

No. 16,295. Improvements on Machines for Dovetailing Lumber. (*Perfectionnements aux machines d'assemblage à queue d'aronde.*)

Ebenezer Bassett, Rice Lake, Wis., U. S., 15th February, 1883; for 5 years.

Claim.—The combination of the yielding bottom rolls X, feed rolls P S, guide rolls T U, rotary cutter G having adjustable toothed cutter blades G² detachable bit frame T¹ T², bits V secured adjustably upon arbors mounted vertically in said frame, and having driving pulleys W and suitably constructed mechanism for operating the said rolls, cutters and bits. The combination of the cutter shaft G¹ having pulley F and mitre wheel H, shaft I mounted vertically in frame A and having mitre wheel I meshing with wheel H and pulley K, driving band h, vertical shaft L having pulley N and O, driving band h and dovetailing bits V arranged alternately in two vertical rows and provided with driving pulley W.

No. 16,296. Improvements in the Manufacture of Boots and Shoes. (*Perfectionnements dans la fabrication des chaussures.*)

Edward H. Buckley, Philadelphia, Penn., U. S., 15th February, 1883; for 5 years.

Claim.—1st. As an improvement in uniting the upper and soles of a boot or shoe, the method of channeling the outer sole, perforating the parts to be united, driving staples through said parts, embedding the heads of the staples in the prepared channel, clinching the ends of the said staples within the shoe, and finally covering the embedded heads of the same. 2nd. The art of uniting the upper and soles of boots and shoes, by channeling separate portions of the outer sole surface of suitable length to receive the staple head, perforating the parts to be united, driving the staples through the parts from the outside, embedding the heads in such prepared channels, and clinching the staple ends upon the insole.

No. 16,297. Improvements in Electrodes for Telegraph Instruments. (*Perfectionnements aux électrodes pour les appareils télégraphiques.*)

George Cumming and Clara M. Prinkerhoff, New York, N. Y., U. S., 15th February, 1883; for 5 years.

Claim.—1st. The combination, in an electrical instrument, of two metal wheels or disks forming electrodes or contact points impinging on one another as hammer and anvil, the point of contact being on their peripheries on a line vertical to the axis of each disk. 2nd. The combination, with the lever and base in an electrical instrument, of two disks or wheels and axle thereof. 3rd. The combination of lever base wheels or disks provided with rims or tires of platina axles or shafts and set screws. 4th. In an electrical instrument, disks or wheels used as electrodes made of brass or any cheap good conducting metal, and surrounded with a rim or tire of platina or any suitable material. 5th. The disks of an electrical instrument used as electrodes or contact points having a wire of platina or other suitable metal let into a groove in the periphery of the disk. 6th. An electrical instrument having contact points on the periphery of disks or wheels, triangular, round, or half-round or other conveniently shaped rims or tires of suitable metal inserted into, or attached to the peripheries of the disks. 7th. The combination, in a telegraphic or electric key, relay or sounder or other similar instrument, of two disks or wheels forming the electrodes or contact points and having their peripheries of platina or any other suitable material.

No. 16,298. Improvements on Bilge Water Valves for Ships. (*Perfectionnements aux valves à l'eau dans les mailles des navires.*)

Henry Cordes, Hoboken, and Thomas Keating, Jersey, N. J., U. S., 15th February, 1883; for 5 years.

Claim.—1st. The plate A having semi-annular slot B and opening E, the semi-tubular case C and plate D, the plug L and a mechanism for raising and lowering the said case and plug, whereby water can be readily withdrawn from a vessel's hold. 2nd. The combination, with the case and plate C D and the plug L, of the swivelled tubular screw G having exterior and interior screw threads and the interior screw J, whereby the said case, plate and plug can be readily operated and securely held in place.

No. 16,299. Improvements on Cooking Stoves and Ranges. (*Perfectionnements aux poêles et aux lan tiers de cuisine.*)

Edgar W. Anthony, Boston, Mass., U. S., 15th February, 1883; for 5 years.

Claim.—1st. The grate clip or support A. 2nd. The combination of the plate a¹ having the recess a² and the lug a³, with the clip A. 3rd. The perforated ash-guard B arranged below the grate to project into the ash pit chamber. 4th. The combination of the oven with an independent passage or chamber C¹ upon one side thereof and adjoining a flue plate, which passage or chamber opens at the top and bottom into the oven space. 5th. The combination of the auxiliary plate C with the flue plate of the oven, the said plate C being so shaped and arranged in relation to the flue plate as to provide a passage or chamber C¹ between it and the flue plate which opens into the oven space at the top and bottom thereof. 6th. The separate down-flues, tubes or boxes D, and up-flues, tubes or boxes D¹ arranged at one end or side of the oven. 7th. The combination of the down flues D, the chamber d₃, the flue plate d₄, the up-flue D¹ and the perforated plate d₁ d₂. 8th. The combination of the perforated plates d₁ d₂ having collars d₃ with the flue boxes D D¹. 9th. The combination of the down-flue D of a stove, the chamber E, the up-flue of the stove, the chamber d₃ and the double damper e¹, one blade of which is adapted to be moved a greater distance than the other. 10th. The combination of the damper rod

e² with the damper plate e² e³, arranged in relation to the down-flue D, and the chamber E. 11th. The combination of the auxiliary plate C with a vertically corrugated or rounded oven wall flue plate, the said plate C being shaped and arranged to provide a passage or chamber C¹ between it and the flue plate, which opens into an oven space at its top and bottom.

No. 16,300. Improvements on Monkey Wrenches. (*Perfectionnements aux clefs à écrous.*)

The Girard Wrench Manufacturing Company, Girard, (assignee of Charles H. Miller, Erie,) Penn., U. S., 15th February, 1883; for 5 years.

Claim.—1st. A frame consisting of the stationary jaw A, neck pieces C C and hollow handle D, formed of one piece of metal. 2nd. A frame consisting of the stationary jaw A, neck pieces C C and hollow handle D, in combination with the movable jaw B having notches b b₁, screw stem B¹ and worm wheel E. 3rd. A frame consisting of a head or stationary jaw A, neck pieces C C and hollow handle D, and having the lug d and lugs e e e e formed of one piece of metal.

No. 16,301. Improvements on Balanced Thermometers. (*Perfectionnements aux thermomètres suspendus.*)

Hyland C. Kirk and James T. Brayton, Phelps, N. Y., U. S., 15th February, 1883; for 5 years.

Claim.—1st. A thermometer having a balanced fluid tube or bar, pivoted or suspended from a point above the centre of gravity. 2nd. The combination of a fluid tube provided with a bulb at one end and with a point at the other end, and pivoted or suspended from a point above its centre of gravity, and a fixed graduated scale at the pointed end of the tube. 3rd. An open ended tube for the purpose explained. 4th. The method of adjusting a balanced thermometer to differently graduated scales, which consists in varying the elevation of its pivots above the centre of gravity. 5th. In combination with a balanced thermometer, a case in which said thermometer is balanced, containing a fixed scale and mounted upon a pivot, whereby it may be rotated to adjust the scale to proper position as explained. 6th. The described case for a balanced thermometer, having the removable transparent front, whereby the position of the indicator may be seen from the outside, or the tube may be removed for independent use. 7th. In combination with the balanced pointer disks H I provided with tongues o projecting respectively over and under the pointer and graduated and stationary pointers p. 8th. In combination with supports g, a hanger e provided with points b, and secured to, and carrying the pointer tube or bar by means of spiral coil f. 9th. In combination with the indicator tube or bar and a bracket or support, the bent arm or hanger e, provided with arms or points b and adjusting screw i. 10th. A graduated thermometer tube adapted to be removed from its pivots and used independently. 11th. The combination of soft iron bearing points or pivots attached to the tube or bar, and a magnetized bracket or hanger above said bearing points.

No. 16,302. Improvement in Devices for Tearing Wrapping Paper. (*Perfectionnement des machines à déchirer le papier d'enveloppe.*)

Alonzo W. Jerome, Paxton Ill., U. S., 16th February, 1883; for 5 years.

Claim.—1st. A device affording means for tearing sheets from the roll of paper in a straight edge A having a suitable bevelled or other edge, in combination with links or arms B, pivotally connecting the straight edge with the centre D of the paper roll E, by means of pivots C. 2nd. A device affording means for tearing sheets from a roll of paper in the straight edge A, in combination with the links or arms B pivoted thereto and also to separate standards, wall, counter or other object. 3rd. The combination of a paper roll E upon a centre D, arms B, pivots C and straight edge A. 4th. A roll of paper to be used in various sized sheets pivotally hung to a suitable object and combined with a straight edge A pivotally secured to a counter, wall, or other suitable object by the arms B, the end of the paper upon the said roll passing underneath the straight edge to the desired length and being torn off along the straight edge by drawing the paper towards the same, while pressing it down.

No. 16,303. Improvements on Surgical Trusses. (*Perfectionnements aux bandages herniaires.*)

Edward Parker and Adam H. Saylor, Bloomfield, Ont., 16th February, 1883; for 5 years.

Claim.—A truss for hernia composed of the body belt A provided with a pad, or pads C C sliding thereon, and straps E E attached thereto and to belt A rearward of the hips, and loops G for holding up the said straps.

No. 16,304. Improvements on Carriage Seats. (*Perfectionnements aux sièges des voitures.*)

Richard H. Lewis, Oshawa, Ont., 16th February, 1883; for 5 years.

Claim.—1st. The side rails B B and back rail F having an adjustable screw connection. 2nd. The seat A secured pivotally by bolt M to box L fastened to the floor of the carriage to turn the seat.

No. 16,305. Improvement in Cigar Lighters. (*Perfectionnement des allume-cigares.*)

Samuel D. Mott, New York, N. Y., and William A. Stern, Menlo Park, N. J., U. S., 16th February 1883; for 5 years.

Claim.—1st. In combination with an electric circuit an incandescent substance exposed to the atmosphere, a circuit breaker in cir-