

No. 29,696. Explosive Compound.*(Composition explosible.)*

Carl W. Volney, Tom's River, N.J., U.S., 20th August, 1888; 5 years.

Claim.—1st. The explosive compound consisting of the solution of nitro-starch in nitro-glycerine and oxidizing agents, such as chlorates or nitrates. 2nd. As a new article of manufacture, the solution of nitro-starch in nitro-glycerine.

No. 29,697. Band Pulley. *Poulie à courroie.*

Wallace H. Dodge, Mishawaka, Ind., U.S., 20th August, 1888; 5 years.

Claim.—1st. A pulley-rim A provided in its inner periphery with dove-tailed notches *b* at opposite sides of said rim as to the center, and a spoke arm C having a dove-tailed tenon *d* on each end adapted to enter said notches *b*, said arm being provided with a shoulder *e* at the base of each tenon to rest against the inner surface of the rim, combined with means for forcing one side of said tenon hard against one side of said notch while being guided thereto, and a solidifying plastic filling *g* to fill all the parts of said notch not occupied by said tenon, as set forth. 2nd. The pulley-rim A provided with the notch *b*, and the pulley-arm C provided with the tenon *d* corresponding in shape with the notch *b*, the surfaces on one side brought into close contact and caused to adhere by cement combined with a wedge also cemented in place, and the solidifying plastic filling *g*, substantially as set forth. 3rd. The pulley-rim A divided as set forth, and provided with the grooves *k*, *m* cut transversely in the divided ends, and the inserted tongue *p* and the covering-rings *q*, substantially as set forth.

No. 29,698. Bleaching Apparatus.*(Appareil de blanchiment.)*

Enoch J. Rogers, Newmarket, Ont., 20th August, 1888; 5 years.

Claim.—1st. A bleaching apparatus consisting of an apartment 1 having internal doors 5, 5 and horizontal screen frames 8, 9, and provided with a removable top or cover 11, substantially as set forth. 2nd. The apartment 1 having a hinged section 10, screen frame 9 hinged to the screen frame 8, whereby each frame may be successively opened doors 5, 5 dividing the apartment horizontally and provided with segment arms 6, 6 to hold the doors closed, as set forth.

No. 29,699. Machine for Eliminating Iron from Ores, etc. *(Machine d'extraire le fer des minerais, etc.)*

Gurdon Conkling, Glens Falls, N.Y., U.S., 20th August, 1888; 5 years.

Claim.—1st. The combination, with a primary apron, of a secondary apron made to operate transversely to the primary, a magnetized plate secured in proximity to said secondary apron, so as to draw the iron particles to said secondary apron, and suitable driving mechanism for actuating the aprons, substantially as set forth. 2nd. The combination, with a primary apron and a secondary apron made to operate transversely to the primary apron, of a magnetized plate secured in proximity to said secondary apron, so as to draw the iron particles to said secondary apron, suitable driving mechanism for actuating the aprons, and a scraper or brush made to act on said secondary apron, substantially as set forth. 3rd. The combination, with a primary apron, of a secondary apron made to operate transversely to said secondary apron, a magnetized plate secured in proximity to said secondary apron, so as to draw the iron particles to said secondary apron, and means for adjusting the magnetized plate in relation to the secondary apron, substantially as set forth.

No. 29,700. Removable and Reversible Support for Shelves and Printer's Galleys. *(Support mobile et réversible pour rayons et galles d'imprimerie.)*

Charles C. Blakeley, Albion, Mich., U.S., 20th August, 1888; 5 years.

Claim.—1st. The herein described removable and reversible rest or support for printers galley, shelves, etc. 2nd. The removable and reversible galley support, comprising a metallic piece or body having an upturned toe at its lower end, a downwardly extending hook or jaw at its upper end, and a second jaw extending from the body upon the same side as the end jaw, the jaws being arranged to rest upon or engage the opposite surfaces of their support, substantially as described. 3rd. The removable and reversible galley support comprising a metallic piece or body having an upturned toe at its lower end, a downwardly extending hook or jaw at its upper end, and a second jaw extending from the body upon the same side as the end jaw, the jaws being substantially parallel and extending at an oblique angle from the body, substantially as described. 4th. The herein described galley rack comprising a supporting frame, and series of pairs of hooks or catches secured to the frame, and arranged one above the other in pairs, and supports A engaging the hooks and forming a rack, as set forth.

No. 29,701. Apparatus for Drying Waste Animal Matter. *(Appareil de dessiccation des déchets animaux.)*

James S. Edwards and James Edwards, Eastbourne, Eng., 20th August, 1888; 5 years.

Claim.—1st. Drying apparatus with a cover or top which is coned or raised in the centre, and is provided with a gutter to receive and convey away liquid condensed upon the cover or top, substantially as described. 2nd. Drying apparatus having a steam heated bottom with stirring shaft and stirrers as described, and doors for the introduction and removal of the material and an outlet passage for the steam or vapour, and a pipe by which liquid may be removed from the apparatus, substantially as described. 3rd. Drying apparatus, heated by steam introduced between two bottom plates A and B, and provided

with a casing enclosing the said bottom plates, together with the sides or body of the apparatus, thereby forming an air chamber by which heat can be conveyed from the bottom to the sides, substantially as described.

No. 29,702. Treatment of Auriferous Minerals. *(Traitement des minerais aurifères.)*

Jules Weirich, Béziers Hérault, France, 20th August, 1888; 5 years.

Claim.—The treatment above described of concentrated ores, or auriferous pigments, by heat regulated between 330 and 450 degrees centigrade, according to the directions above set forth, by which I sensibly reduce the consumption of mercury in the course of the amalgamation.

No. 29,703. Cider Press. *(Pressoir à cidre.)*

Eckhardt Wettlanfor, Tavistock, Ont., 20th August, 1888; 5 years.

Claim.—The combination of the cog-wheels D and E, and the screw F, substantially as and for the purpose hereinbefore set forth.

No. 29,704. Hot Water Heating Apparatus. *(Calorifère à eau.)*

Earnest C. Mount, Montreal, Que., 21st August, 1888; 5 years.

Claim.—A hot-water heating apparatus, constructed of sheets of metal, in which channels or sections of pipes have been so shaped and arranged as to form, when the sheets are joined and fastened together face to face, sheet metal pipes, separated from each other by intervening contact parts, substantially as and for the purposes hereinbefore set forth.

No. 29,705. Hot Water Boiler.*(Chaudière de calorifère à eau.)*

Charles E. Gate, Winnipeg, Man., 21st August, 1888; 5 years.

Claim.—1st. A combination hot water boiler having the peculiar form of the vertical sections 5, 6, 7, 8, 9 and 10, the front 4, back 11, the water way connections 21, 21, with stoppers 23, 23 and bolts 37, 37, combined with the frame 1 forming ash pit bars 2, 2, lips 3, 3, door 30, the furnace 36, door 29, apertures 12, 12 and 14, 14, twin flues 31, 31, twin flue doors 28, 28, return pipe 26, one or more in number, placed either at back or sides or both, substantially as and for the purpose above set forth. 2nd. A combination hot water boiler having the peculiar form of the horizontal section 15, 16 and 17, having their under sides corrugated as shown or plain, the apertures 18 and 19 the smoke-chambers 32, 33, 34, exit 20, doors 27, 27, service flow pipes 25, one or more in number, movable back 35, the vertical water way connections 22, 22, the stoppers 23, 23 and bolts 24, 24, substantially as and for the purpose above set forth. 3rd. A hot water boiler composed of a combination of vertical and horizontal sections, substantially as and for the purpose above set forth.

No. 29,706. Weather Strip. *(Bourrelet de porte.)*

Thomas Hibbert, Cochran, Ind., U.S., 21st August, 1888; 5 years.

Claim.—The improved weather strip herein described and shown, comprising the overhang or ledge A permanently attached to a door and provided with opening F, the curved metal strip B having its upper edge doubled on itself provided with the notches G, the rod D passing through said upper doubled edge of the strip B and the loop C fitted on the rod D, and passed through the notches G and openings F, and having their upper ends bent over on the ledge A, substantially as specified.

No. 29,707. Dry Plate Holder.*(Châssis porte-plaque sèche.)*

Philip Williams, Huntsville, Ont., 21st August, 1888; 5 years.

Claim.—The combination of holder A, receiving the plate from the broadside, with its stationary partition B, of wood or vulcanite, the slides C of wood or vulcanite, the light breaker D in three sections, the plate springs F, the springs G, G, the jacks H, H, the arch I, and the springs J, J, as and for the purpose hereinbefore set forth.

No. 29,708. Mode of Dressing Mill Stones for the Manufacturing of Rolled Oats and Granulated Oat Meal.*(Mode de rabotage des meules pour la fabrication des gruaux d'avoine roulés et granulés.)*

Robert J. Fleming, Bothwell, Ont., 22nd August, 1888; 5 years.

Claim.—Cutting down square of the front or grinding edge of the furrow D, as hereinbefore set forth.

No. 29,709. Machinery for Cutting Wood for Matches, Splints and Match Boxes. *(Machine à tailler le bois pour les allumettes, felisses et boîtes d'allumettes.)*

William Ellis, Peckham, Eng., 22nd August, 1888; 5 years.

Claim.—1st. In machinery for the purposes stated, the combination, with a long knife, a longitudinal iniser, and a circumferential iniser, of the curved guides D and E, and the compensating arrangements for screw D and E, hereinbefore described and illustrated in the accompanying drawings, to enable straight screws to work sliding blocks in a curve. 2nd. In machinery for the purposes stated, the combination, with longitudinal and circumferential inisers, of the long knife C, knife carrier G, blocks D, curved guides D, straight screws D, suitably turned slides D and pivoted blocks D, as and for the purposes described. 3rd. In machinery for the purposes