

No. 15,432. Improvements on Whiffletree Clips. (*Perfectionnements aux crochets des palonniers.*)

Hamilton McCoy, Indianapolis, Ind., U. S., 9th September, 1882; for 5 years.

Claim.—1st. A clip for single-trees and double-trees, the ends of which terminate in ring-parts C1 C2, each of which is provided with an opening and a projection, the projection on each fitting into the opening on the other, thereby forming a lock ring. 2nd. In a clip C for single and double trees, consisting of a band for encircling the tree, having at one end the split ring part C1 with an opening on one side between the ends *a1 a2* to receive the part *a2* of the other ring-part, and a part *c1* to fit between the ends *a3 a4* of said other part, and at its other end the ring-part C2 similarly formed to interlock with the part C1.

No. 15,433. Improvements in Car Seats. (*Perfectionnements aux sièges des chars.*)

Edwin L. Bushnell, Poughkeepsie, N. Y., U. S., 9th September, 1882; for 5 years.

Claim.—1st. The combination of the base frame A elevated only at the ends *b*, with the main springs B having ears thereon, the secondary springs C having the angular ends, the elastic wires or rods D and the connections uniting the springs and wires with each other and with the end rails. 2nd. In a car, or other seat, the combination of the spiral springs B with the longitudinal wires or rods D secured to the upper outer edge of said springs, and the smaller secondary springs having angular ends secured to the wire. 3rd. The improved bed or couch for railway cars, or other purposes, composed of two, or more independent sections arranged side by side, each section composed of a base frame elevated at the ends, only in the manner described, the series of large and small spiral springs mounted on said frame, the flexible connections between the upper ends of the larger springs and the longitudinal wires attached to the edges of the springs, said wires and flexible connections being both attached to the raised ends of the frame.

No. 15,434. Improvements on Horse Rakes. (*Perfectionnements aux râtaux à cheval.*)

Ashbel A. Noyes, Steamboat Rock, Iowa, U. S., 9th September, 1882; for 5 years.

Claim.—1st. The rear guide, caster-wheels E each having a shank *e* passing directly up through the outer end of the beam F, which is fixed to the pole B near the seat C, and the double levers D D1 connected with the heads of said shanks and operated by means of the handle *d* pivoted to the pole B. 2nd. The rake A pivoted to the end of the pole B, and having on each side of its head the frame M fixed to the parallel bars *a1 a2* of said rake, and carrying the wheel or roller L, which does not project above said bars, so as to interfere with the hay, and only sufficiently far below to give a bearing for the rake, when it is moving on the ground. 3rd. A casting F having lugs *f* and foot rest *f1*. 4th. In combination with beam F and seat C, of the foot rest *f1*. 5th. The lever D operating the caster-wheels, pivoted at wheel *a1* in frame B1. 6th. A horse hay rake in which two caster-wheels are used for guiding, when said wheels are operated, in the manner described.

No. 15,435. Improvements on Heating Stoves. (*Perfectionnements aux calorifères.*)

George G. Thomas, Philadelphia, Pa., U. S., 9th September, 1882; for 5 years.

Claim.—1st. The combination of the combustion chamber F and the heating chamber M in the rear of the same, with a magazine and a partition J separating the said chambers, both magazine and partition being exposed at the front to the products of combustion, and at the rear to the air to be heated. 2nd. The combination of the combustion chamber F, hot air chamber M, partition J and magazine G, separating two chambers and the ascending and descending flues *a1 a2* in the rear of said chamber M. 3rd. The combination of the combustion chamber F, the hot air chamber M, the partition J and magazine G, separating the two chambers with the ascending and descending flues *a1 a2* in the chamber M, and the connecting flues *a2 a3* in the hollow base of the stove. 4th. The combination of the combustion chamber F and the heating chamber M in the rear of the same, with the magazine G and partition J separating the said chambers, said magazine projecting partly into the combustion chamber and partly into the heating chamber. 5th. The combination of the stove having the heating chamber M and rear and base flues, with the partition *g* and door *i* forming an oven *h* in the said chamber M. 6th. The combination of the stove having the heating chamber M and rear and base flues, with the door *i* and the partition *g* having a damper *k*.

No. 15,436. Improvements on "Maunder's Ontario Harrow," (*Perfectionnements à la herse de Maunder dite "Ontario."*)

Joseph Maunder and Enoch Rogers, Little Britain, Ont., 9th September, 1882; for 5 years.

Claim.—1st. The combination of the tooth-bar A, brace B, clip D and tooth *f*. 2nd. The combination of tooth-bar A, clip C and tooth *f*.

No. 15,437. Improvements on Dumping Cars. (*Perfectionnements aux wagons à bascule.*)

Thomas P. Cordray, Massillon, Ohio, U. S., 9th September, 1882; for 5 years.

Claim.—1st. The combination of the frame D carrying the upper plate of a turn-table, flat plates G secured against the outer sides of said frame, and each one having one end provided with a perforation and bent upward between the side pieces of the car, for the purpose of lowering the car body relatively to the trucks, and a bolt H passing through said perforation and through said side pieces. 2nd. The combination of turn-table frame D with car body hinged eccentrically

thereto, pin L and car truck frame A with continuous draw bar and bumper M passing through the truck frame and king bolt *a*.

No. 15,438. Improvements on Apparatus for Stowing Cargoes. (*Perfectionnements aux appareils pour arrimer les cargaisons.*)

Mary C. Walsh, (Assignee of Maurice J. Walsh,) New York, N. Y., U. S., 9th September, 1882; for 5 years.

Claim.—1st. The combination, with a jack or other article and its supply-pipe, of a waste-pipe extending from said jack and surrounding the supply-pipe. 2nd. The combination with a dock or other article, of a line supply-pipe extending along the same, for supplying a motive, or heating agent to a series of jacks, or other articles, a line waste-pipe also extending along the dock, for receiving the exhaust and flexible hose connections. 3rd. The combination, with a dock or other article, of a line supply and a line waste-pipe extending along the same, a series of couplings connected to said waste-pipe, flexible supply-pipes extending through said couplings and flexible exhaust pipes. 4th. The combination, with a dock or other article, of line supply and waste-pipes extending along the same, a pump for supplying a motive agent to said supply-pipe, an accumulator for maintaining a uniform pressure in said supply-pipe, and a series of jacks connected with said supply and waste-pipes by flexible hose connections. 5th. The combination, with a dock or other article, of line supply and waste-pipes extending along the same, and a pump connected with said waste-pipe for exhausting the motive or heating agent therefrom. 6th. The combination, with a jack and its supply and exhaust pipes, the exhaust pipe surrounding the supply-pipe of the valve C, for controlling the operation of the jack.

No. 15,439. Improvements on Jacks. (*Perfectionnements aux Crics.*)

Mary C. Walsh, (Assignee of Maurice J. Walsh,) New York, N. Y., U. S., 9th September, 1882; for 5 years.

Claim.—1st. The combination of a jack-cylinder, a piston and rod fitted thereto and adapted to be reciprocated therein, for extending or contracting the jack and two claws, arms or pressers, adapted to embrace the material to be compressed or moved, and be drawn together by the operation of the jack. 2nd. The combination, in a jack, of a cylinder, two pistons fitted thereto, two piston-rods working through opposite ends of said cylinder, passages or ports, for supplying a motive agent to the two ends of said cylinder upon the outside of said pistons, and other passages or ports, for supplying a motive agent to said cylinder upon the inner sides of said pistons.

No. 15,440. Improvements on Flexible Pipes. (*Perfectionnements aux tuyaux élastiques.*)

Mary C. Walsh, (Assignee of Maurice J. Walsh,) New York, N. Y., U. S., 9th September, 1882; for 5 years.

Claim.—A flexible hose, or pipe, composed of a layer of India rubber, leather, or like material, spirally wound layers of a stout woven fabric such as duck, surrounding said layer of India rubber, leather, or like material, a second layer of India rubber, leather, or like material, inclosing the said spirally wound layers, superposed layers of the stout woven fabric, or other suitable material, and an external wrapping of flexible wire, preferably copper wire, serving to strengthen and protect the hose or pipes.

No. 15,441. Devices for Preventing the Accumulation of Frost and Steam Upon Store Windows. (*Appareils pour empêcher l'accumulation du givre et de la vapeur dans les vitrines des magasins.*)

Charles S. Anthony and Jacob Manheim, Taunton, Mass., U. S., 9th September, 1882; (Extension of Patent No. 7,885.)

No. 15,442. Railway Journal Box. (*Boîte à graisse d'essieu de chemin de fer.*)

William E. Wilcox and Lorenzo A. Kelsey, Cleveland, Ohio, U. S., 9th September, 1882; (Extension of Patent No. 7,900.)

No. 15,443. Improvements on Hand Corn-Planters. (*Perfectionnements aux semoirs à bras pour le blé-d'inde.*)

Theodore Horton, Bluffton, Ind., U. S., 11th Sept., 1882; for 5 years.

Claim.—1st. The frame G composed of the gateway and the off-set *g2*, in combination with the dropping wheel, the perforated bracket, the passage leading therefrom to the bottom of the staff, the cut off valve L and means for actuating the dropping wheel. 2nd. The combination of the frame G with the gateway *g* formed thereon, the dropping wheel turning about a pivot on the bracket J, the pawls K L, the cut off valve L and the lever E connected to the spring point plate D and to the finger-lever. 3rd. The frame G cast entire and consisting of the gateway *g*, the off-set *g2*, the lugs *e* and lugs *f*.

No. 15,444. Improvements on Hand Corn-Planters. (*Perfectionnements aux semoirs à bras pour le blé-d'inde.*)

Theodore Horton, Bluffton, Ind., U. S., 11th September, 1882; for 5 years.

Claim.—A hand corn-planter having the following elements: The two hand-staffs A A1 pivoted together, the penetrating blades *a a1*, the handles on said staffs, a spring interposed between the staffs, a hooked spring pawl *d* pivoted to the staff A1, a retaining spring or pawl *e* attached to the staff A, the ratchet dropping wheel E, the perforated bracket F, the cast metal frame D, the gateway, its cut-off, the hopper box and the tube G fixed to the staff A.