RECENTLY PATENTED INVENTIONS.

Pertaining to Apparel.

CHILD'S CAP.—LENA STEINTHAL, New York, N. Y. The purpose of the invention is to provide a construction of child's cap and one wherein the parts of the cap are permanently connected and are capable of being laid flat for purposes of washing, starching, and ironing and wherein, further, the parts may be quickly and conveniently drawn together and secured to form the front and back sections of a child's cap, the two sections being needed for the cap's formation.

Of Interest to Farmers.

MILKING-MACHINE.—L. B. STEVENS, Logansport, Ind. A person on the stool by moving a lever downward will cause a downward movement of a piston, and as the valves carried thereby will be closed the milk will be drawn from the udder, and then upon an upward movement of the piston the valve opens, permitting the milk to pass to the under side of the piston, and then by a subsequent downward movement the milk underneath the piston will be forced through a pipe and at the same time a fresh supply of milk will be drawn.

JOINTER FOR STUBBLE-PLOWS.—D. H. DICKINSON, Parker, Ore. The purpose of the invention is to provide an adjustable rolling jointer for stubble-plows which is economic in construction, and which will leave a clean furrow, turn all material from the plow-beam, and effectually prevent material clogging on the beam back of the moldboard, and which will also turn all stubble, weeds, and grass cleanly under the furrow.

Of General Interest.

BUILDING-BLOCK.—J. AITKEN, New York, N. Y. The object of the inventor is to provide a building-block for the construction of walls arranged to insure the formation of light and air-tight joints and to reduce the weight to a minimum and still render the block exceedingly strong and durable and to provide the block with air-spaces to prevent the penetration of moisture into a room by way of the wall.

SAFETY-ELEVATOR.—J. HART, New Orleans, La. In the present patent the invention has reference to elevators or lifts; and the purpose of the improvement is the provision of a safety device which will operate automatically to prevent the cage or car from falling in case of any breakage of the suspending-cable.

BURIAL-VAULT.—A. H. HAVARD, Urbana, Ill. One of the embodiments of the invention consists of a box-like structure built of concrete and having brace-bars imbedded therein, the whole having an inner rabbeted upper edge combined with means for lowering this part of the vault after it is dry and hard into the grave. A metal top fits into the rabbeted edge of the box-like structure and is placed thereon after the casket is placed in position. Thereafter the metal top is covered with green concrete, which knits to the lower portion of the vault and forms a hermetically-sealed case.

SCOOP.—F. C. HOWE, El Paso, Texas. The object of this inventor is to produce a scoop provided with means for weighing the contents of the scoop, the general purpose being to do away with the necessity of placing the substance within the scoop in a scale for weighing the same. The improvement refers to scoops such as used in stores and similar places in selling products, such as flour, sugar, etc. Mr. Howe has invented another scoop such as used as above; and the object of the improvement is the provision of a construction, having a handle or bail attached thereto, with means for determining the weight of the contents of the scoop.

DRAFT APPARATUS.—T. W. HUCKLE, Standish, Mich. The apparatus comprises a body to which power is applied, and is arranged to roll or climb along a holding element, this body having adjustably attached thereto means for connecting it with the weight, so that as the body is moved along the holding element power is applied to the weight. By adjusting said means for connecting the body with the weight the power of the apparatus may be increased or diminished.

PROCESS OF MAKING TERPIN HYDRATE. L. H. REUTER, New York, N. Y. The hydrate produced can be used as a basis for the manufacture of other turpentine derivatives and that by the use of this new process an important industry can be developed in the United States which has heretofore been exclusively carried out in foreign countries. Certain raw and waste products can be employed which have heretofore had to be refined and imported.

SAFETY-RAZOR. — W. SCHMACHTENBERG, New York, N. Y. The object here is to provide a razor which is simple in construction, composed of but few parts, not liable to easily get out of order, and arranged to permit minute adjustment of the blade to bring the cutting edge thereof in proper relation to the guard, and to hold the blade positively against rearward motion to maintain the cutting edge in the adjusted position.

FASTENING FOR HANDLES OF BAGS, SATCHELS, PURSES, ETC.—H. B. WELCH, West Hoboken, N. J. Heretofore handles of bags, satchels, etc., especially of fastenings which involve the use of a bearing having a swivel connection for attaching a handle, have been attached by inserting the ends thereof in sockets, the ends being held in the sockets each by a transverse pin. That fastening is defective, as the pins pull their way out through the handle ends. Mr. Welch produces a fastening by means of which the handle may be quickly attached and secured.

PACKAGE-HANDLING DEVICE. — W. R. DENNIS, Denver, Col. By moving a sleeve downward on a staff the jaws will spread apart so that they may be engaged with a box, package, or the like. Then upon releasing the sleeve the springs will move the jaws toward each other to engage with a box, package, etc. In shifting paper or pasteboard boxes, it is not desirable that the jaws shall clamp closely against the same while the box is resting on the hangers. To provide for this, the sleeve may be rotated so that the cam mechanism will lock the jaws at a suitable distance apart.

Heating and Lighting.

COMBINED HEATING AND COOKING STOVE.—J. I. HAMAKER, College Park, Va. By means of the present invention the improved stove is so constructed that it may be produced at a small cost. It practically contains an oven, a water-heater, a steam-cooker, and a warming-chamber, all arranged with a view to the greatest economy of heat and consequently of fuel.

Household Utilities.

STIRRER.—I. W. GREENWALD, Frederick, Md. The invention refers to stirring or agitating attachment for cooking-kettles, and has for its object means of this character which may be simple in construction and applicable to all open kettles commonly employed for cooking apple-butter or general purposes where the fluid or material should be stirred or agitated during the cooking process.

DUSTLESS BROOM.—J. R. PRICE, Fond du Lac, Wis. The object of the invention is to construct the device in such a way that it will prevent the raising of dust when in use, and a further object is to construct so as to enable the handle to be adjusted upon the body of the brush and also to construct the body of the brush in such a way as to enable the straws or bristles to be easily reversed or replaced when worn.

Machines and Mechanical Devices.

HEATING DEVICE FOR SPINNING-LATHES.—R. THIEL, Lubeck, Germany. The invention refers to improvements in heating devices for spinning-lathes whereby it is rendered possible to maintain the device at a proper and uniform distance from the blank while the latter is being spun—that is to say, during the reduction or increasing of the diameter of the respective part of the blank—so that the metal is at all times heated up to the right temperature and cannot become brittle and cracked.

ROAD-GRADER.—E. FAHRNEY, Deep River, Iowa. A purpose here is to proviide a machine that will plow and grade a road at the same time, in which a series of spades have rotary co-operative action relatively to the plow, cross-cutting the furrow as turned up by the plow, which spades when they reach a certain point at rear of machine under action of trip devices consecutively throw the dirt inward with such a quick motion that they scatter dirt in direction of the middle of the road, thus making it smooth, the spades acting equally well in dry, soft, soddy, or weedy roads.

PILE-FABRIC LOOM.—H. SARAFIAN, Yonkers, N. Y. Mr. Sarafian's object is to provide a loom for weaving pile fabrics—such, for instance, as are shown and described in the Letters Patent of the United States formerly granted to him and bearing Nos. 752,712 and 782,178. In order to produce the weave, it is necessary to manipulate three warp-threads of each set in a peculiar manner and relative to each other, and for this purpose a special device is used. In operation of the loom the thread on the bobbin of the shuttle unwinds to form a weft-thread at the time the shuttle goes through the open shed from one side of the loom to the other, and when the shuttle returns the same thread on the shuttle-bobbin forms a certain weft-thread.

SAWING-MACHINE.—S. J. GRAY and J. HORNING, Oakland, Cal. This machine is easily transported from place to place and is supported directly by the object to be sawed, thus dispensing with considerable weight. It may be positioned to cut at an angle upward or downward or may be reversed upon its plates when sawing close to the roots of the tree. Any suitable means may be used for imparting motion to the driving-pulley. Any preferred form of endless saw may be used with the machine.

LOADING-MACHINE.—F. K. HOLMESTED, Claremont. W. Va. The machine transfers any class of loose material from the ground or a platform into a conveyer, its object being to produce a device expeditious and efficient in operation. The invention consists, broadly in a revolving wheel or platform adapted to receive the loose material and discharge it upon a conveyer. The platform is set at a slight incline to the horizontal. A revolving plate combines with a side plate and conveyer-belt disposed across the upper face of said plate.

VARIABLE-SPEED GEAR.—C. E. FUNK, Enterprise, Ore. The invention pertains to variable-speed gears, and is especially useful in connection with machines for shearing sheep and the like. The object is to provide a transmission-gear, which permits the speed of the operating parts to be varied within wide limits and which allows the mechanism to be stopped or started by a simple motion of the operator.

HAND-POWER PROPELLER.—N. JOHNSON, Chicago, Ill. In this case the invention has reference to hand-power propellers, and has for its object the provision of means for propeling small boats upon park-lakes and similar places without the use of oars, and thereby enable such boats to move about freely, without interfering with each other.

CIGAR CUTTER AND LIGHTER.—F. A. WIDMANN, Philadelphia, Pa. One purpose here is to provide a form of cutter and lighter wherein a tension-controlled fountain for liquid fuel, such as gasoline, is provided with a wick for ignition and pivotally mounted upon the base for movement to and from the sparking device in an electric circuit the batteries whereof are concealed in the base, so as to produce a spark at the exposed portion of the wick as the fountain is swung outward to light a cigar, the current being closed and opened at moment of passage of the fountain to and from contact with the sparking device.

BALL-BEARING.—J. F. SPRINGER, Girard, Pa. The object of the invention is to provide a bearing arranged to insure a true rolling motion of the balls, unaccompanied by sliding between balls and bearings, to bear heavy strains, and to allow convenient adjustment with a view to taking up wear, and more especially designed for use on journal-bearings and the like, in which the main portion of the strain is approximately perpendicular to the axis of the shaft.

LABELING-MACHINE.—A. MARCUS, Shreveport, La. In operation a bottle or package is placed on a seat. A label is then taken off the pile and is passed over an exposed surface of the pasting-roller from left to right to apply the paste, and the label thus charged uniformly with paste or glue is by continuation of the same movement quickly slipped onto the bottle in about the same plane, thus getting the label on the bottle immediately after pasting it and before it has time to curl up. Location of labels on bottles is uniformly the same by the indication afforded by the marker.

AUTOMATIC WEIGHER.—A. MCLEOD and J. H. MCLEOD, Marietta, Kan. The grain is received into a stationary hopper and discharged therefrom into a movable weighing-hopper which is so connected with weighing and other mechanism that when filled it tilts automatically and the weight is duly recorded or registered, the hopper being then automatically restored to its first position, whereupon it receives another charge of grain and tilts and discharges as before. It is an improvement upon the weigher for which the inventors formerly received Letters Patent.

Prime Movers and Their Accessories.

STUFFING-BOX.—M. BERECKY, New York, N. Y. The object of the invention is to produce a box which will present a metallic packing and absorbent or vegetable packing and in which special provision is made for conducting the lubricating fluid to the vegetable packing. It relates to stuffing-boxes such as used for pistons, tail rods, and similar moving parts.

METALLIC PISTON PACKING. — N. PFLAUM, Pittsburg, Pa. The invention pertains to metallic piston-packings, such as shown and described in Letters Patent of the United States formerly granted to Mr. Pflaum. The object of the present invention is to provide a packing composed of comparatively few parts and arranged to prevent leakage of steam in the cylinder from one side of the piston to the other and to compensate for all wear of the interior contacting surfaces of the engine-cylinder and the piston-packing, thus requiring no reboring of the cylinder.

Railways and Their Accessories.

SAFETY APPLIANCE FOR AIR-BRAKES.—W. H. WINKS, Baltimore, Md. In this case the improvement relates to safety appliances for air-brakes, and has for its object to provide means whereby the brakes on a locomotive and train of cars will be quickly applied when a switch is open or a danger-signal set should the engineer from any cause fail to note the open switch or danger-signal.

RAIL-BRACE.—W. M. JENKINS, Guthrie, Oklahoma Ter. The brace securely fastens rails to the cross-ties. The brace has an anchorage underneath the tie. There are many advantages. Each tie is firmly anchored at each end to the two rails, so that the rail is immovable against all strains. There is great saving in spikes, and as the ties are not pierced at any point their longevity is greatly increased. Stability of the track also increases safety of travel and avoids much loss of life and property. Tension of rail-joints is maintained which deadens sound and avoids all initial looseness. The brace will allow the height of the rail to be increased without danger of the rail turning.

RAILWAY-TIE.—E. A. RASMUSSEN, Hot Springs, S. D. In this patent the invention has reference to improvements in metallic ties and rail-fastenings for railways, the object being the provision of a metal tie that will be comparatively light, yet strong and serviceable, and having novel means for securing the rails. The tie is inserted in the road-bed and the interior filled or packed with dirt, cement, or the like.

COMBINED TIE AND RAIL-FASTENER.—E. P. BERGMAN, Concordia, Kan. The improvement pertains to metallic railway-ties and means for securing the track-rails. The object had in view is to provide a tie and rail-fastening means which shall afford improved securing means for the rails and prolonged use of the tie over all similar ties and rail-fastening means.

METALLIC TRUCK FOR RAILROAD-CARS.—F. GEBHARDT, Alliance, Ohio. The invention refers to trucks for cars such as shown and described in the application for Letters Patent of the United States formerly filed by Mr. Gebhardt. The object of the present invention is to provide a truck for cars which is exceedingly strong and durable and arranged to provide a solid bed for the car-body to rest on and to readily accommodate the draw-bar timbers.

Designs.

DESIGN FOR A FRAME.—G. H. RICE, New York, N. Y. In this ornamental design the inventor produces a form of almost a true circle in the interior of the frame. Exteriorly the frame presents an almost square appearance secured by the four corners being extended and capped with scrolls. Mr. Rice has also designed another frame with nearly identical lines and scrolls (the latter six in number), excepting that the frame adopts an oval interior and an oblong outer 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.

Notes and Queries.

HINTS TO CORRESPONDENTS.

Names and Address must accompany all letters or no attention will be paid thereto. This is for our information and not for publication.

References to former articles or answers should give date of paper and page or number of question.

Inquiries not answered in reasonable time should be repeated; correspondents will bear in mind that some answers require not a little research, and, though we endeavor to reply to all either by letter or in this department, each must take his turn.

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(10331) A. C. L. asks: Is it possible to convey a current of electricity from a battery, stored in a locomotive, to the rail, through the axle and wheel? Does not the oil bearing interfere with a perfect connection? A. We presume it is possible to convey a current of electricity from the locomotive to the rail through the axles and wheels, though we never tried the experiment. We think so, because the current from the overhead trolleys goes through the motor and the axles to the rail and returns to the power house in that way only.

(10332) W. J. C. wishes to know how to remove indelible ink marking from clothing. A. Indelible inks are of such variable character that it is quite impossible to reply. Many of these inks have nitrate of silver as a basis; in this case, a solution of hyposulphite of soda might help. Some other inks might possibly be bleached out with javelle water and weak muriatic acid; this can be used only on white goods, as most dyes would be destroyed. Possibly also a solution of sulphurous acid might be of service.

(10333) G. B. D. asks: Can you tell me how to construct a lamp or light that will burn under water (outside of an electric device). Any hints how to proceed will be appreciated. A. Any lamp will burn under water if protected from the water and supplied with air. We do not know any other way to produce a light under water. An electric light does not need air, a fact which renders it easier to have light under water by electricity, but this is out of the question with you. The metal potassium will burn under water. No means has been devised for utilizing the fact for illumination. Its cost is too great for such a use.

(10334) K. T. asks: 1. Is it possible to synchronize a dynamo and a motor, the latter run by the former, with reliability as to small variations of speed? A. The single-phase motor must closely synchronize with the dynamo which furnishes the current. Direct-current motors need not do so. 2. If so, will you give directions for building a simple and inexpensive model to illustrate the fact? For my purpose the minimum speed would be about 600 revolutions a minute and the maximum 2,400. The sensitivity ought to be such that