Firearms, magazine for breech-loading, P. Mau-

NEW BOOKS AND PUBLICATIONS.

THE SENILE HEART. Its Symptoms. Sequelæ, and Treatment. By George William Balfour. New York and London: Macmillan & Co. 1894. Pp. 300. Price \$1.50.

Much of this work is sad reading. It describes the heart troubles, one of the great dreads of humanity. It is, of course, especially designed for physicians, but to those who are willing to investigate these ailments, and are able to do so without being frightened by possibilities of disease, it will, no doubt, be found very interesting. A full index is appended.

A TEXT BOOK ON ROADS AND PAVE-MENTS. By Fred P. Spalding. New York: John Wiley & Sons. 1894. Pp. viii, 213. No index. Price \$2.

Good roads is to-day one of the subjects attracting the most widespread interest of the public. The fact is coming to be recognized that a civilized country should have the best possible roads and highways, and that the modern streets should not be disgraced by cobblestone pavements, and that the use of these inferior traction surfaces involves a great loss of energy in the conduct of everyday business. The different classes of pavements, such as macadam, asphalt, wood and stone block pavements, are all treated here in detail with numerous illustrations, and the work is in every way to be strongly recommended, except in the omission of an index.

GEOMETRY FOR GRAMMAR SCHOOLS.

By E. Hunt. Boston, U. S. A.: D.
C. Heath & Co. 1894. Pp. iv, 99.

SCIENTIFIC AMERICAN BUILDING EDITION

OCTOBER, 1894.-(No. 108.)

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- 2. Plate in colors showing a very attractive stone dwell ing recently erected for H. J. Peet, Esq., at Buena Park, Ill. Two perspective elevations and floor plans. A pleasing design. Mr. J. L. Silsby, archi tect, Chicago, Ill.
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- 5. The residence at Belle Haven, Conn., recently completed for J. E. Kent, Esq. An attractive design in the modern Colonial style. Two perspective elevations and floor plans. Cost \$6,850 complete. Messrs. Rossiter & Wright, architects, New York City.
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- 9. A small Colonial cottage at Bayonne City, N. J. Perspective elevation and floor plan. Cost complete, nitrate of mercury and 2 parts sal-ammoniac with water. \$2,800. Mr. Arthur C. Longyear, architect, New York City
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(6282) G. C. asks: 1. What is the best constant current medical battery for burning out hairs, lighting a small lamp, etc.? A. Probably a storage bat tery is the best. For constant current a Daniell combination is good, but it is of high resistance and is not adapt d to open circuit work. A Grenet or plunge bat-Bayonne City, N. J. Perspective elevation and terris about the best primary battery for your work. Keep the zinc thoroughly amalgamated. 2. We have a battery of 12 cells made with a stick of carbon, a strip of zinc wrapped with cloth (to act as porous pot) and surfor John P. Jepson, Esq. An excellent example rounded with broken gas coke. Would nitrate of silver in distilled water form a good working solution that and floor plans. Cost \$5,620 complete, ready for would last and not polarize? A. No. It would be very occupancy. Mr. William H. Mersereau, architect, expensive and would quickly polarize. 3. Can you mention a good work giving lots of information on 8. A dwelling at Flatbush, L. I., recently completed for primary batteries? A. We can supply you with the Richard Ficken. Esq. A design in the Colonial following books relating to the subject you refer to; Carhart's "Primary Batteries," price \$1.50; Niblett's "Elementary Treatise on Electric Batteries." price \$2.50. 4. Can you suggest a good solution for our battery, as salammoniac does not answer? A. Try a mixture of 1 part

> (6283) H. E. writes: Why is it necessary to use such powerful engines to run dynamos? I cannot see why they should offer any great resistance, other than that caused by their great weight. A. A dynamo converts mechanical energy into electric energy. This it does by the forcing of the armature coils through a magnetic field. The resistance to its motion is almostidentical with that offered by an armature of a magnet when drawn away from the pole of a magnet. The weight produces no registance except as it increases journal fric-

(6284) F. G. C. writes: I have a teletance of 40 feet perhaps. It hums a great deal, and particularly at night and in cold weather. I have put an appliance called an anti-hummer or anti-singer house end of the line, but it does no good. Could you heater, illustrated.—The Poppert patent improved | tell me, if I also put another anti-singer at the pole end, if it would help it? Also, what is the reason it sings in the night time? A. Try changing the tension of the wire. An intermediate insulator placed to one side of the center of the wire might answer. It hums when its natural period coincides in some way with the wind actuating it. The extra anti-hummer would probably improve it.

Communications Received.

"On Concrete Construction." By E. L. R.

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Milling machine, J. Henwood. Mould. See Glass mould. Mould. See Glass mould. Mould. See Glass mould. Mould for making washers and tacks for plumbers' use, Black & Hill. Money drawer, safety, M. R. Daley. Motor. See Car motor. Current motor. Electric motor. Motor engine, gas, oil, or similar, Andrew & Bellamy. Motor engine, gas oroil, H. Schumm. Music, machine for making perforated sheet, W. E. Griegs. Musical instrument damper. A. Richter. Musical instrument tuling key, A. McKenzie. Olive mill Formake. P. Neaf. Oven paken's, al. Stimpkins. Ore roasting uniace. P. Neaf. Oven paken's, C. J. Bloom. Paddlewheel, feathering, J. Jacobs. Pail milk, R. Campbell. Panoramic camera, M. Flammang. Paper pulp beating engine, J. D. Pickles. Paving block, G. Bagge. Pas shelling machine for scoring, C. W. Gay. Paper pulp beating engine, J. D. Pickles. Paving block, G. Bagge. Pes shelling machine, Empson & McDonald. Pencil sharpener, J. C. McCollum. Pick or similar tool, W. K. Birkinshaw. Pick or similar tool, W. K. Birkinshaw. Pickure bender, T. Seaton, Sr. Pipe connection, E. R. Verworce.	527,931 528,062 528,062 528,116 527,977 527,811 528,016 528,016 528,016 527,892 527,892 527,893 527,789 527,841 527,96 527,841 527,96 528,027 527,924 527,925 527,925 527,925
Milling machine, J. Henwood. Mould. See Glass mould. Mould. See Glass mould. Mould. See Glass mould. Mould for making washers and tacks for plumbers' use, Black & Hill. Money drawer, safety, M. R. Daley. Motor. See Car motor. Current motor. Electric motor. Motor engine, gas, oil, or similar, Andrew & Bellamy. Motor engine, gas oroil, H. Schumm. Music, machine for making perforated sheet, W. E. Griggs. Musical instrument tuning key, A. McKenzie. Olive mill. Toulouse & Delorieux. Olive mill. Toulouse & Delorieux. Olive mill. Toulouse & Delorieux. Oven. portable, I. Stripe. Pandelwebed, feathering, J. Jacobs. Pail milk, R. Campbell. Panoramic camera, M. Flammang. Paper pulp beating engine, J. D. Pickles. Paving block, G. Bagge. Pas shelling machine, J. H. Empson. Pea shelling machine, Empson & McDonald. Pencil sharpener, J. C. McCollum. Pick or similar tool, W. K. Birkinshaw. Picture banger, W. S. Jacker. Pinking machine, C. H. Bayley. Pipe bender, T. Seaton, Sr. Pipe covering and manufacturing same, C. B. Manviller. Plane, bench or other, T. W. Fuller.	527,931 528,063 528,063 528,016 527,97(527,97(527,97(527,93) 527,838 527,934 527,934 527,935 527,935 527,935 527,935 527,936
Milling machine, J. Henwood. Mould. See Glass mould. Mould. See Glass mould. Mould. See Glass mould. Mould for making washers and tacks for plumbers' use, Black & Hill. Mould for making washers and tacks for plumbers' use, Black & Hill. Motor. See Car motor. Current motor. Electric motor. Motor engine, gas, oil, or similar, Andrew & Bellamy. Motor engine, gas or oil, H. Schumm. Music, machine for making perforated sheet. W. E. Griggs. Musical instrument damper. A. Richter. Musical instrument tuning key, A. McKenzie. Olive mill. Toulouse & Delorieux. Ore roasting furnace, P. Naef. Oven. baker's, A. T. Simpkins. Oven. portable, I. Stripe. Oven. portable, I. Stripe. Oven. portable, I. Stripe. Oven. portable, I. Stripe. Pali, milk, R. Campbell. Panoramic camera, M. Flammang. Paper board, machine for scoring, C. W. Gay. Paper palp beating engine, J. D. Pickles. Paving block, G. Bagge. Pea shelling machine, J. H. Empson. Pea shelling machine, Empson & McDonald. Pencil sharpener, J. C. McCollum. Pick or similar tool, W. S. Jacers. Pipe connection, E. B. Vanyorce. Pipe bender, T. Seaton, Sr. Pipe connection, E. B. Vanyorce. Pipe wrench, J. D. Wilson. Planter, check row corn, O. T. Wood. Planter, check row corn, O. T. Wood. Planter, check row corn, U. T. Wood. Planter, check row corn, U. T. Wood. Planter, corn, F. L. Block. Plow, H. Oldendorph. Flow riding attachment, J. Kleihauer, Jr.	527,981 528,063 528,063 528,063 528,073 527,877 527,877 527,878 527,878 527,878 527,922 527,922 527,923 527,92
Milling machine, J. Henwood. Mould. See Glass mould. Mould. See Glass mould. Mould. See Glass mould. Mould for making washers and tacks for plumbers' use, Black & Hill. Mould for making washers and tacks for plumbers' use, Black & Hill. Motor. See Car motor. Current motor. Electric motor. Motor engine, gas, oil, or similar, Andrew & Bellamy. Motor engine, gas or oil, H. Schumm. Music, machine for making perforated sheet. W. E. Griggs. Musica instrument damper. A. Richter. Musical instrument tuning key, A. McKenzie. Olive mill. Toulouse & Delorieux. Ore roasting furnace, P. Naef. Oven, back's, A. T. Simpkins. Oven, portable, I. Stripe. Oven, portable, I. Stripe. Oven, portable, I. Stripe. Oven, portable, I. Stripe. Pali, milk, R. Campbell. Panoramic camera, M. Flammang. Paper board, machine for scoring, C. W. Gay. Paper pulp beating engine, J. D. Pickles. Pea shelling machine, J. H. Empson. Pea shelling machine, Empson & McDonald. Pencil sharpener, J. C. McCollum. Pick or similar tool, W. K. Birkinshaw. Picture banger, W. S. Jacere. Pinking machine, C. H. Bayley Pipe bender, T. Seaton, Sr. Pipe connection, E. B. Vanyorce. Pipe wrenct, J. D. Wilson. Planter, check row corn, O. T. Wood. Planter, corn, F. L. Block. Plow, H. Oldemdorph. Plow riding attachment, J. Kleibauer, Jr. Pneumatic shears, C. O. Heggem. Plowirding attachment, J. Kleibauer, Jr. Pneumatic shears, C. O. Heggem. Polyshing and staining machine, L. & A. Schmoll. Potato digger, M. Klema. Prowder or shot feeding mechanism, C. S. Hisey. Press. See Cheese press. Glass press.	527,931 528,062 528,062 528,062 528,062 527,931 527,931 527,932 527,93
Milling machine, J. Henwood. Mould. See Glass mould. Mould. See Glass mould. Mould. See Glass mould. Mould. See Glass mould. Mould for making washers and tacks for plumbers' use, Black & Hill. Motor or See Car motor. Current motor. Electric motor. Motor engine, gas, oil, or similar, Andrew & Bellamy. Motor engine, gas oroil, H. Schumm. Musical instrument tuning key, A. McKenzle. Olive mill, Toulouse & Delorieux. Ore roasting furnace, P. Naef. Oven, baser's, A. T. Simpkins. Oven, portable, I. Stripe. Panoramic camera, M. Flammang. Panoramic camera,	527,931 528,062 528,062 528,062 528,062 527,930 527,93
Milling machine, J. Henwood. Mould. See Glass mould. Mould. See Glass mould. Mould. See Glass mould. Mould. See Glass mould. Mould for making washers and tacks for plumbers of the making washers and tacks for plumbers. Motor. See Car motor. Current motor. Electric motor. Motor engine, gas, oil, or similar, Andrew & Molellamy. Motor engine, gas, oil, or similar, Andrew & Bellamy. Motor engine, gas or oil, H. Schumm. Music, engine, gas or oil, H. Schumm. Music, engine for making perforated sheet, W. E. Grige. Musical instrument damper. A. Richter. Musical instrument tuning key, A. McKenzle. Olive mill. Toulouse & Delorieux. Oive mill. Toulouse & Delorieux. Oven. portable, I. Stripe. Panoramic camera. M. Flammang. Paner board, machine for scoring. C. W. Gay. Paper pulp beating engine, J. D. Pickles. Paving block, G. Bagge. Pea shelling machine, J. H. Empson. Pea shelling machine, Empson & McDonald. Pencil sharpener, J. C. McCollum. Pick or similar tool, W. K. Birkinshaw. Picture banger, W. S. Jaeger. Pipe connection, E. B. Vanyorce. Pipe covering and manufacturing same, C. B. Manviller. Pipe wrenct, J. D. Wilson. Planter, check row corn, O. T. Wood. Planter, check row corn, O	527,931 528,062 528,062 528,062 528,062 527,930 527,93
Milling machine, J. Henwood. Mould. See Glass mould. Mould. See Glass mould. Mould. See Glass mould. Mould for making washers and tacks for plumbers' use, Black & Hill. Money drawer, safety, M. R. Daley. Motor. See Car motor. Current motor. Electric motor. Motor engine, gas, oil, or similar, Andrew & Bellamy. Motor engine, gas oroil, H. Schumm. Musica, Bachine for making perforated sheet, W. E. Griggs. Musical instrument damper. A. Richter. Musical instrument damper. A. Richter. Musical instrument damper. Pandelle, Stripe. Oven, portable, I. Stipe. Oven, portable, I. Stipe. Panoramic camera. M. Flammang. Panoramic camera. M. Flammang. Paper board, machine for scoring. C. W. Gay. Paper pulp beating engine, J. D. Pickles. Paving block, G. Bagge. Pea shelling machine, J. H. Empson. Pea shelling machine, J. H. Empson. Pea shelling machine, J. McCollum. Pick or similar tool. W. S. Birkinshaw. Picture banger, W. S. Jacker. Pipe wrench, J. D. Wilson. Plane, bench or other. T. W. Fuller. Planter, Check row corn, O. T. Wood. Planter, corn, F. L. Block. Plow, H. Oldemdorph. Plow Tender, J. B. Wanyorce. Plee wrench, J. D. Wilson. Planter, corn, F. L. Block. Plow, H. Oldemdorph. Polishing and staining machine, L. & A. Schmoll. Polishing and staining machine, L. & A. Schmoll. Polishing and staining machine, L. Printing presses. Pressure regulator, W. G. Taafs. Printing presses, two-color attachment for, C. E	527,961 528,062 528,062 528,062 528,062 527,90
Milling machine, J. Henwood. Mould. See Glass mould. Mould. See Glass mould. Mould. See Glass mould. Mould for making washers and tacks for plumbers' use, Black & Hill. Money drawer, safety, M. R. Daley. Motor. See Car motor. Current motor. Electric motor. Motor engine, gas, oil, or similar, Andrew & Bellamy. Motor engine, gas oroil, H. Schumm. Music, machine for making perforated sheet, W. E. Griegs. E. Griegs. Bendelmer and perforated sheet, W. E. Griegs. Motor in the sument faming key, McKenzle. Olive mill. Toulouse & Delorieux. Olive mill. Toulouse & Delorieux. Ore roasting furnace, P. Naef Oven. portable, I. Stipp. New J. Jacobs. Oven. portable, I. Stipp. Pandlewheel, feathering, J. Jacobs. Pail milk, R. Campbell. Panoramic camera, M. Flammang. Paner board, machine for scoring, C. W. Gay. Paper pulp beating engine, J. D. Pickles. Paring block, G. Bagge. Pea shelling machine, J. H. Empson. Pea shelling machine, Empson & McDonald. Pencil sharpener, J. C. McCollum. Pea shelling machine, Empson & McDonald. Pencil sharpener, J. C. McCollum. Pick or similar tool, W. K. Birkinshaw. Picture hanger, W. S. Jaceer. Pipie connection, E. B. Vanyorce. Pipe covering and manufacturing same, C. B. Manville. Pipe wrenct, J. D. Wilson. Plane, bench or other, T. W. Fuller. Planter, Specht & Armand. Planter, check row corn, O. T. Wood. Printing machine, cylinder, J. Brooks. Printing machine,	527,931 528,062 528,062 528,116 527,931 527,93
Milling machine, J. Henwood. Mould. See Glass mould. Mould. See Glass mould. Mould. See Glass mould. Mould for making washers and tacks for plumbers' use, Black & Hill. Money drawer, safety, M. R. Daley. Motor. See Car motor. Current motor. Electric motor. Motor engine, gas, oil, or similar, Andrew & Bellamy. Motor engine, gas oroil, H. Schumm. Music, machine for making perforated sheet, W. E. Griegs. B. Griegs. Musical instrument taming key, A. McKenzle. Olive mill. Toulouse & Delorieux. Olive mill. Toulouse & Delorieux. Olive mill. Toulouse & Delorieux. Oven. portable, I. Stippe. Panoramic camera, M. Flammang. Paner board, machine for scoring, C. W. Gay. Paper pulp beating engine, J. D. Pickles. Paving block, G. Bagge. Pas shelling machine, J. H. Empson. Pea shelling machine, Empson & McDonald. Pencil sharpener, J. C. McCollum. Pick or similar tool, W. K. Birkinshaw. Picture banger, W. S. Jacker. Pipie connection, E. B. Vanyorce. Pipe covering and manufacturing same, C. B. Manviller. Pipe wrenct, J. D. Wilson. Plane, bench or other, T. W. Fuller. Planter, check row corn, O. T. Wood. Printing machine, cylinder, J. Brooks. Printing machine, oylinder, J. Brooks. Printing	527,931 528,062 528,062 528,118 527,062 528,063 527,063
Milling machine, J. Henwood. Mould. See Glass mould. Mould. See Glass mould. Mould. See Glass mould. Mould for making washers and tacks for plumbers' use, Black & Hill. Money drawer, safety, M. R. Daley. Motor. See Car motor. Current motor. Electric motor. Motor engine, gas, oil, or similar, Andrew & Bellamy. Motor engine, gas oroil, H. Schumm. Music, machine for making perforated sheet, W. E. Griegs. B. Griegs. Musical instrument taming key, A. McKenzle. Olive mill. Toulouse & Delorieux. Olive mill. Toulouse & Delorieux. Olive mill. Toulouse & Delorieux. Oven. portable, I. Stippe. Panoramic camera, M. Flammang. Paner board, machine for scoring, C. W. Gay. Paper pulp beating engine, J. D. Pickles. Paving block, G. Bagge. Pas shelling machine, J. H. Empson. Pea shelling machine, Empson & McDonald. Pencil sharpener, J. C. McCollum. Pick or similar tool, W. K. Birkinshaw. Picture banger, W. S. Jacker. Pipie connection, E. B. Vanyorce. Pipe covering and manufacturing same, C. B. Manviller. Pipe wrenct, J. D. Wilson. Plane, bench or other, T. W. Fuller. Planter, check row corn, O. T. Wood. Printing machine, cylinder, J. Brooks. Printing machine, oylinder, J. Brooks. Printing	527,931 528,062 528,062 528,118 527,062 528,063 527,063
Milling machine, J. Henwood. Mould. See Glass mould. Mould. See Glass mould. Mould. See Glass mould. Mould for making washers and tacks for plumbers' use, Black & Hill. Motor. See Car motor. Current motor. Electric motor. Motor engine, gas, oil, or similar, Andrew & Bellamy. Motor engine, gas oroil, H. Schumm. Bellamy. Motor engine, gas oroil, H. Schumm. E. Griggs. Musical instrument damper. A. Richter. Musical instrument damper. Packer. Packer. Packer. Musical instrument damper. A. Richter. Musical instrument damper. Packer. Packer. Packer. Packer. Packer. Musical instrument damper. Musical instrument. Packer. McDonald. Packer. Packer. Packer. Packer. McDonald. Packer. Packer. McDonald. Packer. Packer. Packer. Packer. McDonald. Packer. P	527,961 522,062 522,062 522,062 522,062 522,062 527,96
Milling machine, J. Henwood. Mould. See Glass mould. Mould. See Glass mould. Mould. See Glass mould. Mould for making washers and tacks for plumbers' use, Black & Hill. Motor. See Car motor. Current motor. Electric motor. Motor engine, gas, oil, or similar, Andrew & Bellamy. Motor engine, gas oroil, H. Schumm. Bellamy. Motor engine, gas oroil, H. Schumm. E. Griggs. Musical instrument damper. A. Richter. Musical instrument damper. Packer. Packer. Packer. Musical instrument damper. A. Richter. Musical instrument damper. Packer. Packer. Packer. Packer. Packer. Musical instrument damper. Musical instrument. Packer. McDonald. Packer. Packer. Packer. Packer. McDonald. Packer. Packer. McDonald. Packer. Packer. Packer. Packer. McDonald. Packer. P	527,961 522,062 522,062 522,062 522,062 522,062 527,96
Milling machine, J. Henwood. Mould. See Glass mould. Mould. See Glass mould. Mould. See Glass mould. Mould for making washers and tacks for plumbers' use, Black & Hill. Motor. See Car motor. Current motor. Electric motor. Motor engine, gas, oil, or similar, Andrew & Bellamy. Motor engine, gas oroil, H. Schumm. Musica, machine for making perforated sheet, W. E. Griggs. Musical instrument damper. A. Richter. Musical instrument damper. A. Richter. Musical instrument damper. A. Richter. Musical instrument tuling key, A. McKenzie. O'vee notal. O'vee notal. Toulouse & Delorieux. O'vee notal. O'vee, Daker's, A. T. Simpkins. O'veen, portable, J. Stippe. O'veen, portable, J.	527,961 522,062 522,062 522,062 522,062 522,062 527,96

Rule, calculating, E. F. Steck (r)	11,450
Rule, calculating, E. F. Steck (r). Sash belance, W. W. Abbott. Sash tastener, W. R. Abrums Sash fastener, W. R. Abrums Sash fastener, J. S. J. T. Paul. Saw Frame, J. Gelardin. Saw Gartaned.	527,760 528,059
Sash fastener, J. & J. T. Paul Saw frame, J. Gelardin	528,168 527,845 528,088
Sawing machine, M. Garland. Scale and coffee case. combined, Whetstine &	528,088
Baker	528,052 527,800
Baker Scow, dumping, Ciancimino & Mattocks Seal, J. E. Gogle Separating mach ine, magnetic, W. H. Williams	528,089
separator, see Centritugal separator. Magnetic	
separator. Sewing machine needle bar, S. H. Wheeler Sewing machine, shoe, M. T. Denne Shade suppo t. Crandall & Russell Shears. See Pneumatic shears. Shellcarrier block, C. S. Hisey Sheller. See Pea sheller. Sieve cut-off, W. A. Pendry. Sieve cut-off, agitable, D. J. Davidson Signal. See Annunciator signal. Railway signal.	527,915
Sewing machine, shoe, M. T. Denne	527,836 527,946
Shears. See Pneumatic shears.	528.093 l
Sheller. See Pea sheller.	597 889
Sieve cut-off, agitable, D. J. Davidson	527,834
Signal. See Annunciator Signal. Ranway signal. Signal, E. H. Goodman. Signaling system alactrical R A Fiska	Ear ner
Signal, E. H. Goodman Signaling system, electrical, B. A. Fiske	527,967 527,958
Signal, E. H. Goodman. Signaling system. electrical, B. A. Fiske. Signaling systems, circuit changer for electric, Hunter & Lough. Smoke preventing furnace S. N. Smith.	528,127
Soda agn apparatus for drving reasting and cal-	527,895
cming, J. R. & H. Watson	527,912 528,128
Spectacle case, G. W. Begole.	524,068
Springs, manufacturing flat zigzag, G. Hookham	527,856
Stair, trap door, E. F. Grosse	527,852
Stamp, time, J. C. Wilson Steam boiler, C. Finger	527,918 528,086 .
cuning, J. R. & H. Watson Sole rounding machine, G. Julian Spectacle case, G. W. Begole. Spindle support, H. A. Owen Springs, manufacturing flat zigzag, G. Hookham. Square, Grabler & Brown Stair, trap door, E. F. Grosse. Stamp, time, J. C. Wilson. Steam boiler, C. Fringer Stopper . See Bottle stopper. Stopper extractor, bottle, E. W. Robinson. Stove, gas, A. B. Hutchins.	528,031
Stove, gas, A. B. Hutchins Suction pipe drag, E. O. Patterson	527,858 528,022
Sulphite digester, J. Norton. Jr	527,876 :
liams	527,881
Tablet forming machine, F. S. Hereth	527,980
Tank. See Railway water tank.	521,300
Tapping apparatus, main, D. O'Neil Target trap, flying, A. H. & C. C. Hebbard	527,877 527,854
Sulpour can die and making same, Farker & Williams. Switch actuating mechanism. A. Matz. Tablet forming machine, F. S. Hereth. Tack driving machine, W. T. Hoofnagle. Tank. See Railway water tank. Tapping apparatus, main, D. O'Neil. Target trap, flying, A. H. & C. C. Hebbard. Telephone circuit and signal, T. Speucer. Telephonic and signaling system, combined, H. A. Chase.	528,040
Telephonic and signaling system combined, H. A. Chase. Thill support, J. Hurley. Ticket and holder, railway, Pugh & Martin. Tile floor, wall, etc., F. Furness. Tile floor, wall, etc., F. Furness. Tite, illuminating, J. W. Mark. Tire and run for wheels, flexible, S. Elliott. Tre, rubber, J. C. Tallman. Tires, making joints in pneumatic, C. E. W. Woodward.	528,075 528,102
Ticket and holder, rail way, Pugh & Martin Tile. G. W. Morrow	528.130 527.871
Tile floor, wall, etc., F. Furness	527,961 528,004
Tire and run for wheels, flexible, S. Elliott Tire, rubber, J. C. Tallman	528,004 527,781 527,820 528,056
Tires, making joints in pneumatic, C. E. W. Woodward	529,056
Woodward. Tobacco stripping or stemming machine, S. Reid. Toy money box. R. Nicol, Jr.	527,885 : 529,019
Toy money box, R. Nicol, Jr. Toy money box, R. Nicol, Jr. Trap. See Parget trap. Tran. See Parget trap. Tran. Trimmer. See Wett trimmer.	527,964
Tread wheel, H. Ariens Trimmer. See Welt trimmer.	528,066
Trolley wire support, M. M. Wood	527.920
Trolley wire switch plate, G. A. Huben	528,101 528,038
Truck for handling sewer pipe, F. E. McElfresh	528,011 526,048
Tube or flue cleaner, D. Hanson	527,972 527,072
Trolley wire switch plate, G. A. Huben. Trousers, L. S. Shauer Truck for handling sewer pipe, F. E. McElfresh. Truss, C. Verniaud. Tube or fine cleaner, D. Hanson Tumblers, etc., machine for finishine, W. H. Barr Typewriting machine attachment, Hartwell & Howe Umbrella, Z. Wirt. Valve, air compressor, W. A. Heath Valve for atomizers, heel, J. Hardman, Jr. Valve for compressed air brakes, controlling and discharge, F. A. Holleman. Valve, steam engine, A. F. Devereux Vehicle shipping cover, F. G. Davis. Vell fastener, C. A. Anderson.	599,009
Umbrella, Z. Wirt.	527,823
Valve for atomizers, heel, J. Hardman, Jr	527,974
discharge, F. A. Holleman	527,855
Valve, steam engine, A. F. Devereux	527,833
valve steam engine, A. F. Beverett. Vehicle shipping cover, F. G. Davis. Veil fastener, C. A. Anderson. Vending machine, coin-actuated, J. P. Beretta Veneer cutting machine, N. E. Brown. Ventilator. See Car ventilator.	528,062 527,930
Veneer cutting machine, N. E. Brown Ventilator. See Car ventilator.	528,120
Vine fastener, T. Flesher Vise, J. L Carpenter	527,959 528.074
Wad feeding mechanism, C. S. Hisey	528,099 527,8 8 6
Ventilator. See Car ventilator. Vine fastener, T. Flesher. Vise, J. L. Carpenter. Wad feeding mechanism, C. S. Hisey. Wagon, delivery, J. W. Pile. Wall paper machine, R. Hellmann. Watch movement frame, D. H. Church.	527,970 527,771
Watch plate, D. H. Church	527,772 528,000
Watch movement frame, D. H. Church Watch plate, D. H. Church Watch plate, D. H. Church Water conveyer, A. D. Goodwin Water elevator, J. McMurrin Weighing machine, automatic, Beckett & Roberts	528,015
erts. Welt trimmer F A Dunham	527,828
weigning machine, automatic, Beckett & Roberts. Welt trimmer, F. A. Dunham. Wheel, See Paddlewheel. Tread wheel. Wheel, H. B. Gleason. Windmill, P. O. Lutnes. Wire colls, spiral guide for machines for making, S. Coriasco. Wrench. See Pipe wrench.	590 10E
Windmill P. O. Lutnes.	527,866
Wire coils, spiral guide for machines for making, S. Coriasco	527,945
wrench. See Pipe wrench.	

DESIGNS.

Bracket, J. H. Gavin 23, Buckle, C. K. Kouse. 23, Buckle, C. C. Krouse. 23, T14, 23, Chair, step ladder, F. H. Herhold. 23, T14, 23, Chair, step ladder, F. H. Herhold. 23, T14, 23, Chair, step ladder, F. H. Herhold. 23, T14, 23, Chair, step ladder, F. H. Herhold. 23, T23, 23, 23, 23, 23, 23, 23, 23, 23, 23,	D T TT
Bracket, shelf, C. M. Burgess. 23.7 Buckle. C. C. Krouse. 23.7 Carpet, P. C. Chambellan 23,714, 23.7 Chair, step ladder. F. H. Herhold. 23.7 Clock case, J. Hopson, Jr. 23,723, 23. Disinfectant receptacle. T. S. Smith. 23.7 Display stand, G. A. Driggs. 23.7 Dynamo frame. C. E. Woods. 23.7 Ewer or jug, D. F. Haynes. 23.7 Fabric renovator, M. S. Kjellstrom. 23.7 Fabric renovator, M. S. Kjellstrom. 23.7 Forks, etc., handle for, C. Osborne. 23.7 Glass vessel, H. Sjerel. 23.7 Grave marker, S. B. Parker et al. 23.7 Guitar, J. A. Sutphen. 23. Lub, wheel, J. S. Bretz. 23. Lamp, heater, F. Rader. 23. Last, N. Bier. 23. Pin, stick or scarf, E. B. Thornton 23. Pumps, pipe head for chain. W. Lichtenberger. 23. Sash lift, J. Andrews. 23. Shade pull handle, G. F. Hensel. 23. Spoons, etc., bandle for. G. L. Crowell, Jr. 23. S	Bracket, J. H. Gavin
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