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RECENTLY PATENTED INVENTIONS. Engineering,

ROTARY ENGINE.—George E. Boom, New York City. This engine is designed to occupy but small space, and has rotary pistons and all rotary parts evenly balanced, reducing the vibratory motion to a minimum, and making it possible to employ a light base and framework while obtaining a high speed. The pistons are mounted on disks which have bearings in the walls of the cylinders, and on the opposite sides of the disks are segmental counterbalance weights to which are attached gear wheels, the disks, pistons and parts being mounted on two shafts parallel with each other. Selfoiling mechanism is provided for the bearings and the engine may be readily converted into a water pump or

Railway Appliances.

CAR FENDER. - John P. Geraghty, Jersey City, N. J. Upon a main frame supported from the car, according to this improvement, is a yieldingly mounted sliding frame on which are pivoted side arms, an apron being attached at its lower end to the arms and at its upper end to a fixed support. The apron is thus normally held in a stretched position, inclined from the dashboard nearly to the rails, but when a person in the path of the car is struck by the fender and falls upon the apron the arms swing upward and form a scoop of the apron, in which the person will be received and held without injury.

SPEED INDICATOR.—George S. Wright and Howell P. Terry, Brooklyn, N. Y. A wheel on the axle or other rotary part of the car or vehicle, according to this invention, is connected by a driving belt with a shaft driving an axle on which is a wheel within a casing, a wing subjected to the current generated moving a pointer on a dial. The graduations on the dial indicate miles and parts of miles, and the position of the pointer indicates the speed at which the car is traveling.

SWITCH, - William G. Lewi, Albany, N. Y. This improvement is for a device to be operated from a moving car to shift switches. It comprises depressible platforms in front of a switch, parallel rock shafts, a plunger beneath each platform, while the platform comprises two drop sections and a sliding section, all having a hinged connection. There is a crank connection between each plunger and a rock shaft, while a shifting baris connected with the movable section of the switch, and by links and crank arms with the rock shafts The shifting bar may be automatically operated by pressing downward upon shifting plates at either side of the

SIGNALING APPARATUS.—Charles Oleson and John D. Morrison, Roseburg, Orego. This is au apparatus arranged in connection with air brakes, the closing of an angle cock in the system being marked by an indicator in each car, and causing the locomotive whistle to be sounded. The signal pipe is charged with a constant pressure below that of the train pipe, and the signal pipe is connected with the angle cock, and when the plug in the latter is closed, connection is made with the signal pipe and a pop valve to sound the whistle in the cab of the locomotive.

Electrical.

TRANSMITTING ELECTRICAL ENERGY. Thomas W. Onderdonk, New York City. A device more especially designed for use in dental work, rock drilling, etc., has been devised by this inventor, to facilitate transmitting electrical energy in a simple and effective manner. The invention comprises a reciprocating tool and an electro-magnet and armature for causing reciprocations in one direction, a motor in an electric circuit and on the motor shaft a thimble of alternating me tallic and insulated strips, while a second electric circuit is connected with the first circuit and with the magnet of the tool. Contact plates in the second circuit engage with the thimble to transmit an intermittent current to the

tool magnet, there being a rheostat in the second circuit to regulate the force of the reciprocations of the tool.

Agricultural.

TURNING SWATHS.—George E. Nelson, Dillon, Montana. This is a machine adapted to travel behind a mowing machine, and take up and turn over swaths of cut hav or grass, leaving the swaths in practically the same position relative to each other that they were before being lifted and turned. The frame of the machine is readily raised or lowered according to the character of the hay or grass on the ground, and within the frame are two rotating rakes, each adapted to take up a swath.

IRRIGATION SHOVEL .- John H. Gor don, South Bend, Wyoming. This is an implement peculiarly adapted to the requirements of irrigation farm The celebrated "Hornsby-Akroyd" Patent Safety Oil ers, making it possible to do a variety of work with one tool. It has a protruding tip and chisel-like point, which may serve as a pick or a crowbar in digging a narrow deep trench, and edges of the blade curving from this point outwardly and upwardly, so they will follow the tip through strong sod and into any soil, while the sccop shape of the blade enables it to remove large quantitie of earth at every stroke.

Miscellaneous.

GEOGRAPHICAL CLOCK DIAL. - David W. Thompson, Englewood, Ill. This is a clock for the use of educational institutions, indicating to the eye, in addition to the local time of the place, the time of day or night portunity to make a fortune. Will sell the receipts for making clder extract including the pat. of April 2, 1895, where daylight prevails and the portion where night prewhere daylight prevails and the portion where night pre vails. It is also capable of adjustment to illustrate this for all seasons of the year and all latitudes, showing the rising and setting of the sun and the seasons, and all terrestrial phenomena dependent upon the inclination of the earth's axis to the ecliptic and the revolution of

> BUILDER'S SCAFFOLD.—John E. Ennis. Duluth, Minn. This invention provides scaffold supporting devices so arranged that the scaffold may be raised or lowered with the load by the operator thereon, the apparatus being capable of use as an inside or outside scaffold, or as a window scaffold where a ground support cannot be conveniently employed. The apparatus is also provided with a "runway" or intermediate scaffold, for use as a landing or turning station for the barrowman or Lod carrier.

TYPEWRITER WORD REGISTER.-Clayton O. Blandin, Hastings, Neb. This improvement is more especially designed for use in commercial tele graphy, registering the number of words written to determine the cost of a message, as such messages are usually written on a typewriter. It comprises a casing in which is a registering disk operated by connection with the space bar of the machine, and the improvement is applicable to every style of typewriter.

PYROCATECHIN MONO ACETIC ACID. Wilhelm Majert, Falkenberg, Germany. Pyrocatechin mono-actetate of sodium is a remedy for consumption and loss of appetite, stopping night perspiration reducing the evening temperature, and in mild cases destroying the bacilli of the disease. The acid is obtained, according to this invention, by subjecting one molecule of chloracetic acid to the action of one molecule of pyro catechin in the presence of free carbonate of a free alkali or carbonate of alkali, in accordance with a novel pro cess described in the patent.

STEAM RADIATOR. - Augustus Eichhorn, Orange, N. J. This inventor has devised a radiator designed to readily and effectively expel the air from its interior upon the entry of the steam. In the base is a series of sections communicating with the base at one of their ends, while a diaphragm extends longitudinally and centrally with the base and serves to introduce the steam at the rear of the sections, so that it will be behind the air, and thus easily and effectively expel it.

STORM SASH FASTENER. - Andrew A. Loetscher, Dubuque, Iowa. For fastening storm windows, screens, or shutters to a window casing, this inventor has devised a simple and inexpensive fastening comprising a flanged block to be pivotally connected to a sash, a handle in line with an opening in the flange while a pin or lug is attached to the casing for engage ment with the flange. The device may be easily oper ated from the inner side of a room, so that a screen may be placed in position or removed with very little trouble

FENCE POST. -William J. Sleep, Birmingham, Ala. This is a post especially adapted for carrying the runners of wire fences, and adaptable for the uprights of an arbor, a summer house, etc. It is preferably of metal, of boxlike construction, with longitudinal slots or openings and drainage openings near the ground line, and hasundercutdownwardly inclined brackets to receive the upper ends of braces. A binding strip held on one of the faces of the post has transverse grooves for securing wires to the post.

FENCE.—Elias Roth, New Oxford. Pa. This invention is for an improvement in fences made with wire stretchers, the stretcher wires being made with integral loops to engage the side of the post and being secured on the posts by staples which embrace adjacent members of each loop, thereby preventing longitudinal movement of the wires. The pickets are of peculiar construction, and are firmly bound by the stretcher wires, the latter yielding upwardly when shortened by low temperatures and sagging proportionately during the hot, summer weather, while the fence remains erec

TILTING SPRING SEAT.—Charles F. Davy, Starkville, N. Y. This is a seat supported on Springs from a frame adapted to be bolted to the seat post of a vehicle, and having at its sides studs from which extend side springs, so that the seat will be free to move in all directions, but will be held in position by the springs. The seat is well adapted for use on agricultural machines, locomotives, etc., being readily adjustable to stand at an angle to the surface over which the machine

Corset.—Levi Weingarten, New York

a slit in one edge and a pocket in each edge of the slit, a shield being permanently secured to the corset adjacent to the inner end of the slit, with its side edges sliding freely in the pockets. The corset may be made to readily adapt itself to the form of the user, the expansible parts being capable of spreading or contracting without exposing portions of the garments beneath the corsets.

Designs.

DESIGN FOR MIRROR FRAME.—Albert Wanner, Jr., Hoboken, N. J. This design comprises a crolled frame or border, latticework within the frame and a floriate center within the latticework, the sides of the frame having two series of ornaments.

Note.-Copies of any of the above patents will be furnished by Munn & Co., for 25 cents each. Please send name of the patentee, title of invention, and date of this paper.



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References to former articles or answers should give date of paper and page or number of question.

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(6830) W. W. M. writes: In your answer to my question in a recent issue, you advised me to use caustic soda in place of caustic potash in the battery under consideration. If such a change were made, 1, what would be the change in potential? A. There is no

appreciable change in voltage, but you get the advantage of a clean solution and of one cheaply made. 2. Could commercial sheet zinc be used for negative plates? A (6831) J. P. H. asks how to make an

Æolian harp. A. Æolian harpsshould be made to fit into a window, so that the sash can be adjusted to cause a strong breeze across the strings of the instrument. Make the box of thin dry pine, the top piece or sounding board of extra clear stuff about three-sixteenths of an inch thick. Sides and bottom can be one-quarter of an inch, length two inches shorter than the width of your window, width ten inches, depth two and a half inches. The ends should be of hard wood, and thick enough at one end



to hold the eyes or studs for fastening the wir strings. At the other end the wood should be thick enough to hold a set of violin keys, if you use catgut; or iron piano pins, if you use wire, which should be steel. Two bridges of hard wood glued diagonally across each end, for the strings to rest upon. If steel wire is used, a round wire should be inserted upon each bridge, so that the sounding wires will not cut the wood. The rest you may gather from the sketch. The tuning should be harmonic, or say thirds, fifths, and octaves. Make about four holes in sound board, one inch diameter, under the strings.

(6832) S. L. D. says: I am a subscriber to your valuable paper, and would like you to tell me in Notes and Queries how I can restore gilt picture frames that have become dark and dingy. A. You may improve them by simply washing them with a small sponge moistened with alcohol or oil of turpentine, the sponge only to be sufficiently wet to take off the dirt and fly marks. They should not be wiped afterward, but left to dry of themselves.

(6833) W. P. W. asks: What will take lectricity out of printing paper? A. Nothing has yet been invented that will do this satisfactorily. Moist air palliates the evil, but will not always stop it.

(6834) J. S. asks: 1. How is copper oxide easily and cheaply made? I have tried heating copper scraps, but it don't work after the first coat. A. Mix with ten per cent of potassiumchlorate and water enough to make a thin paste, ignite, and wash. By calcining and vigorous shaking you should succeed by simple ignition. 2. How are the copper oxide plates in an Edison-Lalande battery made? A. See SUPPLEMENT, No. 792 for description of the battery named. 3. I am making a dry hattery as follows: I use an amalgamated commercial zinc cup, coated with plaster of Paris and salammoniac mixed with water-containing a small quantity of gelatine and glycerine. Inside of this is a layer of blotting paper, and around the carbon a mixture of powdered carbon and manganese dioxide mixed with the same solution as the plaster of Paris. The voltage is all right, but the amperage is low. How can I reduce the internal resistance? A. The resistance will inevitably be high-you can reduce by adding zinc sulphate in strong

(6835) A. R. B. writes: We should like to be informed, through your valuable paper, how many storage batteries it would require to light ten 16 candle power, 32 volt lamps for six hours continuously per day. What primary battery and how many would you advise us to get, with which to charge the storage batteries? A. We advise you to consult with a dealer in storage batteries, as different sizes are made. You will require City, and David Grotta, Newark, N. J. This corset has eighteen in series, and a moderate size of cell would Coupling.

suffice in a single series for your purposes, giving a total of eighteen cells. Do not attempt to charge with a primary battery.

(6836) J. W. C. asks: Can you give me receipt for making a solution for removing the scale from drop forgings of iron and soft steel? I understand there are some concerns using a pickle for doing so. What effect would it have on the metal? A. Use, by volume, sulphuric acid, 1 part; 1 part nitric acid; 2 parts water, applied warm. Either the acid or the iron may be heated. It will not injure the iron, unless used to

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April 7, 1896,

AND EACH BEARING THAT DATE

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Electroplating copper, W. H. Hollmgshead	H. W. Hales. 557,670 bot ographic background earrier, Green & Law- ton. 557,990 4 Photographic developing cabinet. R. Aramburu. 557,673	Typewriting machine, W. H. Travis. 557,728 Typewriting machine, W. H. Travis. 557,728 Typewriting machines, word counter for J. A.
Elevators, winding device for electric cables in, D. E. Houser	Photographic developing cabinet. R. Aramburu. 557.633 Pipe cleaning apparatus. C. Peters. 557.634 Pipe wrench, P. M. Knopp. 557.637 Planter and cultivator, corn, W. G. Bixler 557.637 Planter, corn, C. E. White 557.839 Planter, potato, N. M. Nelson. 557.839 Planter, potato, N. M. Nelson. 557.839 Planting machine, corn, H. Hall 557.637 Planting machine, corn, H. Hall 557.637 Planting machine, corn, H. Hall 557.637 Plow, J. Oliver 557.636 Plow, J. Oliver 557.639 Plow damp, abutment and scraper holder, Mc- Clurg & Phillips 557.636 Plow in apparatus, steam, E. Ingleton 557.838 Plowing apparatus, steam, E. Ingleton 557.838 Plumb and level, Fish & Joyce 557.838 Power 557.838 Plow in apparatus, steam, E. Ingleton 557.838 Power 557.838 Plow in the property of	Hasty 557,674 Uphoistering macbine, Young & Locher 557,762 Urinai guard or screen, M. W. Brockman 557,762
Extractor. See Cork extractor. Byelet, E. Kempshall	Planter, corn. C. E. White. 557,732 Planter land marker, C. H. Myers. 557,859 Planter potato, N. M. Nelson. 557,855 Planter podato on W. M. Weiner 557,965 Planter pod depres corn. W. M. Krank	Valve, T. V. Coony 557,975 Valve, H. Sieben 557,902 Valve, atomizer, R. Lockwood 557,589
Face protector. M. Tolle	5 Planting machine, corn. H. Hall 557,671 8 Pliers, parallel jaw. A. Schatz 557,615 Plow. Morano & Gann 557,596	Valve gear, m. M. Forney Valve locking or unlocking device, Bayley & Clark
Pletcher	2 Plow J. Oliver	Valve stopper and measuring device, C. E. 557,931 Wyckoff. 557,931 Valve tap or other, W. H. Foss. 558,020
Feed box, W. B. Martin. 557,5 Feed water heaters, tube cleaner for, A. H. Black- burn. 557,5	Plow, disk, J. A. Stewart	Vault, sectional adjustable burial, W. Eckels
Fence machine, J. E. Bieler	9 Pocket knife, A. K. Brauer	Venticle top bow, E. F. Hill. 507, 504 Ventilator, E. M. Reynolds 57, 607 Wagon, H. Steeck 558,003 Wagon, backs A. Phash 557, 500
Fence J. T. Guthrie. 557,6 Fence machine, J. E. Bieler 557,5 Fence machine, wire and picket, F. H. Dumbauld 557,7 Fence post, C. Kutzner 557,8 Fence stay, wire, Miller & Tilman 557,5 Fence stey, R. Parker 557,6 Fence, wire, G. Lehberger 557,6 Fence, Wire, G. Lehberger 557,6	Press. See Baling press. Printing press. 568,011	Vehicle, S. M. Schindel. 558,002 Vehicle brake, J. W. York 557,747 Vehicle top bow, E. F. Hill. 557,847 Ventilator, E. M. Reynolds. 557,687 Wagon, H. Steeck. 558,003 Wagon brake, A. Pirch 557,689 Wagon dumping, W. Haywood 557,699 Wagon or cart, dumping, J. S. Erickson. 557,599 Wagon seat attachment, Deplanty & Wilson. 557,792 Walst, T. B. Fitzpatrick. 557,792 Wash bench and ironing table, combined, E. D. Norton. 557,987 Wash board, W. B. Cannon. 557,987
Fiber, composition for treating, C. Efros. 557,5 Field motor, rotary, C. S. Bradley. 557,9	Printing machine, L. W. Southgate	Walst, T. B. Fitzpatrick
File, letter, H. S. Sternberger. 557,6 Firearm forestock, T. G. Bennett. 557,9 Firearm magazine, J. L. McCullough 557,8	Duckley Duck	
File, Istter, H. S. Sternberger	Printing presses, apparatus for transferring pa- per from feeding machinesto, T. A. Briggs 557.71 Puller. See Cork puller. Drill puller. Stump	Water closet seat, O. T. Dutro. Blesslug
Flagstaff bolder, R. S. Cbevrier. 557,9 Flour mixing or blending machine, B. M. Root. 557,8 Flower stand or shelf, F. G. Pittet. 557,8 Fluid meter apparatos, coin freed, F. Wright. 557,9	5 Puln shing annewatus for asserting wood Tellet	Water tube boil er, C. G. P. de Laval. 557,838 Water wheel, turbine, A. W. Haag 557,812 Waterways, balance lock for, C. N. Dutton 57,554
Flush tank R. C. [le La Hunt. 557.5	1 Pump, Hanna & Householder	Wheel. See Caster wheel. Water wheel. Winding machine. spool or bobbin, W. H. H. Stsum
Fly trap, A. Tuffnell. 557,9 Fodder shredder, Tracy & Platt 557,7 Forgitz machine, W. R. Webster 557,9 Fur tail trimming, artificial, E. Kraatz 557,6	9 Puzzle, C. A. Worrail	Winding machine. spool or bobbin, W. H. Slsum Slsum Sf. (20) Windmill. W. A. Johnson. 557,620 Windmill. W. A. Johnson. 557,620 Windmill. T. Rogers. 557,820 Window, W. H. Dean 557,653 Wirdow, W. H. Dean 557,653 Wire connector, C. H. McIntire 557,653 Wire mat, W. Elmes. 556,015 Wood moulding machine, F. H. Van Houten. 558,005 Wrench. See Pipe wrench. Yoke, neck. J. & J. W. Anderson. 557,751
furnace. See flot air lurnace. Kerenerative	Railway crossing. W. V. Wilson	Wire connector, C. H. McIntire. 557,890 Wire mat, W. Elmes. 58,015 Wood moulding machine, F. H. Van Houten. 558,005
Furnaces, apparatus for condensing fumes from smelting, H. W. Rappleye	0 Railway signal, automatic electric, W. W. Alexander	Wrench. See Pipe wrench. Yoke, neck. J. & J. W. Anderson
Game mactine and apparatus, E. D. Averell. 557,8 Garment strecting frame, L. Raphael. 557,6 Gas burner, illuminating, Teal & Hamm. 557,8 Gas burner acreen 1 Kock. 557,8	8 Railway switch, J. Kesseiring	DESIGNS.
Gas governor, T. O. Perry 557,6 Gas pipes, pressure alarm for, F. S. Baker 557,6 Gate, D. W. Brooks 557,7	Reaping machine, B. F. Rich	Apparel, metal slide for wearing, J. Obrig, 25,351 Bicycle saddle, W. A. & M. H. Hulbert25,363, 25,364
Gate, Butcher & John 557,5 Gate, J. H. Johnson 557,5 Gate, G. Warner 557,8	0 Regenerative furnace, S. ft. W ell man	Car seat panel J. A. Brill. 25,372 Carpet, C. F. Gedney 25,371 Carpet, J. B. Nell. 25,372 to 25,371 Carpet, A. M. Pone 25,372 to 25,374
	sure regulator. 6 Rein holder, E. H. Howland	DESIGNAS Apparel, metal slide for wearing, J., Obrig, 25,351
Glove fastener, J. B. Chase	1 ardson	Fireplace front, C. Braun. 25,380 Gage, marking, D. P. Osborn. 25,357 Game board, Donabue & Sulli van. 25,349
Gig mill, N. H. Grosselin	Melssner 557,686 Rolling mill adjustment G. W. McClure 557,681 Safety stand, 11. E. Friese 57,680	Hatchet, E. ttogers 25,356 Hinge, F. Kaemmer 25,356 Jar, fruit, A. G. Smalley 25,355 Learn bolder, F. Bund et al. 25,354, 25,355
Grinding edges of flat bars, plates, etc., machine for, R. W. Hunton 557,6 Gun, air. W. F. Markham 557,8 Gun, air. W. F. Markham 557,8	Salt and pepper box. combined, D. M. Kittle. 557,882 O. Sash balance, J. H. Bane. 557,893 O. Sash fastener, H. A. Book. 557,563 O. Sash fastener, H. A. Book. 557,563	Lifting jack stand, F. I. Joyce
Halter and blind, combined, A. S. Smith. 557,7 Handle, H. L. Vietts. 557,8 Harness pad or lining. Riggs & Elv. 557.8	9 Sash fastener, H. A. Book. 557,953 1 Sash bolder, C. Hadden. 557,863 0 Saw set and tooth holder, I. H. Spelman. 557,863 8 Saw setting machine, J. F. Bredlin. 557,959 5 Saws. perstus for placing logs upon cartiages	Sign case, advertising, H. F. Nehr. 25,359 Spoon, Potter & Dane. 25,346 Spoon, etc., H. L. Wallace. 25,347
Harness supplemental terret attachment for, J. Smith. 557,9 Hat body rounding machine, A. C. Saxton. 557,8		Toothpick holder, S. Fuerstenberg
for, R. W. Hunton	4 Sed Car H L Burrill	TRADE MARKS. Aperient and cathartic sirup and elixir, Winkel-
Hinge and check, combined door, A. Allgler 557,9 Hog suspending and holding device, J. E. Van-	6 Sewing knitted fabrics, machine for, J. Bennor 557,687	mann & Brown Drug Company
Hook. See Checkrein hook. Display hook. Swivel	Sewing machine shuttle, W. Brandt	ufacturing Company
Hooks and eyes, etc., fastening device for. Matthews & Mott		Beverage, fermented or carbonated non-intoxi-
Horsesnoe, J. B. Gliespie	3 Show case, Conlin & Whitty, 557,974 1 Show case, cabinet, A. Bever 557,948 5 Signal. Sac thailway signal.	Bicycles and parts of same, A. G. Spalding &
Indicator. See Medicine dose Indicator. Speed indicator. Stature Indicator. Insulator. C. A. Peterson	Signal, S. & Railway signal. Silver, vegetable, Struble & Turner. S57.914	Blacking or dressing for boots and shoes, Teats & 23,080 Rettenbach. 23,080 Boots and shoes, Foot, Schulze & Company. 23,075 Burners in which petroleum oil is used, hydrocarber, Denskey Steep and Mary Setuping Com-
Indicator. Stature indicator. Insulator. C. A. Peterson. 557.6 Insulator. H. W. Rappleye. 557,8 Intrenching tool, J. H. dageby. 557,9 Jack. See Lifting jack. Journal boyes, electric indicator for hot. W. R.	Soldering plates of tron or steel with sheets of copper or its compositions, apparatus for, E. W. Encquist	bon, Dangler Stove and Manufacturing Com- pany
Jack. See Lifting Jack. Journal boxes, electric indicator for hot, W. B. Chockley	W. Enequist 557.979 O Sole laying machine, E. E. Winkley. 557,744 6 Sole rounding machine, Todd & Leary. 558,004 Soles, rounding out and channeling machine for	28,101, 28,102
Knitting machine, J. Bennor	Soles, rounding out and channeling machine for boot or shoe, A. C. Winn	Consee, roasted, Steinwender-Stoffregen Consee Company. 28,103 Corsets, Aurora Corset Company. 22,073 Dress shields, I. B. Ki einert Rubber Company. 23,074 Flour, H. B. Smith. 28,097, 23,098 Flour, wheat, H. N. Schooley & Son. 28,100 Flour, wheat, H. N. Schooley & Son. 22,099 Gold, sterling silver and plated jewelry and silverware. Foster & Bailey. 28,069, 22,070 Gnm, chewing, H. E. Hickox. 28,069, 22,073 Hairpins, Richardson & De Long Brothers. 22,073 Hairpins, Richardson & De Long Brothers. 22,073 Hairpins, shampon, face powder and a prepara-
Knitting machine, automatic straight, J. Bennor 557,6 Knitting machine sinker actuating mechanism, J. Bennor 557,6	I Speed of differential gearing, means for changing, 557,696 [1. W. Penney 557,698] Spinning machine, J. A. Miller. 557,688	Flour, wbeat H. N. Schooley & Son. 23.09 Flour, wbeat, B. Stern & Sons 28.09 Gold, sterling silver and plated lewelry and silver-
Lamp, A. Kiesow. 557,8 Lamp, electric arc, H. E. Bradley. 557,6 Lamp, electric arc, T. Reyman. 557,6 Lamp, helden. 557,6	9 Spool beads, machine for applying metal covers ings to A. T. Tregurths	ware Foster & Bailey
Lamp, miner's safety, K. Broucek	8 Staple driving machine. (3. W. Day	Hair tonic, shampoo face powder and a prepara- tion for the skin, Johnson Brothers
Lathe, nulling or beading, E. Rutishauser	4 Stature indicator, W. Elborne. 558.014 8 Steam boiler, sectional N. W. Pratt. 557.703 2 Steam generator, high pressure, B. T. Sederbolm, 557.808	of the air passages, Cushman Drug Company. 23,083 Hose, cotton rubber lined, linen and cotton hose, bydraulic, Bow are Rubber Company. 23,073 Leather dressing, Restorff & Bettmann. 23,073 Liniment, W. T. Moxon. 28,082 Losenges, H. Thayer & Company. 23,082 Lubricants and dressings, Kent Lubricating Company. 23,082
Lever bracket, supporting, J. M. Boyer. 557,9 Lifting lack, J. D. Gurganus. 557,5 Lifting lack, J. G. Lane. 557,8	5 Steam trap, N. Nison. 557,833 9 Steering gear, C. E. Bergman. 557,539 6 Stitch cutter, bow, W. Robertson. 557,837	Leather dressing, Restorff & Bettmann. 28.081 Liniment, W. T. Moxon. 28.096 Lozenges, H. Thayer & Company. 28,092
Line bolder J. W. Gray	Stopper. See Valve stopper. 557,920 Storage battery, A. F., Vetter. 557,920 Storage battery & F. Rartlett 557,537	pany. 28,082 Medicinal bitters, L. N. Brunswig. 28,089 Oll for mechiners of all kinds jubricating. Pacific.
Linotype machine, Mergenthaler, H. T. Sund- strom. 557,7 Liquid beater, M. G. Wilder. 557,7	Stove, W. C. Dimmock	Medicinal bitters, L. N. Brunswig. 28,089 Oil for machinery of all kinds, lubricating, Pacific Steam Whaling Company. Oil, illuminating, Jenney Manufacturing Company. 28,084
Strom Machine, Mergentosser, H. T. Sund- 557," Liquid beater, M. G. Wilder	Strap. See eccentric strap. 2 stump puller, L. J. Widmer. 557,630 3 Sugar, manufacturing, O. A. Bielmann. 557,642 1 Sugar, rrinning, O. A. Bielmann. 557,643 2 Swina, M. W. Reeves. 556,882	pany
Lock frame or case C. F. De Arden 5577	2 Swint, M. W. Reeves	Poison, animal and bird, E. W. Dodge
Lock knife, I. E. Hotchkiss	way switch. Electric switch. Kail- way switch. Switchboard testing apparatus, multiple, C. E. Scribner	and dye for the bair, E. M. Ten Byck
Locomotive tenders with water apparatus for 557.6 supply ing, Sattelkau & Winkelmann. 557.7 Loom, J. H. Northrop. 557.9 Loom warp stop mo tion, O. Smith. 557.9 S67.9	8 Swivel hook, J. Petermann, Jr	Remedies and pills, tablets and capsules, internal. Puritana Compound Company
Loom warp stop motion, O. Smith. 557,9 Lubricator. See Axie inbricator. Lunch compa nion, J. Guminski. 557,6 Mail bag fast ener, H. T. J. Gilbert. 557,6	Telephone lines, lock out system for, C. E. Scrib-	Rubber sundries, certain named druggists', W. F. Ware. 22,07 Soap, laundry, F. L. Falck & Company. 28,094 Tea and coffee, J. Stiner & Company. 28,104 Tollet tablet for the bath and tollet stand, D. Cole 28, 5
Mail bag rasteener, H. T.J. Gilbert	Telephone transmitter. W. L. Wilhelm. 557,741 6 Thill couping, C. Cathan 557,862 7 Thill couping, C. Cathan 557,863	Toilet tablet for the bath and toilet stand, D. Cole 28, 5
Mattress bats, means for making, D. Haynes 557,6	way switch. way switch. way switch. way switch. way switch. Switchboard testing apparatus, multiple, C. E. Scribner. Swivel hook, J. Petermann, Jr. Table. See Extension table. Tale. See Extension table. Tale, See Extension table. Telephone exchanges, multiple switchboard for, M. G. Kellogg. (Reissue). Telephone transmitter. W. L. Wilhelm. Telephone transmitter. W. L. Wilhelm. Telephone transmitter. W. L. Wilhelm. Telephony. W. C. & J. M. Lockwood. Telephony. W. C. & J. M. Lockwood. Thill coupling. C. Cathan. Thill coupling. W. Horning. Thill coupling. Rawdon. Thill coupling. Schmidt & Lewry. Thrashing machine. W. McKenzie. Thrashing machine straw carrier attachment, Thrashing machine straw carrier attachment, Thrashing machine straw carrier attachment, S57,701	A printed copy of the apenication and drawing of any patent in the foregoing list, or any patent in print issued since 1863, will be furnished from this office for
Measuring and transferring liquids, vessel for, F. W. Poston	Thrashing machine, W. McKenzie	25 cents. In ordering please state the name and number of the patent desired, and remit to Munn & Co., 361 Broadway, New York.
Meter, See Water meter. Milk, apparatus for sterilizing, W. Kortnm	I Tie. See Fence tie.	ventors for any of the inventions named in the fore-
Milk cooler, A. H. Reid	Tire, pneumatic. E. Christiansen	going list, provided they are simple, at a cost of \$40 each. If complicated the cost will be a little more. For full instructions address Munn & Co., 361 Broadway, New York. Other foreign patents may also be obtained.
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5	Tobacco tag and badge, combined, L. H. Neu-	637 Q66
•	Tongs, butter, J. R. Farnham. Tongs, butter, J. R. Farnham. Tooth, artificial, H. V. Des Portes. Toy, W. Barth Track sanding apparatus, H. Tirmann.	557,982
g	Tooth, artificial, H. V. Des Portes	557,654
	Track sanding apparatus. H. Tirmann	557,728
2	Track sanding apparatus, H. Tirmann. Trap. See Fly trap. Steam trap. Tree protector, J. D. Smitb. Trolley mechanism, J. M. Kennedy. Trolley wire banger, W. A. McCallum. Truck, H. O. Tbomas. Relssue. Truck, electric car, C. F. Baker. Tunnels, etc., free from rubbish produced by blasting, method of and apparatus for keeping, A. Brandt. Tube macbine, F. L. Baker. Tubes, machine for making seamless tapered, J. Findlay.	
9	Tree protector, J. D. Smith	557,905 557,827
9	Trolley wire banger, W. A. McCallum	557,860
7	Truck, H. O. Thomas. (Reissue	11,530
6	Tunnels, etc., free from rubbish produced by	007,000
9	blasting, method of and apparatus for keep-	
5	Tube mechine for L. Reker	557,958
_	Tubes, machine for making seamless tapered, J.	001,000
,	Tubes, machine for making seamless tapered, J. Findlay. Type machine for making justified lines of, T. L. nston. Type setting machines, space barfor, W. Berri. Typewriter carriage, A. W. Steiger. Typewriter carriage shift, A. W. Steiger. Typewriter tuter spacing mechanism, A. W. Steiger.	557,791
å	L nston	557.994
6	Type setting machines, space bar for, W. Berri	557,540
6	Typewriter carriage, A. W. Steiger	557.912 557.910
	Typewriter letter spacing mechanism, A. W.	001,010
9	Stelger W I Regron	557,911
	Typewriting machine, V. J. Barron	557,619
0	Typewriting machine, A. W. Stelger557,909,	557,913
0	Typewriting machine, B. U. Stickney	557.728
3	Typewriter exter spacing mechanism, A. W. Stelger. Typewriting machine, W. J. Barron. Typewriting machine, Z. G. Sholes	
7	Typewriting machines, word counter for, J. A. Hasty, Doboistering machine, Yonng & Locher. Urinal guard or screen, M. W. Brockman. Valve, T. V. Coony. Valve, H. Sieben. Valve, atomizer, E. Lockwood. Valve gear, M. N. Forney. Valve locking or unlocking device, Bayley & Clark.	557,674
49	Urinal guard or screen, M. W. Brockman	557,762
9	Valve, T. V. Coony	557,975
5	Valve, at Siebell	557,589
7	Valve gear, M. N. Forney	557,794
5	Clark Clark	557 043
6	Valve mechanism, cut off, C. W. Thompson	557,916
9	Valve stopper and measuring device, C. E.	EEN 091
9	Valve tap or other, W. H. Foss	558,020
23	Vault, sectional adjustable burial, W. Eckels	557,783
	Vehicle brake, J. W. York	557.747
0	Vehicle top bow, E. F. Hill	557,581
1	Wagon, H. Steeck	558,003
0	Wagon brake, A. Pirch	557,699
-	Wagon or cart, dumping, J. S. Erickson	557,570 557,773 557,792
9	Wagon seat attachment, Deplanty & Wilson	557,773
7	Walst, T. B. Fitzpatrick	557,782
9	Valve locking or unlocking device, Bayley & Clark. Clark. Valve mechanism, cut off, C. W. Thompson Valve estopper and measuring device, C. E. Wyckoff. Valve, tap or other, W. H. Foss. Vehicle, S. M. Schindel. Vehicle brake, J. W. York. Vehicle top bow, E. F. Hill. Ventilator, E. M. Reynolds. Wagon, H. Steeck. Wagon, H. Steeck. Wagon, dumping, W. Haywood. Wagon or cart, dumping, J. S. Brickson Wason seat attachment, Deplanty & Wilson. Waist, T. B. Fitzpatrick. Wash bench and ironing table, combined, E. D. Norton. Wast Doard, W. B. Cannon. Water closet bowls, etc., joint coupling for, C. A. Blessing.	557,867
ő	Wash board, W. B. Cannon	557,966
2 6	_ Blessing	557,645
0	Water closet seat, O. T. Dutro	557,780 557,659
1	Water meter, F. A. Hubbuch	557,820
	Water purifying apparatus, N. O. Goldsmith	553.018
2	Water wheel, turbine, A. W. Haag	557,802
3	Waterways, balance lock for, C. N. Dutton	557,564
Ś	Winding machine, spool or bobbin, W. H. H.	
3	Sisum	557,620
5	Windmill.T. Rogers	557,889
	Windmill, W. M. Rowan	557,893
5	Window, W. H. Dean	557.653
B	Wire mat, W. Elmes.	558,015
'	Wood moulding machine, F. H. Van Houten	558,006
9	Yoke, neck, J. & J. W. Anderson	557,751
3	Water closet bowls, etc., joint coupling for, C. A. Blessing. Water closet seat, O. T. Dutro. Water closet tank valve, W. T. Fox. Water meter, F. A. Hubbuch. Water purify in apparatus, N. O. Goldsmith. Water purify in apparatus, N. O. Goldsmith. Water tube to iler, C. G. P. de Laval. Water wheel, turbine, A. W. Haag. Waterways, baiance lock for, C. N. Dutton. Wheel. See Caster wheel. Water wheel. Windning machine, spool or bobbin, W. H. H. Sleum. Windmill, W. A. Johnson. Windmill, W. M. Rowan. Window, W. H. Dean. Window, W. H. Dean. Wire connector, C. H. McIntire. Wire mat, W. Emes. Wood moulding machine, F. H. Van Houten Wrench. See Pipe wrench. Yoke, neck, J. & J. W. Anderson.	,,
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8	DESIGNS.	
3	Apparel, metal slide for wearing, J. Obrig,	95 951
<i>.</i> I	zapparej, moba: situo tot weatilik, o , uutik,	Treem

Apparel, metal slide for wearing, J. Obrig,	25.3
Bicycle saddle, W. A. & M. H. Hulbert25,363,	25.3
Car seat panel, J. A. Brill	25.2
Cornet O E deduce	20,0
Carpet, C. F. Gedney	20.0
Carpet, J. B. Nell	20,3
Carpet, A, M. Rose	25,3
Carnet, A. M. Rose	25,3
Dynamo machine frame, F. Baln25,365,	, 25,3
Engine wheel, M. Geary	25,3
Fireplace front, C. Braun	25.3
Gage, marking, D. P. Osborn	25.3
Game board, Donahue & Sulli van	25.3
Hatchet, E. Rogers	25.3
Hinge, F. Kaemmer	25.3
Jar, fruit, A. G. Smalley25.354,	25 3
Lamp holder, F. Rhind et al	25,3
Lifting jack stand, F. I. Jovce	25. 2
Parasol or like article, W. C. B. Sparry	
Parasol of like article, W. C. D. Sparry	65.9
Puzzle, W. S. Bates	20,0
Sign case, advertising, H. F. Nehr	20,3
Spoon, Potter & Dane	
Spoon, etc., H. L. Wallace	
Toothpick holder, S. Fuerstenberg	25,3

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pany.

Beverage, fermented or carbonated non-intoxicant, J.J. McLaughlin

Bicycles and parts of same, A. G. Spalding &
Brotbers. Blcycles and parts of same, A. G. Spalding & Brothers
Brothers
Blacking or dressing for boots and shoes, Teats & Kettenbach.

Boots and shoes, Foot, Schulze & Company.

28,075
Burners in which Petroleum oil is used, hydrocarbon, Dangler Stove and Manufacturing Company.

28,093
Car wheels, P. B. Griffin Machine Works.

Cereals, prepared, Muscatine Oatmeal Company.

28,101, 28,102
Coffee, roasted, Steinwender - Stoffregen Coffee
Company.

28,073
Corsets, Aurora Corset Company.

28,073
Dress shields, I. B. Kleinert Rubber Company.

28,073
Flour, H. B. Smith.
Flour, wheat, H. N. Schooley & Son.

28,097, 28,098
Flour, wheat, H. N. Schooley & Son.

29,007
Gold, sterling sliver and plated jewelry and sliver-Coffee, roasted, Steinwender-Stoffregen Coffee
Company. 28,103
Corsets, Aurora Corset Company 28,073
Dress shields, I. B. Kleinert Rubber Company 28,074
Flour, wheat, H. N. Schooley & Son 28,098
Flour, wheat, H. N. Schooley & Son 28,099
Gold, sterling silver and plated jewelry and silverware. Foster & Bailey. 28,069
Gum, chewing, H. E. Hickox 28,069
Hair tonic, shampon face powder and a preparation for the skin, Johnson Brothers 28,073
Hair tonic, shampon face powder and a preparation for the skin, Johnson Brothers 28,073
Head cabe, neuralgia, catarrh, bay fever, asthma, colds, sore tbroat, grippe and other affections of the air passages, Cushman Drug Company 28,083
Hose, cotton rubber lined, linen and cotton hose, bydraulic, Bowers Rubber Company 28,083
Liniment, W. I. Moxon 28,061
Lozeng es, H. Thayer & Company 28,062
Lubricants and dressings, Keni Lubricating, Pacific pany. 28,082
Medicinal bitters. L. N. Brunswig. 28,082
Migher of all kinds, lubricating, Pacific Steam Whaling Company. 28,083
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