

No. 11,823. Improvements on Vehicle Hubs.*(Perfectionnements aux moyeux des roues.)*

Francis Culham, Burford, Ont., 27th September, 1880; for 5 years.

Claim.—The combination of the nut A A, the box B, the flange C C, the flange D D and the cap E.**No. 11,824. Improvements on Type Setting and Distributing Machines.***(Perfectionnements aux machines à poser et distribuer les caractères d'imprimerie.)*

Joseph Thorne, Port Richmond, N. Y., U. S., 29th September, 1880 for 5 years.

Claim.—1st. A distributing type case having vertically arranged type channels in which the types descend by gravity, which is constructed so as to move with a step-like action, whereby its said type channels are periodically brought into register with, and to a state of rest over the type channels of a composing case. 2nd. The combination, with the vertical type channels of a composing case which are constructed with wards determining the character or letter which may enter them, of a distributing type case provided with vertical type channels, each adapted to contain types bearing various characters, which distributing type case is constructed to be moved with a step-like action, so as to periodically bring its channels into register with, and to a state of rest over those of the composing case. 3rd. The combination, with the stationary composing type case C, having vertical channels Q that are provided with wards governing their mouths, of the distributing type case D having vertical type channels 12, and provided with means for imparting to it a step-like rotative movement. 4th. The combination of the horizontally moving distributing type case D having vertical channels 12, with the stationary composing type case C having vertical channels 2 that are provided with wards governing their mouths and with horizontally reciprocating type ejectors. 5th. The combination, with the horizontally moving distributing type case D having vertical channels 12, the stationary composing type case C having vertical channels 2 that are provided with wards governing their mouths and with horizontally reciprocating type ejectors, of the horizontally moving carrying table that transfers the ejected types to the line forming mechanism. 6th. The combination, with the type channels of the distributing case having open outer or front sides, and in which channels the types gravitate, of the removable fenders arranged a distance from said open sides, whereby the types may be introduced into and held in the channels, and the condition of the same inspected. 7th. The combination with the vertical type channels of a moving distributing case, of the frictional drag blocks 75. 8th. The combination, with the type channels of a stationary type composing case, of a distributing type case arranged to move over the same, the type channels whereof are provided with frictional drag blocks. 9th. The combination, with the channels of the type distributing case, of a line feeding device consisting of a galley supported vertically before said type case and at an appropriate angle relative to its type channels, and providing with a feeding plate. 10th. The combination, with a composing type case having vertical type channels from which the types are ejected, of a horizontally moving table that receives the types and carries the same to the line forming mechanism that communicates with the edge of the said table, opposite to that upon which the types are received. 11th. The combination, with a composing type case having vertical type channels and type ejectors reciprocating therein, of a horizontally moving type carrying table and a conveying belt as 25. 12th. The combination, with a composing type case having vertical type channels and type ejectors reciprocating therein, of a horizontally moving type carrying table and a type conveying chute, the said table receiving the types at one edge of its surface and delivering them to the chute over the opposite edge. 13th. The combination, with a composing type case having vertical type channels and type ejectors reciprocating therein, of a horizontally moving type carrying table, a conveying belt as 25, and a conveying chute. 14th. The combination, with a composing type case having vertical channels 2, ejectors reciprocating therein, and a rotating type receiving carrying table, of a guard as 21 situated a distance in front of said channels and having a throat at 3. 15th. The combination, with the composing type case, the horizontally moving type carrying table and the conveying chute 28, of the deflector 19, the said table receiving the types at one edge of its surface and delivering them to the chute over an opposite edge. 16th. The combination, with the type case C and the ejectors 6 that reciprocate in its type channels, of the horizontally moving type receiving carrying table 30, and a guard as 21 that is situated a distance in front of said channels. 17th. The combination, with the type case C and the ejectors 6 that reciprocate in its type channels, of the horizontally moving type receiving carrying table 30 and guards 21 22. 18th. The combination with the type case C, its channels and type ejectors, of the moving carrying table 30 and the guards 24. 19th. The combination with the vertical type channels and a receiving table, of the type ejectors having bevelled ends. 20th. The combination, with the vertical channels of the type case, the type carrying table and its guard 21, of the reciprocating type ejectors having bevelled ends. 21st. The combination, with the vertical channels of the type case, the type carrying table and its guards 24, of the reciprocating type ejectors having bevelled ends. 22nd. A type case provided with vertical type channels, the rear walls whereof have a ward, whereby a thin type is prevented from turning or cutting as it descends. 23rd. A line forming mechanism consisting of a type carrying wheel having type receiving steps, an inclined stationary type elevator 15 and a setting stick. 24th. The combination, with the type conveying chute 28, the type carrying wheel having receiving steps, the inclined stationary elevator and the setting stick. 25th. The combination with the type conveying belt, conveying chute, stepped carrying wheel, inclined stationary elevator and the setting stick. 26th. The combination with the type channels of the case C and their ejectors, the rotating carrying table, the deflector belt, stepped carrying wheel, inclined stationary elevator and setting stick. 27th. The combination, with the type channels in the case C and their ejectors, the rotating carrying table, the deflector, conveying chute, stepped carrying wheel, inclined stationary elevator and setting stick. 28th. The combination, with the stepped type carrying wheel, inclined elevator and setting stick, of the spring 14. 29th. A type ejecting mechanism consisting of a reciprocating ejector, a vertically vibrating type bar having tappets 32, 33, 34 and a rotating driver, the latter being constructed with a multiplicity of angularly arranged plates that engage said tappets to propel

the type bar forward, and disengage from the tappets, to permit the rearward movement of said type bar. 30th. The combination with the ejectors 6, the type bars 70 and their tappets 32, 33, 34, the rotating type bar driving plate 23 and retaining springs 37. 31st. The combination, with the keys 36, the key bars 70 and their studs 43, of the slotted plates 42 having rearward and forward recesses, whereby a key bar, when depressed, may be held down during its forward movement and at the end of its stroke rise and be held upward during the rearward movement. 32nd. The combination, with the keys 36, the spring seated key bars 70, their studs 43 and the slotted and recessed division-plates 42, of the rotating type bar driving plates 23 and the tappets 32, 33, 34.

No. 11,825. Improvements on Screw Cutting Die Holders.*(Perfectionnements aux porte-filières à fileter les vis.)*

Robert Mitchell, (Assignee of Ambrose Chatwin), Montreal, Que., 29th September, 1880; for 5 years.

Claim.—In a die-holder for screwing machines, for tubes and bolts, the combination of jaws carrying the divided screw-cutting dies, with the operating lever, by means of which the dies may be opened and closed, while the machine is in motion.**No. 11,826. Improvements on Chucks.***(Perfectionnements aux mandrins.)*

Robert Mitchell, (Assignee of Ambrose Chatwin), Montreal, Que., 29th September, 1880; for 5 years.

Claim.—An internal adjustable gripping chuck, for screwing machines for tubes or bolts and for other purposes, said chuck consisting of a face plate carrying two or more serrated roughened or toothed cams adjustable to various sizes of tubes or bolts, in combination with an actuating ring and lever, or equivalent mechanism whereby the cams may be opened or closed simultaneously in order to grip or release the tube or bolt or other object, while the machine is in motion.**No. 11,827. Improvements on Hose Pipes.***(Perfectionnements aux tuyaux élastiques.)*

John Bestwick, Dedham, Mass., U. S., 29th September, 1880; for 5 years.

Claim.—1st. The hose pipe, combined with the removable plates a centrally connected and adapted to be inserted into, or removed from the hose pipe at will. 2nd. The hose pipe plates a centrally connected and provided with the annulus c for arresting the issuing water and condensing, solidifying and lengthening the stream.**No. 11,828. Improvements on Steam Engines.***(Perfectionnements aux machines à vapeur.)*

George B. Dixwell, Boston, Mass., U. S., 29th September; (Extension of Patent No. 5,311).

No. 11,829. Improvements on Horse Collars.*(Perfectionnements aux colliers de cheval.)*

Samuel Peters, Sydney, N.S., 29th September, 1880; for 5 years.

Claim.—1st. The curved metal plate A, curved link B and loops C C. 2nd. The combination of the curved plate A and correspondingly curved link B with loops C C. 3rd. The combination, with the curved plate A and curved link B and loops C C, of the collar tops D D.**No. 11,830. Improvements on Waggon Springs.***(Perfectionnements aux ressorts des wagons.)*

William G. Hughes, Churnbusco, Ind., U. S., 29th September, 1880; for 5 years.

Claim.—1st. The spiral spring E enclosed in a frame upon the end of the bolster A, in combination with the said bolster, the yoke H, the eye bolts or clips and links I and the waggon body G. 2nd. The combination of the spiral spring E, the arched rods F and the slotted yoke H with the bolster A, the eye bolts or clips and links I and the waggon body G.**No. 11,831. Improvements in Rocking Chairs.***(Perfectionnement aux chaises berçantes.)*

William H. Bartelo, Carthage, Ill., U. S., 29th September, 1880; for 5 years.

Claim. The foot board B, the brackets E having bearings or perforations, the roller C C having projecting axes D, the single adjustable connection composed of rods F G and set screw J, in combination with a rocking chair having an eye bolt or staple H attached to its seat.**No. 11,832. Improvements on Hinges.***(Perfectionnements aux pentures.)*

Daniel N. Stewart, Cobourg, Ont., 29th September, 1880; for 5 years.

Claim.—The combination of head section A, arm section B, rivet C, shoulder D, with churn dash E.**No. 11,833. Improvements on Thrashing Machines.***(Perfectionnements aux machines à battre.)*

Gregory S. Thompson, Port Hope, Ont., 30th September, 1880; (Extension of Patent No. 5,221.)

No. 11,834. Improvements on Forming Seams of Boots and Shoes.*(Perfectionnement dans la manière de faire les coutures des chaussures.)*

Jeremiah Fogarty and Timothy F. Fogarty, Montreal, Que., (Assignees of Laurens E. De Waru, Philadelphia, Pa., U. S.), 30th September, 1880; (Extension of Patent No. 5,220).