



Silentvane Design 7 Rotor, Number 145,  
Double Width, Class 3.

# STURTEVANT DESIGN 7 SILENTVANE FANS

**T**HE first of the Sturtevant line of Silentvane Fans was built in 1921, tried, tested and proved in the field, and then announced to architects and engineers in October 1922. The position which Sturtevant has gained in the engineering world has been due directly to the fact that beginning with Mr. B. F. Sturtevant's early fan designs in 1869, and continuing through the years, Sturtevant has pioneered in fan design and fan application, resulting in the highest static efficiencies ever developed in fan practice. Coupled with high efficiency were many other desirable fan characteristics, such as a rising pressure curve, a true self-limiting or non-overloading horsepower curve, and quietness of operation which caused the name "Silentvane" to be adopted and trade marked.

The trend of design in centrifugal fan practice has varied since the birth of the fan industry. Prior to 1908, so-called "steel plate" or "paddle wheel fans" predominated. Then, because of greater capacity in a given size, the trend swung almost overnight to the multiblade fan with many forwardly pitched blades. In 1922, with the announcement of the early Sturtevant Silentvane Fans, the switch in fan popularity among architects, engineers and industrial users towards this new fan was even more pronounced. Soon more than one thousand Silentvane Fans had been sold. They were purchased for many large projects. Perhaps the most notable early Silentvane Fan installation was for the ventilation of the Holland Vehicular Tunnel constructed beneath the Hudson River connecting New York City with Jersey City.

The Holland Tunnel, for which ninety Silentvane Fans were used, was the largest and most vital ventilating contract ever awarded. Total capacity of all fans is 11,581,200 cubic feet of air per minute requiring 6330 horsepower. Numerous other nationally known installations soon followed. The Detroit-Windsor Tunnel, the Oakland Tunnel, Union Trust Co., Cleveland, Ohio; Roosevelt Hotel, New York City; Olympic Hotel, Seattle, Wash. and many others — all sold prior to 1925.

