the cutters H, the guide ridges I, the slitting knives &, and the slicing knife O, all as shown and described.

## No. 25,217. Refrigerator. (Garde-Manger.)

Harry Greenland, Orillia, Ont., 25th October, 1886: 5 years.

Harry Greenland, Orillia, Ont., 25th October, 1886: 5 years.

Claim—1st. A combined refrigerator and show case, the same being constructed with four double grooved posts B, double glass sides and fronts D. D. D. with air spaces E between them, a double bottom and an ice chamber, having its floor formed in sections containing dead air spaces, for the purpose specified. 2nd. In a refrigerator, one or more upper hollow air sections 1, for the bottom of the ice chamber, arranged substantially as and for the purpose specified. 3nd. In a refrigerator, the lower sections J placed under the spaces of formed between the upper sections T, and constructed with a dead air space i and a drip pipe J, substantially as and for the purpose specified. 4th. In a refrigerator, the combination of the upper dead air sections I, and the lower dead air, substantially as specified. Bth. In a refrigerator, the combination of the upper dead air sections I, the lower dead air sections J, the trough k, drip pipes i, j, and main drip pipe m, all arranged and constructed substantially as and for the purpose specified. the purpose specified.

# No. 25,218. Clothes Drier, (Sechoir a Linge)

Frederick G. Manley, Syracuse, N. Y., U. S., 25th October, 1835; 5

years.

# No. 25,219. Ditching Machine.

(Machine à Fossoyer.)

Robert H. Kersay, Lobanon, Ind., U. S., 25th October, 1836; 5 years. Claim—1st. A an improvement in ditching machines, the bottomless and endless scoops G baving a U-shaped cross-section smaller at one and than at the other, and united by pivotal connections to form a continuous chain or trough, substantially as shown and described. 2nd. The series of bottomless and endless tancing scoops united by pivotal connections, forming an endless and continuous trough, in combination with the wheel E, which closes the open side of the scoops during the time their contents are in contact with the periphery of said wheel, while being elevaried to the discharging point, as set forth. 3rd. The continuous chain of bottomless and endless, tapering and overlapping scoops, in combination with the spring scraper, arranged and operating substantially as and for the purpose described. 4th. The continuous chain of bottomless, endless and overlapping scoops in combination with the spring scraper and discharging chaites arranged to discharge the earth upon one or both rides of the ditch, and operating conjointly in the manner specified. 5th. In a ditching machine, the sprocket, driving wheel E provided with recessed side flanges b, b, and connecting who of bottom c arranged to carry the scoop chain and form a bottom for its open side while the chain is in contact with the wheel, as set forth. 6th. The scoop chain or trough F, in combination with the wheels E, Er, constructed as described, and inclined swinging frame I, extending between the wheels and forming a support for the spring scraper and discharging chuies, as set forth. 7th. The combination, with the scoop chain and its supporting devices, constructed and arranged to carry and adjust the plugs and shape the bottom of the ditch, as set forth. 8th. The combination of the scoop chain and plough K, with the straps or bars h, provided with cutters h, for trimming the sides and edges of the ditch. as set forth. 9th. In a ditching machine, the frame A and the shafts t and v connect Robert H. Kersay, Lebanon, Ind., U. S., 26th October, 1886; 5 years.

### No. 25,220. Voltaic Battery. (Pile Vollaique.)

The Primary Battery Company. (assignce of Thomas J, Jones), London, Eng., 26th October, 1886; 5 years.

London, Eng., 26th October, 1886; Syears.

Claim.—1st. In a galvanic element, a support or current conductor for the active material constructed of an insulating and inoxidizable or nearly inoxidizable material, and of an oxidizable conductor having gold or platinum locally applied or connected thereto, the conductor being embedded in the insulating material with the exception of the gold or plotinum portions, which alone make electrical contact between the active material and the exidizable conductor, whereby all contact of the electrolyte or of the active material with the oxidizable conductor is prevented as herein specified. 2nd. A gulvanic element whereof the support for the active material is constructed of a framework of insulating and in oxidizable or nearly noxidizable material, having an exidizable conductor embedded therein, and branch wires or strips connected to said conduct, or, said branch wires or strips projecting from the insulating material and penetrating the active material and being plated or coated with gold or platinum or made wholly of one or

other of these metals, substantially as and for the purpose specified. 3rd. A galvanic element whereof the support for the active material is constructed of a network of wires or of a corrugated and perforated plate of bese metal partially plated or covered with gold or platinum and embedded in an insulating and inexidizable or nearly inexidizable material, the portions plated with gold or platinum alone making conductive contact with the active material of the element, substantially as herein specified and shown in the drawings. 4th. A current conductive clip, chaip or terminal for a galvanic element, construted of an exclusable conductor embedded in an insulating, or inexidiable, or nearly inexidizable in iterial, and provided with platinum, or gold points, or surfaces, which alone make connection with the active material of the element, substantially as herein described and shown in the drawings. shown in the drawings.

#### No. 25,221 Preparation of Transparencies. (Préparation des Transparents.)

William Jones and Richard C. Powell, London, Eng., 26th October 1886 ; 5 years.

William Jones and Richard C. Powell, London, Eng., 26th October 1880; 5 years.

Claim.—1st. For the production of transparencies, the use of the "sheet" consisting of an enamel face to receive the print or design, a "body" of "tracing tissue" or other equivalent material, substantially as specified. 2nd. The process of making the said "sheet" consisting in varnishing the "body," pressing and enamelting the same, and backing it with stout paper or other strengthing paper, substantially as specified. 3rd. In the production of transparencies, the combination, with the "body" having tissue or equivalent material of an enamel face, substantially as specified. 4th Strengthening the "bracing tissue" or "body" of the "sheet" intended to receive the picture, print or other design, by backing it with one or in re layers of paper or equivalent strengthening material, to enable it to carry the weight of color and for the purpose of "securing" the "register", substantially as specified. 5th. The process of applying pictures to china or glass by the use of the herein described "sheet" attached by means of a volatile combustible varnish and afterwar is forming the articles, substantially as specified. 6th. The u-o of a mixture of pamfline oil, giscerine, common, and and water for ponetrating paper and thereby rendering ordinary prints, chromographs, oleographs, naintings, or the like, available as trans arroneous substantially as specified. 7th. The method or process of producing transparencies by saturating prints, chromographs, cleographs, paintings, or the like, available as trans arroneous substantially as specified. 7th. The method or process of paper, when too thick, by the application of a mixture and friction, substantially as specified. 8th. The method of producing transparencies by printing or paintings or the like, with a mixture, such as herein described, attaching the same to glass and removing the excess of paper, when too thick, by the application of a mixture and friction, substantially as specified. 8th. The

# No. 25,222. Sponge Cup. (Godet Eponge.)

Samuel Allen, Toronto, Ont., 26th October, 1836; 5 years.

Samuel Aiter, toronto, one, with a sponge-cup, of a turning cover provided with an elongated opening which, by the turning of the cover, will expose different parts of the upper surface of the sponge, substantially as set forth. 2nd. The combination, with a sponge-cup, of a cover, a locking device holding the cover upon the cup, but permitting such cover to be turned, and an elongated opening in said cover, composing different parts of the upper surface of the sponge as the cover is turned, substantially as set forth.

# No. 25,223. Combined Latch and Lock.

(Loquel et Serrure Combinés.)

John C. Craig, Fenelon Falls, Ont., 26th October, 1886; 5 years.

John C. Craig, Fension Falls, Ont., 26th October, 1886; 5 years.

Claim.—1st. The combination, with the lock case having a slot 14, of the elbow lever 12, latch boit 10 and gravity lever 5, whereby the bott is retracted by lifting one arm of the elbow lever and expelled by the gravitation of ther lever, as set forth. 2nd. The combination, with the lock case having slot 22, of the gravity lever 5, nived within the ease and having a loop 21, and a latch boit 10 pivoted to an arm of said lever, whereby the bolt will be retracted by lifting the gravitating lever by the loop, as set forth. 3rd. The combination, with the lock case having slots 14, 22 and curved projection 2, of the elbow lever 12, sliding bolt 10, gravity lever 5 having a loop 21, and dog 9 sliding in a curved slot in the gravity lever, and engaging with the projecting on the lock case, as set forth for the purpose described.

# No. 25,224. Apparatus for Welding Wheel Tires. (Appareil pour Souder les Bandages des Roues.

William Harrison, Walker, Mich., U.S., 26th October, 1886; 5 years. Claim.—1st. In a welding-machine, a die constructed in two sections, each having in longitudinal section the form of a right-angle triangle, and the subtense of one section being laid upon that of the other in combination with set-seiews bearing against the end of each part, substantially as described. 2nd. In a welding-machine, the combination, with the angular die-section A. of the section B, having a similar form, the two boing united by a tongue and groove a and b, and means, substantially as described. for adjusting one section relatively to the order, substantially as described. 3rd. In a weldingmachine, the combination, with rear and front lover dies, one acting upon the perimeter of a tire, and the other upon its edge, of corresponding apper dies, the tire being submirted to the action of the rear and front dies alternately, substantially as described. 4th In a welding-machine, the combination, with the lower dies A and D, the former having a groove I and the latter a convex face F1, substantially as described. William Harrison, Walker, Mich., U.S., 26th October, 1886; 5 years.