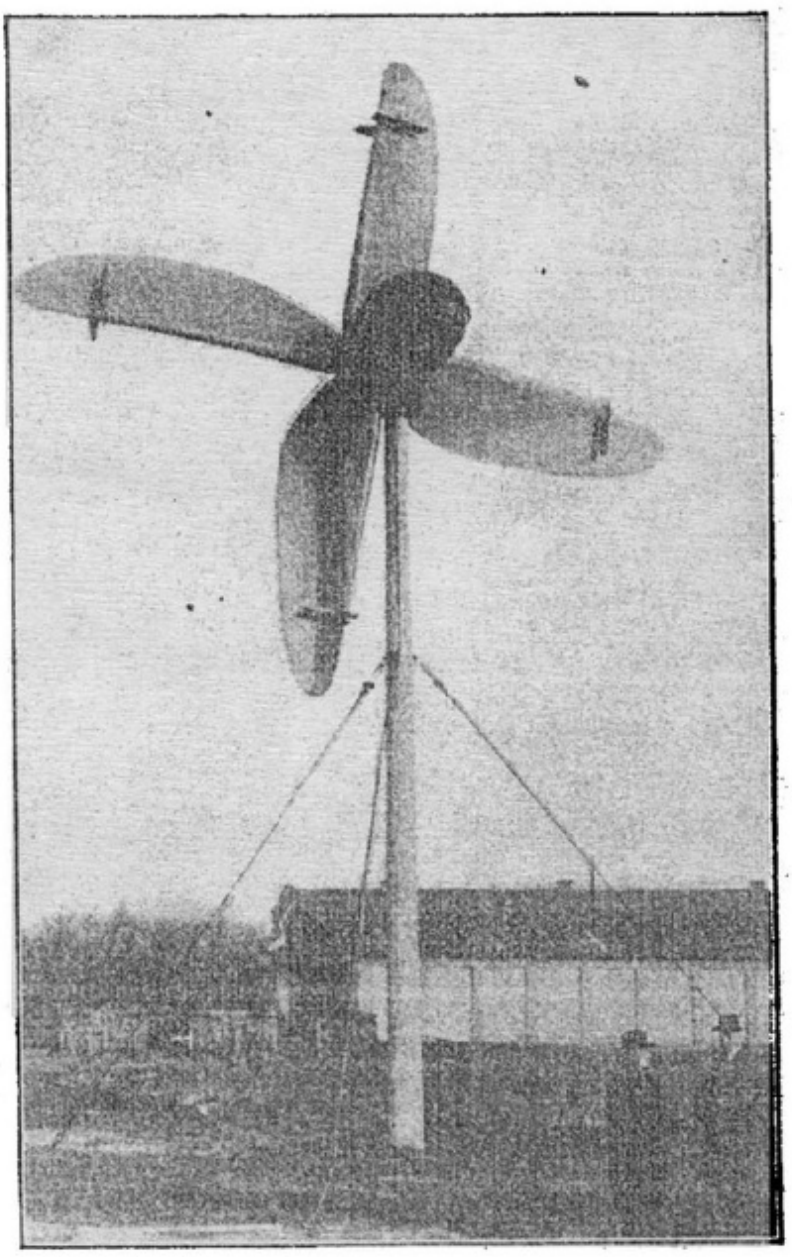
Now for the Aerodynamo Windmill

A Boon to Farmers, It Harnesses the Air to Electricity

AFTER the rotorship comes the aerodynamo. A German inventor, Kurt Bilau, has produced a new kind of windmill at the Göttingen Institute of Aerodynamics which its backers declare will provide the farmer at almost no maintenance expense with all the power he needs to run his stationary machinery and electric lighting circuit. The British Ministry of Agriculture has expressed a formal wish to examine the invention and it is said that eleven stations are operating already in East Prussia.

Herr Bilau declares to the North Amreican Newspaper Alliance that scientific measurements show this device to be capable of generating exactly twice as much power as the most scientifically constructed windmills. The secret lies in the design of the four wings, which resemble somewhat two crossed airplane propellers. The development of the airplane in recent years has taught physicists so much about air currents and resistances that they are now beginning, as in the rotorship and the aerodynamo, to apply what they know in other fields and to harness the winds. In designing the aerodynamo, Bilau has taken full advantage of the suction force of the wind on the lee side of the blades, the peculiar importance of which has been learned through the development of airplane wing construction.



"TWICE AS EFFICIENT"

The aerodynamo developed by Kurt Bilau, a German inventor, which he claims extracts from the wind twice the horse-power of the most efficient wind-mill. The turning blades generate electric current directly by means of the dynamo at the mast-head. The breezes strike the blades on the side displayed in the photograph.

The Bilau aerodynamo, in the model shown here, is a three-ton structure, built upon a slender reinforced concrete 40-foot mast. The span of the wings is twenty-five feet. The head of the mast, bearing the wings and dynamo, is mounted on roller bearings which permit the blades to swing before the wind like a weathervane. Thus they always present their face to the breeze. The rotating blades turn directly the shaft of the dynamo, so that the friction of a gear-transmission system such as the old windmill employed is eliminated. Wires convey the current to storage batteries in the vicinity. In a sixteen-mile wind the aerodynamo is said to generate sixty horse-power.