

RECENTLY PATENTED INVENTIONS.

Electrical Devices.

ULTRA-VIOLET-RAY ELECTRODE.—C. F. W. HORN, New York, N. Y. In this patent the invention relates to electrodes for the production of ultra-violet rays; and the principal object of the improvement is the provision of an electrode by means of which these rays may be produced in large quantities and which may be conveniently employed in the application of the rays to the cure of disease.

Of Interest to Farmers.

STOCK-WATERER.—F. S. SEYMOUR, Manchester, Iowa. The present invention relates to certain improvements in apparatus for containing an automatically-regulated supply of drinking water for live stock, particularly on farms, but also in towns, villages, and in such other places as it may be desirable to care for the stock. The water is kept clean and free from the effects of temperature, thus keeping the liquid cool in summer and preventing winter freezing.

CULTIVATOR.—M. JENNINGS and J. H. JENNINGS, Elizabeth City, N. C. This apparatus is especially an improvement in straddle-row cultivators, and one object of the invention, among others, is to provide a construction of beam and of devices for supporting the same so the different sections of the beams can be readily adjusted in order to set the plows in any desired relation.

AUTOMATIC COUPLING.—T. W. LUKENS and B. HUGHES, Hoopston, Ill. An object of the invention is to provide an automatic coupler adapted for use under conditions which will hold with absolute security, preventing accidental uncoupling of the engine from its load when on the road, and which may be quickly and easily uncoupled, the uncoupling of the coupler being effective to set it in position for automatic action when the coupling-bar is introduced therein.

MOTOR-DRIVEN CULTIVATOR.—E. IMPERIALE, Naples, Italy. In this patent the invention relates to an apparatus for cultivating land, said apparatus comprising a cultivating tool or tools mounted on a wheeled frame and a motor connected by suitable gearing with the tool or tools and with the traction-wheels, so that the tools may be operated and the vehicle propelled over the ground to follow the operation of the tools.

THRESHING-MACHINE.—M. DAVIS and W. A. LEHENDAUER, Ames, Oklahoma Ter. A purpose of this invention is to provide a box or casing in which is located a hollow shaft carrying knives tapering in direction of the casing exit, which knives have their cutting edges bent over in direction of the motion of the shaft, and, further, to provide a drive-shaft which passes loosely through the tubular shaft, being turned thereon in an opposite direction, and to provide a governing comb opposite the delivery ends of the knives to prevent a too rapid feed of the cut material to the fans and off-take mechanism. It is an improvement on a former patent allowed to these inventors.

VINE-CUTTER.—S. V. JEFFORDS, Waycross, Ga. Mr. Jefford's invention relates to that type or class of cutters employing suitably-spaced runners adapted to be drawn along by horse or manual power and having blades whereby the vine is cut at opposite sides of the row, the runners being provided with handles adapting them to be guided as they are drawn along.

Of General Interest.

STAGE-FLOODING SYSTEM.—G. J. GIBNEY, Mobile, Ala. This invention is an improvement in fire-extinguishers, having for an object to provide a novel construction of stage-flooding mechanism, so that in case a fire breaks out a valve or valves under the control of persons from the stage can be opened and the entire stage quickly flooded with water.

FOUNTAIN ATTACHMENT FOR PENS.—J. W. LANGDON, Walla Walla, Wash. One object among others in this case, is to provide a novel construction which can be fitted and held on the pen and which can be filled and emptied through its front end and which at its said front end will be free from contact with the pen-point so that the flexibility of the latter will in no wise be impaired.

METHOD OF PRODUCING ARTIFICIAL FUEL.—G. K. HOLLISTER, JR., New York, N. Y. The object of this invention is to provide a method of producing artificial fuel, the fuel having a high rate of heat units and being in solid or briquet form, practically smokeless and odorless before and while burning, and intended for use in household-furnaces, kitchen and other stoves, boiler furnaces, and the like, and capable of producing a high heat.

TRAP-DOOR OPENER.—C. H. MOOS, Stillwater, Minn. The object in this instance is to provide features of construction that are simple, practical, and inexpensive, take up little room, do not obstruct the door-opening, afford means for counterbalancing doors of different weight provided with the improvement, and also permit graduation of the lifting power, so that the door will remain closed until started to open by slight manual effort.

FORMALDEHYDE APPARATUS.—S. RAUSCHENBERG, Mount Vernon, N. Y. Broadly stated, the process employed in this case consists in boiling liquid formaldehyde, whereby

it is converted into its polymers, which are volatilized along with the steam, which still holds formaldehyde absorbed in it. This is passed through a superheater. The high temperature entirely liberates formaldehyde from the steam, converts polymers into active formaldehyde, and discharges it with the steam in superheated state through the door into the chamber to be fumigated.

FOLDING BOX.—A. L. REYNOLDS, Madison, N. J. Mr. Reynolds' object is to provide a box arranged to permit packing and shipping it flat or collapsed, to allow quick and convenient setting up of the box for immediate use, and to securely lock the parts in position and prevent accidental unlocking, and at the same time presenting unobstructed inner faces of the top, bottom, sides, and ends of the box.

ERASER.—H. B. TOOKER, New York, N. Y. This mechanical eraser is more especially designed for use on type-writing machines and arranged to enable the operator to quickly and accurately erase either a single letter, sign, or the like or a word or an entire line without danger of marring the remaining writing or injuring the paper, and to readily brush the paper clean of abrading matter to allow of striking another letter on the erased part without blurring.

ART OF PURIFYING NITROCELLULOSE.—P. I. DU PONT, Wilmington, Del. Mr. Du Pont's invention refers to improvements in the art of purifying nitrocellulose and analogous substances, his more particular object being to dislodge impurities which affect the stability of nitrocellulose and also to remove any gaseous impurities which may be occluded within the material owing to its organic structure.

HOMOLOGUES OF ISOLIONONE AND PROCESS OF MAKING SAME.—RICHARD SCHMIDT, Holzminden, Germany. The present invention relates to the manufacture of homologues of alpha and beta ionone illustrated by the following example: Fifty parts of crude or pure cyclo-citral are mixed with one hundred of methyl-ethyl-ketone, and to this mixture five parts of sodium dissolved in alcohol are added. This is left at ordinary temperature an hour or two or more, if necessary, until the odor of cyclo-citral has disappeared. It is then acidified slightly with a solution of weak acid, such as tartaric acid, and is distilled in steam, which carries over first all excess of the methyl-ethyl-ketone and finally the methyl-ionone.

POST-LIFTER.—H. O. ROTVOLD, Hesper, Iowa. In operation to pull posts, large or small, the lifter may be placed with the stand about a foot from the base of the post. The handle end of the lever may now be lifted up and the barb pressed against the post as low down as possible and the chain be passed around the post from the eye and secured upon the returned end at the opposite side of the point at the end of the lever. The chain will prevent any slipping of the barb or spur on the post, and the handle end will be brought down and the post be lifted out of the ground.

FLUID-PRESSURE REGULATOR.—J. W. SCOTT, Colorado Springs, Col. The aim of the present invention is to provide a regulator arranged to permit the diaphragm to expand and contract in both circular and diametrical directions to prevent buckling of the diaphragm and to allow up-and-down movement without danger of the diaphragm bending unduly. The invention relates to fluid-pressure regulators such as shown and described in the former Letters Patent granted to Mr. Scott.

REINFORCED TERRA-COTTA PARTITION.—P. H. BEVIER, New York, N. Y. Means are provided in this case for increasing the strength and efficiency of the mortar or cement joint between superposed tiles, and to attain this end a metallic member of open-work construction is placed between the courses of tiles and imbedded in the plastic bond in a way for the material while plastic to pass through the metallic member and to adhere to the surfaces of adjacent tiles, the mortar and the open-work member producing a thin, strong, and secure joint between the tiles.

FENCE.—J. PENCE, Gratis, Ohio. In this instance the invention has reference to improvements in metal picket fences, an object being the provision of a metal fence, preferably made of steel, that will be of light structure, yet very strong and serviceable, and that may be sold at a comparatively small cost.

DUST-ARRESTER.—W. J. NEWTON and R. DIGGLE, Accrington, Lancashire, and G. WATSON, Leeds, York County, England. In this case the invention relates to improvements in dust-arresters, an object being to provide an automatic and effectual means of arresting or preventing the escape of dust or the like from refuse-burners or other furnaces and flues and so arranged that the accumulated matter may be removed without interfering with the furnace-draft.

VENDING SHOW-CASE.—I. KLAYMAN, Baltimore, Md. Mr. Klayman's invention is in the nature of a vending show-case for retail tradesmen for containing all sorts of small articles held for sale, such as candies, spool cotton and silk, screws, nails, bolts, and various other small articles which are kept in assorted sizes, styles, and prices.

MUSICAL INSTRUMENT.—SARAH W. CLARK, New York, N. Y. The invention relates particularly to improvements in upright pianos or similar upright musical instruments, an object being to employ in connection with

such instrument a curved sounding-board and a curved or concave lid, which also serves as a medium to diffuse and give enlarged tone and effect to the sounds deflected upon it by the curved board within the instrument.

TRANSFER-TICKET.—W. KLEIN, JR., Brooklyn, N. Y. This inventor's ticket is particularly designed and adapted for use in transferring passengers from one line of cars to intersecting lines, and for this purpose the ticket is composed of a body or main portion and attached coupons. The purpose of the ticket is to prevent a passenger from riding in a circuit on the cars of any street-railway system, and it is an effective check against this.

SAFETY HOOK OR RING.—D. L. TROYER, Shanesville, Ohio. Though adapted to various uses or purposes, the device is intended more especially as a safety hook or ring for connecting the ring of a watch, charm, locket, or the like to a chain, fob, guard, or similar contrivance. It is also admirably adapted as a key-ring, as well as a connector for belts, cables, etc.

PORTABLE APPARATUS FOR THAWING FROZEN GROUND.—C. W. JOYNT, Seattle, Wash. The object in this instance is to provide a portable apparatus adapted to utilize the combustion of wood for thawing frozen ground in a very economical manner, effect rapid dissipation of frost that pervades the ground by directing the entire volume of heat from fuel combustion upon the bottom surface of an excavation, a further object being to enable the starting of the fire at the upper surface of the ground, and also enable convenient removal of the heating apparatus from the excavation to permit the thawed ground to be readily loosened and elevated from the shaft.

ACID-PROOF COMPOSITION.—F. A. PANK, Butte, Mont. This composition or paint when applied to iron pipes used in copper-mining industry prevents their corrosion by acids normally contained in the copper water. Heretofore such pipes were lined with wood; but expensive and cumbersome lining of wood may be dispensed with if the pipes have been properly coated with this paint. It admits of general use, and is not limited in its application to pipes of this kind, being suitable for use in building, marine, naval, and other construction work, and to prevent corrosion of iron and steel generally.

KNOCKDOWN CASE.—R. SCHOUTEN, Keokuk, Iowa. The invention has reference to improvements in cases or boxes particularly adapted for shipping bread or the like, an object being to provide a case that will be light yet strong and durable and so constructed that it may be compactly folded to take up but little space during the return shipment or in storage.

COLLAPSIBLE MEGAPHONE.—H. STURGES, New York, N. Y. In this patent the object of the inventor is the provision of a new and improved megaphone adapted to be collapsed and folded into comparatively little space for convenient storing aboard ship or other place and adapted to be quickly and readily extended for use.

RETORT-LID.—C. F. A. HENTSCHEL, Stettin, Germany. The invention refers to a cover or lid for securing, tightly closing, or sealing vessels, mainly retorts used for purposes of coal or other distillation, the object of the invention being to avoid as far as possible the radiation of heat from the iron lid, which has hitherto proved to be a grave inconvenience in practice and one that very seriously interfered with the operation of the retorts.

EXPANSIBLE ROLL.—J. H. BRECK, Bristol, N. H. Mr. Breck's invention relates to rolls the peripheries of which may vary in size, and more particularly to those adapted for use in paper machines. In such machines difficulties occur that cause loss of time and production in stopping operations, and damage often is caused. To obviate these difficulties and provide means for readily varying the rolls without the necessity for stopping the machine are the principal objects of his invention.

HORSESHOE.—R. E. JOHNSON, New York, N. Y. This shoe is provided with a pad or rubber or analogous material to relieve the shock to the horse due to striking the hoof on the ground. The invention comprises the combination, with the shoe proper, of a compressible frame arranged to be clamped on the shoe carrying the pad which engages the ground as the horse travels.

MUSIC-TRANSPPOSITION CHART.—W. H. FINLEY, Chicago, Ill. The purpose of this improvement is to provide a chart through the medium of which any one can transpose a piece of music at sight without chance of mistake and which will be of material aid to persons writing music. It will prove an accurate guide readily understandable to any one having a slight knowledge of the principles of musical composition.

Hardware.

KNIFE-SHARPENER.—A. W. JOHNSON, New Brunswick, N. J. This invention consists of a reversible grinding-tool having a coarse abrading-face on one side and a fine-finishing face on the other, in connection with means for presenting the respective faces of the tool at different angles to the edge portion of the knife or blade, whereby the coarse side of the tool is available for grinding the bevel

on the knife in a rapid manner, and the fine surface of the tool is presentable to act only on the edge portion in a way to produce a keen cutting edge.

COMPOUND TOOL.—A. L. GHEEN, Creede, Col. Mr. Gheen's object in view is the provision of a combined screw-driver and nut-wrench wherein the parts may be folded compactly, so as to be carried conveniently in the pocket, provision being made for locking the members in their unfolded operative positions, so that the tool can be used to good advantage.

HAND-TOOL.—W. W. BARTON, Salt Lake City, Utah. Briefly stated, the device comprises two jaw-like members having handles at one end and a chain or other means for adjustably connecting together their opposite ends. Connected with the chain is a spike, which is employed in connection with the jaws for prying off covers or for various other purposes, as will suggest themselves during the practical use of the device.

BUCKLE.—H. W. LUHMANN, Hays, Kas. The intention in this instance is to provide a buckle adapted to clasp or clamp an attached strap, and thereby dispense with the usual tongue, whereby securing of the strap end is effected. It has advantages over all similar buckles in forming a bend over a transverse rib and by double-clamping action effected on opposite sides of the bend through means of cams and an under transverse rib.

WIRE-TIGHTENER.—T. J. CORRIGAN, Arkansas City, Kas. This invention relates to improvements in devices for tightening or taking up the slack in wires, particularly fence-wires, the object being to provide a tightener of simple construction by means of which the wire may be quickly and neatly tightened with very little labor and without danger of drawing the fastening-staples from the posts.

Heating and Lighting.

ACETYLENE-GAS GENERATOR.—J. C. WAUGH, Moline, Ill. One object of this improvement is to provide a form of carbide-magazine wherein the carbide is confined in isolated layers by mechanical devices adapted to be released in an automatic and successive manner for the purpose of dropping the carbide layers on the successive downward movements of the floating bell, such magazine being easily removed for the purpose of cleaning the parts and renewing the carbide-supply.

ACETYLENE-GAS GENERATOR.—N. LUKINS, St. Paul, Minn. In this patent the invention relates to an apparatus for facilitating the generation of acetylene-gas. It is especially adapted for railway use and in other places where gas-holders cannot be conveniently used. When, however, a gas-holder is to be used, valves may have suitable connection with the gas-holder, so as to be automatically operated thereby.

ACETYLENE-GAS MACHINE.—G. ANDERSON and F. A. SEEL, Red Lodge, Mont. First, this invention accomplishes the automatic supply of carbide in given quantities when gas in the holder is diminished by consumption at the burners; second, the quick and easy replenishing of carbide; third, the prevention of gas leakage through a hand-hole and stuffing-box; fourth, reduced ebullition of water in generator when carbide is dropped therein; fifth, to expel gas and flood generator on consumption of carbide in magazine before opening generator to clean the same; sixth, to facilitate discharge of water and residue from generator; finally connecting reserve generator of battery to intermediate connecting devices with gas-holder.

RANGE.—Q. CRANE, San Diego, Cal. In this patent the invention relates particularly to improvements in a combined range, baking oven, and serving-table, an object being to provide a device of this character that shall be accessible from all sides, and that will occupy but comparatively little space, adapting it for use in hotels or restaurants.

OVEN FOR GAS, GASOLINE, OR OIL STOVES.—ELLA D. HARRIS, New York, N. Y. The purpose in this instance is to provide a construction which will be simple, durable, and effective, and such that the base can be vertically adjusted to place a pan, griddle, grid-iron or broiler, or other cooking vessel or utensil employed in the desired relation to the flame.

Household Devices.

DOOR-OPENER.—T. E. LEE, Chulavista, Cal. Though particularly adaptable to screen-doors, the invention may be used in connection with doors of other sorts; and it comprises a means mounted on the door mechanism or frame which when engaged by the foot of a person passing the door will act to enable the person to pass through the door without using the hands to open it.

STEP-LADDER.—H. L. SCHWABE, Jersey City, N. J. In the present patent the invention has reference to improvements in extension step-ladders, the particular object being the provision of a step-ladder of this character that will be very simple in its construction and very rigid and strong in any one of its adjusted positions.

CURTAIN-FIXTURE.—O. MALMQUIST, New York, N. Y. The purpose of the inventor is to provide a fixture adaptable to receive a rod for supporting a lace or other light curtain and which is employed as a fixture auxiliary

to the main bracket utilized as a support for the curtain-pole or the pole adapted to sustain a portière or other heavy curtain, the auxiliary fixture being so made that it may be quickly and conveniently clamped upon the lower limit of the main bracket and secured in position and as expeditiously and readily removed.

REVOLVING SASH.—J. F. BLANCHARD, New York, N. Y. The invention relates to sashes having horizontal pivots to the side edges mainly for convenience and cleanliness. A main feature of the invention consists of auxiliary sash stiles formed of two longitudinal members; interposed springs between the members permit them to move toward and from each other, the springs yielding when the sash is turned on its pivots.

FLUSHING-TANK.—B. WALKER, JR., Austin, Texas. A purpose of this invention is to provide means whereby the water may be let out of the tank through an outlet-pipe having slip connection with a fixed flushing-pipe, which outlet-pipe is automatically closed by the upward action of the tank, and to provide an overflow-pipe in connection with the closing or valve device for the outlet-pipe whereby to regulate the amount of water to be received by the tank to obviate the pounding noise common to flushing-tanks due largely to siphons sucking air and water just as the siphonage is broken.

ADJUSTABLE STEP FOR BOOK-SHELVES.—T. S. MARTIN, Butte, Mont. In libraries, where tiers of shelves are of such height as to require a temporary foot-rest to enable one to reach upper shelves, it is desirable to have the foot-rest always in place and adapted for vertical adjustment. The object in this case is to provide details of construction which afford a simple and convenient step capable of vertical adjustment and clamped connection with upright portions of a tier of book-supporting shelves to enable one to readily reach books on high shelves.

WATER CLOSET.—F. W. BENDER and J. M. SCHLOTTER, New Rochelle, N. Y. The aim of the invention is to provide a new and improved water-closet, more especially designed for use on railroad-cars, marine vessels, etc., and arranged to prevent upward draft in the bowl and to allow of flushing the bowl to keep the closet at all times in proper sanitary condition.

DRAPERY-HOOK.—L. NACHMANN, New York, N. Y. The object the inventor has in view is the provision of an article adapted to sustain the upper edge portion of a curtain above or alongside of the curtain-pole, whereby a plurality of the hooks serve to support the curtain or portière in a way to conceal the pole and the rings without resorting to stiffening media for holding the curtain.

WINDOW-SASH.—A. C. GODDARD, Wood-cliff, N. J. In this instance the invention relates particularly to that class of sash adapted to slide vertically in the window-casing and to swing on horizontal pivots, so that the sash may be turned to any desired angle or completely reversed for convenience in washing both sides of the glass by a person within the room; and the object is to provide a mechanism permitting the movements with ease and without noise.

Machines and Mechanical Devices.

FEED-GEARING.—J. B. HART, Clarksburg, W. Va. In this case the invention is an improvement in the feed mechanism of sawmill-carriages, and has for an object, among others, to provide a compact arrangement of devices whereby motion is transmitted from the saw-mandrel to the feed shaft of axle and to support the intermediate friction-wheel and the other friction-wheel as well in the feed-controlling frame.

WEIGHT-REGISTERING WEIGHING-MACHINE.—H. POTTIN, 100 St. Lazare Street, and L. M. DELOGELIERE, 25 Caumartin Street, Paris, France. An important feature of this contrivance consists in that the "weighing-machine," properly so called, is independent of registering mechanism and takes up position of equipoise without moving any of the parts save its own levers and its cursor, which may be so arranged as to move without any sliding friction, so that the weighing-machine may be of the very greatest sensibility. As the registering mechanism is acted independently of the load to be weighed it may be of very compact construction and made to fulfill a plurality of functions without impairing sensibility or precision of apparatus.

CAROUSEL.—H. S. THOMAS, New York, N. Y. In this case the invention has reference to improvements in carousels or merry-go-rounds, an object being to provide a device of this character in which there is a variety of movements and so arranged as to not only give amusement to the riders, but also to produce a peculiar illusion to onlookers.

VENDING-MACHINE.—F. LYNES, Johnstown, N. Y. Mr. Lynes' object in this invention is to provide a machine adapted to contain articles of different values or grades, such as cigars, and operating to deliver an article from any desired one of the several receptacles upon the insertion of a coin, and directing the money by means of a novel mechanism and a controlling mechanism for the desired receptacle.

DECORTICATING-MACHINE.—P. P. FAURE, 21 Place du Champ de Foire, Limoges,

Haute-Vienne, France. This machine for decorticating ramie and other textile plants and leaves, comprises rolls between which stalks are fed, a beater-wheel for breaking stalks and separating fiber from coarse impurities, a shaker-frame for continuously agitating stalks while operated upon by the beater-wheel, a conveyor for removing fibers, drums arranged in parallel consecutive pairs and provided with intermeshing members, and means for rotating said pairs of drums at different speeds for scraping the fiber.

TYPE-WRITER.—J. ALEXANDER, New York, N. Y. The aim of this invention is the provision of a type-writing machine of comparatively simple construction so arranged that the type-carrying bars and operating-levers may be moved to printing operation by a very little pressure and upon release be quickly returned to their normal position.

WELL-DRILLING MACHINE.—H. H. WILBURN, North Yakima, Wash. The main object of this invention is the provision of a walking-beam with which a gasoline or steam engine may be successfully used for well-drilling, so shaped and hung as to cause the drilling-tool to move in direct perpendicular lines, thus preventing the rope or cable from rubbing against the sides of the well and wearing the rope or cable away.

PUMP-CONTROLLING APPARATUS.—G. V. ELLIS, New York, N. Y. The invention relates to an apparatus for automatically priming and starting pumps, particularly centrifugal pumps used for lifting sewage, bilge-water, and the like. By its means as the level of the water rises to a height requiring its discharge a liquid-pressure is opened to prime or fill the pump and simultaneously to throw the pump-controller, whereby to start the operation of the pump. The present invention represents a further adaptation of the automatic starting apparatus forming the subject of a former patent granted to Mr. Ellis.

PRESSURE ATTACHMENT FOR LUMBER-MATCHING MACHINES.—A. MULNE, Burk's Falls, Ontario, Canada. The principal object of the inventor is to provide a machine which shall have the pressure-arm carrying the blocks thereof so mounted on the machine that they may be independently operated—that is to say, if any uneven strip of material is being passed through the machine the blocks will at all times bear upon the under surfaces of the same in such manner that it will be held even to the machine, and thereby prevent any unevenness in the matching of the same.

POLISHING-MACHINE.—G. A. ENSIGN, Defiance, Ohio. More particularly this invention relates to polishing-machines using an endless sand or other polishing belt. The object is to provide a machine more especially designed for polishing wagon and carriage wheel spokes, neck-yokes, swingletrees, whiffletrees, handles, and other turned articles requiring high finish, the machine being arranged to automatically rotate the article when moving it in contact with the polishing-belt.

ORE-SLIMER.—I. F. MONELL, Boulder, Col. In this patent the invention has reference to certain improvements in ore-slimers, a particular object of Mr. Monell being the provision of an ore-slimer of novel construction and so arranged as to quickly and wholly separate fine gold from sand and slimes.

DUPLICATING-MACHINE.—C. H. COLTER, Decatur, Ind. In this patent the object of the invention is to provide a new and improved machine, more especially designed for use in banks and other financial institutions and business houses and arranged for making a complete record of all commercial papers received and sent out to permit of obtaining immediate reference at any future time to previous transactions or disposals of notes, drafts, checks, domestic and foreign exchange, etc.

Pertaining to Vehicles.

WAGON-TOP.—J. POHLIG, New Orleans, La. In this instance the invention relates particularly to improvements in side-curtain mechanism for wagon-tops, an object being to provide a simple and novel means for supporting the rolling side curtains, and a further object is to reduce the cost of construction by emitting certain elements shown in a former patent recently granted to Mr. Pohligh.

TRICYCLE.—C. J. MADONNA, New York, N. Y. The purpose of this improvement is to provide a race-horse tricycle, or a tricycle in which the body is in the form of a horse in two pivotally-connected parts, the rear being supported by two wheels on the same axle and the forward part by a single wheel which is a steering and at the same time a driving wheel, so that the head of the horse-like body always points in the direction of travel.

Photography.

PHOTOGRAPHIC SHUTTER-OPERATING MECHANISM.—J. H. HAMMER, Marquette, Mich. The purpose of the invention is to provide a trigger-operated cushion-controlled device for making and breaking circuit connection with an alarm device, a bulb operating device operated by the alarm device, the bulb acted upon being connected with the shutter of a camera, and means whereby the trigger may be brought into action manually or

through connections with an alarm clock or trap to effect closure of said circuit whereby the device may be set to provide for an automatic instantaneous photography of animals, birds or like moving objects.

FOCAL-PLANE SHUTTER.—W. F. FOLMER, New York, N. Y. In this patent the invention relates to an improvement in focal-plane shutters; and its special purpose is to provide a construction whereby the alignment of the shutters to each other and the alignment of the connection-tapers for the shutters with respect to the reeling device will be maintained under all conditions of adjustment and operation of the shutters.

STEREOSCOPIC APPARATUS.—V. S. L. OWEN, Adrian, Minn. The object of this improvement is to provide means for displaying stereoscopic views more effectively and in greater numbers than heretofore. The pictures may be instantaneously changed without the necessity of taking the eyes from the lenses, and therefore strain and discomfort heretofore entailed in removing one picture and replacing another are avoided. Also the pictures are effectively protected from abrasion and injury and the number which may be shown is practically limitless.

FILM-DEVELOPING MACHINE.—J. M. BRAINERD, Rome, N. Y. The primary object of the invention is to produce an improved structure adapted for use in the daylight for the purpose of developing the sensitized exposed surfaces of a film and for fixing the developed surfaces without resorting to a dark room, either portable or stationary, and without the possibility of the latent impressions becoming "light struck" during the process of treating the film.

Prime Movers and Their Accessories.

OIL-FEEDING DEVICE.—W. W. MATHEWS and C. BAUER, Eureka, Utah. In this patent the invention relates to a means for introducing a supply of lubricating-oil into steam on its way to the engine; and it consists in certain peculiar devices by which the flow of lubricant may be regulated at will and kept feeding at a steady rate.

MUFFLER.—I. B. ULLOM, Claysville, Pa. In operation, the exhaust is introduced through the main inlet-pipe and upon striking the projection in the T is divided and passes out through branch pipes into the casing, where it expands, losing force and impurities against the casing-head, striking upon the conical projection walls and being deflected all directions back toward the center of the casing, where the two portions meet and mix, whereby further deadening effect is secured. The exhaust rising through the outlet-pipe is deflected by the cone and directed against the ring, the latter's concavity tending to return it toward the casing. These impacts further deaden sound and it escapes through ring opening practically without noise.

HYDRAULIC AIR-COMPRESSOR.—J. H. ALEXANDER, Ymir, British Columbia, Canada. It is the object of this inventor's improvement to provide an apparatus for compressing air wherein a falling column of water is received by an air and water separating tank, which is connected with a hydraulic air-compression apparatus proper whose operation is such that the air compressed by it may be delivered to the same pipe through which the column of water falls, and thus be conveyed into the said separating-tank, whence it is conducted into a storage-tank.

LUBRICATOR.—O. E. GAY, Rockymount, N. C. The present invention has for an object to provide a novel construction whereby to minimize the danger of breaking the glass through which the feed is seen and to provide for renewing such glass in each sight device without stopping the operation of lubricating the other cylinder or the air-pump lubricating devices connecting with the same cup.

Railways and Their Accessories.

FEED-VALVE.—J. L. CURRAN, Rocklin, Cal. The prime object of Mr. Curran's invention is to provide a single feed-valve which may be made to serve the purpose of the plural valves now commonly employed. This end the inventor attains by constructing the valve with means facilitating its ready adjustment from one pressure to another, so that the single valve may be made to feed high or low pressure.

WINDOW-SCREEN.—H. P. CHERITZBERG, Winston Salem, N. C. This invention relates particularly to screens for railway-car windows to shield passengers from cinders, dust, and the like while riding with windows open, an object being to provide a screen of simple construction that may be sold at a very small price, easily placed in a window or removed therefrom by a passenger, compactly folded or rolled when not in use, and conveniently carried in a valise or secured to the outer side thereof.

Designs.

DESIGN FOR A MEMBER FOR BAG-FRAMES.—C. FLAX, New York, N. Y. This inventor has designed an original and ornamental design for a member of a bag frame.

DESIGN FOR A PAPER-WEIGHT.—W. D. PAULSON and R. D. HEINBOCKEL, Manitou,

Col. The design of these inventors represents an original and ornamental paper-weight, square in form.

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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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 desiring the information. In every case it is necessary to give the number of the inquiry.

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Inquiry No. 5752.—For castings for a 1 h. p. steam engine.

Inquiry No. 5753.—For a steam plow and steam engine portable on horses' backs, or on a one-wheel hand push wagon.

Inquiry No. 5754.—For a set of tints for a tintometer; must be of the Lovibond scale, for refined cottonseed oil.

Inquiry No. 5755.—For makers of wood alcohol.

Inquiry No. 5756.—For makers of boot-blackening by electricity.

Inquiry No. 5757.—For a fan with either a battery attached, or could be run by an accumulative battery which could be charged from a dynamo at a mill, and then moved to a residence to furnish cool air for a sick-room, desk, etc.

Inquiry No. 5758.—For makers of small portable dredges for cleaning and deepening small canals and ditches.

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Inquiry No. 5760.—For a device for heating a house by hot water circulation wherein the fuel used is either oil or gas.

Inquiry No. 5761.—For the necessary machinery and tuffing appliances for making horse collars, collar pads, etc.

Inquiry No. 5762.—For makers of ventilators and fans, also drying plants.

Inquiry No. 5763.—For gas motors suitable for aerial navigation.

Inquiry No. 5764.—For automatic machines for turning and drilling pearl buttons.

Inquiry No. 5765.—For makers of pearl-button machinery.

Inquiry No. 5766.—For makers of gymnastic apparatus made of wood, such as Indian clubs, etc.

Inquiry No. 5767.—For manufacturers of machines known as saw gins and roller gins, such as are used in the South.

Inquiry No. 5768.—For parties who make air compressors adapted to the up-stroke of a pumping windmill.

Inquiry No. 5769.—For makers of cold-drawn, seamless copper or steel tubing suitable for high-pressure boiler purposes.

Inquiry No. 5770.—For manufacturers of electric fans which run with a dry battery.

Inquiry No. 5771.—For the manufacturers of the "Ever-ready" electrical goods.

Inquiry No. 5772.—For makers of electric motors with attachment of emery wheels and polishers.

Inquiry No. 5773.—For makers of tinfoil for wrapping moist goods, etc.

Inquiry No. 5774.—For makers of gas traction engines.

Inquiry No. 5775.—For the makers of a cigar called "Good Health Cigar."

Inquiry No. 5776.—For a large quantity of screws, cold rolled thread, having flat bottom, with slot on top, either flat or round; all to be about 3-8 inch or 5-16 inch and from 3/4 to 9 inches long.