

**No. 37,941. Door Securer. (Arrête-porte.)**

Henry W. Chase, Wittenburg, Wisconsin, U.S.A., 10th December, 1891; 5 years.

*Claim.*—1st. A door-securer comprising a plate provided at its lower end with a lip adapted to fit in the crack at the bottom of the door, a lever having one end fulcrumed on the plate, and a brace having its outer end adapted to engage the floor and having its inner end pivoted to the lever, substantially as described. 2nd. A door-securer comprising a plate provided at one end with a lip and having longitudinal flanges, a lever having a longitudinal opening and having one end pivoted between said flanges, and a brace adapted to engage the floor and having one end pivoted in the opening of the lever, substantially as described.

**No. 37,942. Machine for Holding Lasts.**

(Machine pour tenir les formes.)

John Grant, Windsor, Ontario, Canada, 10th December, 1891; 5 years.

*Claim.*—1st. An improvement in machines for supporting lasts, consisting of the heel supporting arm K, the adjustable toe supporter, and the spring strained holding strap, operating together to hold the last firmly as described. 2nd. In combination with a last support, a removable block of wood K, to which the upper of the shoe may be temporarily fastened as described.

**No. 37,943. Horse Shoe. (Fer à cheval.)**

Arthur Bissonnette, Montreal, Quebec, Canada, 10th December, 1891; 5 years.

*Resumé.*—1o. Dans un fer chirurgical, le ressort d'expansion A, B, C, tel que décrit et pour les fins indiquées. 2o. Dans un fer chirurgical le mode d'insertion et de fixation de ce ressort entre le sabot et le fer en e, f, et retenu par les points B, C, dans la corne du sabot tel que décrit et pour les fins indiquées.

**No. 37,944. Combined Grading, Separating and Dust Collecting Machine.**

(Appareil de réglage, émolteur et aspirateur de poussière combinés.)

Barnard and Leas Manufacturing Company, (assignees of Charles A. Barnard), all of Moline, Illinois, U.S.A., 10th December, 1891; 5 years.

*Claim.*—1st. The combination of the hopper, the vertical air trunk beside the same, the dust chamber below the trunk, the settling chamber above and to one side thereof communicating with the dust chamber through said trunk, and the fan chamber communicating with the settling and dust chambers, a trough in the dust chamber for receiving the material falling through the trunk, and a fan, all substantially as specified. 2nd. The combination of the air trunk, the dust chamber below the same communicating therewith, a settling chamber communicating with said trunk and having a receiving bin at its end opposite the trunk, and a regulating valve at top of said bin, and a fan chamber and fan for creating an endless air current through the dust chamber, trunk, and settling chamber, substantially as described. 3rd. The combination of the settling chamber, the bin below the bottom thereof, the traveling brushes in the bottom of the chamber, and the series of regulating valves in the mouth of the bin forming part of the floor of the chamber, with the dust chamber, fan chamber, fan and air trunk, substantially as described. 4th. The combination of the hopper, the vertical air trunk beside the same, the dust settling chamber below the trunk, the settling chamber above and to one side thereof communicating with the dust chamber through said trunk, a receiving bin at the end of said settling chamber, a valve at the top thereof, a second dust chamber below the settling chamber, a fan chamber communicating with both dust chambers, and means for removing the matters collected in the chambers and bin, substantially as specified. 5th. In a combined grader separator and dust collector, the vertical air trunk, a dust chamber below the same, a trough in said chamber adapted to receive material falling through said trunk, a settling chamber above and to one side of the trunk, communicating therewith, a receiving bin below said chamber, the valves in the top thereof forming part of the floor of said chamber, a second dust chamber below said bin communicating with the settling chamber, a fan chamber communicating with both dust chambers, and a fan therein, substantially as set forth. 6th. In a combined purifier, grader and dust collector, the hopper, separating trunk beside the same, the dust chamber below the trunk, the receiving trough therein, the settling chamber above and to one side of said trunk, a pair of bins at the opposite end of and below said settling chamber and receiving material deposited therein, the valves for said bins, a second dust collecting chamber below said bins communicating with said settling chamber, the fan chamber communicating with both dust chambers, the fan, and means for removing deposited matters from the chambers, bins and trough, all substantially as and for the purpose described.

**No. 37,945. Combined Separating, Grading and Dust Collecting Machine.**

(Appareil de réglage, émolteur et aspirateur de poussière combinés.)

Barnard and Leas Manufacturing Company, (assignees of Herman A. Barnard and Charles A. Barnard), all of Moline, Illinois, U.S.A., 10th December, 1891; 5 years.

*Claim.*—1st. In a combined middlings purifier, grader and dust collector, the combination of a separating device having a series of air passages across which the material must pass, means for dis-

charging the purified material collected in it, a settling chamber for collecting the lighter middlings blown out in the process of purifying, and two dust settling chambers each provided with devices for discharging the material deposited therein, with a fan and mechanism for imparting motion thereto, substantially as described. 2nd. The combination in a separator and dust collector combined of an air blast separating device and two dust chambers communicating with said device, for collecting the dust drawn up by the air current with a secondary air passage connecting the two dust chambers, and means for creating a circulation of air in said passages whereby a part of the dust laden air can be returned to the first dust chamber and made to pass through both chambers again, substantially as described. 3rd. The combination of the hopper, inclined boards below the same upon which the material delivered from the hopper falls, and a receiving trough for the material, a deposit chamber above the said boards, two dust collecting chambers below said deposit chamber and hopper respectively, a fan chamber communicating with said dust chamber, and a fan, whereby a continuous air current is created through the said chambers and between said boards, with conveyors for removing the material from the said receiving trough, deposit chamber, and dust chambers, substantially as described. 4th. The combination in a combined purifier, separator, and dust collector, of two dust collecting chambers, a fan chamber communicating with said chambers, a series of air blast passages above one dust chamber through which the material is passed to be cleaned, a deposit chamber above said passages communicating with the other chamber, and a fan for creating a continuous current through said chambers and passages, substantially as described, with an air passage leading from one dust chamber to the other, whereby a second air current is created in the large dust chamber below the fan, substantially as described. 5th. In a combined purifying, separating and dust collecting machine, the combination of a hopper, inclined boards e, c, below the hopper, the trough H, and conveyor H, the dust collecting chamber F, below said boards and trough, the brushes a, in chamber F, the deposit chamber D, at top of the machine communicating with chamber F, the conveyor trough J, and conveyor J, and brushes b, and the dust collecting chamber E, under chamber D, and communicating therewith and extending under chamber F, and communicating therewith through its bottom, and the trough and fan chamber communicating with chambers F, and E, and adapted to create continuous air currents through the machine, and the deflecting partition O, in chamber E, substantially as specified. 6th. In an endless air current separating machine, having a continuous air passage, a separating device, a fan chamber, one or more settling chambers, each chamber being flat bottomed and provided with both a scraper for continuously cleaning the bottom and a conveyor for removing the material collected by the scrapers, in combination with a fan and mechanism for imparting motion to said fan, scrapers and conveyors, whereby larger settling chambers are obtained, the dust more effectually settled, and the air in said air passage made more free of dust before it again enters the separating device. 7th. In a separator and dust collector the combination of an air blast separating device, a flat bottomed settling chamber below the same, a second flat bottomed settling chamber indirectly communicating with the first chamber through said air blast device and through a fan chamber, with the conveyors for removing collected materials from said chambers and traveling scrapers or brushes for sweeping the collected matters off the bottoms of said settling chambers to the conveyors, substantially as described. 8th. In an endless closed air current dust collecting machine, the combination of a fan chamber and fan, and a dust chamber having substantially vertical walls and large flat surfaced bottom, with traveling scrapers or brushes adapted to sweep the collected material off the bottom of the dust chamber, and mechanism substantially as described for laterally moving said scrapers or brushes over the bottom of the dust chamber, substantially as set forth.

**No. 37,946. Current Indicator.**

(Indicateur de courant.)

Reliance Electric Manufacturing Company, Waterford, Ontario, Canada, (assignees of Frank Bankson Rue, Detroit, Michigan, U.S.A.) 10th December, 1891; 5 years.

*Claim.*—1st. A current indicator consisting of a magnet, the coils of which are included in the circuit to be measured, a tapering core piece for the magnet, and a pivoted armature embracing the tapering core piece and carrying a pointer, substantially as described. 2nd. A current indicator consisting of an electro-magnet, the coils of which are included in the circuit to be measured, a semi-circular core piece for said magnet, tapering toward its extremity, and an armature having a ring embracing the tapering core piece and carrying an indicating point, substantially as described. 3rd. A current indicator consisting of an electro-magnet, the coils of which are included in the circuit to be measured, a semi-circular core-piece tapering from its base to its free end, a plate connected to the base and extending toward the free end of the core piece, an armature pivoted to the plate and carrying a ring shaped piece of soft iron embracing the core piece, and an indicator attached thereto, substantially as described. 4th. A current indicator consisting of an electro-magnet, the coils of which are in the circuit to be measured, a semi-circular core piece gradually tapering toward its free end, a soft iron plate secured to the base of the core, adjacent to the coils, an armature pivoted in said soft iron plate, a ring of soft iron secured to the armature and embracing the free end of the core, a pointer secured to the ring, and a segmental scale for the pointer, substantially as described.

**No. 37,947. Hand Harrow or Rake.**

(Herse à main ou râteau.)

Harry Daniel McConn, Fort Madison, Iowa, U.S.A., 10th December, 1891; 5 years.

*Claim.*—1st. A rake or hand harrow consisting of a handle carrying a cross bar, pivoted levers carried upon the cross bar and adapt-