RECENTLY PATENTED INVENTIONS. Electrical Devices.

TROLLEY.-J. W. ROCKAFELLOW, Sergeantsville, N. J. This invention relates to improvements in trolleys for electric-railway cars receiving current from suspended wires or conductors, the object being to provide a trolley with a simple device to prevent the trolley from jumping off the conductor, the said de vice being adjustable to adapt the same to conductors of different shapes or sizes.

ATTACHMENT FOR PARTY-LINE TELE-Lexington, Ga. The advantages in this case, are: First. Any subscriber other than those engaged in conversation, is prevented from hearing it between those using the line. Second. Several pairs of stations upon the same line may be in communication at the same time without interference with each other, the line being thus practically divided up into several circuits. Third. When two subscribers are talking, the lines are grounded (or metallic circuits completed according to system used) upon either side of the two stations in active use, thus lessening resistance of circuits and improving the service.

PARTY-LINE TELEPHONE SYSTEM.—F. VOLLMER, Winsted, Minn. Mr. Vollmer's invention relates to telephony, his more particular object being to produce a system in which a subscriber at one station may call a subscriber at any station selected without disturbing other stations upon the line and yet silently indicating to all other stations that the

Of Interest to Farmers.

PLOW .- E. B. WINTERS, Coffeyville, Kan. One purpose of the invention is to provide two levers for accomplishing adjustments-that is, one lever for adjusting a single wheel on one side and a second for adjusting the wheels on both sides—which levers are arranged in close proximity to each other and on one side of and adjacent to plow-beam. These levers are preferably placed to right of plow-beam, with driver's seat on left of beam, thereby making it perfectly convenient for driver to manipulate said levers with right hand, while guiding the team with lines in his left hand. It is an improvement on a plow formerly patented by Mr. Win-

GATE .-- J. GRANGER, Springer, New Mex. it is fastened. The purpose of this invention is to provide latch devices for the gate operated through the Place Darcy. Dijon, Côte d'Or, France, This medium of the cables, which latch devices are new night-table is essentially characterized by automatically released from their keepers when the fact that it comprises two levels of same with the keepers when the gate is closed, the latches being directly operated by link connectitute the box intended to contain the pot was granted Letters Patent.

Of General Interest.

patent the invention has reference more par-. ticularly to improvements in means for heating the engraved steel plates in printing of projecting nails or like fastening devices to presses, the purpose being to provide a heater prevent injury to the merchandise in packing carried by the press bed-plate whereby the printing-plate is kept heated at a practically! uniform temperature.

NON-REFILLABLE BOTTLE. — G. GOLDIE, Manitowoc, Wis. This invention refers to improvements in bottles of the nonrefillable class, the object being to provide a bottle of this character that will be simple in construction, comparatively cheap to make, and by the use of which both the original bottle and the purchaser will be protected from fraudulent reuse of the bottle.

METHOD OF TREATING SHEET IRON OR STEEL.—H. H. GOODSELL, Leechburg, Pa. This invention has reference to a process for treating sheet iron or steel, and more particularly for causing a uniform and thorough oxi- BAESE, Berlin, Germany. In carrying out his dation upon the exterior of the sheet, so that the oxid will adhere firmly to the sheet, being practically a part thereof, and presenting an elegant appearance, besides being very dur-

PAPER BOX FOR PACKING BOTTLES.—J. T. CRAW. Jersey City, N. J. This knockdown box is adapted for packing bottles, especially box is anapted for packing bottles, especially said object. He then prepares a diapositive of such bottles as are used for marketing small one of said negatives, and this diapositive and may be constructed to receive bottles having plates. top and bottom body-fianges, the bottles having plates. straight or smooth bodies, the box so constructed that bottles may be conveniently and quick- N. Y. According to practice now in vogue it ly placed or removed and held safely packed is frequent that several trips are necessary to and separated for transportation or storage deliver bottles where different families live in without sawdust or like packing material.

TWINE HOLDER AND LIFTER.-E. S. ALDERMAN, Marietta, Ohio. In this patent the invention is an improvement in that class of twine-holders which are provided with a takeup for the twine in the form of a roller-weight, the frame of the device being adapted to be suspended from the ceiling or other support. The construction and arrangement and combination of parts are such that friction is reduced to a minimum. The entire apparatus suspends by a hanger.

and which is so constructed as to be made and sold in what is known as the "knockdown" form, in which for convenience of storage and cheapness of transportation the parts are dismembered and packed into small compass and as quickly and conveniently erected for use. This optical toy is designed to furnish both amusement and instruction.

KILN.-W. N. WEIR. South River, N. J. The object of this improvement is to provide a kiln more especially designed for burning bricks and other clayware and arranged to utilize the fuel to the fullest advantage, and thereby render PHONE SYSTEMS .- W. A. SHACKELFORD, the kiln exceedingly economical, at the same time permitting a continuous operation.

BASKET-HANDLE.—R. C. TOTZKE, St. Joseph, Mich. In this patent the object of the invention is to provide a basket-handle of wire or similar material which may be used instead of the ordinary wooden handles provided upon veneer baskets and which is adapted for application to baskets of different sizes and with reinforcing strips of different widths disposed along the upper margins thereof.

BASS DRUM AND CYMBAL ATTACH MENT .- J. P. STANTON, San Francisco, Cal. In the present instance the object of the invention is the provision of a new and improved bass drum and cymbal attachment whereby the bass drum and cymbal can be beaten separately or simultaneously by a pedal action controlled by the foot of the musician.

SAFETY COMMERCIAL PAPER.—J. ROWAN Ottawa, Canada. Mr. Rowan's invention re lates to commercial paper, such as is used by bankers, merchants and other business men, his object being more particularly to so prepare a paper that alterations in the condition of the paper—such, for instance, as the erasure of intelligible characters or the addition of said characters thereupon—may be readily detected. Another object is to provide a paper and ink therefor such as will not deteriorate with age and in which the fabric of the paper is not injuriously affected by ink used thereupon.

SAFETY-CATCH FOR PINS.—A. M. REMING-TON, Fitchburg, Mass. The catch is for use in connection with pin-fastenings for articles of jewelry, such as brooches, breastpins, and the The object is to provide a device of the character specified which will hold the pin with absolute security, so as to prevent all possibility of accidental detachment of the pin from the garment or other support upon which

HYGIENIC NIGHT-STAND.-N. FAUCON, 8 the gate is opened and automatically engage height entirely open upon their four faces and four panels vertically movable in order to contion with the mechanism acting directly on the gate and operated by the cables. It relates to lower one. Under such conditions the airing a former improvement for which Mr. Granger of the table is perfect and no nauseous odor can be accumulated therein.

BOX .- J. DOBOS, New York, N. Y. In this case the improvement refers to boxes or chests HEATER FOR PRINTING-PLATES.—G. H. used for shipping fabric piece goods and other Kendall., New York, N. Y. In Mr. Kendall's merchandise; and its object is to provide a box which is exceedingly strong and durable, comparatively cheap to manufacture and free

> COUPLING FOR GAS-HOSE.—H. ACKER | MAN, Newark, N. J. The main purpose of the OTTLE. — G. S. invention is to provide a coupling especially This invention re- adapted for use in connection with gas-hose adapted to connect a standing burner or drop light with a source of gas-supply, the connection being so made that when the burner is to be disconnected from the fixture and moved from place to place but a short length of tubing will be connected with the burner and the mating length of tubing need not be removed from source of supply with which it is connected.

> > PHOTOGRAPHIC PROCESS FOR THE RE PRODUCTION OF PLASTIC OBJECTS.—C. invention Mr. Baese photographs the object to be reproduced, hereinafter to be called the "original," in a light graduated in the direction of the axis of the lens of the camera and in proportion to the relief of said objects or parts thereof and then repeat the exposure on another plate or film in homogeneous light or in light graduated in inverse proportion to relief of

> > MILK-SERVER -C C REVVETT YORK a single house. The present invention seeks to overcome this disadvantage by providing a device readily adjustable to the number of bottles or packages to be carried, so that whether a large or small number are to be delivered at one house the instrument will nevertheless be susceptible to such adjustment as will adapt it to the existing conditions.

Hardware.

COMBINED STOP AND LOCK FOR WIN-OPTICAL TOY.—W. H. ZIMMERMAN, Ilale-DOW-SASHES.—R. L. RILEY, Newburgh, N. Y. thorpe, Md. The invention is designed to pro-It may be briefly stated that in the embodivide a simple toy of a general character which | ment of the inventor's improvements Mr. Riley

engaging with means on corresponding sash for preventing the sash from being opened without proper operation of said bolt.

DOOR-FASTENING.—L. A. DE MAYO, New York, N. Y. By means of this invention a vention is the provision of a combination lock-door may be held securely locked or it may be ing device for the hammer operated at the exheld so that it can be partly but not wholly opened, and by proper adjustment of the parts by a person inside of the room to which the door leads the catch may be entirely disconnected. It may be applied to either right or left hand doors without modifying its construction.

Household Utilities.

CAKE-BEATER.—M. A. RITTER, Carlisle, Ky. Mr. Ritter's invention is an improvement in cake-beaters, seeking to provide a novel construction whereby the dough may be beat or worked the desired way and by which the dough may be scraped from the bowl when desired. The construction is simple, inexpensive, and will be found efficient in the practical use of the invention.

SECTIONAL CASE.—A. E. STENSHAUG, Ashland, Wis. In this patent the invention has reference to improvements in sectional cases for books or other articles, the object being to provide a case of this character so constructed that the several sections may be readily assembled and having a novel locking means for firmly securing the parts together.

Machines and Mechanical Devices.

DRYING APPARATUS.—H. HENCKE, Berlin, Germany. In this apparatus the arrangement has the advantage that when the material is brought upon the endless band the water or fluid is pressed out and the material itself is compacted, whereby it better adheres to the transporting-band. Also there are arranged means for the purpose of cleaning the band and removing impurities from its meshes before it enters into the trough containing materials. By this cleaning process the perviousness and roughness of the band is regenerated and the latter adapted to take up material again.

APPARATUS FOR EXHIBITING MOVING PICTURES .- N. POWER, New York, N. Y. The purpose of the vitascope is to provide register ing and changing device conveniently operated during operation of the machine relative to the framing-opening, said device operating so that while the picture to be projected may be raised or lowered, for a perfect registry at framingopening the rectifying mechanism acts independently of the body of machine and without interfering with action of any part carried by said body. Means provide a rectifying mechanism with an operating-lever frictionally held in adjusted position and means for increasing or diminishing tension.

DEVICE FOR TRANSMITTING POWER.-C. F. Pearson, Chicago, Ill. In this patent the invention has reference to a device for transmitting power, commonly termed "planetary gearing." The objects are to provide a The objects are to provide a power-transmitting device which shall be capable of producing variable speeds and reversing. These results are intended to be secured with comparatively simple construction and efficient and absolute certain action.

EXCAVATOR .-- C. L. PAYNE, Salem, Ind. The present invention has reference to improvements in machines for excavating ground for irrigation, laying pipe-lines and the like, an object being to provide an excavator of comparatively simple construction and by means of which the work may be rapidly carried on. While one set of digging devices is moved downward through the ground an other set is moved upward free from the ground, so that a large ground-surface may be operated with comparatively little expenditure of power.

REVERSIBLE FRICTION DRIVE-GEAR .-A. MacGregor, Elizabeth, and J. V. B. Kenny, Bayonne, N. J. The object in this case is to provide a construction of gear which is durable and efficient in service by the omission of weak parts that are liable to soon wear out by frequent adjustment of the parts required to reverse the driven shaft. In construction the several members are so combined and organized that very slight movement of pulleys relative to one another is all that is required to start, stop, or reverse the shaft, and the operation can be effected without jar or shock on the working parts.

TRITURATOR .- I. ST. C. GOLDMAN, LOS Angeles, Cal. The triturator is arranged to insure proper reduction of substance to be treated by causing the pestle to be moved across the bottom of the mortar very rapidly on giving the pestle a pounding motion or allowing the pestle to work on the sides of mortar or to pass slowly across the entire bottom or up the sides of the mortar, according to nature of substance treated, to insure perfect grinding without danger of clogging, cramping. or fouling the machine, especially when treat ing gummy substances.

MULTIPLE RECEPTACLE FOR LIQUIDS. -A. L. PEPIN, Norfolk, N. Y. Mr. Pepin's invention relates to a multiple receptacle for liquids, and more particularly to an apparatus liquids, and more particularly to an apparatus WANTED. An expert electrician. Wages \$50, to begin, in which divers liquids, such as beverages of State full particulars. See "Herald" Nov. 20th, for full may be made and sold for a very small price employs a double combined stop and locking different kinds, may be stored separately and particulars. "Downing," Box 446, N. Y. City.

device located in a mortise or recess therefor drawn either separately or two or more conin one side of a window-frame and in line with jointly. The apparatus may be used in resthe meeting-rails of the two sashes of the win-taurants, hotels, cars, and all other places dow, one of the duplicate bolts of the device where it may be desirable for a person to select one or more of several liquids to be drawn off into a drinking-receptacle.

SAFETY DEVICE FOR FIREARMS.-O. G. VOLD, Dawson, Minn. The purpose of the interior of the frame and which until properly set prevents the hammer from being carried to a half-cocked or fully-cocked position, and, further, means whereby the combination locking mechanism cannot be removed from the arm for purposes of inspection unless the person is fully acquainted with the setting of the combination.

 $N\bullet_{\text{TE.}}\text{--}\text{Copies}$ 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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AUTOS .- Duryea Power Co., Reading, Pa.

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Patented inventions of brass, bronze, composition or aluminum construction placed on market. Write to American Brass Foundry Co., Hyde Park, Mass.

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of writings, that is marvelous as a money-labor saver. Inquiry No. 6237.—For the address of the manufacturers of the "Eclipse" smoothing iron.

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