

Business and Personal.

The charge for insertion under this head is One Dollar a line for each insertion; about eight words to a line. Advertisements must be received at publication office as early as Thursday morning to appear in the following week's issue.

Marine Iron Works. Chicago. Catalogue free.
"U. S." Metal Polish. Indianapolis. Samples free.
Yankee Notions. Waterbury Button Co., Waterbury, Ct.
Pocket Folding Umbrellas. Grove & Stover, Luray, Va.
Machinery designed and constructed. Gear cutting. The Garvin Machine Co., Spring and Varick Sts., N. Y.
Ferracute Machine Co., Bridgeport, N. J., U. S. A. Full line of Presses, Dies, and other Sheet Metal Machinery.
Acetylene Gas Generators, Lamps and Cookers. Placer Gold Washers, Hoisters, Dredges, Mills. J. H. Lancaster, 95 Liberty St., N. Y.

Machinery for R. & T. contractors, mines, and quarries, for hoisting, pumping, crushing, excavating, etc., new or 2d-hand. Write for list. Willis Shaw, Chicago.

The celebrated "Hornsby-Akroyd" Patent Safety Oil Engine is built by the De La Vergne Refrigerating Machine Company. Fort of East 138th Street. New York.

The best book for electricians and beginners in electricity is "Experimental Science," by Geo. M. Hopkins. By mail, \$4. Munn & Co., publishers, 361 Broadway, N. Y.

Send for new and complete catalogue of Scientific and other Books for sale by Munn & Co., 361 Broadway, New York. Free on application.

Notes & Queries

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 This is for our information and not for publication.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 hear 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.

(7769) A. B. K. asks how emery paste or razorene is made and pressed into cakes. A. Mix fine emery intimately with fat and wax until the proper consistency is obtained in the paste, and then rub it well into the leather strap. Prepare the emery by pounding thoroughly in a mortar the coarse kind, throwing it into a large jug of water and stirring well. Immediately the large particles have sunk, pour off into a shallow plate or basin and let the water evaporate. This emery is better for polishing and other purposes than that prepared at the emery mills.

(7770) E. W. B. writes: I have a number of valuable film negatives so curled, and the gelatine so hard, that they cannot be unrolled without injury. Have tried solutions of glycerine of various strengths, but on drying they curl as bad as ever. Kindly give a remedy. A. Sometimes the roll holder film will curl till like a pipe stem, but if soaked in a five per cent solution of gelatine, and pinned on to a board, they will be found quite manageable when dry. Where there are many films to deal with, a better way is to cut strips of thin sheet lead, each the length of the films and $\frac{1}{4}$ of an inch wide. These are folded along their length, making grooves into which the edges of the films are inserted, the thumb firmly drawn from end to end, making them tight enough to hold them fast till dry. Some samples of gelatine are so contractile as to draw the film from the lead grooves, but that may be avoided by making several awl holes through both thicknesses of the lead and pinning them to the board.

NEW BOOKS, ETC.

FOREIGN PATENT AND TRADEMARK LAWS. A Comparative Study, with Tabular Statements of Essential Features of Such Laws. By Arthur P. Greeley, Assistant Commissioner of Patents. John Byrne & Company. Price \$5.

No one has made a more thorough study of foreign patent and trademark practice than Mr. Arthur P. Greeley, Assistant Commissioner of Patents, whose connection with the Commission appointed under the Act of Congress to revise the patent and trademark laws of the United States and whose progressive spirit with reference to improving the practice within the Patent Office qualifies him especially for the work in hand. The above entitled work, therefore, commands the attention of all those who are interested in patent practice, and no work has yet been published which gives, in so convenient a form and so thorough a manner, an exposition of foreign patent practice. The information to be obtained concerning foreign patent laws appears ordinarily in abstracts or in scattered notes which the attorney has made for his own use during the course of his practice. The work that we have before us represents an immense amount of labor, and the tables have been put in such a form that the most important information concerning foreign patent practice may be obtained with a minimum of effort, owing to the comprehensive system of classification employed. In the first portion of the book, the different systems of granting patents are discussed, with special chapters on the questions of novelty, subject matter of patents, who can apply for patents, etc. In these pages the author has discussed the difference between the patent practice of France and the United States, and has illustrated the working of the English patent system as well as pointed out wherein the

German patent laws resemble, in some respects, the laws of the United States, and in other respects the English system. With the laws of these four countries taken as a standard, the practice of other countries is discussed, and the resemblance of their patent laws to one or more of the systems first presented is set forth. Following this is found a set of tables where the principal countries are alphabetically arranged, with abstracts of the important features of their patent laws. These tables will be found of the greatest service to patent attorneys. The pages devoted to the trademark laws explain the differences between the laws in those countries where the property in a trademark is derived from its registration, and in those where the act of registration is merely to complete ownership, the first step to secure which was taken when the mark was first used in trade in the country. The discussion of this subject is of the greatest value. The subject of the registrable forms of marks in the different countries is also treated. Again, as in the first half of the book, which is devoted to patents, the principal features of the trademark laws are arranged in table form so that information can be easily found. In the last pages, before the index, which is very complete and adds greatly to the value of the work, will be found copies of the conventions and treaties to which the United States is a signatory. We heartily recommend this work as being of the greatest value and assistance.

INDEX OF INVENTIONS

For which Letters Patent of the United States were Issued for the Week Ending

NOVEMBER 28, 1899,

AND EACH BEARING THAT DATE.

[See note at end of list about copies of these patents.]

Abacus, J. P. Johnson.	637,964
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Alarm system and apparatus for testing same.	637,988
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Animal trap, J. Herfert.	637,783
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Barrel washing machine, A. Danner.	637,854
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Car coupling, C. J. R. R.	637,996
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Carding machine rubbing mechanism, Barber & Cromie.	638,162
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Door stop and fastener, J. D. Postle.	638,139
Dough board, E. Sargent, Jr.	638,149
Paught connection, J. D. Hubbell.	638,015
Drainage equalizer, J. W. Miller.	637,883
Dredge cutter head, A. W. Robinson.	637,831
Dredgings, method of disposing of, A. G. Rose.	638,145

Advertisements.

ORDINARY RATES.

Inside Page, each insertion, - 75 cents a line
Back Page, each insertion, - \$1.00 a line
For some classes of Advertisements, Special and Higher rates are required.

The above are charges per agate line—about eight words per line. This notice shows the width of the line, and is set in agate type. Engravings may be had advertisements at the same rate per agate line, by measurement, as the letter press. Advertisements must be received at Publication Office as early as Thursday morning to appear in the following week's issue.

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Dredgings, means for disposing of, A. G. Rose.	637,947
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Dust pan, A. J. Vroman.	637,908
Dye, black azo, G. Koerner.	638,127
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Electric heater, E. E. Gold.	638,050
Electric light and making same, incandescent, W. L. Voelker.	637,979
Electric machine, dynamo, W. B. Sayers.	638,070
Electric meter, E. S. Halsey.	638,011
Electric switch, F. A. Merrick.	638,129
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Electrical distribution system, E. B. W. Reichel.	637,828
Electrical distribution system, Wilson & Cater.	638,157
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Felt, plastic, A. Gentzsch.	637,776
Fence, flood, Waldman & Willey.	638,055
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Filter, Benjamin & Jackson.	638,167
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Fire escape, O. A. Treadway.	638,080
Fireproof partition wall, V. Venezia.	637,906
Fireproof window, Voigtmann & Pomeroy.	637,907
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Flagstaff truck, D. P. Chesebro.	638,055
Flashlight device, C. W. King.	637,800
Floor mat, C. Schmitt.	638,038
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Flower pot, adjustable, R. E. Burke.	637,763
Fluid heating and sterilizing apparatus, Waterhouse & Forbes.	638,192
Fluid pressure brake, H. O. Muller.	638,025
Fluid pressure regulating mechanism, E. H. Weatherhead.	637,800
Flushing apparatus, J. W. Berry.	638,002
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Forging, drop, W. R. Howe.	637,922
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Gas generator for stoves, O. L. Yancey.	637,953
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Gate opening device, M. E. Fassett.	637,927
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Graphophone cylinders, holder, or support for, F. B. Horton.	637,933
Grinder, sickle, A. L. Reiner.	637,946
Grinding machine, cutlery, T. J. Tellefsen.	638,204
Grinding mill, W. F. Davis.	637,957
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Grubbing machine, Bloodgood & O'Donnell.	637,859
Gun sight attachment, D. H. Darling.	638,007
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Hammer, block, T. B. Haddaway.	638,058
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Harvester sickle, C. S. Bone.	637,848
Hat and coat holder, G. W. Chester.	638,190
Hat conformator, Mayer & Altland.	638,022
Hay and stock rack, combined, S. H. Petro.	638,201
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Hinge, spring, G. W. Chandler.	637,855
Hitching device, C. Jacobs.	637,746
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Horse, A. H. Lewis.	637,919
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Ice cream freezer, J. P. Perkins.	637,980
Ice creeper, G. W. Rush.	638,098
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Jack, W. C. Reber.	637,945
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Journal box, car axle, F. Thompson.	638,077
Keyboard rail protector, L. Bernard.	638,080
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Knife or fork cleaner, A. Rantala.	637,974
Knitting machine, H. Clarke.	638,040
Knitting machine stop motion, circular, W. J. Ferris.	637,928
Label clip, T. Boville.	638,171
Lamp, acetylene, Sandebrand & Marshall.	637,824
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Lamp, electric arc, Johnson & Wunderlich.	638,125
Lamp, electric arc, G. L. Moyer.	637,886
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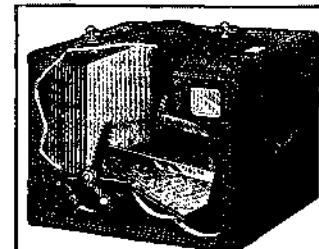
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Valve, roller reciprocating, J. Stabe	637,841
Valve, roller reciprocating, J. Stabe	637,771
Valve, roller reciprocating, J. Stabe	638,029
Valve, roller reciprocating, J. Stabe	638,139
Valve, roller reciprocating, J. Stabe	638,143
Valve, roller reciprocating, J. Stabe	637,843
Valve, roller reciprocating, J. Stabe	637,878
Valve, roller reciprocating, J. Stabe	637,825
Valve, roller reciprocating, J. Stabe	637,885
Valve, roller reciprocating, J. Stabe	637,892
Valve, roller reciprocating, J. Stabe	638,130
Valve, roller reciprocating, J. Stabe	637,855
Valve, roller reciprocating, J. Stabe	637,867
Valve, roller reciprocating, J. Stabe	637,868
Valve, roller reciprocating, J. Stabe	638,143
Valve, roller reciprocating, J. Stabe	638,146
Valve, roller reciprocating, J. Stabe	638,123
Valve, roller reciprocating, J. Stabe	637,896
Valve, roller reciprocating, J. Stabe	637,897
Valve, roller reciprocating, J. Stabe	637,898
Valve, roller reciprocating, J. Stabe	637,899
Valve, roller reciprocating, J. Stabe	638,001
Valve, roller reciprocating, J. Stabe	638,104
Valve, roller reciprocating, J. Stabe	638,137
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Valve, roller reciprocating, J. Stabe	638,200

Atomizer, W. C. Downey	31,892
Bell, George, E. D. Rockwell	31,893
Clamp band, T. W. G. Cook	31,894
Clutch member, A. F. Stenberg	31,895
Color exhibiting card, J. E. Patton, Jr.	31,896
Electromotor casing, J. Post	31,897
Escutcheon, A. E. Reed	31,898
Eye-glass guard, M. W. Kaufmann	31,899
Fans, air deflector for electric, E. W. Brown	31,900
Filter press plate, Hinken & Turney	31,901
Fork, loose, P. M. Swartz	31,902
Game board, M. L. Luchoux	31,903
Game board, A. E. Libby	31,904
Garment supporter loop, G. E. Adams	31,905
Glass receptacle, C. W. Klein	31,906
Glass receptacle, C. W. Klein	31,907
Glass receptacle, C. W. Klein	31,908
Glass receptacle, C. W. Klein	31,909
Glass receptacle, C. W. Klein	31,910
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Glass receptacle, C. W. Klein	31,997
Glass receptacle, C. W. Klein	31,998
Glass receptacle, C. W. Klein	31,999
Glass receptacle, C. W. Klein	32,000

Ale, S. S. Pierce Company	33,813
Books and shoes, Parition Shoe Company	33,814
Clothing, certain named, Mayfield Woolen Mills	33,815
Coffee, B. W. Blauvelt Company	33,816
Earthenware, china, porcelain, and parian, P. Schell	33,817
Golf supply goods, certain, Crawford, McGregor & Canby Company	33,818
Groceries, certain named, W. E. Sibley	33,819
Hair and scalp preparations for the J. C. Ayer Company	33,820
Leather, chemical preparation for the preservation of, Semelme Company, Gesellschaft mit Beschrankter Haftung	33,821
Liqueur made with cherries, L. Fremy, Fils	33,822
Liquors, malt, M. C. McDonald Bottling Company	33,823
Medicinal preparation for certain named diseases, A. E. Larzelere	33,824
Medicine for certain named diseases, Yohn Chemical Company of Baltimore City	33,825
Medicine for certain named diseases, proprietary, Micajah & Company	33,826
Paper, certain named H. Lindenmeyr & Sons	33,827
Paper, certain named H. Lindenmeyr & Sons	33,828
Paper, certain named H. Lindenmeyr & Sons	33,829
Paper, certain named H. Lindenmeyr & Sons	33,830
Paper, certain named H. Lindenmeyr & Sons	33,831
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Paper, certain named H. Lindenmeyr & Sons	33,896
Paper, certain named H. Lindenmeyr & Sons	33,897
Paper, certain named H. Lindenmeyr & Sons	33,898
Paper, certain named H. Lindenmeyr & Sons	33,899
Paper, certain named H. Lindenmeyr & Sons	33,900

LABELS.	
" Egyptian Water Nymphs," for cigarettes, G. Grossas & Company	7.21
" Natural Early June Peas," for canned goods, United States Printing Company	7.22
" Natural Golden Wax Beans," for canned goods, United States Printing Company	7.22
" Natural Lima Beans," for canned goods, United States Printing Company	7.22
" Natural Stringless Beans," for canned goods, United States Printing Company	7.22
" Natural Succotash," for canned goods, United States Printing Company	7.22
" Natural Wax Beans," for canned goods, United States Printing Company	7.22
" Old Reliable Rye Whisky," for whisky, United States and Foreign Company	7.23
" Paz de Oro," for cigars, American Lithographic Company	7.23
" Pearl Wedding Rye Whisky," for whisky, United Wine and Trading Company	7.23
" Perfection Brand Plum Pudding," for plum pudding, E. G. Stevenson	7.23
" Roaching," for insect powder, W. W. Gardner	7.23
" Young's Witch Hazel and Almond Cream," for a toilet preparation, J. F. Young	7.23