

a frame for holding said plate, and an adjustable pivoted connection between the frame and the plate, substantially as described. 15th. In a lathe for turning various forms, the carrier of the spindle stocks having a clamping plate with a sleeve in the slot of said carrier for a vibratory connection with a clamp-pivot, in combination with the rocking frame arranged, substantially as and for the purpose set forth.

**No. 37,179. Machine for Making Envelopes, etc.** (*Machine pour faire les enveloppes, etc.*)

Sidney Austin Grant, Springfield, Massachusetts, U.S.A., 20th August, 1891; 5 years.

*Claim.*—1st. In an envelope machine, the cylinders A, A', in combination with folding mechanism, one cylinder having a land a, and the other a depression a', to make the four creases between the flaps and the body of the envelope, substantially as and for the purpose set forth. 2nd. In combination, with the cylinders A, A', one having a land a, and the other a depression a', and actuating mechanism to intermittently rotate the cylinders stop guides a'', and means substantially such as described, for example bracket F', pins a'', and springs a'', for varying the position of the stops, the stops when in one position preventing the insertion of the blank between the cylinders, and when in the other allowing the insertion of the blank between the cylinders, all substantially as and for the purpose set forth. 3rd. In combination, creasing cylinders A, A', one having a land a, and the other a depression a', gummings a', and gum-distributor a'', the gummings being mounted on creasing cylinder A, substantially as and for the purpose set forth. 4th. The improved means for creasing, gumming and printing envelope blanks, composed of cylinders A, A', one having a land a, and the other a depression a', combined with gummings a', on one of the cylinders, and a form A'' on the other cylinder to simultaneously crease, print and gum an envelope blank, substantially as and for the purpose set forth. 5th. In combination, feed table A'', reciprocating stops a'', and creasing cylinders A, A', one of the cylinders having an intermittent motion toward and from the other cylinder, and mechanism for depressing the stops a'', and folding mechanism all arranged and operating, substantially as and for the purpose set forth. 6th. In combination, a folding table and folding mechanism with feed rolls and blank creasing and gumming cylinders, one of the cylinders having an intermittent motion toward and away from the other cylinder, all arranged to feed the creased and gummed blank positively to the folding table, substantially as described. 7th. In combination, folding table B, flap folder b', flap folder b' being mounted at one edge of table B, pusher b'', and means (for example rack b'', and pinion b'') for reciprocating the pusher to turn the flap folder b', and to move said pusher over the folding table, substantially as and for the purpose set forth. 8th. In combination feed table A'', reciprocating stops a'', gumming and creasing rolls A, A', stationary folding table B, flap folders b, b', presser foot B', reciprocating pusher b'', and mechanism substantially such as described for actuating the same, the stops a'' being depressed to allow the operator to feed the blank to the creasing and gumming cylinders, the creasing and gumming cylinders simultaneously creasing and gumming the blank, the blank being fed positively from these cylinders to the folding bed, and removed positively from the folding bed by the reciprocating pusher all arranged and operating, substantially as and for the purpose set forth.

**No. 37,180. Base for Red Pigment and Process of Making the Same.** (*Base pour les pigments rouges et procédé de fabrication.*)

James Pliny Perkins, Boonton, New Jersey, U.S.A., 20th August, 1891; 5 years.

*Claim.*—1st. The within described combined red pigment, and paint base, consisting of an intimate mixture of ferric oxide and separated or precipitated silica, in substantially the proportions mentioned. 2nd. The process of treating silicious ferruginous slags for the production of pigments, which consists in, first, pulverizing the slag, second, treating it with sulphuric acid, and third, applying heat to the mass, all substantially as described. 3rd. The process of treating silicious ferruginous slags for the production of pigments, which consists in, first, pulverizing the slag, second, heating it with access of air, third, treating with sulphuric acid, and fourth, applying heat to the mass, all substantially as described.

**No. 37,181. Machine for Scouring Grain.** (*Nettoyeur des grains.*)

Dennis E. Sibley, Chicago, Illinois, U.S.A., 20th August, 1891; 5 years.

*Claim.*—1st. In the grain scouring machine shown and described, the combination, with the case A, having the inlet spout B, and outlet spouts F, and G, of the drums P, brush belt D, mounted on said drums, brush rollers S, arranged in a vertical train against the said belt brush, so their brushes will intermesh with those of said belt brush and rotate at a different speed from said belt brush, guide rollers R, for holding said belt brush in contact with said roller brushes, deflecting boards L, screens V, and suction fan blower J, all arranged to operate, substantially as and for the purpose set forth. 2nd. In the grain scouring machine shown and described, the combination of drums P, belt brush D, mounted on said drums, brush rollers S, arranged in a vertical train against said belt brush so their brushes will intermesh with those of the roller brushes and rotate at a different speed from said belt brush, guide rollers R for holding said brush belt in contact with said roller brushes, deflecting floors L, worm wheels W, arranged on the ends of the shaft of said roller brushes, shaft J', worms Z', secured on said shaft and

arranged to mesh with said worm wheels, and bevel gears H, H', and shaft J'', all arranged to operate, substantially as and for the purpose set forth. 3rd. In the grain scouring machine shown and described, the combination, with the endless brush-belt B and roller brushes S, of the outlet spout F, having the fan J, the screen V, arranged across the inner end of said spout, and spout G, having the series of arms Z arranged to extend across its inner end, substantially as and for the purpose set forth.

**No. 37,182. Iron Bucket, etc.** (*Seau en fer, etc.*)

William and Ann McLauchlan, both of Manchester, England, 20th August, 1891; 5 years.

*Claim.*—1st. The improvements in buckets, sloop pails, coal scuttles, and other similar articles, whereby the same are rendered perfectly noiseless in use, substantially as hereinbefore set forth. 2nd. The application to the rims of buckets, sloop pails, coal scuttles, and other similar articles, of rubber or other feet or pads, substantially as and for the purpose hereinbefore set forth. 3rd. The application to the ears or handles of buckets, and other like articles, of rubber washers and guards, substantially as and for the purpose hereinbefore set forth.

**No. 37,183. Gaiter Stocking.** (*Bas guêtre.*)

Charles Bellerive, Quebec, Province of Quebec, Canada, 20th August, 1891; 5 years.

*Resumé.*—Comme nouvel article de manufacture un bas ayant une ouverture longitudinale pratiquée dans sa hausse la dite ouverture fermant soit avec des agrafes des boutons, etc., etc., tel que décrit et pour les fins y mentionnées.

**No. 37,184. Nut Fastening.** (*Arrête-écrou.*)

Angus Fongère, Moncton, New Brunswick, Canada, 20th August 1891; 5 years.

*Claim.*—1st. The combination, with a bolt and primary nut, of the metal elastic washer or locking plate having an oblique thread cut diagonally therein to its faces, and screwed on to the bolt exteriorly of the primary nut, said elastic washer when screwed down being deflected or bent from its initial diagonal position on the bolt by contact with the nut, and bearing against said nut with increased force or compound frictional contact in the manner and for the purpose herein described. 2nd. In a nut lock, the combination, with a bolt and a primary nut, of the inclined locking plate or washer arranged on the bolt exteriorly of the nut thereon, and having the oblique threads cut at an angle to its faces, said flat locking plate lying at an angle to the face of the nut and being of suitable thickness and temper in proportion to the nut and bolt to spring or yield as the contact between the faces of the nut and plate is increased, whereby the locking plate is bent or deflected as it is screwed home and a compound frictional contact is secured between said plate and nut without deflecting the end of the bolt, as set forth. 3rd. As an article of manufacture, the elastic metal plate or washer herein described, having a thread diagonal to its bearing in order to produce torsional spring resistance, and a yielding of the parts held together to secure the nut and operate, substantially as and for the purposes set forth.

**No. 37,185. Machine for Mixing Dough.**

(*Machine pour mêler la pâte.*)

John Simons, Aylmer, Ontario, Canada, 20th August, 1891; 5 years.

*Claim.*—The combination of the motive power F, (or pulley and belt, etc.) the shaft I, the pinion E, and the driving wheel B, with one or more mixing wheels C, D, the paddles a, a, a, a, and a', the inside geared cogged wheel A, and the dough pan H, substantially as and for the purpose hereinbefore set forth.

**No. 37,186. Method of Treating Filaments for Incandescent Electric Lamps.** (*Méthode de traiter les filaments pour lampes électriques incandescentes.*)

Turner D. Bottome, Hoosick, New York, U.S.A., 21st August, 1891; 5 years.

*Claim.*—1st. The process of reducing metallic compounds contained in carbon filaments to the metal, consisting in electrically heating the said carbon in an atmosphere of pure, dry and heated hydrogen, substantially as described. 2nd. The method of treating incandescent filaments, consisting in heating them by electrical means to a temperature at which the carbons become soft, in an atmosphere of pure, hot, dry hydrogen. 3rd. The method of regulating the electrical conductance of a filament for an incandescent electric lamp, consisting in alternately submitting the same to a treatment, incorporating a metallic compound and subjecting the same to a high temperature by electrical means, in an atmosphere of heated hydrogen obtained as a product from the destructive distillation of a hydrocarbon, substantially as herein described. 4th. The method of treating filaments, consisting in toughening them throughout their structure by electrically heating them until they become soft while inclosed in a chamber containing pure, dry and heated hydrogen, as described.

**No. 37,187. Weather Strip for Car Doors.**

(*Bourrelet de porte pour chars.*)

William R. Betham, Chicago, Illinois, U.S.A., 21st August, 1891; 5 years.

*Claim.*—1st. The herein described weather strip, consisting of the combination with the car body and sliding door of the flat strip A,