RECENTLY PATENTED INVENTIONS.

Of General Interest.

WALL CONSTRUCTION.—G. P. WHITE, Wallace, Idaho. The invention refers to concrete blocks, and its object is to provide a construction, arranged to form air spaces between the outer and inner courses, and to allow a perfect circulation of air through the spaces both in a horizontal and vertical direction, with a view to prevent the penetration of moisture through the wall to the interior of the building.

CABLE-SQUEEZER.—H. D. ROBINSON, New York, N. Y. The aim of the inventor is to provide a device which may be easily and quickly applied to the mass of strands making up the cable, which will force them together into a perfectly cylindrical mass, and which may be very readily loosened and moved after the permanent securing means has been applied adjacent the point last squeezed into shape.

Heating and Lighting.

WATER-HEATER.—O. C. SYVERTSEN, Taunton, Mass. This heater is adapted for domestic purposes, and more especially for use in connection with the boiler of a steam heating system to replace or augment the water front of the range. The heating chamber consists of a cylindrical body having expanded heads secured at opposite ends, a coil within the chamber and an inlet and outlet to and from the chamber for circulation of the heating fluid. Where the coil return and supply pipes pass into the head the inventor provides outwardly-projecting nipples surrounding the pipe, the former having packing nuts, and thus forming in connection with the pipes annular heating spaces in communication with the chamber.

Machines and Mechanical Devices.

ATTACHMENT FOR LOOMS.—W. P. WATSON, Middletown, Conn. The invention has in view a suitable mechanism in connection with a loom, for raising and lowering the weights used to maintain a tension on the warp. Two weights are simultaneously raised and lowered by mechanical means preferably operable from the front of the machine, which means permits of a heavier weighting and consequently the lengthening of the warp and an increase in production.

TUBULAR TRITURATING-MILL.—R. R. SHAFTER, New York, N. Y. The invention is an improvement in mills of the character which contain a quantity of pebbles, spheres, or other pulverizing elements. In machines of this nature the material to be ground is introduced into the grinding tube having the pebbles, and as it revolves they roll upon each other and reduce material to powder. The inventor's aim is to get rid of the large per cent of dead weight of the pebbles and increase the mill's grinding capacity.

FRICTION-CONTROLLING DEVICE.—S. J. DIBBINS, New York, N. Y. The device insures the easy working of the friction clutch, reduces the friction of the working parts to a minimum, and avoids weakening of the drum shaft. Use is made of a device external of the shaft, and having a spring-pressed pressure device engaging a grooved collar on the movable clutch member, and a normally-controlled pressure nut screwing on a pressure screw on the pressure device.

OPERATING-TABLE.—J. LAUGHLIN, Ledyard, Iowa. Dr. Laughlin in this invention provides a table that may be adjusted in a variety of positions, being capable of rising and falling movement, rotary movement, tilting on its longitudinal axis, and tilting on its transverse axis, and also an infinite variety of combinations of the two tilting movements.

LADDER.—I. R. CONCOFF and R. S. LOVETT, Portland, Ore. The ladder is for use by firemen, it being capable of considerable and rapid extension, adapting it for use in connection with tall buildings. One embodiment of the invention consists of a ladder composed of a series of sections of varying widths telescoped one within the other and a gear mechanism for driving the several sections, causing them to simultaneously move with respect to each other.

NOTE.—Copies of any of these patents will be furnished by Munn & Co. for ten cents each. Please state the name of the patentee, title of the invention, and date of this paper.

NEW BOOKS, ETC.

CANE SUGAR AND ITS MANUFACTURE. By H. C. Prinsen Geerligs, Late Director of the West Java Sugar Experiment Station. Manchester (Altringham): Norman Rodger, 1909. Levant octavo; pp. 350.

Mr. Geerligs has collected in this book pretty much everything that is known about the chemistry and technology of sugar cane and cane-sugar manufacture. In a way the book may be regarded as a supplement to Noel Deerr's work on sugar and the sugar cane, for it carefully avoids the discussion of machinery which finds so prominent a place in Deerr's work, and confines itself largely to the chemical side of sugar cane. The chapters are seven in number, and their subjects are respectively "Constituents of the Sugar Cane," "Proportion and Distribution of the Constituents of Sugar Cane," "Extraction of the Juice," "Clarification," "Concentration of the Juice," "Curing," and "Exhausted Molasses."

ELECTRICITÉ AGRICOLE. Par A. Petit, ingénieur agronome et ingénieur électricien. 1909, 1 volume in-18 de 400 pages, avec 100 figures. Librairie J.-B. Baillière et fils, 19 rue Hautefeuille, à Paris.

M. Petit first presents some general considerations on the adaptation of electricity to the farm, energy, and some general theories in electricity. He then considers the production of electric energy by all possible practical means—dynamos, water motors, steam engines, gas engines, gasoline engines, and windmills. He lastly sets forth the comparative merits of these various methods, cost of each installation, and the mechanical and electrical conditions involved. Inasmuch as electrical energy is conducted by wires to the machines which it is intended to drive, he naturally describes the apparatus employed between generating and receiving stations in a chapter entitled "Transportation and Distribution." The energy thus conveyed is utilized in various forms. How it is utilized, a chapter on utilization explains.

THE FIRELESS COOK BOOK. A Manual of the Construction and Use of Appliances for Cooking by Retained Heat. With 250 Recipes. By Margaret J. Mitchell, Director of Domestic Science in Public Schools, Bradford, Pa.; Instructor in Domestic Science, Drexel Institute, Philadelphia, Pa. New York: Doubleday, Page & Co., 1909. Price, $1.25.

The fireless cooker is another name for the insulated oven or hay-box, which has been introduced into this country from Europe. By its means food is subjected to a brief preliminary cooking and placed in the hay-box, where the cooking process is continued for some time after without the aid of fuel. It is the purpose of this book to present in a convenient form directions for making and using fireless cookers, so that those who are not experienced even in the ordinary methods of cookery may be able to follow them easily and with success. Naturally, a book such as this must be used in the kitchen before any opinion as to its practical value can be delivered. It seems to us, however, that the book has been well designed to attain the object for which it is written.

THE WESTINGHOUSE E-T AIR BRAKE INSTRUCTION POCKET BOOK. By W. W. Wood. New York: Norman W. Henley Publishing Company, 1909. 16mo.; pp. 242. Price, $2.

This is an admirable example of what a technical book should be. The illustrations are mostly in the form of plates, and are appropriately colored to distinguish the various pressures. We have rarely seen better examples of fine color printing. The register is most accurate, and the coloring will tend to simplify the descriptions for the student. The publisher has taken the very wise precaution of copyrighting every individual illustration. It is strange that more publishers do not do this, as it would save them from the vast legion of pirates that are always ready to snap up every good book. The author is a practical air-brake instructor. The examination questions are given in the popular question-and-answer form. It is a beautiful example of book making, and reflects the greatest possible credit upon the publisher.

THE REAL ESTATE EDUCATOR. By F. M. Payne. New York: T. J. Carey, 1908. 18mo.; pp. 256. Price, $2.

This is a repository of useful information for ready reference especially designed for real estate agents, operators, builders, contractors, and business men. The advice given seems to be very sensible, and the book will probably be of value to those who are engaged in buying or selling real estate.

ENGINEERS' MANUAL FOR INSTALLATION AND OPERATION OF THE REEVES VARIABLE SPEED TRANSMISSION. Columbus, Ind.: The Reeves Pulley Company, 1909. 24mo.; pp. 59. Price, $1.

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