RECENTLY PATENTED INVENTIONS. Agricultural Implements.

HAY AND STRAW STACKER.-ROBERT GRISWOLD, Carr, Col. Mr. Griswold has devised a portable machine for carrying and unloading loose hay and straw. In the construction of the machine a pivoted carrier is included. which operates back and forth upon a body section. This body section can be moved from place to place and held firmly in its adjusted position.

COMBINED RAKE AND STACKER.-ROBERT H. JAHNS, Miami, Tex. This invention provides a horse-rake for hay, which can adjacent cars. A controlling device for the be used for loading the hay on a wagon or plling it on a stack. The combined hay rake and stacker comprises a frame consisting of two parallel bars having a tongued and draft attachment at its front end and a frame at its rear end projecting at right angles. At the front and rear ends, supporting-wheels are mounted; and at the outer end of the rightangularly projecting frame a supporting and driving wheel is mounted. Over this wheel a single rotatable mast is erected, on which a rake is slidably supported and arranged to rotate therewith. A hoisting-rope, a windlass, and gears are provided, the gears being actuby the running-wheel under the mast, for the purpose of raising and lowering the

CHECK-ROW ATTACHMENT FOR CORN-PLANTERS .- ELVIS C. ROBERTS, Holdenville, Indian Territory. Combined with a main frame having rear supporting-wheels, furrow-openers, and vertical guides at the front, are marker-wheels and their axle, which axle is arranged to play vertically between the guides. On the axle a toothed wheel is fixed. An elongated lantern-wheel, pivoted at its lower end, has at its upper end a vertically-slotted guide which receives the axle and allows it to play vertically. The seed-dischargers are operated by means of a tappet-wheel fixed on the seed-discharger shaft, and a cam fixed on the lower portions of the lantern-wheel and arranged to engage the tappet.

STRAW-STACKER AND CHAFF-SEPA-RATOR.—James C. Carothers and Nathan E. MORRIS, Jr., Franklin, Tenn. The invention is a pneumatic attachment for a threshing-machine, and is arranged to separate chaff from the straw, and deposit them in separate stacks. The machine consists of a straw-drum to which a passage leads, and a chaff-drum to which a passage also leads. Fans are located in the drums; and independent straw and chaff chutes are connected with the respective drums, whereby straw and chaff are separated from each other within the threshing-machine, to be deposited in different piles.

Engineering Improvements.

TOOL.-WILLIAM NEWMAN, Alexandria, S. D. This tool, for removing flues from boilers, comprises a driving shoulder or ring, the diameter of which does not exceed the external diameter of the flue to be removed. A tapered guide extends beyond the shoulder to operate in the flue. In operation the driving-shoulder is fitted in place and the tapered guide sllpped up against the driving-shoulder and secured by a nut. The tapered guide serves to direct the shoulder or ring against the end of the flue, so that it can operate as a ram.

BEARING-ADJUSTER FOR CONNECTING-RODS.—CHARLES E. KESTER and CHARLES R. MOORE, Hillsboro, Ill. A glb and key are usually employed for tightening the strap holding the brasses which constitute the bearing of a connecting-rod on the wrist-pin of an engine-crank. To adjust such a bearing necessitates the stopping of the engine. The present invention permits this adjustment to be made without stopping the engine or reducing its load or speed. Two wedges are employed. which work in frictional contact with inclined surfaces on one of the halves of the bearing. conduits with the bodies of water. The conduits by adjusting these wedges toward or from a conduits with the bodies of water. The conduits bearing. each other, the bearing is tightened or loos-A screw-shaft and worm-gear serve to operate the wedges simultaneously.

Railway Contrivances.

ELECTRICAL SIGNALING DEVICE FOR RAILWAYS .- WILLIAM A. FARRELL, Wellsville, N. Y. Should a switch be open, the mechanarm in the locomotive and also in a station world appears, the globe being mounted on a or switch-tower. An attendant in a station can make tests for open switches and signal the engineer when approaching arriving at a point where the locomotivewhistle is to be sounded.

FISH-PLATE.—ALBERT M. WILSON, Cherokee, lowa. The object of this invention is to provide in conuection with a fish-plate a simple device operating to hold the plate firmly and permanently in place. The fish-plates are orced tightly against the rails by means of set-screws, and exert a considerable pressure upon the fastening or tie bolts. Thus the tie bolts are prevented from becoming loose, as often happens through the constant pounding

CAR-COUPLING .- MARK A. BROWN, Douglas, Ga. Mr. Brown has devised a construction by means of which the coupling-pin is read- an opposite-curved central dome and a curve ily locked in its engagement with the coupling and readly detached therefrom. The coupling device comprises a bearing provided with communicating slots, the walls of which form a pair of lugs located in a staggered relation.

and is provided with a radial arm extending through the slots and engaging the lugs, and with a handle for rocking the shaft and sllding it lengthwise to engage the lugs.

AUTOMATIC COUPLING .- Louis Boirault, Rue Chateaudun 51, Chartres (Eure-et-Loire), France. The draw-head is provided with two inversely-arranged bolts, which are joined by an adjusting balance-lever, so as to neutralize the disturbing effects of shocks. The drawhead is connected with the draft-bar by an extensible frame having a compensating bufferspring, which prevents any play between the several parts connecting the draft bars of two bolts permits not only the unlocking of a coupling, but also its being kept unlocked. The coupling can be adapted without any modifications to the railway-cars at present in use fitted with couplings having screw tension-

Miscellaneous Inventions.

BLOCK .- LAFAYETTE W. JOHNSON, Jerome, Ariz. Ty. The invention relates to a block of that class known as "snatch-blocks" in which parts of the framing or shell of the block are movable to permit a rope to be engaged with the sheave without necessitating the reeving of the rope through the block. To this end the invention comprises a block with a swivel-eye, serving not only to sustain the block, but also removably to engage the rigid portions of the block, so as to hold the rope properly in the sheaves.

MATCH-HOLDER.—ANTON T. ANDERSON AND CARL F. HJERPE, Jamestown, N. Y. This novel simple match-holder is adapted to hang upon an upright support and is capable of holding a considerable number of matches, which can be conveniently and safely removed from the holder at its lower end one at a time or in greater number if desired. Means are provided for scratching the match.

FISH-TRAP.-WILLIAM J. INMAN, Russellville, Ky. 'The trap is constructed of a flexible, transparent or semi-transparent substance. The best material adapted for this purpose is sheet celluloid. It is tough and not liable to breakage, and, being transparent, readily exposes the bait and is itself partly or wholly invisible, so that it does not frighten the fish as much as other material.

SWIMMING DEVICE .- BYRON J. HOOPER, Portland, Ore. The swimming device comprises a body to which two wings are hinged, llmited in their upward and downward movements. Such a device is arranged for attachment to each arm and extends from the elbow to the wrist. The device may also be attached to each leg, and extends from the knee to the ankle. The swimming devices permit the swimmer to make rapid progress through

HEAD-REST .- JOHN R. KIRK, East Las Vegas, New Mexico. The head rest is to be used in railway-cars. The rest consists of a base-piece securable upon a person's shoulder and a hollow longitudinally-slitted post erected upon the base-piece. A standard is slidable in the hollow post and is held at a desired point of adjustment by means of a clamp on top of the post. An offset projection is carried on the upper end of the standard. The offset end of the standard is secured upon the head-restblock detachably.

PLEASURE-CANAL.—GUSTAV E. Brooklyn, New York city. The invention relates to pleasure canals, and more particularly to means for removing boats from a low water level to a relatively higher water level and for maintaining different levels of water in the canal. The pleasure-canal consists of a water-way provided with a wheel for maintaining separate bodies of water at different levels. Adjacent to the wheel are locks connected by conduits with the bodies of water. The conduits may ride continuously, without vacating their seats at the terminals for another ride. The economy of power used is noteworthy.

Designs.

ORNAMENTAL STAND. — EDMUND SAETTELE, St. Louis, Mo. The leading feature consists of a globe on which the map of the base having a cylindrical bettom and two superposed tapering concaved portions. A sword and a pen project above the globe.

DRUGGIST'S LABEL-CASE. — ALEXANDER S. BAIRD, Manhattan, New York city. In order to prevent possible mistakes in the selection of labels, Mr. Baird has devised a box in which a continuous strip bearing the labels nasses before an opening so that it can be read before being torn off.

BAG FRAMES.—SIDNEY A. KELLER. Manhattan, New York city. The bag frame is etc. curved at the lower edge, and at the upper edge at the center. At each side of the central curve are two scallops. The space between the edges are embossed in relief. The other hag-frame has a three-scalloned lower edge. at each side of the central dome, each of which curves join the outer curve of the lower edge and of the ornamentation.

NOTE.-Copies of any of these patents will be furnished by Munn & Co. for ten cents each. A cylindrical shaft is journaled in the pearing Please state the name of the patentee, title of and is free to slide lengthwise and to rock, the invention, and date of this paper.

Business and Personal Wants. INDEX OF INVENTIONS

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Sawmi)l machinery and outfits manufactured by the Lane Mrg. Co.. Box 13, Montpelier, Vt.

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

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CANS.—¼ pint and ½ pint tin cans are manufactured by National Cement Co., Toledo, O. Write for prices.

Inquiry No. 1846.—For small acetylene gas gene rators for the use of street lamps. FOR SALE.—The patent right of a good-selling port able commode. Address Saunders Bros., Westerly, R. I.

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Inquiry No. 1848.—For manufacturers of engines of % to I horse power. For Machine Tools of every description and for Ex perimental Work call upon Garvin's, 149 Varick, cor.

Spring Streets, N. Y. Inquiry No. 1849.—For manufacturers of machines for making wrapped strings for pianos.

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

Inquiry No. 1850.—For manufacturers of electric railway construction material.

Designers and builders of automatic and special machines of all kinds. Inventions perfected. The W A. Wilson Machine Company, Rochester, N. Y.

Inquiry No. 1851.-For manufacturers of sodium. FOR SALE. - Handsome 24-passenger automobile coach; also 2-ton steam freightwagon. Both new. C. Francis Jenkins, 1103 H st. N.W., Washington, D. C.

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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. 1853.-For manufacturers of small malleable from castings.

Experienced draughtsman desires position. Gas engines preferred, technical education, good references.

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ney, Ohio. Inquiry No. 1855.—For manufacturers of ice

WANTED .- Experienced draughtsman on mill ma-

chinery and machine tools. Permanent employment assured to rapid and accurate draughtsman. Bethlehem Steel Company, South Bethlehem, Pa.

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EXPERIMENTAL MACHINE SHOP .- We are not using our shop at present. Well equipped with lathes, shaper. woodworking machinery, etc. Will rent use and power very low. Fine place for automobile work. Billings Clapp Co., Boston, Mass.

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Inquiry No. 1861.—For a machine to cut paper rolls for music passing over rolls. Also for hand punches suitable for such work.

Inquiry No. 1862.—For manufacturers of wooden cannons with spring attachment that could throw a rubber ball about 150 feet.

For which Letters Patent of the

United States were Issued for the Week Ending

December 31, 1901,

_	December 31, 1901,	
	AND EACH BEARING THAT D	ATE.
-	LSee note at end of list about copies of these p	atents.
٠.	Acid and making same, acid salt of phenyl- glycocol-ortho-carboxylic, P. Seidel Acid and making same, acylated indoxylic,	690,325
г	glycocol-ortho-carboxylic, P. Seidel Acid and making same, acylated indoxylic, Vorlander & Drescher Acid, making acetyl-phenyl-glycocol-ortho- carboxylic, F. Bender Advertising device, E. M. Bentley Advertising wheel, A. B. Chubbuck Air brake, compressed, J. Lipkowski Alarm device, W. H. Clark Alkali chlorids, apparatus for the continu- ous electrolysis of, W. Gintl Alkali chlorids, continuously electrolizing,	690,332 690,346 689,947
	Advertising wheel, A. B. Chubbuck	690,132 690,065 690,015
1	Alkali chlorids, apparatus for the continuous electrolysis of, W. Gintl	690,365
р	W. Gintl Alum, making, E. Everhart. Animal trap, E. Mills. Auger, hollow, A. A. Wood	690,141 690,257 690,171
ė		
3,	Automobile running gear, W. J. & G. Lane Axle and box, car, J. R. Fleming. Axle spindle protector, C. H. Smith. Axle, vehicle, H. S. Hemenway. Back pedaling brake and coaster, G. H. Hammond	689,890 690,158 689,867
e	Axle spindle protector, C. H. Smith Axle, vehicle, H. S. Hemenway Back pedaling brake and coaster, G. H.	690,039 690,147
3.	Bag machine, G. R. Ward689,998 Bale tying attachment for compressors, F.	689,876 689,999
۱-	Ball players, body protector for base, J.	690,037 690,140
е	Band brake, W. J. & G. Lane	690,370 689,992 689,964
n	Barber's chair, C. W. Hieber	689,863 690,322
,.	for controlling the connection of storage, N. H. Suren	689,930
-	device for connecting storage. N. H.	689,929
d	Suren Beating engine, A. W. Case. Bedsteads, folding metallic, G. A. Mellon. Bell, E. D. Rockwell. Belt cleaper H. S. Hov	690,097 690,168 690,034
)-	Beil, E. D. Rockwell. Belt cleaner, H. S. Hoy Bicycle, C. L. Horack Bicycle, F. H. Pierson. Bicycle canopy, J. Anderson. Bicycle canopy, J. Anderson. Bicycle caster and brake, G. H. Hammond Billiard cues, self-chalker for, J. Eskerson. Billiard table pocket, C. Fisher. Binder twine tension, F. D. Ring. Boat, W. B. Motheral. Boat or boat vehicle, recreation submarine, J. Wilson Book displayer, E. G. Nicewaper	689,967 690,180
•	Bicycle coaster and brake, G. H. Hammond Billiard cues, self-chalker for, J. Eskerson Billiard table pocket C. Fisher	689,962 690,022
d	Binder twine tension, F. D. Ring Boat, W. B. Motheral	690,032 690,029
	J. Wilson Book displayer, E. G. Nicewaner Book for the game of golf, score, C. Sparks Bookbinding sheet, F. Hager Boot or shoe finishing machine, W. Gordon. Bottle cooler, A. W. Puffer Bottle, non-reusable, Rodenberg & Rendell. Bottle stopper, J. S. Alston. Bottles, jars, etc., manufacturing, C. Chris-	690,215 690,373
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Caisson for repairing vessels and submerged Bucket, dumping, E. E. Slick. 690,086
Bung, expansible, G. W. Bernauer 689,948
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Case. See Lamp or bulb case.
Case. See Lamp or bulb case.
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Clutch, reversible

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Collar, shirt, Mapes & Minor. | 690,307 |
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Cutter head, A. B. Landis. | 690,236 |
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