

RECENTLY PATENTED INVENTIONS. Electrical Devices.

ELECTROMAGNETIC SOUNDING APPARATUS.—W. F. SEIDEL and E. SASSENHOFF, Elkhart, Ind. The invention relates to apparatus capable of general use but of peculiar service upon automobiles, motor-boats and the like in which it is desirable to sound signals at will. It may be operated by direct or alternating currents, and employed as a horn or whistle, and operated by hand or foot. It is easily regulated and admits of a variety of uses.

Of General Interest.

MAILABLE BLOTTER.—G. W. SPEYER, Philadelphia, Pa. The object of the invention is to provide an article, one portion of which comprises a blotter and the remaining portion adapted to carry any desired amount of advertising matter and also the name and address of the person to whom the article is mailed. On arriving at its destination, the advertising and address sections may be torn off, leaving the blotter perfectly clean and fresh for use.

PICTURE-HANGER.—H. N. PATRICK and G. T. GLEESBY, Sheffield, Ala. In this instance the invention is an improved means for hanging or suspending pictures from walls. It provides for easily and quickly raising or lowering as required, and for locking at any required height. The rim of a disk is bent outwardly to provide increased space for the cord when wound on the pulley.

FENCE-POST.—A. M. WEATHERLY, Sr., Rome, Ga. The object of the invention is the provision of a double metal post which may be manufactured economically and is rigid and durable in use. It is adapted for use of boards, pickets, or wires comprising the body sections or portion of a fence, and may be used in line as a part of the fence proper, or as a corner therefor.

STOVEPIPE.—J. MCGHIE and B. BLOOD, Spokane, Wash. The invention is an improvement in stove and other pipe-joints and has for an object to provide a simple construction which can be easily made and which will effectually and safely couple the pipe sections so they may be conveniently detached. In practice the sections may be made with projecting hook-like tongues at one end and the beads at the other end for convenience in fitting the sections together.

DINNER-BUCKET.—J. J. BURNS, Cumberland, Md. In this patent the invention is an improvement in dinner buckets intended especially for working men and others who may desire to take dinner with them, and for heating the different articles. The bucket will be found useful by hotels and restaurants for sending out hot dinners.

DEVICE FOR TEACHING PENMANSHIP.—L. G. MCCONACHIE, Madison, Wis. In the ordinary school copybook used in teaching penmanship each page contains an engraved headline or model and a dozen or more lines underneath upon which the pupil endeavors to reproduce the copy. The inventor's object is to overcome the above objections by providing a simple and compact article of novel form.

MEASURING DEVICE.—G. F. CLARK, Tower, Minn. The object of this improvement is to provide in one compact implement, convenient for use, a board or log rule of suitable length, a short scale to take the thickness of plank or boards, and a pencil holder and a chalk holder for respectively tallying the material as measured, and for marking the area or cubical contents of boards or logs, respectively, as they are measured.

PHOTOGRAPHER'S TRIMMING-WHEEL.—L. F. SMITH, El Paso, Ill. This improvement relates to trimming wheels, that is, a device having rotary cutter, as employed by photographers for cutting photograph prints, and similar material, into circular, oval or other shape, and at the same time when desired, leave a marginal border around the picture or print, of contrasting color or tint.

Machines and Mechanical Devices.

WOVEN FABRIC.—J. K. DALKRANIAN, New York, N. Y. The object of the invention is to provide certain improvements in selvages for fabrics, notably woven pile fabrics of the oriental rug type. The invention consists essentially in a selvage having a selvage ground warp, and a selvage binding warp interwoven transversely with the said selvage ground warp and interlooped with the binding weft of the woven fabric.

ENVELOP-FORMING MACHINE.—W. L. BARSTOW, Vicksburg, Miss. The result aimed at in this invention is the production of a machine which is adapted to be used for the purpose of forming envelopes about a circular or letter which is to be sent by mail; the arrangement being such that the envelop will be formed and sealed at substantially the same operation. It will be useful in large offices where a great quantity of mail is sent out.

SHAFT-KEY.—W. E. LAUDERBAUGH, Utica, Ohio. The invention consists in providing the main body portion of the key with a reverse taper, that is, instead of tapering from the head end of the key to the point end, tapers back from the point toward the end. A wedge is placed upon the tapered side of the main body and means are provided for holding the key and wedge in a predetermined

position. The key, when assembled for use, is slightly larger toward the head end so that it can be driven tight in its seat.

FEEDING-HOPPER.—A. JOHNSON, New York, N. Y. The improvement pertains to hoppers for feeding metal crowns or caps for bottles or other articles having inclined walls of gradually increasing diameter, to an assembling table. The object being to provide a device so constructed as to direct and deliver the articles open side, or right side upward, for receiving cork disks therein, thus obviating the necessity of manually turning the crowns, therefore saving considerable time in the assembling of parts.

Prime Movers and Their Accessories.

FEED-WATER HEATER.—M. L. CABLE, Greensboro, N. C. The invention relates to water heating systems designed for use in connection with the feed water for boilers, radiating systems and the like, in which exhaust or waste steam from an engine or the like is utilized for the purpose of heating water, the steam and water being combined in a heater before being supplied to the feed pipe connected to the boiler or other device. An object is to get the greatest possible temperature in the feed water with the least amount of steam.

WATER-PURIFYING APPARATUS FOR FEED-WATER IN STEAM-BOILERS.—J. JØRGENSEN, Baldersgade 8, Copenhagen, Denmark. In the present patent the invention is an improvement in purifying apparatus for feed water, and relates especially to that class of purifying apparatus wherein the feed water is mixed with lime water contained in a tank or vessel, the lime water being supplied to the feed water at definite intervals.

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.

FIGHTING SHIPS. Founded and edited by Fred T. Jane. London: Published for the Naval Syndicate by Sampson Low, Marston & Co., Ltd., 1907. Price, \$8.50. Oblong 4to; pp. 495.

The 1907 edition of Jane's "Fighting Ships" is marked by the accuracy and completeness which have given to this annual its widespread popularity, and there are certain new features added which greatly enhance its value. The principal addition is the treatment of merchant ships, photographs of which have now been given a national arrangement, while at the end of each of the principal navies are placed all liners which are likely to have some war use as scouts, etc., or which are subsidized. Silhouettes of these merchant ships have also been added. Even greater in value is an addition at the end of the book which includes in a specific scheme all merchant ships that are at all removed from the "tramp" category. The first part of the volume consists of an illustrated description of each navy of the world, over 400 pages being devoted to this feature alone. The information regarding each navy comprises, first, diagrams of the various flags; maps of the leading shipyards with tables of the docks, building slips, etc.; a list of private docks and yards, giving their sizes and capacities; a complete set of identification and signal silhouettes of the ships of the navy, from battleships down to torpedo boats, followed by excellent silhouettes of the leading liners; tables of the types of torpedoes used, giving their principal dimensions, speeds, etc.; and tables giving full details of the naval guns employed. This is followed by a tabular description of each ship in the particular navy treated, containing all details of guns, armor, size and speed of ships, etc. With this is a side elevation and plan, showing by shading the distribution and thickness of the armor, and also, where possible, a half-tone engraving of the ship is presented. Part II. contains a series of chapters on leading topics of interest affecting naval development, written by well-known experts on the various questions considered. There are tables giving a list of the warships of the world that are fitted with turbine engines; others showing ships carrying heavy armor-piercing guns; ships with waterline belts, and the ships with waterline belts safe against various types of guns outside of 7,000-yard range. This annual has become the standard work among naval authorities; and it will prove a source of continual interest and information to that increasing circle of civilians who follow closely the progress of naval development.

CLINTON WIRE LATH. Descriptions, Specifications, Applications. Clinton, Mass.: The Clinton Wire Cloth Company. 8vo.; cloth; 50 pages.

Although an advertising booklet published by the Clinton Wire Cloth Company, of Clinton, Mass., it contains a great deal of valuable information as to the use and possibilities of this very efficient building material.

PITMAN'S DICTIONARY OF COMMERCIAL CORRESPONDENCE. In English, French, Spanish, and Italian. London: Isaac Pitman & Sons, Ltd., 1907. Cloth; 12mo.; 502 pages. Price, \$2.25.

A very excellent and serviceable work for those having commercial relations with foreign countries.

PRECISION GRINDING. By H. Darbyshire. New York: Hill Publishing Company, 162 6x9 pages; 39 illustrations; 3 tables. Price, \$2.

The author of this book, who is a well known contributor to the columns of the American Machinist on grinding and kindred subjects, sets forth in this volume some valuable information which should be of service to users of grinding machines in general. He deals briefly and to the point with the advantages of grinding, describes various classes of grinding wheels and methods of making and grading them, discusses speeds and feeds of wheel and work and the effect on output and quality of finish, of coarse and fine grits, hard and soft wheels, broad and fine side feeds, etc. One chapter is devoted to plain cylindrical grinding and another to plane surface grinding in which the use of the magnetic chuck is taken up along with other matters pertaining to this line of operations. Some causes of defective work such as temperature, improper methods of chucking, poorly fitted arbors, etc., are treated in a way that should make this section of the book especially useful to grinding-machine operators. The last two chapters of the book are devoted to laps and lapping, and measuring tools and gages, both of which subjects are of importance in connection with the finishing of precision work.

INDEX OF INVENTIONS

For which Letters Patent of the United States were Issued for the Week Ending August 20, 1907.

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

Table listing inventions with patent numbers and names of inventors. Includes items like Acid, purification of arsenical sulfuric, J. Raschen et al. 863,940; Air and gas mixing apparatus, air-supplying and pressure regulating means for, E. A. Hall 863,602; Air brake apparatus, Nelson & Brown 863,746; Air brake, combined automatic and straight, E. A. Wright 863,823; Air brake coupling, Nelson & Brown 863,744; Air brake system and engineer's valve, automatic, F. B. Corey 863,785; Air purifying apparatus, Clements & Hostler 864,078; Alkyl ethers of aromatic bodies, making, M. Engelmann 863,792; Alloy or compound, metallic, W. Ruebel 864,140; Alloys, manufacture of, W. Ruebel 864,139; Alluvial deposits, apparatus for recovering values from, O. T. Crosby 863,700; Amusement apparatus, O. Roberts 864,033; Animal trap, A. M. Grubbs 864,142; Automatic coupling, J. C. Sands 863,108; Automatic lubricator, A. Farley 863,707; Automobile wheel, A. Heilmann 863,848; Automobile, compressed air cushion mechanism for, T. F. Scott 864,141; Bag bottoming machine, F. J. Kuerzi 864,098; Bag-holding device, C. F. Asplund 863,967; Balance weight, C. E. Pope 863,635 to 863,638; Balcony, folding, G. Regondi 863,877; Baling press, W. M. Fitzwater 863,975; Barrel supporting device, liquor, C. G. Schenck 863,659; Barrels and similar packages, apparatus for trussing, Knorr & Stankovich 863,925; Bath apparatus, vapor, O. D. Waltz 864,062; Bats, machine for making, W. R. Pelton 863,753; Bearing, roller, J. Halmas 863,986; Bed for sleeping cars, C. Herendeau 863,921; Beds for railway sleeping coaches, construction of, C. Herendeau 864,095; Beet root cutting machine, J. Schulte 864,109; Bell ringing motor, C. Simon 864,038; Bicycle, motor, S. Panelli 863,630; Binder, loose leaf, W. M. Wheelon 863,888; Bit brace, A. Larsen 863,927; Block signaling apparatus, W. E. Foster 863,913; Blow gun, B. Pike 863,753; Blower, positive pressure, F. P. Boland 863,822; Boat, combined ice and water, J. A. Norton 863,747; Boiler, G. C. Andrews 863,829; Boiler furnace, smoke consuming, H. H. Freeman 863,597; Boiler tube cleaner, J. & A. Niclausse 863,628; Bolt. See Safe bolt. Book leaf, P. Hansen 863,988; Books, etc., baffle for the locks of the adjustable backs of loose-leaf, J. S. McDonald 864,136; Bottle, R. H. McCaughey 864,025; Bottle, non-refillable, M. Perez 863,631; Bottle, non-refillable, J. R. Hall 863,919; Bottle, non-refillable, E. Hoerichs 864,130; Bottling machine, liquid, A. Schneider 863,884; Bowling alley, C. Lufsky 863,732; Box covering machine, J. G. Beattie et al. 863,579; Box fastener, Helmer & Stute 863,920; Brake apparatus, load, H. T. Herr 863,849; Brake mechanism for railway and other vehicles, H. E. Brown 864,120; Bridge ring, W. J. Hiss, Jr. 863,992; Brush, polishing, W. Dixon 863,790; Brush, tooth, A. Brams 864,054; Buckle, skirt and waist, S. W. Phelps 864,133; Bung, C. J. Bender 863,831; Butter preparatively to cutting it into individual portions, device for molding, L. M. Medbury 863,621; Butter separator, pneumatic, L. Lillard 863,859; Butter wiring apparatus, C. Sanderson 863,881; Button making machine, E. G. Denniston 863,702; Cabinet, H. G. Gerner 863,981; Cabinet, medicine, J. Haller 863,985; Can cleaning, sterilizing, and drying apparatus, milk, C. H. Hood 864,131; Can opener, G. M. Ross 863,652; Can opener, C. L. Tisdale 863,673; Car and self-propelled sledge, convertible motor, F. Pfeifer 863,633; Car coupling, J. W. Malphurs 864,098; Car door, C. W. Taylor 864,042; Car, dumping, H. W. Dougherty 863,703; Car, metallic, J. L. Levy 863,615; Car, mine, Edmondson & Ferguson 863,971; Car mover, G. Holtger 863,694; Car, railway, H. Cohen 863,904; Car roofs, means for conducting water from, A. H. Funke 863,709; Car safety appliance, railway, J. T. Andrews 864,058; Car step, extension, J. H. Cameron 863,699; Car underframe, A. Becker 863,580; Car underframe, H. M. Pfleger 863,871; Car wheel lubricator, E. L. Knight 864,004; Car wheel oil chamber cover, H. W. Landrock 863,800; Cars, hanger strap or handhold for, J. F. Newton, Jr. 863,935; Carbureter, H. B. Maxwell 863,739; Carbureter, E. J. Selley 864,037; Carbureter, F. W. Sickles 864,111; Carpet sweeper, stair, J. W. Ellis 864,125; Carpet sweeper, G. Friedman 863,598; Casting ingots, A. J. Lustig 863,733

Table listing inventions with patent numbers and names of inventors. Includes items like Cement and other products, manufacture of, A. P. Bjerregaard 864,068; Cement in rotary kilns, burning, B. H. Thwaite 864,046; Center, L. Evans 863,909; Chain, expandible, S. B. W. Covell 863,856; Channel cutter, J. S. Ramlose 863,859; Chaplet, F. Vollmer 863,816; Charging device, T. F. & J. G. Witherbee 864,053; Cheese cutter, long horn, W. L. Bridges 864,119; Churn, O. G. Guss 863,713; Cigar moistener, J. K. Williams 863,769; Cigar wrapper cutter, L. W. Palmer 864,105; Circuit closer, automatic, Pearson & Adams 864,027; Clamp. See Door clamp. Cleaning rod, thread tip, A. M. Sheakley 863,762; Clock, J. C. Burke 864,075; Clock case, C. E. Sanford 863,882; Clockworks, spring attaching means for, J. S. Kirstein 863,725; Cloth cutting machine, electrical, E. M. Waring 863,956; Cloth, manufacture of, T. N. Burbury 863,780; Clothes drainer, J. C. 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