the heel—see Fig. 1. A strap *o*, to extend over the foot of the operator, is attached to the treadle C.

The fan B may be constructed of a wire frame *r*, with a covering of textile material and a pendant *s*, of any cloth desired, connected with said frame. The movement of the fan, in one direction, being effected by the treadle drawing the cord *f*, the return movement, while it is affected partly by gravity, is considerably assisted by the action of the retracting spring *k*, connected with cords *l* and *m*, so that but little force is necessary to operate the fan and give it an ample sweep.

Several of the hangers A may be fixed to the ceilings of different rooms—one being fixed to the ceiling of a dining room, another to the ceiling of a bed chamber, &c., and the rod *d*, with the fan, being readily lifted from the bearings *e* in the hanger, in one room, may be transferred to another room and connected with the hanger in the latter room.

In the case of a sick person confined to the bed, the spring *k* with its connecting cords may be removed and the fan may be suspended to a hanger in position over the pillow of the bed. The cord *f*, connected with the fan-rod, may then be passed from said rod to and attached to an elastic rod (not shown), fastened to the back of a rocking chair, to be occupied by an attendant, and a slight rocking movement of such chair will produce sufficient motion of the fan for the comfort of the patient.

I claim—

The combination with a hanger provided with two prongs, the ends of which are notched and bent inward and upward to form open bearings, of a fan provided with a rod *d*, a

pin *b*, fastened to said rod, in position to rest
in said open bearings, so that endwise move-
ment of said pin is prevented, by said prongs,
and the fan rod may be removably connected
5 with the hanger and secured against lateral
movement therein, substantially as set forth
and described.

In testimony whereof I have affixed my sig-
nature in presence of two witnesses.

GEORGE W. GRIMES.

Witnesses:

M. DORIAN,
LULU WATSON.