PLANOVANE EXHAUSTERS—DESIGN 3

For Collecting and Conveying Shavings, Sawdust, Chips, Dust from Emery and Buffing Wheels, and Similar Materials which can be conveyed on a current of Air.

High efficiencies . . . rugged construction for a lifetime of trouble-free operation . . . adaptability to almost any usual collecting or conveying application . . . these are the features of Sturtevant Design 3 Planovane Exhausters.

The high efficiencies are largely due to the design of the inlet. A large unobstructed opening is assured by the use of an overhung wheel, and the casing inlet is streamlined to reduce to an absolute minimum the losses due to entrance friction and eddies. A comparison of the performance of this exhauster with that of similar equipment clearly shows the unusually high efficiencies developed by Sturtevant Design 3 Planovane Exhausters.

CONSTRUCTION

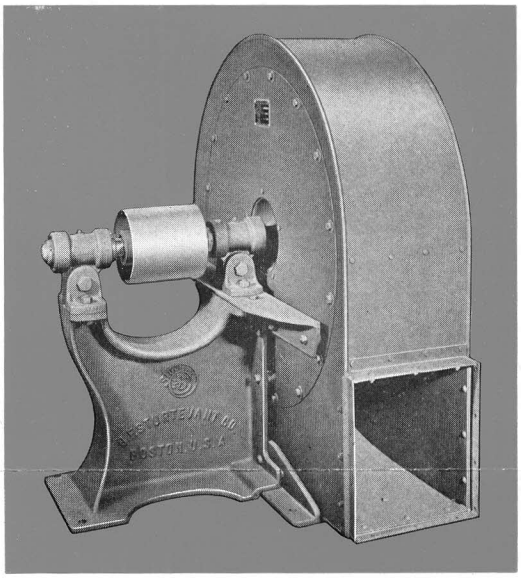
The Shaft of the Design 3 Planovane Exhauster is of open-hearth carbon steel, accurately ground to size, and runs in double race ball bearings, assuring long-life and low friction. The Planovane Exhauster is furnished for either pulley or motor drive. The wheel may be overhung on the motor shaft, as illustrated, or a separate shaft and coupling may be supplied, with either one or two intermediate ball bearings. The standard wheel is of the cone-back type, suitable for handling shavings, chips, emery dust and similar materials.

For special applications, or where operating conditions are unusually severe, special construction is available. Textile fibres, such as cotton or wool waste require special construction of both wheel and housing. For handling materials of a corrosive nature, the Design 3 Planovane Exhauster can be furnished built entirely of Monel, stainless steel, or other non-corrosive metals. Units with rubber-covered wheels and rubber-lined casings are also available for this type of service. Wherever application calls for special construction, communicate with B. F. Sturtevant Company, Engineering Department, for recommendations.

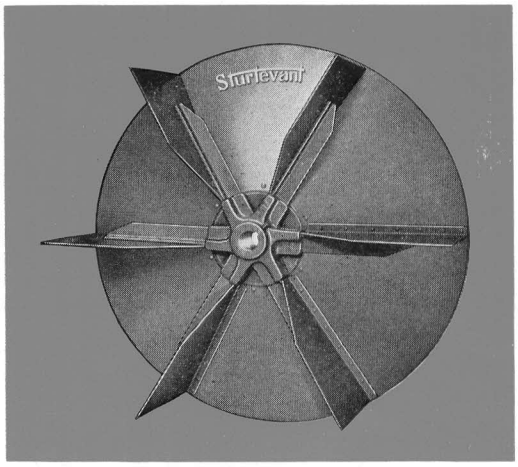
Planovane Exhausters are made in two styles, as shown on the dimension drawings on the back cover. Sizes 30 to 60 are convertible, and can be arranged for standard discharges. Sizes 70 to 100 are non-convertible. Both styles can be furnished for either clockwise or counter-clockwise rotation.

CAPACITY TABLES

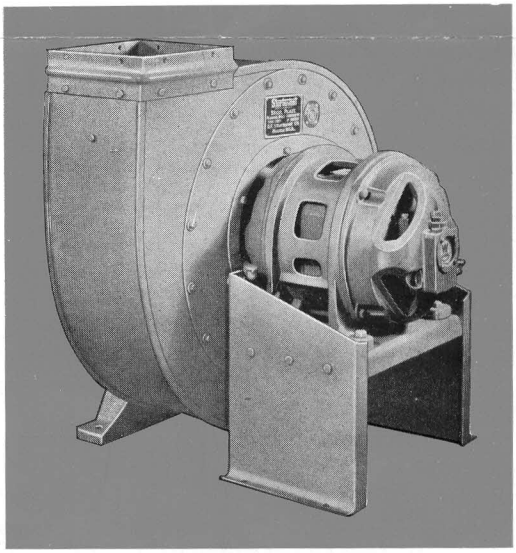
The wide range of capacities makes it possible to select a standard size Exhauster for practically any set of requirements. The table shown on the opposite page permits the use of short cut methods for determining fan performance, thus avoiding extensive calculations. This table will be found useful in arriving at approximate speed, cfm. and horse power on average systems where machines are grouped reasonably close together and there are no long branches of long discharge mains.



Pulley Driven Arrangement



Planovane Exhauster Wheel



Motor Driven Arrangement