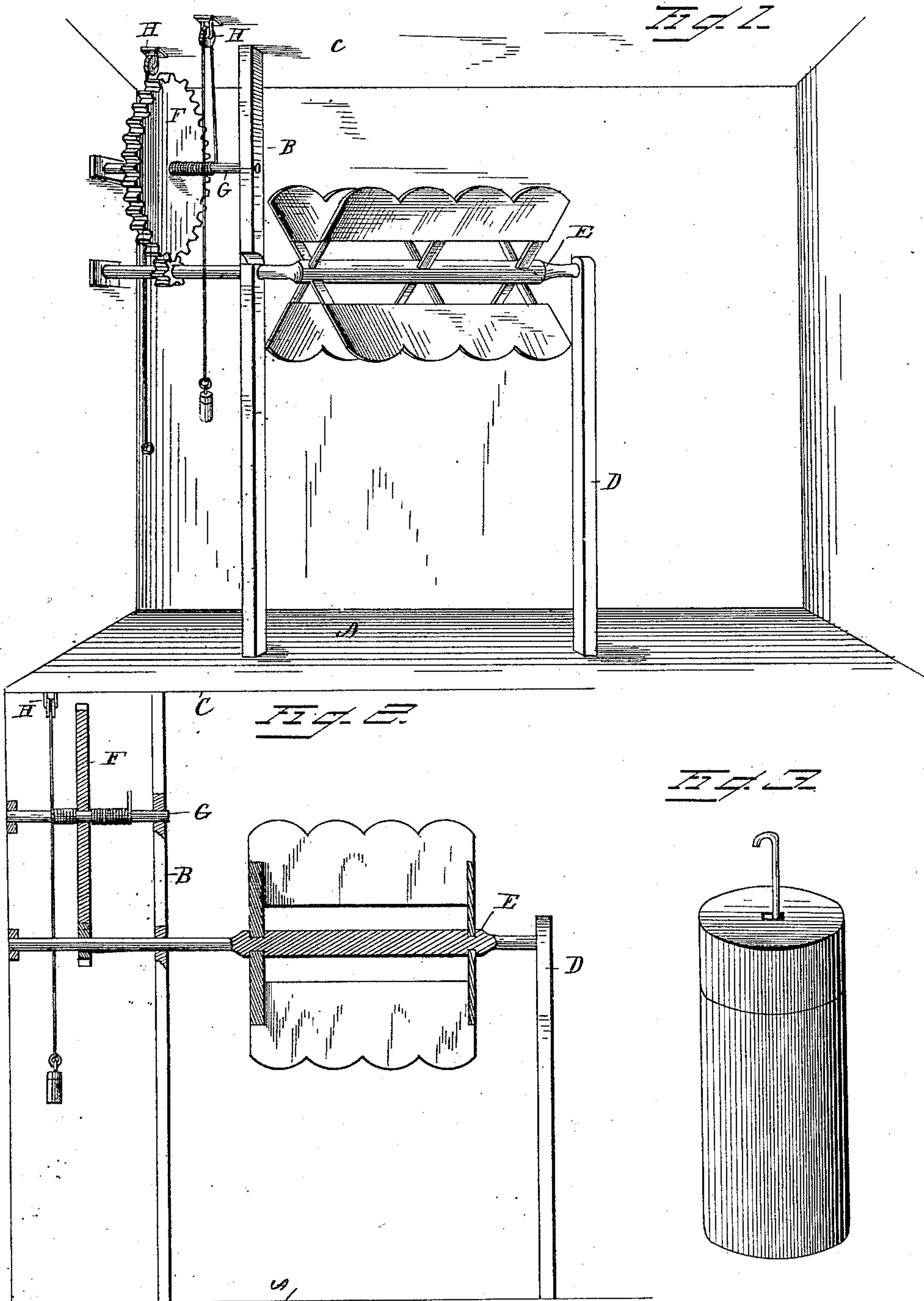


(No Model.)

J. W. ELLIS.  
MECHANICAL POWER.

No. 298,739.

Patented May 20, 1884.



WITNESSES  
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# UNITED STATES PATENT OFFICE.

JAMES W. ELLIS, OF CAMERON, TEXAS.

## MECHANICAL POWER.

SPECIFICATION forming part of Letters Patent No. 298,739, dated May 20, 1884.

Application filed March 6, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES W. ELLIS, a citizen of the United States, residing at Cameron, in the county of Milam and State of Texas, have invented a new and useful Mechanical Power, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to a combined room-ventilator and fly-hand; and it has for its object to provide a device of this character which shall be simple in its construction and thoroughly efficient and effective in its operation.

With these ends in view the invention consists in the improved construction and combinations of parts hereinafter fully described, and pointed out in the claims.

In the drawings, Figure 1 is a perspective view of a ventilator and fan constructed in accordance with my invention. Fig. 2 is a longitudinal section of the same, and Fig. 3 is a perspective view of the weight actuating the gear-wheels.

In the accompanying drawings, in which like letters refer to corresponding parts in the several figures, A represents the floor of a room, and B suitable standards for supporting the actuating mechanism, having a cross-bar, C, secured at its upper end, which is intended to represent the ceiling of a room. A short distance from the supporting frame or beams B is secured an upright, D, which is provided at its upper end with a suitable opening for the reception of a shaft, E, the other end of which passes through the beam B, and is loosely mounted to turn in a bracket secured to the side wall. Upon this shaft E, between the beams B and D, is attached the fan or ventilator, which consists of a series of radial arms, upon which is secured a covering of any desired material. Near the end of the shaft E, between the upright B and the bracket in which the end of said shaft is mounted, is provided a pinion-wheel, which is adapted to mesh with a gear-wheel, F, mounted upon a shaft, G, the ends of which are journaled in a bracket in the side of the wall and in the upright B, respectively.

H represents whirls or pulleys, which are secured to the ceiling of a room and depend therefrom.

Upon either side of the shaft G are secured the ends of cords or ropes in such manner that when the shaft is revolved the unwinding of one will serve to wind the other. These cords pass through the pulleys or whirls in the ceiling, and are each provided at their ends with rings for the attachment of a weight, which, when it is attached thereto, draws the cord through the pulley, and thus imparts motion to the gear-wheel F, which imparts motion to the fan-shaft through the pinion-wheel which is arranged thereon. It will thus be seen that to revolve said shaft it is only necessary to attach the weight to the end of the cord, which in unwinding one cord serves to wind the other, so that when one cord has been entirely unwound it is only necessary to attach the weight to the opposite cord, and vice versa.

It will be seen from the above description that I have provided, at a slight cost and with very few parts, a simple and effective device for the purpose set forth. It will, however, be seen that the power may be applied to various uses—as, for instance, a crank may be attached to the revolving shaft at one end, and the other end to a churn, sewing-machine, or in fact for almost any work which only requires a light power to operate the same.

It will also be seen that by providing double gearing the shaft may be revolved for a long length of time without changing the weight, and with but a slight additional expense.

It will be further obvious that the speed may be regulated by adding to or taking from the weight which is attached to the end of the operating-cord.

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

1. The combination, with a shaft mounted in suitable bearings and provided with a pinion, of a gear-wheel suitably mounted in bearings and adapted to mesh with said pinion, cords oppositely arranged upon the shaft of said gear-wheel and passing through pulleys,

and a weight for operating the mechanism, substantially as set forth.

2. The combination, with a shaft provided with a pinion and suitably-arranged fan, of a  
5 gear-wheel adapted to mesh therewith, and cords oppositely arranged upon the shaft of the gear-wheel, and adapted to pass through pulleys, said cords being provided at their ends with rings for the attachment of a weight, sub-  
10 stantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JAMES W. ELLIS.

Witnesses:

B. I. ARNOLD,  
J. M. TUCKER.