

ENGINEERING

New S-Rotor Runs Efficiently On Both Wind and Water

Device Using Principle Applied to Rotor Ship is Finding Use Taking Small Amounts of Power From Nature

THE S-ROTOR, a new, simple and inexpensive type of windmill which, in addition to its chief duty as the world's most efficient harnesser of power from moving air, will ventilate buildings, generate power from the tides and draw smoke from stubborn chimneys, was described in Baltimore last week before the Aeronautic Division of the American Society of Mechanical Engineers by its inventor, S. J. Savonius, of Helsingfors, Finland.

Mr. Savonius began work on the S-rotor several years ago after his interest had been aroused by the success of Anton Flettner, the well-known inventor of the rotor ship. To make an S-rotor, so named after similarity be-

tween its cross-section and the letter S, a Flettner rotor was cut in half vertically and the halves separated along the cutting plane. Thus a vertical rotor that will turn equally well regardless of the direction of the wind is made.

Although rotors of this type are more efficient than ordinary windmills, they cost no more to make, it was stated. They are coming into wide use in Europe, where one of the manufacturers is Anton Flettner, who is recouping some of the fortune consumed in the exploitation of his rotor.

Replaces Ordinary Ventilators

As a ventilator, the Savonius rotor was said to be operating efficiently where ordinary cowls have failed. It develops uncommonly strong suction power. In the water the rotor operates the same way it does in the air, but since water is about 800 times as heavy as air the power generated is greater in proportion. One of its advantages as a tidal motor is that it always turns in the same direction regardless of whether the water is ebbing or flooding.

MEDICINE

Seasickness Affects Women More Often Than Men

SEASICKNESS is not at all an impartial affliction. It discriminates among its victims by sex, by age, by race. Women suffer oftener than men, and little girls of ten or twelve years more than anybody else. Babies and very young children, fortunately, are troubled relatively little.

These are among the observations of Dr. A. Seitz, for many years a ship's doctor, as published in the German journal, *Natur und Museum*.

Among white men, the Germanic peoples are more resistant to seasickness than are the Latins, Dr. Seitz says.

Mr. Savonius did not make exaggerated claims for his invention. He said that it is not suitable for power plants of such magnitude as those contemplated by Georges Claude in his recent experiments in Cuba, but that it is adapted to small and inexpensive plants working in a river or tidal creek and that as such it could extract a considerable amount of power for use in irrigation and for supplying light and power to farms and villages.

Science News Letter, May 23, 1931

ARCHITECTURE

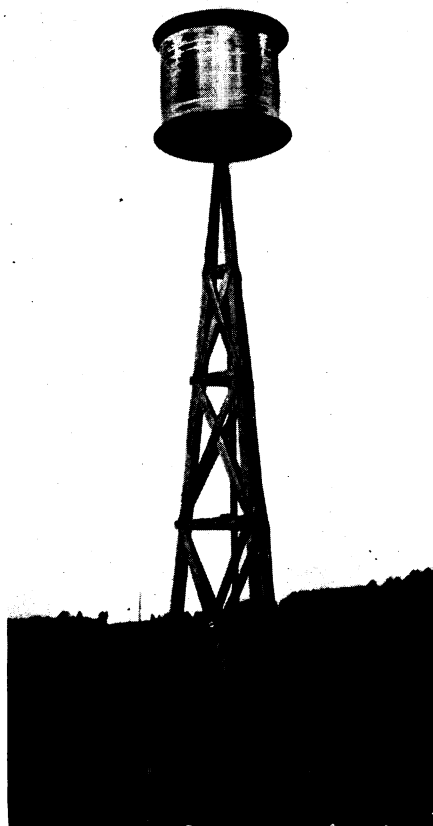
British House Planned To Shut Out Traffic Din

ON THE PRINCIPLE that prevention is better than cure, an English architect is exhibiting in London a house that is built first and foremost to answer the prayer "Oh, for a quiet life!"

All the rooms are placed at the back. Its front and side walls are windowless. The front wall forms a screen against noise, and is broken only by a decorative front door and the doors of a yard and garage.

Not merely does the design shut out noise from outside, but there are rooms inside where sounds can be bottled up. Eel-grass from Nova Scotia, tough kraft paper, special wall-board, are among the sound and heat insulators that have been used in providing rooms where children need not be on their best behavior if Dad is at work, for not a sound can penetrate to him.

Science News Letter, May 23, 1931



WINDMILL SUBSTITUTE

The odd-looking s-rotor which may replace windmills as a source of power from moving air.