

RECENTLY PATENTED INVENTIONS. Pertaining to Apparel.

ARM-SCYE BUST-FORM.—C. H. SCOTT, New York, N. Y. The principal objects of the invention are to overcome various objections by providing a form light and comfortable and produce an attractive and symmetrical figure besides providing for the better fitting of outer garments; also, to provide for the escape of heat or air confined between the pad and the body. The scye is so constructed as to full in the deficiency of an undeveloped bust from the shoulder downward in front to the part of the scye underneath the arm.

LADY'S COMB.—W. J. WATSON, Shawnee, Oklahoma Ter. The invention refers to ladies' combs, and particularly to the side combs and back combs which are worn in the hair. It is also applicable to hair-pins. The object of the invention is to produce a comb of this class which is simple in construction and provided with means for preventing its becoming accidentally displaced.

Electrical Devices.

ELECTRICAL APPARATUS FOR SETTING THE POINTS AND SIGNALS ON RAILWAYS.—L. KOTTMAR and R. ZWACK, 86 Lillenstrasse, Munich, Germany. This improvement relates to an apparatus for setting the points and signals on railways by means of electric actuating devices in such a manner that these actuating devices act upon the separate points and signals in succession, so that when an electric switch belonging to a line is closed each actuating device after being properly set closes the circuit of the next. The whole or a portion of the actuating devices belonging to the track are thus automatically set.

Of Interest to Farmers.

PLATFORM LEVELING DEVICE FOR HARVESTERS.—E. R. GORDON and D. R. THROOP, Harrington, Wash. In this instance the invention pertains to a new means for simultaneously raising and lowering the main wheels on the opposite side of a harvester, reaper, or other similar vehicle in order that the body of the vehicle may be maintained in a level position, irrespective of the inclination on a hill upon which the harvester may be used.

Of General Interest.

FILTER.—E. BURT, El Oro, Estado de Mexico, Mexico. In this patent the inventor relates to high-pressure filters for precious-metal ore slimes, as gold, silver, etc., having among other objects the production of an apparatus of this character of large capacity capable of filtering the slimes expeditiously and at a comparatively low cost.

GUN CLEANER.—C. T. FORBES, Fresno, Cal. The invention has to do more particularly with a form of handle for attachment to the outer or rear end of the cleaner-rod; and the object is to provide a handle adapted to permit free turning or rotation of the rod and the fixedly-attached swab at its inner end with the handle held against turning action.

SCRAPER AND REGULATOR.—J. H. YOUNG and G. B. YOUNG, El Paso, Texas. The invention is an improvement for use in making bricks of ice-cream of different kinds of layers of cream in a suitable mold. The ice-cream scraper and regulator comprises a plate having at its edges a projecting rectangular tongue or tongues and a triangular tongue.

Household Utilities.

COMBINED LOUNGE AND FOLDING BED WITH A CANOPY.—P. P. LAGRANGE, New Orleans, La. The object in this case is to provide a device which will comprise the necessary mechanism to adapt it to be used as a lounge when folded, and also to be easily opened into a complete bed with a canopy, which will be as complete, attractive, and comfortable as the common form of bed which is not constructed to perform any other function.

COMBINED SHAVING MUG AND BRUSH.—G. A. RONEY, Grand Forks, N. D. The invention consists of a cup or mug having a displaceable handle adapting it to normally lie in the mug when not in use and a cap or top to close the mug to keep it free of dust, dirt, or other foreign material. The top carries a brush having an extensible handle, which is also inclosed when the mug and top are in assembled relation.

WATER-STILL.—O. A. NENNINGER, El Paso, Texas. Steam passes into a boiler-pan, thence upwardly into a condensing-chamber, said steam being condensed flows back into the distilled-water pan. Circulation of water in the boiler-pan is maintained, and air to aerate distilled water is admitted, the steam drawing the air into the chamber. Water in the cylinder when heated may be drawn for house uses. Warm water is supplied the boiler-pan from the cylinder. When hot water is drawn from the cylinder a valve opens and cold water from the main forces out the hot. The valve opens likewise when warm water passes from cylinder to boiler-pan. Means provide against entrance of foul air in the chamber and against escape of steam.

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.



HINTS TO CORRESPONDENTS.

Names and Address must accompany all letters or no attention will be paid thereto. This is for our information and not for publication. References to former articles or answers should give date of paper and page or number of question. Inquiries not answered in reasonable time should be repeated; correspondents will bear in mind that some answers require not a little research, and, though we endeavor to reply to all either by letter or in this department, each must take his turn. Buyers wishing to purchase any article not advertised in our columns will be furnished with addresses of houses manufacturing or carrying the same. Special Written Information on matters of personal rather than general interest cannot be expected without remuneration. Scientific American Supplements referred to may be had at the office. Price 10 cents each. Books referred to promptly supplied on receipt of price. Minerals sent for examination should be distinctly marked or labeled.

(10380) P. M. C. says: We desire some cheap adhesive substance that can be used in manufacture of briquettes to contain charcoal and sawdust. A. Coal tar and molasses are the substances used for briquetting, and are both quite cheap.

(10381) B. D. wishes a receipt for a glue that will satisfactorily glue celluloid to wood, such as is used in making draughtsman's tie squares of celluloid and wood. A. A very simple formula recommended for this purpose is to heat glue to boiling, and stir in gradually wood ashes until the consistency is similar to a thick varnish. Use hot.

(10382) C. C. A. says: I have a gas engine cylinder that leaks water through fine holes in the cylinder wall near a boss, the holes evidently being caused by the "draw" of the iron in cooling. Can you suggest any method of dosing these pores solidly enough to stand the heat and pressure of explosion? A. The application of a saturated solution of sal ammoniac in water to the spongy surface will soon rust up the leaky places.

INDEX OF INVENTIONS

For which Letters Patent of the United States were Issued for the Week Ending February 5, 1907.

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

Table listing inventions and their patent numbers, including items like 'Abrading surface to metal', 'Acid derivative', 'Advertising card', etc.

Table listing inventions and their patent numbers, including items like 'Brush or mop holder', 'Brushes, making', 'Buckle', 'Building block molding machine', etc.

Let Us Arrange a Month's Test of "Prest-O-Lite" for Your Automobile



Simply write us a postcard... When your tank is empty we exchange it for a full one in one-quarter of the time it takes to fill out a coked-up tank...

The Prest-O-Lite Co. Dept. 78, 18-24 So. East St., Indianapolis, Ind.

Concrete Blocks WE HAVE a very Beautiful Album containing over Sixty views of Houses, Churches, Factories, Plants, etc., taken from different parts of the country.

DURYEA AUTOS Have large wheels, long springs. This means comfort. They are right for rough roads. They take hills, sand, snow and mud on high gear.

ELECTRICAL MATERIAL At Less Than Wholesale Prices Write to-day, mentioning the Scientific American, and we will send you FREE, by return mail, our SPECIAL PRICE LIST...

High Grade Brass Manufacturers BRASS CASTINGS of any composition and for any class of service Made to Order. Estimates furnished on brass, bronze, copper or aluminum specialty castings for all requirements.

Pony Rigs for Boys and Girls Nothing else could give your children so much pleasure. Our Pony Rigs are light, sturdy, roomy, safe, comfortable and practical.

60 YEARS' EXPERIENCE PATENTS TRADE MARKS DESIGNS COPYRIGHTS & C. Anyone sending a sketch and description may quickly ascertain our opinion free whether an invention is probably patentable.

- Lead pigments, Picher Lead Co. 60,296, 60,297
Leather for boots and shoes, saddlery, and bookbinding, L. Agoos 60,360
Leather for shoes, upper, H. Loewenstein 60,345
Limeum and salve, A. W. Lowrie 60,415

- LABELS "Arbiter Hand Plated Extra Superfine," for writing papers, White & Wyckoff Manufacturing Co. 13,342
PRINTS "Cream of Wheat is Good for You," for a breakfast food, Cream of Wheat Co. 1,903

Columbia Motor Cars for 1907 Mark XLIX ARE constructed throughout in a manner that for uniformity of excellence is unequalled in any other motor cars, and they also contain certain exclusive features which alone so add to their worth as to make them preferable to all others.

Mullins Steel Pleasure Boats Can't Sink Easiest to Row—Absolutely Safe Made of steel, with air chambers in each end like a life boat. Can't leak, crack, dry out or sink last a lifetime.

LET US BE YOUR FACTORY WRITE FOR ESTIMATE ON ANY ARTICLE YOU WANT MANUFACTURED STAMPINGS, MODELS, EXPER. WORK WRITE FOR FREE BOOKLET THE GLOBE MACHINE & STAMPING CO. 970 Hamilton St., Cleveland, O.

MODELS & EXPERIMENTAL WORK. Inventions developed. Special Machinery. E. V. BAILLARD, 24 Frankfort Street, New York.

HARVARD UNIVERSITY The Graduate School of Applied Science and The Lawrence Scientific School Offer graduate and undergraduate courses in Civil, Mechanical, Electrical, Mining and Metallurgical Engineering, Architecture, Landscape Architecture, Forestry, Physics, Chemistry, Biology, and Geology.

LEARN ASTROLOGY There is Big Money in it for Experts. It is a Science that you can prove to the Doubting Ones. Write to-day for Free Book. H. M. POST, 6928 Stewart Avenue, Chicago

ROTARY PUMPS AND ENGINES. Their Origin and Development.—An important series of papers giving a historical resume of the rotary pump and engine from 1688 and illustrated with clear drawings showing the construction of various forms of pumps and engines. 35 illustrations. Contained in SUPPLEMENTS 1109, 1110, 1111. Price 10 cents each. For sale by Munn & Co. and all newsdealers.

TELESCOPES W.D. MOGEY, BAYONNE CITY, N.J. AGENTS WANTED To sell the Dr. Haux famous "Perfect Vision" spectacles—finest on earth. State present occupation. Dr. Haux Spectacle Co., D. pt. 129, St. Louis.

Frictionless Metal A rabbit that is all the name implies. Satisfied customers are the best argument. You can reduce expenses in the plant by reducing long expensive steps and tearing down of machinery to a minimum by the use of Frictionless Metal. Frictionless Metal Co., Chestnut St., Chattanooga, Tenn.

Telegraphy Circular free. Wonderful automatic teacher. 5 styles \$2 ap. CHRYSEGRAPH CO., Dept. 52, 89 Courtlandt St., New York.

Print Your Own Cards Circulars, books, newspaper. Press \$5. Large size \$18. Money saving maker. All easy, printed rules. Write factory for catalog, presses, type paper, cards. THE PRESS CO., Meriden, Conn.

SPARK COILS Their Construction Simply Explained Scientific American Supplement 160 describes the making of a 1 1/2-inch spark coil and condenser. Scientific American Supplement 1514 tells you how to make a coil for gas-engine ignition. Scientific American Supplement 1522 explains fully the construction of a jump spark coil and condenser for gas-engine ignition. Scientific American Supplement 1124 describes the construction of a 6-inch spark coil. Scientific American Supplement 1087 gives a full account of the making of an alternating current coil giving a 5-inch spark. Scientific American Supplement 1527 describes a 4-inch spark coil and condenser. Scientific American Supplement 1402 gives data for the construction of coils of a definite length of spark. The above-mentioned set of seven papers will be supplied for 70 cents. Any single copy will be mailed for 10 cts. MUNN & COMPANY, Publishers 361 Broadway New York