

shaft connected by gearing, the said screw shaft having a carriage *k*¹, connected with said arm, a pattern *4*, a tracing tool *w*¹, connected with said arm and controlling the movements of the same, substantially as set forth.

No. 41,784. Process of and Apparatus for Impregnating Fibrous and Cellular Material by Electricity. (*Procédé et appareil pour imprégner par l'électricité des matières fibreuses et cellulaires.*)

Gustav Adolph Oncken, Merxem, Belgium, 2nd February, 1893; 6 years.

Claim.—1st. In the process of preserving or impregnating organic, fibrous and cellular matter, the employment of an electric current, substantially as set forth. 2nd. The process of preserving or impregnating organic, fibrous and cellular matter, consisting of first, running trucks containing the substances to be treated into an impregnating vessel, closing the latter, and fitting it with an acid, alkaline or other desirable solution, heating the same, and whilst heating, leading an electric current through the impregnating solution, substantially as and for the purpose described. 3rd. The combination, of the receptacles for the organic, cellular or fibrous matter to be treated with an acid, alkaline, antiseptic or other desirable solution, the steam generator, means for conducting the said solution to and from the said receptacles, a dynamo electric machine, the conducting wires, and electrodes placed opposite another at the end of the said receptacles, substantially as and for the purpose specified.

No. 41,785. Fruit Evaporator. (*Evaporateur pour fruits.*)

Joseph Warren Doty, Lockport, New York, U.S.A., 2nd February, 1893; 6 years.

Claim.—1st. In an evaporator, the combination, with the outer casing, of a vertical series of horizontally disposed hollow headers spaced apart, each subdivided by a horizontal partition into non-communicating compartments, a supply pipe connected to each of the upper compartments of the headers, an exhaust pipe connected to each of the lower compartments, a series of horizontal coils laterally disposed and having their upper terminals connected to the upper compartment of their respective header and their lower terminals to the opposite compartment, and a series of pans mounted upon the coils between their branches, substantially as specified. 2nd. In an evaporator, the combination, with series of horizontally disposed coils connected with a steam supply, of an evaporating pan mounted within and supported by the series of coils and comprising a perforated bottom and opposite metallic L shaped flanges projecting above and below the bottom, and adapted to rest upon the coils, substantially as described. 3rd. The combination, with the case of an evaporator, having an opening at one end, of a steam supply and a steam exhaust pipe vertically disposed and arranged opposite each other at the sides of the opening and connected with a boiler, a series of horizontal headers spaced apart and subdivided into non-communicating compartments, pipes connecting the upper compartment with the supply pipe, similar pipes connecting the lower compartments with the exhaust pipe, and series of U shaped coils having their upper terminals connected with the upper compartments and their lower terminals with the lower compartment of their respective headers, substantially as specified. 4th. In a drier, the combination, with a casing provided with opposite open ends, of a series of heating coils located in one of said open ends, a series of horizontally disposed heating coils projecting from one end, steam supply and exhaust pipes leading to the same, said coils terminating short of the opposite end wall of the casing, a series of inclined evaporating pans arranged between the ends of the coil and said end wall of the casing, and an exhaust fan occupying the opening of said end wall, substantially as specified.

No. 41,786. Machinery for the Making of Tin Vessels. (*Machine pour la fabrication de la poterie d'étain.*)

William Woolnough, 174 Sebert Road, Forest Gate, Essex, England, 2nd February, 1893; 6 years.

Claim.—1st. The grooved or channelled squeezing jaws such as *b*, having a groove or channel therein such as *d*, with the tongue *f*, fitting into the recess *g*, for the double seaming rectangular or the like, tins cans, boxes or cases, substantially in the manner and for the purposes hereinbefore described and illustrated in the drawing. 2nd. In a squeezing machine for squeezing on and double seaming the tops and bottoms of tins, cans, boxes and cases or the like, I claim broadly, a groove or channel in the squeezing jaw, which acts to turn over and double seam the edges of a rectangular can or case or the like, substantially in the manner and for the purposes set forth.

No. 41,787. Barrel. (*Baril.*)

James Pleukharp, Columbus, Ohio, U.S.A., 2nd February, 1893; 6 years.

Claim.—As an improved article of manufacture, a standard barrel, composed of a given number of staves, each staff being the counter part of the other, and in longitudinal section of uniform thickness from end to end, and tapering slightly in width from the middle to

ward each end, and having the ends crozed and chamfered and having the edges similarly bevelled, and having the inner surface between the edges straight, and the outer surface curved to correspond approximately with the circumference of the barrel, and having a dowel projected from one edge and a corresponding opening in the opposite edge, substantially as and for the purpose described.

No. 41,788. Fishing Basket. (*Panier de pêche.*)

Walter Greaves, Ottawa, Ontario, Canada, 2nd February, 1893; 6 years.

Claim.—1st. A fishing basket having a partly perforated body moulded integrally of indurated fibre or the like material, and provided with a top or lid secured thereto by riveted hinges and fastenings, and the back provided with plates riveted thereto, and carrying rings for the attachment of the shoulder strap, and said back also provided with slots, substantially as set forth. 2nd. In a fishing basket, the combination of the front and sides *a*, back *a*¹, and bottom *a*¹¹, partly perforated, and the partition *A*¹, forming a compartment *3*, all moulded integrally in indurated fibre or the like material, the rings *B*, on plates *b*, and washers *b*¹, secured to the back, strap slots *4*, in said back, lid *C*, hinged to the body with riveted hinges *c*, and provided with suitable riveted fastenings in front, and the buttons *d*, pieces of cloth or flannel *d*¹, and elastic bands *d*¹¹, secured to the inside of said lid, and an opening *5* approximately in the centre of said lid, substantially as set forth.

No. 41,789. Finger Guard for Knives.

(*Garde-doigt de couteau.*)

John May, Penshurst, Kent, England, 2nd February, 1893; 6 years.

Claim.—In finger guards for knives, a clip *a*, provided with a cushion *b*, and rubber bearing surfaces *d*, in combination with back of knives, substantially as described.

No. 41,790. Method of Making Yarn from Fibrous Waste.

(*Méthode de fabriquer du fil des déchets fibreux.*)

Daniel Edgar Coe, Darby, Pennsylvania, U.S.A., 2nd February, 1893; 6 years.

Claim.—1st. The improvement in the art of converting fibrous hard waste into yarn, which consists in severing the threads or strands composing the waste into sections of the appropriate length, then drawing the waste until the proper degree of attenuation is reached, and then twisting the same into yarn, substantially as described. 2nd. The improvement in the art of converting fibrous hard waste into yarn, which consists, first, in dividing the threads or strands composing the waste into sections of the appropriate length, then drawing the mass to bring such threads or strands into parallelism and the waste into the form of a sliver, then combining and drawing the slivers thus formed until the proper degree of evenness and attenuation is attained, and then twisting the product so formed into yarn, substantially as described. 3rd. The improvement in the art of utilizing fibrous hard waste in the manufacture of yarn, which consists, first, in forming the waste into laps, next in cutting or dividing these laps into sections of the appropriate length, next in forming these sections again into laps, next in drawing such laps and converting them into slivers, next in combining a number of slivers and drawing them until another sliver is formed, next in combining these last mentioned slivers without changing their form, next in combining and drawing a number of the slivers thus combed until the proper degree of evenness and attenuation have been attained, and then twisting the product so formed into yarn, substantially as described. 4th. A yarn having a number of short sections of twisted threads or strands incorporated therein and forming an integral part of its body, substantially as described. 5th. A yarn composed of a number of short sections of twisted threads or strands spun or twisted together, substantially as described.

No. 41,791. Wrench. (*Clé à érou.*)

William C. Riesberry, Carberry, Manitoba, Canada, 2nd February, 1893; 6 years.

Claim.—1st. In a screw wrench, the combination of the upper jaw having a stem *A*, provided with a handle *C*, said stem divided transversely and connected by a hinge joint *H*, and the lower jaw having a downward extension socket *E*, sleeved on said stem below the hinge, and provided with a screw *F*, and nut *K*, or device for adjusting the lower jaw relatively to the nut, &c., as set forth. 2nd. In a screw wrench, the combination of the upper jaw having a stem *A*, provided with a handle *C*, and divided transversely between said jaw and handle and connected by a hinge joint *H*, a spring *M*, secured to one section of said stem to keep the other section in alignment therewith, a lower jaw having a downward extension or socket *E*, sleeved on said lower section and having an upwardly extending cheek or flange *6*, provided with an inclined plane *5*, and an adjusting screw reciprocating the lower jaw, as set forth, for the purpose described. 3rd. In a screw wrench, the combination, with the upper jaw having a stem *A*, divided transversely and connected by a hinge joint *H*, the lower jaw having a downward socket *E*, sleeved on said stem below the joint and provided with a screw *F*,