(No Model.)

J. F. WINCHELL.

BLOWER.

No. 314,901. Patented Mar. 31, 1885.

Fig. 1.

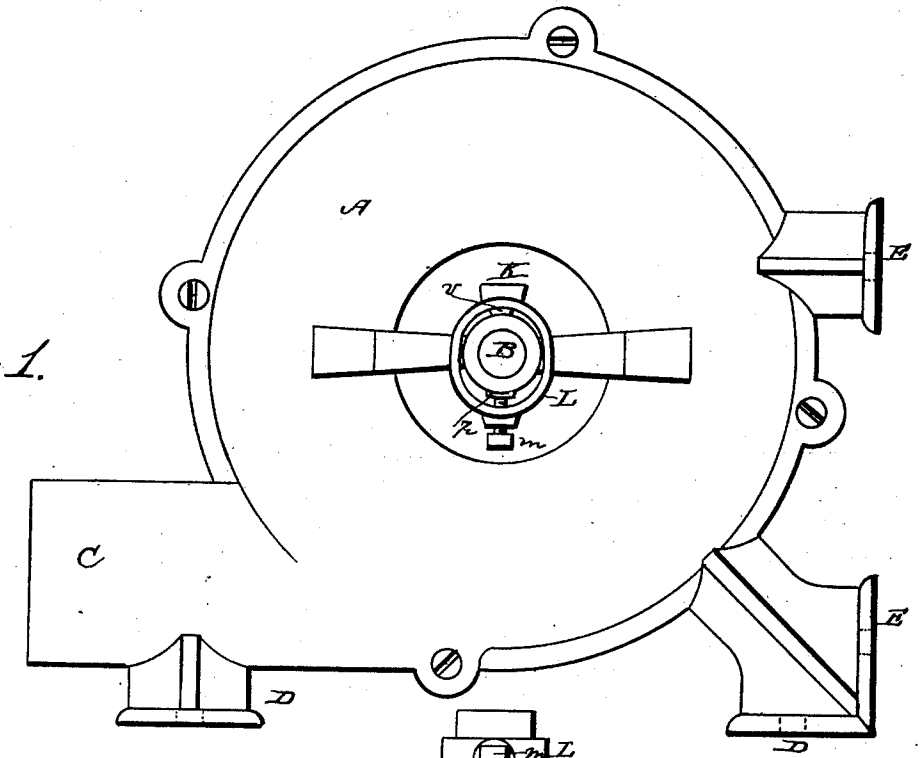


Fig. 2.

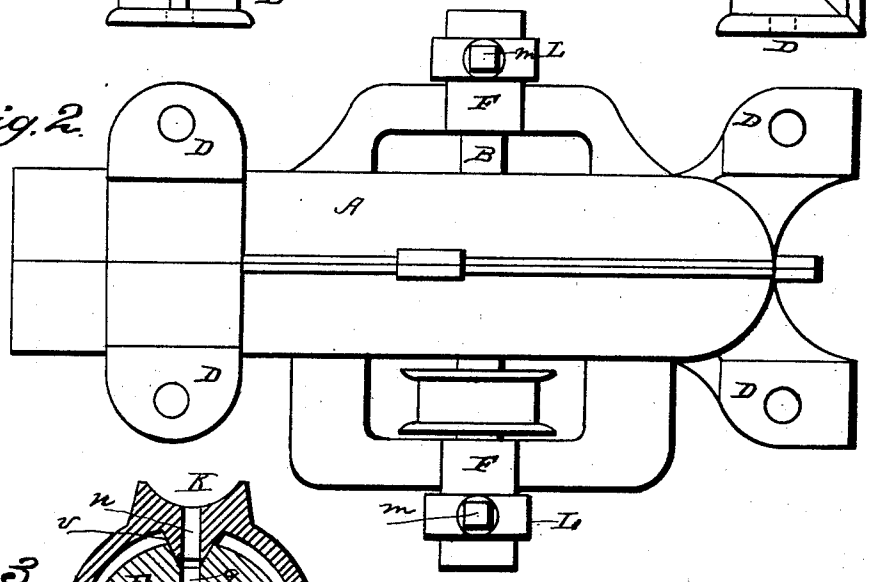
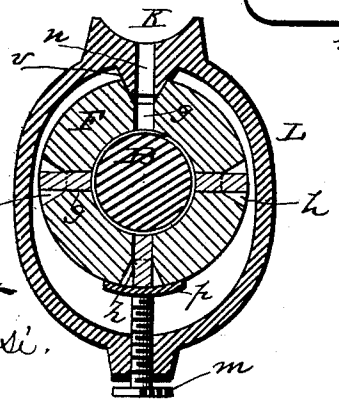


Fig. 3.



WITNESSES

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UNITED STATES PATENT OFFICE.

JAMES F. WINCHELL, OF SPRINGFIELD, OHIO, ASSIGNOR TO THE FOOS MANUFACTURING COMPANY, OF SAME PLACE.

BLOWER.

SPECIFICATION forming part of Letters Patent No. 314,901, dated March 31, 1885.

Application filed January 17, 1885. (No model.)

To all whom it may concern:

Be it known that I, JAMES F. WINCHELL, a citizen of the United States, residing at Springfield, in the county of Clark and State of Ohio, have invented certain new and useful Improvements in Blowers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation of a side view of the invention. Fig. 2 is a bottom view. Fig. 3 is a sectional detail view.

This invention has relation to blowers or blast-fans; and it consists in the construction and novel arrangement of devices, as hereinafter set forth, and pointed out in the appended claims.

In the accompanying drawings, the letter A designates the blower-case, and B the fan-shaft. C is the spout of the case.

The object of the invention is to provide means whereby the blower may be secured to horizontal or vertical supports in low or high position without changing the direction of the blower-spout, and at the same time to provide means for changing the position of the blower and its spout if necessary, whether the blower be fastened to a vertical or horizontal support or in high or low position.

In the drawings the blower is represented as having its spout directed horizontally, and the case is provided with the feet D D, which are perforated for the passage of the screws whereby it is fastened to the floor or other horizontal bearing when the spout is in the direction shown. If it is required to fasten the blower in a higher position, its spout still projecting horizontally—as, for instance, to a post or other vertical bearing—the fastening-screws are passed through the perforations in the feet E E, the bases or bearing-surfaces of which are at right angles to the bases of the feet D D; and if the blower is to be secured to a horizontal support and at the same time to have its spout directed upward the fastening is made by the passage of screws through the feet E E; or the blower may be fastened to a ceiling beam or rafter by the feet E E, the spout being directed downward. To fasten the blower to a vertical support with its spout directed upward or downward, the feet D D are employed.

In order to provide for oiling the fan-shaft in any of the different positions of the blower, I have devised the following means: Through the shaft-bearing F of the case four perforations or oil-holes, *g*, extend through to the shaft. The outer portion of each oil-hole is countersunk, as at *h*.

K represents the oil-cup, having an elongated bearing, L, which surrounds the shaft-bearing F. Through the lower portion of this bearing L extends a set-screw, *m*, which bears against a small plate, *p*, which bears upon the bearing F under the lower oil-hole, as shown. The discharge-opening of the oil-cup (shown at *n*) extends through a downwardly-projecting lug, *v*, which is of proper size to fit into the countersunk or enlarged portion *h* of the upper oil-hole, thereby forming a close joint around the oil-passage, so that the oil will not be wasted. When the blower is changed in position according to the adjustment required, some one of the four oil-holes will be uppermost, as these oil-holes correspond in angular position to the feet D D and E E. The bearing L is then adjusted, bringing its projection *v* into engagement with the uppermost oil-hole. The set-screw *m* is then turned up against the plate *p*, and the bearing L is thereby firmly fastened and holds the oil-cup securely in position. Before the oil-cup is placed in position those oil-holes which are not to be used are plugged with soft wood or other plugs, which can be readily removed when another adjustment is required.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

1. A blower-case having perforated feet or bearings D and at right angles thereto perforated feet or bearings E, whereby the blower may be adjusted in high or low position to a

vertical or horizontal support without or with a change of direction of the blower-spout, substantially as specified.

2. An adjustable blower-case having four oil-holes in the shaft-bearing at right angles to each other, substantially as specified.

3. An adjustable blower-case having four oil-holes in the shaft-bearing, an adjustable oil-cup having a bearing extending around the shaft-bearing, a perforated projection entering the upper oil-hole, and a set-screw adapted to secure the oil-cup and its bearing firmly in position, substantially as specified.

4. The combination, with an adjustable blower-case, of an adjustable oil-cup, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES F. WINCHELL.

Witnesses:
PHILIP C. MASI,
C. A. NEALE.