

tity to cool under cold water, and if not found sufficiently firm, allowing to simmer longer, or have more tar and resin added. The cement should be poured in the angles of the aquarium while in a liquid state, but not when boiling, or it would most assuredly crack the glass. The cement will become firm in a few minutes, and the aquarium may then be tilted up in a different position while a second angle is treated likewise. This composition adheres firmly to the glass, is so pliant that it may be pressed into any shape by the fingers, and it does not communicate any poisonous quality to the water.

(32) J. C. D. asks: 1. Is there any method by which drawings or facsimiles of handwriting can be transmitted by telegraph? A. There are several. 2. And if so, why has it not come into more general use? A. On account of the complication of the apparatus and the time consumed in working it. 3. If there is any method, where could I get a description of it? A. You will find several of them described in Prescott's "Electricity and the Electric Telegraph."

(33) J. K. B. asks: 1. How many revolutions must a fan have, 12 inches in diameter, 4 inch buckets? I wish it to blow the trash out of corn as it enters the millstone to be ground. A. If it is well made, you can run it from 5,000 to 6,000 revolutions a minute. 2. The engine that we are using is badly eaten with tallow; if not tallow I do not know what it is. I supposed it to be the tallow. I have recently fitted up the piston and partly the steam chest, and now I am using West Virginia lubricating oil and beeswax, in proportion 2 of oil to 1 of wax. A. The oil alone will answer very well. We do not think the wax will do any harm.

(34) Engineer asks: 1. Is the curve traced through the points found by the method explained by you in No. 29, "Notes and Queries," of the SCIENTIFIC AMERICAN for August 17, adiabatic, or only hyperbolic, having a slightly larger valuation than the one formed from the equation $x a' = b a$? A. The curve is an approximated one for dry saturated steam. 2. Will you please construct a formula or equation, and give an example, from the symbols $P \propto n^{-1/2}$, as given in Rankine's "Manual of the Steam Engine," p. 385, article 282? A. a = piston stroke (clearance added) to point of release. a' = piston stroke (clearance added) to any other point. P = initial pressure of steam. P' = pressure at point a' . $P' = P \times \left(\frac{a'}{a}\right)^{1/2}$. Example: $a = 60$. $a' = 30$. $P = 100$. $\frac{a'}{a} = 0.5$.

Log. 0.5 — 1.6989700
Multiply by 10

Log. of 10th power of 0.5 4.9897000
Divide by 9 4.9897000

Log. of 1/10th power of 0.5 — 1.6653222
Add log. of 100 — 2

Log. of pressure at a' — 1.6655222
Corresponding number, pressure at a' , 46.3.

(35) R. C. K.—See p. 139 (11), current volume.

(36) C. K. asks: 1. In vertical engines, how much weight should be counterbalanced, the pitman, piston rod and head, or the pitman and crank? A. Connecting rod, piston rod, crosshead, piston, and crank. 2. Which is the best way to screw crank pins into the crank, by riveting or by nuts? A. Nuts, generally. 3. Can a correct judgment be given as to the merits of an engine by the working of a small one, say a 1/2 inch bore and 3 inch stroke, double cylinder? A. Many points can be determined in this way, but not all.

(37) J. L. K. writes: Please give me the lifting power of a cask, 100 gallons capacity, attached to a dead weight and pumped full of air, at a depth of 10 or 12 fathoms. A. It will be equal to the difference between the weight of water displaced, and the weight of the cask and its contents. For power of windmills see vol. 32, p. 241.

(38) B. S. & M. ask: Do the driving wheels of a locomotive slip in passing an ordinary curve? I contend that they do not, as the face of the wheels on steam roads is beveled. In curving the inside wheel comes to the small or narrow part of the face, the outside wheel must ride on the high or large part. A. If the curving is right for one curve, it may not suit another having a different radius, so that there may be cases where a slip will occur.

(39) J. M.—We do not know that there is any advantage in placing water at the bottom of the ash pit.

(40) C. O. H. asks: What is the best blacking for dressing up a steam boiler and smoke stack? A. A black varnish made from mineral oil answers very well.

(41) S. P.—It is impossible to make a cheap heliostat with one mirror which will keep a beam of sunlight fixed in any given horizontal direction. The double mirror heliostat, described by Mayer in his work on light, may, however, be cheaply converted into an automatically movable one, by connecting a pulley on its polar axis with another of half the circumference on the hour axle of a common spring clock by means of a band. The theory of the single mirror heliostat in its numerous forms must be sought in special works, e. g., Jamin's "Cours de Physique de l'Ecole Polytechnique."

(42) G. C. L. writes: 1. I want to make a telephone, and hear that I can purchase in New York all the necessary parts ready to put together. A. Full directions for making a telephone are contained in the SCIENTIFIC AMERICAN SUPPLEMENT, No. 142. 2. Do I render myself liable to patent suits? A. See "Rights of Inventors," p. 128, current volume of SCIENTIFIC AMERICAN.

(43) E. G. B. writes: Suppose that we have a line shaft running about 180 or 200 feet, the power at one end and a fan at the other. Now if we would move the fan up close to the power, still leaving the line shaft in its original place, would it require any more power at one place than it would at the other? A. We think there would be no essential difference if the shaft is of sufficient size and well supported.

(44) E. R. D. writes: I have been troubled the same as T. T. writes in your issue of September 21, 1878, and, after trying all the experiments that he relates, have found that the only material that will withstand the action of steam, oil or tallow is pure asbestos. A. This is often good, but we scarcely think that it is the only material.

(45) G. G. L. writes: I propose going from New York to Florida in a staunch 25 foot steam yacht, and I wish to ask if you think it is safe, or if it is a dangerous undertaking. What would I need besides coast charts and compass to aid me? A. It would not be very dangerous with a good boat. You should have lanterns, a sounding line, two good anchors, and some life preservers, in addition to the articles you have named.

(46) M. S.—Weissenborn's "American Engineering" contains full details of beam engines.

(47) I. T. S. asks: What is the composition of a good flux for purifying metals, such as brass, pewter, hard lead, etc.? My object, for instance, is to separate in brass turnings the iron filings. A. The metals cannot be separated by fluxes alone. The brass and iron filings or turnings may be most economically separated by means of good electro-magnets, arranged on the periphery of a wheel or in any other suitable manner.

(48) F. K. asks: 1. Is a Smee battery with center plate of carbon a good battery for silver plating? A. Yes. 2. If so, what surface of zinc and anode is required to a given surface of work? A. Your anode may have twice the surface of the zinc. 3. What is the standard used by platers for 4, 8, and 12 oz. plate, or, in other words, how many table or tea spoons is 4 ozs. of silver put on for a single plate? A. For 4 oz. plate 4 ozs. of silver are put on a gross of spoons. 4. Is it any more necessary that different cells of a battery should be charged alike for quantity than for intensity? A. No.

(49) O. H. asks: Could you inform me of the existence of any substance which will make metal adhere to wood? A. Melt together equal parts of clear pitch and gutta percha. Apply hot.

(50) G. W. K. asks: What is the best English publication on numismatics? A. Consult Prime's "Coins, Medals, and Seals," Dickinson's "American Numismatic Manual," Faure's "Catalogue de Medailles antiques et Monnaies du Moyen Age composant sa Cabinet."

(51) F. W.—The star Mira Ceti will be found on the horizon at about 5° south of east.

(52) W. R. S.—To secure an artificial mustache you may try the cements recommended on p. 171 (3), current volume, SCIENTIFIC AMERICAN. Also p. 11 (3), vol. 38. These "masks" are, we believe, usually held in position by small springs entering the nostrils.

MINERALS, ETC.—Specimens have been received from the following correspondents, and examined, with the results stated:

J. S. R.—A fragment of quartz.—J. S. R.—Please send larger sample of the ore.—T. S. B.—No. 1. The sample of earth does not contain phosphates. No. 2 is dolomite or magnesian limestone. It may be used for building purposes.

COMMUNICATIONS RECEIVED.

The Editor of the SCIENTIFIC AMERICAN acknowledges with much pleasure the receipt of original papers and contributions on the following subjects:

On the Steam Ram. By S. S.
A Climax to Mechanical Invention. By E. L. T.
Egyptian Lotus. By J. S.
Elephantiasis vs. Leprosy. By T. C.
How to make a Simple Beam Compass. By M. A. B.
Mechanical Stoker. By D. S.

HINTS TO CORRESPONDENTS.

We renew our request that correspondents, in referring to former answers or articles, will be kind enough to name the date of the paper and the page, or the number of the question.

Many of our correspondents make inquiries which cannot properly be answered in these columns. Such inquiries, if signed by initials only, are liable to be cast into the waste basket.

Persons desiring special information which is purely of a personal character, and not of general interest, should remit from \$1 to \$5, according to the subject, as we cannot be expected to spend time and labor to obtain such information without remuneration.

[OFFICIAL.]

INDEX OF INVENTIONS FOR WHICH Letters Patent of the United States were Granted in the Week Ending August 13, 1878, AND EACH BEARING THAT DATE. [Those marked (r) are reissued patents.]

A complete copy of any patent in the annexed list, including both the specifications and drawings, will be furnished from this office for one dollar. In ordering please state the number and date of the patent desired, and remit to Munn & Co., 37 Park Row, New York city.

Advertising card, O. J. Ramsdell 206,999
Advertiser, illuminated, G. H. Chatterton 206,861
Alkali balls, composition for coating, A. Mendleson 206,891
Amalgamator and washer, ore, Firmin & Forster 207,028
Apple corer and slicer, Pfeiffer & Ulrich 206,967
Bag holder, W. B. Allen 206,915
Baking powder, W. P. Clotworthy 206,930
Bale tie, A. Roeder 207,071
Basket, flower, F. C. Tennyson 207,083
Bed, camp, F. J. De Morambert 207,060
Bed, sofa, S. Squires 206,980
Bedstead, table, E. Kiss (r) 8,375
Belt fastener, A. J. Johnson 207,038
Bird cages, fastener for, C. M. Neubauer 207,063
Bird cages, food holder for, B. A. Drayton 206,867

Blasting wedge, O. F. Brockhausen 206,927
Blind stop, A. F. Fuller 207,026
Blind, window, J. E. Goodrich 207,022
Blotter, tablet, C. M. Cott 207,017
Boats, outrigger, etc. for, Roberts & Knight 207,070
Bolt threading machine, T. Thomas 207,084
Boot and shoe, A. Van Wagenen 206,985
Bottle and bottle stopper, H. Codd (r) 8,372
Bottles, pliers for wiring, B. P. Kincaid 206,951
Bung, W. Bender 206,923
Button, F. A. Comey 206,931
Can and vent for oil, jacketed, J. S. Lester 207,046
Can lids, locking device for, W. E. Jenkins 206,879
Can, sheet metal, G. D. Brooks 207,007
Can, sheet metal, Miller & Coll 207,058
Canvas, making artists', W. Levin 206,885
Canvas, painters', W. Levin 206,886
Car coupling, J. Ballard 207,094
Car coupling, A. Rice 207,068
Carpet sweeper, F. Kammerer 207,040
Carriages, hanging, C. Schmitt 207,075
Cattle and sheep, marker for, T. Madden 206,889
Chair, window cleaning step, A. Dormitzer 206,935
Chandelier, extension, H. Tucker (r) 8,371
Chimney or ventilator cup or cowl, D. Scott 206,978
Churn, T. A. Irick 207,037
Churn, Tise & Kester 207,085
Clear tip protector, C. R. Becker 206,921
Clamp, H. W. Atwater 206,851
Clamp for holding bolts, J. W. Leete 206,954
Clasp for supporting garments, S. Porter 206,896
Cloth shearer, rest for, A. Woolson 207,090, 207,091, 207,092
Cock, steam, J. Dowling 206,937
Coffee, etc., cleaner and polisher, M. Doyle 206,866
Coffee roaster, J. B. & W. H. Wiggerman 206,911
Collar, M. Hermann 207,034
Collar, J. K. P. Pine (r) 8,369
Colors on glass, etc., producing, F. S. Shirley 207,077
Cooler, beer, W. B. Frantz 206,941
Cooler, milk, S. R. Bryant 207,008
Corn marker, D. S. Harner 207,031
Corset, C. L. Olmstead 206,964
Corset, J. K. Ross 206,900
Corset, H. S. Strauss 206,906
Cotton scraper and chopper, Gibson & McDaniel 206,871
Crocheting fabrics, machine for, H. A. House 206,878
Cultivator, C. D. Bradley 206,925
Cultivator, C. E. Sackett 206,974
Cultivator, S. R. Stanton 206,903
Cultivator wheel, J. E. Mustard 206,961
Cut-off valve for steam engines, R. Sanderson 206,975
Dental purposes, abrading tool for, E. T. Starr 207,079
Door alarm, F. C. Renner 206,899
Door securer, W. D. Rumsey 207,073
Drill hoe, grain, A. Landis 206,884
Drilling metal, A. J. Smart 206,979
End gate for wagons, W. H. Parkin 206,966
Engine, portable steam, W. H. Tappey 207,082
Evaporator, liquid, J. J. Johnston (r) 8,373
Evaporating liquids, process for, J. J. Johnston (r) 8,374
Excavator, C. Pontez 207,064
Fan, automatic, W. Duchemin 207,022
Fence, J. D. & W. E. Mandeville 207,050
Fence, E. D. Youngs 206,938
Fertilizer and grain distributor, S. S. Morton 207,062
Fertilizer distributor, B. Kuhns 207,043
Filter, water, P. P. Emory 206,938
Firearm, breech-loading, F. J. Mesle 207,056
Firearms, look for, J. M. Wittman 206,991
Fire escape, C. H. Ames 206,916
Fire extinguisher, H. S. Parmelee (r) 8,376
Foot power, W. F. Lane 206,952
Fork, M. Naumier 206,894
Forks, ferrule for spading, W. H. Buckley 207,009
Fruit drier, A. C. Burdick 206,860
Funnel, measuring, D. Hitchcock 206,946
Furnace, ore-roasting, etc., A. Ramage 207,065
Garbage holder, R. Cook 207,016
Gas light extinguisher, Brand & King 206,926
Gas, preparing nitrogen, G. A. Treutler 207,086
Gas regulator for retorts, L. G. McCauley 207,052
Gate, Hastings & Cook 207,032
Gate, farm, H. W. Goodwin 206,942
Gate, farm, S. Schreffler, Jr. 207,073
Glove fastening, A. B. Kittson 206,883
Grain separator, R. Clarke 206,920
Grain separator, M. P. Korsgaard 207,042
Grain separator, A. M. Sutherland 206,982
Grate holder, Howdon & Wood 207,036
Gun, machine, F. L. Bailey 206,852
Harrow, S. Becker 206,922
Harrow, J. Johnson 207,039
Harrow and seeder, wheel, J. S. Foster 207,025
Harvester, T. S. Brown 206,857
Hay carrier, E. A. Walters 206,987
Hay tedder, E. W. Bullard 207,010
Hay tedder, W. M. Saunders 207,074
Hedges, constructing orange, J. Kline 207,041
Hides, unhairer, scourer, etc. for, J. A. Talpey 207,081
Hinge for folding seats, R. T. Hambrook 206,875
Hinge, lock, H. M. Ralston 206,897
Hog choker, compound, J. P. Cole 206,863
Hoister, tobacco, J. M. Wadlington 206,986
Hoisting apparatus, tobacco, W. A. & W. S. Guy 207,030
Holdback for vehicles, E. E. Morse 207,061
Honey comb, foundation for, M. Metcalf 207,057
Hops, sack for baling, C. A. Sands 206,976
Horse nail machine, J. Mills 207,059
Horse power, C. E. Macarthy (r) 8,366
Horse power equalizer, L. B. Rowland 206,973
Horse shoe, D. F. Fetter 206,939
Horse shoe nail machine, J. D. Sumner 206,907
Horse shoes, die for making, G. Bryden 206,859
Horse shoes, manufacture of, G. Bryden 206,858
Hot air register and evaporator, W. L. McDowell 206,890
Hydrant for watering stock, J. Compton 207,015
Insect destroyer, J. P. Ruhmann 206,901
Ironing table, W. C. McGill 207,054
Knife scales, manufacture of, W. Baker 206,919
Knitting machine cylinder, A. Greiss 207,029
Lamp, Stephens & Lameroux 206,904
Lamp and stove, R. R. Moore 206,960
Lamp burner, W. O. Lincoln 207,048
Lamp, carbureting, C. E. Ball 206,999
Land leveler, S. Griffin 206,943
Lantern, L. J. Atwood 206,917
Lantern, C. H. Viereck 207,088
Lantern, signal, S. Coxon 206,938
Lock, time, J. L. Hall 206,872
Lock, time, S. M. Little 206,887
Lock, time, E. Stewart 206,931
Lubricator, C. F. Raymond 207,067
Lumber trimming machine, G. W. Nichols 206,962
Meal, flour, etc., drying, J. T. Maybury 207,051
Medicament, coated compressed, C. Carter 207,013
Middlings separator, W. H. Fruen 206,889
Mill attachment, grinding, C. V. Stevens 206,905
Mill, cider, J. L. Barnes 207,001
Mill, grinding, M. B. Atkinson 206,996
Millstone dress, W. D. Odendahl 206,963
Millstone dressing machine, W. Coplin (r) 8,377
Millstone driver, P. H. Childress 207,014

Mower, lawn, A. H. Rau 207,066
Numbering machine, T. S. Bowman 206,924
Nut lock, W. J. Brassington 207,006
Nut lock, J. C. Lewis 207,047
Odorless closet, W. Glover 206,874
Oil, transporting petroleum, R. A. Wilder 206,990
Oil for locomotives, O. A. Haynes 207,033
Paper pulp, separating, P. & G. C. Rose 206,971
Paper pulp washer, H. Hollingsworth 206,877
Pen holder, T. B. Jeffery 206,950
Photographs, coloring, Price & Klingaman 206,968
Pins, making wooden, A. M. Kendall 206,882
Pitheer, S. W. Rabbitt 206,907
Planter, corn, Goodwin & Hurlburt 207,028
Plow, F. Johnson 206,880
Plow, C. P. McWane 206,958
Plow point, White & Francis 206,910
Plow, sulky, J. C. Welsh 206,989
Pocket books, etc., clasp for, Wolf & Loeb 207,089
Potatoes, removing the skin of, A. R. Davis 206,834
Press, baling, P. K. Dederick 206,865
Press, hop, C. A. Sands 206,977
Printing press, Rosser & Briggs 206,972
Propelling vessels, Cowles & Brewer 207,018
Pump, C. F. & S. Rigby, 3d 206,970
Pump bucket, chain, M. C. Bignall 206,854
Pump bucket chain, J. S. Wilcox (r) 8,370
Pump chains, making, J. Adt 206,995
Pump, oil well, M. Lytle 206,888
Punkas, apparatus for working, Parsons & Palliser 206,895
Quilting frame, W. E. Barker 207,000
Railway spike, E. J. Remillon 206,898
Railway switch, street, J. V. McIlroy 206,957
Railway track, A. Herring 206,876
Rake, horse hay, T. S. Miller 206,959
Rein for two horses, driving, G. R. Woolsey 206,912
Rein holder, R. Floryanowicz 207,024
Rice hulling machine, W. G. Stevenson 207,080
Riveting machine, H. Mac Coll 207,049
Roofing, etc., material for, D. S. Armstrong 206,850
Ruling paper, machine for, E. Goupel 206,873
Sash and frame skylight, J. L. Cox 207,019
Sash fastener, Fogelstrand & Sparks 206,940
Saw handle, crosscut, M. E. True 206,908
Saw tooth, insertible, J. L. Berry 207,003
Screw cutting stock and tool, E. P. Berville 206,920
Sewing machine, T. Lamb 207,044
Sewing machine, Young & Dimond 206,892
Sewing machine, blind stitch, Hoffman & Meyers 207,035
Sewing machine shuttle, E. Bouscay 207,004
Shawl strap, W. T. Butler 206,928
Shirt, G. A. McFadden 207,053
Shirt neck shaper, A. Borchardt 206,856
Shoulder brace, A. Adamson 206,934
Skylight, A. & G. Bickelhaupt 206,853
Spike extractor, J. F. Scribner 206,902
Spinning ring, J. W. Wattles 206,988
Spring, vehicle, W. Chegwin 206,842
Springs, clip for vehicle, J. Bowden 207,005
Springs, retarding recoil of, Dick & Luders 207,020
Springs, retarding recoil of, C. J. A. Dick 207,021
Stamp, branding, W. L. Gamage 206,870
Steam generator, J. G. Baker 206,898
Steamer, feed, Crane & Gaylord 206,964
Stomach and enema pump, E. Rosenzi 207,072
Stove attachment, Lawrence and Strawbridge 206,953
Stove polish, H. J. Dreher 206,968
Stoves, fender for cooking, B. S. Hite 206,947
Swimming apparatus for teaching, T. H. Monstrey 206,892
Table slide, extension, H. W. McIntyre 207,055
Tar, package for, C. H. Leggett 207,045
Target, ball, C. A. Tatum 206,963
Telephone resonator, C. E. Carmon 207,011
Thill coupling, Holdredge & Cowan 206,948
Thill coupling, W. S. Palmer 206,965
Thrashing machine teeth, Richardson & Morgan 207,069
Toy bank, E. R. Morrison 206,893
Treadle, A. L. Akins 206,914
Truck and bag holder, Bissell & Van Buren 206,845
Turbine wheel, etc., U. S. & W. H. Sheffer 207,076
Twine holder, J. W. Turner 206,984
Type writing machine, E. R. Barron 207,002
Ultramarine, manufacture of red, J. Zeitner 207,093
Valve, globe, J. Powell (r) 8,367, 8,368
Ventilator for blow and dust rooms, J. B. Holmes 206,949
Wagon hound, J. Q. Adams 206,913
Wagon jack, H. Hiestand, Jr. 206,914
Wash board, B. Kaufmann 206,881
Wells, casing head for oil, F. A. Conkle 206,932
Wheel, vehicle, C. S. Carpenter 207,012
Wheelbarrow, J. Lennon 206,955
Whip socket, F. Higgins 206,945
Whitewashing machine, J. P. Weber 206,909
Wrench, axle nut, A. Van Wie 207,837

TRADE MARKS.

Baking powder, C. E. Andrews & Co 6,461
Boot and shoe blacking, Boyer & Co 6,473
Brushes, J. L. Whiting 6,469, 6,470
Condiments, such as pickles, etc., F. & J. Heinz 6,464
Cooking stoves, S. S. Jewett & Co 6,475
Drygoods, C. M. Williams 6,490
Dry hop yeast, Judd Brothers Yeast Company 6,465
Fancy furs, etc., J. E. Bergtold 6,478
Flour, H. F. Harrington 6,454
Flour, Kenly, Jenkins & Young 6,455
Fruit preserving substances, L. P. Worrall 6,459
Medicines, B. F. Rackley 6,467
Medicine for horses, etc., J. Saunders 6,480
Photographic material, E. & H. T. Anthony & Co 6,472
Prints, Eddystone Manuf. Company 6,457, 6,458
Printing plates, L. Brown & Co 6,453
Salt, R. Evans 6,479
Salve, Schloss & Frech 6,456
Sewing and knitting needles, H. Baylis 6,474
Smoking and chewing tobacco, MacIn & Barkley 6,477
Soap, C. F. Bates 6,462
Soap, Day & Frick 6,463
Thrashing machine, Seymour, Sabin & Co 6,481
Water closets, Zane & Roach 6,471
Wines and brandies, Renaud, Francois & Co 6,468
Wood heating stoves, S. S. Jewett & Co 6,466, 6,476

DESIGNS.

Burial caskets, A. H. Nirdlinger 10,776
Carpet, H. Christie 10,778
Carpet, C. Magee 10,779, 10,780
Carpet, J. Neil 10,781
Font of types, D. W. Bruce 10,777
Rocking chairs, S. Willershausen 10,782

[For the week ending August 6th.]

TRADE MARKS.

Baking powder, G. W. Kendall 6,450
Cassimeres, F. Glazier 6,437
Churns, Tiffin Union Churn Company 6,451
Cigars, H. Welsh 6,445
Coffee and spices, J. Prusso 6,439
Fertilizers, H. Duvall & Co 6,434
Flour, G. V. Hecker 6,438

Flour, Red Wing Mills	6,441, 6,442
Heating and cooking stoves, Detroit Stove Works	6,435
Lard, F. G. Pierra	6,440
Medicinal preparations, T. H. Videto	6,443
Medicinal preparation, J. L. Wallach	6,444
Plug tobacco, H. Welsh	6,446, 6,447, 6,448, 6,449
Spool cotton, A. D. Warren	6,452
Tickings, Eagle and Phenix Manufacturing Co.	6,436

DESIGNS.

Chairs, Harwood & Wood	10,766
Crackers, Fowler & Rockwell	10,765
Fonts of type, J. Herriet	10,767 to 10,769
Hand wheel for globe valves, J. L. Wolcott	10,775
Oil cloths, C. T. & V. E. Meyer	10,770 to 10,772
Overalls, G. Watkinson	10,774
Pocket lamp, C. S. Tallmadge	10,773
Sewing machine bracket arm, G. S. Darling	10,764

FOR THE WEEK ENDING AUGUST 20TH.

Adding machine, M. W. Clay	207,255
Axle, vehicle, W. Beers (r.)	8,384
Axles, upsetting collars on, J. C. Richardson	207,208
Bale tie, J. C. Harper	207,273
Bale tie, wire, R. H. Bartlett	207,097
Balls, manufacturing seamless, J. Brant	207,158
Barrel cover, S. W. Sheldon	207,214
Basins, overflow and trap for, C. H. Moore	207,197
Bath apparatus, vapor, G. W. Carpenter	207,249
Battery, galvanic, W. W. Griscom	207,270
Belt stretcher, C. K. Dodge	207,259
Blackboard, E. G. Durant	207,111
Bleaching, etc., fabrics in bulk, L. W. Wright	207,334
Blind wiring machine, C. Hinz	207,181
Boiler feeder, automatic, F. A. Wells	207,326
Boiler, steam, Salisbury & Smith	207,133
Bollers, heater for steam, H. Park	207,298
Bolt clipping machine, Chambers Jr. & Mendham	207,252
Boot and shoe, A. Van Wagenen	207,227
Boot and shoe counters, skiver for, S. D. Tripp	207,223
Boot jack, J. Roberts	207,209
Bottle corking machine, J. C. M. Braun	207,244
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