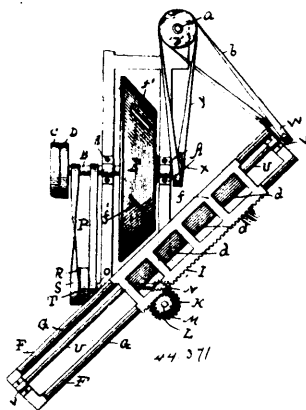


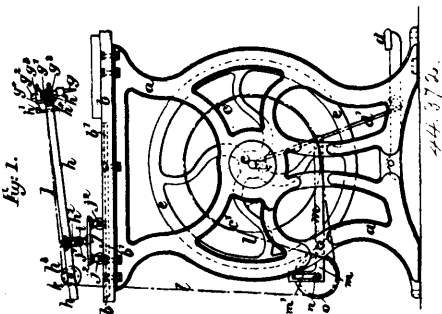
tive movement as the said carriage advances the stick with surface contact with said revolving cutter-head. 2nd. The combination of

by causing it to pass through an electrically heated tube of carbon or other material of low electrical conductivity. 2nd. The combina-



a driving shaft, a cutter arranged thereon and so as to revolve therewith, a track arranged in a plane substantially parallel with the plane of said shaft, a carriage on said track, a longitudinal shaft parallel with said carriage, rollers on said shaft, arranged to partake of the revolution of said shaft, but also adapted to move longitudinally with the carriage, the surface of the said rollers roughened and projecting above the upper surface of the carriage, with mechanism substantially such as described to impart longitudinal backward and forward movement to said carriage and rotative movement to said roller shaft and rollers, the said carriage and rollers being arranged in such relation to the revolving cutter-head that the stick placed upon the carriage will rest upon said rollers and receive a longitudinal movement from the carriage and rotative movement from said rollers, substantially as described.

**No. 44,372. Machine for Carving and Engraving Wood.** (*Machine à sculpter et graver le bois.*)



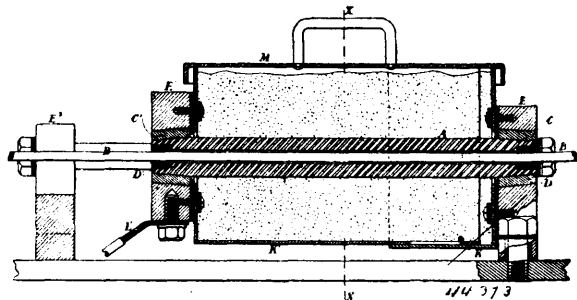
Thomas Ryland, and Earle Bird, both of Brixton, Surrey, England, 2nd October, 1893; 6 years.

*Claim.*—1st. In carving or engraving machine, the combination of a driving spindle, a long drum on said spindle, a counter shaft having a normally downward tendency, band pulleys mounted freely on said counter shaft, a cutter frame mounted on a guide parallel with machine front, and carried by a frame mounted on guides at right angles to machine front, band guiding pulleys mounted loosely on a shaft forming part of cutter frame, a tracing pointer and rotary cutter or cutters mounted on front of cutter frame, and cutter driving bands passing partly around the cutter pulleys, guide pulleys on cutter frame, guide pulleys on counter shaft, and partly around the long drum, substantially as herein shown and described. 2nd. In carving or engraving machines, the combination, with suitable driving means of a cutter frame mounted on guides carried by the bed of the machine, and capable of freely moving in any direction over the said bed, and a fixed tracer and rotary cutter or cutters carried by the cutter frame, substantially as herein shown and described.

**No. 44,373. Method of Heating Metal Rods in Machinery for Making Nails, etc.** (*Méthode de chauffer le métal en barre, etc., pour l'alimentation des machines à faire le clou.*)

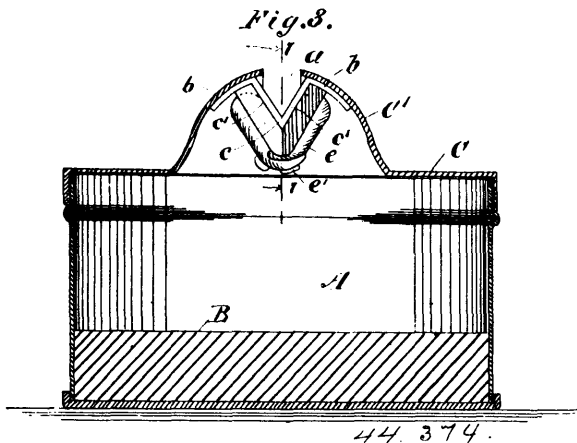
Sunens Brothers & Co., Westminster, assignee of Alfred David William, Canonbury, both of Middlesex, England, 2nd October, 1893; 6 years.

*Claim.*—1st. The herein described method of heating a metal rod, bar or wire that is being fed to a nail making or other like machine,



tion in an electrical heater for rods, bars or wires, &c., of an insulated refractory tube A, fixed sleeve C, and movable sleeve C', refractory pieces D D', spring G, box made in two parts K K', filled with refractory material, and conductors L L', the whole substantially as and for the purposes set forth.

**No. 44,374. Chalk Sharpening Implement.** (*Taille-craie.*)



George Hay, Pictou, Nova Scotia, Canada, 3rd October, 1893; 6 years.

*Claim.*—1st. The combination, with a hollow base, and a lid having a hollow slotted projection, of a cutter device located in the lid below the slot, substantially as described. 2nd. The combination, with a hollow base, and a lid having a slotted projection, of a pair of divergent cutter blades fixed below the slot, substantially as described. 3rd. The combination, with a hollow base, a lid, and a slotted spherical projection on the lid, of a pair of cutter blades depending from within the projection below its slot, and divergent at like angles on opposite edges, substantially as described. 4th. The combination, with a hollow cylindrical base, a removable lid, and a slotted spherical projection on the lid, of a pair of V-shaped blades sharp on edges that diverge in pairs at like angles, substantially as described. 5th. The combination, with a hollow base, a lid, a hollow slotted projection on the lid, and a pair of cutter blades below the slot, of a wiper device on the cutter device between its blades, substantially as described. 6th. The combination, with a hollow base, a lid, a hollow slotted projection on the lid, and a pair of V-shaped depending cutter blades sharp on edges that diverge in pairs at like angles, of a pliable wiper strip secured on the cutter blades between the pairs of V-shaped sharp edges, substantially as described. 7th. The combination, with a hollow base, a weighty bottom thereon, a removable lid, a slotted spherical projection central on the lid, and a wiper on the projection at its slot, of a pair of cutter blades below the slot in the lid, and a wiper device on the cutter blades between their edges, substantially as described.

**No. 44,375. Lawn Mower.** (*Tondeuse pour pelouses.*)

Horace L. Freeman and Baxter Shemwell, both of Lexington, North Carolina, U.S.A., 3rd October, 1893; 6 years.

*Claim.*—1st. The frame D, having a central tubular portion with bifurcated branches at its rear end with bearings for the axle, and with vertical arms D<sup>2</sup>, D<sup>2</sup>, at its front end with bearings for the vertical cutter shaft, and also with horizontal arms D<sup>1</sup>, D<sup>1</sup>, at its front end, in combination with the axle B, with gear wheel C, the shaft C<sup>2</sup>, arranged within the tubular part of frame D, and carrying