

ture of hydrofluoric acid and barium sulphate, no projector being used or needed. The "Scientific American Cyclopaedia of Receipts, Notes and Queries," price \$5, contains several receipts on the subject of your inquiry.

(4245) G. S. W. writes: In vol. x, No. 252, SCIENTIFIC AMERICAN SUPPLEMENT, "How to Make a Telescope." by Hopkins, it says the focusing tube, G, of brass is 1 1/4 inch internal diameter. Then, speaking of the astronomical eyepiece, the eye aperture should be 1 1/4 inch diameter, and the diaphragm about the same. As the diaphragm would be same diameter as the brass tube G, of what use is it? Is it not an error? Also what are the diameters of the lenses for the astronomical eye piece described, and what would be the combination for one of higher and one of lower power? A. In the article referred to, for "eye aperture 1 1/4 inches" read eye aperture 1/4 inch. The rule for the combination of lenses for astronomical eye pieces is given in the article referred to. The focal lengths of the eye and field lenses should be as 1 to 3.

TO INVENTORS.

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Trunk or case, S. Herm nn 472,119
Tub. See Dye tub.
Tub, for upsetting ends of metal, J. Kitsmiller 472,504
Turning machine, rod and broom handle, S. H. Britton 472,332
Typewriting machine, W. J. Barron 472,023
Typewriting machine, G. M. Bower 472,024
Typewriting machine, C. Fleckenstein 472,445
Typewriting machine, J. F. Franke 472,042
Typewriting machine, J. Jackson 472,481
Umbrella or parasol, folding, Hayes & Millay 472,457
Vacuum pan, J. R. Faruham 472,369
Valve controller, electro-magnetic, O. E. Lundstedt 472,401
Valve for safety plugs for steam boilers, L. Sleno 472,233
Valve gear for steam engines, B. Bertermann 472,100
Vapor burner, C. A. Pope 472,381
Vaporizer, C. W. Merrill 472,133
Varnish, apparatus for applying, J. J. Clause 472,075
Vehicle running gear, T. Sutherland 472,280
Ventilating machine, coin-actuated, R. Moran 472,507
Ventilation, system of, J. F. Duffy 472,163
Vessel, air tight, G. A. Lawrence 472,480
Vise, J. H. McIntyre 472,311
Wagon running gear, C. E. Holler 472,286
Wagon running gear, J. M. Holler 472,286
Washing machine, J. D. Reed 472,227
Watch cases, ornamenting, C. Wilhelm 472,490
Water heater, H. B. Joyce 472,128
Water motor, running, E. B. Bickel 472,467
Wave power motor, Rohnold 472,386
Weighing and bagging machine, H. E. Hawk 472,455
Weir, automatic measuring, A. Johnson 472,127
Wells, apparatus for boring artesian, F. O. Brown 472,493
Wheel. See Buggy wheel. Car wheel.
Whiffletree, electric, G. W. Blanchard 472,329
Whiffletree book, T. Address 472,491
Winding machines, traverse motion for bobbins in, J. A. Murphy 472,383
Window, O. Wagner 472,239
Windowers, shaking sieve for, G. N. Salenius 472,275
Wire brush, machine, E. L. Briley 472,385
Wires, device for joining intersecting, G. M. & H. R. Lamb 472,069
Wood graining machine, W. W. Grier 472,200
Woven fabric and weaving the same, G. H. Harvey 472,216
Wrench, W. S. D. Tripp 472,302
Wrench. See Pipe and rod wrench.

DESIGNS.

Badge, W. F. Bowen 21,443
Bretzel, J. Pfenniger 21,450
Buckle, L. B. Prabar 21,448
Button, A. A. Brunswick 21,449
Fireplace front, W. E. Fitch 21,444
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Monument, W. H. Perry 21,451
Picture frame bracket, L. Wolfsky 21,432
Ruffling or rouching, C. G. Hill 21,447

TRADE MARKS.

Alloy, Frictionless Metal Company 20,922
Boots and shoes, leather, Guthmann, Carpenter & Co. 20,920
Canned vegetables and fish, Seeman Brothers 20,942
Cement, Burham Brick, Lime and Cement Company 20,950
Cigars, D. L. Trujillo & Sons 20,948
Coffee, Elmenhorst & Co. 20,926
Composition, preparation to beautify the, E. C. Clay 20,927
Confectionery or candies, E. F. Gavin & Co. 20,939
Currants or similar prepared fruits or vegetables, cleaned, Crandal & Godley 20,938
Dental plates and other uses, aluminum solder for, Gerard & Leard 20,929
Edge tools, cutlery, and instruments and implements of steel for surgical, toilet, domestic, and other purposes, Jacoby & Wester 20,933
Fertilizers, ground bone, Sharpless & Carroter 20,932
Glass bottles, jars, and other glass receptacles and table ware, Nelson Glass Company 20,931
Gloves, Ormes, Upsdale & Co. 20,922
Hair restorative consisting of a natural white oil, White Rock Oil Co. 20,934
Hair tonic, W. B. Logan 20,940
Hooks and eyes for garments, Richardson & De Long 20,923
Lard, E. Godel & Sons 20,928
Liniment, W. E. Everitt 20,927
Medical composition for removing fungus growths from the jaws and bones of animals and warts from persons, G. R. Wrage 20,933
Mowers, law, Chaddorn & Coldwell Manufacturing Company 20,936
Paint, liquid, Hanna & Abbott Manufacturing Company 20,935
Paper for printing and lining strawboards used in making boxes, W. H. Parsons & Co. 20,947
Polish for wood and metal work, Manley & Turner 20,930
Remedies, neuralgic, C. H. Sagar 20,941
Remedy against blood poisoning, D. A. Chippinger 20,951
Remedy for rheumatism, J. J. Winsor 20,949
Salves, ointments, or liniments, and cough mixture, F. B. Scherer 20,924
Soap, harness, Capitani Manufacturing Company 20,946
Starch for laundry or food purposes, preparation of, National Starch Manufacturing Company 20,943
Suet or beef fat and cotton seed oil for cooking purposes, compound of, R. B. Brown 20,944
Towel wash for the complexion, F. A. Jones 20,921
Wines and whiskies, bottled, C. F. Bode 20,945
Wool dress goods, F. Arnold 20,925

A printed copy of the specification and drawing of any patent in the foregoing list, or any patent in print issued since 1863, will be furnished from this office for 25 cents. In ordering please state the name and number of the patent desired, and remit to Munn & Co., 361 Broadway, New York.