ENGINEERING INVENTION.

A system and apparatus for heating and lighting cars has been patented by Mr. George Smith, of Rochester, N. Y. A compressed air reservoir is connected with a naphtha tank, a pipe from which leads to the heater and lamps for supplying carbureted air, while there is an automatic cut-off by which the supply of gas is cut off to prevent danger from fire in case of accident.

AGRICULTURAL INVENTIONS.

A corn harvesting and husking machine has been patented by Mr. John A. Hilbert, of Carroll, Iowa. This invention covers an improvement on a former patented invention of the same inventor, the machine cutting the stalks, separating the ears and husking them, and delivering them to a wagon traveling with the machine, while the stalks are placed in a row or a pile on the ground.

A mower has been patented by Messrs. Robley D. Hoke and Isaac A. Harris, of Wessington, Dakota Ter. It has an improved driving mechanism, and an adjusting mechanism designed to drive the sickle bar with a sufficient number of strokes to secure a perfect cut of the grain in proportion to the advance of the machine, the machine also having a simple and practical means of adjusting the shoe of the sickle bar.

MISCELLANEOUS INVENTIONS.

A button has been patented by Mr. Charles A. Peirce, of Dover, N. J. It is a collar button having attached means for securing and engaging the necktie, and consists in a hinged pointed pin combined with a collar button.

A shoe fastening has been patented by Mr. George H. Coursen, of Baltimore, Md. It is made of a sheet metal strip, bent and closed for attachment to a shoe or other article of wear to make an eye-like fastening, adapted to receive a lacing cord or shoe string freely through it.

A cement has been patented by Mr. Isaac C. Hatch, of Santa Cruz, Cal. It is made of stated proportions of lime, sand, coralline, and sugar, finely ground and thoroughly mixed, and is said to be particularly well adapted for building heavy walls of either brick or stone.

A stove has been patented by Mr. Hans Lindas, of Stoughton, Wis. This invention relates to parlor stoves adapted for heating separate rooms, and wherein provision is made for cooking or baking, and is designed to afford an improved construction in which the smoke is utilized as a heating factor.

A commode has been patented by Mr. William R. Wythe, of Santa Barbara, Cal. This invention covers a novel construction, combination, and arrangement of parts, constituting a commode easily discharged of its contents, not liable to become offensive, and which is protected against freezing.

A coffee pot has been patented by Mr. William Racer, of Harrison, Ark. A funnel with cylindrical lower end and strainer in its bottom is supported inside the pot, in combination with an interior perforated cylinder, holding the ground coffee, affording a pot specially designed for making coffee by percolation.

An ore jigger has been patented by Messrs. William B. Hodgson and Truman C. Safford, of Lyon Mountain, N. Y. This invention covers an improved screen to facilitate the sizing of wet and dry ores, the screen being convex or conical, and supported directly over the upper end of a hopper by a vertical shaft revolving in the casing.

A rowing apparatus has been patented by Mr. Robert Masay, of Nashville, Tenn. Combined with a frame or support are pivoted bearer plates to which oars are held, the frame having a sliding bar and means for locking the parts in position, with other novel features, whereby boats may be propelled and steered without directly handling the oars.

A cut-out for electric light circuits has been patented by Mr. Charles D. Wright, of Petersburg, Ill. It is designed to throw a suitable amount of resistance into the circuit when the current therein becomes abnormal, and before the regulating devices connected with the dynamo can act, thereby avoiding the burning out of the armature of the machine.

A composition for roadways has been patented by Mr. Louis N. Beauchemin, of Hancock, Mich. It is intended for use as a top layer or facing upon other layers of other materials, and is made of specified proportions of black pitch, coal tar, resin, copper moulding, stamp sand, and other materials, compounded and applied as described.

A combined school seat and desk has been patented by Mr. Albert Landon, of Rutland, Vt. The seat is located in front of the desk, which forms a back for the seat, the seat being adapted to fold up beneath the desk and behind its back, the seat being easily adjustable in and out of position to afford a passageway between rows of desks.

A hand punch has been patented by Mr. William Yates, of New York City. It is for canceling, numbering, dating, or otherwise marking railway tickets, etc., and the invention covers novel features of construction and arrangement of parts, whereby a great variety of combinations for marking and punching may be effected.

A combined freight bucket and truck has been patented by Mr. Louis A. De Mayo, of Jersey City, N. J. This invention provides a novel construction whereby freight may be conveniently carried from one portion of a warehouse to another, wheeled along a dock, or be hoisted from floor to floor, etc., or may be readily dumped from the bucket without moving or tilting the truck.

A tool post ring has been patented by Mr. William S. Cobb, of Philadelphia, Pa. The invention consists in a series of three inclined face rings or plates fitted around the tool post and on to the tool block and on each other, and relatively adjusted to give the required set of the tool, making an attachment to tool posts or holders of lathes or shaping machines.

A nail cutter has been patented by Mr. Terence F. Curley, of Brooklyn, N. Y. It consists of a handled plate having unsharpened edges, one or both of which are provided with a V-shaped notch, the plate being sharpened at the sides of the notch to adapt it for cutting the ends of the nails, and so the nails may be trimmed without danger of cutting the flesh.

A lemon juice extractor has been patented by Mr. John L. Easley, of New York City. It has a rotary frame with vertical curved arms or ribs between which a lemon may be wedged, with openings by which the skin may be dislodged, and other novel features, whereby the juice extracted will be free from the oil of the skin, and the pulp and seeds will be caught without impeding the flow of the juice.

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Lockwood's Dictionary of Terms used in the practice of Mechanical Engineering, embracing those current in the drawing office, pattern shop, foundry, fitting, turning, smith's and boiler shop, etc., comprising over 6,000 definitions. Edited by a foreman patternmaker. 1888. Price, $3.00. For sale by Munn & Co., 361 Broadway, New York.

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ELECTRICAL INSTRUMENT MAKING FOR AMATEURS. By S. R. Bottone. London: Whittaker & Co.; and New York: D. Van Nostrand & Co. 1888. Pp. 183. Price $1.20.

This new edition, enlarged by a chapter treating of the telephone, and by various other minor features, brings this convenient manual up to date. The description of the pocket accumulator, practical notes on electro-magnets, etc., are most acceptable. We have already noticed in these columns the first edition. We can only add that we consider it a good augury that a second edition has so soon been called for.

MANAGEMENT OF ACCUMULATORS AND PRIVATE ELECTRIC LIGHT INSTALLATIONS. By Sir David Salomons, Bart., M.A., A.I.C.E. London: Whittaker & Co. New York: D. Van Nostrand & Co. 1888. Pp. 176. Price $1.20.

The results of the experience of this distinguished electrician, one who has made the study of electric lighting and home appliances a true labor of love, are in this volume given freely to the public. The work purports to be and is a practical one. No obnoxious quantity of theories and formulas encumber its pages, but what to the practical man is the real meat of the question is given by itself. It is well illustrated, and should be in the hands of every one interested in the subject of small electric plants.

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