

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. SHAFER, 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 percent of dead weight of the pebbles and increase the mill's grinding capacity.

FRICITION-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, Leeward, 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. Prinsens Geerligns, Late Director of the West Java Sugar Experiment Station. Manchester (Altringham): Norman Rodger, 1909. Levant octavo; pp. 350.

Mr. Geerligns 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 Haute-feuille, 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—dynamoes, 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.

INDEX OF INVENTIONS

For which Letters Patent of the United States were Issued for the Week Ending July 6, 1909,

AND EACH BEARING THAT DATE [See note at end of list about copies of these patents.]

Abrasive machine, belt, D. S. Oakley	927,066
Abrasive wheels, safety collar for, D. B. Hyde	927,145
Acetate of lime, making, R. W. Erwin	927,135
Adding and recording machine, D. C. Gray	926,738
Air brake, A. J. Wisner	927,016
Air compressor, T. O. Perry	927,162
Air drying method and apparatus, D. Baker	926,980
Alloys, making, J. T. H. Dempster	926,972
Animal shears, W. M. Cahill	926,726
Animal trap, A. O. Kompellen	926,880
Animal trap, M. Johnson	927,149
Armature for electric machines, W. J. Bauroth	927,209
Asphalt spreading apparatus, liquid, C. A. Baldwin	927,315
Automatic carrier, S. H. Libby	926,884
Automatic multiple press, D. W. Custer	927,123
Automatic sprinkler, G. I. Rockwood	927,430
Automatically opening and closing dies, F. A. Errington	927,029

Automobile axles, combined driving and steering wheel for, S. V. Dusseau	926,929
Automobile steering gear, G. S. Hill	927,143
Automobile transmission gears, cover for, H. V. Young	926,800
Automobiles, transmission gearing for, M. L. Williams	926,797
Autopiano, W. F. Bayer	926,921
Axle box for locomotive drivers, E. Fuller	926,862
Baggage rack, W. S. Hamm	927,235
Baling press, J. R. Browning	927,402
Ball cups, making, A. G. Anderson	927,391
Ballot box, Sullivan & Black	927,311
Ballot box, A. Page	926,779
Bearing, ball, E. Sachs	926,771
Bearing casings, detachable lining for roller, C. I. Shirley	926,966
Bearing, roller, J. E. Parrish	927,160
Bearing yoke driven by shaft, roller, Steenstrup & Lockwood	926,967
Bed, W. H. Cling	926,854
Bed attachment, D. A. Carson	926,849
Bed, swinging, W. P. Elliott, Jr.	927,133
Bed shifter, F. A. Carlton	927,222
Billiard cue, J. Kalmanovits	927,150
Blinder, loose leaf, M. M. Smick	926,901
Blanket grip, C. Ross, Jr.	927,286
Blanks, cutting, E. S. Stiles	927,293
Bleaching, F. Fuhrmann	927,457
Bleaching and preparing straw from the Southern palm, E. Pickett	926,765
Blinds, mechanism for operating Venetian, F. C. Thompson	926,911
Block signal system, A. G. Davis	927,404
Boiler fue, J. M. Crozier	927,329
Boiler fue cleaner, W. J. Bradley	926,722
Bookcase, W. W. Points	927,979
Boot and shoe, T. C. Young	927,017
Boot cleaner, E. G. Killebrue	926,749
Boote, nursing, R. A. Van Cleave	927,013
Bottle opener, J. Hough	926,807
Bottles, jars, and the like, stoppering, M. Quillot	926,895
Bottles with aerated waters, machine for filling, W. J. & J. Forrester	927,228
Bowl or tureen, O. A. Boehm	927,102
Brake, W. S. Adams	926,920
Brake shoes, forming steel backs for, H. Jones	926,875
Branding appliance for heating adjustable cattle, W. G. Landells	926,881
Brick drying rack, E. H. Callaway	926,924
Broom hanger, J. H. Ashmead	927,208
Brush bridle, B. C. Gindorf	927,232
Buckle, baling tie, C. H. Heath	927,044
Buckle, belt, J. Hough	926,808
Buffing machine, J. F. Gail	927,036
Building block and wall constructed thereof, J. Rebaut	926,767
Building construction, J. D. O'Neill	927,273
Building material, J. Schirra	926,773
Bunching and counting machine, H. Smithwick	926,904
Burglar alarm, J. B. Nash	926,817
Butter server, O. W. Moberg	927,158
Cabinet, A. H. Klug	926,946
Cable grip, J. C. Dawson	926,926
Cable hanger, J. E. Felock	927,032
Cable joint, self soldering, W. Reid	927,166
Cable terminal, electric, C. W. Davis	926,857
Calculating machine, A. O. Cornelison	927,452
Calendar, H. B. Young	926,799
Calendar, pad and stand, memorandum, W. M. Chamberlin, Jr.	926,853
Camera, photographic, Vogt & Dietz	926,912
Cameras, magazine plate holder for, E. L. C. Morse	927,063
Can heading machine, multiple, Adriance & Calleson	927,310
Candy articles, making hollow, J. F. Sigrist	927,435
Car bolster, J. A. Lamont	926,752
Car coupling, R. D. Gallagher, Jr.	927,138
Car coupling, C. Dohs	927,334
Car coupling, A. Moritz	927,423
Car coupling, H. C. Crigger	927,453
Car door, A. A. Davis	927,332
Car door, grain, Douglas & Robinson	927,335
Car emergency draft gear attachment, railway, G. H. Gilman	926,733
Car fender, street, V. Allegra	927,441
Car stanchion, W. P. Scofield	927,288
Car steel underframe, railway, Robbins & Shrip	926,897
Car, tram, P. Kavanagh	926,810
Carburetor, A. C. Bennett	927,211
Carburetor, J. A. Carlson	926,848
Card counting and stacking machine, Sergeant & Peebles	927,080
Carding engine and like machine, W. L. Holland	927,242
Cards, playing, S. A. Cohen	927,119
Case or box, F. J. Kremetz	927,250
Casein, machine for grinding green, L. Axtell	926,801
Cash and package carrier propelling mechanism, L. B. Bethards	927,212
Caster, B. C. Mathes	927,061
Caster track, bed, P. R. Chabassol	927,113
Centrifugal separator, J. A. B. Dominguez	926,859
Chair, L. F. Doering	926,858
Chimney cow, J. T. Piffitt	927,072
Churn, bath, J. G. Oliver	926,761
Churn, Neal & Gillette	926,760
Churn, O. G. Klein	927,358
Chute cart or wagon, A. Hartl	926,983
Cigarette manufacturing apparatus, O. Wartmann	927,196
Cleansing machine, F. W. & G. L. Reed	927,165
Cloth cutting machine, adjustable presser foot, H. A. Meyer	926,815
Clothes drier, J. D. Leen	926,813
Clothes drier, W. W. Sauber	927,172
Clothes rack, W. L. Smalley	927,082
Clothes wringer swinging support, Ramby & Reichard	927,270
Clutch, pneumatic, J. C. Garrett	927,229
Coal picking table, J. E. Jones	927,412
Coat hanger attachment, N. E. Weigle	926,794
Cock for gas ranges, gas, H. G. Burrows	926,922
Coll, C. Schrader	926,964
Collar, B. S. Ellis	927,134
Collar, C. I. Mandel	927,257
Column for buildings and other structures, E. V. Johnson	926,747
Compressed air engine, E. V. Nordberg	926,816
Concrete beam, reinforced, C. A. P. Turner	927,194
Concrete bucket, W. D. Lockwood	926,886
Concrete mixer, W. D. Clough et al.	927,117
Concrete wall, P. H. Bosworth	927,215
Condenser, H. A. Hogel	926,943
Condenser, A. Kuylenstjerna	927,251
Condensing fumes, H. A. Hogel	927,241
Conduit system, third rail, P. M. Reynolds	927,428
Confectionery holder, E. J. Adams	927,396
Control apparatus, G. H. Hill	927,465
Convertible chair, E. T. Marsh	926,992
Conveyers, deflector for gravity, M. C. Schwab	927,176
Cooking vessel extensible support, J. Wahl	927,300
Cork extractor, G. B. Argo	926,839
Corkscrew, R. De Bersaques	927,127
Corn, machine for separating silk from green, H. H. Ulery	927,086
Cotton chopper, C. E. Delano	927,128
Cotton picker, M. B. Coe	927,118
Cotton picker and cleaner, Int. J. L. Hart	927,350
Counter molding machine, W. J. Young	927,204
Counter, recording, A. P. Phillips	926,763
Cover for closing disks, machine for making, F. L. Nichols	927,002
Crate, knockdown shipping, W. English	926,931
Crate, shipping, D. J. Harding	926,941
Cream separator, W. Kolvig	927,360
Crusher, M. G. Bunnell	926,725
Cultivator shield, corn, F. G. Timm	927,296
Cupboard and bed combined, O. Knutson	926,988
Current indicator or detector, C. D. Babcock	927,314
Current motor, alternating, E. F. W. Alexander	927,398
Currents, rotary converter for direct, L. A. Hawkins	927,142
Curtain pole, A. C. Butcher	927,109
Curtain rod, A. T. Howland	926,945
Cushion, E. B. Ordway	926,822
Cuspidor, F. E. Pellton	927,138
Cuspidor cover, L. E. & J. B. Wilson	927,307
Cutter, E. W. Jones	927,247
Cutter head, O. L. Siscoe	927,436
Cycle motor, G. M. Hoenecker	926,745
Dating and delivering apparatus, ticket, E. W. Bell	927,020

Dental hammer, automatic, R. P. Lyle	927,420
Dental instrument tray, J. Brun	926,877
Derrick, sectional, W. E. Garmony	926,925
Desiccating apparatus, J. Roel	927,109
Developing apparatus, daylight, J. W. Meek	927,155
Diaper fastener, infant's, W. M. Conrad	927,120
Dictograph, W. F. H. Germer	927,230
Die plate, multiple, W. R. Gwin	927,406
Dish washing machine, F. J. Holley	926,744
Disinfectant apparatus, F. D. Raforth	926,961
Disinfectant holder, P. Duenwald	927,132
Display cabinet, seed, Jobs & Snow	926,809
Display rack, knife, C. P. Catlin	926,852
Door hanger, G. W. Stuyvenon	926,778
Door hanger, sliding, J. W. Ohl	927,272
Doubling and twisting machines, stop motion device for, F. W. Rochelle	927,285
Dough mixer, pie and biscuit, E. P. Violette	927,387
Draft gear, A. L. Stanford	927,382
Draft rigging, J. J. Dippel	927,333
Drain or sewer pipe, W. L. Jackson	927,353
Drier. See Clothes drier.	
Drill socket, H. E. Bradley	926,845
Driving mechanism, foot power, J. F. Wilkinson	927,201
Drum, heating, W. S. Keyser	927,356
Dumping elevator, E. B. Symons	926,909
Dust pan, W. Devol	926,927
Dyeing, bleaching, etc. apparatus for, A. W. Thompson	926,782
Electric contacts, device for cleaning or truing, J. A. J. Haslop	927,042
Electric heater, K. Schluter	927,173
Electric isolation system, N. C. McClure	927,375
Electric lock, T. C. Nixon	926,890
Electric machine, dynamo, L. A. Pape	927,274
Electric machine, dynamo, B. A. Behrend	927,318
Electric protection system, G. U. Carpenter	927,111
Electric voice circuits, connection block for, Swallow & McCoy	927,384
Electrical conductor junction box, J. F. Burns	927,218
Electrical selector, E. A. Faller	927,455
Electrical switch, R. H. Manson	926,951
Elevator door, counterbalancing, A. Toif	927,012
Elevator safety device, mine, J. K. Williams	927,440
Engine, C. Tuckfield	927,297
Engine muffler, explosive, G. A. Jackson	927,246
Engine sparking mechanism, explosive, G. German	927,346
Engine, air, for compressed air, Shonnard & Dieter	927,434
Envelop, church offering, J. H. Earle	927,339
Envelop, safety, J. W. Carr	927,112
Everer bar, Whipple & Johnson	926,917
Excavator, multiple, C. C. Jacobs	926,746
Expansion bolt, H. W. Mower	927,064
Explosion engine, J. & F. O. Peterson	926,892
Explosive engine, L. Petterson	927,004
Eyeglasses, L. F. Adt	926,728
Eyeballing machine, R. B. Smith	926,935
Eyeballing machine, W. B. Lautenschlager	927,948
Fan blower, D. J. Bemiller	927,310
Fare collector, J. H. Coleman	927,451
Fastening device, F. H. Richards	926,768
Faucet, safety, R. P. Wilton	927,308
Feed bag, W. J. Rayburn	927,073
Feed bag, D. L. Toland	927,193
Feed motion device, F. J. Waters	926,915
Ferrules or rings, die for forming plastic compound, E. Miltner	927,421
Fertilizer dropper and planter, L. B. Thomas	927,084
File, E. Rustin	926,829
File cabinet, L. S. Morris	927,559
File, card, S. J. Walton	927,303
Finishing nail, J. J. Simon	927,291
Fire apparatus, device for raising and lowering, C. M. Dean	927,126
Firearm, N. Pieper	927,070
Firearm, L. L. Hepburn	927,464
Fire bucket, D. B. McLaughlin	926,998
Fire door, T. E. Collins	926,978
Fire escape, J. Krasmer	927,056
Fire escape, W. H. Jay	927,148
Fireplace, C. L. Taylor	926,910
Fish plate, L. W. Ackerson	927,339
Flax puller, W. G. Griffin	927,039
Floor surfacing machine, A. E. Johnson	927,409
Flooring, sanitary, N. J. Clayton	927,026
Flushing tank float, J. C. Johnston	927,354
Flying machine, L. H. Brown	926,804
Flying machine, P. V. Wadleigh	926,913
Flying machine, M. B. Sellers	927,289
Furnace, T. S. Blair, Jr.	927,098
Furnace grate, steam generator, R. A. Tarr	927,295
Furnaces, stirring and conveying device for, L. Wedge	927,389
Furniture, etc., material for making articles of, H. B. Morris	926,966
Game apparatus, S. Bristow	927,106
Game apparatus, card, B. A. Staley	927,183
Garbage can, I. Gluckman	926,864
Garment, G. M. Gray	927,038
Garment rack, folding, A. May	927,369
Garment pressing machine, Schumann & Prepejchal	927,081
Garment supporter, A. C. Davis	926,856
Garment supporter, D. Wertz	926,916
Garment supporter, J. H. Bryant	927,323
Gas fixture, self closing, C. Schmitt	926,774
Gas from wood, manufacturing, Loomis & Pettibone	927,418
Gas generator, McDonough & Conway	926,889
Gas generator, acetylene, A. J. R. Marjehoff	926,952
Gas, manufacture of producer, Crossley & Rigby	926,729
Gate, I. D. Cady	927,221
Gear wheels according to pattern, machine for producing, H. Lehman	926,989
Gearing, A. N. Adams	926,919
Gearing, T. M. Van Swieten	927,885
Glass clamp plate, L. Bartelstone	927,092
Glass rinser, H. Blum	927,320
Glassware to leers, device for transferring, L. J. Robb	927,168
Gluing machine, loose wrap, Cohn & Krouhelmer	927,224
Go-carts, foot rest for, A. J. Adams	927,089
Governor, vacuum, G. H. Beebe	927,449
Grader drag, adjustable road, G. W. Pointer	927,071
Grain separating machine, J. B. Cornwall	927,328