given the correct time, thinness is due to too short development. You need to keep the plate in the developer until you see signs of the image appearing through the back of the film. Probably your trouble has been in making instantaneous exposures with too weak a light or a slow lens stopped down. Both will make thin negatives. 2. Which are the best plates for instantaneous work? A. Cramer C, Seed 26, Stanley, Forbes and Carbutt plates are good. 3. Can you give me a good formula for a developing and fixing bath? A. The developing and fixing baths must be kept separate. An energetic developer is made by dissolving in warm

Water	40 oz.
Sulphite sodium c. p.	2 "
Eikonogen	1 "

To two ounces of the above add one drachm of following solution:

Water	3 oz.
Carbonate of potash	1 "

Begin by soaking the plate in the first solution a few minutes, then, should the plate refuse to develop, add the second. A fixing bath is made by dissolving 1 ounce of hyposulphite of soda in 6 ounces of water. 4. Do you know of any good book containing instructions in developing, fixing, printing, and what is the price? A. "The Amateur Photographer," by Ellerslie Wallace. Price $1.

(2877) G. L., alluding to an article in our SUPPLEMENT, No. 226, in which "black alder" is given as the popular name of *Rhamnus frangula*, asks if this is not an error, as "black alder" is the popular name of *Ilex verticillata*. A. No; it is not an error, in one sense. If the popular names of plants were subject to laws, the name "black alder" would, by the law of priority, belong to *Rhamnus frangula*, which, by the old herbalists, was called *Alnus nigra*, because, as Gerard observes, its "leaves be like those of the alder tree (the *Alnus glutinosa* of Europe), yet blacker." The name "alder" properly belongs to the species included under the generic name of *Alnus*, a Latin term cognate with the Teutonic, Scandinavian, and Sclavonic names of the common alder of Europe. The name "black alder" is properly applied in this country to *Alnus serrulata* and *A. incaua*, and improperly to *Nemopanthes Canadensis* and *Ilex verticillata*. To the last mentioned plant the name was applied by the early English colonists. The reason for the application is not obvious, since the plant is not an alder, resembles no species of alder, and is not black in any of its parts. The most conspicuous feature of the plant is its bright red berry-like drupes, which persist through the winter (as implied in the popular name "winterberry"), and which, one would suppose, would have recalled to the English mind the fruit of the common holly (*Ilex aquifolium*) of the old country, a plant generally related to our so-called "black alder." It must be remembered that the English names of plants given in medical works are not always popular, in the strict sense of the word, but are often merely translations of Latin names used by the older botanists, who were merely wont to classify plants rather by their external resemblances than by their botanical affinities.

(2878) T. H. asks (1) how to make a preparation for bleaching lard. A. One process is to heat the melted fat with sulphuric acid 1·3 to 1·45 sp. gr. 2. One for preserving meats (made with boracic acid). A. 92 parts pure glycerine are heated to 302° Fah., and 62 parts of finely pulverized boracic acid are added. Steam is evolved in considerable quantities. An entire day is needed for the preparation of 6 pounds. Or 100 parts common borax may be dried completely and mixed with 150 parts glycerine at the above temperature. They are about twenty times as powerful as salt.

Replies to Enquiries.

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

(2787) In reply to inquirer No. 2787, would say if his cider is colored with any iron substance, that is to say, if any nails are driven through the barrel into it, use fresh sweet milk, one quart, put in barrel and stirred up, and then filtered, will make it clear as if fresh made. Try it on small quantity; say take vinegar and whisky and add a few drops of tincture iron; it will turn black; then add your milk, and filter.—GEO. W. GULLICK.

TO INVENTORS.

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INDEX OF INVENTIONS

For which Letters Patent of the United States were Granted

February 24, 1891,

AND EACH BEARING THAT DATE.

[See not at end of list about copies of these patents.]

Air brake, C. R. James ... 447,236
Air brake, A. J. Wisner ... 446,908
Alarm. See Fire alarm.
Alizarine derivative, R. E. Schmidt ... 446,892, 446,893
Animal trap setter, A. Maul ... 446,921
Annunciator and indicator system, J. E. A. Miller ... 447,195
Atomizer, A. M. Shurtleff ... 447,064
Automatic sprinkler, A. F. Nagle ... 447,004
Axle box, car, D. Barckdall ... 447,271
Axle box, railway, L. Ellert ... 447,148
Bag blanks, machine for making tubular, J. Arkell ... 447,065
Ball. See Bowling ball.
Band cutter and feeder, W. G. Huntington ... 446,973
Battery. See Galvanic battery. Secondary battery.
Battery elements, machine for moulding separator plugs for, A. F. Madden ... 446,873
Beam, pressed steel, S. Fox ... 446,859
Beating-out machine, G. H. Cogswell ... 446,990
Bed, T. J. Parkinson ... 447,257
Bed bottom, spring, G. Keenholts ... 447,135
Bed, bracket, T. E. Smith ... 447,167
Bell for grain elevators, etc., alarm, G. W. Nye ... 446,881
Berth and seat for ships or railway cars, J. G. W. Aldridge ... 447,020
Bicycle, S. A. Donnelly ... 447,234
Bicycle support, J. M. Anck ... 447,125
Binding post, C. A. Lieb ... 446,871
Bird cage perch, J. F. Sweeney ... 447,006
Bit. See Bridle bit.
Blind stile boring and mortising machine, W. C. & J. A. Aycock ... 447,270
Block. See Fuse block.
Blow or pressure, coin-controlled machine for indicating the force of a, A. J. C. Graf ... 446,970
Board. See Crimping board. Game board.
Boiler. See Steam boiler.
Boiler cleaner, S. C. La Hatt ... 447,192
Boiler water tube, steam, E. G. Shortt ... 447,209
Bolt, Stroh & McIntosh ... 446,997
Bolt machine, C. & C. E. Hall ... 447,110
Book case, roller shelf, Babbitt & Harvey ... 447,238
Bookmark, A. S. Fiske ... 446,857
Book, spring back, A. C. Fletcher ... 446,858
Boot or shoe case, S. F. Frazier ... 447,150
Boot or shoe cleaner, C. Johnson ... 447,116
Boring machine, G. L. Campbell ... 447,176
Bottle filling machine, W. H. Baldinger ... 447,056
Bowl or wash basin, set, S. P. Crosswell ... 447,232
Bowling ball, S. S. Harman ... 447,011
Box. See Axle box. Cigarette box. Fire alarm signal box. Letter box. Signal box.
Box corners, machine for attaching stays to, F. H. Beach ... 447,225
Box lifter, F. P. Morrison ... 446,924
Braiding machine, J. Tregurtha ... 447,262
Braiding machine carrier, P. J. A. Fornander ... 447,108
Braiding machine take-up, P. J. A. Fornander ... 447,107
Brake. See Air brake. Car brake. Rail brake.
Brake-actuating device, R. T. Smith ... 446,935
Brick kiln, J. B. Griswold ... 447,151
Bricks, composition for coating, J. Miller ... 446,877
Bridge, W. B. Wise ... 447,222
Bridle bit, M. J. Daly ... 446,944
Bronzing or other machines, fly delivery for, A. N. Buchanan ... 447,101
Broom, T. J. Thorp ... 446,901
Buckle, R. G. Henry ... 447,070
Bucket cover, sugar, H. H. Reymer ... 447,082
Buckle, harness, M. Huffman ... 447,244
Building and water tower, combined, W. F. Smith ... 446,897
Burnishing machine, C. W. Miller ... 446,923
Butter worker, T. Muir ... 447,157
Button, separable, R. H. Lewis ... 447,249
Calendar, J. D. Watters ... 447,171
Calendar and time card, combined perpetual, C. M. Hamilton ... 446,916
Can. See Milk can.
Can opener, S. E. Painter ... 446,883
Car brake, E. M. Barnes ... 447,272
Car brake, Pool & Beals ... 446,981
Car brake, automatic, Seawell & O'Hara ... 447,207
Car coupling, F. A. Johnson ... 447,154
Car coupling, J. E. Mullins ... 446,976
Car coupling, G. R. Rogers ... 447,259
Car coupling, C. W. Smith ... 557,165
Car coupling, Weeks & Bush ... 447,035
Car door latch, O. P. Hix ... 447,182
Car heating apparatus, W. C. Baker ... 447,100
Car platform gate, G. C. Bushman ... 447,102
Car, railway, L. P. Farmer ... 446,984
Car, railway, W. W. Green ... 447,055, 447,054
Car replacer, Reynolds & Perkins ... 446,951
Car, street, Baier & Hart ... 447,240
Car ventilating device, railway, R. W. Waldrop ... 447,216
Car ventilator, G. Hogg ... 447,071
Cars, current controlling device for electric railway, J. C. Chamberlain ... 447,230
Carriage bow, I. N. Topliff ... 446,938
Carriage corner irons, process of and apparatus for straightening, E. C. Porter ... 446,950
Carrier. See Braiding machine carrier.
Carrier and cleaner, J. H. R. Wendel ... 447,173
Cart, road, W. L. Pike ... 446,834
Case. See Book case. Boot or shoe case.
Cash indicating, recording, and registering machine, C. W. Weiss ... 447,036
Cash indicator and recorder, Kruse & Weiss ... 447,031
Cash register and indicator, W. C. McGill ... 446,925
Cash register and indicator, Webster & Drew ... 447,261
Cement, apparatus for the calcination of, P. Krottnaurer ... 447,155
Cement, manufacture of Portland, H. C. Baum ... 446,911
Chopper. See Cotton chopper.
Chucks, automatic feed mechanism for, J. B. Clyne ... 447,144
Churn, J. P. Lynott ... 446,948
Cigar bunching machine, Westman & Delarue ... 446,989
Cigarette box, E. A. Hoen ... 447,183
Cleaner. See Boiler cleaner. Boot or shoe cleaner. Saw cleaner.
Clock, independent electric, W. J. Dudley ... 447,105
Cloth scouring, rinsing, and purifying machine, J. W. Steelbrooke ... 446,937
Clothes drier, J. Degelleke ... 446,853
Clutch, W. A. Murphy ... 447,033
Clutch mechanism, S. K. White ... 447,019
Cock box for water and gas pipes, stop, A. W. Morgan ... 447,078
Cockeye, M. M. Killinger ... 446,870
Coffee making apparatus, F. L. Brown ... 447,002
Coffin handle, Sargent & Stevens ... 447,086
Coke from ovens, apparatus for extracting, T. Smith ... 446,936
Concentrating apparatus, J. K. Hallowell ... 447,029
Condensing apparatus, E. Theisen ... 447,123
Cooking rack, W. Earle ... 446,855
Corkscrew, C. Hollweg ... 447,185
Corset, E. C. Foster ... 446,968
Cotton baling apparatus, H. Rembert ... 446,888
Cotton chopper, S. S. Kent *et al* ... 447,046
Coupling. See Car coupling.
Cracker cutting machine, W. A. Hull ... 447,113
Crane, traveling, J. H. Greiner ... 447,281
Crimping board, G. E. Shaw ... 447,119
Cryolite, making artificial, E. Richters ... 447,003
Cultivator and seed drill, combined, C. C. Hunter ... 447,188
Cut-out, S. D. Field ... 446,966
Cut-out, automatic, J. P. Tirrel ... 446,902
Cutter. See Band cutter. Plug and socket cutter.
Die stock and die, J. S. Fletcher ... 446,915
Doll, A. Pulvermacher ... 447,034
Door operating device, Von Brandis & Davidson ... 447,080
Doweling machine, J. B. Shengle ... 446,954
Drier. See Clothes drier.
Drill. See Rock drill.
Drilling to pattern, machine for, P. Pryibil ... 447,014
Drinks, shaker for mixing, C. W. Fox ... 447,069
Duet collector, J. K. Hallowell ... 447,026
Dye, red, P. Julius ... 447,189
Dyeing machine, J. P. Delehunty ... 446,854
Electric circuit regulator, T. M. Edwards ... 447,177
Electric heater, J. I. Ashbaugh ... 447,144
Electric motor, L. Gutmann ... 446,863
Electric motor mechanism, S. E. Mower ... 447,255
Electric signal device, magneto, N. B. Ginochio ... 447,045
Elevator, W. H. Jones ... 447,117
Elevator indicator, E. Whitlock ... 446,907
Engine. See Gas engine. Wind engine.
Engine reversing gear, steam, C. M. Farrar ... 446,992
Evaporating apparatus, E. Theisen ... 447,210
Feed water heater, L. Norton ... 447,159
Feed water heater and condenser, J. F. Fife ... 446,913
Feed water purifier, Titus & Werner ... 447,018
Fence and tree protector, combined, Blaine & South ... 446,849
Fence, flood, J. A. Davis ... 447,852
Fence, portable rail, C. B. Wynegar ... 447,223
Fence post, J. B. Cleaveland ... 447,231
Fence post, J. M. Rife ... 447,204
Fence, straight rail, D. & S. R. Port ... 447,201
Fertilizers, making phosphatic, J. Van Ruymbeke ... 446,998
Fibers, chemical retting and ungumming of textile, C. De la Roche ... 446,983
Fibrous plants, machine for decorticating, J. G. Hernandez ... 447,152
File cutting machine, J. Erlenwein ... 447,149
File, paper, A. B. Dick ... 447,067
Filter press, Coes & Reiss ... 447,024
Finger bar, A. J. Inglis ... 447,245
Finisher press, J. H. McGowan ... 447,003
Finishing or cleaning surfaces, apparatus for, A. Bryce ... 446,961
Fire alarm, pneumatic, A. Goldstein ... 446,863
Fire alarm signal box, non-interference, W. H. Kinnan ... 447,074
Floors or the surface of lumber, machine for dressing, R. L. Patterson ... 447,160
Flushing tank, J. Totham ... 446,904
Fly paper, sticky, H. W. Stecher ... 447,121
Forgings non-circular in cross section, making rolled, G. F. Simonds ... 446,934
Frame. See Sewing machine quilting frame.
Fuel, artificial, I. C. Bandman ... 446,845
Fuel, artificial, R. J. Schimper ... 447,138
Furnace. See Muffle furnace. Ore roasting furnace. Roasting and smelting furnace.
Furnace, M. C. Hawley ... 447,179
Furnace feeding device, boiler, G. W. Wood ... 446,959
Fuse, blasting, D. B. James ... 446,919
Fuse block, A. P. Seymour ... 446,895
Gauge, W. Ricketts ... 447,203
Gauge for determining the radius of curvature, J. T. Brayton ... 447,276
Galvanic battery, M. W. Robinson ... 447,016
Game apparatus, W. F. Jones ... 447,247
Game board, J. W. Sutton ... 447,088
Game board, J. Wood ... 446,942
Garment fastening, J. Leotin ... 447,076
Gas engine, B. H. Coffey ... 446,851
Gas retort discharging apparatus, G. A. Bronder ... 447,022
Gate. See Car platform gate. Railway gate.
Gate, C. H. Fidler ... 447,042
Gate, J. F. A. Millerick ... 447,013
Gate, W. H. Swogger ... 447,122
Gearing, frictional reversing, F. H. Richards ... 446,927
Glazier's window lead, machine for cutting, W. C. Minns ... 446,878
Glove, catcher's, E. H. Decker ... 447,233
Glue applying machine, Knowlton & Pease ... 447,012
Governor, engine, E. Thompson ... 446,957
Governor, steam engine, E. S. Bowen ... 447,059
Grain cleaning machines, roller mills, etc., feed device for, W. W. Huntley ... 447,072
Grape trimming and packing table, J. H. Edington ... 447,041
Grindstone, J. B. Kibler ... 446,920
Guard. See Sewing machine thread guard.
Gun carriages, recoil check for disappearing, J. B. G. A. Canet ... 447,227
Hammer, drop, A. Wilzin ... 447,093
Handle. See Coffin handle.
Hanger. See Tobacco hanger. Trolley wire hanger.
Harrow, M. Sattley ... 447,260
Hat holder, G. N. Cooper ... 447,278
Hatchway, elevator, J. J. McBride ... 447,196
Hay stacker, M. Machin ... 447,250
Heater. See Electric heater. Feed water heater. Milk heater.
Heating and ventilating the walls of buildings, W. Benner ... 446,848
Heating apparatus, electro, C. E. Carpenter ... 447,023
Heating device, H. Ingersoll ... 447,115
Heating devices, vacuum core for electrical, H. R. Butterfield ... 447,227
Heel nailing machine, J. H. Pope ... 446,885
Holder. See Hat holder. Pen holder. Pillow sham holder.
Hook, R. & J. Ingal ... 446,946
Horse detacher, J. M. Harden ... 446,866
Ice planing and corrugating apparatus, G. A. Birch ... 447,000
Incubator, S. H. Petro ... 446,980
Indicator. See Cash indicator. Elevator indicator.
Iodine with thymol, compound of, Messinger & Vortmann ... 446,875
Iron. See Smoothing iron.
Iron globule, chilled, B. C. & R. A. Tilghman ... 446,988
Iron globules, manufacturing chilled, B. C. & R. A. Tilghman ... 446,986, 446,987
Ironing table, E. W. Nothstine ... 446,977
Ironing table, G. R. Richardson ... 446,928
Kiln. See Brick kiln.
Knitted pile fabrics, machine for producing, J. Booth ... 447,226
Knob or handle, seamless sheet metal, S. R. & F. A. Wilmot ... 447,265
Knobs or handles, attaching, S. R. & F. A. Wilmot ... 447,266
Lamp, self-loading magnesium flash, D. H. Houston ... 446,918
Lamp socket, incandescent electric, J. M. Orford ... 446,995
Lamps, apparatus for flashing and exhausting incandescent electric, Nickerson & Berrenberg ... 447,256
Lamps, lantern for regenerative gas, L. A. Cooper ... 446,991
Latch, Matson & Phillips ... 447,055
Lathing, machine for forming sheet metal, J. Welchhart ... 446,939
Lathing, metallic, L. L. Sagendorph ... 447,084, 447,085
Leather staking machine, E. Hayes ... 447,180
Leather stretching machine, H. R. Behrens ... 446,847
Letter box, house door, Matthews & Gilmer ... 447,254
Leveling instrument, Soltmann & Grabau ... 446,956
Lifter. See Box lifter. Transom lifter.
Light by magnesium or other glowing materials, producing intense, J. W. C. C. Schirm ... 446,891
Lock. See Revolver lock. Time lock. Trunk lock.
Locomotives, extension smokestack for, H. D. Dunbar ... 447,106
Loom for weaving chenille fabrics, A. Sinclair ... 446,896
Loom positive shuttle motion, J. W. Babcock ... 447,038
Lounge, C. Mee ... 446,874
Lubricating device, G. T. Reiss ... 447,015
Lubricator. See Sight feed lubricator. Truck lubricator.
Mail bag catcher, Winsor & Cummings ... 447,094
Malt liquor, making, J. Griffiths ... 447,131
Matrix making or type setting machine, H. Lee ... 447,135
Matrix making or type setting machine, Lee & Lebrun ... 447,134
Measuring machine, foot, A. S. Adler ... 447,098
Mechanical movement, K. C. Kunkle ... 447,075
Metal articles, device for knurling the surfaces of, G. F. Simonds ... 446,933
Metal capsules, machine for making, F. W. Perry ... 447,137
Meter. See Oscillating meter.
Middlings purifier and dust collector, Miller & Walker ... 446,876
Milk can, J. E. Morrison ... 446,949
Milk curd, preparing food from, A. W. Rehnstrom ... 446,887
Milk heater, J. L. Jonsson ... 447,073
Mill. See Saw mill.
Mould. See Stereotype mould.
Mortising machine, H. F. Wyatt ... 447,269
Motor. See Electric motor. Railway gate motor. Sewing machine motor.
Motor, L. Eynard ... 446,945
Mowing machine divider, F. J. J. Schuett ... 446,894
Muffle furnace, C. H. Land ... 446,947
Music leaf turner, E. W. Burnham ... 447,040
Nut, lock, L. H. Young ... 447,224
Oiler, centrifugal, C. O. Heggem ... 447,282
Ordnance, breech-loading, J. B. G. A. Canet ... 447,228
Ore concentrator, M. Castelnau ... 446,963
Ore drying and pulverizing apparatus, J. K. Hallowell ... 447,028
Ore roasting furnace, G. N. Phelps ... 446,996
Ore separating apparatus, J. K. Hallowell ... 447,027
Oscillating meter, Thayer & Everett ... 447,140
Overshoe, W. F. Wahl ... 447,091
Packing, piston, W. Christie ... 447,007
Packing, rod, E. G. Shortt ... 447,261
Packing, rod, J. Walker ... 447,170
Pail and wringer, mop, E. A. Wood ... 446,909
Paint, fireproof, I. I. Merrell ... 446,922
Pen holder, T. Nance ... 447,197
Photographic camera shutter, H. B. Norton ... 446,880
Piano and organ, combined, J. A. Smith ... 447,120
Piano packing device, W. Hay ... 447,112
Pillow sham holder, W. L. Peevers ... 447,118
Pine needles, machine for fibrillation of, A. Scott ... 447,206
Pipes, etc., air space covering for steam, Costigan & Valleau ... 447,243
Pipes, covering for steam or hot water, C. C. Gilman ... 446,860
Planter and fertilizer distributer, combined cotton seed, J. M. Orr ... 446,978
Planter, corn, A. F. Runyan ... 447,205
Plaster slab, R. R. Coursen ... 447,025
Plastic material, machine for shaping, Hull & Boyer ... 447,132
Plastic material, press for shaping, Hull & Boyer ... 447,187
Pliers, L. Hugoniot-Tissot ... 446,972
Plow, T. G. Eason ... 446,965
Plow and fertilizer distributer, combined, W. F. Moss ... 447,156
Plug and socket cutter and chuck for the same, N. P. Stevens ... 447,048
Post. See Binding post. Fence post.
Powder distributer, M. C. Barden ... 447,175
Power machine, Glassbrook & Emmer ... 446,862
Press. See Filter press. Finisher press.
Printing device, H. F. Rockey ... 446,929
Printing in colors, W. Schumacher ... 447,087
Printing of textile fabrics, doctor employed in the, J. Archer ... 447,126
Printing press inking device, H. F. Bechman ... 447,021
Projectile for ordnance, explosive, J. J. Moore ... 446,975
Protector. See Fence and tree protector.
Pulley, friction clutch, Waterous, Jr., & Peel ... 447,217
Pulley, return, L. H. Paul ... 447,199
Pulverizing machine, J. K. Hallowell ... 447,030
Pump connection, vaccum, A. Berrenberg ... 447,275
Pump, vacuum, Berrenberg & Nickerson ... 447,273, 447,274
Pump, vacuum, A. Bornholdt ... 446,960
Pumping engines, gear for controlling the speed of, C. Davy ... 447,146
Pumping engines of hydraulic forging or other presses, governing gear for the, C. Davy ... 447,147
Puzzle, Z. F. Lightner ... 446,872
Rack. See Cooking rack. Show rack.
Radiator, steam, C. Otis ... 447,241
Rail brake, A. M. Perry ... 447,161
Rail cambering apparatus, J. Duffield ... 447,051
Railway, cable, Watriss & Kaighin ... 446,905
Railway chair spike, W. C. Wood ... 447,268
Railway cor.duit, underground, C. C. Gilman ... 446,861
Railway conduits, apparatus for cleaning, W. Heckert ... 447,181
Railway crossing, E. B. Entwisle ... 447,150
Railway drawing head, W. C. Peirce ... 447,200
Railway, electric, R. M. Hunter ... 447,283
Railway, elevated, D. B. Weaver ... 447,172
Railway frog, M. A. Dudley ... 447,235
Railway gate, A. J. McDonald ... 447,080
Railway gate motor, McDonald & Brent ... 447,079
Railway signal, electric, E. T. Harvey ... 446,917
Railway switches, appliance for moving, Washington & Roberts ... 446,904
Railway system, electric, C. J. Van Depoele ... 447,215
Railway tie and chair, metallic, H. P. Sweet ... 446,899
Railway trolley, electric, S. H. Short ... 446,931
Razor strop, C. L. Holland ... 447,184
Razor strop, J. R. Torrey ... 447,213
Reel. See Twine reel.
Register. See Cash register.
Register sheet, E. J. Richard ... 446,952
Regulator. See Electric circuit regulator. Windmill regulator.
Rein supporting ring, harness, M. C. Gamble ... 447,044
Reservoirs, device for disposing of surplus water impounded in, E. P. Roberts ... 447,083
Revolver lock, Weeks & Foehl ... 447,219
Rifling machine, C. W. Sponsel ... 446,898
Ring. See Rein supporting ring.
Road bed drain and safety tie, metallic, H. P. Sweet ... 446,900
Roasting and smelting furnace, W. Heckert *et al* ... 446,971
Rock drill, multiple, C. J. Van Depoele ... 447,214
Safe armor, F. M. Williams ... 446,941
Safe bolt retracting device, F. M. Williams ... 446,940
Safety switch, Hopkins & Bryant ... 447,186
Sand screen, Presscott & Bennett ... 447,162
Sash fastener, W. E. Dixon ... 447,068
Sash fastener, C. A. Frisbie ... 446,969
Saw cleaner, gin, J. W. Webb ... 447,218
Sawmill dog, W. A. Pannebaker ... 446,979
Sawmill, gang, T. S. Wilkin ... 447,092
Saw swage, D. B. Hanson ... 447,111
Scale weight, A. C. Mott ... 447,136
Screen. See Sand screen.
Screwdriver, push, E. Brown ... 447,277
Screw machine, C. M. Spencer ... 447,017
Screw machine slotting attachment, A. H. Eddy ... 447,010
Screw, temper, L. D. Mason ... 446,994
Screw threaded rolled forgings, method of and apparatus for making, G. F. Simonds ... 446,932
Screw wrench, J. Ryan ... 447,163
Seat spring for cushioned seats, W. Westermann ... 447,142
Secondary battery, S. C. C. Currie ... 447,279
Sewing machine, H. H. Cummings ... 447,008
Sewing machine feeding mechanism, W. A. Mack ... 447,251
Sewing machine motor, F. L. Clark ... 446,904
Sewing machine presser foot, W. A. Mack ... 447,252
Sewing machine quilting frame, J. N. Touchstone ... 447,169
Sewing machine shuttle actuating mechanism, W. A. Mack ... 447,253
Sewing machine take-up, H. H. Cummings ... 447,009
Sewing machine thread guard, J. H. Cutten ... 447,280
Shell, Cayley & Courtman ... 447,229
Shoe upper, E. Waldschmidt ... 447,263
Shot screening machine, G. T. Haring ... 446,867
Show rack, window, J. E. Briggs ... 446,982
Sight feed lubricator, E. Lunkenheimer ... 446,993
Signal. See Railway signal.
Signal apparatus, municipal, B. J. Noyes ... 447,060, 447,061
Signal box, B. J. Noyes ... 447,062
Signaling apparatus, police, B. J. Noyes ... 447,058, 447,059
Smoothing iron, J. H. Toof ... 447,049
Spectacles, bifocal, G. H. Cline ... 447,128
Spinning spindle support, R. White ... 446,999
Spring. See Seat spring. Vehicle spring.
Sprinkler. See Automatic sprinkler.
Stamp pads, inker for rubber, G. J. B. Rodwell ... 446,889
Stamp, perforating, A. Von Brandis ... 447,089
Stamps, apparatus for attaching adhesive, C. W. Tobey ... 447,212
Steam boiler, M. Levi ... 447,248
Stereotype mould, C. Sears ... 446,930
Store service apparatus, J. R. Haight ... 447,178
Stove, feed cooking, Montague & Bailey ... 446,879
Stovepipe fastener, F. A. Snow ... 447,168
Strap and buckle shield, G. H. Nicholls ... 447,158
Straw stacker, J. M. Smith ... 446,955
Surveyor's plotting instrument, P. O'Marra ... 446,882
Switch. See Safety switch.
Table. See Grape trimming and packing table. Ironing table.
Tank. See Flushing tank.
Tapping mains, machine for, J. Brankey ... 447,001
Telegraph apparatus, J. A. Parker ... 447,198
Telegraph transmitter, S. W. Smith ... 447,166
Telephone, E. J. P. Mercadier ... 447,194
Thermometer, oven, D. G. Cooper ... 447,129
Thermostat, A. M. Barron ... 446,846
Thrashing machine, G. Frick ... 447,043
Thrashing machine, F. F. Landis ... 447,052
Tie. See Railway tie.
Timber bending machine, Ranke & Yergens ... 447,202
Time lock, electric, M. I. Flowers ... 446,967
Tire tightener, Hewitt & Buence ... 446,869
Tires and fellies of wheels of road vehicles, machine for drilling the, J. Faske ... 446,856
Tobacco and other substances, machine for cutting, H. Winterwerber ... 447,095
Tobacco hanger, W. J. Sculthorp ... 447,242
Tobacco pouch, W. J. Cussen ... 447,103
Tool handle attachment, E. W. Fant *et al* ... 447,052
Toy, E. Del Valle ... 447,284
Toy, S. F. Simpson ... 447,164
Transmitter circuit, A. C. White ... 447,220
Transom lifter, J. L. Baker ... 447,174
Transom lifter, G. W. Hamilton ... 446,865
Tray, A. Wiggers ... 447,221
Trigger, set, O. A. Bremer ... 446,912
Trolley line cross-over, S. H. Short ... 447,208
Trolley wire hanger, Macloskie & Baker ... 446,985
Truck driving mechanism, car, C. W. Hunt ... 447,114
Truck lubricator, locomotive, W. McIntosh ... 447,081
Trunk, W. G. Russell, Jr. ... 446,890
Trunk lock, J. Krieger ... 447,057
Tube. See Boiler water tube.
Tug, Crabbs & Emens ... 447,050
Turn buckle, W. B. Middleton ... 447,077
Turn buckle blanks, roll for rolling, W. B. Middleton ... 447,237
Twine, machine for making compound paper and jute, J. W. Perkins ... 446,926
Twine reel, J. B. Holmes ... 447,153
Type distributing holder, A. B. Adams ... 447,124
Type writer drop cabinet, W. C. Behrens ... 446,943
Typewriting machine, T. F. Bourne ... 446,850
Typewriting machines, ribbon feed reversing mechanism for, J. Pusey ... 446,886
Typewriting machines, type cleaning brush for, F. Van Fleet ... 447,141
Valve for water, steam, etc., W. Thomson ... 447,211
Vaporizer, J. P. Robert ... 446,953
Vapors from foaming concentrated solutions, method of and apparatus for separating, J. Patten ... 447,258
Vehicle running gear, F. Funk ... 447,109
Vehicle spring, D. M. & T. H. Parry ... 447,005
Vehicle top, Zoller & Burrows ... 447,097
Vehicle wheel, E. Woolson ... 446,910
Velocipede, Archer & Bowley ... 447,099
Velocipede, T. W. Jamison ... 446,246
Velocipede pedal, G. W. Cushman ... 447,145
Vending machine, O. A. Wheeler ... 447,037
Vending machine, coin-controlled, F. J. Wood ... 447,267
Ventilator. See Car ventilator.
Vessels, shelter for watchmen on, H. L. Meadows ... 447,193
Voting booth, Babcock & Gourlay ... 447,239
Wagon dump and elevator, J. S. Kidd ... 447,190, 447,191
Washing machine, G. P. Walter ... 446,958
Washing machine, G. W. Wheatly ... 446,906
Weighing apparatus, liquid, J. P. Baldwin ... 446,844
Welding apparatus, electric, M. W. Dewey ... 447,104
Welding, method of and apparatus for electric, Lemp & Schmidt ... 446,974
Wheel. See Vehicle wheel.
Wind engine, M. C. Chapman ... 447,066
Windmill pump attachment, U. Yoder ... 447,096
Windmill regulator, Stover & Ziegler ... 447,139
Wood, means for joining, E. J. Fletcher ... 446,914
Wood polishing machine, J. L. Perry ... 447,047
Wood surfaces, finishing, A. Bryce ... 446,962
Wrench. See Screw wrench.

TRADE MARKS.

Ammonia preparations for medicinal purposes, Chemische Fabrik auf Aktien (vorm. E. Schering) ... 19,064
Baking powder, E. F. Jones Chemical Company ... 19,072
Beef, hog, and sheep products, including lard, fresh and cured, F. Whittaker & Sons ... 19,102
Bitters, pale orange, J. H. Membrey ... 19,092
Button fasteners, Anchor Button Fastener Company ... 19,061
Cement and plaster, Silicon Wall Plaster and Manufacturing Company ... 19,086
Chemicals for increasing the combustion of fuel, Standard Coal and Fuel Company ... 19,081
Cigars, J. D. Meyer ... 19,100
Cigars and tobacco, G. F. Davenport ... 19,067
Cordials, Hulstkamp, Zoon & Molyn ... 19,071
Corsets, waists, and shoulder braces, E. J. Swartwout ... 19,093
Cutlery for household use, Landers, Frary & Clark ... 19,091
Fabrics of cotton, wool, or mixed cotton and wool, Smith, Hogg & Gardner ... 19,080

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