Impulse Blades

The illustration shows the arrangement of an impulse element consisting of two rows of rotating blades attached to the rotor and one row of stationary blades attached to the cylinder blade holder. These blades are made from rolled and drawn sections and are secured to the rotor (or cylinder) by a dovetail type of fastening. The root of each blade is machined to fit in a dovetail shaped groove and a soft steel packing piece, placed between each pair of blades, spaces them to give the correct area for steam passage. Each row of blades is shrouded with a strip which is fitted over the tenons on the ends of the blades and secured by riveting the tenons over the shroud. This shroud serves to space the outer ends (or tips) of the blades correctly and prevents spilling of steam. With this type of fastening it is, of course, necessary to widen the groove at one point in order to enter the blades in the dovetail shaped grooves. With all the blades in place, a filler piece is carefully fitted into this widened slot, and caulked into the dovetailed section.

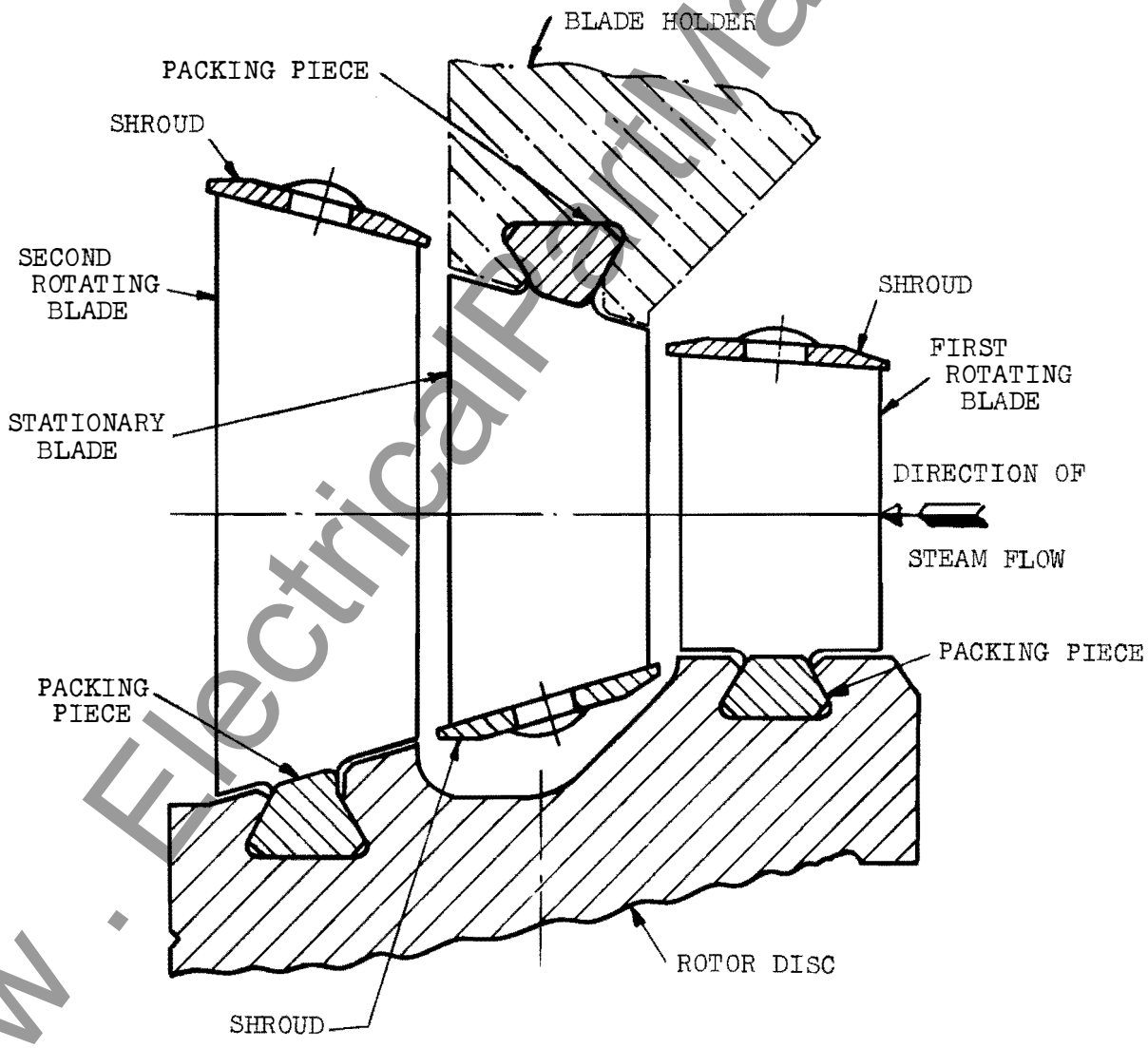

Fig. 1

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