RECENTLY PATENTED INVENTIONS Agricultural Implements.

FEEDING-RACK.—SAMUEL L. LAMOREUX Titonka, Iowa. This improved feeding-rack is so constructed that its several parts may be conveniently adjusted for feeding milk, grain, or hay to calves without danger of spilling the grain or milk.

WEEDER.-WILLIAM D. LLOYD, Fiskville, Tex. The implement is designed to remove weeds and rubbish simultaneously from each side of a row or drill of corn, cotton, or other plants, and to direct the removed material to the longitudinal center of the row or drill. The implement is provided with hoes, which are given rotary reciprocating motion through gearing and cranks from the supporting-wheels. The hoes are normally held in contact with the ground and can be lowered whenever it is so desired. Independent driving mechanism is provided for each hoe.

CORN-HARVESTER.—ARTHUR W. RICH ARDS, Indianola, Iowa. The invention is embodied in the mechanism employed for severing the ears from opposite sides of each row of stalks whatever be the difference of height of the several ears from the ground. The severed ears are deposited in a suitable receptacle provided on the machine. The different agents which sever the ears from the stalk are spiral reel-cutters extending longitudinally on the front portion of the machine plate, and arranged adjacent to a slot in the frame into and through which the standing corn passes as the machine advances. These reel-cutters differ in size, and one is arranged lower than the other and spaced from it a distance required to admit a row of cornstalks, so that the cutter operates simultaneously on opposite sides. Reciprocating cutters are likewise employed; and these are arranged below and parallel to the rotary reel-cutters, for the purpose of severing the ears that are not clipped by the upper cutters. The ears severed by the various cutters fall upon endless traveling aprons by which they are conveyed to the receptacle provided for them.

Electrical Apparatus.

ELECTRICAL DEVICE FOR THE TREAT-MENT OF DISEASES.—Dr. WILLIAM J. GAV-IGAN, Manhattan, New York city. The invention is based upon an entirely new theory of medical electricity. The spinal cord serves as a pathway to conduct motor impulses from the brain and sensory impulses to the brain. What Dr. Gavigan has done is to apply a flexible electrode to the entire length of the spinal cord and a flexible electrode to the body near the part machines of all kinds. Inventions perfected. showing symptoms of disease. Thus a current A. Wilson Machine Company, Rochester, N. Y. is passed from the spinal cord, through the corresponding nerve to the part showing symptoms of disease. Since all the veterbral spinal processes are covered by a set of electrodes, the seat of disease is necessarily reached.

Engineering Improvements.

PUMP.-Hudson S. Clark, Sigourney, Iowa. The purpose of this invention is to provide a simple, novel construction and arrangement of parts, whereby to prevent the circulation of sand with the water by the operation of the pump in drilled, driven, or other wells. Combined with the pump-tube and its inlet-pipes are a strainer-diaphragm fitting around the pump-tube, and inlet-pipes below the inlet-ends of the latter.

Mechanical Devices.

WIRE-STRETCHER.-WALTER Z. BRANNON, Brazos, Tex. The device is adapted for attachment to a post or other support and to the wire to be stretched; through movement of a lever and of two gripping-arms, traveling upon the element to which the wire is attached. This element in a direction to place the wire under renewed tension, one gripping-arm acting to bring about such result, the other gripping-arm acting to hold the wire under tension while the actuated arm is advanced for another grip, the locking-arm being free to travel upon the wireholding element while the actuated arm is in service.

ELEVATOR-GEAR.—WILLIAM M. BAIN-from castor beans, palm nuts, etc. BRIDGE, Elkton, Colo. The invention relates principally to the devices for locking an ele-vator-cage in inactive position. The gear is woodworking machinery, etc. Will rent use and power vator-cage in inactive position. The gear is especially applicable to mining-cages. Dogs are pivotally hung on the cage and are to be op-A retractile spring erated by a hand-lever. tends to draw the dogs toward each other. By throwing the lever contrary to the action of the spring, the parts will be thrown into operative position; and when the elevator-cage is at the proper elevation the dogs will be seated.

WAVE-MOTOR.-RICHARD H. HANNAH, Ontario, Cal. The invention relates to a means for deriving motive power from the action of waves; and the special feature of the invention resides in certain novel devices for automatically regulating the position of the parts with respect to the varying elevation of the water due to tides and other causes.

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

Business and Personal Wants.

READ THIS COLUMN CAREFULLY,—You will find inquiries for certain classes of articles numbered in consecutive order. If you manufacture these goods write us at once and we will send you the name and address of the party desir-ing theinformation. In every case it is neces-sary to give the number of the inquiry. MUNN & CO.

Marine Iron Works. Chicago. Catalogue free. Inquiry No. 2156 -For modern machinery used in canning and preserving fruits and vegetables. For logging engines. J. S. Mundy, Newark, N. J.

Inquiry No. 2157.—For the makers of the Oregon pine need e pillows.

Motor Vehicles. Duryea Power Co., Reading, Pa. Inquiry No. 2158.—For woodworking machinery also machinery for the manufacture of pianos. "U.S." Metal Polish. Indianapolis. Samples free.

Inquiry No. 2159.-For a second-hand ditch dig-WATER WHEELS. Alcott & Co., Mt. Holly, N. J.

Inquiry No. 2160.—For manufacturers of portable band sawing machines. Stencil Machines.-A. J. Bradley, 101 Beekman St. N.Y Inquiry No. 2161.-For makers of toy balloons. Sawmill machinery and outfits manufactured by the

Lane Mfg. Co., Box 13, Montpelier, Vt. Inquiry No. 2162.—For machinery for making wool and cotton blankets.

Rigs that Run. Hydrocarbon system. Write St Louis Motor Carriage Co., St. Louis; Mo.

Inquiry No. 2163.—For manufacturers of metallic bottles and boxes.

For sheet metal stampings and novelties try Standard Stamping Co., Seventh and Hudson, Buffalo, N. Y.

Inquiry No. 2164.—For makers of machinery for pulverizing, grinding and mixing clay with oils, etc. Are you looking for anything in bent woodwork?

Write Tucker Bicycle Woodwork Co., Urbana, Ohio, Inquiry No. 2165.—For makers of acetylene gas machines.

We develop inventions through their several stages, manufacturing for the market. Amstutz Osborn Co.,

Inquiry No. 2166.—For makers of oil and gas burners for heating purposes.

Inventions developed and perfected. Designing and machine work. Garvin Machine Co., 149 Varick, cor. Spring Sts., N. Y.

Inquiry No. 2167.—For manufacturers of cast-iron bells.

Manufacturers of patent articles, dies, stamping tools, light machinery. Quadriga Manufacturing Com-pany, 18 South Canal Street, Chicago.

Inquiry No. 2168.—For a machine for making bricks out of sand by pressure.

WANTED.-Boss millwright for general factory repairs, replacements and alterations. Address Millwright, P. O. Box No. 653, New York City.

Inquiry No. 2169.—For makers of sheet metal dies for cutting and forming parts of padlock.

Designers and builders of automatic and special machines of all kinds. Inventions perfected. The W.

Inquiry No. 2170.—For parties to undertake the manufacture of a special metal clamp.

The celebrated "Hornsby-Akroyd" Patent Safety Oil Engine is built by the De La Vergne Refrigerating Machine Company. Foot of East 138th Street, New York. Inquiry No. 2171.—For some method of transferring designs in bronze from paper to cloth.

The best book for electricians and beginners in electricity is "Experimental Science," by Geo. M. Hopkins. By mail, \$4. Munn & Co., publishers, 361 Broadway, N. Y. Inquiry No. 2172.—For makers of gears of all kinds.

WANTED. - A cheap engine-lathe that will swing from twenty-four to thirty inches over bed. Bed where from ten to fifteen feet. J. W. Murkland, Bar-

ton. Vt. Inquiry No. 2173.—For the address of the makers of the Interchangeable Safety Step.

WANTED.-Foundry chemist who can also superintend cupolas and produce iron at lowest cost. Young man preferred. Stover Manufacturing Company, Free-

Inquiry No. 2174.—For parties dealing in electronickel and silver plating supplies.

Wanted-Revolutionary Documents, Autograph Let ters, Journals, Prints, Washington Portraits, Early American Illustrated Magazines. Correspondence Soli-cited. Address C. A. M. Box 773, New York.

Inquiry No. 2175.—For machinery for making glassware. WANTED. - A horizontal 10 to 20 h. p. second-hand by one movement of the lever is carried gasolene engine in A 1 condition to run dynamo. Fairbanks make preferred. Address, with price and parti-

culars, Paul Huut, Belvidere Court, Boston, Mass. Inquiry No. 2176.—For makers of machinery for a tanning extract plant.

Those using now Duplicators or desiring to reproduce many copies of writing-all alike-do well to state their needs to the original inventors of the latest multicopiers. S. C. Beusinger, Manager, 265 Broadway, N. Y.

EXPERIMENTAL MACHINE SHOP very low. Fine place for automobile work. Billings Clapp Co., Boston, Mass.

Inquiry No. 2178.—For dealers in hydraulic rams.

MANUFACTURER WANTED.-For patent shaft-gov erned high-speed engine, fully demonstrated, authentic tests. All machine works standarized for cheap production. Full working drawings and personal super-vision if required. Address Y. K. E., at Horncastle's Advertising Offices, 61 Cheapside, London, England.

Inquiry No. 2179.—For manufacturers of iron or brass novelties for the mail order business.

Send for new and complete catalogue of Scientific nd other Books for sale by Munn & Co., 361 Broadway New York. Free on application.

Inquiry No. 2180.—For makers of a combination kitchen range and water heating apparatus. Inquiry No. 2181.—For manufacturers of kitche

Inquiry No. 2182.—For machinery for the manufacture of excelsior.

Inquiry No. 2183.—For a combination steam lawn nower and roller.

Inquiry No. 2184.—For manufacturers of "Spirit Lamp" for heating model engines of special dimensions (Caster socket, W. Llyingstone. 693,875 control model 1.1 Cornell 1.1 Cor

Inquiry No. 2185.—For manufacturers of steam turbines.

Inquiry No. 2186.—For a small engine about? Inquiry No. 2187.—For dealers in electric ceiling

Inquiry No. 2188.—For manufacturers of card board houses.

Inquiry No. 2189.—For brass or other metal tuber not larger than a common round lead pencil, not to

Inquiry No. 2190.—For makers of wood, bone or rubber handles for printing advertising thereon. Inquiry No. 2191.—For machines for making tinboxes.

Inquiry No. 2192.-For makers of modern has

Inquiry No. 2193.—For machinery for sorting cleaning and cutting sardines.

Inquiry No. 2194.—For rag paper manufacturer to make special paper. Inquiry No. 2195.—For small engines with 1 to horse power boiler.

Inquiry No. 2196.—For an apparatus for burning lead. Inquiry No. 2197 .- For dealers in talcum powder

Inquiry No. 2198.—For makers of hydrofluoriacid.

Inquiry No. 2199.—For an electrical flashing cabinet for advertising purposes. Inquiry No. 2200.-For manufacturers of rolle

Inquiry No. 2201.-For paper-making machinery

INDEX OF INVENTIONS

For which Letters Patent of the United States were Issued for the Week Ending

February 25, 1902,

ND BACH BEADING THAT D	ATE	ļ
AND EACH BEARING THAT D		Į
See note at end of list about copies of these	patents.	I
Acidyl dialkylrhodamin and making same,		Î
Acidyl dialkylrhodamin and making same, C. Hoffman dding machine duplicate printing mechan- ism, D. E. Felt terator, milk, L. E. Morgal. gricultural implement, E. G. Bowman Agricultural machine steering device, C. F. Grohmann	694,149	ı
ism, D. E. Felt	693,958 694,296	I
Agricultural implement, E. G. Bowman Agricultural machine steering device, C. F.	694,088	I
gricultural machinery, J. Clark	694,010 693,999	I
Grohmann gricultural machinery, J. Clark. Air brake, C. A. Seley. Air brake operating mechanism, compressed, J. Lipkowski Air compressing apparatus, Howe & Vau- clain	694,328]
J. Lipkowski	693,874	Ì
clain clain compressor and cooler, O. P. Ostergren. Air, generation of power from compressed, F. M. Leavitt Air, propulsion of torpedoes, etc., by compressed, F. M. Leavitt Alarm. See Thermo electric alarm. Aliarm. See Thermo electric alarm.	694,280 694,299	I
F. M. Leavitt	693,871	I
pressed, F. M. Leavitt	693,872	I
		H
Kressel Miloy, Wolfe & Englert Amalgamating machine, G. C. Scott, 694,112, 694,203, Amalgamator, J. R. Sawyer.	694,224	Ī
694,112, 694,203,	694,204 694,201	H
Amalgamator, J. R. Sawyer. Amalgamator, fine gold, M. Lasswell. Animal tie, J. T. Horris. Annealing furnace, E. Danner. Arc lighting system for alternating currents, L. & A. Privat. Arch construction, rib for concrete, K. S.	694,290 694,279	I
Annealing furnace, E. Danner	694,054	İ
rents, L. & A. Privat	694,190	Ì
Riser	6 94,193 6 93,924	I
Automobile controller mechanism, J. G. Mac- Pherson	694,065	Ē
Pherson Baling machine, O. S. Lee. Baling press, W. S. McLemore.	694,166 693,983	I
Ball shaped or spherical bodies, machine for forming, S. Smith.	694,330	I
Barrel machine, A. C. Luyckx	694,171 694,167 694,289	I
forming, S. Smith	693,911	I
regulator for storage, C. H. Holderrieth.	693,863 694 089	Į
Bearing, shaft, G. Wideman	694,043 694,028	1
Bed, W. D. OlneyBedstead, couch, D. C. Storr	694,183 693,923	H
Belt and pulley gearing, L. J. C. Souhami. Belt folding machine, B. O. Hale	6 94,211 6 94,099	ŀ
Belt gearing, W. Newman	6 94,175 6 93,9 6 9	Ì
regulator for storage, C. H. Holderrieth. Sattery zinc element, primary, H. J. Brewer Bearing, shaft, G. Wideman	694,214	I
Seton strengthened by metal, system of con- struction with, H. Henkel	693,966	0
Sit, R. A. Shafer	694,022 693,914 694,154	0
Boats, means for automatically ballasting	694,153	(
Book, manifold, A. Levison	694,103 694,144	0
30ttle capping machine, R. Flanigan 30ttle stopper, J. A. Hayes. 30ttle stopper, J. & J. A. Butkus 30ttle stopper, non-refillable, J. W. Calef 30ttle stoppering machine, J. & J. A. Butkus.	6 94,013 6 94,131	ì
Bottle stopper, non-refillable, J. W. Calef Bottle stopperlng machine, J. & J. A. But-	693,834	Ò
Box. See Mail box. match box.	4 34,102	(
Box stapling machine. J. Schmidt, Jr Brake mechanism, F. M. Smith	694,031 694,207	(
Brewer's vat, W. Griesser	693,900 694,267	(
Brick edger, W. Towers	693,826	(
Brick making press, J. E. Grinder	694,009 603,827	I
Buffing machine, J. M. Sellmayer	693,912 694,243	I
Sox stapling machine. J. Schmidt, Jr. Brake mechanism, F. M. Smith. Breech closure, H. J. Perry. Brewer's vat, W. Griesser. Brick edger, W. Towers. Brick for building arches, E. Bottger. Brick Making press, J. E. Grinder. Buckle, trace, S. Boyer. Buffing machine, J. M. Sellmayer. Buffing machine, J. M. Sellmayer. Buffing machine, J. M. Sellmayer. Buffing machine, J. T. Boxley & Holmes. Buildings having circular or regular shaped roofs converging in one point, construction for, M. H. Vail. Button or catch for coat collars, J. A. Linderman.		I
tion for, M. H. Vail	693,989	I
derman	694,104 694,237	Î
Calender roll cleanser, J. Frossard Camera, photographic, F. H. Sanderson	6 93,853 6 94,080	I
Camera, swing back photographic, V. Odquist	694,181	1
Can straightener, C. W. Nicklaus	693,921 694,177	1
Canopy, G. A. Babbitt.	694,093 694,232	I
Car coupling, P. Brown	693,998	I
Car door, hopper, R. V. Sage	693,910 693,858]
Car fender, street, A. Fischer	693,960 694,052]
Car haul, A. M. Acklin	694,047 693,935	İ
Carbureter, explosive engine, L. H. M. Sanson	694,110	l
utton for, M. H. Vall sutton or catch for coat collars, J. A. Linderman laddy, base delivery, G. Bernhard lalender roll cleanser, J. Frossard lamera, photographic, F. H. Sanderson lamera, swing back photographic, V. Odquist lan filling machine, H. R. Stickney lan straightener, C. W. Nicklaus landle making machine, W. H. Day lanopy, G. A. Babbitt lar brake stand, J. W. Puckett lar coupling, P. Brown lar door, popper, R. V. Sage lar, dumping, H. S. Hart lar fender, street, A. Fischer lar, freight, F. P. Butts lar haul, A. M. Acklin lar safety attachment, C. A. Willard larbureter, explosive engine, L. H. M. Sanson larriage clutch adjustment, motor, D. F. Graham larriage steering gear, motor, Fox & Gra-	693,963	I
	200 000	
nam Darrier See Music carrier. Darrier track, G. Wideman. Dartridge, H. Maxim. Dash register, C. C. Stearns. Dash register, N. Collins	693,934	Ī
Cash register, C. C. Stearns	694,035	
Naon LeBraceri et. Antithàssissississississis	004,404	•

n- m	Caster socket, W. Livingstone. Casting mold, J. J. Carroll. Ceilings and walls, construction of, A. Rinck-	693,875 694,315
1,6	Coment and making some adhesing D II	693,905
g	Willis Chaffer or sieve, adjustable, F. Hixson Charging buggy, O. Sundt Chimney cap, A. T. Cox Chopper. See Cotton chopper. Chuck operating device, Potter & Johnston. Churn, S. P. A. Andersson.	694,332 693,951
d- b-	Chuck operating device, Potter & Johnston. Churn, S. P. A. Andersson Cigar, J. D. Tynen Cigar lighter, electric, J. M. Althouse	694,189 694,126 694,217
o or	Churn, S. P. A Andersson. Cigar, J. D. Tynen. Cigar lighter, electric, J. M. Althouse. Cigar pressing apparatus, R. Woenner. Cigar wrapper cutter, C. & L. J. Du Brul. Cleaner. See Comb cleaner. Clock, geographical, C. E. Davis. Clock, geographical, A. J. Day. Cloth board, registering, J. W. Currier. Clutch, friction, F. G. Hampson. Clutch mechanism, C. M. Day. S33,954, Coffee roaster, E. Linaberry. Coli operated machine, C. L. Hurd. Collar blanks, etc., folding machine for, R. D. Viele et al. D. Viele et al.	694,082 694,259
'n	Clock, geographical, C. E. Davis	693,953 694,256 694,001
y	Clutch mechanism, C. M. Day693,954, Coffee roaster, E. Linaberry	693,955 693,873 694,282
g, rs	Collar blanks, etc., folding machine for, R. D. Viele et al	693,931 694,339
2	Collisions at sea, apparatus for preventing, N. Gherassimoff Comb cleaner. A. & C. Syverson.	6 94,198 6 93,855 6 94,040
g	Collar blanks, etc., folding machine for, R. D. Viele et al. Collar, pneumatic horse, C. S. Boehm. Collar studing, horse, B. H. Rueter Collisions at sea, apparatus for preventing, N. Gherassimoff Comb cleaner, A. & C. Syverson Concrete body molding machine, M. A. Winget Concrete preparing and laying machine, J. T. Dempsey	694,123
r. ic	T. Dempsey Conveyer bucket, L. A. Brigel, Jr. Conveyer system, E. W. McKenna. Cord, apparatus for separating silk from	694,245 694,067 693,887
g	Corn, apparatus for separating silk from green, E. Houston	694,017 694,161
er y.	Couch roll, H. Parker	693,894 694,057 694,060
3	Cycle stand, C. W. L. Schmidt. Dark room, portable, A. Werner. Dental device holder, J. A. Mead	6 94,030 6 94,221 6 94,021
	Corn, apparatus for separating silk from green, E. Houston. Corset, D. Kops. Cotton Chopper and cultivator, W. C. Elsey. Couch roll, H. Parker. Cut off, variable, A. D. & J. H. Gillett. Cutter head extension, C. E. Hawley. Cycle stand, C. W. L. Schmidt. Dark room, portable, A. Werner. Dental device holder, J. A. Mead. Derrick and holsting mechanism, hoisting, A. Zastrow Developing trays, device for supporting rolls in, E. P. Smith.	6 93,940 6 94.11 6
	Diamonds, cutting, J. H. G. Stuurman Display rack, W. A. H. Winter Door hanger, G. Wideman	694,215 694,124 694,044
	Developing trays, device for supporting rolls in, E. P. Smith Diamonds, cutting, J. H. G. Stuurman Display rack, W. A. H. Winter Door hanger, G. Wideman Door, warehouse, W. A. Cross Draft equalizer, J. J. Cox Draft equalizer, A. Cogswell Drain hopper, slop, H. H. Kendrick Drain repairing annaratus. G. Rose	693,952 693,840 694,000 693,972
3. s.	Drier. See Lead drier.	•01,13•
	Drinking cup and shaving mug, combined traveler's, F. Finley. Dump shovel, hand, J. Felton. Ear protector, E. E. Kistler. Electric current induction machine, alter-	6 93,959 6 94,2 6 3 6 94,159
8	nating, E. Danielson. Electric current induction motors, device for starting alternating, K. A. Lindstrom Electric machine or motor, dynamo, W. R. V. Marshall	6 94,092 6 94,105
88 10 19	V. Marshall Electric motor, Pocock & Kennedy. Electric switch, T. H. Brady Electric transformer current regulator, F. R.	694,293 694,075 693,995
28 14	Electric transformer current regulator, F. R. M. Cutcheon	693,841 693,916
30 99	Electrodeposition, forming bodies by, C. Steinweg Elevator hoisting motors, controlling mechanism for H. Rowntree	6 93,918 6 93,908
1	Elevator hoisting motors, controlling mechanism for H. Rowntree	693,907 693,936 694,158
24	Engines, electric igniter for gas, F. Burger.	694,250
)4)1	bustion, G. B. & E. W. Petter	694,240 694,244 694,016
00 '9 5 4	Fare register, J. F. Ohmer et al	694,322 693,865
90 93 24	Faucet or cock, A. Clarkson. Feed trough and rack, combined, A. B. Swope Fence, farm, B. F. Zent. Fence post, E. M. Bunce. Filaments for incandescent electric lamps,	6 93,839 6 93,925 6 94,084
5	Fence post, E. M. Bunce	693,947 694,220 694,235
3 30 1	former for, G. C. Webster	694,157 694,331 694,145
7 19 1	Fire escape, J. Frenzel. Fire escape tower, portable, P. Mackae. Fire kindler, C. Pollard. Fireplace heater, T. B. Jackson. Floor cloth, machinery for use in the manufacture of mosaic or inlaid, E. Batten. Floor treating machine, Raasch & Krueger. Fluid pressure brake, automatic. W. H.	694,027 694,155
39	rad probodic bidge, datomatic, vv. 11.	
28 33 33 1	Clarke Flying machine wing, W. J. Bell Folding case or crate, A. McDonald Folding chair, La Coursiere & Steffen	693,943 693,981
9 5 9	Furnace, S. T. Bleyer	693,838 694,241
4	Furnace fuel feeding mechanism, Burger & Williams Furnace grate, boiler, R. Mitchell. Fuse, blasting, Harris & Bray. Gage. See sliding gage. Gaiter, W. Lanz. Garment supporter, S. S. Conant. Gas burner, H. S. Campbell. Gas burner, P. Kries. Gas, gasolene, or inflammable vapor engine, A. W. Clayden. Gas generator, R. A. Kummer. Gases, anoparatus for saturating liquids with.	693,880 694,271
4	Garment supporter, S. S. Conant	694,164 694,253 693,836 694,287
3	Gas, gasolene, or inflammable vapor engine, A. W. Clayden	6 94,090 6 94,288
3 1 4	Weis & Anderson	
32 31	Gear, transforming, H. Rose. Gold bearing material, concentrator for, G. Sale Gold separator, A. L. Dana. Grain drill feed mechanism, F. J. Noechel.	
)7 0 7 0	Grate, F. Burger	694,069 693,828 694,096
6	Gun, air, W. R. Benjamin	693,823 693,965 693,939 694.070
7 2 3	Hammock spreader, I. E. Palmer	694,071 693,986 693,882
9	Harrow, C. S. Sharp	694,113 693,891 693,867 693,851
14 137 130 130	Harvesting onion sets, etc., machine for, J. W. Jefferson	694,284 694,168
31 21	Grade, F. Burger Grinding machine safety stop motion, M. P. Fillingham Gun, air, W. R. Benjamin. Gun, repeating, B. R. Harrington. Hammer, pneumatic, M. A. Yeakley. Hammock pillow attachment, I. E. Palmer. Hammock spreader, I. E. Palmer. Hanrow, J. B. Morrison. Harrow, J. B. Morrison. Harrow, J. B. Morrison. Harrow, disk, Packham & Oates. Harrow, disk, Packham & Oates. Harrow riding, J. Franceeur. Harrow, riding, J. Franceeur. J. W. Jefferson. J. W. Jefferson. Hat for firemen, etc., J. L. Maitland. Hay rake, horse, A. F. Brown. Heating and cooking shelf, portable, A. W. Newell Heating boller, steam or water, Kuen & Heating device, electric, E. Kastner. Heating material, H. Campbell.	694,174
7 93 92 91	Hodges Heating device, electric, E. Kastner. Heating material, H. Campbell. Heating system, but water, I. D. Smead	693,870 694,018 693,835 694,206
8 ¹	Heel breast concaving machine, J. G. Buzzell	693.833
8 10 12 17 15	Hinge, spring, A. S. Held	694,273 693,881 694,091 694,340
35 10	Horseshoe machine, O. W. Siebenhaar Horsehoe, soft tread, Alexander & White Hotel register, W. C. Loney	694,205 693,942 694,291
3 32	Hydrant, D. F. O'Brien	694,292 694,298 694,170 694,179
34 95 85		694,305
52	(Continued on page 177)	

(Continued on page 177)