



Vol. XI.—No. 6.

JUNE, 1883.

{ Price in Canada \$2.00 per An.
 { United States - \$2.50 “

CONTENTS.

INVENTIONS PATENTED.....	173
ILLUSTRATIONS.....	183
INDEX OF INVENTIONS.....	I
INDEX OF PATENTEES.....	II

INVENTIONS PATENTED.

No. 16,770. Improvements in Mowing Machines. (*Perfectionnements aux faucheuses.*)

William F. Cochrane, and John L. Mothershead, Indianapolis, Ind., U.S., 25th April 1883; for 5 years.

Claim.—1st. The combination, with a bevelled stationary annular gear F fixed to encircle the main driving shaft or axle B, of a conical bifurcated sleeve or spider E placed upon said shaft to rotate therewith and carrying, upon its diverging arms, bevelled pinions or planet wheels F F, adapted to engage said annular gear and to mesh centrally upon a pinion G upon the hub of a gear wheel H rotating upon the main shaft B. 2nd. The combination of the inverted bevel wheel H turning loosely upon the main shaft B, with the bevelled pinion I upon the crank shaft J on one side, and with the planet wheels F F engaging a pinion upon its hub on the other. 3rd. The combination, with the shoe M and spherical joints M m, of an arm U extending radially from said joint a guide X upon the casing D and a lever 13 pivoted to said casing, for the purpose of elevating or depressing the shoe and its cutter bar. 4th. The combination, with the spherically jointed shoe M, M₂ and the finger bar carried thereby, of a lever S journaled upon a spindle secured to the frame of the machine, a quadrant or segmental sheave geared to the lever at an angle therewith, a chain extending from said sheave to the shoe and a pawl governing the movement of the sheave and lever, and actuated by a foot pedal. 5th. In combination with the finger-bar O, the cutter-bar P provided with lugs on its inner end, the pitman head R having recesses adapted to receive said lugs, and means for securing the cutter-bar and pitman head together, whereby an interlocking joint is formed which will admit of a ready release and withdrawal of the cutter-bar.

No. 16,771. Improvements on Curtain Rollers. (*Perfectionnement aux bâtons des rideaux.*)

Walter B. Noyes, Saginaw, Mich., U. S., 25th April 1883; (Extension of Patent No. 15,077.)

No. 16,772. Improvements on Curtain Rollers. (*Perfectionnement aux bâtons des rideaux.*)

Walter B. Noyes, Saginaw, Mich., U. S., 26th April, 1883; (Extension of Patent No. 16,077.)

No. 16,773. Improvements on Printers' Quoins. (*Perfectionnements aux coins d'imprimerie.*)

Joseph A. Hempel and Joseph A. Dingens, Buffalo N. Y., U. S., 26th April 1883; (Extension of Patent No. 8,817),

No. 16,774. Improvements on Blind Hinges. (*Perfectionnements aux pentures des persiennes.*)

Ellswood Smart, Brockville, Ont., 30th April 1883; (Extension of patent No. 8950),

No. 16,775. Improvements in the Manufacture of Coke. (*Perfectionnements dans la fabrication du coke.*)

John Jameson, Newcastle-on-Tyne, Eng., 30th April, 1883; (Extension of patent No. 15,804).

No. 16,776. Improvements in the Manufacture of Coke. (*Perfectionnements dans la fabrication du coke.*)

John Jameson, Newcastle-on-Tyne, Eng., 30th April 1883; (Extension of Patent No. 15,804).

No. 16,777. Improvements on Step-Ladders. (*Perfectionnements dans les échelles à queue.*)

William Varnum, Erie, Penn., U.S., 4th May, 1883; for 5 years.

Claim.—1st. The combination of the brace c hinged on the prop, the clamp iron D and cam lever E on the step A, said brace passing through said clamping device and provided with an enlargement e₂ at its upper end. 2nd. A clamp for the brace consisting of the iron D with bearing bridge d and a cam lever E.

No. 16,778. Improvements in Whisk Holders. (*Perfectionnements aux porte-vergettes.*)

Thomas H. Doyle and Abram R. Stogg, Norwich, N.Y., U.S., 4th May 1883; for 5 years.

Claim.—1st. A whisk or other broom-holder having a spring suspending portion comprising two divergent spring arms, each carrying a broom holding strip or portion, said strips being relatively convergent and provided, or formed with concave inner faces. 2nd. A whisk or other broom holder comprising a spring suspending portion bent to form a top suspending eye or loop, and two divergent arms having their ends bent up and two convergent blocks or strips having concave inner faces, and each secured to one of said arms by its rear edge.

No. 16,779. Improvements on Devices for Waking Purposes. (*Perfectionnements aux réveille-matin.*)

Samuel S. Applegate, Camden, N. J. U. S. 4th May 1883; for 5 years.

Claim.—1st. As a means of waking persons from sleep, the combination of the light frame A of the character described, a cord for suspending the same over the bed, and a device for retaining and for automatically releasing said cord. 2nd. The combination of the suspension cord and a device for retaining and automatically releasing the same, with a frame A having pendant cords d. 3rd. The combination of the suspension cord and a device for retaining and automatically releasing the same, with a frame having pendant cords d with blocks e. 4th. The combination of the suspension cord B and the frame A with the retaining cord n. 5th. The combination of the frame A, the suspension cord B, and a device for retaining and releasing the latter with a stop, whereby the descent of the frame on the release of the cord is limited. 6th. The combination of the bars b with the central bar a of the frame, said bar a being made in parts x x hinged together, the part x₁ carrying the bars, and the part x having a turnbuckle m. 7th. The combination of the frame A and the suspending cord B having a notched plate h, with the winding spindle i of the alarm mechanism of the clock, said spindle being flattened for the reception of the notched plate.

No. 16,780. Improvements on Brushes. (*Perfectionnements aux brosses.*)

Daniel A. McDonel, Detroit, Mich. U. S., 4th May 1883; for 5 years.

Claim.—1st. The combination, with the brush block A having the longitudinal grooves provided with semi-circular bottoms a and outwardly inclined walls c, the bristles e and the longitudinal wire B holding the bristles tightly in the inclined groove, and having its ends bent up and driven into the ends of the brush. 2nd. The combination of the wire B, extending the whole length of the brush and having projecting ends bent up and driven into the brush head, with the staples a driven into the ends of the brush head straddling the chaffnel.

No. 16,781. Improvements on Stoves. (*Perfectionnements aux poêles*)

John W. Thomas, Jersey, N. J., U. S., 4th May 1883; for 5 years.

Claim.—1st. An oven door provided with a series of perforations