prevented from recombining. 2. What comparative space do the gases occupy as compared to the water of which they are made? A. 1,844 times the volume of the original water at 32° and 30 inch barometer.

(692) M. S. writes: 1. Will not magnesium ribbon, if heated, unite with chlorine, with the evolution of heat and light? A. Yes. 2. Ayrton, Practical Electricity, p. 11, says: "To specify the strength of the current by the sulphuric acid voltmeter, neither the shape nor the size of the plates need be taken into account within wide limits." My experiments do not seem to confirm that. Is the statement well founded? A. Yon are wrong, and the authorities are right. 3. If two cylinders equal in size be filled, the one with chlorine, the other with hydrogen, placed mouth to mouth, inverted a few times, and a piece of manganese ribbon be burned near by, no explosion takes place. And yet when a flame is applied at the mouth, the gases explode. Why not with actinic light? A. If the experiment is properly conducted, it will succeed. 4. In Hoffmann's experiment with hydrogen and chlorine, how are the hydrogen and chlorine made to mix? The aperture in the stop cock is 2·5 mm., and yet the gases will not mingle rapidly enough for a class experiment. A. Turn tbe apparatus so as to have the chlorine uppermost, and after a few minutes reverse it.

(693) H. D. L. asks: Will you please inform me through your paper what is the best light substance that can be used as a deadener or husher of sound? How soft can rubber be obtained, and where? Or is there any way of making it soft? Or quite pliable? A. Cork, sawdust, asphalt concrete, curled hair, or felting are excellent deadeners of sound. Soft rubber can be procured from manufacturers. Its softness depends on the degree of its vulcanization. Possibly sponge rubber, such as used by draughtsmen, would answer yonr purpose. Once hardened, as by vulcanizing, you cannot soften it.

(694) C. C. J. writes: I have heard that there is a kind of ink which, when you write with it, makes no mark, but when you hold the letter over a lamp, it makes itshow like ordinary ink. I would like to know if there is such an ink, and how it is made. A. Dilnte sulphuric acid one volume, water twenty volumes, may be used with a quill pen, and will produce the above effect. The writing will be black or dark brown and quite indelible.

(695) C. G. asks: 1. What is fuller's earth, which is used in connection with the fulling of cloth? A. It is a white natural deposit resembling clay, and known as infusorial silica. It is made up of the microscopic siliceous skeletons of diatoms, a minute form of living being. 2. What do they use to bleach cloth? A. Chlorine, the cha acteristic constitnent of bleaching powder, is the great hleaching agent. The cloth to be bleached is subjectcd to quite an elaborate process, involving treatment with alkali and otherchemicals.

(696) L. B. asks: How can I melt or shape rubber to any form (I have the mould), and have a smooth surface, also to have same elastic? What is used to do this with, and where can I get the rubber, or is any rubber good to get good results? A. We refer you to our SUPPLEMENT, Nos. 249, 251, and 252, for full details of rubber manufacture. You mnst have pnre rubber mixed with sulphur, and after pressing it into the mould must vulcanize it by heat while it is held in shape. Any rubber manufacturer can supply the gum ready for vulcanizing. Coat the mould with soapstone, to prevent adherence of the rubber.

(697) Enquirer asks: 1. How electricity is applied to a machine to produce motion. Kindly abstain from technical terms as much as possible. A. For a description of a motor which, if understood, will probably cover your ground, we refer you to our SUPPLEMENT, No. 641, which we can send you for 10 cents. 2. We are told that the canse of the different phases of the moon, such as new, full, gibbous, are formed by the earth casting a shadow on its snrface. Now, if such is the case, how isit possible for the earth, which will always cast a convex shadow, as in the new moon, to cast a concave shadow, as it would appear to do when the moon appears in that phase called gibbous? A. If you are so told, your informant is in error. The phases of the moon are caused by the different directions of the sun's rays with respect to the moon's surface. When the shadow of the earth falls on the moon, it is said to be eclipsed. This shadow is always convex.

(698) F. A. writes: I would like to know through your paper whether tobacco using (smoking or chewing) isapt to make a man nervous or not. Can you give me an effective antidote for tobacco habit? A. Excessive use of tobacco may affect the nerves and heart. The best antidote is rcsolution. Stop using tobacco until the habit is conquered.

(699) J. C. S. writes: I would like to attend some good school, either in New York or Brooklyn, where I could learn how to model and draught boats. A. Your best plan is to enter some ship yard and work in the draughting room, with inspection of the general work in the moulding loft and yard. No school that we know of will answer your requirements.

(700) W. S. asks if glycerine is good for the teeth and gums. A. It is not generally supposed to have any good effect upon either.

(701) J. M. B. asks: 1. Is the spectroscope used to advantage now in analysis, and how is it used? A. It is used largely in scientific investigations. In physics, astronomy, and chemistry. In chemical analysis it is used to a limited extent for detection of the alkalies, sodium, potassium, lithium, etc. The substance is ignited in a colorless flame, and its spectrum is examined. 2. What is the best kind of a spectroscope, and where can I get one? A. A good glass prism spectroscope is probably tbe .best. For dealers in scientific apparatus, consult our advertising columns. If you wish to make one yourself, we refer you to our SUPPLEMENT, Nos. 651 and 672. 3. What work is the best treatise on spectroscopic analysis, and where can I get it? A. We can supply you with Lockyer's Spectrum Analysis, price $2.50, Roscoe's Spectrum Analysis, $5. Also consult the index of our SUPPLEMENTS, which contain much matter on this subject. 4. Can a person take a compound substance and with the spectroscope tell its component parts at once? A. Not generally. It takes experience to use it advantageously, and in actual analysis its use is very limited. In comparatively very few cases it could be thus used.

(702) W. L. C. writes: I should like to ask you if an analysis has ever been made of human saliva; if one has been made, of what ingredients it is composed. I understaud that the simplest experiment in voltaic electricity is that in which a piece of zinc is placed on one side of the tongue and a piece of copper on the other: they touch, and a stinging sensation is felt. Now, why cannot a battery be made in which tbe fluid is a chemical combination made to imitate saliva? This is an original thought, and I hope you will not think it foolish. A. The saliva has been analyzed. As far as regards electric action, the chloride of sodium (common salt) contained in it is the active agent, and has been very extensively used in batteries. It gives a low voltage, and the couple dependent on it alone is quickly polarized.

(703) G. H. S.—For formula for making printers' rollers see Note and Query No. 444, in SCIENTIFIC AMERICAN of March 9, 1889.—For intensifier for wet-plate photo. in line work photo-zinc etching: After fixing the wet plate in a cyanide of potassium solution, intensify with mercury and ammonia as follows:

No. 1.

| | |
|---|---|
| Water | 80 ounces. |
| Chloride of ammonium | 2 " |
| Dissolve, then add: | |
| Bichloride of mercury | 2 " |
| Dissolve and filter. | |

No. 2.

| | |
|---|---|
| Liquor ammonia 0·880 | 5 ounces. |
| Water | 20 " |

Dip the plate in No. 1 till it is whitened, then wash, and flow over with No. 2. Another method is as follows. Prepare:

| | |
|---|---|
| Water | 8 ounces. |
| Ferrid-cyanide of potassium | 6 parts. |
| Nitrate of lead | 4 parts. |
| Dissolve and filter. | |

Pour over the plate and keep on till the film is bleached. Wash well under the tap. Then flood with—

| | |
|---|---|
| Nitric acid | 1 oz. |
| Water | 80 " |

Allow this to remain on a few seconds, then wash, and flood with—

| | |
|---|---|
| Sulphide of ammonia | 1 part. |
| Water | 5 parts. |

which will at once turn the film an intense black; again wash, and flood with the nitric acid solutiou, again wash, and set the negative up to dry. We quote the above from Wilkinson's work on photo-engraving and etching.

(704) A Subscriber asks how the ever-ready ink pads for rubber stamps are made. A. By saturating the pad with aniline colors dissolved in alcohol and mixed with glycerine. Consult the SCIENTIFIC AMERICAN of Nov. 24, 1888, where you will find an article on type writer ribbon, giving methods for making inks suitable for pads.

## Replies to Enquiries.

The following replies relate to enquiries recently published in SCIENTIFIC AMERICAN, and to the numbers therein given:

(420) How to Perforate Glass.—For the information of E. P. B., (420), page 154, of your paper of March 9, 1889, I would say that I bored two 1⅛ inch holes in crystal plate, without any particular trouble, and now have them mounted, and any one of ordinary ingenuity can doit in the same way. On the fly wheel shaft of my foot lathe there is a wooden pulley, from the side of which projects the crank pin to drive the lathe. The other end of the shaft corresponds. From this pulley I ran an endless cotton rope (clothes line) to a three inch wooden pulley, which I secured to a piece of ⅝ inch pipe, brass, by putting the pipe through a hole in the center of a piece of sheet brass, soldering it to the pipe, and screwing it to the flat sideof the pulley. I supported the pipe vertically in maple-wood bearings, all done in a rough way, but put up true. Lubricatewith tallow by heating the wood overa fire, enough to melt the tallow in, before you put the bearings on; this will be the only time you need to put tallow for this job. On the lower end of this small pipe solder a piece of copper or brass pipe, of the size you wish the hole in the glass, then put it in the lathe and turn your pulley groove for the endless rope, also face the end ot the pipe true, which is to rest on the glass. In the upper end of the pipe place a small funnel; suspend over this a can of water having a plug by which you can let the water drop into the funnel. Get a pound of coarse emery, 10to 15 cents. To fix your glass, select a place as much out of the way as you can, get an old box or other support, place it where you can run your endless rope to it, level the box and fasten it to the floor. Make a case tbat will hold your glass and an inch to spare, so as not to pinch the glass; the sides of case are of rough boards, four inches or more high, to protect the glass from accident. In the center of this case fasten a dome-shaped circular piece of board, ¾ of an inch thick, turned true in the lathe. Exactly over the center of this dome place your vertical pipe and pulley, so that it can be raised and lowered in its bearings. Place the glass on the block without any other support, then press the pipe end on to the glass, arranging a spring to give a constant pressure. This will keep the glass level and make it bore faster. Make a ring of putty around the center of the glass, about five inches in diameter, to keep in the emery and water. If the rope slips, make a tightener with a little sash or other pulley, and give the rope a little powdered resin. Now pour emery into the funnel and start the water drip, and while you are running your lathe, making the rest of your machine, you will be boring your glass.—C. R. W.

☞ Books or other publications referred to above can, in most cases, be promptly obtained through the SCIENTIFIC AMERICAN office, Munn & Co., 361 Broadway, New York.



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**AND EACH BEARING THAT DATE.**

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Pail, fisherman's, Meyering & O'Connor... 400,588
Painting machine, shingle or sheet metal. G. D. Armstrong... 400,426
Pan. See Grinding pan.
Paper cutting machine, H. P. Feister... 400,652
Paper folding machine, Fowler & Henkle... 400,662
Pavement, street, H. S. Hallwood... 400,767
Petroleum, apparatus for refining, F. M. F. Cazin. 400,634
Phonogram blank, T. A. Edison... 400,648
Phonogram blanks, making, T. A. Edison... 400,649, 400,650
Phonograph, C. Batchelor... 400,629
Phonograph. T. A. Edison... 400,647
Phonograph doll, W. W. Jacques... 400,851
Phonograph recorder and reproducer, T. A. Edison... 400,646
Pick, H. C. Stouffer... 400,803
Pipe coupling, J. C. Bayles... 400,822
Pipe coupling, S. R. Dresser... 400,694
Pipe coupling, R. J. Edwards... 400,759
Pipe laying apparatus, D. A. Streeter... 400,881
Pipe welding machine. R. Cartwright... 400,829
Pipes, composition for, J. H. Walsh... 400,527
Planter and cultivator. D. B. Henry... 400,456
Planter and fertilizer distributer, corn, J. B. Broadwell... 400,740
Pliers for applying couplings of wire, H. D. Taylor... 400,512
Plow, E. P. Lynch... 400,468
Plow and plow point, J. W. McAnulty... 400,591
Plow, corn, Quillan & Dake... 400,710
Plow, hillside, M. J. Bunnell... 400,434
Plow, sulky, C. Boulay... 400,433
Pressure brake, fluid, G. A. Boyden (r)... 10,993
Pressure regulator, C. Dubois... 400,553
Printing and delivering mechanism, web, L. C. Crowell... 400,548
Printing machine sheet delivery apparatus, W. Scott... 400,875
Printing presses, numbering attachment for, T. Robertson... 400,599
Protector. See Thread protector.
Pruning knife. L. H. Sholder... 400,800
Pulley, R. C. Paul... 400,706
Pulley lubricator, loose, C. W. Wilder... 400,885
Pulley, split band, A. Kehler... 400,574
Pulverized substances, receptacle for, F. Kampf... 400,696
Pump. C. Bagley... 400,428
Pump, lift, R. N. Roach... 400,487
Pump, steam, S. J. Parker... 400,737
Pump, vacuum, J. T. Hambay... 400,668
Pumping engine, steam, F. Steinmann... 400,877
Rack teeth, automatic machine for cutting, U. & H. E. Eberhardt... 400,645
Rail cutting machine, T. G. Perkins... 400,707
Railway and railway vehicle, G. W. Brown... 400,544
Railway motor, Valentine & Grigg... 400,522
Railway rail tie and fastening, J. Frysinger... 400,558
Railway signal, S. T. Street... 400,880
Railway signal, automatic, J. Oxley... 400,703
Railway signaling, electrical, W. H. Waddell... 400,525
Railway switch stand, C. Aikins... 400,816
Railway switch stand, G. F. Gage... 400,657
Railway tie and fastening, metallic, H. L. De Zeng... 400,643
Railways, conduit for cable, E. C. Phillips... 400,482
Railways, trolley for electric, D. A. Ainslie... 400,725
Railways, trolley for electrical, D. A. Ainslie... 400,724
Rake. See Hay rake.
Ratchet wrench, W. H. Whitmore... 400,722
Recorder. See Phonograph recorder.
Refrigerating and ventilating car, Lucas & Wood. 400,563
Refrigerating tower, A. R. Pechiney... 400,595
Refrigerator packing box, Hohmeier & Ball... 400,768
Register. See Medicine spoon register.
Regulator. See Feed regulator. Pressure regulator. Temperature regulator.
Rice huller, H. Schofield... 400,804
Rice, treating, E. V. Donelson... 400,835
Rings, forming, J. Bowden... 400,541
Rocking chair, L. C. Gunn... 400,564
Rocking chair, W. L. Paine... 400,478
Rod. See Lightning rod.
Rolling metals, rolls for, J. Gnest... 400,845
Rolling mill, J. Guest... 400,814
Rolling mill, J. S. Seaman... 400,495
Rule, dress cutter's, T. I. Stockman... 400,504
Rule working machine, R. Atwater... 400,818
Ruler, parallel, Phelps & Ellis... 400,596
Sad iron, A. Rosa... 400,796
Safe or vault, M. Siersdorfer... 400,499
Sash fastener, J. W. Atwood... 400,535
Sash fastener, W. F. Elkins... 400,554
Sash, machine for grooving window, F. V. Phillips... 400,597
Satchel attachment, J. A. Yarger... 400,624
Saw guide. Sleeper & Woodard... 400,801
Scissors. E. Peters... 400,480
Scraper, road, P. Raab... 400,493
Scraper, wheel, T. Rebholz... 400,791
Screen. See Window screen.
Screw taps, machine for cutting, G. W. Tower... 400,882
Seal lock, O. E. Davidson... 400,445
Seat. See Car seat.
Seat, G. J. Wolber... 400,623
Secondary battery, W. W. Griscom... 400,842
Secretary and dresser, combination folding, A. Shields... 400,607
Seed for planting, preparing cotton, G. W. Newell 400,786
Separator. See Magnetic separator. Ore separator.
Sewing machine, E. Bruncker... 400,744
Sewing, machine, boot or shoe, W. Comey... 400,439
Sewing machine buttonhole attachment, G. D. Spielman... 400,608
Sewing machine feed mechanism, J. W. Dewees.. 400,833
Sewing machine, glove, C. M. Boland... 400,432
Sewing machine quilting attachment, C. Mandeville... 400,699
Sewing machine tuck creasing and marking attachment, A. A. Crawford... 400,751
Shirt waist, E. W. Wheeler... 400,721
Shoe, P. Caspary... 400,632
Shoe fastening, S. Wilson, Jr... 400,812
Shutter worker, J. O. & A. O. Shatsick... 400,496
Sifter, rotating wavegenerating, F. G. Winkler... 400,620
Sifting granular material, F. G. Winkler... 400,619
Sifting machine, F. G. Winkler... 400,621
Signal. See Air brake signal. Railway signal.
Sisal, etc., treating, A. W. Montgomery... 400,782
Snap hook, Tainter & Noble... 400,511
Snow plow, railway, McCarthy & Moran... 400,582
Snow scraper, G. J. Kopmeier... 400,775
Solder and flux, combined, Norton & Hodgson... 400,869
Soldering iron, Sundeen & Molander... 400,509
Soldering iron, self-heating, Heidel & Frey... 400,455
Soldering pipe joints, submarine apparatus for, F. Rann... 400,484
Spark coil, F. H. Root... 400,795
Spectacle lens. A. Morck, Jr... 400,783
Speculum, W. Molesworth... 400,589
Spinning and twisting machines, stop motion device for, W. Lund... 400,864
Spinning spindle, Smith & Gill... 400,502
Spring. See Vehicle spring.
Stairway, spiral, G. V. Marshall... 400,470
Stamp, hand, E. W. Lehman... 400,860
Stand. See Railway switch stand.
Steam boiler, W. T. Bate... 400,729
Steam boiler, J. L. Gill, Jr... 400,448
Steam boiler, S. P. Hedges... 400,568
Steam boiler, H. A. Kroeschell... 400,462
Steam engine, C. O. Heggem... 400,847
Steam engine, compound, M. Coryell... 400,641
Steam trap, W. A. Taylor... 400,718
Stool, piano, H. Walther... 400,528
Stool, sectional camp, C. F. Glocker... 400,841
Stopper. See Bottle stopper.
Stove, F. Vell... 400,612
Stove, heating, A. S. Phelps... 400,481
Stoves, recess summer piece for, J. H. Keyser... 400,689
Straight edge or darby, E. Moore... 400,590
Strap joint, C. T. Remus... 400,812
Straw stacker, A. A. Russell... 400,736
Stuffing box, W. E. Brockett... 400,543
Swinging gate, T. E. Brodt... 400,631
Switch. See Automatic switch. Electric switch. Electric current switch.
Switch lock, May & Spikins... 400,580
Swivel, double-acting, M. Collins... 400,749
Syringe, D. C. McNaughton... 400,586
Syringe and medicine case, combined, G. B. Ross. 400,491
Table. See Extension table.
Tank. See Wash boiler tank.
Tank, H. W. Harry... 400,566
Targets, machine for making bird, M. E. Pontious 400,870
Tea kettle, C. E. Coats... 400,635
Telegraph wire carrier, R. S. Donaldson... 400,552
Telegraphy, harmonic, F. Van Rysselberghe... 400,523
Telephone transmitter, W. J. Morton... 400,591
Telephones, arm support for, C. R. Tuttle... 400,520
Telescopic glasses, mirror attachment for, A. Janzon... 400,571
Temperature regulator, L. F. Easton... 400,758
Thermometer case, C. J. Tagliabue... 400,717
Thermometer, oven, Julier & Robinson... 400,573
Thill coupling, D. K. Stone... 400,878
Thill coupling, B. E. Wade... 400,526
Thread, L. Briggs... 400,739
Thread protector, E. J. Colby... 400,636
Tide and look power engine, A. F. Smith... 400,500
Tie. See Railway tie. Railway rail tie.
Tile or brick, paving, C. M. O'Conner... 400,477
Tobacco cutter, J. B. Adt... 400,723
Tool, combination, A. D. Kimball... 400,690
Traction engine. C. O. Heggem... 400,848
Transformers, apparatus for regulating current or potential in secondary of, E. Thomson... 400,515
Transformers, regulating current or potential in secondary of, E. Thomson... 400,516
Trap. See Insect trap. Steam trap.
Trimming machines, rotary cutter for, M. D. Phelan... 400,788
Truck loader, J. D. Hill... 400,457
Trusa, J. Hayden... 400,464
Tube or pipe sections, locking device for, J. W. Teetzel... 400,513
Tunnel, sub-river, A. W. Straub... 400,804
Typewriting machine, C. Spiro... 400,716
Umbrellas or analogous articles, holder for, A. C. Porter... 400,598
Valve gear for steam hammers, S. Trethewey... 400,519
Vapor burner, C. H. Shultz... 400,498
Vehicle brake, A. H. Wilson... 400,887
Vehicle rub iron, D. Guile... 400,451
Vehicle running gear, E. W. Jenkins... 400,772
Vehicle seat lock, J. N. Corey... 400,640
Vehicle spring, L. Stouffer... 400,506
Vehicle trace loop, O. V. Blazier... 400,630
Ventilating apparatus for vehicles, J. J. Geraghty... 400,569
Wagon brake, Hartman & Clay... 400,675
Wagon brake lever, W. A. & E. G. Haney... 400,565
Wagons, advertising panel for delivery, E. A. Culver... 400,831
Walls or ceilings, furring strip for, J. Twichell... 400,521
Wash board, S. Bingham... 400,823
Wash boiler tank, J. W. Anderson... 400,425
Washing machine, B. Brobst... 400,741
Washing machine, S. M. Cole... 400,637
Washing machine, R. Nash... 400,702
Water motor, F. W. Tuerk, Jr... 400,610, 400,883
Weather strip, H. O. Woy... 400,815
Welding roll, R. Cartwright... 400,828
Well boring apparatus, Lowery & Wyant... 400,466
Wheelbarrow, metallic, J. Annin... 400,534
Whip holder, A. Hall... 400,452
Window, B. Aschinbach... 400,427
Window, removable bay, S. Schofield... 400,605
Window screen, extension. Burt & Holman... 400,825
Wire stretcher, tightener, and splicer, combined. Hays & Clemens... 400,676
Wood, machine for ornamenting, E. W. Alleigh... 400,423
Wood, etc., machine for ornamenting, E. W. Alleigh... 400,625
Wood, etc., two-part cylinder and die for, ornamenting, E. W. Alleigh... 400,626
Wrench. See Ratchet wrench.
Yarn reeling machine, W. Schofield... 400,494
Yoke for draw heads, R. Morris... 400,474

## DESIGNS.

Bottle. F. M. Underhill... 18,997
Carpet, W. L. Jacobs... 18,984, 18,985
Carpet, J. McMann... 18,988
Carpet, E. Poole... 18,991 to 18,994
Carpet, L. W. Valentine... 18,998
Carpet, G. C. Wright... 19,000 to 19,004
Collar or cuff, E. O. House... 18,983
Curling and crimping comb, G. A. Scott... 18,995
Curtain fabric, C. Wheeler... 18,999
Dish, J. B. & G. E. Coiffee... 18,979
Drawer pull, F. A. Coffin... 18,978
Horseshoe, H. J. Goldman... 18,980
Organ case top, L. H. Marston... 18,987
Plates, ornamentation of, E. Morel... 18,989
Rug, J. Stroheim... 18,996
Sewer trap, W. H. Graham... 18,981
Sewing machine frame, A. Faulkner... 18,982
Sheet metal elbow, A. Langerfeld... 18,986
Stove, heating, J. A. Orr... 18,990
Textile fabric, J. Bleischwitz... 18,977

## TRADE MARKS.

Baking powder, Price Baking Powder Company... 16,438
Boots and shoes. Urner Bros... 16,440
Boots, shoes, and slippers of all kinds, Packard & Field... 16,436
Brushes, mirrors, and ornamental boxes, toilet, W. M. Welling... 16,441
Cigars, Hesslein Bros... 16,447, 16,448
Cigars, Wengler & Mandell... 16,461
Cleaning and polishing compound, E. J. Austin... 16,442
Clothing, oil or waterproof, J. F. Carter... 16,427
Coating for iron, stone, cement, wood, and the like, liquid, L. Pupat... 16,456
Coloring matter, A. F. Poirrier... 16,455
Compounds for coughs, colds, and diseases of the throat and lungs, Crescent Medical Co... 16,446
Elastic and flexible compound and articles made therefrom, A. M. Wood... 16,462
Fertilizers composed of phosphoric acid, potash, and ammonia, Farmers Fertilizer Company... 16,429
Galvanic batteries, P. C. Burns... 16,445
Grape vine slips, S. Hoyt's Sons... 16,433
Grease, leather, A. Sommer... 16,460
Hair and scalp, tonics and lotions for the, M. Hakoumoff... 16,432
Heating apparatus, Howard Furnace Company... 16,449
Laces for boots and shoes, cotton, W. Paton... 16,437
Leather, dressing and lubricating compound for, Porpoisine Manufacturing Company... 16,454
Magazine, semi-monthly, Buckeye Publishing Company... 16,444
Medical compound for external and internal use. G. H. Rundle... 16,458
Medical compounds for the cure of diseases of the nerves, liver, and stomach, H. R. Rogers... 16,457
Medical tonic, Kerfall Drug and Chemical Co... 16,434
Medicines for coughs, colds, and pulmonary diseases, F. Gies... 16,430
Metal decrustating compound, Non-Corrosive Boiler Compound Company... 16,453
Oars, handspikes, and capstan bars, De Grauw, Aymar & Co... 16,428
Paints, and painters' supplies, T. Hubbuck & Son, 16,450 to 16,452
Preparation for diseases of the liver and kidneys, for constipation, and nervous affections, Manhattan Therapeutic Company... 16,435
Remedy for rheumatism, S. A. Richmond... 16,439
Saws, S. I. Goddall... 16,431
Shears, H. Seymour Cutlery Company... 16,459
Soap and toilet cream, toilet and medicinal, Blondeau & Cie... 16,448

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