Clarage Fan Company

KALAMAZOO, MICHIGAN

NEW YORK CITY · CHICAGO · MINNEAPOLIS · PHILADELPHIA
INDIANAPOLIS · PITTSBURGH · LOS ANGELES · DETROIT
CLEVELAND · BOSTON · ROCHESTER · MEMPHIS
ST. LOUIS

Complete stocks carried in New York, Pittsburgh and special stocks in Memphis

Multiblade Fans

Clarage-Kalamazoo Multiblade Fans are guaranteed to be equal to any fans built for heating and ventilating work or for the handling of large volumes of air or gases at low pressures.

Since the only points of contact and points of greatest wear are in the bearings, the prime requisite of a good fan is good bearings. The Clarage bearing, shown at the right, below, is self-aligning in every plane and within large limits. Inner sleeves are lined with high grade babbitt and are lubricated by means of two brass oil rings, which carry a copious supply of oil to bearing surfaces from large reservoir below. An exclusive Clarage feature is the felt washers, which fit snugly around shaft at each end of bearing case, keeping oil in and dirt out.

Especially suitable for heating and ventilating schoolhouses, theaters, churches, office buildings and factories. Can be used with equal success for ventilating mines and tunnels. The unusually high efficiency obtained, quietness of operation, small space required and adjustable features of the design are all points in which these fans have been found superior to other types.

For convenience in specifying, fans are numbered according to approximate diameter of wheel: No. 1, 1-ft. wheel; No. 2½, 2½-ft. wheel, etc. Sizes up to and including No. 10. Full-housed fans, up to and including No. 3 size, are built with cast iron side plates, and are adjustable and reversible for hand and discharge. Built ⅞-housed in sizes larger than No. 3. Double width fans have twice the capacity of single width fans of same size.

Pipe coils or cast iron vento heaters, or other accessories for complete heating and ventilating systems, can be supplied.

Air Washers

The efficiency of any air washer depends on the quality of the spray. The Clarage design is simple and compact. Being of the centrifugal type, it does its work thoroughly. Passages are large, a feature which does away with danger of clogging, a trouble which comes often in the center-jet nozzle type.

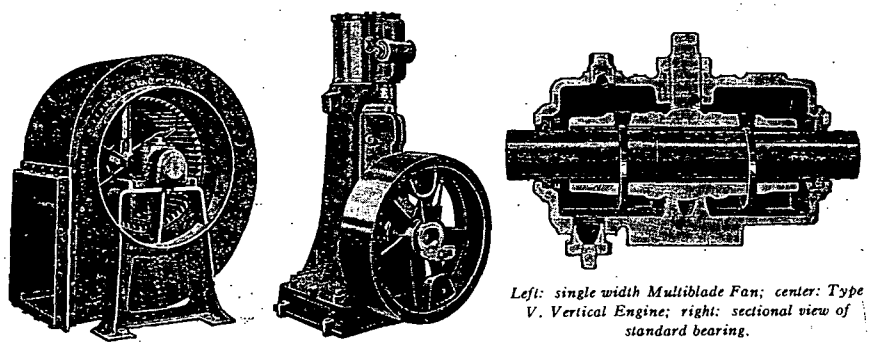
They are designed for a velocity of 500 inches per minute and can be furnished in sizes from 2500 to 100,000 cu. ft. per minute.

Vertical Engines

Clarage Vertical Engines are fully enclosed and self-oiling. Used for direct connection to fans and blowers, pumps, motor generators, etc.; built in four classes and are capable of developing up to 81 hp.

Co-operative Service

The Engineering Department of this company has compiled elaborate data covering capacities, etc., of every Clarage product. This material will be of value in determining requirements. The department will gladly co-operate with architects in every way possible.



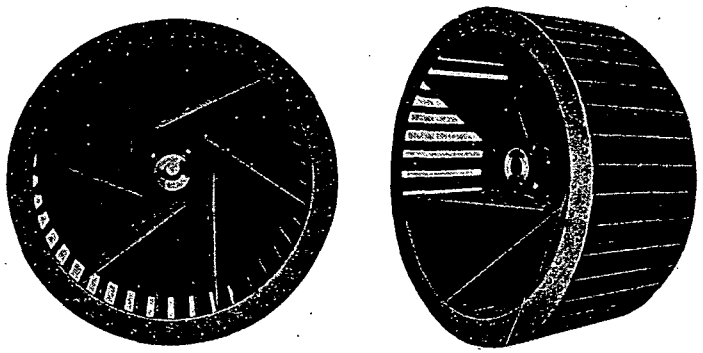
Left: single width Multiblade Fan; center: Type V. Vertical Engine; right: sectional view of standard bearing.

Hersh Brothers Company

Allentown, Pa.

149 Broadway N. Y. — 131 State St., Boston

Fans and Blowers for Heating and Ventilating



Lehigh Multiblade Fans, Wheel Type "M"—Cut Showing a Counter Clockwise Wheel

This type of fan is designed particularly for use in connection with heating and ventilating systems in public and industrial buildings where large volumes of air are handled at comparatively low pressures. It is proportioned to give low velocities of air throughout with the least resistance both at the entrance and at the discharge.

The special construction of this type of wheel combines in one the desirable qualities of the older steel plate fan wheel with the large capacity and efficient operation of the Multiblade Type. This wheel requires no stay-rods to keep it in shape under any speed. The strength and rigidity of construction can be readily ascertained from examination of the radial blades which run to the hub of the wheel, so placed in order to give the greatest strength in the direction of rotation. The strains on this wheel are those of tension, in which all metal is strongest, rather than shear, in which it is weakest. No wobbling side thrusts occur with this construction. The curvature of the Multiblades does not restrict the area of discharge and therefore the capacity of the wheel.

The housing, being rigidly braced with angle iron and the inlet and outlet with tee iron punched for sheet metal connection, is free from vibration under the highest speeds and pressures.

The bearings are of unusual quality (ball and socket type) with double ring oiling and best babbit. They are self-aligning in all directions. This prevents the shaft from becoming bound.

The shaft is constructed of the best grade of DRAWN STEEL containing from 30 to 40% carbon.