



Vol. V.—No. 12.

DECEMBER, 1877.

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

CONTENTS.

INVENTIONS PATENTED	187
INDEX OF INVENTIONS	CLXXVII
INDEX OF PATENTEES	CLXXVIII
ILLUSTRATIONS	179

INVENTIONS PATENTED.

No. 8059. Improvements on Bougies.

(*Perfectionnements aux bougies.*)

John C. Allen, (Co-inventor with, and Assignee of, J. Fowler and R. K. Smither), Buffalo, N.Y., U.S., 2nd November, 1877, for 5 years.

Claim.—1st. A flexible wrethral bougie composed of gum arabic or tragacanth, glycerate of starch and cocoa butter; 2nd. The glycerate of starch as an ingredient of flexible wrethral bougies; 3rd. A flexible wrethral bougie, medicated or not, fusible at the temperature of the body, coated with glue or gelatine, medicated or not.

No. 8060. Improvements on Wringer Rollers.

(*Perfectionnements aux rouleaux d'essoreuses.*)

John Graeco, Jr., New York, U.S., 2nd November, 1877, for 5 years.

Claim.—1st. Preparing a wrought iron shaft or spindle by freeing it from scales and foreign matters, building up upon the shaft thus prepared a body of vulcanized rubber compound, until the requisite form and thickness is attained, and then vulcanizing the same; 2nd. An improved clothes wringer roll, in which the rubber of such roll is vulcanized directly on to the central iron shaft or spindle.

No. 8061. Improvements on Threshing

Machines. (Perfectionnements des machines à battre.)

Ira H. Green, Canandaigua, N. Y., U.S., 2nd November, 1877, for 5 years.

Claim.—1st. The combination with the endless apron C and rotary cutters E E, of the dividers G G consisting of arms resting between the cutters, and pivoted at their upper ends so as to be capable of being turned backward; 2nd. The combination with the endless apron C and rotary cutters E E, of the beater D standing in the angle between the apron and cylinder.

No. 8062. Improvements on Car Ventilators.

(*Perfectionnements aux ventilateurs de wagons.*)

Manfred A. Morton and Edwin H. Winchell, Chicago, Ill., U.S., 2nd November, 1877, for 5 years.

Claim.—1st. A box divided into two compartments by a permanent partition, both compartments opening through gauze screens to the outside air, and opening into the car through apertures which are provided, or which are not provided, with a valve or valves, said box being attached in such manner to the car as to project clear into the air at all sides, except that which connects it to the car; 2nd. The ventilator having the double compartment permanently divided, gauze covered ends, and a double inclined bottom.

No. 8063. Improvements on Steam Boilers.

(*Perfectionnements aux machines à vapeur.*)

Alvin C. Norcross, Boston, Mass., U.S., 2nd November, 1877, for 5 years.

Claim.—1st. An automatic draft regulator, operated by water forced from the boiler into an air chamber, and returned by the expansive force of the compressed air; 2nd. The coil I arranged within the casing A and forming a flexible oscillating conduit joint; 3rd. The combination of the casing A with grooved arm B, rim C, cap D, with arm B having knife edges bb and overlapping projections or flanges dd; 4th. The curved pipe K extending from the arm G to the bottom of the air chamber H, in combination with the said chamber, arm and the coil I; 5th. The combination of the tilting rim C, beam E, with weights, flexible joint conduit pipe I, hollow arm G and air chamber H.

No. 8064. Improvements on Wooden-soled

Shoes. (Perfectionnements aux souliers à semelles de bois.)

Theophilus R. Hyde, Westerly, R.I., U.S., 2nd November, 1877, for 5 years.

Claim.—1st. Shaping the block or blank to conform to the finished sole and then sawing the same into sole sections, with surfaces of curvature adapted to be united together to form two or more sections of sole; 2nd. The combination with the insole D and outer sole A, of the yielding intermediate sole F of smaller size than the insole, leaving a marginal space a between the said insole and outer sole, for the introduction of the edge of the upper; 3rd. The combination with an insole and tread-sole, sawed from the same block, of a welt sole C located between the two, and screwed to the insole; 4th. A wood-soled shoe having the sections of its sole sawed apart to fit each other, and the yielding intermediate sole E laid in waterproof cement between the insole and outer sole; 5th. The wood-soled shoe consisting of the insole D, intermediate sole E, tread-sole B and welt sole C, connected, first, to the insole, and then to the tread sole; 6th. A sectional wooden shoe sole composed of the parts A C and D, sawed from a single piece, or blank, of wood and having their contiguous surfaces accurately conforming to each other.

No. 8065. Improvements on Screw Machines.

(*Perfectionnements des machines à vis.*)

Albert R. Munson, New York, U.S., 2nd November, 1877, for 5 years.

Claim.—1st. In an organized machine arranged for the automatic manufacture of screws from a continuous supply of wire, the combination of the following elements, viz.: a blank heading device, a shaving device, a drilling device, a punching device, a slotting device, a re-shaving device, a screw threading device, and an apparatus for transferring the screw blanks from one device to the others, such combination of elements being arranged for the manufacture of screws, the heads of which are provided with an angular cavity in addition to the usual slot or nick; 2nd. In an organized machine arranged for the automatic manufacture of screws from a continuous supply of headed screw-blanks, the combination of the following elements, viz.: a shaving device, a drilling device, a punching device, a slotting device, a re-shaving device, a screw-threading device, and an apparatus for transferring the blanks from the first named device to the others in rotation, such combination of elements being arranged for the manufacture of screws, the heads of which are provided with an angular cavity, in addition to the usual slot or nick; 3rd. In an organized machine arranged for the automatic manufacture of screws from a continuous supply of wire, the combination of the following elements, viz.: a blank heading device, a drilling device, a punching device, a slotting device, a shaving and milling device, a screw-threading device, and an apparatus for transferring the screw blanks from one device to the others, such combination of elements being arranged for the manufacture of screws, the heads of which are provided with an angular cavity, in addition to the usual slot or nick; 4th. In an organized machine arranged for the automatic manufacture of screws from a continuous supply of wire, the combination of the following elements, viz.: a blank heading device, a shaving device, a drilling device, a punching device, a screw-threading device, and an apparatus for transferring the screw blanks from one device to the others, such combination of elements being adapted to the manufacture of screws, the heads of which are provided in the centre with an angular cavity, in place of the usual slot or nick; 5th. In an organized machine arranged for the automatic manufacture of screws from a continuous supply of headed screw blanks, the combination of the following elements, viz.: a shaving device, a drilling device, a punching device, a screw threading device, and an apparatus for transferring the screw blanks from the first named device to the others in rotation, such combination of elements being adapted to the manufacture of screws, the heads of which are provided in the centre with an angular cavity, in place of the usual slot or nick; 6th. In an organized machine arranged for the automatic manufacture of screws from a continuous supply of wire, the combination of the following elements, viz.: a blank heading device, a drilling device, a punching device, a combined milling and shaving device, a screw-threading device, and an apparatus for transferring the screw blanks from one device to the others, such combination of elements being