RECENTLY PATENTED INVENTIONS. Agricultural Improvements.

COMBINED RAKE AND STACKER.-J. H. KINDSVATER, Russell, Kan. This rake and stacker, which is provided for use in connec tion with all kinds of grain and feed, can be operated by one man and either one or two teams according to the size of the machine used. The construction of the machine is such that the rake may be carried to a gathering, carrying and dumping position, the latter being automatically accomplished when a proper point is reached relative to the stack and while the machine is in motion.

Hardware and Plumbing.

LOCK .- J. L. COULTER, Bovina Center, N Y. This invention provides a lock attachment for the usual cottage-latch so that the latch cannot be opened without the application of a kev. The latch is formed near its pivoted end with two recesses in which the finger of a tumbler is engaged. The tumbler is provided with a forward extension which is adapted to be wedged between the latch and a stop in the casing. The tumbler can be moved out of locking position only by the operation of a key.

FIXTURES FOR WASHSTANDS, BATH-TUBS. OR THE LIKE .- A. P. WINDOLPH, New York, N. Y. This fixture, which is adapted for use on washstands, bathtubs or the like, is designed for controlling the flow of cold or hot water, or a graduated mixture of the same, and also for controlling the waste and overflow. 'The ordinary overflow openings in the bowl are completely dispensed with, and use is made of a branched waste pipe to dispose of any overflow to prevent flooding of

Engineering Improvements.

IGNITER.—C. A. WILKINSON, Worcester. Mass. This invention relates to an electric spark igniter for internal combustion engines, and it comprises certain novel features of construction, particularly adapted for this office. The igniter operates without the action of any external operating mechanism, and since the contacting parts are normally in contact with of the seat, thus preventing passengers from each other there is no liability of their be- getting on or off on that side of the car, and coming clogged or fouled so as to destroy ef-

WATER-WHEEL .- S. M. THURMAN, Yuma, Arizona Ter. This water-wheel belongs to that type in which the water flows against and underneath the same, and the power of the wheel in rotating is carried by suitable mechanism to any desired point of utilization. The waterwheel is of relatively small diameter, which may be either partly or wholly submerged, and which when located in running water containing drift wood will readily ride over the same without being damaged thereby or stopping its action.

Machines and Mechanical Devices.

ROAD-OILING MACHINE.—T. F. WHITE, signed to distribute petroleum over the whole, art to which it relates. surface to be oiled, to gage the amount distributed, and to allow of discharging different quantities of petroleum on different portions of the width of the road according to the requirements.

PUNCHING-MACHINE.—J. HEISSENBERG-ER, New York, N. Y. This coin-controlled punching-machine is designed to accurately indicate in pounds upon a dial the force of a blow struck. The construction is such that after the blow is delivered the pointer on the dial will remain in position to indicate the record made until it be purposely released.

LATHE FOR TURNING IRREGULAR FORMS.—F. J. LELAND, Knoxville, Tenn.
This machine is adapted particularly for fitting tool handles to the tool eyes. The handles must be made at the eve end to certain sizes or gages corresponding to the gage of the openings in the tools. This invention provides an easy mechanical method of accomplishing this result accurately.

MEANS FOR STOPPING LOOMS AT IN-TERVALS.—G. A. Cluff, Paterson, N. J. In the shaft of a hat-pin. manufacture of ribbons it is the cus to weave the ribbon in lengths of ten yards; N. Y. This device is employed in moistening the ribbon loom accurately at every ten yards the adhesive on envelope-flaps and the like. along the length of the ribbon, after which the ribbon may be moved slightly with the warp threads and the weaving then resumed. The result of this operation is that the ribbon will have a small section at each ten yards in which there is no filling, this part serving as a mark for subsequently cutting the ribbon.

Moscow, Idaho. Mr. Rawson has provided an improved fluting machine, more especially designed for quickly and accurately forming longitudinal flutes on columns, table legs and similar articles. The machine can be readily adapted driven by the water as it falls into the flush for other work,-that is a circular saw may be used for cutting wood, and a cutter head may be used for grooving undulating articles, a gage shoe traveling on the surface of the art'ale to insure uniformity in the depth of the

which is used for measuring or weighing grain or other substances, is arranged to permit of minute adjustment of the parts to insure accurate weighing, either for weighing the material successively in equal quantities or in unequal quantities, and for delivering the measured quantities to separate receptacles.

Railway Improvements.

AIR-BRAKE ATTACHMENT.-T. C. MAN son, Lake Charles, La. Mr. Manson has invented an air-brake attachment which acts to cause instant application of the brakes upon the derailment or other disarrangement of the car-trucks. This end is attained by placing a cock in the train air-pipe or in some other analogous part of the brake system containing the air pressure and connecting this cock with the truck. The parts are so adjusted that should the truck become disarranged and thereby endanger the safety of the train the cock will be opened to exhaust the train pipe and the brakes will be applied.

RAIL JOINT .- S. M. WIXCEL, Marcus, Iowa. The invention comprises two peculiarly-shaped clamping sections adapted to be weedged together with the rail section be-tween them and having angle bars bearing under the ball of the rail not only to hold the sections of rail in proper position, but also to securely brace the various parts.

SWITCH-STAND ATTACHMENT.—H. Ong, Wendling, Oregon. Mr. Ong has invented a means whereby warning may be instantly given when the hand lever of a switch-stand is unlocked, thus informing track-men and trainmen that the switch is, if not open, in a dan-gerous position. This end is attained by pro-viding a "target" or signal and connecting this with the hand lever of a switch stand in such a way that the instant the hand lever is released from its socket the target will be thrown to an extent sufficient to give the warning.

GUARD-RAIL FOR STREET-CARS.-W. S. BRADLEY, Willow Grove, Pa. This invention provides a guard for the sides of such convevances as open trolley cars. The guard may be adjusted, when not in use, beneath the body of the car, or when desired may be turned out wardly and raised to a position above the level thereby securing safety to the passengers from cars passing in the opposite direction.

Vehicles and Their Accessories.

HARNESS .- A. L. HAWKINS, Georgetown, Tex. This harness is constructed of few pieces so disposed that the traces will extend from the front singletree to a point near the saddle or belly-band, the collar of the harness being dispensed with and a shoulderstrap being employed instead, which serves as a support for the forward singletree.

VEHICLE-FASTENING FOR HARNESS. M. McNally, St. Louis, Mo. This device may be used for holding traces upon singletrees and for holding straps of any kind upon neck-yokes and shafts. The utility of the de-Chino, Cal. This machine is used in making vice, owing to its novel construction, will and preserving roads, paths, etc., and is de-readily suggest itself to persons skilled in the

Miscellaneous Inventions.

NON-REFILLABLE BOTTLE.—C. F. MIT CHELL, Baltimore, Md. The object of this invention is to provide an improved construction of non-refillable bottle, in the use of which it will be necessary to break off the end of the neck of the bottle before the con tents can be poured off.

KINDERGARTEN LOOM.—BEATRICE LINDBERG, Faribault, Minn. This invention relates to an educational appliance and provides a hand school-loom for use by school children in industrial work. The loom is arranged to hold the warp properly stretched and spaced apart and permits of conveniently beating in the weft to insure perfect work.

HAT-PIN RETAINER. - E. KRANCHER, Brooklyn, N. Y. This retainer provides means for protecting ladies' hats and auxiliary parts, such as ribbons and ornaments, from the effects of mutilations caused by the use of hatresilient filling for the purpose of receiving a a room by the current of wind which the fan

MOISTENER .- L. S. DUNCAN, New York, the envelopes may be rapidly moistened and the moisture spread evenly and thinly, thus preventing the forcing out of water and gum onto the envelope body when the flap is pressed down.

VENTILATOR .- T. M. CARPENTER and F. mark for subsequently cutting the ribbon.

L. Baker, Los Angeles, Cal. The invention WOOD-FLUTING MACHINE.—E. RAWSON, relates to ventilators for carrying off the impure gases from water-closets and various devices in sanitary plumbing. It is particularly adapted for use in connection with a flushing apparatus, and comprises a motor tank, such motor operating an exhaust fan for carrying off the gases from the vicinity.

CROSSING-GATE .- M. C. BARRY, Atlanta. Ga. This gate which is employed for railway crossings is provided with novel and simple releasing and resetting devices arranged along vented an article of furniture which may be China. Mr. Sandstedt has invented an im-AUTOMATIC WEIGHING-MACHINE. - F. the track and adapted to be operated by a BARTO, Islip, N. Y. This weighing machine, locomotive passing along the track. Should a changed from one to the other. The construc- The device, which is light, yet strong, is so

and the track when the gate is closed, it locked automatically when brought into posimay be swung open laterally to permit that tion to be used as a table, and the mattress person's escape.

ATTACHMENT FOR MOUTH-HARMON-ICAS .- A. S. ALEXANDER and A. VISCHER, New York, N. Y. The attachment consists of a bell or horn closed at one end, and having in its side an elongated opening for receiving the mouth-harmonica. The harmonica can be readily detached from the bell whenever desired, and when used with the bell the sounds which emanate from the horn are greatly reinforced and correspond in quality to that of a brass instrument.

MERRY-GO-ROUND .- C. LOOFF, JR., Brooklyn, N. Y. The object of the invention is to provide an improved merry-go-round arranged to give the seats a uniform up-and-down motion without requiring much driving power. This result is obtained by employing friction rollers which travel freely in cam grooves and consequently impart an easy rocking motion to the shafts from which the seats are hung.

WINDOW SHADE AND FIXTURE.—J ECKERT, New York, N. Y. The window shade is made up of a series of strips so hung that each will be provided with a spring-controlled roller and pivotal supports for the hangers of the rollers. The sections may be made to overlap and substantially close the space within the window frame, or they may be so turned as to regulate the amount of light to be admitted into the room.

BOTTLE-HOLDER.—E. C. LUDIN, New York, N. Y. Mr. Ludin has provided a simple device comprising a base and a series of U-shaped arms between which a bottle may be securely supported in an upright position. A novel method has been employed for securing these arms to the standard.

CHATELAINE-HOOK. — L. B. PRAHAR, Brooklyn, N. Y. Three patents have been granted to Mr. Prahar for improvements in chatelaine-hooks. The chatelaine-hooks are provided with a locking tongue which will automatically adjust and lock itself to the support on which it is placed. Simple and effective means are employed for releasing the tongue from the support whenever desired. The parts are so constructed that they are liable to be disarranged and may not quickly be brought into locking engagement, remaining in such engagement until the releasing means is purposedly manipulated.

spring-controlled tongue for holding the hooks of liquid has been attained. safely upon a belt or band, which tongue is operated at the front portion of the hook through the medium of an upwardly-extending lever handle.

In the third invention Mr. Prahar has provided a chatelaine-hook constructed of three pieces, and without springs, which is positive in its locking and unlocking action.

SASH-HOLDER .- W. M. REELY, Spokane, Wash. The invention belongs to that class of sash-holders in which a shoe is pressed by a spring against the sash or window jamb, to hold the sash at any desired point. This improved sash-holder may be readily applied and repaired, and removed when necessary. The tension of the spring may also be regulated to compensate for wear

ANKLE-SUPPORT-F. H. READ, Providence, R. I. This ankle-support is more especially designed for the use of skaters and other persons to sustain weak ankles. The support comprises an instep strap and an ankle strap fixed at right angles thereto,

HEARSE.-D. JOHNSTON, Watseka, Ill. This invention relates particularly to improvements arm in the usual manner, and then flexible in devices for clamping a casket in a hearse. The object is to provide clamping devices with means whereby they may be quickly and simultaneously adjusted to different sizes of caskets, and when adjusted will prevent movement of the casket on the floor of the hearse.

VENTILATOR AND MIRROR-PROTECTOR. -W. C. McBride, Hillsboro, Texas. The object of this invention is to so arrange pendant streamers and a rotatable fan near a mirror that the means for actuating the fan will serve that the means for accurating the chasing of flies to agitate the streamers for the chasing of flies sliding adjustment. The construction is simfrom the mirror, and also ventilate and cool ple, substantial and inexpensive. produces.

STRING-H ERS, Harrisburg, Pa. This device is employed for facilating the fastening of strings around packages. It comprises a clasp of peculiar form, which is adapted to be attached to one end of a length of cord, so that the cord may be passed around various sides of a pack- of oak, and an intermediate layer of felt. The age of any sort and engage with the clasp at one or more points in order to hold the cord securely without necessitating knotting it.

ORE-TESTING TABLET.-H. E. WAY, Custer, S. D. This invention provides a means by which miners may determine without special knowledge or skill and without the aid of delicate and expensive apparatus the presence in ores of metals having commercial value The tablet comprises a fuel and a decomposible fuel, whereby a reducing heat is obtained and nascent reducing agents are furnished.

COMBINED CRIB AND TABLE.—H. G. DORAN, Brooklyn, N. Y. Mr. Doran has in-

person be driving a team between the gate tion is such that the body section may be may be locked in position in the body, the surface of the body presented as a table being unbroken from end to end.

> ANTIRATTLER FOR AWNING-FIXTURES. J. SULLIVAN, New York, N. Y. By using Mr. Sullivan's device, no matter how violently the awning frame may be raised and lowered, there will be no rattling, as each engaging point is protected by a pliable washer, causing the movement of the awning frame to be perfectly noiseless. The device is not only simple and economic, but it may be easily applied and when damaged or worn may be conveniently replaced by a fresh one.

> AUTOMATIC THRESHOLD,-C. R. Sow-DEN, Basin, Montana. In this invention Mr. Sowden provides a weather-strip so constructed that when the door is closed the weather-strip will be automatically carried upward into engagement with the bottom face of the door, thus excluding the weather, dust, etc., from the room. When the door is open, the weather-strip will be about flush with the threshold strip or at a point below its upper face.

> LACING DEVICE .- EMILE SAVOYE, 35 Rue du Caire, Paris, France. The purpose of this invention is to overcome abrasion of the lacing cord used in connection with lacing eyelets or analogous devices by manufacturing eyelets of rounded wire, the same being so bent as to form a series of coils. Each eyelet thus presents rounded edges and guiding surfaces of suitable length, so that it does not chafe and wear out the lacing cord, but permits it to slide easily and freely through the opening.

> CURTAIN-POLE AND SHADE-ROLLER BRACKET.-G. L. LYONS, Bradford, Pa. This device, which is in the form of a double bracket, is adapted to support a shade-roller and also to support a curtain-pole above the shade-roller. The bearings of the curtain-pole being horizontally adjustable to or from the frame to which the device is applied. The adjustable bearings are so constructed that set screws or other forms of fastening devices are entirely dispensed with.

FILLING-INDICATOR.—L. F. DOELLINGER, Davenport, Ia. This indicator is adapted for use on lamps or other non-transparent receptacles to indicate when the body has been filled to proper height with the liquid. The indicator is operated by a float to close an open-The second invention provides, further, a ing in the indicator-cap when a proper level

> ICE-RUNWAY.-F. H. and C. H. EICH-HORN and F. P. DERNELL, Athens, N. Y. The invention relates to improvements in runways or chutes for transferring cakes of ice from an elevator or the like to an ice-house or to a vessel. The construction is such that the ice cakes may be directed at will to different compartments of an ice-house or different parts of a transporting barge or the like.

> COLLAPSIBLE CARTON .- C. H. RUSSELL, Manistee. Mich. The carton consists of two blanks suitably scored, one of which forms the top, bottom and rear walls thereof, the other blank forming the front and end walls and laps thereto, and means are provided for securing the laps to the rear walls. The invention affords an efficient article to receive fillers and cell cases such as are usually used for carrying eggs or other articles. When desired the carton may be collapsed or folded for return shipment.

GLOVE.-MINNIE E. ROLLASON, Brooklyn, whereby the ankle may be properly supported. N. Y. The invention relates more particularly to means for securing long gloves upon the arm. The glove is placed upon the hand and members are spirally wound around the arm in opposite directions and threaded through apertures therein so as to cross each other at a number of points. The loose ends are then tied together in any desired manner.

IRONING-BOARD.—G. KAHLER, Wymore, Neb. This ironing-board is provided with novel details of construction which render it foldable in parts and afford a supporting leg held in open adjustment by spring pressure and the coaction of a keeper block adapted for

MOISTURE-PROOF CIGAR-BOX.-A. MOR-TEN, New York, N. Y. The invention relates to boxes for cigars, the object being to preserve the same so that they will always be fresh and retain their flavor, together with the proper amount of moisture. Mr. Morten has found that the best results are attained with an inner lining of cedar wood, an outer lining bottom of the box should be provided with perforations, the idea being not to make the box air-tight nor to allow too free ingress and egress of the air, but to admit only a certain amount and to exclude all moisture except that already in the cigars.

WINDOW-SCREEN.-C. B. WARNER, Avon. Ill. The invention provides novel details of construction for window screens having the sheet metal frames, which adapt the screen compound containing oxygen for burning said frame for adjustment to fit it for use in windows of different widths. The screen is further provided with a hand hole opening and a closure therefor of novel construction.

PAPER-FILE. -E. W. SANDSTEDT, Hankow, used as a crib or as a table, and be quickly proved device for holding files of newspapers. arranged as to have no projecting parts to INDEX OF INVENTIONS damage the papers, scratch articles of furniture, or catch in the clothing to the inconvenience of the reader. The paper file is adapted to be locked and opened with a key.

ANIMAL-POKE.—8. A. RITCHIE, North Middletown, Ky. Mr. Ritchie has invented a simple poke for animals, particularly horses. The device is fastened to the animal by yoke members around the animal's neck, the lock of this yoke being so arranged that it cannot be accidentally released by the animal rubbing it against a fence or tree. The yoke may be readily unlocked whenever it is desired to remove the device.

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.

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land, Ohio.

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

Inquiry No. 2946.—For modern machinery required for a bric a-brac and cabinet-making plant.

IDEAS DEVELOPED .- Designing, draughting machine work for inventors and others. Charles E. Hadley, 584 Hudson Street, New York.

Inquiry No. 2947.—For a compressed-sir whistle for a fire engine house.

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

Inquiry No. 2948.—For an attachment for a stationary boiler to use crude or other oils as fuel instead of coal. Clippings of everything printed on any subject in the American and foreign press. United States Press Clip-

ping Bureau, 153 Lasalle Street, Chicago, Ill. Inquiry No. 2949.—For an oil burner for cooking and heating purposes.

Patents developed and manufactured, dies, special

tools, metal stamping and screw machine work. Metal Novelty Works Co., 43-47 S. Canal St., Chicago. Inquiry No. 2950,-For small, hollow rubber balls of the best rubber.

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. 2951.—For small motor power to run with weights or spring to be used for small machinery of one or two h. p.

The best book for electricians and beginners in elecricity is "Experimental Science," by Geo. M. Hopkins By mail, \$4. Munn & Co., publishers, 361 Broadway, N. V. Inquiry No. 2952.—For manufacturers of alkaline products, such as soda ash, etc.

ROCKING CHAIR ATTACHMENT-Hatrack and wall nacket. Three household articles all combined in one. atents for sale or will put on royalty to manufacture. Write for circulars. J. B. McGurk, Belt, Montana.

Inquiry No. 2953.—For makers of hardware suitable for the manufacture of screen doors and win lows. A GREAT INVESTMENT FOR CAPITAL - A POINTY track. The motorman has full control of the sweeper. will make contract to have the sweeper manufactured and marketed on a royalty or sell the entire United States patent. Address F. D. Branch, patentee, Deca-

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

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AND EACH BEARING THAT DATE. lSee note at end of list about copies of these patents

Electrical panel board attachment, E. W. Muller (1965, 1975,

705,499 705,489 markatus of the like, system of and apparatus for transmitting, W. A. Thiermann 765,482

Multipress, double, H. A. W. Wood (relissue) 12,016

Music sheet turner, C. E. Bertegliatti. 705,023

Musical instrument strings, tension apparatus for stringed, P. Pechenart 705,285

Nall machine, E. Schwarz 705,450

Necktie fastener, J. A. Clinton 705,382

Necktie fastener, J. Well. 705,561

Nut lock, J. McVey 705,120

Nut lock, Minges & Elwell, Jr. 705,420

Oil burner, J. W. Lewellen 705,413

Oil can, J. A. Baeuerle. 705,013

Oils, purifying hydrocarbon, J. W. Warren 705,163

Orenance, breech loading, J. W. Stockett 705,167

Overseaming machine, blind stitch, B. W. Tucker 705,486

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