

No. 15,598. Improvements on Mechanical Musical Instruments. (*Perfectionnements aux instruments de musique mécaniques.*)

Frank Stone, Worcester, Mass., U.S., 9th October, 1882; for 10 years.

Claim.—1st. In a mechanical musical instrument, governed by a moving perforated music sheet operating directly as a valve, the tube board provided with horizontal cells, having vertical air passages formed through the roof thereof and with reeds inserted therein, said tube board being located beneath the music or valve sheet and above the air exhausting apparatus. 2nd. In combination, the sounding board having the wind chamber beneath it, tube board located upon the top of said round board with its cells and reeds parallel therewith, and having air inlet passages opening through the roofs of the respective cells, the perforated music sheet operating directly as a valve to said air inlets and arranged to move parallel with the top of said tube-board. 3rd. In combination, the bellows reservoir centrally connected and supported with the wind chest by a hollow standard or conductor, and the exhausters respectively arranged in couples at the right and left of said standard or support and attached to the upper and lower sides of said reservoir for operation in connection therewith. 4th. In combination, the action bed or table A, the sounding devices supported thereon, the bellows reservoir connected therewith by a depending hollow standard or air conductor, the bellows exhausters arranged respectively above and below the ends of said reservoir, the coupling pitmans P, the operating pitmans R and the actuating shaft with cranks and feed rolls thereon. 5th. The tube board D, having its series of cells formed of the relative proportions indicated, with air ducts formed through the roofs of the cells and the reeds located in relation thereto, viz: with the air ducts over the heel ends of the reeds and the lowered toned reeds set into the cells to a proportionally greater distance than the higher toned reeds. 6th. In combination, the action bed or table with the sounding board, tube board and feed devices arranged thereon, and the removable cap or top covering carrying the presser roll G and provided with the hinged section H. 7th. The combination, with the tube board D and cap piece H, of the presser I consisting of a wire having its ends bent to form spring portions I which are secured to said cap piece, and with its central portion extending transversely across the top surface of the tube board for pressing upon the music sheet.

No. 15,599. Improvements on Machines for Baling Hay. (*Perfectionnements aux presses à foin.*)

Peter K. Dederick, Albany, N. Y., U. S., 9th October, 1882; for 15 years.

Claim.—1st. The combination of the arm F with the arm D, extension or cam E and sweep or horse lever G. 2nd. The loose, or adjustable horse lever and the preliminary condenser, connected and combined with the pressing devices so as to admit of independent operation. 3rd. The press rods X X passing around the feed orifice and press box at opposite sides and secured at or near opposite ends of the press frame.

No. 15,600. Improvements on Machines for Removing Potato Sprouts. (*Perfectionnements aux machines à enlever les germes des pommes de terre.*)

Edwin Payne, Oxbors, N. Y., U. S., 9th October, 1882; for 5 years.

Claim.—1st. In a potato sprouter composed of a revolving cylinder, provided with ogee-formed slats, cross bars and ribbed heads. 2nd. In combination with a frame of the revolving sprouting cylinder provided with a segmental door and a tray.

No. 15,601. Improvements on Thill Lugs. (*Perfectionnements aux dossières.*)

Nehemiah T. Folsom, Boston, Mass., U. S., 9th October, 1882; for 5 years.

Claim.—1st. A metallic thill lug formed at its upper end to receive and permit the removal of a buckle holding loop. 2nd. The combination of the lug A, the buckle holding loop and means for securing the ends of said loop to the lug. 3rd. The combination of the lug a, having the recess a', the clamping plate e, the screws d d and the buckle holding loop. 4th. The combination of the thill lug, having the recess a' in its upper end, the leather loop holding the buckle in its bight, the clamping plate e operating to clamp the ends of the loop in the recess of the lug, and the screws d d. 5th. The combination of the metallic thill lug, the shaft girth loops and the socketed plate secured to the lug by screws K K.

No. 15,602. Improvements in Shooting Skiffs. (*Perfectionnements dans les esquifs des chasseurs.*)

George Warin, Toronto, Ont., 9th October, 1882; (Extension of Patent No. 8008.)

No. 15,603. Harvesting Machine. (*Moissonneuse.*)

Charles D. Dewey, Brockport, N. Y., U. S., (assignee of Robert Thomson and Alfred R. Williams of Stratford, Ont.,) 9th October 1882; (Extension of Patent No. 7988.)

No. 15,604. Improvements on Harvesting Machines. (*Perfectionnements aux moissonneuses.*)

Charles D. Dewey, Brockport, N. Y., U. S., (assignee of Robert Thomson and Alfred R. Williams, Stratford, Ont.,) 9th October, 1882; (Extension of Patent No. 7988.)

No. 5,605. Improvements on Barbed Fence Wire. (*Perfectionnements au fil métallique barbelé des clôtures.*)

Samuel L. Chisholm, Chicago, Ill., U. S., assignee of Joseph T. Cook, Moline, Ill., U. S., 11th October, 1882; for 5 years.

Claim.—1st. In a continuous barbed fence wire, the combination, with the wire links A consisting of short sections of wire having hooks at their ends, of the alternating sheet metal links B provided with points and apertured to receive the hooks of the wire links so as to join the latter and serve as barbs. 2nd. In a barbed fence wire, the combination, with the two barbed sheet metal link B, of the wire links A having their hooks a turned in different planes.

No. 15,606. Improvement in Sewing Machine Motors. (*Perfectionnement aux moteurs des moulins à coudre.*)

Anatole E. Rouif, Montreal, Que., 11th October, 1882; for 5 years.

Claim.—1st. A coiled spring wound up at stated intervals and serving to give rotary motion in either direction through a train of gears and wheels to the driving wheel of a sewing or similar machine. 2nd. The means for reversing the action of a coiled motor spring by causing either end of such spring to work while the other is held fast, consisting in a fixed gear wheel mounted on a shaft, and a loose gear wheel revolving on said shaft, the coiled spring being attached at its outer end to a projection or casing formed in one with such loose gear, and the inner end of said spring being secured to said shaft which is moved in the direction of its axis to cause either gear, at will, to intermesh with the first of a train of gears.

No. 15,607. Improvements on Car Couplings. (*Perfectionnements aux attelages des wagons.*)

Darwin S. Walrath, Peter Kitts and Titus Sheard, Little Falls, N. Y., U. S., 11th October, 1882; for 5 years.

Claim.—1st. A frame and a draw-head, having a spring between them, and both having a limited longitudinal movement in opposite directions in the platform of the car, in combination with means for retaining the connecting link. 2nd. A frame and draw-head separated by a spring, both having a limited movement in opposite directions in the platform of the car, in combination with the bumper head. 3rd. A frame and a draw head separated by a spring, both having a limited movement in the platform of the car, in combination with the bumper head and means for restraining the connecting link. 4th. The frame carrying the spring actuated cross bar H, the spring actuated draw-head E and the intermediate bumper G, in combination with the bumper head N. 5th. The frame having the extensions C C provided with the slots c c and the cross piece D, having the hole d, in combination with the draw-head E, having the stem or shank e carrying the spring F. 6th. The draw-head E, having the chamfered stem or shank e, in combination with the intermediate bumper G, provided with a stem or shank g and the spring g'. 7th. The spring actuated cross bar H, having the stem h and spring h', in combination with the lever k and the bumper head N. 8th. The lug k', having its top made concentric with the pivot k' and formed into a ratohet, in combination with the lever handled pawl k' pivoted to the lever k. 9th. The bumper head N, formed with the flaring mouth and the tapering throat and with the table n and projection m. 10th. The bumper head N, in combination with the intermediate bumper and cross bar H. 11th. The frame formed of the grooved upright pieces A A, the top piece B, the slotted and grooved extensions C C and the perforated cross piece D, in combination with the stemmed draw-head E, stemmed intermediate bumper G, cross bar H and bumper head N.

No. 15,608. Improvements on Devices for Levelling Engine Boilers. (*Perfectionnements aux appareils de nivellement des chaudières à vapeur.*)

Thomas F. Wilson and Albert L. Wilson, Gorham, N. Y., U. S., 11th October, 1882; for 5 years.

Claim.—1st. Raising and lowering the front ends of horizontal boilers of traction, road or other movable engines by the devices, or their equivalents, to keep the said boiler, or boilers, level when the engine is going up or down inclines. 2nd. In combination with the boiler A of a movable engine, the post c, horizontal bar b, attached to the front axle a, its rear end raised and lowered by chain d, drum or rod e, toothed wheel g and worm h on crank rod k.

No. 15,609. Improvements on Bed Bottoms. (*Perfectionnements aux sommiers des lits.*)

Dallas Knowlton, Brantford, Ont., 11th October, 1882; for 5 years.

Claim.—In a bed bottom of woven wire or other material, the rods E E to guide bar D, and the screws F F to draw up bar D.

No. 15,610. Improvements on Velocipedes. (*Perfectionnements aux vélocipèdes.*)

Joseph R. Smith, Brockville, Ont., 11th October, 1882; for 5 years.

Claim.—1st. An iron wheel for velocipede consisting of the hub, or nave, made of two flanged disks 1, having a perforated centre and flange notched peripherally shrunk on a hollow-spindle 4, the spokes 5 laterally inserted in the notches and screwing into the rim 6. 2nd. The perch 8 of rolled T-iron rivetted at the upper end to a socket 9, having a termination 10 of T-iron, slotted to receive the vertical web of the perch and the lower end rivetted to a bifurcation 11, having a T-iron termination, slotted to receive the vertical web of the perch. 3rd. The steering frame 21, formed of rolled T-iron in one piece, bent to form and having at both terminations a friction block 15, in combination with a chamfered block 18 for holding a lubricant and packing by a band 19, and bolt and nut 20. 4th. The steering frame 21,