No. 14,950. Improvements in Knitting Machines. (Perfectionnements aux machines à tricoter.)

Horatio W. Murdock, Montreal, Que., 12th June, 1882; for 5 years.

Claim.—1st. In combination with a knitting machine, a dial rotated automatically by means of a screw thread and spur. 2nd. In combination with the dial A and sleeve At, the springs a. 3rd. The combination with the threaded shaft D, of the spur wheel C capable of adjustment. 4th. In a knitting machine, the combination, with a cam or other operating device of the springs, of shaft G, operating pawl F and ratchet E. 5th. A dial for a knitting machine, graduated for the purpose of indicating the different stages of the operation.

No. 14,951. Improvements on Spring Beds.

 $(Perfectionnements\ aux\ sommiers\ \'elastiques.)$

John Chisholm, (Assignee of Dealton W. Whitaker,) Toronto, Ont., 12th June, 1882; for 5 years.

Claim.—1st. The clip c as constructed with a ring in the middle and affording thereby free action to the links of the clips, to adapt themselves to the springs when attached thereto. 2nd. In combination with the clip c_t the common coil spring b_t the side bars a^{\dagger} , the end bars a^{\dagger} , the cross bars a^{\dagger} , the corner spring d^{\dagger} .

No. 14,952. Remedy for Catarrh and Hemorrhoids. (Ramè le pour le catarrhe et les hémorroïdes.)

James Murray, Toronto, Ont., 13th June, 1882; for 5 years.

Claim.-An emulsion made from horse chestnut boiled in soft water n about the proportions specified.

No. 14,953. Spoke Guide and Gauge.

(Guide et jauge pour les rais des roues.)

John McCloskey, London, Ont., 13th June, 1882; for 5 years.

Chaim.—1st. The lever D, in combination with the spoke guide G provided with a loose jaw P. 2nd. The combination of the lever Di, guide Gt and loose jaw P. 3rd. The lever D in combination with the guide Gt. 4th. The combination of the sam J, bell crank lever K, rod L, spring N and foot board M. 5th. The combination of the levers D Dt, uprights C F, arms E E, and guides G Gt. 6th. The combination of the bell crank lever K provided with a slot, the rod L, spring N and foot board M. 7th. The combination of the brucket R, bolt S, gauge stick T, spring V, lever Z and notched arm X.

No. 14,954. Improvements on Apparatus for Ventilating, Cooling and Warming Buildings. (Perfectionnements aux apparails à aérer, rafraichir et

chauffer les bâtisses.)

Heinrich Mestern, Berlin, Germany, 13th June, 1882; for 5 years.

Claim.—1st. The novel combination of two cylinders A C, top passages E F, valves G Gt, chain H, axle pin J and rose or spreader K arranged in the manner explained. 2nd. The two valves G Gt in top passages E F for opening and closing, and for determining the inflow of air to or from a room or apartment, and the cooling or heating of such air in its passage. 3rd. The pressure water rose produced by the combination of the pressure pipe A, the fixed conical valved seat C, the axially perforated movable conical valve D, the adjusting screw pin F, the adjusting screw socket G and the rotating socket H, with straight or screw-like notches.

No. 14,955. Improvements on Knitting Machines. (Perfectionne nents aux machines à tricoter.

Cornelius Callahan, Chelsea, Mass., U.S., 13th June, 1882; for 5 years.

Claim.—1st. The needle cylinder, its reciprocating series of needles, and the weft thread-holder or stud, combined with the cam cylinder having cam surfaces r^2 page p^2 /2, the preliminary needle lifting surface r^2 and but supporting surface being arranged between the surface, r^2 having cam surfaces 12 120 of 212, the preliminary needle lifting surface 120 and butt supporting surface being arranged between the surfaces 12 12, to hold the upper ends of several of the needles in position, after they have been particularly lifted to permit the weft thread directed and guided by the stud, to be placed with certainty at rear of the needles just before they are to be raised by the cam surface 1. 2nd. The rotating needle cylinder, the revolving warp holding or carrying frame, the hollow bearing a for the same, and the rotating needle carrying cylinder, of smaller diameter extended above the said bearing and suitable intermediate connections between the frame and needle cylinder, to insure the movement of the needle-cylinder and the said frame in unison, combined with a stationary cam cylinder also extended above the said hollow bearing and a series of reciprocating needles. 3rd. The revolving warp holding or carrying frame, the hollow bearing a for the same, the rotating needle carrying cylinder of smaller diameter extended above the said bearing and suitable intermediate connections between the warp frame and needle cylinder to insure their movement in unison, and the stationary cam cylinder also extended up through or above the said bearing and the series of reciprocating needles combined with the weft holder or stud i fixed with relation to the needle cylinder. 4th. The table A2, hollow fixed bearing a and revolving warp holding frame having its hollow foot or gear fitted thereon, and the needle cylinder and needles therein elevated above the said hollow bearing and suitable gearing to connect the said warp holding frame and needle with the stationary cam cylinder arranged inside the space included within the said frame as it revolves, and above the said hollow bearing. 5th. The table A2, the hollow fixed bearing a, the oam cylinder and supports fextending upward from within the said fixed hollow bearing and the revolving warpholding frame, having its foot fitted to the said-pearing and the said revolving frame. 6th. The revolving needle cylinder e and its shank dt and bearing at for it, combined with the intermediate removable reducing plate d2. 7th. The hollow needle cylinder and its neck combined with the shield pt provided at its end with the oil receiving pan p2. 8th. The tension device composed of the plate 14, the lever 12 and suitable means to adjust its position, and the pivoted lever 1 to bear on the threads w, the one lever 1 operating at each end upon a different thread, the tension on each being regulated by one adjusting device. 9th. In a circular knitting machine, the revolving warp holding frame, the revolving needle cylinder and its series of reciprocating needles, means to connect and revolve the said frame and needle cylinder in unison, and a stationary cain cylinder combined with a series of adjustable tension devices attached to the said frame and operating upon the warp threads. 10th. In a circular knitting machine, the revolving warp holding frame, its hollow fixed bearing a, the revolving needle cylinder e arranged above and of smaller diameter than the said hollow bearing, the series of reciprocating needles, means to connect and revolve the said frame and needle cylinder, and stationary cam cylinder also arranged above the said hollow bearing, combined with the tube sizing or gaging ring, to contract and gather the warps above the needles and permit them to be delivered vertically, or nearly so, to the said needles. 11th. In a circular knitting machine, the revolving warp holding frame, its hollow fixed bearing a, the revolving needle cylinder e arranged above and of smaller diameter than the hollow bearing, the series of reciprocating needles, means to connect and revolve the said frame and needle cylinder together in unison, and the stationary cam cylinder also arranged above the said hollow bearing, combined with the tube sizing or gaging ring b5, the rotating needle spinder, combined with the stationary ring b2, the adjustable warp tension devices thereon, and the war

No. 14,956. Improvements on Gates.

(Perfectionnements aux barrières.)

Isaac S. Shirwin, Battle Creek, Mich., U.S., 13th June, 1882; for 15 years.

years.

Claim.—1st. An improved device with bevelled side bearings for limiting the swing of the gate, an intermediate bearing for supporting the gate rail and a fluted shank, in combination with a sliding gate. 2nd. In combination with the gate post E provided with a transverse pin c and with a drop pawl G, sliding gate provided with a projecting tapering bevelled rail A2 which rides over the pin c and engages with the pawl G, the gate being further provided with the connecting levers II III adapted to unlock the gate by tripping the pawl. 3rd. The slotted gate post E provided with a pivoted drop pawl G and a transverse pin c, in combination with a sliding gate provided with the projecting tapering bevelled rails A4 A2 and the lever II, whereby the gate may be secured either in a horizontal position, or with one end raised. 4th. In combination with a sliding gate, a guide post provided with a vertically adjustable head, whereby vertical displacements of the posts may be compensated for. 5th. In combination with a sliding gate, a guide post with a sliding gate, a guide post, provided with a vertically adjustable head, and a suitable locking device for retaining it in position when set. 6th. In combination with a sliding gate, a guide post provided with a broad flange at its base, a vertically adjustable slotted head for the reception of the lower gate rail, and a sliding collar (or other suitable device) for locking the head to the guide post.

Magazine No. 14,957. Improvements in Stoves. (Perfectionnements aux poêles à charbon.

John Magee and Frank A. Magee, Chelsea, Mass., U. S., 13th June, 1882; for 5 years.

1882; for 5 years.

Claim.—1st. A magazine or base burning stove, having the plate or section supporting the doors of the combustion chamber removable, whereby the stove is adapted to be converted from a close to an open grate. 2nd. In a magazine or base burning stove, a removable door supporting front plate F. 3rd. The combination of the plate et forming a portion of one of the walls of the magazine, hinged at et to the magazine, and means for moving the same to and from the remaining walls of the magazine or base burning stove having interchangeable front plates or sections, each of which contains the opening to the combustion chamber, one of which is provided with doors and the other is adapted to receive a blower, whereby the stove may be used as a close or open grate.

No. 14,958. Improvements in the Running Gears of Buggies. (Perfectionnements aux trains des voitures.)

James Field and Richard E. Hammill, Ancester, Ont., 13th June, 1882; (Extension of Patent No. 7557.)

No. 14,959. Improvements on Gauge Tubes. (Perfectionnements aux indicateurs deau.)

Lindley M. Fleet, Boston, Mass., U. S., 14th June, 1882; for 5 years.