RECENTLY PATENTED INVENTIONS. Electrical Devices.

FIRE-SIGNAL .- J. H. DIXON, Pittsburg, The invention of Mr. Dixon relates to automatic fire-signals, and more particularly to the type in which a wire is made fusible for the purpose of sounding alarms. The object is to provide a cheap and practicable device for causing and transmitting signals in case of fire in a building with a minimum liablilty of signals being induced from other causes than fire.

Engineering Improvements.

STEAM-TRAP.-G. M. HILGER, Chicago, Ill. In carrying out this invention, which relates to improvements in steam-traps for receiving the water condensed from a steam heating or other apparatus, the inventor has particularly in view the provision of an extremely simple device which shall receive the water condensed from steam-coils or similar apparatus where it is required to remove the condensation in order to preserve what is commonly known as "dry" steam.

PUMP.-G. W. MEYER, Sparrows Point, Md. In this case the invention has reference to a duplex pump adaptable to all ordinary purposes, but especially adapted for use in places which are confined and otherwise difficult of access. It may be operated by any fluid under pressure; but compressed air is thought to be most effective.

ROCK-DRILL ATTACHMENT.--D. OWEN, Poultney, Vt. The object of the invention is to provide a new and improved rock drill attachment for drilling holes in rock to desired line of fracture or cleavage upon firing the explosive with which the hole is charged. The device can be readily applied The device can be readily applied to rock-drllis now used, by changing the shank of the drlll, to accommodate the cutter.

STEAM-TURBINE .- A. J. TAPLIN, Wash ington, D. C. Mr. Taplin's object is to provide a construction for driving the propellers, to provide the propellers in pairs, one right and the other left, and to operate them independently so they may be used singly or the parallel sieves and gathering-boards arjointly for steering the vessel without the aid of a rudder. The mechanism secures greater screw capacity and speed in a vessel and controls the flow of fluid vapor-such as steamin a manner to easily operate the reversible turbines and screws operated thereby to propel and steer without a rudder's use, with safety, economy and without vibration.

MARINE PROPULSION .-- A. J. TAPLIN, Washington, D. C. The object in this case is to provide a mechanism for propelling the vessel, including draft-propellers, which may be operated by fluid-vapor, water, or other power, seeking to produce a vessel-propelling mechanism direct in operation, of minimum weight, of little or no vibration, which will occupy minimum space and will increase the carrying power, stability, and navigable properties of a vessel, and furnish a propeller and engine capable of driving a vessel at the greatest speed attainable with safety and economy.

REDUCING-VALVE.—S. Munson, Hastings, Neb. This valve is more particularly for use on air-brakes on railway-trains; and the object is to provide one of simple construction for gradually reducing the brake-cylinder pressure from eighty-five pounds to tifty pounds in about twenty seconds, when the fifty pounds pressure remaining in the brake-cylinder will be maintained until the voluntarily by the engineer.

DOYLE, Leoti, Kan. This device is an extremely simple secure lock that is devoid of springs; may be locked or unlocked with a key or by manipulation, and a right and left hand latch that is reversible readily, is adapted to oper ate to lock it entirely by its gravity, and consisting of a single piece operative by a knobspindle rotatable in either direction.

CHISEL.-N. H. SMITH, Bonaparte, Iowa. The object in view is to provide a chisel with peas from the hull; and it comprises means cutting edges so constructed that the fiber for effecting these functions combined in a of the material being turned will be cut off novel manner into a wheeled apparatus adapted in a smooth manner, not broken, and then rapidly removed. With this tool rapid, accurate, and smooth work in squaring up ends, removing superfluous grooves, either vertical or oblique, in making pulleys, rosettes, or disks ETC. -C. SERLEY, Wilbur, Wash. This is a is facilitated. It is useful and rapid in all simple, practical, and efficient device for hoist-face-plate work and in getting work ready ing and piling sacked grain, boxes, or other for other tools.

PIPE-BENI)ING TOOL.—C. W. MILLER, New York, N. Y. In this case the invention relates to improvements in tools for bending metal pipes, an object being to provide a tool by means of which a very considerable pressure may be brought to bear upon the pipe or tube, thus making it possible to bend pipes of comparatively rigid metal with little manthe pipe at the bend.

Machines and Mechanical Devices.

CLOTH-CLEANING ATTACHMENT FOR FLOUR-BOLTS, ETC .- J. CHARLES, Charlton. The object in this improvement is to provide means for brushing the cloth of flourbolts, and to that end the inventor has constructed a useful attachment which while intended to be used in connection with flour-

bolting machines having a gyratory motion is equally adapted to all sieves having a similar motion.

STAMP-AFFIXER .- J. OLSEN, Jersey City, N. J. In this patent the invention relates to improvements in stamp-affixers; and the object is the provision of a device by which stamps may be easily and rapidly applied to letters and other pieces of mail-matter, the stamps being moistened, cut, and pressed in proper sequence to securely affix them.

JACK .- W. R. LEWIS, Montezuma, Iowa. In this invention the improvement refers to a screw jack, the leading feature of which is a novel ratchet arrangement for operating the jack, which may engage the screw jack in any position and may be applied to or removed from the screw at will. The jack may be readily handled and stored in a relatively small

RATCHET-LEVER .- L, P. JACOBS, Earling, Iowa. The intention in this case is to provide a lever whereby the initial movement of the lever toward the released position will operate automatically to release a dog from the rack-segment, thus dispensing with the necessity of separate devices on the handle of the lever for releasing the dog before the lever can be moved to released position. The invention is especially designed for use in connection with wagon-brakes.

WASHING-MACHINE.—E. A. GRIFFIN and HESTER M. GRIFFIN, Altoona, Pa. One object in view in this invention is the provision of means for supporting a vessel so that it can turn freely and be capable of easy operation by hand. A further object is to retain a rub-ber in a stationary position within the oscilfacilitate the splitting of the rock along a latory vessel by improved means, which permit the rubber to be raised or lowered and also allow the rubber to be lifted with the vessel's cover to a raised or opened position.

FLOUR - BOLTING MACHINE. — C. WHITE, Anderson, Indiana. The present invention includes improvements in the means for imparting a swinging body movement to the cylinder of the machine; also, in the means for rotating independently of the cylinder proper the horizontal brushes which clean ranged below them; also, in the construction of such boards the better to deliver the sifted product to conductors arranged at the outer side of the cylinder. This invention is an improvement upon a former patent received by

REVERSIBLE TRANSMISSION GEAR. J. A. DICKEY, Columbus, Indiana. This apparatus is fitted with a clutch for directly connecting the driving and driven elements and a set of gears for connecting said elements to run the driven elements in the opposite direction, the clutch and gears being arranged the one to be inactive upon the other, and vice versa.

CAM .- W. H. DAILY, Carthage, Ill. In car rying out this invention Mr. Daily has in view as an object the construction of a cam disk which shall take its load at a point farthest from the center or at the greatest point of leverage and shall release such spring at a point nearest the center or at the shortest point of leverage. By this means it is possible to compress a spring or a gas without the loss of any power save friction and with the least possible jar to the machinery and the operator.

PILL - COUNTING MACHINE. — W Brough, Baltimore, Md. This improved matrain comes to a stop or the brake is released chine is adapted to count automatically pills or other similar articles rapidly and accurately without injury or adhesion of one to the other. A distinguishing feature of the contrivance is an endless traveling belt having COMBINED LOCK AND LATCH.—A. M. groups of sockets for receiving the pills or other articles to be counted, the pockets being so arranged as to facilitate discharge of the pllls at the proper time in the travel of the

Of Interest to Farmers.

HARVESTER. — H. TRAEGER, Auburn. Wash. In this patent the improvement relates to a machine for shelling and separating to be associated with a cutting or harvesting apparatus and drawn through the field in which the peas are grown.

HOISTING DEVICE FOR SACKS, BOXES material in a very rapid, convenient and economical manner. By means of this machine two men can pile high about four sacks of grain per minute, which is more than twice the amount handled by the ordinary blockand-tackle apparatus.

LOADING OR UNLOADING APPARATUS. -W. T. SMITH, Ames, Iowa. Though applicable to different purposes in the arts, these ual exertion and without danger of breaking improvements have reference more especially to apparatus for loading and unloading shocks of hay, wheat, barley and other grain while in the field; and the principal object of the invention is to provide apparatus which is simple in construction and organization besides being thoroughly effective and reliable in operation, as well as capable of easy handling or manipulation.

HAY-LOADER.-C. J. ROMWALL and W. C.

vention is to provide a simple, durable, economic, and effective form of hay-loader espe-the construction of both being applicable to cially adapted for use on large ranches where hay in quantities is to be gathered and stacked, the device being adapted to save the expense of shocking and pitching, and, in a measure, raking the hay into wagons.

Pertaining to Vehicles.

TRACE.—F. D. THOMAN, Toledo, Iowa. The aim in this improvement is to provide a trace which has no leather parts to wear, one which is pliable and strong, readily attached and de-The invention consists of a wiretached. cable body portion surrounded by a tightlycoiled covering of metal and detachable hame and whiffletree connections. This body-portion is surrounded by a waterproof covering which is in turn surrounded by a tightly-coiled covering of metal, with detachable hame and whiffle-tree connections.

BICYCLE-GEAR .-- J. H. TRISMEN, York, N. Y. The aim in this invention is the provision of a bicycle-gear more especially de signed for transmitting the motion of the sprocket-chain to the rear or driving wheel of the bicycle in an economical manner, at the same time insuring a high speed to the bicycle and utilizing the power exerted by the rider or motor to the fullest advantage

WAGON.—S. H. BOONE and C. W. STAPLES, Burtts Corner, New Brunswick, Canada. In most low-down axles wagons the front of the wagon-body is of reduced dimension and is not available for receiving its proportion of the load. In this invention the wagon-body may be of full dimensions throughout, and it extends beyond the front axle, thereby accom-penter's invention is to provide a card readily modating a larger load. This principal advantage is due to the inventor's improved manner of mounting the body on the front axie.

TRUCK.—T. H. Brown, Sterling, Kan. By this invention a barrel of heavy goods, such as salt, can be picked up with ease and placed on tension cut from the material of the blank, a spot without touching it with the hands in loading or unloading. The clasp-arms work automatically and extend in front of the wheels, so that the truck being pushed in front of the barrel the arms roll and adjust themselves to the barrel below the quarterhoop. The wheels being back, the clasps readily pass between adjacent barrels to position to engage with the quarter-hoops. Means are provided to pull the barrel onto the truck.

MOVING-VAN .- A B. YETTER, New York, N. Y. The purpose of this invention is to provide a construction in which the body is roller-supported upon a running-gear and means for retaining the van upon the gear while in transportation. After the body has received a sealed load, to provide means by which the body may be released from its fastening devices on reaching a storage-house and without impediment transferred to a platformtruck, so that the body can be carried to any position by an elevator or other means. van-box so constructed dispenses with many handlings of transported material, saves time, and wear and tear of articles.

Railways and Their Accessories,

RAILWAY-SWITCH .- T. T. CHALONER, New York, N. Y. In the present patent the inven-tion has reference particularly to improve-closed, resulting in a great saving of time in ments in railway-switches, and the object in collecting and delivering mail. view is the provision of a switch of simple MOUNTING FOR RIFLEconstruction that may be readily and positively C. E. STALLCOP, Sac City, Iowa. The holders shifted by a motorman or driver on a moving or mountings proper for the telescope in this

this case the invention relates to an automatic brake for rallway-vehicles, a more particular is practically wedge shaped and furnished on object being to devise means for automatically its inclined edge with an open slot whose venting the air-brake of a locomotive, there—shoulders are adapted to engage the mountby causing the mechanical brakes to be applied ings. By means of an adjustment the telein case the engineer disregards a semaphoresignal.

RAILROAD-RAIL HOLDER FOR METAL secured upon metal or other cross-ties, and has special provision for accommodating the shifting ends of a track-rail and frog-tongue tion of a chair.

DUMPING-CAR has particular application to railway dumping-cars. Mr. Davis has in contemplation the construction of a car of the "hopper-bottom" type, wherein a load of dirt, coal, ore, or similar material passing through an opening in like to be discarded. the bottom of the car will be directed to predetermined points or places alongside the car and out of the way of the wheels thereof.

GRAIN-DOOR .- J. E. DRAKE, Blue Rapids, construct a substantial grain-door for freightcars, which door will involve few parts and as frequently happens at obscure railwaystations. The door is so constructed that when moved into inactive position it will not interfere with the use of the car for ordinary purposes.

BRAKE MECHANISM FOR CARS.—W. S. HAY-LOADER.—C. J. ROMWALL and W. C. HOWLAND, Old Saybrook, Conn. This mechan-practice in making badges or the like of this Pitt, Lovelock, Nev. The purpose of this in- ism includes main and supplemental or emer-metal to mechanically secure a brass or simi-

gency devices for controlling the brake-shoes, any car, and such that the main brake may be used independently of the emergency brake. and whereby the supplemental mechanism may be almost instantly applied to the brake-shoes to add to their gripping power upon the wheels for stopping the car instanter even upon a decided downgrade.

SPARK-EXTINGUISHER.-J. W. BRYAN'T, Crewe, Va. The improvement is adapted for use on locomotives, and the object is to provide a construction by which to thoroughly extinguish and pulverize the sparks and cinders without impeding the discharge of same from the stack, whereby the engine will be prevented from throwing sparks or fire, the draft of the engine will be increased, and the engine enabled to clean its front of all cinders and sparks, thus permitting of a practically perfect

Miscellaneous.

SPUR ATTACHMENT FOR LEGGINGS .-W. C. Brown, U. S. Army. The object in Captain Brown's invention is to provide a spur attachment for leggings, such as used by cavalrymen and other horsemen, the attachment permitting the user to quickly remove the yoke and rowel from the supporting member whenever the user wears the leggings under circumstances that render spurs undesirable, the attachment also permitting immediate attachment of the yoke and rowel whenever desiring to use the spur for its legitimate purposes.

CARD.—E. B. CARPENTER, Plymouth, Indiana. One of the important objects of Mr. Carattachable to any projection, such as a door knob or the like, the shape of the article being such that the likelihood of the card being disturbed will be obviated. Another object is to furnish an improved card with a tongue or exsuch tongue serving as a support or brace for the card whenever it is desired to apply the same in an upright position.

ARTICLE-ATTACHER.-E. B. CARPENTER, Plymouth, Indiana. In this patent the invention relates to improvements in an article for suspending and retaining canes, umbrellas, parcels, and the like. Great inconvenience is caused and many articles are lost through carelessness, when purchasing in large and crowded stores. The inventor's object is to provide means whereby articles such as those mentioned, may be connected with the person of the wearer, to obviate the possibility of losing the same.

CHIP-RACK.—S. A. C●HEN, New York, N. Y. This game accessory has for its purpose the provision of a chip-rack which is arranged to permit easy and quick attachment to or removal from a table and to bring the rack in position for a player to conveniently place the chips into the rack or remove the same therefrom.

MAIL-BOX .- I. F. Collins, Sabetha, Kan. This mail-box is particularly adapted for use on rural mail-routes; and the object of the improvement is to provide a box so arranged as to protect the deposited mail-matter from rain

MOUNTING FOR RIFLE-TELESCOPES. invention are provided with springs which bear AUTOMATIC BRAKE FOR RAILWAY upon the telescope to press it both downware VEHICLES.—E. L. CRIDGE, Passaic, N. J. In and laterally, and in connection with such mountings a graduated slide is provided which scope may be lifted •1 pressed laterally and held in position.

HAT.-L. M. STIREWALT, Toledo, Ohio. The CROSS-TIES .- J. KATZENMEYER, Kirby, Ohio. present invention is an improvement in hats, The present invention refers to means for de- in which the inventor includes caps and simitachably holding the track-rails of a railroad lar head-coverings; and the object is the provision of a novel construction of ventilated for its object to provide novel features of con- hats aiming to avoid baldness and other instruction for the purpose indicated. There is Juries which result from wearing of air-tight unventilated hats.

COLLAR-FASTENING CLASP.—CAROLINE at a switch, this detail comprising the addi- LASSEN, New York, N. Y. This clasp is designed particularly for use in fastening collars used in connection with ladies' shirt-waists Col. In carrying out this improvement, which Primarily the inventor's object is the provision of a collar-fastener which shall overcome the numerous objections to other fasteners, such clasp dispensing with pins and enabling such fasteners as hooks and eyes, buttons, and the

PUMP ATTACHMENT FOR PORTABLE CANS.—I'. J. BLACKMON, Corsicana, Texas. This contrivance provides means for detachably connecting a liquid-lifting pump with an Kan. The purpose of this improvement is to ordinary commercial packing-can containing coal-oil, and thus enables the convenient transfer of the liquid contents of the can into a none readily detachable, thus making it practilamp or other receptacle. The improvement tically impossible for the parts to be stolen, facilitates the transfer of oil, prevents loss, and lightens the labor of filling lamps from the original packing-can.

MEANS FOR ATTACHING PINS TO METAL PLATES .- H. F. NEHR, Brooklyn, N. Y. As it is difficult or practically impossible to solder metal to aluminium, it is the general practice in making badges or the like of this ha metal plate in the back of the aluminium slate, and to this brass plate the pin is soldered. This method requires considerable time and adds to the cost. Mr. Nehr's object is to provide a simpler means for securing the pins.

ACCOUNT-BOOK HOLDER.—A. J. SHAUL, Quimby, Iowa. This device is adapted for holding account and other books for containing holding account and other books for containing records and which when not in use require to be deposited in safes. By means of stepwise adjustment the top or upper portions of the books permit of convenient inspection, and the names of parties with whom the accounts are kept being printed on such portions a selection may be instantly made. The book holders may be readjusted into a compact form so may be instantly made. The book holders may be readjusted into a compact form, so as to occupy minimum space when stored in a safe or vault, without removal of the account books.

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American inventions negotiated in Europe, Felix

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(9206) J. A. McD. says: Could you inform me in regard to the welding of copper; drawn and the lettering is conveniently disis it still considered a lost art, or is it readily posed, a feature which has been too often negdone over the country? Are there people look lected in this kind of work. For protection ing for the secret? Would you say we can weld copper successfully? A. The welding of copper is not considered, so far as we are aware, a lost art. A number of companies are now welding copper without any serious difficulties, we believe; and the trouble which there has been in the past has been caused largely by the difficulty of getting sufficiently pure copper in the market. We know of no one who is looking for the solution of this

(9207) C. W. says: Would you kindly inform me of the best method to pump sea water from a sandy beach, when at present considerable difficulty is experienced by the sand choking the pipe and steam pump, although the suction and X pipe is run out 200 feet from shore? Is there any way of keep-lng the sand out of a well if sunk on the beach? I suggested digging a well and sinking a barrel with the suction pipe cemented through the bottom and buried in the sand, but they tell me that the barrel would soon fill up from underneath; would that be so? Any information on the subject will be thankfully received, also as to what pump is considered the best for salt water. A. In reply to your inquiry regarding the best method of pumping water from a sandy beach, we would advise you to have your pipe run out as far as Bi the conditions will allow and then have the pipe as large as you conveniently can, preferably with a flaring or funnel-shaped opening, so that the velocity of the water as it enters the pipe will be very small. Extending your suction pipe another 50 feet into the ccean would not appreciably increase the work on the pump. The additional work would be caused only by the slight amount of additional friction. For pumping salt water, it is best to have a pump with a bronze-lined cylinder, a bronze piston and piston rod, and bronze valves. Almost any of the well-known pump manufacturers will be able to furnish you with such.

(9208) N. P. says: 1. Give a formula to find how many horse power I need to run this machine: Driving shaft, 130 revolutions, 20-inch pulley; machine, 66-inch pulley, 9-inch belt, 40 revolutions. 2. Name of a small book containing similar formulas. 3. They write me from Italy about a much-advertised American invention—a Muller's "acousticon" for deaf and dumb. Muller is from Alabama, and his "acousticon" was experimented with in the R New York Institute for Deaf Mutes with extraordinary success. Is anything true? If so, please give me some information. A. A common formula for calculating the horse power of a belt is "a single belt will transone horse power for each inch of width and for each 1,000 feet velocity per minute." A double belt will transmit 18-10 times as much power as a single belt. According to this formula, a 9-inch single belt, traveling Ca over a 6-inch pulley, making 40 revolutions per minute, will transmit 62-10 horse power. it is a double belt, it will transmit 112-10 Ca horse power. If you are figuring on an ento drive this gine or other source of power machine, it would be well to allow a considerable factor of safety above these amounts, as most machines require at times a power considerably in excess of the average power which they consume. In answer to your request for a small book containing formula Ca similar to the above, we would refer you to the 'Handbook of Practical Mechanics," price \$1.00. Information as to how to reach the acousticon has been mailed you.

(9209) W. F. H. writes: Please advise me by mail or through Notes and Queries of the Scientific American the number of pounds of water which must be evaporated to cr give one boiler horse power, when the temperature of the feed-water is 32 deg. F., and the boiler pressure 70 pounds. Also when the feed-water temperature is 100 deg. F. and the Ci boiler pressure the same as above. A. One boiler horse power equals 30 pounds of water evaporated from a feed-water at 100 deg. F., and at a pressure of 70 pounds. This equals'

1110-3 B. T. A. per pound. It will require 68 more heat units to evaporate from a feedwater of 32 deg. F. Therefore one boiler horse power equals an evaporation of 281/4 pounds under these conditions.

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Britain 741,451 ullding construction, T. O'Shea. 741,066 uildings, etc., metallic finish for, N. Poul-	Fi Fi Fi Fi
nildings, etc., metallic finish for, N. Poul-	H.I
741.545 741.	FI FI FI
urial apparatus, J. E. Lawrence	Fl
ustle, H. H. Taylor	Fl
alendar holder, memorandum, G. G. Green- burg741,128	Fl
burg	FI FI FI FI
araes	Fl
ane and whip, combined, H. H. Brandes. 741,219 ane, combination, L. Robertson 741,373	Fo Fo
ar coupling, P. Luther	Fo
ar door hanger, J. Goettel	Fo Fr Fu
ar pipe coupling, railway, C. Mahon 741,050	Fu
ar replacer, J. D. Green	Fu
ane, combination, L. Robertson	Fu
ars, door for self-discharging hoppers of	Ga Ga
Twineberrow	Ga Ga
street, J. Enright	Ga Ga
Twineberrow	Ga
F. Soety	Ga Ga Ga
asting small steel ingots, A. B. Chantraine 741,460	Ga Ga
arpenter's and Joiner's Jack, Tolding, W. F. Soety	Ga Ga
hein drive Butler & Whitney 741,455	Ga Ge
hair table attachment, J. A. Dale 741,019	Ge Gi
hart, harmony and transposition, E. W. Curtiss	Gla
horry stoning device Von Uffel & Len-	Glo
gert	Gl
hute, coal, M. J. Brennan	Gli
	Go
ircuit breaker, J. D. Forrer	Go Gr
for link, J. Wojciechowski. garette machine, A. Grellsammer. 741,242 ircuit breaker, J. D. Forrer. 741,339 lassifying or sizing apparatus, A. Ten Winkel	Gr:

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8	Clock, electric, F. W. Moore	741,358
l- r	man	741,431 741,307
4	Clothes drier, G. M. G. & W. H. Weston. Clothes pounder, O. •ines	741,202 741,409
_ 1	Cover cutter, H. B. Humphrey. Coal hod and sieve, combined, V. H. Byar Coal screener and bagger, J. H. Gmelin Coatings, antifouling, C. D. Coleman Coatings, making antifouling, G. D. Coleman Coffee cooker, P. Renner. Coffee put, J. W. Vogan Coffee substitute, M. H. Just. Columbarium cell, W. J. Mathews Combing machine, circular, J. H. Whitehead, et al.	741,454
_	Coating, antifouling, G. D. Coleman Coatings, making antifouling, G. D. Cole-	741,398 741,228
E	man	741,227 741,547
) -	Coffee pot, J. W. Vogan	741,196 741,041
h	Columbarium cell, W. J. Mathews	741,355
a :	head, et al. Compasses, drawing, J. Wild. Composition of matter, W. A. Lawrence. Compositor's stick, F. W. Weeks Concrete or cement building block, J. H.	741,088 741,425 741,259
n :	Compositor's stick, k'. W. Weeks	741,423
d :	Jones C. A. Parsons. Condenser, C. A. Parsons. Conveyer, pneumatic, W. W. Annable. Conveyer system, H. W. Blaisdell. Cooking utensil, O. A. Lane. Corner strip, F. L. Union. Corner busks, metal clasp for, E. D. Etienne	741,040 741,270
ζ,	Conveyer, pneumatic, w. w. Annabie Conveyer system, H. W. Blaisdell	741,435 741,447 741,348
į	Corner strip, F. L. Union	741,288
у : у	conset busks, metal chasp lot, E. B. Elf- enne Cotton gin, W. H. Baskin. Cotton press, oscillating, S. J. Webb. Crane or like holsting or lowering appa- ratus, A. H. Mitchell. Crate, banana, A. Sansone. Crusher, W. W. Case.	741,237 741,443
n '	Cotton press, oscillating, S. J. Webb Crane or like hoisting or lowering appa-	741,085
d : h	Crate, banana, A. Sansone	741,525 741,551 741,458
1- d	Curb box and cock support. J. R. Finn	741,458 741,477
)-	M. Deri Curtain fixture, F. L. Bailey	741,234 741,572 741,231
ll 	Dental appliance, L. A. de Rosa	741,071 741,071
;-	Digester, T. W. McFarland Distilling apparatus, wood, A. A. McKethan	741,495 741,530 741,157
n. '.	Door hanger, J. H. Burkholder Door stop, W. Platt	741,221 741,410
=	Dough mixing machine, H. H. Wilson Draft evener, A. B. Fogle	741,603 741,124
5	Drilling apparatus, C. A. Ott	741,124 741,362 741,364 741,210 741,383
	Current machine and apparatus, continuous, M. Deri M. Deri Cyanid solutions, treating, W. H. Davis Cyanid solutions, treating, W. H. Davis Dental appliance, L. A. de Rosa Desk attachment, J. Hoffman Distilling apparatus, wood, A. McKethan Door hanger, J. H. Burkholder Door stop, W. Platt Dough mixing machine, H. H. Wilson Draft evener, A. B. Fogle. Drawer bottom, E. Ohnstrand Drilling apparatus, C. A. Ott Dust arrester, L. D. Young Dust guard, G. H. S. Soule Dye and making same, green sulfur, R.	741,383
	Gley Dyes, making azo, F. Scholl.	
	Eaves trough, B. H. Gedge Egg beater, F. Maurer	741,027 741,028 741,586
	Electric furnace, F. E. J. Hatch Electric induction motor, Porter & Currier	741,333 741,272
•	Dye and making same, green sulfur, R. Gley Dyes, making azo, F. Scholl. Eaves trough B. H. Gedge. Eaves trough hanger, B. H. Gedge. Egg beater, F. Maurer Electric furnace, F. E. J. Hatch. Electric induction motor, Porter & Currier. Electric generator, turbine, Porter & Currier. Electric switch, J. H. Rushy.	741,271 741,168
• • • • • • • • • • • • • • • • • • •	Electric terminal, H. R. Young	741,168 741,60 5
		741,052
1	& Ewing Electrical switch, A. E. Handy	741,570 741,490
9	Electricity meter, Mordey & Fricker Electrolytic diaphragm, I. L. Roberts	741,527 741,592 741,274
3	Elevated carrier, H. H. Drew Elevator gate, W. H. Mechlin	741,236 741,523
1 1	Elevator safety device, W. S. Fulwider Embroidery and manufacturing same, orna-	741,481
2	End gate and shoveling board, F. J. Weston	741,302 741,200
5 : 7 : 4	F. J. Weston	741,201 741,531
2 : 4 :	Electrical oscillations, detection of, Walter & Ewing	741,379
8 · 2 ·	Rowlands Engine interchement, traction, Saunders & Rowlands Engine ignition device, explosion, H. Guillou Engine oil cup, G. F. Clarke Engine synchronizing device, duplex-steam, E. M. Coryell Engines, cooling attachment for internal combustion, J. W. Sutton. Engines, electric igniter for hydrocarbon, J. W. Packard Engraving machine neutograph M. Barr	741,329 741,309
6 : 2 ·	E. M. Coryell	741,013
8 6	combustion, J. W. Sutton Engines, electric igniter for hydrocarbon,	741,419
8	J. W. Packard Engraving machine, pantograph, M. Barr. Equalizing mechanism for reciprocating ma-	741,365 741,442
6	Engraving machine, pantograph, M. Barr. Equalizing mechanism for reciprocating ma- chines, A. C. Eastwood. Excavating machine, F. M. Bisbee. Explosive engine, F. H. Smith. Explosive engine, F. Sproehnle. Extension table, pedestal, Luger & Muller. Extension table, pedestal, Luger & Muller. Eyeglasses, Finch & Weil. Fan construction, W. W. Burnes. Fatty substances, making, O. Liebreich. Feed measure and box, J. A. Leighton. Feed mack, J. M. Shutts. Feed mack, J. M. Shutts. Feeder, boller, M. Castelnau. Feeder, time stock, G. A. Crotto. Fence, Bayless & Dallas. Fence machine, F. E. Smith Fence post, Composite, R. D. Hayward. Fencing, J. W. Berry. Ferrule applying machine, G. H. F. Schrader Filter, J. F. Ziegler. Filter, barrel, A. E. Johnson. Filtering apparatus, J. Miller. Fire box, W. D. Boyce.	741,470 741,099
7	Explosion engine, F. H. Smith Explosive engine, C. W. Sponsel	741,559. 741,178
2	Extension table, pedestal, Luger & Muller.	741,179 741,049 741,475
24	Fan construction, W. W. Burnes Fatty substances, making, O. Liebreich	741,107 741,584
1	Feed measure and box, J. A. Leighton Feed rack, J. M. Shutts	741,262 741,175
9 ;	Feeder, boiler, M. Castelnau	741,502 741,459 741,310
1 ¦ 0]	Fence, Bayless & Dallas	741,095 741,177
i !	Fence post, J. F. Martin Fence post, composite, R. D. Hayward	741,354 741,579
7 : 6 :	Ferrule applying machine, G. H. F. Schrader File, paper, F. A. Weeks.	741,216 741,073 741,422
i :	Filter, J. F. Ziegler Filter, barrel, A. E. Johnson	741,090 741,499
6 : 4 :	Filtering apparatus, J. Miller	741,055 741,218 741,082
6 · 8 :	Fire kindler mold, E. C. Sachse	741,169 741,192
1 · 6 ·	Fireproof floor construction, E. Merrick Fireproof nailing brick, J. T. Taylor	741,054 741.185
5 -	Fireproof structure, N. Poulson	741,544 741,214
2	Fleshing and shaving machine, E. Schroeder Floor iack, M. Nesheim.	741,007 741,553 741,533
8 : 4 :	Floors, etc., surface finish for, J. J. Black-	741,100
4	riouring and constructing floors, F. L. Un- ion	741,289 741,370 741,086
8 9	ion Flour bolting brush, J. G. Peterson. Fluid motor, rotary, S. J. Webb. Fluid operated engine, B. V. Nordberg Fluids, means for preventing meddling with the flow of, C. W. Geekie Flushing tank, W. A. Williams.	741,086 741,536
2	Fluids, means for preventing meddling with the flow of, C. W. Geekie	741,240
9	Focal plane shutter, L. Borsum	741,203 741,103 741 301
4	Fork, J. A. Tornblom	741,203 741,103 741,301 741,191 741,352 741,428
i !	Focal plane shutter, L. Borsum. Forging machine, O. Briede. Fork, J. A. Tornblom. Foundry truck, W. F. & O. E. Mains. Fruit pulp machine, C. R. Wilson. Fruit pulp machine, C. R. Wilson. Fuel, artificial, Von Heydebrand und der Lassa	741,428
) . 7 :	Furnace, C. J. Monfort	741,493 741,357 741,456
6 . 6 .	Furnaces, means for utilizing oil or gas in ore reducing, W. Kemp	741,504
3	Furring, C. T. Purdy	741,412 741,146
5	Fuel, artificial, Von Hegdebrand und der Lassa Furnace, C. J. Monfort. Furnaces, G. C. Cannon. Furnaces, means for utilizing oil or gas in ore reducing, W. Kemp. Furring, C. T. Purdy. Gage, C. S. Labofish. Game, W. F. Moughler. Garment fastening, E. A. Peffley. Garment supporter clasp, Smith & Buchanan Gas burner, incandescent, E. W. Phelps Gas burner, safety, M. F. Kerrigan. Gas burner, sectional, E. A. Hall Gas cut-off, automatic, Jenkins & Ebert Gas generator, acetylene, E. R. Angell. Gas guerator, acetylene, E. R. Angell. Gas guerator, acetylene, E. R. Angell.	741,528 741,540 741.281
3	Garment supporter clasp, Smith & Buchanan Gas burner, incandescent, E. W. Phelps.	741,417 741,068
ij	Gas burner, safety, M. F. Kerrigan	741,344 741,130
	Gas cut-off, automatic, Jenkins & Ebert Gas generator, acetylene, E. R. Angell Gas purifier box, E. F. Lloyd. Gasoline engine, J. A. Nickelson Gate, P. W. Robinson.	141,498 741,006 741 250
, ! !	Gasoline engine, J. A. Nickelson	741,064 741.167
3 !	Gate, H. R. Dansboe	741,404 741,539
	Gear, transmitting, F. D. Howe	741,089 741.038
[Glass, manufacturing wire, N. Franzen Glass sheets or plates. annealing H K	741,421 741,125
	Hitchcock Glove, W. C. Wefel.	741,494 741,424
<u> </u>	univerin and acidylated derivatives of aromatic bases and the product thereof,	741,585
<u>'</u>	a, , , , , , , , , , , , , , , , , , ,	
	chines, J. H. Gray, reiseue	12,160 (41,590
	Gluing machine, J. A. Hrubecky. Gold saving apparatus for dredging ma- chines, J. H. Gray, reiscue. Governor, speed, W. S. McKinney. Grain storage tank. Warren & Fontain. Grate bar. T. J. Pritchard. Grave filler, S. Schlachter.	741,546 741,594
11	GLAYO BHELL S. SCHIRCHSEL	,00 4