

dicator travels, substantially as set forth. 9th. In combination, with a series of weights K, supports therefor having V-shaped slots within which the pins carrying the weights lie, and a vertically movable basket or frame attached to the scale beam, substantially as set forth. 10th. The combination, with a scale beam constructed, substantially as set forth, and provided with an adjustable weight, of a slotted tube C<sup>1</sup>, and spring locking bar O, having notches o, said bar being twisted so that the portion in which the notches are located is vertical and its spring tendency downward, as set forth. 11th. In combination, with a weighing scale, a beam C, pan-supporting frame L, bars d, and d<sup>1</sup>, pivoted as shown, and a basket or frame F, attached to the main beam and bar d<sup>1</sup>, said basket being adapted to engage with a series of vertically moving weights and operating an oscillating pointer which moves over the faces of the scale-plate F, substantially as set forth.

### No. 36,774. Hay Press. (*Presse à foin.*)

Alphonse Dansereau, Verchères, Quebec, Canada, 8th June, 1891; 5 years.

*Claim.*—1st. In a hay press, the piston B, piston rod C, wheel F, standards G, quadrant J, connecting rods E, and H, crank I, shaft J, clutch O, composed of the two pieces N, and K, and lever M, substantially as described and for the purposes set forth. 2nd. In a hay press, the combination of the frames A, and L, with the piston B, piston rod C, wheel F, standards G, quadrant D, connecting rods E, and H, crank I, shaft J, clutch O, and lever M, substantially as described and for the purposes set forth.

### No. 36,775. Bicycle. (*Bicycle.*)

Walter Eugene Coburn, Toronto, Ontario, Canada, 8th June, 1891; 5 years.

*Claim.*—1st. A tandem single runner sled attachment for bicycles, consisting of the front and rear runners A, and B, which are propelled by the wheels J, deriving motion from the treadle P, by the sprocket wheel and chain connections, as specified. 2nd. The front and rear runners A, and B, propelled by the wheels J, in combination with a brake wheel Q, supported on one end of the pivoted lever R, which is connected at the other end by the chain S, running over the pulley s, to the lower end of the bent rod T, pivoted on the end of the brake shoe U, which is operated, as and for the purpose specified. 3rd. The front runner A, formed of the standards C, and braces D, secured in the bearings of the front wheel of the bicycle, in combination with the rear runner B, formed of the standards G, and braces F, secured in the bearings of the rear wheel, and propelled by the wheel J, operated as specified. 4th. The rear runner B, having lugs a, by which it is located on the lug b, secured at the bottom of the bar E, the spring e, located between the runner proper B, and the bar E, in combination with the bar E, braces F, and H, and standards G, the top of which is secured in the bearing of the rear bicycle wheel, as specified. 5th. The rear runner B, having propelling wheels J, the axle of which is journaled in the bearing box K, in combination with the standards G, and spiral springs g, arranged on the said standards, as and for the purpose specified. 6th. The rear runner B, having propelling wheels J, the axle of which is journaled in the bearing box K, in combination with the standards G, spiral springs g, chain L, connected to the top of the bearing box K, running over the pulley I, and connected by the rod M, to the lever N, which is held in any desired position by the teeth of the rack n, as and for the purpose specified. 7th. The rear runner B, provided with standards G, having guards f, following the curve of the said standards and partially encircling the same, as specified. 8th. The front runner A, having a brake wheel Q, pivoted in one end of the lever R, and having a spiral spring r, connecting this end of the lever to the top of the standard, in combination with the chain S, rod T, and their connections, arranged as and for the purpose specified.

### No. 36,776. Clothes Pin. (*Épingle à linge.*)

Harvey Tirrell, Pittsburg, and Percival Delmar Heath, Colesbrook, New Hampshire, and Whitcomb Tirrell, Pittsburg, New Hampshire, all in U.S.A., 8th June, 1891; 5 years.

*Claim.*—1st. In a metallic clothes pin, the combination of a wire doubled to form diverging arms, formed with offsets near their free ends and with outwardly-bulged clamping-jaws at said ends, and having the upper doubled end bent to form an eye at a right angle to said arms, with a wire having its upper end formed into an eye or ring-sliding in the eye of said doubled wire, and formed with a ring or slide at its lower end which slides upon the arms of said wire and engages the offsets upon the same, substantially as described. 2nd. In a metallic clothes pin, the combination of the wire J, doubled to form the arms 2, having the offsets 4, and jaws 5, bent to form the eye 3, and having the loop 6<sup>1</sup>, formed upon one of said jaws, with the wire 7, having the eye or ring 8, at its upper end, and the ring or slide 9, at its lower end which slides upon said arms 2, substantially as described. 3rd. In a metallic clothes pin, the combination of the wire I, doubled to form the arms 2, bent to form the eye 3, and the shoulder 10, and having the bulges 4, and the jaws 5, one of which is doubled at its end and returned to form the guide-loop 6<sup>1</sup>, with the wire 7, sliding in the eye 3, having the ring 8, at its upper end, and the ring or slide 9, at its lower end, which slides upon and clamps said arms 2, substantially as described.

### No. 36,777. Sharpener for Pencils.

(*Taille-crayon.*)

Edwin S. Drake, Cambridge, Massachusetts, U.S.A., 9th June, 1891; 5 years.

*Claim.*—1st. In a pencil sharpener, the combination of a shaft, a rocking carrier travelling thereon, and carrying a pencil holder, and a file arranged transversely to the length of the pencil, substantially

as described. 2nd. In a pencil sharpener, the combination of a rock shaft, a carrier travelling thereon and carrying a pencil holder, and a file arranged transversely to the length of the pencil, substantially as described. 3rd. In a pencil sharpener, the combination of a rock shaft, a carrier sliding to and fro thereon and carrying a pencil holder rotated by contact with said shaft, and a file arranged transversely to the length of the pencil, substantially as described. 4th. In a pencil sharpener, the combination of a rock shaft having a rack thereon, a carrier sliding to and fro on said shaft and carrying a pencil holder having teeth or cogs to engage the rack on the shaft, and a file arranged at right angles to the length of the pencil, substantially as described. 5th. A pencil sharpener, consisting of a back or stand, a rock shaft suitably mounted thereon, and having a rack, a carrier sliding to and fro on said rock shaft and carrying a pencil holder having a gear connection with the rack on the shaft, and a file arranged on said stand parallel with the rock shaft but in a position transverse to that of the pencil, substantially as described.

### No. 36,778. Mechanical Motion.

(*Embrayage à friction.*)

Patrick Blackie, Redfern, and John Nisbet, Coolabah, both in New South Wales, Australia, 9th June, 1891; 5 years.

*Claim.*—1st. The improved mechanical motion, comprised in the combination and arrangement with a peculiarly recessed disc or femstar, (adapted to revolve) of a tongue or male or diamtang (adapted to reciprocate) gearing in and with the recesses of said femstar, substantially as herein described and explained. 2nd. The improved mechanical motion having a disc or femstar and male or diamtang whose construction or configuration is determined, in the manner and for the purposes, substantially as herein described and explained and as illustrated in the drawing. 3rd. The improved mechanical motion constructed and arranged, substantially as herein described and explained and as illustrated in the drawing.

### No. 36,779. Transplanter. (*Transplantoir.*)

John William McKay, Lynchburg, Virginia, U.S.A., 10th June, 1891; 5 years.

*Claim.*—1st. A transplanter, consisting of two upright supports bearing the side shovels and the actuating rods, and springs joined at the top by a movable cross-handle, and at the bottom by a forwardly-curved bar, having a plate, a cutter, and the front jaw of a plant-holder attached to it, and having midway between them, a lever attached to and moving on a rock-shaft and carrying at its lower end a cutter and the rear jaw of the plant-holder which is hinged to the front jaw at the top, said lever having a bottom forward-curve, a central backward-curve and its upper end bent forward at an angle and curved terminating in a hook, and having two shoulders which engage with a spring-actuated bolt attached to the cross-handle, substantially as shown and described. 2nd. The combination, with the supports cross-handle shovels, cutters, rock-shaft, and hopper of a transplanter, of a lever between the supports having its upper section bent forward at an angle and curved, and two shoulders on one side its next lower section straight, its next lower section curved backward, and its lowest section curved forward, substantially as shown and described. 3rd. A combined transplanter and seed planter, consisting of a seed dropper within and detachably fastened to the front and rear jaws of the plant holder, substantially as shown and described.

### No. 36,780. Zinc for Batteries. (*Zinc de batterie.*)

Joseph Moseley, Manchester, Lancaster, England, 10th June, 1891; 5 years.

*Claim.*—1st. Flat, rectangular, and similar battery zincs, constructed from separate sheets or layers of wrought or rolled sheet zinc, secured together by means of zinc or of non-conducting fasteners, substantially as hereinbefore described, and as illustrated by the accompanying drawings. 2nd. Tubular and cylindrical battery zincs, constructed from separate tubes of rolled or wrought zinc, arranged concentrically with each other, substantially as hereinbefore described, and as illustrated by the accompanying drawings. 3rd. Flat, rectangular, and similar battery zincs, constructed from sheets or layers of wrought or rolled zinc, separately amalgamated, and secured together by means of zinc or of non-conducting fasteners, substantially as hereinbefore described, and as illustrated by the accompanying drawings. 4th. Tubular and cylindrical battery zincs, constructed from tubes of wrought or rolled zinc, separately amalgamated, and arranged concentrically with each other, substantially as hereinbefore described, and as illustrated by the accompanying drawings.

### No. 36,781. Hay Ricker.

(*Appareil à mettre le foin en meule.*)

Charles Worcester Ham, Canaanville, Ohio, U.S.A., 10th June, 1891; 5 years.

*Claim.*—In a hay ricker, the combination, with a base, a transverse bolt therethrough, a pitcher, and an inclined brace pivotally mounted on said bolt, an upright rising from said base, and an operating rope leading over a pulley on the base, over a pulley at the top of the upright, over a pulley at the upper end of the brace, over a pulley on the pitcher, and connected to the end of the brace, of arms Q, projecting from the upright, pulleys I, in their outer ends, a cross bar on the upper end of the inclined brace, having pulleys in its ends, a rope connecting the upright and brace, a weight T, having pulleys S, and ropes R, leading from a point on the upright through the pulleys S, over the pulleys at the ends of the cross bar, and connected to the pitcher, the whole adapted to operate, substantially as described.