

and adapted to serve the purposes specified; 6th. In combination with means for inducing a pressure of fluid, and an instrument for producing sound thereby, the cylinder B₂ and its attachments, partially turning with a slow motion to a definitely prescribed extent to induce the signals and means for turning the cylinder between the signals, so as to bring a new part into action; 7th. The graduated dial *a* and index B. In combination with automatic signalling mechanism, and with means for instantly changing the same; 8th. The bellows or wind forcing means G_g, and means for forcibly operating it, in combination with a sound producing instrument D, mechanism for producing a pre-determined order of blasts, and means for changing the number or order, or both, between the signals; 9th. The slot *b*₂ helical in one portion of its length and straight at its lower end, adapted to serve in combination with the pin *e*, disc B, or its equivalent sound producing instrument D, and air forcing means G_g, so arranged as to cause the first portion of the motion to generate a pressure, and then to cause turning of the signalling mechanism to a pre-determined extent, to give the signal by such pressure; 10th. The entire slot *b*, formed helical at its mid-length and straight at both its upper and lower ends, in combination with the bellows G_g, actuating means E, signalling disc B, or its equivalent, and sound producing device D, to allow not only the production of a wind pressure during the first portion of the motion, and the operating of the signalling mechanism to a definite extent during a succeeding portion, but also to allow of a variation in the extent of the final movement without affecting the signal; 11th. A sound signalling apparatus or machine giving a series of sounds by one motion of a lever or other device, so that it will cause the entire signal consisting of a succession of sounds with intervals between them to be given with one motion; 12th. An automatic machine so arranged as to give a succession of sound signals whether they be given as described, or reversed in any way, so long as they are adapted to indicate danger, such as an approaching vessel, or to distinguish one lighthouse from another, or for any kind of buoy or lightship which may have this apparatus attached; 13th. The method of communicating at sea by a succession of mechanically induced sounds indicating the direction of the motion of the vessel, and capable of being instantly changed on commencing to change the course to avoid collision; 14th. A code of sound signals composed of long and short sounds, systematically arranged and actuated by mechanical means.

No. 10,158. Improvements on Force Pumps.

(*Perfectionnements aux pompes foulantes.*)

Jacob Scott and Albert Scott, Richmond, Que., 26th June, 1879 (Extension of Patent No. 3,616), for 5 years.

No. 10,159. Improvements on Gates.

(*Perfectionnements aux barrières.*)

George W. Simons, St. Catharines, Ont., 26th June, 1879, for 5 years.

Claim.—The mode of constructing, erecting and applying the gate A C to ordinary board or other fences, the manner in which it is opened and shut, and otherwise worked by wheels B B.

No. 10,160. Improvements on Trace Fastenings.

(*Perfectionnements aux accroche-trails.*)

Lucius P. Crandall Eau Claire, Wis., U. S., 26th June, 1879, for 5 years.

Claim.—The bar A, provided with the vertically elongated head *a*, and the block *b* pivoted eccentrically upon said bar, between said head and the end of the whiffletree and having within its rear side a semi-circular groove *c*, for the reception of the slotted end of the trace.

No. 10,161. Improvements on Liniments.

(*Perfectionnements aux liniments.*)

Sterling C. Buchanan, Camden, Ark., U. S., 26th June 1879, for 5 years.

Claim.—A compound of aconite, camphor, arica and sassafras, held in solution of fusil oil, of the specific gravity of about 830, said elements having the respective proportions specified.

No. 10,162. Improvements on Boot Uppers.

(*Perfectionnements aux empeignes des chaussures.*)

Edward H. Thurston, Ottawa, Ont., 26th June, 1879, for 15 years.

Claim.—1st. A boot having an upper of the one piece pattern A, crimped upwardly to a central point B, whereby after crimping, the pattern will require to be slit from the rear towards the front, to admit of the insertion of the foot of the wearer; 2nd. A boot upper of the whole pattern A, raised to a central point B, by crimping, whereby the slitting of the upper after crimping to admit the foot of the wearer, is necessitated.

No. 10,163. Improvements on Ovens.

(*Perfectionnements aux fourneaux.*)

John R. Haywood, Boston, Mass., U. S., 26th June, 1879, for 5 years.

Claim.—1st. In combination with the walls B B, the bottom of wall B, being above the bottom of the oven to admit of circulation; 2nd. The oven attachment composed of the frame C, and the sheet metal B B, extending from near the bottom of the frame at one side, and across the frame at the top nearly to the other side.

No. 10,164. Improvements on Seeders.

(*Perfectionnements aux semoirs.*)

Samuel Noxon, Ingersoll, Ont., 26th June, 1879, for 5 years.

Claim.—1st. The double receivers G H, in combination with a rocking bar F, or its equivalent; 2nd. The combination of the receivers G H and rocking bar F, or its equivalent, adjustable to receive the discharge from the cylinders C, by either of the receivers for sowing the grain in drills or broadcast; 3rd. The receivers G H, hung to a bar F having an adjustable movement, whereby the grain is discharged into either receiver.

No. 10,165. Improvements on Grain Drills.

(*Perfectionnements aux semoirs traceurs.*)

Samuel Noxon, Ingersoll, Ont., 26th June, 1879, for 5 years.

Claim.—1st. A tooth or hoe A, having a forwardly projecting plate B, provided with radial serrations or teeth C, laterally; 2nd. The adjustable

sector plate E, having lateral and radial serrations or teeth F pivoted to the tooth plate B having coinciding serrations or teeth G and locking device G. 3rd. The combination of a tooth or hoe A having a projecting plate B, sector plate E pivoted thereto, locking device G and drag arms H H, whereby the depth of penetration in the soil is regulated by the adjustment of the tooth to a greater inclination.

No. 10,166. Improvements on Earth Scrapers.

(*Perfectionnements aux râbles à terre.*)

Silas G. J. Morrow, New Bloomfield, Miss., U. S., 26th June 1879 for 5 years.

Claim.—1st. The lever H, rock shaft G and links *b b*, in combination with the scraper S and platform C; 2nd. The platform C, support F and rack R, in combination with the lever I, pivoted bar *d* and scraper S. 3rd. The scraper S, platform C, lever H, rock shaft G and links *b b*, in combination with the support F, lever I and pivoted bar *d*.

No. 10,167. Ironing Board.

(*Table à repasser*)

Samuel Boyd, St. Catharines, Ont., 26th June, 1879, for 5 years.

Claim.—The small board working on the pivot and divided with hinge, with pins at each end to hold shirt and other articles of clothing, the mode of working and using the leg C and lever D.

No. 10,168. Improvements in Gas Governors.

(*Perfectionnements aux régulateurs à gaz.*)

George S. Woodruff, Grand Rapids, Mich., U. S., 26th June, 1879, for 5 years.

Claim.—1st. The cup-shaped washers F, on the spindle D, in combination with the diaphragm B fastened to the curved flange C. 2nd. The passage G connecting the riser H and chamber above the diaphragm in combination with the stop cock I; 3rd. A passage J through the spindle D, or other suitable point, to connect the chamber above and below the diaphragm.

No. 10,169. Improvements in Lamp Burners.

(*Perfectionnements aux becs des lampes.*)

Joseph Trent, New York, N. Y., U. S., 26th June, 1879, for 5 years.

Claim.—1st. The guard or deflector A, having the straight parallel sides *a a* and the parabolic curved sides *b b*, for a kerosene lamp burner. 2nd. The guard or deflector in combination with the cone B and chimney C. 3rd. The catch D held against the base of the chimney C by the sliding clasp E. 4th. The combination of the chimney C, cone B and guard or deflector A with the base plate G.

No. 10,170. Process for the Preservation of Eggs.

(*Procédé de conservation des œufs.*)

Osmar A. Stempel and John C. S. Foss, Washington, Mo., U. S., 26th June 1879, for 5 years.

Claim.—1st. The process of packing eggs by placing in a vessel with sides rendered partially or wholly impervious to gases and containing a solution of lime, salt, water, salicylic acid and oil, with some free oil forming the top of the solution; 2nd. The described composition of lime, salt, water, salicylic acid and oil, for the purpose set forth.

No. 10,171. Process for Extracting Malt.

(*Procédé pour extraire le Malt.*)

John A. Shaefer, Jr., William Norman and Robert W. Davies, (Assignees of John A. Shaefer), New York, N. Y., U. S., 26th June, 1879, for 5 years.

Claim.—The use of luke-warm water, instead of very hot or boiling water in connection with ground malt in the manufacture of Lager Beer, Ale and other malt liquors.

No. 10,172. Improvements on Wrenches.

(*Perfectionnements aux clés à érous.*)

Joseph Goodrich, Henry, Ill., U. S., 26th June, 1879, for 5 years.

Claim.—1st. A tool for grasping objects to be worked with or upon, wherein the jaws, mounted upon right and left hand screws, are arranged to approach or recede from each other simultaneously, and adapted to be thrown out of parallelism by turning either one of the screws independently; 2nd. In a tool, the jaws D D, screws C C, and a central shank; 3rd. A shank or stock bearing right and left hand screws and provided with guides for the jaws, and the two jaws arranged as set forth; 4th. The arrangement of the nuts swivelled or loosely fixed to the jaws; 5th. The arrangement, in a tool, or vise for grasping objects, of two movable jaws operated simultaneously by means of two right and left hand screws; 6th. The arrangement in a tool for grasping objects of a shank having a socket to fit a bit brace, and two jaws to be operated simultaneously by two right and left hand screws.

No. 10,173. Improvements on Ore Concentrators.

(*Perfectionnements aux machines à concentrer les minerais.*)

Edward W. Stephens, Erie, Penn., U. S., 26th June, 1879, for 5 years.

Claim.—1st. In combination with the horizontally movable ore bed of an ore concentrator, a blast chamber located directly beneath and extending across the entire width of the same, and provided with a plate or piston which fits said chamber horizontally and, when moved upward, causes a uniform flow of air upward through the superimposed portion of said bed. 2nd. In an ore concentrator which has a horizontally movable ore bed, the combination, therewith, of a splitting knife placed parallel with said bed. 3rd. An ore concentrator having the following elements, an air blast chamber, a superimposed horizontally travelling ore bed, a feeding hopper with mouth of equal width with the ore bed and a splitting knife placed parallel with said bed; 4th. An ore concentrator in which is combined the following elements, viz: a horizontal continuously moving ore bed, mechanism for feeding ore upon the same and mechanism for producing a blast, which shall force a current of air upward uniformly through each portion of said ore bed. 5th. An ore concentrator having devices constructed and operating together as shown, whereby the ore from the time it is fed upon the ore bed until it is discharged from the machine in a concentrated and separated condition, moves always and only in one direction.