tilling chamber, a lateral chamber Y Y, at a lower level, provided with a gas tight door, and a vertically-movable sole, forming part of the said distilling chamber, all constructed, combined and operating together, substantially as set forth.

No. 17,812. Shoe. (Soulier.)

W. Rogers, Cincinnati, Ohio, U.S., 3rd October, 1883; 5 years.

W. Rogers, Cincinnati, Ohio, U.S., 3rd October, 1883; 5 years. Claim.—1st. The innersole A formed preparatory to being placed on the last, with the transverse slits A1 in the edges opposite each other and having the inturned flaps or leaves C, substantially as set forth. 2nd. The described process of manufacturing shoes, which consists in first placing a removable lasting piece on the forward part of the last, and then over this a permanent innersole, prepared with transverse slits at points near the ball and toe, and flaps turned in between said slits, so that its cut away, indented, or inturned parts shall be directly over said lasting piece, and in lasting the upper to the permanent innersole, along the rear part and around the toe thereof and to the lasting piece, along the cut away, indented, or inturned portion of the innersole, and in tacking the outersole to the innersole and sewing the outersole, innersole, and upper together along the rear part and around the toe portion of the shoe, and in only stitching together the outersole and upper along the cut away, indented, or inturned portion of the innersole, and withdrawing the lasting piece, and turning down the leaves or flaps. all substantially as set forth.

No. 17,813. Grain Elevators. (Elévateurs.)

A. Bardeen, Blackstone, Mass., U.S., 3rd October, 1883; 5 years.

A. Bardeen, Blackstone, Mass., U.S., 3rd October, 1883; 5 years.

Claim.—1st. The improved grain elevator described, the same consisting of the shaft E, provided with the pulleys H, G, the shaft J, provided with the pulleys K, P, the lugs L, provided with the screws M, and wheels I, the standards D, provided with screws a, and wheels h, the belt O, provided with the buckets R, and belts F, constructed, combined, and arranged to operate, substantially as set forth. 2nd. In combination with the elements included in the first clause of the claim, the shaft W, standards U, slides f, shovel Y, pulley Z, and belt Q, substantially as and for the purpose specified. 3rd. In a grain elevator, substantially such as described, a rotary shovel adapted to be operated in such a manuer as to bring the grain into a convement position to be taken up by the buckets of the elevator, substantially sas set forth. as set forth.

No. 17,814. Nut and Pipe Wrenches.

(Clés à écrous et à tugaux.)

C. W. Hoffmann, Brantford, Ont., 3rd October, 1883; 5 years.

Claim.—1st. The handle A, made of malleable iron or other suitable metal, and having joints C and F formed on it, substantially as and for the purposes set forth. 2nd. The outside jaw B, jointed to the handle A at C, and having the inside face serrated across, and case hardened or faced with serrated steel plate D, also inside jaw E jointed to handle A at F, and having the inside face serrated across and case hardened or faced with serrated steel plate D, also inside jaw E jointed to handle A at F, and having the inside face serrated across and case hardened or faced with serrated steel plate G, substantially as and for the purposes set forth.

No. 17,815. Wine and Cider Press.

(Pressoir.)

H. J. Campbell, Altoona, Pa., U.S., 3rd October, 1883; 5 years,

Claim.—1st. The combination of the frame, having a suitable hopper toothed at its lower edge, the cutting cylinder, the inclined plane wholly or partly perforated, the V-shaped trough having a straining-spout, the pressing-rollers, and suitable operating mechanism, as set forth. 2nd. The combination, with the pressing-rollers, arranged and perating as described, of a stationary scraper bearing against the lower roller, and a hinged door bearing in like manner against the upper roller and affording access to the interior of the machine, as set forth. set forth.

No. 17,816. Paging Machine.

(Machine à paginer.)

M. H. Dement, Chicago, Ill., U.S., 3rd. October, 1883: 5 years.

M. H. Dement, Chicago, Ill., U.S., 3rd. October, 1833: 5 years.

Claim.—1st. The combination of the sliding shelves W.W. grooved block N, knife c, and receiving shelf L, substantially as and for the purpose shown and described. 2nd. The combination of the sliding shelves W.W. pedal guide-posts J.J., and ground block N, substantially a and for the purposes shown and described. 3rd. The combination of the sliding shelves W.W. ground b ock N, knife c, receiving shoft L, and a chase or justifying form, substantially as and for the purposes shown and described. 4th. In a printer's chase or justifying apparatus, the combination of the series of adjustable movable line-supports, with means for securing and compressing the same, substantially as shown and described. 5th. The combination of the series of movable line-supports Y, and means, substantially as described, for securing the same to the support, with cams or cogs by means of which they are held in position, substantially as and for the purposes shown and described. 6th. The combination of the series of movable line-supports Y, and means, substantially as described, for securing the same to a support with flexible cam strips K11, wheels K1, and springs S1, substantially as and for the purpose shown and described. 7th. The combination of the supports Y, rods z z, and blocks T and y, and means for compressing the supports, substantially as and for the purpose shown and described. 8th. In an apparatus for putting type-bars in page and column form, a series of movable or adjustable supports, in combination with cams or cogs by means of which the supports are held in position, and which cams or cogs are readily removable, to permit the supports to be compressed, and with means for compressing the type-bars and supports together, substantially as shown and described. 9th. The series of movable supports, recessed so as to admit the type-bars and supports and hold them rigidly in position, with means for compressing the same, substantially as shown and described. 10th.

chase or justifying form, a series of movable line-supports, with means, substantially as described, for securing them to a common support, in combination with cams of cogs for holding the line-supports in position while the chase or form is being filled, and means, substantially as described, for compressing the same. Inth. In an apparatus for paging or justifying type-bars, a series of supports for the lines which are capable of being pressed together or spread apart, in combination with mechanism for compressing and separating the same, substantially as shown and described. 12th. The combination of the chase, cam wheels K K, catches rr, catchelvers d, d, and lever r, substantially as and for the purposes shown and described. 13th. The wheels K K, catches r, and catch levers d, d, bar O, and springs, in combination with the lever q, substantially as shown and described. 14th. The combination of the sliding shelves W W, grooved block N, knife c, swinging shelf L, chase with movable line supports G, and means for adjusting the supports, substantially as and for the purposes shown and described.

Switch for Incandescent Lamps. (Aiguille des lampes incandes-No. 17,817.

C. G. Perkins, New York N. Y., U. S., 3rd October, 1883: 5 years.

C. G. Perkins, New York N. Y., U. S., 3rd October, 1883: 5 years. Claim.—1st. A switch for incandescent lamps, consisting of a spring g, secured to the handle F, in combination with the switchbox D, the lid of which has two lugs h h, between which is a contact plate E, for the purpose of putting the lamp in or out of circuit, substantially as described. 2nd. In a switch for incandescent lamps, the combination of the lid C, of the switch-box and the pieces AA, secured to the upper side of the same, with the contact plate E, and spring g, said spring being secured to the handle F, and so constructed that by turning the handle it will describe an arc around the underside of the lid C, and be made to snap on or off the contact-plate E, substantially as described. 3rd. The switch-box D, having two bayonet grooves in the opposite sides of the top thereof, in combination with the disk or cover C, having the projection e on one side, and the metallic spring f on the opposite side, which fit into the grooves at the top of the switch-box, for the purpose of securing the lid to the same, and so arranged as to form a means of electrical connection with the contact spring g, substantially as described.

No. 17,818. Bark Cutting Machine.

(Maehine à couper l'écorce.)

J. C. Haggerty, Santa Cruz, Cal., U. S., 3rd October, 1883; 5 years.

J. C. Haggerty, Santa Cruz, Cal., U. S., 3rd October, 1883; 5 years. Claim.—1st. An apparatus for reducing bark for tanning purposes, consisting of the case A, having within it the revolving disk D with its angularly-placed knives, said disk revolving close to the side of the machine which is provided with a feed opening or directing chute G, the whole combined to operate substantially as and for the purpose described. 2nd. In a bark-cutting or reducing apparatus, consisting of the disk D, having cutting knives and revolving in proximity to one side of a case through which the bark is introduced, the knives F having the slots a so that the knives may be removed or introduced from the back of the disk without removing the bolts, and be secured, substantially as described.

No. 17,819. Car Axle. (Essiou de char.)

E. B. Orne, Philadelphia, Penn., U. S., 3rd October, 1883; 5 years.

E. B. Orne, Philadelphia, Penn., U. S., 3rd October, 1883; 5 years.

*Claim.—1st. In a car wheel axle, two car wheels having bearings upon the outer sides for the axle boxes of the car, in combination with a center part or axle made hollow and loosely journaled in each of said car wheels, said axle being provided with means to admit a lubricant, and holes to allow said lubricant to flow from said axle to its journals in the wheels, substantially as and for the purpose specified. 2nd. An axle made of a centre and two end sections, in combination with split cores arranged to firmly clamp the end sections, and form bearings for the center sections, and wheels the hubs of which clamp the two parts of the cores together, substantially as and for the purpose specified. 3rd. The center part A provided with collars C upon its ends, in combination with split cores E having grooves & F, end sections I, having bearings i, and wheels L having hubs K, substantially as and for the purpose specified. 4th. The center part A made hollow, and provided on its end with collars and pluss, split cores E having grooves & F, end sections I having bearings; and wheels L having hub K, substantially as and for the purpose specified. 5th. The hollow center part A closed on its ends and provided with holes d, collar B C, and plugs M, in combination with cores E made in two parts and having grooves & F, end sections I having flange J, bearing i, and channel II, and wheels L having hubs R, substantially as and for the purpose specified. 6th. The combination of hollow axle A having collars B C, closed end plugs D and holes d, cores E having grooves & F and made in halves, end section I, having flanges J and bearings i, dises N, and wheels L having hubs R, substantially as shown. 7th. A car wheel axle made hollow and provided with a series of closed apertures arranged about its circumference to fill it with a lubricant, substantially as and for the purpose specified, in combination with loose wheels upon one or both of its ends.

No. 17,820. C

No. 17,820. Combination Tools.

(Outils en combinaison.)

A. E. Nelson, Boston, Mass., U. S., 3rd October, 1883; 5 years.

Claim.—1st. A tool stock provided with a chuck at one end and with means for operating the same, said stock being constructed with longitudinal ribs provided with slots adapted to receive various tools, substantially as described. 2nd. A tool stock or chuck consisting of a tubular body provided with radially sliding jaws at one end, a rotary rod within said body provided with a slot at its upper end, mechanism connecting said rod with said jaws, a shouldered coupling-rod provided with a tongue adapted to project into said slot for coupling said rods, a spring for forcing said parts into connection with each other, and means for rotating said coupling rod, substantially as described 3rd. A tool stock or chuck consisting of the tubular body A, having the nut N at one end, the radially-sliding jaws q at its opposite end. Claim.—1st. A tool stock provided with a chuck at one end and with