

comparatively fine pitch; 2nd. In a flax breaking and scutching machine, the springs I I, carrying the guide board H and supporting the breaking roller E.

No. 11,006. Improvements on Faucets. (*Perfectionnements aux canules.*)

Theodore F. Conklin, Fond-du-Lac, Wis., U. S., 8th March, 1880; for 5 years.

Claim.—The combination, with a plug E having the pin G, of the tube C D, whose slot H has a horizontal and vertical slot conjoined to form, with the stud or pin, a lock.

No. 11,007. Improvements on Hay Rakes. (*Perfectionnements aux râtaux à foin.*)

Jacob S. Oberholzer, Wadsworth, Ohio, U. S. 8th March, 1880; for 5 years.

Claim.—1st. The combination, with the thills, axle and rake head C B F, of the draw bars E and the levers H, so that the rake head F may be raised from the ground without being revolved; 2nd. The combination of the lever J having spring catches R, attached to its lower end and the rod and lever M N, with the rake head F having a catch pin L attached to its shaft, so that the rake head F can be adjusted with its teeth at any desired inclination by operating the lever J; 3rd. The combination of the lever S and the sliding rod T, with the levers M N and spring catch R, so that the rake head F may be released automatically and allowed to revolve, when its teeth have been brought to a fixed inclination.

No. 11,008. Improvements on Advertising Devices. (*Perfectionnements aux appareils de publicité.*)

Christian F. Collet and Frederick L. Schmidgall (Assignees of Julius J. Cohen), Chicago, Ill., U. S., 8th March, 1880; for 5 years.

Claim.—A card or sheet having toilet pins, or equivalent articles, stuck in the card or sheet through one or more of the prominent words, characters or figures.

No. 11,009. Automatic Measuring Faucet. (*Canule-compteur automatique.*)

William M. Sack, Oakland, Cal., U. S., 8th March, 1880; for 5 years.

Claim.—1st. The measure B B connected with the tank A, by means of the passages or pipes F F and tube D, in combination with the faucet or valve M, with its slots d d, and the discharge pipe q, whereby the liquid is allowed to flow from the tank through the pipes D, F into the measure B, while the liquid in the measure B flows through the pipe F and slot d of the valve, through the discharge pipe q, simultaneously; 2nd. The combination with the tank A, with its measure B B, and pipes D F F leading to said measures and to the discharge pipe q, the four-way valve M with the chambers or slots d d, whereby one measure is filled while the other is being discharged, and one measure thus constantly kept filled by the action of emptying the other; 3rd. In combination with the measures B B, the air pipe C, whereby the pressure in the tank, acting to fill the measure B, forces the air in said measure into the oppositely placed measure B, to assist in discharging the liquid in said measure; 4th. In combination with the air pipe C connecting the two measures B B, the valve h, whereby, air is automatically supplied to said measures to replace loss and siphonage from one to another is prevented; 5th. The double measuring device with its connecting passages, faucet and air pipe, and the containing tank hermetically sealed at the top, in combination with the air pipe C and check valve.

No. 11,010. Improvements on Grates. (*Perfectionnements aux grilles.*)

Daniel Richmond, Rochester, N. Y., U. S., 11th March, 1880; for 5 years.

Claim.—1st. The combination of the grate A, the subgrate D and the rake E; 2nd. The combination of the subgrate D and the rake E, the subgrate being arranged to rock or tilt upon its bearings and the rake being arranged to move forward and backward, and so operating that the forward and backward actions of the rake will tilt the subgrate in opposite directions; 3rd. In combination with the rake E provided with the bars t t, the hanger j on the bottom of the grate A, forming both a support for said rake and a stop for sweeping of the ashes, in the backward movement of the same; 4th. In combination with the subgrate D, the teeth y y on the rake E projecting down and resting between the bars of the subgrate, and serving to sweep the ashes from the subgrate in the forward movement of the rake; 5th. The combination with the main grate A provided with the central opening a, the rake E constructed with the opening u in its front portion, and the bars t t in its rear portion, so arranged that, when the rake is pushed back, the opening u will come beneath the opening a and allow the coal to fall on the subgrate, but when it is drawn forward, the bars t t will come beneath the opening a and support the body of coal; 6th. The combination, with the ring B C, of the lever or clutch P pivoted to the outer ring C, and so arranged as to give motion to the ring B when moved in one direction, and to the ring C, when moved in the other direction.

No. 11,011. Improvements on "Corbin's Horse Rake." (*Perfectionnement au râtaux à cheval dit "de Corbin."*)

Charles I. Corbin, East Oxford, Ont., 11th March, 1880; (Extension of Patent, No. 287) for 5 years.

No. 11,012. Compound Paper or Board. (*Papier ou carton composé.*)

Joseph O. Gregg, Elkhart, Ind., U. S., 11th March, 1880; for 5 years.

Claim.—1st. A paper or board composed of coarse unleached straw pulp and a facing of finely ground white wood pulp; 2nd. A paper or board composed of coarse, dark straw pulp and finely ground, unleached wood pulp; 3rd. A board composed of coarse straw board and wood pulp firmly united in the manufacture as set forth.

No. 11,013. Improvements on Car Seats. (*Perfectionnements aux sièges des chars.*)

Norman B. Sherwood, Saratoga, N. Y., U. S., 11th March, 1880; for 5 years.

Claim.—The combination of the seats B B, made adjustable on the supports C C and capable of being laid flat ways to form a couch, and the plates D D, joined to the end of one of the seats and arranged to fold compactly on the bottom of the seat, when the seat is upright, and to be unfolded and extended to form a division between the couches, when the seats are turned down.

No. 11,014. Improvements in Snap Hooks. (*Perfectionnements aux porte-mousquetons.*)

William Grassick, Lucknow, Ont., 11th March, 1880; for 5 years.

Claim.—1st. A snap hook constructed and operated without a spring; 2nd. A snap hook containing within it the guard a; 3rd. In combination, the swinging latch arm b, pivoted at c, and the mortise g; 4th. In combination, the swinging latch arm b, acting in connection with the hooked guard a, and the mortise g.

No. 11,015. Improvements on Wood-Working Machines. (*Perfectionnements aux machines à travailler le bois.*)

Alexander Laing, Essex Centre, Ont., 11th March, 1880; for 5 years.

Claim.—1st. A table D, resting on the frame E supported within the frame A, by the bevelled cross pieces F having racks J attached to them, in combination with the spur pinions I on the shaft H, provided with a hand wheel K, for raising and lowering the said table D; 2nd. The pivoted fence W, in combination with the adjustable table D; 3rd. The sliding plank M, provided with cleats e, in combination with the strip F and clamp g; 4th. The double ended spindle N, held in the sliding box O, supported on the cross guides P, in combination with the adjustable table D, provided with fences; 5th. The belt tightener T, secured to the pivoted shaft U, in combination with the ground quadrant V and weight V.

No. 11,016. Improvements on Dash-Boards. (*Perfectionnements aux garde-crottes.*)

John B. Armstrong, Guelph, Ont., (Assignee of William C. Peel and Justus V. Elster, Springfield, Ohio, U. S.) 11th March, 1880; (Extension of Patent, No. 5,301) for 5 years.

No. 11,017. Improvements on Hose Reels. (*Perfectionnements aux dévidoirs à boyaux.*)

William Neracher, Cleveland, Ohio, U. S., 11th March, 1880; (Extension of Patent, No. 7,410) for 5 years.

No. 11,018. Improvements in Pumps. (*Perfectionnements dans les pompes.*)

Charles Powell, Toronto, Ont., 13th March, 1880; for 5 years.

Claim.—1st. A pump head constructed in sections, which are coupled together by a tubular core connecting with the spout; 2nd. A pump head constructed in sections, which are coupled together by a tubular core having a water connection with the spout and an air vessel; 3rd. The combination, in a single casting, of the water chamber, tubular core, spout and air vessel; 4th. The combination, with the handle and pump rod of a pump, of the swinging crane E, said crane being connected to the pump head in any suitable manner, and adapted to move, to permit the self-adjustment of the fulcrum of the handle; 5th. The combination of a handle pump rod, swinging crane and the air vessel, said crane being pivoted to the air vessel; 6th. The combination, with the pump rod and pump head, of a stuffing box adapted to be fastened to, and detached from the pump head; 7th. The stuffing box F provided with the recessed bottom and packing f, in combination with the pump rod and pump head provided with the collar F'; 8th. The combination, with the pump spout, of the lever H and flexible band I, connected thereto, said band being arranged to pass around the spout over the hose.

No. 11,019. Improvements in Paper Holders. (*Perfectionnements aux porte-papier.*)

Seth Wheeler, Albany, N. Y., U. S., 13th March, 1880; for 5 years.

Claim.—1st. A paper holder in which the roll of paper is secured by a rod passing through its centre, in combination with a frame, whereby the weight of the roll is made to prevent unwinding; 2nd. The combination, with a frame, whereby the weight of the roll serves to prevent unwinding, of a locking device applied to the roll securing the roll to the frame; 3rd. A swinging bracket or frame for holding a roll of paper, whereby the roll of paper is caused, by its own weight, to rest against the wall or partition to which it is secured.

No. 11,020. Improvements on Brick and Tile Machines. (*Perfectionnements aux machines à briques et à tuiles.*)

Augustus Whalen, Aldborough, Ont., 13th March, 1880; for 5 years.

Claim.—1st. The use of a wrought iron upright shaft A, instead of a cast iron one, on account of lightness and durability; 2nd. The use of a sleeve B with square mortise to slip on upright shaft A, turned on the outside and used as a journal; 3rd. The application of double knives D with mortise in centre, to slip on upright shaft, instead of single knives with rounded ends passing through a hole in the upright; 4th. The manner of securing knives D to upright A, by means of set screws F instead of keys, as now in use; 5th. An eccentric I, for working plunger H, instead of crank now in use; 6th. In friction rollers J J, for eccentric I to revolve against; 7th. The continuation of eccentric I and friction rollers J J, as giving uniformity of motion, quantity of clay expressed, and lightness of draft; 8th. The cap L, for covering slot z in plunger H, to prevent the clay from entering the interior of said plunger; 9th. The use of two air valves M M instead of one, in each end of plunger H; 10th. The use of a water tap K to each mould, instead