No. 13,999. Improvements in Looms.

(*Perfectionnements dans les métiers d'tiss:r.*

George Keighley, Burnley, Eng., 16th January, 1882; for 5 years.

Claim.—In combination with a loom and as a substitute for the usual breast beam, a roller operating to exert a tension upon the cloth and take up slack between the reed and cloth roller.

No. 14,000. Improvements on Hot Water Stoves. (*Perfectionnements aux calorifères à eau.*)

Edouard Bellavance, Montréal, Que., 16th January, 1882; for 5 years.

Résumé.—1o. Le déplacement du réservoir à eau chaude, tel qu'aujourd'hui placé dans l'interieur du foyer d'une fournaise ordinaire, et sa mise endessus de ce même foyer. 2o. Dans une fournaise dite "Self Feeder," ou autre, la conversion du tube central ou alimentateur en un réservoir cylindrique ou de forme quelconque devant servir a recevoir l'eau à être échauffée et donner ainsi un appareil de chauffage à l'eau chaude. 3o. Dans une fournaise dite "Self Feeder," ou autre, le remplacement du tube central ou alimentateur par un serpentin ou une serie de tubes verticaux devant servir à l'échauffement de l'eau et transformant la fournaise ordinaire en appareil de chauffage à l'eau chaude.

No. 14,001 Improvements on Nut Locks.

(*Perfectionnements aux arrête-écrous.*)

Samuel S. Smith, Bryan, Ohio, U. S., 16th January, 1882; for 5 years.

Claim.—The plate D having the nib *c*, V-shaped notch *b* and perforation to receive the bolt C and adapted to be bent upon itself, in combination with said rail *a*, fish plates B, bolt C and nut *a*.

No. 14,002. Improvements on Automatic Regulators. (*Perfectionnements aux régulateurs automatiques.*)

Alexander M. Kerr, Westminster, Ont., 16th January, 1882; for 5 years.

Claim.—The combination of the regulator A and the wire E or its equivalent, with the door G or its equivalent.

No. 14,003. Improvements on Skates.

(*Perfectionnements aux patins.*)

Henry Bezer, London, Eng., 16th January, 1882; for 5 years.

Claim.—1st. The vertically adjustable spring bearing plate *s*. 2nd The combination, with the vertically adjustable spring bearing plate *s*, of the screw *m*, collar *r*, plate *f*, plate *y*, pin *z* and runner *a*. 3rd. The combination, with the sliding heel piece *i*, of the sliding plate *f*, lever *n* and cam *l*. 4th. The combination with the bearing plate *s*, of the sliding heel piece *i*, sliding plate *f*, lever *n*, cam *l*, screw *m*, inclined slots *t t*, headed adjustable *u u* and slotted clip plates *v v*.

No. 14,004. Improvements on Harrows.

(*Perfectionnements aux herses.*)

John H. Smale, St. Thomas, Ont., 16th. January, 1882; for 5 years.

Claim.—1st. The wrought iron teeth E having diamond-shaped pieces of wrought steel F welded on to said teeth, which are attached by bolts C passing through them and clipped on two bars A by groove *a* and shoulders *b c*. 2nd. In combination with the above, the wrought iron bars A, braced by tubes B and connected by bolts and nuts C D.

No. 14,005. Improvements on Ploughs.

(*Perfectionnements aux charrues.*)

Fremont Simonds, Grand Island, N. Y., U. S., 16th January, 1882: for 5 years.

Claim.—1st. A mould-board for ploughs having a spiral face of a gradually increasing pitch and its surface straight on lines drawn radially across its face. 2nd. A mould-board A in which the furrow turning portions of the surface are straight, in combination with the plough share B having a similar furrow turning surface but sharper or having less pitch, so as to start the turning of the furrow more gradually. 3rd. The combination of a mould-board having a straight lower edge and a removable shoe attached to said edge near the heel. 4th. The standard D having a top bearing, in combination with the beam D2 clamped directly to said bearing by a bolt I2 and swinging on the latter for the purpose of adiusting it to one side or the other. 5th. The land side C, the bottom of which acts as a shoe, in combination with a mould-board, the base or lower part of which is arranged parallel, or substantially so, with the land side and adapted to act as or to receive a shoe. 6th. The combination of a mould-board, a share secured to said mould-board and provided with a rib on its under side, extending from near its front and back to the landside. 7th. The combination, with a plow, of the pivoted handles secured respectively to the mould-board and land side, and intermediate plate L. 8th. The bolts K, slotted handle plates I I1, bolts *m m*, landside C, mould-board and handles M, in combination with the angle plate L, for the purpose of holding the handles and all the parts together.

No. 14,006. Improvements on Wheels.

(*Perfectionnements aux roues.*)

Robert Gowans, Scarboro, Ont., 16th January, 1882; for 5 years.

Claim.—In a wheel composed wholly of metal, a rim formed out of a U-shaped bar of metal, and a hub having flanges forming a central recess around its circumference, corresponding with the recess in the U-shaped rim, in combination with curved spokes having hooked or eye-shaped ends arranged to fit in the recesses in the rim and hub, and held in position by bolts or rivets.

No. 14,007. Improvements on Wind-Mills.

(*Perfectionnements aux moulins à vent.*)

Clarence J. Hamilton, Plymouth, Mich., U. S., 16th January, 1882; for 5 years.

Claim.—A wind-mill wherein the sails automatically controlled and governed with relation to the force of the wind, by the centrifugal action of the weights which turn the sails upon their arms. 2nd. In combination with the plate I and its connections, the laterally moving ring N, and frame O secured to the yoke R by means of the bars P, said yoke being secured to a lever S and by means of which the said ring and its frame are projected or retracted, for the purpose of operating the lever M fulcrumed on the plate I.

No. 14,008. Improvement on Curtain Rollers. (*Perfectionnements aux bâtons des rideaux.*)

Hugh Farley, Philadelphia, Pa., U. S., 16th January, 1882; for 5 years.

Claim.—1st. Mechanism to support a curtain roller and allow it to rotate freely, which retains its position against the window frame by friction alone. 2nd. A support for curtain rollers, in combination with means to create a friction between said support and the window frame. 3rd. The combination of the roller A and pivot projection C, with pivot recessed caps D or their equivalent, and a spring F.

No. 14,009. Improvements in the Manufacture of Articles from Plastic Materials. (*Perfectionnements dans la fabrication des objets en matières plastiques.*)

Joseph Naylor, Sterling, N. J., U. S., 16th January, 1882; for 5 years'

Claim.—1st. The method of making or preparing rolls, sticks, or cylinders of plastic material from the ends of which are to be cut blanks to form buttons or other articles or veneers for the same, which consists in placing together side by side sticks, sheets or elements of the plastic material of different colours, and then consolidating the same, whereby a finished cylinder or stick is formed, transverse sections of which, taken at any point, present the same design in the same colours. 2nd. The improvement in the manufacture of articles from plastic materials which consists in, first, producing or forming a stick or cylinder of the plastic material having a design in different colours or tints running through it from end to end, second, consolidating said stick or cylinder, third, cutting from the end of said completed stick or cylinder, disks or blanks of the proper thickness and, fourth, pressing said blanks in moulds or dies, whereby they are given the required shape.

No. 14,010. Improvements in Pavements.

(*Perfectionnements dans le pavage.*)

Antonio Pelletier, Washington, D.C., and Tranquilino Luna, Los Limas, N.M., U. S., 16th January, 1882; for 15 years.

Claim.—1st. Paving blocks formed of concrete having their upper and lower longitudinal and transverse edges bevelled, so as to form, when laid, V-shaped channels running at right angles to each other, and adapted to be reversed at will .2nd. The foundation formed of concrete blocks at right angled parallelogram form, laid with relation to each other in such a manner that each paving block will bear upon three or more of the said foundation blocks. 3rd. The pavement formed of the paving blocks D having upper and lower bevelled edges *d*, in combination with the foundation formed of blocks B arranged in relation to the said paving blocks in such a manner that each of the latter will bear upon three or more of the foundation blocks B and with an intervening layer of sand. 4th. The combination of the foundation formed of series of strips of wood, laid upon the road bed, crossing each other at angles so as to form diamond or rectangular shaped spaces, said spaces filled with concrete or beton, the strips forming part of the foundation, the paving blocks formed of concrete, with bevelled upper and lower edges, and a cushion layer of sand interposed between said foundation and the paving blocks.

No. 14,011. Improvement on Sawing Machines. (*Perfectionnement aux scieries.*)

William Hamilton, Peterborough, Ont., 16th January, 1882; for 5 years.

Claim.—The placing of the levers laying down horizontally at each end of frame, the set works column and rack bar, with notch bar and shifting gauge block and gauge bails attached, the use of the front cast ways, the using of the steam cylinder on this kind of a mill by adapting it as a frame to hold ways, also the drop dog for holding logs.

No. 14,012. Improvements in Oil Lamps

(*Perfectionnements aux lampes à huile.*)

Francis J. Hamilton, Orillia, Ont., 16th January, 1882; for 5 years.

Claim.—The slotted tube A provided with a wick, in combination with the burner B.

No. 14,013. Improvements on Skates.

(*Perfectionnements aux patins.*)

The Starr Manufacturing Company, (Representing John Forbes,) Halifax, N. S., 16th January, 1882; (Extension of Patent No. 1344.)