

A NEW ELECTRIC PROPELLER VENTILATING FAN.

Since the B. F. Sturtevant Co., of Boston, Mass., has entered extensively upon the manufacture of electric motors and generating sets, it has been carefully studying the

panying engravings, showing views of one of their electric ventilating fans, which have just been put upon the market.

The fan wheel has eight blades rigidly attached to a spider at the centre, and held in place by a hoop at the periphery at an angle of approximately thirty degrees. The angle is increased in such a manner that as the centre is approached, the theoretical velocity of the air remains practically constant. In other words, the delivery edge is helical, and the air is picked up on the inlet edge of the blades at low velocity. When well under the influence of the blades, it is accelerated to its maximum velocity with the least amount of slip. The result is an extremely efficient wheel.

The motor likewise has been the result of very careful study in the attempt to provide a light machine, entirely enclosed, and at the same time to avoid the excessive temperature which is incident to the operation of most enclosed motors. The result is a machine capable of continuous operation for ten hours, with a maximum temperature rise of not exceeding thirty degrees F. A practical efficiency of over eighty per cent. is obtained even with the small sized motors, and an excess load of seventy-five per cent. above the rated capacity may be carried without sparking, and without change of brushes.

This feature, combined with the small temperature rise, allows of carrying temporary overloads with impunity.

The bearings are self-oiling and self-aligning, and are fitted with phosphor-bronze sleeves which are removable from the outer ends of the boxes.



problem of the manufacture of a compact, efficient and convenient type of electric ventilating fan. Exhaustive tests were made with different types of fan wheels. The result is rendered clear by the accom-

The wheel is partially enclosed within a conoidal inlet ring, which decreases the frictional resistance to the entering air, and furnishes at the same time a rigid support for the motor to which it is attached by the tripod hanger.

The Sturtevant IMPROVED PORTABLE FORGES

TWENTY-FIVE SIZES AND STYLES

HAND POWER
AND
BELT POWER

Hand Blowers

FOR FORGE.



The Sturtevant STEAM : FANS

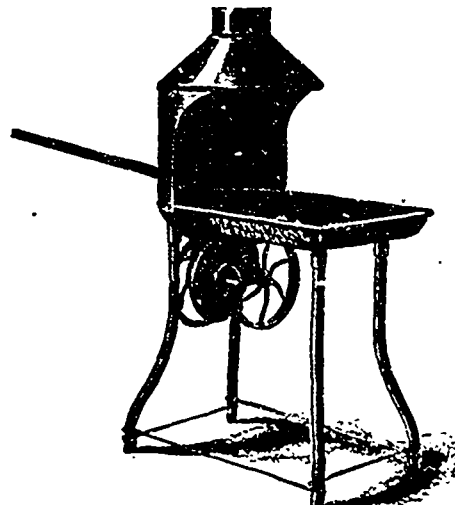
For BOILER FIRES

FORCED OR INDUCED DRAUGHT

MANUFACTURED BY

B. F. STURTEVANT CO.

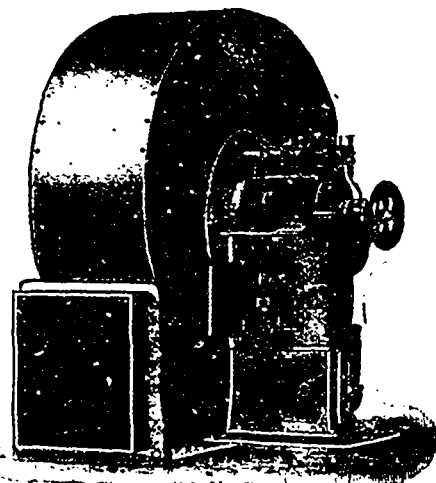
Boston, Mass., U.S.A.



The STURTEVANT Blowers and Exhausting FANS

Known as the Monogram Pattern,
For Blowing Boilers and Fires, Ex-
hausting Dust and Gases.

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