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From the Complex to the Simple

A MARKED step was taken in the simplification of prime movers when Watt's cumbersome beam engine, with its ingenious but elaborate parallel motion, gave way to the present standard reciprocating type, with only piston rod, cross head and connecting rod interposed between piston and crank. An even greater advance toward ideal simplicity occurred when, after years of effort by inventors to produce a practical rotary engine, Parsons brought out his compact, though costly, turbine, in which the energy of the steam is developed on a zig zag pattern through multitudinous rows of fixed and moving blades.

And now comes Mr. Tesla with a motor which bids fair to carry the steam engine another long step toward the ideally simple prime mover — a motor in which the fixed and revolving blades of the turbine give place to a set of steel disks of simple and cheap construction. If the flow of steam in spiral curves between the adjoining faces of flat disks is an efficient method of developing the energy of the steam, the prime mover would certainly appear to have been *at last* reduced to its simplest terms.

The further development of the unique turbine which we describe elsewhere (ed: See page 103; Tesla's Engine — A New Dimension For Power) will be followed with close attention by the technical world. The results attained with this small high-pressure unit are certainly flattering, and give reason to believe that the addition of a low pressure turbine and a condenser would make this type of turbine as highly efficient as it is simple and cheap in construction and maintenance!



Details of Turbine.