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 inventhon provides a horse-rake for hay, which can 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 right-
angularly projecting frame a supporting and driving wheel is mounted. Over this wheel a single rotatable mast is erected, on which a
rake is slldably supported and arranged to rake is slldably supported and arranged to and gears are provided, the gears being actuated by the running-wheel under the mast, for the purpose of raising and lowering the rake.
CHECK-ROW ATTACHMENT FOR CORN-planters.-Elvis C. Roberts, Hoidenville, Indian Territory. Combined with a main frame having rear supporting-wheels, furrow-
openers, and vertical guides at the front, are openers, and vertical guides at the front, are
marker-wheels and their axle, which axle is marker-wheels and their axle, which axle is arranged to play vertically between the guides. On the axle a toothed wheel is fixed. An 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 thresh-ing-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.

## Engincering Improvements.

TOOL-Wllliam Newman, Alexandria, S. D. This tool, for removing flues from boilers, comprises a driving shoulder or ring, the di-
ameter of which does not exceed the external ameter 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 neces-engine-crank. To adjust such a bearing neces-
sitates the stopping of the engine. The pres sitates the stopping of this permits adjustment to be made without stopping the engine or reducing its load or speed. Two wedges are employed,
which work in frictional contact with incllned which work in frictional contact with inclined surfaces on one of the halves of the bearing. By adjusting these wedges toward or from each other, the bearing is tightened or loosened. A screw-shaft and worm-ge
operate the wedges simultaneously.

## Railuay Contrivances.

ELECTRICAL SIGNALING DEVICE FOR railways.-William a. Farrell, Wellsville, N. Y. Should a switch be open, the mechanism provided by Mr. Farrell will sound an alarm in the locomotive and also in a station or switch-tower. An attendant in a station can make tests for open switches and signal
the engineer when approaching a crossing or the engineer when at where the locomotivewhistle is to be sounded.
fisil-Plate.-Albert m. Wilson, Cherokee, Iowa. The object of this invention is to device operating to hold the plate firmly and nermanently 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 upon the fastening or tie bolts. Thus the tie bolts are prevented from becoming loose, as ften happens through the constant pounding $f$ trains.
CAR-COUPLING.-Mark A. Brown, Doug las, Ga. Mr. Brown has devise a
tion by means of which the couplling-pin is read ily locked in its engagement with the coupling and readlly detached therefrom. The coupling device comprises a bearing provided with communicating slots, the walls of which form a palr of lugs located in a staggered relation. and is free to slide lengthwise and to rock,
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.
a tomatic 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 the disturbing alance-lever, so as to neutrallz head is connected with the draft-bar by an extensible frame having a compensating bufferspring, which prevents any play between the adjacent cars. A controlling device for the bolts permits not only the unlocking of coupling, but also its being kept unlocked The coupling can be adapted without any
modifications to the railway-cars at modifications to the rallway-cars at present in use fit
rods.

## 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 this end the rope through the block. To 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 are provided for scratching the match.
FISH-TRAP.- William J. Inman, Russelltransparent 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, readlly ex
poses the bait and is itself partly or wholly invisible, so that it does not frighten the fish much as other material.
SWimming Device.-Byron J. Hooper Portland, Ore. The swimming device comprises a body to which two wings are hinged, lmited in their upward and downward move ment to each arm and extends from the elbow to the wrist. The device may also be at tached 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 La 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 base-piece securable upon a person's shoulder and a hollow longltudinally-slitted post erected upon the base-piece. A standard is slidable in 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-rest block detachably.
PLEASURE-CANAL-GUSTAV E. PAPE, lates to pleasure canals, and more particular iy to means for removing boats from a low water level to a relatively higher water leve and for maintaining different levels of wate in the canal. The pleasure-canal consists of ing separate bodies of water at different levels. Adjacent to the wheel are locks connected by conduits with the bodies of water. The conduits can be opened and closed at wlll. Passenger may ride continuously, without vacating their seats at the terminals for another ride
economy of power used is noteworthy.

## Designs.

ORNAMENTAL STAND: - EdmUND M. Saetitele, St. Louis, Mo. The leading feature world appears, the globe being mounted on a base having a cylindricar 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 or-
der to prevent possible mistakes in the selection of labels, Mr. Baird has devised a box in which a continuous strip bearing the labels is to be mounted on a roll. The label strip passes before an opening
read before being torn off.
bag frames.-Sidney a. Keller, Manhattan, New York city. The bag frame is 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
bag-frame has a three-scalloped lower edge, an opposite-curved central dome and a curve 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 Prease state the name of the patenten, title of the invention, and date of this Daper.

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chines for making wrapped strings for pianos.
Manufacturers of patent articles, dies. stamping tools, light machinery. Quadriga Ma
pany, 18 South Canal Street, Chicago.
Inquiry No. 1850.-For mat
Designers and builders of automatic and specia
machines of all kinds. Inventions perfected. The $\mathbf{W}$.
A. Wilson Machine Company, Rochester, N. Inquiry No. 1851 . - For manufacturers of sodium. FOR SALE. - Handsome 24-passenger automobile
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rolls for masic passing over rolls. Also for hand
punches suitable for such work. Inquiry No. 1862 .-For manufacturers of mooden
cannoms with spring attachment that could throw a
rabber ball about 150 feet.

INDEX OF INVENTIONS

## For which Letters Patent of the

 United States were Issued for the Week Ending December 31, 1901, and eachbearing that date.|  |
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