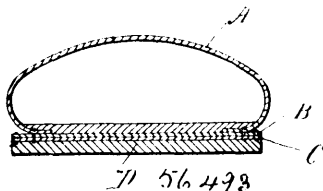


rear end of the body frame and in turn arranged for sliding adjustment upon the rear axle, a gear 16 journaled in a rear extension of the middle portion of the rear bolster and engaging a rack on the rear axle, the said middle portion of the rear bolster being recessed so as to expose the rack on the rear axle to the said gear, and being divided into upper and lower parts which are fastened together, substantially as set forth. 9th. In a machine for making and repairing roads, the body frame having its rear end supported upon a vibratory bolster which is in turn arranged to slide upon the rear axle having a rack, a gear engaging said rack, and a catch normally engaging the gear as a means for locking the bolster against sliding movement upon the axle, said catch being arranged to be engaged by and forced away from the rack by an implement applied to operate the gear, substantially as described.

No. 56,493. Rubber Soled Leather Shoe.

(Semelle de caoutchouc pour chaussures.)



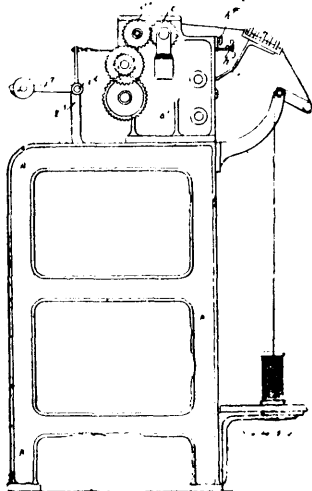
56 493

John Ernest Kennedy, Montreal, Quebec, Canada, 5th July, 1897; 6 years. (Filed 8th June, 1897.)

Claim.—1st. The combination, with an upper, and a plate of leather secured thereto, of a middle sole or welt of textile material and india-rubber secured to the said plate and upper, and a sole and heel or half sole and heel tap of india-rubber vulcanized onto the said middle sole or welt, substantially as set forth. 2nd. The combination, with an upper, and a plate of leather secured thereto, of a middle sole or welt of textile material and india-rubber, fastening devices such as stitches securing the said middle sole to the said upper and plate, and a sole and heel of india-rubber vulcanized onto the said middle sole, substantially as set forth.

No. 56,494. Machine for Winding Thread, Yarn, etc.

(Machine pour enrouler le fil, etc.)

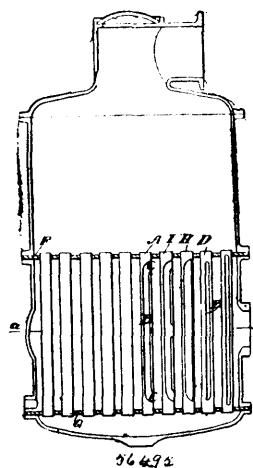


Bryce Muir Knox, Kilbirnie, Ayrshire, Scotland, 5th July, 1897; 6 years. (Filed 9th June, 1897.)

Claim.—1st. In machinery for winding thread, yarn, and the like, the combination comprising reciprocating frames f , rollers f^a , and operating canis b , b^1 , substantially as set forth. 2nd. In machinery for winding thread, yarn, and the like, the combination comprising bell-crank lever i , i^1 , strap j , movable spindle j^1 , and vertical arm j^2 , substantially as set forth. 3rd. In machinery for winding thread, yarn, and the like, a cop e receiving a continuous motion of rotation from a spindle d , in combination with a reciprocating cross-head frame f , and cam b , b^1 , substantially as set forth. 4th. In machinery for winding thread, yarn, and the like, the method of automatically regulating the tension on the thread, consisting in moving the rod l by automatic mechanism so that it shall move through a segment of a circle from the time the winding of the cop is started until fully wound, substantially as set forth. 5th. In machinery for winding thread, yarn, and the like, the combination comprising longitudinal rods l , l^1 , worm gear m , n , hand lever m^2 , portable pin m^1 , spindle n^1 , ratchet-wheel n^3 , pawl o , slotted lever links o^2 , p , pin p^2 , connecting rod q , stud q^2 , and longitudinal rotating shaft a , substantially as set forth.

No. 56,495. Combined Tube or Vaporizing Element.

(Appareil à chauffer et évaporer.)

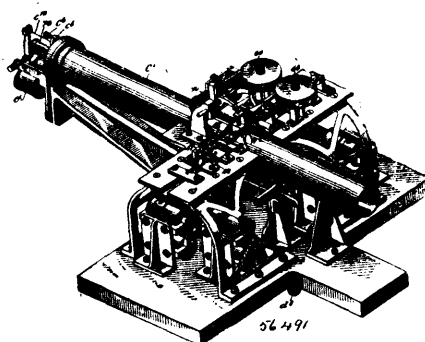


56 495

Victor Clement Joseph Ortmans, Brussels, Belgium, 5th July, 1897; 6 years. (Filed 16th June, 1896.)

Claim.—1st. In a tubular heating and evaporating apparatus for liquids, the construction and the combination of tubes having several and concentric walls constructed in such a manner that the heating medium can circulate all around those several walls, due to the fact that the passage established for the said heating medium is formed in the lateral wall of each element, an opening constituting the extremities of the internal walls extending through nearly the whole length of each element as is described hereabove and shown in the annexed drawings and for the purpose specified. 2nd. In combination with a heating apparatus, the form of tubes consisting of a tube bathed in a heating medium and provided internally and concentrically to it with a second tube of which the extremities open out through the lateral wall immediately into the heating medium in such a way as to produce an extremely extended heating surface for the liquid which circulate in the tubes, as described above and shown in the annexed drawings and for the purpose specified. 3rd. In combination with heating apparatus, the type of tubular vaporizing element with walls forming a retreating passage in the periphery of the said tubes allowing a passage for the heating medium, as shown. 4th. In combination with a heating apparatus, the type of tubes consisting of a tube bathed in the heating medium and provided internally and concentrically to it with a second tube in the form of a canal having a single lateral opening throughout nearly its whole length, as shown in the annexed drawing and for the purpose specified.

No. 56,496. Printing Telegraph. (Télégraphe imprimant.)



The Western Union Telegraph Co., assignee of Charles L. Buckingham, both of New York, U.S.A., 5th July, 1897; 6 years. (Filed 21st July, 1896.)

Claim.—1st. In a type-by-type printer, a paper tube blank mounted on a suitable cylindrical support and provided with means engaging with the surface of the tube for turning it continuously in the same direction in the printing of lines, and also with a step-by-step axial feed device operated intermittently or at the end of each line of printing but normally out of connection with the paper surface, as and for the purpose described. 2nd. The step-by-step axial feed device for the paper tube having an actuating spring in which power is stored from the driving power of the machine during the printing of the line, and means for releasing the spring and bringing