

No. 14,648. Machine for Setting the Edges of Boots and Shoes. (*Machine à finir la tranche des chaussures.*)

George H. P. Flagg, (Assignee of George A. Fullerton,) Boston, Mass., U. S., 24th April, 1882; (Extension of Patent No. 7768.)

No. 14,649. Improvements on Staples. (*Perfectionnements aux gâches.*)

Charles W. Dean, South, Wareham, Mass., U. S., 24th April, 1882; for 5 years.

Claim.—1st. The process described, of manufacturing metallic staples by first cutting them from bars, with head and divergent legs, and then bending the latter to the required position. 2nd. A staple cut in one piece, from bar metal, and having a flat head *b*, sloping shoulders *c c* and parallel legs *d d*.

No. 14,650. Improvements in Tow Boats. (*Perfectionnements aux remorqueurs.*)

Alexander McDougall, Cleveland, Ohio, U. S., 24th April, 1882; for 5 years.

Claim.—1st. A freight vessel, so constructed in its outline that the body of the hull has parallel sides for a considerable portion of its length, between the points where it tapers to form the bow and stern, which portion shall be semi-cylindrical above and ellipsoidal below the water mark or wales. 2nd. A freight vessel so constructed in its outline that its bow and stern formed by the continuation of its sides which are parallel for some considerable portion of their length, and of semi-cylindrical shape above, and ellipsoidal shape below the water mark, shall uniformly taper to a point above its bottom about two thirds the depth of the boat.

No. 14,651. Improvements on Galvanic Batteries, and in the Treatment of Solutions Therefrom, for the Recovery of Useful Products. (*Perfectionnements aux batteries galvaniques et dans le traitement des solutions qui en proviennent, pour récupérer des produits utiles.*)

James Higgin and Alfred J. Higgin, Manchester, Eng., 24th April, 1882; for 5 years.

Claim.—1st. In batteries having tin for the positive element, and cells charged with dilute acid and pyrolusite and producing protosulphate of tin, which can be treated to obtain useful salts of tin. 2nd. In batteries having tin for the positive element, and cells charged with solutions of persulphocyanide of iron alone or in conjunction with pyrolusite. 3rd. In batteries having tin for the positive element, and cells charged with certain solutions which will absorb hydrogen, such as solutions of persulphate, perchloride, peracetate or pernitrate of iron, alone or in conjunction with pyrolusite. 4th. Treating the spent solutions of such batteries in order to obtain useful salts of tin, such as stannic acid or oxide, bichloride of tin, protochloride of tin, stannate of soda, stannate of potash. 5th. Treating the spent solutions of such batteries in the various ways set forth, in order to obtain a copper salt which may be used in dyeing and calico printing, and for other purposes. 6th. Batteries having tin and copper elements excited by solutions of caustic soda or potash, and having pyrolusite in the cell or cage forming the copper element, and producing stannate or stannite of soda or potash. 7th. Batteries having tin and carbon elements, excited by combined solutions of caustic soda or potash, and nitrate of soda or potash, and producing stannate or stannite of soda or potash. 8th. The use of persulphocyanide of iron as an absorbent of hydrogen in galvanic batteries.

No. 14,652. Improvements in the Manufacture of Vegetable Fibre for Upholstery. (*Perfectionnements dans la fabrication de la fibre végétale pour les tapisseries.*)

John G. Stevens, Jersey City, N. J., U. S., 24th April, 1882; (Re-issue of Patent No. 12,748.)

Claim.—The new article of manufacture, consisting of the fibre of vegetable substances or animal hair, when crimped or corrugated for upholstery and other like purposes, as distinguished from the roped or twisted fibre used for said purposes.

No. 14,653. Taper Manufacturing Machine. (*Machine à fabriquer les cierges.*)

Jean B. Lannier, St. Athanase, Que., 24th April, 1882; (Extension of Patent No. 7603.)

No. 14,654. Improvements on Metal Barbed Fencing. (*Perfectionnements aux clôtures métalliques barbelées.*)

Thomas C. Hewitt, (Assignee of Joseph F. Walmsley,) London, Ont., 24th April, 1882; for 5 years.

Claim.—The loose barb *C* having points *D E* projecting in any direction therefrom, secured to the flat strip *A* of a fence by means of slits *a a*, through which said barb is inserted and held in place by intervening flat surface *B*, the whole being afterwards rolled and galvanized.

No. 14,655. Improvements in Means for Protecting Lightning Arresters. (*Perfectionnements dans les moyens de protéger les paratonnerres.*)

Charles T. Fitch, Harlow, C. Palmer and Samuel H. Cowles, Buffalo, N. Y., U. S., 24th April, 1882; for 5 years.

Claim.—As a means of protecting lightning arresters, located upon working circuits, from dust, insects, moisture, etc., the cross-arm of a telegraph pole provided with a recess to receive the lightning arrester therein, and having a suitable cover which forms with the recess an enclosure for such lightning arrester.

No. 14,656. Improvements in Running Gears for Vehicles. (*Perfectionnements aux trains des voitures.*)

The Herbrand Company, (Assignee of Jacob Herbrand,) Fremont, Ohio, U. S., 24th April, 1882; for 5 years.

Claim.—The upper fifth wheel plate *F* constructed with the lateral flanges *f*, the front eye or lug *D* and the rearwardly extending arm or plate *G*, in combination with the head block *R* held between said flanges, the reach *A*, the brace or bolt rising from the latter and secured to the lug *D*, the lower fifth-wheel plate *I* and the king bolt *J*.

No. 14,657. Improvements in Cable Railways. (*Perfectionnements aux chemins de fer à traction de câble.*)

Worcester Haddock, Jacob Frank, Cincinnati, Ohio, and Isaac Frank, New York, U. S., 24th April, 1882; for 5 years.

Claim.—1st. In cable railways, the combination of one cable and the car, and two gripping devices, one located at the forward portion of the car, the other being located in the rear of the forward one. 2nd. In combination, with suitable supporting devices, the shoe *D* provided with pulleys *e e*, and a device for causing the cable to be gripped between them or released therefrom. 3rd. In combination with the suitable supporting devices, the shoe *D* provided with suitable frictional devices, and the lever *h*. 4th. In combination with suitable supporting devices, the shoe *D* provided with pulleys *e e*, and the lever *h*. 5th. In combination, the shank *C* provided with slot *d*, and supporting bracket provided with bolt *d*, and suitable device for gripping the cable. 6th. The combination of the bracket *B* and shank *C*, and devices for gripping the cable. 7th. The combination of the bracket *B* hinged at one end and provided with bolt *b* and spring *b*, for supporting cable gripping devices. 8th. The combination of the bracket *B*, shank *C* adjustable therein, shoe *D* and lever *h*, said lever being provided with means for causing it to depress the rear end of the shoe. 9th. The shoe *D* provided with stirrup *e* and suitable non-frictional devices for gripping the cable. 10th. The combination of the shoe *D*, pulleys *e e* and stirrup *e*. 11th. The combination of the shoe *D*, stirrup *e* and rod *f*. 12th. The combination of the shoe *D*, stirrup *e*, rod *f*, lever *g*, rod *g*, lever *g*, rod *g* and hand lever *g*. 13th. The combination of the bracket *B* provided with brace *h*, shank *C*, shoe *D*, stirrup *e* and rod *f*. 14th. The combination of the shank *C* vertically adjustable, and catch *p*. 15th. The combination of the vertically adjustable shank *C* and catch *p* and rod *p*, crank *p*, shaft *p*, lever *p* and treadles *p*. 16th. The combination of the shoe *D*, non-frictional devices as pulleys *e e*, lever *h*, cord *h*, drum *h*, shaft *h* and hand wheel *h*. 17th. The combination of the shoe *D*, non-frictional devices as pulleys *e e*, lever *h*, cord *h*, shank *C*, cord *K*, drums *h* and *K*, shaft *h*, and devices for turning the latter. 18th. In combination with shoe *D*, non-frictional devices as pulleys *e e*, lever *h*, cord *h*, shank *C*, cord *K*, pulley *K* and drums *K*, and devices for turning the latter. 19th. In combination with two separate and independent sets of gripping attachments, the rod *g*, cords *h*, cord *K*, pulleys *K*, drum *h* and shaft *h*, and shaft *h*, and shaft rod *g*, and devices for turning said shafts. 20th. In combination with the two independent and separate set of gripping attachments, the rods *g*, cords *h*, cords *K*, pulleys *K*, drums *h* and *K*, and shafts *h* and *K*, and devices for turning said shafts, and catches *p*, rods *p*, lever *p*, shaft *p*, levers *p* and treadles *p*. 21st. The bracket *B* provided with several arms or wings *a a*, affording a broad light bearing, and the slotted centre piece *a* for receiving shank *C*, supporting the devices for immediately gripping the cable. 22nd. The bracket *B*, provided with wings or arms *a a*, and the slotted centre piece *a* for receiving the shank *C*, and made with closed sides for keeping out the dirt.

No. 14,658. Improvements in Hay Presses. (*Perfectionnements aux presses à foin.*)

James E. Treuholm, Point de Bute, N. B., 25th April, 1882; for 5 years.

Claim.—1st. The dropping of the rear end of the traverser *F* by means of the curved track *u u*, the wheel *w* and the guiding block *Z*, or by any equivalent means. 2nd. The connection of the feeder frame *F F* to the connecting rods *b b* by means of the links *l l*. 3rd. The guiding of the position of the feeder *P* by means of the eccentric, the eccentric rod *n*, the lever *n* and the rod *n*. 4th. The holder *h* pivoted by the arms *n n* at the points *n n*, and the folder *r* acting in concert with it.

No. 14,659. Improvements on Steaming, Cleansing and Drying Casks. (*Perfectionnements au vaporisation, nettoyage et séchage des fûts.*)

William Ellis, St. Catharines, Ont., 26th April, 1882; for 5 years.

Claim.—In combination with a steam and water boiler, the arrangement of the main supply pipe *C*, branch *D* having nozzles *E*, branch *F* connecting with supply pipe *C*, branch *G* connecting with a hot water boiler, branch *H* passing through a super heater *I* and connected with branch *D* for rinsing, steaming, and drying casks placed in a row upon skids *B*, the nozzles *E* of branch *D* entering the bung hole of each cask and supplied with water or steam from both ends of the pipe.