

# RECENTLY PATENTED INVENTIONS.

## Pertaining to Apparel.

**TROUSERS-SUPPORT.**—A. M. TAYLOR, Port Ewen, N. Y. The object of the invention is to provide a support which is easily manipulated for placing the trousers in position on the support or removing the same therefrom and arranged to clamp the waistband of the trousers in position, so that the trousers hang naturally down from the support, to avoid folding and consequent undesirable doubling up and creasing of the trousers.

**GARMENT-HANGER.**—E. T. PALMBERG, New York, N. Y. The inventor's object is to provide a hanger designed for supporting one or more garments, such as coats, skirts, and the like, and arranged to securely hold the supporting-bar in position on the hook and to readily accommodate the velvet or other delicate coat collar without danger of crushing the same.

**TROUSERS-BRACE AND STOCKING-SUPPORT.**—J. T. ANDREW, Montgomery, Ala. The invention relates to improvements in combined trousers-braces and stocking or sock supporters, the object being to provide a device of this character that will prevent the trousers from bagging at the knee and also to maintain the front crease of the trousers-legs for a considerable length of time, thus preventing frequent pressing.

## Electrical Devices.

**VOLTAGE-REGULATOR.**—T. M. PUSEY, Kennett Square, Pa. In the present invention there is a tipping beam, controllable by the action of a main solenoid and adapted to control the opening and closing of certain contacts encircling the main solenoid are annular solenoids for preventing the solenoid core from racing.

**ELECTRIC SIGNALING SYSTEM.**—J. S. ANDERSON, Ames, Neb. It may happen that a portion of a track is displaced by landslide, or a bridge turned, or one or more cross-ties dislodged, or the track maliciously tampered with. In these and all cases of a similar kind by means of this invention warning is given directly and automatically to the locomotive engineer as soon as the locomotive approaches within a suitable distance of the part of the track thus affected.

## Of Interest to Farmers.

**SHEEP-HOOK.**—E. W. STAUFFER, Chinook, Mont. This hook is very efficient and easily operated without injury to the leg of the sheep. Very light pressure is required to release the catch or to return it into an operative position. When in operative position, it is impossible for the sheep to release itself. It may be used with equal facility as a goose or turkey-hook, in which case it should be made of lighter material.

## Of General Interest.

**PEN-WIPER.**—J. S. STULL, JR., and C. P. BERKES, Philadelphia, Pa. The device is particularly for use in wiping draftsmen's ruling pens, the object being to provide one that will be simple in construction and by means of which the pen-points may be quickly and thoroughly cleaned of ink at both the inner and outer sides and more conveniently than by employing the usual cloth.

**COAL-WASHER AND ORE-CONCENTRATOR.**—A. C. CAMPBELL, Asheville, N. C. The object of the present invention is to provide a washer and concentrator arranged to effectively separate the more dense material from the less and to insure a uniform distribution of the material into the separating pan. It relates to coal-washers and ore-concentrators, such as shown and described in the Letters Patent of the U. S., formerly granted to Mr. Campbell.

**AUTOMATIC FIREARM.**—J. J. REIFGRABER, St. Louis, Mo. The invention relates particularly to that class of automatic firearms in which the several operations—such as the unlocking and opening of the breech after firing a shot, the extracting and ejection of the empty cartridge-shell, the cocking of the hammer, the introduction of a fresh cartridge into the firing-chamber, and the closing and locking of the breech—are automatically effected by the pressure of the gases generated by the cartridge explosion.

**APPARATUS FOR DISTILLING TURPENTINE.**—J. G. SAUNDERS, Lake Park, Ga. By the operating means of this apparatus the hot spirit of turpentine as it comes from the worm of the still is cooled down to or even below atmospheric temperature without exposure to the air and without any loss by evaporation or any swelling and subsequent leakage of the barrels.

**CAMP-BED.**—F. D. RAPPELEE, Green Bay, Wis. The purpose of the invention is to provide an economic form of camp or field bed, and to so construct the same that it can be compactly folded for storage and transportation, quickly set up for use, and so that all parts will remain connected at all times.

**PROPORTIONAL CALIPERS.**—J. PRARIO, Mount Hope, W. Va. The aim of the inventor is to provide a means whereby any definite relationship between the lengths of the opposite legs may be secured at will and in which there is no liability of this relationship being

accidentally varied or changed during the use of the instrument on any one particular piece of the work.

**APPARATUS FOR HANDLING HIDES.**—B. A. McNABB, Lowell, Mass. The improvement pertains to a means for handling hides or skins, particularly those being treated for so-called "patent-leather," and by means of which the hides fastened to the boards in the usual manner may be readily placed in proper position in the drying oven, and when the drying process is finished the hides may be removed from the oven in far less time and labor than by the ordinary methods of handling.

**LAUNDRY-TAG.**—F. F. AKERLY and W. BORCHERT, Reno, Nev. One purpose of this invention is to provide a tag especially adapted for laundry use and which can be quickly and conveniently applied to any article to be laundered and which will remain on the article until purposely removed, the removal being very readily accomplished. It can be applied by hand or machine, and will not rust a garment.

**ANCHOR.**—F. B. LANGSTON, Brooklyn, N. Y. The invention has for its purpose anchoring devices in which the seizing device is sunk, owing to the fact that the ground is softened or loosened beneath it by fluid under pressure in such a manner that the seizing device is able to sink into the subsoil owing to its own weight.

**EXTENSION BRACE-BAR.**—J. W. KOMINEK, Cedar Rapids, Iowa. In this patent the invention refers to improvements in brace-bars particularly adapted for use in supporting theatrical stage-wings or the like, the object being to provide a brace that may be readily adjusted as to length and firmly held when adjusted.

## Hardware.

**WRENCH.**—A. LOVELL, East St. Louis, Ill. The invention has reference particularly to the type commonly termed "pipe-wrenches." The principal object is the provision of a simple and durable implement the jaws of which may be drawn toward and separated from one another to set them upon the work by a force applied to and tending to revolve the handle about the work.

**LOCK.**—O. KATZENBERGER, San Antonio, Texas. The lock belongs to the padlocks of the keyless combination type, and the inventor's aim is the provision of a lock of this character that will be simple in construction, having no parts liable to get out of order, and that may be opened only by a person knowing the combination.

**NUT-LOCK.**—W. S. MASON, La Salle, Ill. Mr. Mason's improvements are applicable to either square, hexagonal, or octagonal nuts and are effective in locking the nut in position on the bolt without requiring any extra turning of the nut in either direction. They are also applicable for intended purposes irrespective of the particular number of turns required to be made of the nuts upon the bolt in order to bring the transverse holes in the bolt and the case in proper registry to receive the locking-pin.

## Heating and Lighting.

**AUTOMATIC-LIGHTING BURNER.**—H. LYON, Oneonta, N. Y. The aim of this invention is to provide simple and improved means for automatically lighting a burner, such as a gas-burner. The invention is applicable to gas, gasoline, or petroleum burners of all kinds used for lighting purposes and seems especially useful in connection with gas-burners for illuminating purposes.

**DRAFT DEVICE FOR FURNACES.**—W. G. McPHERSON, Portland, Ore. Special means are employed by which air may be introduced to the fuel on the bottom of the fire-box of a furnace at numerous places throughout the mass of the fuel rather than at those portions only thereof lying at the front of the furnace. Such means may be constructed separately from or as an integral part of the furnace and may be renewed or replaced from time to time, no dismantling or separation of other portions of the furnace being necessary for enabling this to be done.

## Household Utilities.

**CAKE-TRIMMER.**—J. B. WINFREE, JR., Lynchburg, Va. The device is chiefly applicable and useful for trimming the edges of layer-cakes, which it expeditiously effects with economy of material without breaking away any portion save that which is eccentric or too rough. It is very difficult to cut the edges of such cakes while hot, but this invention performs the operation in such a manner that the cakes are left in the best practical form.

## Machines and Mechanical Devices.

**DECAPPING, RECAPPING, AND SIZING MACHINE.**—D. E. SWAYSGOOD, Mark Center, Ohio. The invention relates to cartridges; and its object is to provide a machine arranged to permit convenient decapping and recapping of the shells and accurate sizing thereof. The shell is first decapped, then resized, and finally recapped before leaving the machine, and it is not necessary to handle the shell a number of times for performing the several operations.

**UNIVERSAL WORK-HOLDER FOR POL-**

**ISHING-MACHINES.**—I. L. POMEROY, Lockport, N. Y. The principal objects of the device are to provide for the universal adjustment of the holder, so that it can be applied to any kind of work and so that the work may be manipulated in any desired manner to secure the desired polishing action without introducing any necessity for moving the polishing-wheel itself, except the ordinary rotation of the same upon the axis. The means provided saves a large percentage in the cost of labor in these operations.

**SAWMILL.**—J. H. HOWSER, Dawsonville, Ga. The principal objects of the inventor are to provide for automatically reversing a reciprocating carriage at each end of its stroke, so connected with other operating parts that the reversing means will not interfere with the operation of a hand-operated means for stopping and reversing the carriage, and also permitting a saw when used in a sawmill to rotate continuously and to be driven from the same source of power as the means for driving the carriage.

**MACHINE FOR DECORTICATING RAMIE AND OTHER FIBROUS PLANTS.**—J. M. A. FAURE, 21 Place du Champ de Foire, Limoges, Haute-Vienne, France. The invention consists of a finishing-cleaner adapted to operate in an automatic and continuous manner and so constructed as to effect in succession the introduction of the previously-disintegrated textile materials between a pair of cleaning scraper-cylinders and their subsequent submission to a drawing action in a direction opposed to that in which the cylinders tend to draw the materials, such action continuing until the stems, etc., are entirely disengaged from the cylinders.

**WOODWORKING-MACHINE.**—E. S. BERRY, Putnamville, Vt. The machine operates upon wood and similar materials, and while capable of general use is especially adapted to making blanks from which clothes-pins are to be made. The principal objects are to provide means for feeding and holding the blanks for grooving opposite surfaces thereof and for beveling the edges.

**TYPE SETTING AND DISTRIBUTING MACHINE.**—A. G. BAKER, Albion, Mich. In this instance the invention relates to a machine for setting individual type under the control of a keyboard and for automatically distributing the type into various compartments or cases provided therefor, the machine being capable of performing the operations of setting and distributing either simultaneously or independently.

## Prime Movers and Their Accessories.

**MULTIPLE-CYLINDER ROTARY EXPLOSIVE-ENGINE.**—B. F. WALKER, Bridgeport, Conn. The prime objects of the improvement are to attain, first, several expansion-strokes from each cylinder at every revolution of the engine, thereby giving greatly-increased power with light weight and small area; second, direct thrust with no lateral strain on the piston and cylinder; third, dispensing with crank; fourth, a means for mechanically opening the inlet and exhaust valves; fifth, devices for automatically reversing the engine.

**ROTARY EXPLOSIVE-ENGINE.**—B. F. WALKER, Bridgeport, Conn. In its present form the invention comprises a stationary cammed member of circular undulating form, this member sustaining revolvably a central shaft with a cylinder or cylinders, which turn with a shaft and which have their pistons connected with a part running in or against the cammed part, so that by the reaction of the piston movement on the cam a continuous rotary movement is imparted. It relates to a specific form covered, broadly, in a copending application for engines formerly filed by Mr. Walker.

**GOVERNOR.**—A. C. CAMPBELL, Asheville, N. C. The invention relates to devices for regulating the speed of engines, motors, and other machinery; and its object is to provide a new and improved governor, more especially designed to subject the source of power to such automatic restraint as to check any tendency to variability of the speed of the motor, the governor being exceedingly sensitive, and positive in its action.

**STEAM-BOILER.**—C. E. CHAPMAN, Fort Edward, N. Y. The inventor provides a quick-steaming purely coil-boiler in which coils are continuous from around the firebox throughout the body and header in the dome from which live steam is taken, the water being forced under pressure in the fire-box coils, passing in vapor to the body-coils, the vapor entering headers of the series of body-coils farthest from the fire-box and then entering headers of next series at a point close to the fire-box, so that the vapor travels from any series to the other in the direction of the fire-box and contrary to direction of travel of products of combustion.

**REGULATOR.**—E. A. BEYER, Marquette, Mich. The regulator is adapted to be applied to governors, valves, and other spring-actuated parts by means of which the set of the governor or valve under the spring may be regulated, at will, for instance, if the invention is applied to an air-brake governor the spring of which is set at a certain pressure. Said adjustment of the spring may be temporarily changed by the device, so as to bring about operation at another pressure or pressures.

## Railways and Their Accessories.

**SIGNAL.**—C. P. RUGGLES, Texarkana, Texas. The object of the present invention is the provision of a flag holder or staff which will normally conceal a plurality of flags or similar signals of different colors or significance, arrangement being made for bringing any one of these flags into view when desired.

**TIE-BAR.**—J. F. McKECHNIE, Eleele, Hawaii. In this case the invention relates to railway-tracks; and its object is to provide a new and improved tie-bar for connecting the rails with each other with a view to prevent spreading of the rails, especially at curves, and to relieve the sleepers of undue strain.

**SWITCH-ROPE COUPLING.**—D. F. KNAPP, Portland, Ore. The purpose here is to provide a device which can be coupled to an automatic coupler-bar by removing the knuckle and using the same knuckle-pin that holds the knuckle in place, and which will also be adapted for application to the arch-bar of a truck to slue the truck around in line with the track. To this end the coupler has a body portion and is provided at one end with a link to which the switch-rope may be secured.

**RAILWAY-CAR.**—C. M. FUNK, Centralia, Wash. This invention is an improvement in railway-cars, and especially in cars designed for carrying logs or other heavy timber or commodity which it is desired to bind upon the car. By extending the binders under the load at the sides of the car the tendency is to bind the car together instead of spreading it.

**SIGNAL.**—C. R. DOWLER, Lamar, Col. This "automatic danger-signal" is designed for location near the approach of a railway-bridge at places along railway trackage and on public roads where through action of high water the bridge may be washed away or rendered unsafe and places along the track or roadway made dangerous by washouts, land-slides, or due to other impediment to travel.

**CIRCUIT-BREAKING DEVICE.**—C. R. DOWLER, Lamar, Col. This invention may be generically stated as comprehending an electric circuit along railway-tracks, suitable signal devices, and means in the circuit for breaking same, the circuit-breaking devices being adapted for automatic operation, through action of peculiar means, upon undermining action or washout of the roadbed embankment or from spreading of the rails.

**TORPEDO-PLACER.**—W. D. JACKSON, Escanaba, Mich. The object of this inventor is to provide a device for placing alarm-torpedoes on a railway-rail by means of which a person on a rear platform of a moving train may readily place a torpedo in position to be exploded by an approaching train, and thus give signal as to a train ahead.

**FREIGHT-CAR.**—W. I. BROCK, Erie, Pa. In the present patent the invention pertains to freight-cars; and the object is the provision of a car capable of transporting liquid or solid material and which shall be strong in construction, durable in use, and adapted to be freely and quickly loaded and unloaded.

## Pertaining to Recreation.

**AMUSEMENT DEVICE.**—O. HENRICHSEN, New York, N. Y. One purpose of this improvement is to provide a device which will represent a miniature race-course and horses, automobiles, bicycles, or men racing thereon, and, further, to so construct the device that the objects will be capable of independent action and so that the speed of the objects will be under complete control of the operators, since the game can be played by one or more persons.

## Pertaining to Vehicles.

**AUTOMATIC BACK-STOP FOR VEHICLES.**—C. A. NOBLE, Catskill, N. Y. The invention relates to automobiles and other vehicles, and more particularly to the means employed for preventing the vehicle ascending a hill from running backward in case the power is shut off. The object is to provide a back-stop for vehicles arranged to automatically stop the vehicle on a slope to prevent it from running backward down the same and previous to obtaining any momentum.

## Designs.

**DESIGN FOR A GAS-STOVE.**—C. SCHAEFER, Cambridge City, Ind. The designer has produced an ornamental gas-stove. The body is round and tapers down sharply from the top and sets on a sloping circular base on four feet. Body and base when they meet are encircled with a band giving a wasp-like waist effect. A shade surmounts the upper part of the body and a wire woven pendant is suspended therefrom.

**DESIGN FOR A GAME-BOARD.**—L. HUDGIN, Nogales, Ariz. Ter. The board is laid out in 255 squares. At intervals there are six patches of ambush trees. At the top of the board, there are opposite alternate rows of square tunnel holes in the hills that make up the landscape of lake and valleys beyond. A railway track with switch is at the bottom of the board.

**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.