

is applicable to all beam plows and cultivators and can be readily applied and removed and adjusted as may be desired upon either iron or wooden beams.

**CULTIVATOR.**—G. W. HAMILTON, Council Bluffs, Iowa. Mr. Hamilton's invention refers to an improvement especially that kind adapted to simultaneously cultivate two or more rows. The purpose is to provide means under the convenient control of the driver whereby to impart either side or vertical adjustment to the cultivator-beams or both, all of the cultivator-beams being simultaneously moved to adjusted position.

**HORSE-STALL.**—G. B. EPPLEY, Washington, D. C. In this case the invention is an improved knock-down or adjustable and collapsible stall especially adapted for use in railway-cars for shipping stock, more particularly valuable horses, with safety and comfort. The panels allow ventilation without permitting the animals to interfere with one another.

**HARVESTING-MACHINE.**—J. H. BRAMMER, Hunters, Wash. The purpose of the invention is to provide means whereby to connect the cutter-bar, sickle, conveyor, and reel with the side of a vehicle and to employ an elevator in connection with the conveyor. The elevator enters a guarded opening in the vehicle-box at one side of a point centrally between the ends of the vehicle, the upper terminal being below the upper edge of the box, thus preventing loss of material by the wind or irregular driving as the material is delivered into the box.

#### Pertaining to Vehicles.

**PNEUMATIC TIRE.**—T. J. COOPER, Paterson, N. J. The inventor's purpose is to so construct a practically punctureless and non-collapsible tire and a wheel-rim of metal or wood or other material to which the tire can be quickly attached without danger of creeping, and to so construct the tire that it will not only be reliable and economic, but whereby two independent air chambers are provided supplied with air from one inlet-valve, and whereby the inlet-passages of both chambers are automatically sealed against leakage.

**WAGON-TOP.**—J. POHLIG, New Orleans, La. In this patent the invention has reference to improvements in wagon-tops, and particularly to the manner of hanging the side curtains, and the object in view is to provide simple means for guiding the curtains and keeping them straight while rolling up or unrolling.

**WHEELED SCRAPER.**—J. J. GLYDENBORG, Hillhouse, Miss. The inventor's object is to provide a scraper especially designed for use in building levees and other embankments, and in which the scoop will ride high, will be easily dumped, can be lifted out of the ground by the draft of the team, will be simple in construction, strong, durable, and easily repaired. It is an improvement in that class of scrapers represented in a former patent granted to Mr. Glydenborg.

#### Railways and Their Accessories.

**TRACK DEVICE FOR INCLINED WAYS.**—A. H. McCLURE, Majestic, Col. The improvement is adapted for use in connection with inclined ways in mines and similar localities for the rapid transit of one or more loaded cars or vehicles. The object is to provide devices by which cars may be chocked at the upper end of a way and by which also they may be readily released and caused to descend the way with the use of little power on the operator's part.

**LOCKING DEVICE FOR SEAT-GUARDS.**—S. E. JACKMAN, New York, N. Y. The object in this invention is to provide a device for the seat-guard of a car, boat, or like vehicle arranged to securely hold the guard against accidental opening or opening by passengers of the vehicle while the latter is in motion to prevent passengers from leaving the seat during the ride, thereby insuring complete safety of the passengers.

**SAFETY DEVICE FOR INCLINED RAILWAYS.**—S. E. JACKMAN, New York, N. Y. This invention relates to apparatus for use in pleasure-resorts, etc., and is a division of the application for a former patent granted to Mr. Jackman. The object is to provide a device designed to prevent accidental return or downward movement of the car while traveling on the upwardly-inclined track portion of the continuous track in case of accident to the propelling mechanism, so that complete safety of the passengers is insured.

**RAILWAY CAR.**—J. M. HETFIELD, Plainfield, N. J. The object in view in this improvement is the provision of a car of the gondola or coal-carrying type with a cover or covers which will effectually prevent the entrance of snow, sleet, or rain, preventing the danger of freezing, and thus causing a saving of time in the unloading of a car. The car is equally adapted to carry lime, as the roof is absolutely water-tight.

#### Miscellaneous.

**SEPARABLE BUTTON.**—C. YEOMANS, New York, N. Y. In this case the purpose is to furnish a button capable of being firmly and expeditiously applied, and to so construct it that the more one section is forcibly drawn from the other the more firmly will both sections remain in locking engagement, and also to so construct the socket-section that a cap member will have limited play upon the body portion, it being necessary to move this member

upon the body portion before the two button sections can be separated.

**LETTER-OPENER.**—H. C. ZENKE, New York, N. Y. The object of the invention is the provision of a letter-opener which is simple and durable in construction, very effective in operation, and arranged to enable the operator to quickly and accurately open a bunch of letters of various sizes and shapes at one operation without danger of injuring the contents of the envelope.

**GLOVE.**—C. WINKLER, New York, N. Y. In this instance the object is to provide a glove having the reinforcing portions or tips arranged to present a smooth surface to the wearer's fingers, to prevent uncomfortable contact of the wearer's fingers with projecting edges, seams, or doubled-up portions, at the same time avoiding undue thickening of the glove-fingers, but giving strength and a fine appearance.

**ERASER.**—H. B. TOOKER, New York, N. Y. The mechanical eraser in this case 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 entire line without danger of marring the remaining writing or injuring the paper.

**MEASURING DEVICE.**—F. M. STEADMAN, Puebla, Mexico. The device is very compact, comprising simply a disk on which is mounted a roll of specially graduated tape. The size of an object at a known distance or the distance of an object of known size may be determined by noting on the tape at what distance from the eye the object will be eclipsed by the disk.

**SIGHTING DEVICE FOR CAMERAS.**—F. M. STEADMAN, Puebla, Mexico. In this patent the invention is in the nature of a sighting device for ascertaining exactly what confronting objects strike the image plane or for locating the image properly on the plane without looking on the ground glass to do so. The device is especially adapted to film-cameras with which it is impossible to use the ground glass, but is applicable to all cameras.

**CAMERA ATTACHMENT.**—W. E. MULHOLLAN, Juneau, Alaska Ter. Mr. Mulhollan's purpose is to provide a device which can be removably attached to any camera for the purpose of automatically operating the shutter at a predetermined time, enabling persons to take their own photographs from a point near to or at a distance from the camera.

**INSTRUMENT FOR HOLDING ARTIFICIAL TEETH.**—W. F. MCKIBBEN, Linneus, Mo. The purpose of the invention is to provide an instrument for holding teeth to be mounted, especially plate-teeth, so constructed as to firmly hold either end of a tooth while the other end is being operated upon and to duly accommodate the pins in the teeth whether the pins be arranged transversely or longitudinally of a tooth. Mr. McKibben has also invented another instrument for holding artificial teeth, the purpose of which is to furnish one adapted to hold what is known as "plain vulcanite teeth" for grinding purposes, the instrument so constructed that the position of the tooth may be reversed, enabling either side to be ground to the biting edge or adjacent there to and wherein the teeth may be turned end for end and firmly held in any position.

**PANORAMIC CAMERA.**—C. MILLS, New York, N. Y. The object of the improvement is to provide a camera arranged to permit convenient adjustment of the film-carrier nearer to or farther from the lens, to allow the use of lenses of different focuses on the same apparatus, and to permit of presenting both concave and convex surfaces of the focusing-screen or film to the lens to distinctly bring out on the finished picture nearer or farther portions of the object to be photographed.

**INSECTICIDE.**—J. H. YELVINGTON and J. E. YELVINGTON, Nocatee, Fla. This solution has been employed with remarkably successful results, especially on orange-trees, pineapples, tomatoes, egg-plants, and other fruit-trees, vegetables, and cultivated plants. It acts not only as a most efficient insecticide and fungicide, but also invigorates and promotes the healthy growth and development of the trees and plants in a high degree.

**HOLDER FOR MARKING OR ERASIVE MATERIAL.**—R. P. HAFNER, Passaic, N. J. The inventor provides a holder in which a receiver is arranged to travel in direction of one or the other of the open ends of a tubular casing, which receiver is adapted to hold a stick of chalk or crayon at each end, or an erasive or marking material at one end and an erasive material at the opposite end, whereby the material attached at either end of the receiver may be exposed for use, or all the material may be concealed within the casing.

**DESIGN FOR AN EASEL.**—SABELLA G. DOHERTY, New York, N. Y. In this case the invention is of a new, original, and ornamental design for an easel. The easel is crowned with a wreath. The uprights of the back have holes for the purpose of adjustment of the picture rest to various heights. The base is highly ornamented and is placed on symmetrically curved feet, the whole effect being very agreeable.

**WAIST-BELT ATTACHMENT.**—A. T. GOLDFIELD, New York, N. Y. The main purpose of this invention is to bring the plates in close-hinged connection solely by the lacing of the belt through the plates, the plates hav-

ing no direct hinge connection one to the other, and to so hinge the plates one to the other through the medium of the belt upon which they are supported that the plates will not move from the position in which they were placed.

**STAIR-ROD AND SECURER.**—S. A. BROWN, New York, N. Y. The principal object of the invention is to overcome many disadvantages and objections common to stair-rod and securer devices hitherto devised. Though applicable to wooden stairs, the improvements are especially intended for use in connection with stairs constructed of hard materials—such as marble or iron, for instance—and into which it is impossible to drive or insert tacks or the like for securing the carpet or covering in place upon the stairs.

**FISHING-BEEL.**—O. ALLEN, Lincoln, Ill. What is called "backlashing" in the reel occurs by the overrunning of the spool, and thus the cast or flight of the bait is suddenly arrested, and often, when this occurs, the bait is separated from the hook and is lost. The line must then be drawn off the spool, and is often so tangled as to require considerable time to straighten out. This invention avoids these results and delivers the line from the spool without overrunning or the necessity of applying the brake.

**BUILDING CONSTRUCTION.**—A. MENCZARSKI, New York, N. Y. In this case the invention has reference to a fireproof building construction; and the improvement comprises a peculiarly-constructed span of material laid plastic between the horizontal metal I-beams running side by side and the structure thus constituted being allowed to set and form the floors and ceilings.

**FASTENER.**—E. S. GARDNER, San Angelo, Texas, care of D. T. AVERETTE. This fastener is designed for securing the eyes to traces or tugs or fastening stirrup-leathers together, the fastener being also applicable for various other purposes, the arrangement being such that the fastener securely locks the parts together and can be conveniently opened when desired to lengthen or shorten the traces, stirrup-leathers, or the like.

**CIGAR-PERFORATOR.**—W. K. HOLMES, New York, N. Y. The purpose in this case is to provide a device which may be worn upon a watch-chain, and so constructed that it will perforate a cigar inserted therein simultaneously from opposite sides, effecting clean, clear perforations whether the cigar be green or dry, and which will not crack or break the wrapper if the cigar be dry.

**FLY-CATCHER.**—J. SCHNELL, Macon, Ga. The invention is an improvement in that class of fly-catchers in which a surface of some form is smeared or covered with a sticky substance, which may also be attractive and deadly to flies and other insects. A candle or other light-producer may be adjusted at any required distance to attract insects at night.

**BABY-COMFORTER.**—H. SPENCER, New York, N. Y. In this instance the invention refers to improvements in devices for comforting or quieting young babies, an object being to provide a device for this purpose that shall be simple in construction and that when placed in a child's mouth will not only serve to solace the child, but will afford slight nourishment.

**KNIFE ATTACHMENT.**—G. E. CROSBY, Albion, Wis. The improvement relates to an attachment for pocket-knives or for other devices having blades by which pencils may be conveniently and effectually sharpened. The edge of the knife-blade may be exposed to facilitate the cutting of finger nails, and also a roughened or filing surface is provided adapted to be used for filing and rubbing the finger-nails.

**STARTING-GATE.**—F. A. VIANEST, New York, N. Y. In this contrivance the invention has reference to improvements in starting-gates for use on race-tracks, and the object of the inventor is the provision of a starting-gate arranged at opposite sides of the race-course, of very simple construction and having a direct and quick perpendicular movement.

**VALVE.**—A. C. FAMBROUGH, Sonora, Texas. Mr. Fambrough's invention is an improvement in valves, and especially in valves designed for use in tanks. The construction is simple, easily applied to a tank, and the arrangement of valves such as will work in shallow water and permit a much greater flow, because the valve can be adjusted to a wide open position.

**PLUMB-LEVEL.**—W. B. BRADSHAW, Ennis, Texas. This device consists of a body portion having on its upper side front and rear sights, and also a compass, a depressed open-top casing having an outer arc-shaped graduated flange, a box-shaped member having pivoted support within the casing and a glass front side, a suspended bob and lower fixed point within the box or pivoted member.

**COUPLING DEVICE FOR SCREW-DRILLS.**—C. CHRISTIANSEN, Gelsenkirchen, Germany. The invention provides a coupling device by means of which screw-borers of any desired length may be composed of shorter sections. Borers constructed in this manner allow of drill-holes to be bored of any depth in a narrow shaft and transversely to its longitudinal axis. If a borer of a certain length has been driven in up to its rear end up to the mouth of the drill-

hole, an extension-piece, and so on, is attached to it by means of this device. When it is desired to sharpen the borer bit carry the lower part of the serpentine borer provided with the bit to the shop.

**PLACKET-FASTENER.**—A. D. BELL, New York, N. Y. In carrying out the invention Mr. Bell particularly contemplates the production of a clasp which may be secured to the placket of the skirt in such manner that when the placket is closed the fastener will be invisible, so that the skirt will present a neat and tidy appearance, thereby effecting a departure from the bulky, untidy seam and protruding fasteners ordinarily incident to the clasps commonly in use.

**DESIGN FOR A GLOVE.**—F. SCHMIDT, New York, N. Y. In this ornamental design for a glove, three separated bars or rows of heavy black twisted silk each bordered by a thin edge of white silk stitching extend from the knuckles to a line with the base of the thumb. A neat V shaped formation of the same material and execution as the bars complete the design.

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