

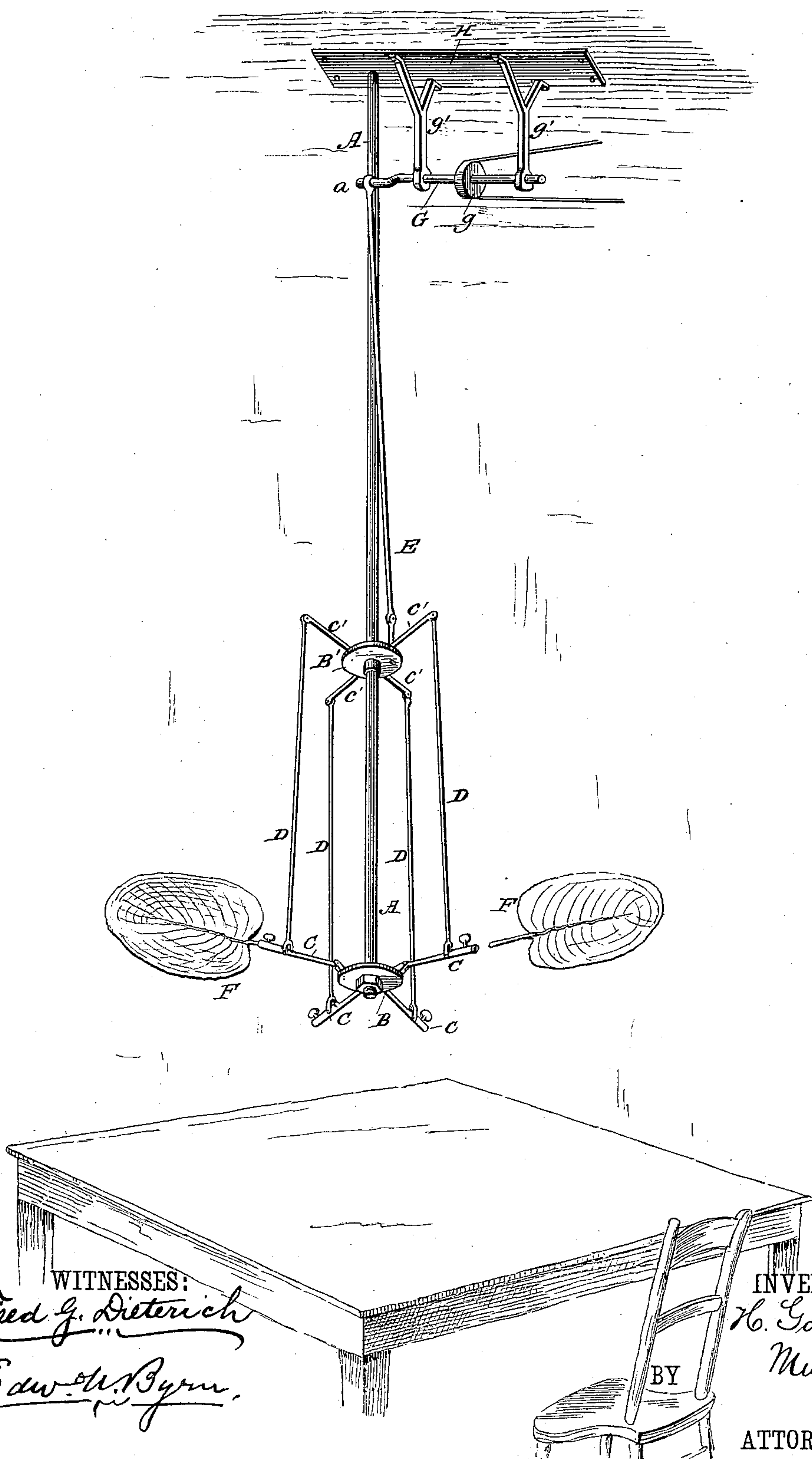
(No Model.)

H. GOODSPEED.

AUTOMATIC FAN.

No. 390,663.

Patented Oct. 9, 1888.



WITNESSES:

*Fred G. Dieterich*  
*Edw. H. Byrnes*

INVENTOR:

*H. Goodspeed*  
*Munn & Co*

ATTORNEYS.

# UNITED STATES PATENT OFFICE.

HENRY GOODSPEED, OF SAN MARCOS, TEXAS.

## AUTOMATIC FAN.

SPECIFICATION forming part of Letters Patent No. 390,663, dated October 9, 1888.

Application filed January 5, 1888. Serial No. 259,870. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY GOODSPEED, a citizen of the United States, residing at San Marcos, in the county of Hays and State of Texas, have invented a new and useful Improvement in Automatic Fans, of which the following is a specification.

My invention relates to automatic fans of that class which are adapted to be operated by suitable driving power for the purpose of creating a cool and refreshing breeze, or for driving away flies, mosquitoes, and other troublesome insects; and it consists in the peculiar construction and arrangement of parts adapted to be connected to and suspended from the ceiling of a room in any desired position above a table, stand, or bed, as will be hereinafter fully described.

The figure is a perspective view of my invention.

In the drawing, H represents an attaching and sustaining plate which carries all the parts of my invention, and is adapted to be screwed or nailed to the ceiling-joists of a room. This plate has rigidly attached to it a pendent rod, A, extending down to a convenient position for the fans, and has also hangers  $g' g'$ , in which is journaled a shaft, G, carrying a driving-pulley,  $g$ , adapted to be rotated by a belt by any suitable driving power. This shaft G has at its end a crank,  $a$ , that is connected to a pitman-rod, E, which extends down beside the pendent rod A.

At the lower end of the rod A is rigidly attached a flanged head or plate, B, to which is jointed four, more or less, socket-arms, C, in the sockets of which are held by set-screws a corresponding number of palm-leaf fans, F. Sliding on the rod A is a tubular flanged plate, B', having radiating arms C', corresponding to the fans below and connected to the socket-

arms by rods D. The sliding plate B' is jointed to the lower end of the pitman-rod E, which connects with the crank of the drive-shaft above. With this construction it will be seen that whenever the crank  $a$  is set in motion by the drive-shaft the sliding plate B' is made to reciprocate vertically on the pendent rod, and this movement through the rods D causes the socket-arms C, bearing the fans F, to have a gentle oscillation that produces a refreshing breeze from the fans or serves to keep any insects from a bed or dinner-table.

This device occupies no floor space or room on the table, can be placed in any part of the room, and is complete in its parts, so that all that is necessary is to attach the plate H to the ceiling at the desired point.

I do not claim, broadly, a pendent rod with oscillating arms at its lower end connected by rods with a vertically-reciprocating cross-head, as I am aware that this arrangement has been employed in mechanical fly-brushes.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination, with the attaching-plate H, the depending rod A, the fixed plate B on the lower end thereof, the socket-arms C, pivotally connected to said plate at their inner ends, and the fans F, held in the sockets in said arms, of the plate B', loosely mounted on the rod A above plate C, having arms C', the rods D, pivotally connecting the outer ends of said arms C C', the pitman E, connected to plate B', and the operating crank, substantially as shown and described.

HENRY GOODSPEED.

Witnesses:

ED. R. KANE,  
P. N. SPRINGER.