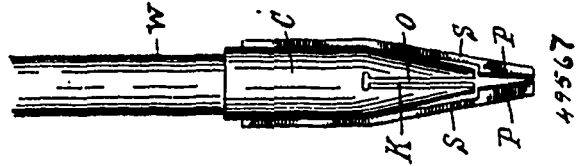


the under face thereof, the cylinder being carried and capable of being slid on a bar or lever fulcrumed at one end and provided with an index bridge for setting the position of the cylinder, in combination with an inking roller, beneath the type, carried by an arm fulcrumed to the base and a paper carrier below the type cylinder moved as required by suitable means, whereby upon the cylinder being depressed it comes in contact with the inking roller which inks the type and passes over and beyond the paper carrier upon which the type then prints, substantially as set forth. 2nd. In a type-writing machine, the combination with a cylinder, having indicating letters or characters arranged on the upper face and type on the under face, carried and capable of being slid on a bar fulcrumed at one end to the base and provided with an index bridge for setting the position of the cylinder, of an inking roller carried by an arm fulcrumed to the base and located beneath the type, a paper carrier over which the inking roller passes after inking the type upon the depression of the cylinder for printing, together with mechanism such as a cam surface on the ink-roller arm acting on levers, and a pawl to traverse the paper carrier when the type cylinder is depressed and before the type meets the paper, substantially as set forth. 3rd. A type-writer wherein the letters of the alphabet or other characters are arranged on one side of a cylinder visible to the operator with the types below or on the opposite side of same, the cylinder being mounted so as to be capable of being rotated on a frame and free to slide on a strip to suit the letters that are required to be written, the position of the letters and the type being indicated by the position of the bridge on the surface of the cylinder, together with an inking roller carried by a bracket working on a fulcrum at the base of the bracket having a cam projection for operating on a bell crank lever to actuate a pawl for operating a ratchet on a frame arranged at right angles to the type carrier together with paper carrying roller and the rods P¹ and Q, whereby type-writing is with facility effected.

No. 49,567. Pencil Sharpener. (Taille-crayon.)



William Duffield, London, Ontario, Canada, 30th July, 1895; 6 years.

Claim.—1st. In a pencil sharpener, the combination with a tubular cutter, of an arm pivotally connected to said cutter and provided with an abrading surface on its free end in front of the tubular cutter, substantially as described. 2nd. In a pencil sharpener, the combination with a tubular cutter, of a spring arm connected to said cutter and provided with an abrading surface on its free end in front of the cutter, substantially as and for the purpose specified. 3rd. In a pencil sharpener, the combination with a tubular cutter, of a spring arm pivotally connected to said cutter, and provided with an abrading surface on its free end in front of the cutter, substantially as and for the purpose specified. 4th. In a pencil sharpener, the combination with a tubular cutter, of a frame supported thereon, and a spring arm pivoted to said frame and provided with an abrading surface on its free end in front of the tubular cutter, substantially as and for the purpose specified. 5th. In a pencil sharpener, the combination with a tubular cutter, of a collar on said cutter, flanges extending from said collar, a frame pivoted to said flanges and an arm secured at one end to said frame and provided with an abrading surface on its free end in front of the tubular cutter, substantially as described.