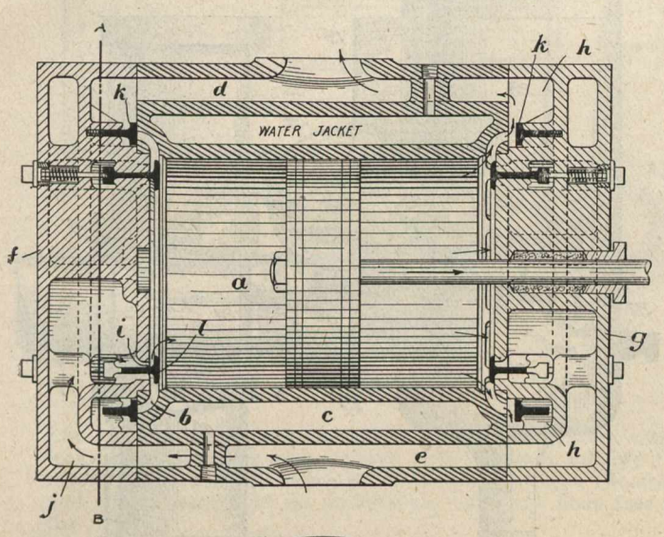
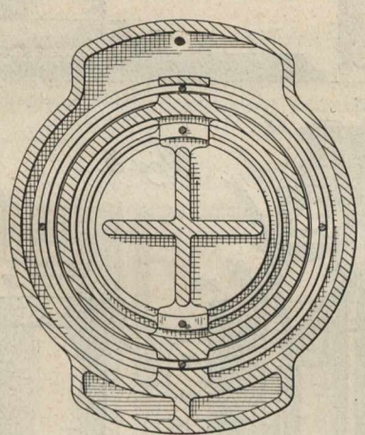
INTERNATIONAL PATENT RECORD

CANADA.

Specially compiled by **Messrs. Fetherstonhaugh and Dennison**, Patent Attorneys, Toronto, Montreal, and Ottawa.

Air Compressor.—A. J. Lavoie.—93,013.—The arrangement is that of an open ended cylinder *a* having annularly arranged outlet ports *b*, and a water-jacket *c* surrounding said cylinder and air passages *d* and *e* above and below said water jacket, heads *f* and *g* having passages *h* communicating with said outlet ports *g*, and the air passage *d* of the cylinder, and an annular inlet port *i* and a passage *j* leading therefrom to the air passage *e* of the cylinder. T-shaped annular valves *k* and *l* arranged to close

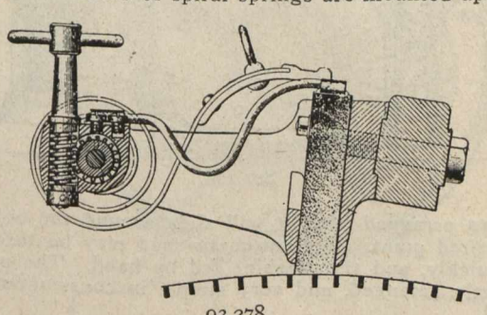




Air Compressor, 93,013.—A. J. Lavoie.

said annular outlet ports and annular inlet ports. The inlet valves *l* are provided with stop lugs forming an integral part of the same and designed to come in contact with the lugs formed in the cylinder head. The annular T-shaped valves have suitable spring means for assisting them to return to their seats.

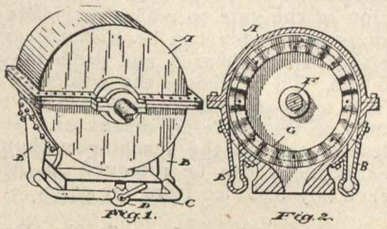
Brush Holder for Electrical Machine.—The Canadian Westinghouse Co., Hamilton.—93,278.—In this patent a new form of brush holder is shown in which there is a shaft upon which the holder is loosely mounted. A series of spiral springs are mounted upon said

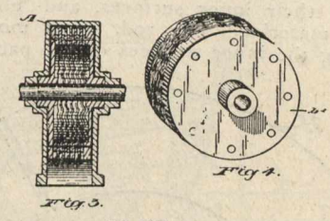


93,278.

shaft and bear at their outer ends on the carbon brushes. Each of the spiral springs has a worm gear mounted upon the brush to which the spring is attached, and these worm gears are operated by small worms located in the frame of the holder.

Steam Turbine.—J. H. K. McCollum.—93,419.—This invention comprises a new form of steam turbine which is readily reversible. *A* is a cylindrical casing which is provided at either side with nozzles *B*. The nozzles *B* are connected together by a pipe *C* in which is located a

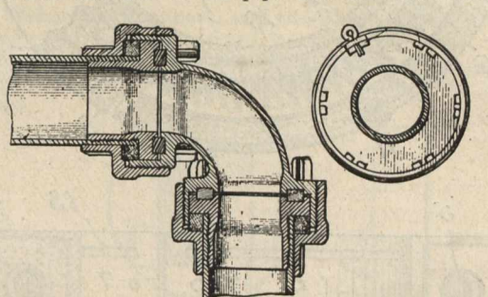




93,419.

three-way valve *D* for reversing and exhausting. Mounted within the casing *A* upon the shaft *F* is a drum D^1, the periphery of which is formed with a series of serpentine passage ways.

Swivel Coupling.—A. J. Hageman.—92,880.—This invention relates to pipe couplings which are required to be swung in various directions, and allows both of the pipes and the swivel to be turned. A ferrule is screwed into the end of the pipe and the elbow connection



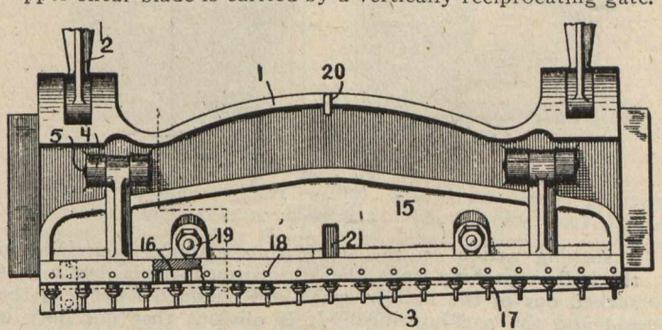
92,880.

fits down over this ferrule, both the elbow connection and the ferrule have circular recesses formed in their faces to receive a suitable gasket. A portion of the elbow overhangs the outer flange of the said ferrule, and a packing is inserted between this overhang and the outer surface of the pipe. A loose knot embraces the outer surface of the pipe and has a threaded extension to engage with the outer surface of the overhanging portion of the said elbow. Suitable lugs are provided to retain the swivel in a certain position.

UNITED STATES OF AMERICA.

Specially compiled by **Messrs. Siggers and Siggers**, Patent Attorneys, Washington, D.C.

Punching and Shearing Machine.—Chas. A. Bertsch.—803,660.—This punching and shearing machine is founded on shearing machines of the well-known gate type, in which the upper shear blade is carried by a vertically reciprocating gate.



803,660.