to the alarm cord, in combination with a rod S, secured to the door or window sash in proximity to the weight, all arranged substantially as described. 5th. In a burglar alarm operating as described, a weight, supported on a platform in proximity to a door and operating the alarm cord by gravity when pushed off said platform, an arm or rod S, secured to the door and adapted to force the weight off its platform by opening the door, all arranged substantially as described. 6th. In a burglar alarm operating as described, in combination of the weight G, staple K, sliding rod S, and alarm cords P, O, all combined and operating as described.

#### No. 21,985. Automatic Barrel Filler.

(Transvaseur Automatique de Baril.)

Charles Ward, Toronto, Ont., 3rd July, 1885; 5 years.

Charles Ward, Toronto, Ont., 3rd July, 1885; 5 years.

Claim.—1st. A float G connected to the spindle I, having on arm J fixed to it, in combination with a valve D, arranged to close the pipe C, and attached to a spindle E, having an arm K, arranged to engage with the arm J, substantially as and for the purpose specified. 2nd. A float G, connected to the spindle I, having an arm J on its end, in combination with the spindle E, having an arm K, attached to it, so as to engage with the roller j on the arm J, and a valve D attached to the said spindle, and arranged to close the mouth of the pipe C, substantially as and for the purpose specified. 3rd. A float G, attached to the spindle I, having an arm J attached to it, in combination with the spindle E, having an arm K attached to it to engage with an arm J, and a hammer O, arranged to come in contact with the bell P when the valve D is closed.

# No 21,986. Folding Table (Table de Camp.)

John Danner, Canton, Ohio, U.S., 3rd July, 1885; 5 years.

John Danner, Canton, Ohio, U.S., 3rd July, 1885: 5 years. Claim.—1st. In a folding table, the legs B. provided with tenons b on the outside thereof, in combination with the top A, and hinged side rails C provided with mortices Cr. substantially as and for the purpose described. 2nd. The combination of a table-top A, its cleats A1 on the underside thereof, with the legs B hinged to the underside of the table top, and hinges  $b_1$  and  $b_2$  of different length, substantially as and for the purpose described. 3rd. In combination with a table top, the side rails C hinged thereto, and provided with mortices Cr and grooves C2, the hinged legs screwed-eyed, and hook rod D, substantially as and for the purpose described. 4th. In combination with a table-top, the side rails C hinged thereto, and morticed castings secured to and projecting from the inner side thereof, with hinged legs having projections b on their outer sides and means for connecting the side rails, substantially as described. 5th. The combination of a table-top A, legs B with tenons b and hinges b and b2, side rails C2 and C3, staples d and hooked rod D, substantially as and for the purpose described.

# No. 21,987. Shirt. (Chemise.)

William M. Spence, Carson, Nev., U.S., 3rd July, 1885; 5 years.

William M. Spence, Carson, Nev., U.S., 3rd July, 1885; 5 years. Claim.—1st The improved shirt, herein described, provided with a vertical opening located at one side of the bosom, and a second opening or slit intersecting said first opening near the top of the shirt and severing the neck-band, and buttons and button-holes, located substantially as described. 2nd. The improved shirt herein described, provided at one side of the bosom with a vertical seam or bosom with a vertical seam or bosom with a vertical slit or opening, intersected at its top by a second slit or opening arranged at right angles therewith and severing the neck-band, and suitable buttons and button-holes located adjacent to said slit or openings, substantially as set forth.

# No. 21,988. Horse Collar. (Collier de Cheval.)

Ebenezer Fisher, Philadelphia, Pa., U.S., 3rd July, 1885; 5 years.

Ebenezer Fisher, Philadelphia, Pa., U.S., 3rd July, 1885; 5 years.

Claim.—1st. A steel horse collar having its side portions or sections constructed with a thin flange α, which is extended laterally, substantially as described, whereby it forms an elastic or spring bearing for attachment of the draft, as specified. 2nd. In combination with the lateral elastic flange α, of the steel collar section A, the draft hook attached to the same near its edge, as shown and described. 3rd. The combination, with a steel collar section A, having substantially a U-shape in cross section, of a supplemental spring which is interposed between the two flanges α and δ of said section, as specified. 4th. The combination, with a steel collar section A, having substantially a U-shaped cross section, of a curved plate spring, which is bolted to the front flange α, and bars with its free end upon the rear flange δ, as shown and described. 5th. The combination, with the adjustable piece B, and flanged steel collar section A, arranged to slide one in the other of the fastening bolt, passing through the outer flange α, of said section and through the contiguous edge of said top piece, as shown and described. 6th. The combination, with the collar coupling and neck pad, of the piece B, having its eye on top portion projecting laterally forward so that the bearing on the pad is located nearer its front than its rear side, as shown and described. 7th. The combination with the coupling and neck pad of the hook device and a fastening bolt for securing said parts together, substantially as shown and described. 8th. The check-rein hook and back-strap, hook formed in one piece, as shown and described.

# No. 21.989. Potato Screen. (Crible à Patales.)

Janvier Joubert, Côte St. Michel, Que., 3rd July, 1885; 5 years.

Janvier Joubert, Côte St. Michel, Que., 3rd July, 1885; 5 years.

\*\*Réclamc.\*\*-10.\*\* Dans un crible à patates, le tamis K contenu dans la boite mobile I., avec la boite B, les tamis D, H, J et Dr., le mécanisme U, X, W, Y, Z, Zi et les plans inclinés I, c et F, tel que cidessus décrit et pour les fins sus-mentionées. 20. Dans un crible à Di, la boite B, le mécanisme U, X, W, Y, Z, Zr, les plans inclinés I, C, F, et le bâti A, tel que ci-dessus décrit et pour les fins sus-mentonées. 30. Dans un crible à patates, le tamis Dr, en combinaison avec les tamis D, H, J et K, et la boite B, tel que ci-dessus décrit et pour les fins sus-mentonées. 40. Dans une crible à patates, la balance

D1, G2, M, N, O, P, Q, R, S, en combinaison avec les tamis D, H, J, G1, K, les boîtes B, L, le réceptacle G, le plan incliné F et le bâti A, tel que ci-dessus décrit et pour les fins sus-mentionées. 50. Dans un crible à patates, la combinaison des tamis D, H, J, D1, K, des boîtes L, B avec les plans inclinés F, I, c, le mécanisme U, X, W, Y, Z, Zt, le receptacle d, b, G et le bâti A, le tout tel que di-dessus décrit et pour le fins sus-mentionnées. crit et pour le fins sus-mentionnées.

## No. 21,990. Putting-Out Machine for Tanning Purposes. (Machine à Nettoyer les Peaux durant le Tannage.)

William M. Hoffman, Buffalo, N.Y., U.S., 3rd July, 1885; 5 years.

William M. Houman, Bunaio, R. I., U.S., and auty, 1805; 3 years. Claim.—The combination, in a putting-out machine, of a driving shaft b carrying a gear  $b_3$ , a putting-out cylinder a, supported on a shaft  $a_3$ , journalled in arms  $a_4$ , pivoted to the shaft b, gear  $b_4$  on the shaft  $a_3$  engaging with the gear wheel  $b_3$  and feed rollers e,  $e_1$  below the cylinder  $a_1$ , and extensible rods  $e_3$ ,  $e_3$ , each connected at one end to the arms  $a_4$ , and at the opposite end to the pivoted and counterweighted foot treadle f, substantially as and for the purposes described.

### No. 21,991. Automatic Time Draft or Damper Regulator for Steam Boiler Furnaces. (Régulateur Automatique de Régistre Horaire.)

John Burge, Westfield, Mass., U.S., 3rd July, 1885; 5 years.

John Burge, Westfield, Mass., U.S., 3rd July, 1885; 5 years. Claim.—Ist. An automatic time draft and damper regulator having the plate A, with its projecting port b, with the inclined surface b1, and the lever B, pivoted to said plate A, the latch D, the dise F adapted to rotate, and having the notch f, the lever arm E, the connecting rod e1, the stop C, the chain or cord a, connecting the lever B with the draft damper or valve K, substantially as and for the purpose hereinbefore set forth. 2nd. In an automatic time draft or damper regulator, the combination with the clock G, of the dise F with the notch f, the lever arm E, the rod e1, and the latch D, all substantially as and for the purpose hereinbefore set forth. 3rd. In an automatic time draft and damper regulator, the combination with the latch D, of the lever B, the chain or cord a, the stop C, and the late A, with its projection b, substantially as and for the purpose hereinbefore set forth.

### No. 21,992. Land-Excavating Machine,

(Machine à Creuser le Sol.)

James Parker, Hull, Eng., 3rd July, 1885; 5 years.

James Parker, Hull, Eng., 3rd July, 1885; 5 years.

Claim.—1st. The use of digging-tools or picks, having a revolving and reciprocating, or a motion combined of these, for excavating or dredging purposes. 2nd. The use of such digging, delving or breaking off tools for excavating or dredging, mounted upon a frame fitted with a lifting bet or chain of buckets. 3rd. The use of digging-tools or picks in front of the ordinary ladder and buckets of a dreger, so as to fill the buckets by the movement of these tools. 4th. The mounting of moving digging-tools on the lip of an ordinary collecting bucket, so as to fill the same, substantially as described.

#### No. 21,993. Paper-Folding Machine.

(Machine à Plier le Papier.)

Frederick G. Beach, Rochester, N.Y., U.S., 3rd July, 1885; 5 years.

Frederick G. Beach, Rochester, N.Y., U.S., 3rd July, 1885; 5 years. Claim.—1st. In a paper-folding machine, the combination of a series of folding-flies, with a knife and cylinders, substantially as described, and for the purpose specified. 2nd. In a paper-folding machine, oscillating blades, combined with folding-flies for creasing the sheets preparatory to the operation of folding the same. 3rd. In combination with the folding-flies of a waper-lolding machine, a crease or other means for forcing the sheets between the revolving cylinders, substantially as shown and for the purpose specified. 4th. In combination with the folding-flies and knife of a paper-folding machine, means for carrying the sheets below the surface of the paper-folder, substantially as shown.

#### No. 21,994. Machine for Carding Cotton, etc. (Machine à Carder le Coton, etc.)

William S. Archer, New York, N.Y., U.S., 3rd July, 1885; 5 years.

William S. Archer, New York, N.Y., U.S., 3rd July, 1885; 5 years. Claim.—1st. A machine for separating cotton waste and other fibrous material, composed of one or more sections, each section consisting of a picker, toothed boards located below the same cylinders located in the rear of said picker, an open work platform or grate for conveying the material from the picker to the cylinders, and mechanism for feeding the material to the picker, substantially as set forth. 2nd. A machine for separating fibre, consisting of two or more sections, each section consisting of a picker roller toothed boards located below the same, cylinders located in the rear of the picker, and a platform for conveying the material from the picker, othe oylinders, each picker being somewhat smaller than that located in the section immediately in front of it, substantially as set forth. 3rd. The combination, with a picker, of boards located below the same and provided with teeth slanting in the direction in which the material travels, cylinders located in the rear of the picker, an open-work platform or grate for conveying the material from the picker, substantially as set forth. 4th. In a machine for separating fibre, the combination, with an outer casing or frame, of an endless abron, a feed roller, a small roller located between the apron and said feed roller, substantially as set forth. 5th. The combination with an outer frame or casing, of an endless apron, a feed roller, a small roller located between the latter and said apron, a picker, and cothed boards located below said picker, substantially as set forth. 6th. The combination, with a frame, of an endless apron, a feed roller at rough secured to the frame in close proximity to the feed roller and provided with a forwardly extending ledge, sub-