

characters or designs in duplicate form in intaglio therein below the printed or painted letters, figures, characters or designs, and a blank space on the state below the letters, figures, characters or designs, in intaglio which blank space is adapted for copying thereon, the same letters, figures, characters or designs, as are printed thereon, and as appear therein in intaglio, substantially as described.

### No. 37,256. Whip. (*Fouet.*)

Frank Grant, Westfield, Massachusetts, U. S. A., 1st September, 1891; 5 years.

*Claim.*—A whip having a tapering central core, a layer of rubber of uniform thickness adherent to the central core and vulcanized thereon, and a covering of braud over said rubber, substantially as described.

### No. 37,257. Ironing Table. (*Table à repasser.*)

Edmund Burke Nagle, Almonte, Ontario, Canada, 1st September, 1891; 5 years.

*Claim.*—1st. In an ironing board, the combination of the framed legs A, having staples *f*, cleated and slotted board B, narrow notched board D, bolt C, passing through the legs, and board B, and provided with thumb nut and connecting the legs and board pivotally, and adjustably the removable table E, having brackets *e*, and the removable arms F, having brackets *f*, adapted to engage the staples *f*, substantially as set forth. 2nd. In an ironing table, the combination of the framed legs A, cleated and slotted board B, narrow notched board D, bolt C, passing through the legs and bottom B, and provided with thumb nut, and connecting the legs and bottom pivotally and adjustably, substantially as set forth.

### No. 37,258. Toy. (*Jouet.*)

Donald Murray Murphy, St. John, New Brunswick, Canada, 1st September, 1891; 5 years.

*Claim.*—1st. An improved toy consisting of a rod and a series of disks movable thereon, substantially as shown and described. 2nd. An improved toy consisting of a rod, a series of disks movable thereon, and the end-pieces rigidly attached to the opposite ends of the rod, substantially as shown and described. 3rd. The combination, with a rod, of the rigid end-pieces having flat inner faces, and the revolubly and longitudinally-movable disks arranged upon the rod intermediate the end-pieces, substantially as shown and described.

### No. 37,259. Spiral Stairway. (*Escalier spiral.*)

Christopher Clarke, Northampton, Massachusetts, U.S.A., 1st September, 1891; 5 years.

*Claim.*—1st. The double-flight spiral stairway composed, essentially, of a series of metallic sections, each section consisting of a hollow cylindrical metallic sleeve having radially-extending treads extending from opposite sides thereof, and risers connected to the treads, the sleeve, treads, and riser being in a single piece for each section, and the sleeves nestling with each other to form a central hollow cylindrical pipe with interlocking joints, all combined, substantially as described. 2nd. The within-described improved double-flight spiral stairway, consisting of a series of metallic sections, each comprising a central sleeve provided with a stud and socket to form a hollow central column when combined, and having integral with said sleeve radially-extending treads and risers from opposite sides thereof, and a threaded bolt within the combined sleeves, and a nut thereon bearing upon the upper sleeve of the series, whereby two steps are simultaneously erected by the arrangement of a single section, and whereby the whole series is made fast by the compressive action of a single nut, substantially as shown and described. 3rd. The herein described spiral stairway, consisting of sections, each section having a hollow cylindrical metallic sleeve, with a radially-extending arm forming the tread, and riser integral with said tread, the tread and riser being imperforate, adjoining treads and risers being connected by a groove, and a packing in said groove, all the parts combined and co-operating, substantially as described.

### No. 37,260. King Bolt for Vehicles.

(*Cheville maîtresse pour voitures.*)

John Eupator Fisher, Boston, Massachusetts, U.S.A., 1st September, 1891; 5 years.

*Claim.*—1st. In a vehicle, a king bolt firmly attached to the rocker plate and tapered on the front and sides from the rocker plate towards the end of the bolt, but approximately straight on the back portion of said bolt to present a nearly perpendicular surface against which the axle bed and axle bed plate rest, when the vehicle is drawn forward, as set forth and described. 2nd. In a vehicle, a tapering king bolt, as described, combined with means, as a lug chain or strap to hold said bolt within the perforation in which it is adapted to rest, for the purpose set forth and described.

### No. 37,261. Boiler Cleaner.

(*Nettoyeur de chaudière.*)

John D. McEachren, Galt, Ontario, Canada, 1st September, 1891; 5 years.

*Claim.*—1st. One or more pans arranged in the steam space of a boiler and connected to a water supply pipe, in combination with a pan placed below the water line under the other pans, substantially as and for the purpose specified. 2nd. A series of pans, arranged one above the other and extending from a little above the water

level in a boiler to a point above the top of the boiler, in combination with a dome to enclose the pans, and a pipe to supply water under pressure to the said pans, substantially as and for the purpose specified. 3rd. One or more pans, arranged one above the other in the steam space of a boiler and connected to a water supply pipe, in combination with a pan placed below the water line under the other pans and joined to a funnel, which is connected to a suitable mud receptacle outside of the boiler, substantially as and for the purpose specified. 4th. A funnel joined to a pan located below the water line in the boiler, and having side plates extending from each side of the said funnel to the sides of the boiler, in combination with a pipe connected to the smaller end of the funnel and tending to a point outside of the boiler where it is provided with a suitable cock, substantially as and for the purpose specified. 5th. A funnel joined to a pan located below the water line in the boiler, and having side plates extending from each side of the said funnel to the sides of the boiler, in combination with a pipe connected to the smaller end of the funnel and to a mud receptacle having a curved plate placed within it to separate the mouth of the pipe leading back into the boiler, substantially as and for the purpose specified. 6th. A mud receptacle K, having a compartment formed in it by the curved plate M, in combination with the pipes J, and O, located one on each side of the plate M, substantially as and for the purpose specified. 7th. A mud receptacle K, having a compartment formed in it by the curved plate M, in combination with the pipe J, and O, located one on each side of the plate M, and the cock P, situated at the bottom of the receptacle K, substantially as and for the purpose specified. 8th. A horizontal receptacle Q, having a settling chamber R, and filtering material between the perforated plates *b*, and *d*, in combination with pipes J, and O, arranged to connect the said horizontal receptacle with a steam boiler, substantially as and for the purpose specified.

### No. 37,262. Hitching Device. (*Enrénroir.*)

Christian Lasman, jr., Chicago, Illinois, U. S. A., 1st September, 1891; 5 years.

*Claim.*—As an improvement in lock-buckles, the frame A, provided with a hollow cross-bar B, having a lateral opening F, a lock, substantially as shown, on one side of said frame, having its bolt E, extended through the hollow of said cross-bar, and a tongue C, provided with a hole at one end adapted to be applied in the lateral opening of the said cross-bar and engage said lock-bolt, as and for the purpose specified.

### No. 37,263. Lubricator for Car Axles.

(*Boîte à graisse pour chars.*)

John A. White, assignee of Abe L. Cushman, both of Concord, New Hampshire, U.S.A., 1st September, 1891; 5 years.

*Claim.*—1st. A car axle lubricator, provided with a casting or a receptacle B, for the purpose of containing the felt or wicking C, and the said casting provided with journals *a*, *a*, oscillating in bearings on the opposite sides of the aforesaid receptacle E, secured to one end of the said casting or support F, as set forth and described. 2nd. A car axle lubricator, provided with a casting or support F, having fulcrum points *b*, *b*, adapted to rest on the bottom of the box or housing A, the aforesaid support supplied with a weight C, of the proper size to hold the felt or wicking D in contact with the journal B, and to take up any wear in the journal B, or the felt-  
ing D, as herein set forth and described.

### No. 37,264. Apparatus for Propelling Vehicles. (*Appareil de propulsion pour voitures.*)

Alexander Craig Mather, Montreal, Quebec, Canada, 1st September, 1891; 5 years.

*Claim.*—1st. The combination of an expanding and contracting frame, consisting of bars connected by pins at points of intersection, and connected with the leg L, as explained, applied to the sides of the vehicle, substantially as and for the purpose above set forth. 2nd. In connection with a sledge or other vehicle, a number of bars *n*, together with a number of other bars *n'*, pin connected at points of intersection arranged to operate, substantially as and for the purpose above set forth.

### No. 37,265. Brake. (*Frein.*)

Vacuum Brake Company, Limited, London, assignees of James Gresham, Salford, Manchester, Lancaster, both in England, 1st September, 1891; 5 years.

*Claim.*—1st. The improved ejector apparatus for use with automatic vacuum-brakes constructed and operating, substantially as described, with reference to Figs. 1 to 7 of the accompanying drawings. 2nd. In automatic vacuum-brake apparatus, the improved construction and combination of mechanism for simultaneously applying or releasing the automatic vacuum-brakes, and the steam-brakes on the engine, arranged and operating substantially as described, with reference to Figs. 8, 9 and 10 of the accompanying drawings. 3rd. In automatic vacuum-brake apparatus, the employment of stop-valves, such as *dx* and *dx'*, placed above the ejectors, substantially as and for the purpose herein described. 4th. In automatic vacuum-brake apparatus, the combination with the small ejector, of the ball-valve *g*, substantially as and for the purpose set forth. 5th. In automatic vacuum-brake apparatus, the combination of a stop-valve *dx*, controlling the passage of air both to the small ejector and to the large ejector, with a stop-valve *dx'*, controlling the passage of air to the large ejector, substantially as and for the purposes set forth. 6th. In automatic vacuum-brake apparatus, the employment of a hollow annular disc-valve, such as *k*, operating as and for the purposes herein set forth. 7th. In automatic vacuum-brake apparatus, the combination, with the steam disc-valve *i*, of the hollow annular disc-valve *k*, as and for the purposes set forth.