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 This is for our information and not for publication.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 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.
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Books referred to promptly supplied on receipt of price.
Minerals sent for examination should be distinctly marked or labeled.

(8403) A. A. D. writes: In the past summer it has often been unpleasant to handle iron exposed to sun rays with bare hands. It is not easy to convince men who handle such burning bars of iron that such iron is not hotter than the air they breathe. Many well-informed engineers stoutly hold that iron does absorb heat from sun rays, and does become hotter than the air. To deny this is to rule the sense of touch out of court as a witness. Perhaps the editor of the SCIENTIFIC AMERICAN can turn his searchlight upon this matter, and perhaps many of his readers will disagree with his conclusions. If iron exposed to sun rays rises in temperature above surrounding objects, then it becomes a heat storage cell. I believe the accepted theory is that heat radiates from all objects at higher temperature to all objects at lower temperature until all are at one dead level of temperature. In this view iron in sunlight is not warmer than the surrounding air, and iron in water or in snow is not warmer or colder than the surrounding water or snow. Yet it is not easy to flatly contradict one's senses. If iron in the sunshine on a hot day is not hotter than the air, our senses decidedly deceive us. When this question was stated to Dr. H. W. Wiley, Chief Chemist of the U. S. Department of Agriculture, he at once replied, "Place a wooden rod, a glass rod, an iron bar, a copper bar in sunlight on a hot day. They soon acquire the same temperature, yet the wooden rod and the glass rod seem, to touch, not warmer than the air, because they are not good conductors of heat. The iron bar may be too hot to hold in the hand. The copper bar may seem still hotter, it may burn the hand, because it conducts heat rapidly. In a very cold day the wooden rod and the glass rod seem not colder than the air. The iron bar may freeze to wet fingers. The copper bar may seem yet colder, for it rapidly conducts heat from the hand, yet on the hottest day and on the coldest day all are at the same temperature." A bar of iron exposed to sun heat on a hot day does show a higher temperature than a thermometer not far away. This is partly, perhaps, accounted for by the black color of iron, for white reflects and black does not reflect heat rays. But this does not explain why it is that when the temperature of the air is say 98 deg. F. and the temperature of the bar of iron is also 98 deg., and the temperature of the human hand is also 98 deg., heat should rush from the iron into the hand, carrying the sensation of scalding, burning heat. If the iron has but 98 deg. temperature it must, in conveying heat to the hand, also at 98 deg., reduce its own temperature below 98 deg. It may be that the air, and all objects exposed to sunshine on a hot day, are at the same temperature, but it is not easy to convince one who handles iron on a hot day that it is a fact, if it is a fact, that iron is not hotter than the air. A. It is a very difficult thing indeed to convince people that the sense of touch is a very unreliable guide in reference to heat and cold, or relative temperature. An experiment which will unsettle one's faith in his feelings may be performed as follows: Take three dishes. Put into one ice cold water, into another hot water as hot as can be borne by the hand, and into the third a mixture of these two, so that it may have an intermediate temperature. This dish should be set between the other two. Put one hand into the ice water and the other into the hot water till each hand is well accustomed to the temperature of the water in which it is. Then quickly transfer both hands to the middle dish, the water in which will feel hot to the cold and cold to the hot hand. A second experiment will convince one that articles of the same temperature do not feel equally hot. Take a silver half dollar, a copper washer, an iron washer and a piece of wood, all of the same size and shape as near as may be. Place these in an oven till they have had time to acquire the temperature of the oven. Then reach one hand into the oven and test the several pieces one after another. The silver will feel hottest, next will come the copper, then the iron and last the wood, which may not feel hot at all, unless the oven is very hot indeed. A silver spoon from a cup of tea may burn the mouth when the tea which it contains will not. Such experiments ought to convince any one that the testimony of a reliable thermometer should be taken as final instead of speculations about what ought to be or seems to be the case. We are very certain that stones and iron in the sunshine become hotter than the surrounding air during the day and colder during the night, and that this fact explains the deposit of dew upon such articles. We also think that if the air were 98 deg. and a bar of iron in the air were 98 deg. the hand in the same position would not be 98 deg., since the hand is cooled by the evaporation of perspiration, which would be rapid at that high temperature. For that reason the iron would feel hot to the hand. An article cannot feel hot to a hand which is at the same temperature. It would certainly be very rarely the case that a thermometer laid upon the open skin exposed to the air would indicate 98 deg. Controversy upon such a matter ought not to be possible. The demand should be immediate: "To the experiment. Test the temperatures and find what they are."

(8404) C. U. M. writes: A claims that a rain gage, or pluviometer, of small diameter, say, from 4 inches to 6 inches, which stands perpendicular, will under all circumstances show the actual rainfall, while B maintains that the gage will show the actual rainfall only while the latter descends perpendicularly or nearly so, but that when it descends at an inclination it will show less, and that the greater the inclination the greater the difference between the actual fall and that shown by the gage. Which is right? A. The object of the rain gage is to collect the rain which would fall upon a certain area of the earth. This it does without reference to the angle of inclination of the descending drops. The same amount of water is collected as would fall upon a sheet of white paper or of soil of the size of the opening of the rain gage. We agree with A. Suppose the rain gage were made with a square opening, say, one square foot, and that each square foot of the surface of the earth upon which the rain falls were provided with its rain gage, the entire shower would be collected in the gages. Each gage would catch the water which otherwise would fall upon a square foot, no matter what the inclination of the falling drops. If B is right this ought not to be true when the rain falls obliquely. But the entire rainfall must be caught in the gages, and hence each gage must catch what falls upon its square foot, even when the rain falls obliquely.

(8405) A. K. S. asks: Please give me simple definitions in Notes and Queries of the following: A volt, ampere, watt, induction. A. These terms have been defined repeatedly in our columns. The volt is the unit of electrical pressure, the cause of the flow of an electric current. About one and one-tenth volts is the pressure of a Daniell's or gravity cell at its best. The ampere is the unit of current strength, and is such a current as would be given when the pressure is one volt and the resistance is one ohm. The watt is the unit of electrical power, the power given when the pressure is one volt and the current is one ampere. It is 1-746 of a horse power, or 746 watts will do the same work as a horse power. Induction is the effect of an electric current upon a wire in its neighborhood, setting up a current in the wire. There are numerous kinds of induction, however.

(8406) G. C. L. asks: Can you tell me if the quadrants of paper on a Toepler-Holtz electrical machine ought to be insulated from the tinfoil disks which they cover? A. The paper sectors should be in contact with the tinfoil, not insulated from it, on a Holtz machine.

(8407) J. C. P. asks: To settle a dispute kindly state in the Notes and Queries column of your valuable paper if the idea that lightning rods afford protection to buildings is not rapidly becoming obsolete. A. On the contrary, lightning rods are regarded as a great protection to buildings.

(8408) J. H. asks: 1. A few months ago I noticed that whenever I touched metal an electric spark with a crack passed off my finger to the metal, and in about ten minutes I could repeat the same again. For three or four successive days this occurred. Never before or since had I noticed same. During that time I was occupied with the same business as before and after. What caused the electric sparks? A. The spark was caused by the condition of the air. In dry cold weather it is very easy to obtain a spark by simply rubbing the shoes on the carpet as we walk and then presenting the finger to some object. The gas can be lighted in this way. 2. How is the electric current generated in the air? It cannot be through the rotation of the earth, as the atmosphere moves with earth, and between atmosphere and the empty space there can be no friction to produce it. A. We do not know.

(8409) H. B. writes: I notice in your issue of SCIENTIFIC AMERICAN for September 7 an article on the depth of the atmosphere surrounding the earth, which is variously estimated from 40 to 216 miles. I can understand how the depth of atmosphere could be estimated by its weight per cubic foot; but as there is no limit (apparently) to its elasticity, and as every foot ascension makes the same atmosphere rarer and necessarily occupy a greater space, and as far as we know from practice its density decreases at a given ratio as the height increases, how can there be a limit to the height the atmosphere reaches unless there is a limit to its rarity? I ask this question, not to dispute other assumptions, but to grasp the idea that would enable one to figure a limited height of the atmosphere. A. The older estimate of the height of the atmosphere was based upon the law of expansion of gases as the pressure is diminished. This law is that a gas expands in the same ratio as the pressure is diminished. If the pressure is halved the volume is doubled; if reduced to one-third, the volume becomes three times as great, etc., for any pressure. In addition to this the effect of temperature upon the air to contract it and prevent a portion of the expansion must also be allowed for. The temperature of the air falls one degree for every 300 feet of ascent above sea level. Allowing for both these laws, we have the result that if the barometer stands at 30 inches at the sea level, it will indicate 29 inches at an altitude of 910 feet above the sea level, and 28 inches at 1,850 feet. At 16,000 feet the barometer would stand at 16 inches, at 30 miles it would read five-thousandths of an inch, and at 45 to 50 miles the reading would be too small to be made. The mercury in the cistern and in the tube would apparently be at the same level. At that altitude the air has become so very thin as to be incapable of producing pressure sufficient to be measured by a barometer. But that is not the same as saying that there is no air above that level. Meteors are small bodies which are moving through space in exactly the same manner as the earth moves around the sun. Some of these encounter the earth in their flight and enter the earth's atmosphere. As they rush through the atmosphere they exert friction against the air just as a train of cars does, and as a result of the friction they take fire and are burned when they contain only gas. If they are solid they are heated and fall hot to the surface of the earth. Many of these have been collected. Some of them have been found while still hot from their rush through the air. If a meteor happens to be observed by two persons at a distance from each other and its angle above the horizon noted a triangle can be drawn which shall have the meteor at one corner and the observers at the other two corners. If the distance between the observers is known in miles, the other two sides of the triangle can be found also in miles; that is, the height of the meteor can be measured. In this way it is learned that meteors take fire at much more than 100 miles above the surface of the earth, and, of course, the air extends a considerable distance above that point, since the meteor had gone through air enough to heat it and set it on fire before it became visible. It is difficult to conceive of anything so thin as the air must be at these great heights, but we are compelled by the reasons given above to believe that it does so exist. That the air extends more than 100 miles above the earth is not a matter of estimate, but of measurement. How much farther it extends is a matter of estimate. The other question raised, How can there be a limit to the atmosphere unless there be a limit to its rarity? may be answered that there is a limit to its rarity. Matter is not infinitely divisible, though space may be. The limit to the rarity of the air is ultimately reached when the attraction of the earth, which we call gravitation, is unable to hold the molecules of oxygen and nitrogen upon the earth. The energy of these molecules keeps them in constant motion. They collide with one another and bound away without ceasing their motions. As we go above the earth the distance between the molecules of the gases becomes greater through which they must move before they strike another molecule. At the greatest heights the molecules in the outer layer may move away from the earth and be lost to it, passing away into what we erroneously call *empty* space. From such considerations it is thought that the heavier gases of the air are more abundant near the surface of the earth and the lighter ones extend higher above the earth. It may even be that there have been gases in the atmosphere which have now entirely escaped from it. And the processes may be still going on. We have not reached the limit of knowledge even in regard to so common and free a thing as the air we breathe.

(8410) J. M. C. asks: 1. What do you consider the best compound for pouring on wires of a newly-wound armature to act as an insulator? A. Shellac. 2. How may I run a 110-volt motor on a 500-volt circuit? A. If the motor is a small one, it can be run with a resistance made of lamps; if more current than a lamp bank will furnish is required, you will have to rewind the motor. 3. How may I ring electric bells (run on battery) from a 500-volt circuit? Have you SUPPLEMENT containing such a diagram? A. Put the bell in series with five incandescent lamps requiring 100 volts each. The bell will probably get voltage enough through the lamps. 4. How should I regulate the pressure of a trolley pole against the trolley wire? I mean by this how may I know when the pressure is too great or not enough? A. The pressure is regulated by a spring. 5. Where should the trolley wire be on a curve—in the center of the track, near the outside rail or near the inside? A. The wire is as nearly as may be over the center of the track. The book upon "Electric Railways," by Dawson, price $12.50, gives full details upon most points in the construction and operation of trolley lines. "The Electrical Railway Pocket Book," by the same author, price $5, is valuable.

(8411) A. D. asks: Is the voltage of circuits cut down when a rheostat is used, and is it cut down when a lamp is used? I am burning a 105-volt lamp in series with a water rheostat on a 210-volt alternating circuit. Does rheostat cut down the voltage to 105, or does it simply cut down the amperage? A. The voltage of a circuit is not affected by a rheostat. From one pole of the circuit to the other in the case you cite is 210 volts. If you had two 105-volt lamps across that circuit half the drop would be taken by one lamp and the other half by the other lamp. Your rheostat simply takes the place of one lamp, and in the rheostat there is done exactly the same electrical work which would be done in the lamp if it were put in place of the rheostat. The current which flows through the rheostat heats water to a certain degree. The same current would heat a lamp so that it would shine. If your lamp takes a half ampere, you pay for a half ampere at 110 volts. You get light for a half ampere at 105 volts and waste in the water one-half ampere at 105 volts. Without the rheostat you could not put a single lamp on the circuit. Alone it would get a whole ampere, and that would burn the lamp out immediately. The rheostat adjusts the resistance of a circuit to the work to be done and enables one to change the current as desired.

(8412) H. V. asks: Can I obtain a steady current of about 100 volts from 15 Grove cells by passing the current through an induction coil? If not, please advise me as to how to get a current of about 100 volts as steady or continuous as possible without using a dynamo. A. You cannot obtain a continuous current by an induction coil in any known way. The induction coil gives either an alternating current or a pulsatory unidirectional current according to circumstances. To obtain a 100-volt continuous current with a Grove battery will require from 50 to 60 cells connected in series. This will be as steady as that of a dynamo.

(8413) C. H. A. asks: Will you please explain how, if I know the power of each lens, I can find the combined power of two or more, as in a microscope or telescope? Should not one rule apply to either microscope or telescope if there is no difference other than the high-power objective in one and the very low power in the other? A. In obtaining the magnifying power of a microscope, the fact is used that the limit of distinct vision by the eye is normally ten inches. The linear magnifying power of the objective and of the eyepiece is found by dividing ten inches by the focal length of the lens. Thus a half-inch objective magnifies a line 20 times. The lens is said to magnify 20 diameters. A 2-inch eyepiece magnifies 5 diameters. The total linear magnifying power of the two lenses combined is the product of their separate magnifying powers. In the case above this would be 20 by 5, or 100 diameters. The magnifying power of a telescope is the quotient found by dividing the focal length of the object glass by that of the eyepiece. An object glass whose focal length is 6 feet, or 72 inches, with an eyepiece of 2 inches focal length will magnify an object 36 diameters. The superficial magnification will in both instruments be found by squaring the linear magnification.

(8414) W. O. B. asks: Will you kindly inform me if winding should be changed in motor described in SUPPLEMENT No. 641 to run on 110-volt circuit, or would it be advisable to use resistance coil? A. A rheostat may be used or the winding may be changed, using No. 28 B. & S. on field and No. 30 on armature.

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Phonograph or similar records, machine for duplicating, A. N. Petit 684,455
Photographic apparatus, Core & Grubman 684,630
Photographic plate handle, H. F. Shindle 684,730
Piano action, upright, P. D. Strauch 684,472
Pie trimmer and marker, J. Nickel 684,709
Pipe coupling, H. R. Dean 684,631
Pipe wrench, E. E. Miner 684,446
Pitman connection, E. A. Johnston 684,435
Platen press, A. H. Schumann 684,463
Plow and cultivator for planters and fertilizer distributors, combined, McIlwinen & Fletcher 684,583
Plow, cultivator and planter, combined, D. H. Garrison 684,684
Pneumatic despatch tube apparatus, J. T. Cowley 684,678
Pneumatic despatch tube terminal, compound, O. S. Pike 684,715
Pole support, E. S. Mowry 684,451
Power head, G. L. Stearns 684,591
Precious metals from ores, machine for extracting, L. Chandlee 684,672
Printing press, multicolor, F. H. Mowbray 684,450
Printing press sheet delivery apparatus, W. Scott 684,464
Projectile, A. B. Tubini 684,653
Pulley, P. J. Creeden 684,603
Pump, J. E. Anderson 684,398
Pump, direct pressure, D. Svenson 684,473
Pump, double acting cylinder, H. B. Arnold 684,740
Puttying machine, F. M. Flower 684,503
Quilt knotting machine, W. H. Palmer, Jr. 684,587
Rack. See hat and coat rack.
Rail bond, electric, I. B. Chantler 684,600
Rail joint, C. F. Dreier 684,632
Rail joint support, A. Haarmann 684,687
Railway crossing, E. M. Rankin 684,526
Railway, electric, B. Bidwell 684,596
Railway switch, E. Fromm 684,504
Railway system, J. W. Jenkins 684,693
Railway tie, A. J. Harms 684,758
Railway tie, composite, C. C. Harrell 684,570
Railway vehicle controlling system, E. R. Hill 684,609
Recarburizing machine, J. W. Davis 684,681
Reclining chair, A. C. Benedict 684,403
Receiving table, rotary, Wyckoff & Stearns 684,737
Revolver loading pack, Garfield & Larsson 684,752
Rift machine, A. Cunningham 684,764
Rolling mill, universal, P. M. Weber 684,658
Rotary engine, L. O. Stevens 684,471
Rudder, adjustable, Wees & Martin 684,486
Safety hook, S. E. Farmer 684,419
Salt cellar, L. Hardy 684,757
Saw, drag, Elgin & Adkins 684,500
Saw filing machine, A. C. Saxton 684,727
Saw handle, E. F. Shaw 684,729
Saw, jig, C. H. Hapgood 684,756
Scale, computing weighing, G. H. Chatillon 684,629
Scale, weighing, L. Hachenberg 684,425
Screwing head in which the dies are opened automatically, H. Austin 684,594
Seeding machine, C. A. Green 684,424
Sewing machine, shoe, H. Briggs 684,538
Sewing machine, shoe, H. Chadbourn 684,540
Sewing machine spool holder, S. Mandelbaum 684,577
Sewing machines, awl actuating mechanism for shoe, H. Briggs 684,537
Sharpening and polishing scissors, device for, Craven & Cleaver 684,679
Sifter and receptacle, combined ash, J. A. Wang 684,483
Signaling system, A. J. Mundy 684,706
Smoke consumer, W. W. Lowe 684,444
Spark arrester, E. E. Jarvis 684,692
Speed mechanism, differential, H. R. Isler 684,433
Spinning and doubling frame, R. W. Moncrieff 684,519
Spinning cotton, etc., apparatus for, W. A. Phillips 684,714
Sprinkler head, E. D. Etnyre 684,542
Square, steel, F. W. Lynde 684,759
Stacker, G. Wettlaufer 684,533
Stacker, straw, A. Van Houweling 684,531
Stair builder's pitch board, W. T. Wible 684,490
Stanchion, R. T. Reid 684,720
Starting mechanism, W. T. Gordon 684,606
Steam boiler, W. D. McNaull 684,585
Steam generator, F. S. Chapman 684,746
Steam generator, water tube, J. M. Hurd, 684,430, 684,431
Stitch machine, fair, E. F. Mower 684,548
Storage battery, R. M. Lloyd ... 684,698 to 684,700
Storage battery for boats, R. M. Lloyd 684,697
Street cleaning machine, A. Schmidt 684,618
Surgical splint, E. L. Cook 684,411
Switch. See railway switch.
Switch operating device, C. W. Tanner 684,558
Table fork, C. F. Smith 684,761
Telegraph, signal, E. & E. J. Lavens 684,440
Telegraphy, quadruplex, C. E. Diehl 684,415
Telegraphy, wireless, H. Shoemaker 684,467
Telephone apparatus and system, F. B. Cook 684,601
Telephone attachment, H. J. Mier 684,445
Telephone call bell apparatus, W. S. Paca 684,615

(Continued on page 271)

Telephone relay, B. Gati 684,506
Telephone system apparatus, F. B. Cook 684,602
Tie plate, J. M. Sellers 684,466
Tiles or clay materials, drying apparatus for, Moller & Pfeifer 684,704
Tire, bicycle wheel, C. H. Pascbke 684,712
Tire pneumatic vehicle, C. A. Pettie 684,550
Tire support, wheel, J. S. Duquette 684,417
Tires, means for plugging pneumatic, H. P. Madsen 684,647
Tongue support, I. L. Umstead 684,530
Tool, combination, J. Boivin 684,406
Tool handle, H. F. Anawalt 684,663
Tool rest adjustment, J. J. Grant 684,508
Top, spinning, E. R. McCall 684,613
Trace fastener, J. T. Hale 684,607
Trains, graphic record for locating moving, F. B. Henretta 684,427
Translating devices, means for controlling energy delivered to, J. Sachs 684,725
Transplanting machine, J. W. Collins 684,410
Transporting apparatus, A. K. Finlay 684,748
Trolley attachment, T. J. Burke 684,408
Trowel, G. A. Lucas 684,576
Truck bolster, railway car, C. Vanderbilt 684,626
Truck bolsters, brake beams, etc., making, C. Vanderbilt 684,625
Truck brake, T. R. Hazzard 684,638
Tube expander, Young & Speyer 684,661
Tubes, brazing, G. Boehmler 684,670
Type writing machine, J. C. Lotterhand, 684,645, 684,646
Umbrella runner, C. R. Holt 684,511
Valve, automatic cylinder drain, E. Rowe 684,723
Valve gear, H. G. Campbell 684,494
Valve, plug, F. M. Ashley 684,399
Valve, steam actuated, Poore & Davis 684,716
Vehicle brake mechanism, self propelled, G. L. Reenstierna 684,527
Vehicle gearing, self moving, F. G. Webb 684,657
Vehicle, motor, E. T. Birdsall 684,535
Vehicle, motor, G. E. Warren 684,733
Vehicle wheel driving gear, A. M. Neeper 684,453
Vessel ventilating system, A. K. Finlay 684,749
Vise, J. R. Long 684,443
Voting machine, L. W. Luellen (reissue) 11,938
Wagon seat supporting attachment, J. M. Calhoun 684,671
Water bag, C. W. Meinecke 684,701
Water heater, H. Barber 684,666
Waterproof coating, W. A. Hall 684,509
Weighing and packing machine, automatic, J. W. Berry 684,595
Welding, metal, H. Wachwitz 684,479
Welt beveling machine, L. Goddu 684,544
Wheel, C. Heart 684,639
Wire stretcher, J. H. Tanner 684,475
Wire weaving loom, H. A. Bond 684,536
Worm wheel cutting machine, J. J. Grant 684,634
Wrench forgings, manufacture of, P. A. Whitney 684,488
Wrench jaws, manufacture of, P. A. Whitney 684,489
Yohimbine and making same, L. Spiegel 684,650

DESIGNS.

Badge or similar article, T. J. Dunn 35,179
Basin inlet, catch, A. W. Kurz 35,187
Board, G. Barrett 35,195
Box fastener catch plate, M. C. Ryan 35,184
Burial casket, C. H. Hiser 35,196
Cream separator, H. M. Lourie 35,185
Dental engine, angle handpiece handle, A. W. Browne 35,182
Drop bar, Coldwell & Gildard 35,183
Filter strainer, J. M. Davidson 35,186
Hoisting machine standard, Campfield & Grover 35,190
Lamp vaporizer, incandescent, E. Marshall 35,189
Machine tool standard, C. C. Newton 35,181
Mowing machine windrower, T. B. Fagan 35,191
Range, R. H. Stockton 35,194
Spoons, forks, etc., handle for, W. C. Codman 35,180
Sprocket wheel, J. M. Dodge 35,192, 35,193
Valve seat member, float, W. H. Dodson, Jr. 35,188

TRADE MARKS.

Antiseptic preparations, B. Batt 37,201
Antiseptic preparations for external and internal use, Schiebel & Co 37,202
Beverage, certain named, Ice & Cold Storage Co., of Los Angeles 37,193
Boots and shoes, liquid preserver for, G. M. Port 37,197
Butter, Continental Creamery Co 37,194
Candy, chocolate candy, and chocolate chips, Phelps Company 37,191
Cigarette paper, Son Brothers & Co 37,189
Cigarettes, Egyptian Flag Cigarette Co 37,190
Cure and preventive of certain named diseases, Carpenter Bros 37,207
Fabrics of silk and satin, William Skinner Manufacturing Co. 37,187
Fabrics, woolen, F. S. Mackenzie 37,186
Gasolene engines, Sterne Brothers Co 37,213
Grinding and polishing powders, E. Reis 37,195
Gums and oils, chemical solvents for, Bausch & Lomb Optical Co 37,196
Hosiery, H. Rosenberg 37,188
Jewelry, certain named, H. F. Barrows & Co. 37,183
Lamps, stoves, etc., using kerosene oil, burners for, American Incandescent Light Co. 37,212
Malaria cure and tonic, F. W. Cook, Jr 37,209
Medical compound for the cure of certain named diseases, Calvert Chemical Co 37,208
Medicines, proprietary, H. E. Henwood 37,204
Poker chips, C. H. Harris Co 37,184
Remedy for external and internal use, liquid, F. G. Birr 37,203
Remedy in the form of tablets, dyspepsia, Curesal Tablet Co 37,206
Salve, P. W. Lerch & Co 37,211
Shoe dressing, O'Sullivan Brothers 37,198
Soap, certain named, E. S. Morris 37,199
Surgical purposes, adhesive plasters for, Johnson & Johnson 37,210
Therapeutic product or chemical remedy for tuberculosis, Yonkerman Chemical Co 37,205
Thread for sewing and for making lace, L. Jachiet 37,185
Tonsorial articles, certain named, Milwaukee Commercial Importing Co 37,200
Water, filtered, Pasteur-Chamberland Filter Co. 37,192

LABELS.

"Chinchona Wine," for wine, E. Quirin 8,731
"Cleandent," for tooth powder, Claremont Chemical Co. 8,726
"Delmac Liver Regulator," for a medicine, Delmac Medicine Co 8,728
"Dr. Humphrey's Medicated Holland Gin," for medicated Holland gin, H. Lightwardt, Jr. 8,730
"Effervescent Seltzer Mint," for a medicine, O. Stafford & Co 8,729
"Little Wonder," for canned vegetables, E. V. Stockham 8,733
"Pickles for the Elite," for pickles, W. D. Richardson 8,732
"Sim's Tonic Elixir of Pyrophosphate of Iron," for a medicine, E. B. Sims 8,727

PRINTS.

"Enameline," for stove polish, J. L. Prescott & Co. 409
"Tambourine Egyptian Cigarettes," for cigarettes, American Lithographic Co. 410
"The Kind You Have Always Bought," for Castoria, Centaur Co. 411
"The Washerwoman," for soap, Kirkman & Son. 412

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