

RECENTLY PATENTED INVENTIONS.

Electrical Devices. CLIP.—L. STEINBERGER, Brooklyn, N. Y. This clip belongs to that kind used for suspending wires, cables, and other electric conductors.

Trolley.—J. H. WALKER, Lexington, Ky. In the present case the invention is an improvement in trolleys, and particularly in the means for supporting the wheel and lubricating it.

Mr. Walker has also invented another improvement in trolleys. It has for an object, among others, to provide novel means whereby to support the trolley-wheel, to prevent the wire from dropping immediately alongside the wheel, and for securing a more effective conduction of the current from the wheel and along the pole.

Household Utilities.

HOSE ATTACHMENT.—W. G. MCKAY, Leadville, Col. To prevent water and dirt collecting around a hose and to enable this article to be moved with greater ease, the inventor provides an attachable support, any number of which may be applied to the hose to raise it from the floor or from the ground in case of use on a lawn or the like.

WASHTUB.—G. V. BLACKSTONE, Jamestown, N. Y. The aim of this invention is to provide certain new and useful improvements in washtubs whereby the tub is greatly strengthened and the legs securely held in position on the tub-body to insure a firm standing of the washing-machine on the floor, and at the same time relieving the lower hoop of a portion of the strain incident to the swelling of the bottom of the tub.

FLOUR-SIFTER.—G. W. HANCOCK, Lynchburg, Va. The aim of this invention is to furnish a manually-operated device adapted to sift flour, meal or other powdered substances faster and with more ease and cleanliness than can be done by the old-style wood or tin rimmed sifters.

BED-COVER HOLDER.—F. C. BILLINGS, Macon, Mo. This invention relates to clamping devices such as shown in a former patent granted to Mr. Billings; and the object is to provide a bed-cover holder cheap to manufacture, easily applied and designed for holding the coverings securely in position and to allow convenient opening of the holder for removal of the covering.

Miscellaneous.

DISPLAY-TRAY.—J. H. SMITH, Brooklyn, N. Y. The present invention refers to store-furniture; and its object is to furnish a new and improved display-tray more especially designed for containing and neatly displaying hosiery and like articles and arranged to hold different sizes of an article of a certain price.

RIFLE-RANGE.—J. DE ST. LEGIER and E. HERBAGE, Hicksville, N. Y. The purpose of this invention is to provide a target-box so constructed that it will be quickly freed from smoke and to so construct the sight tube that the smoke will pass out therefrom almost simultaneously with the explosion, enabling the marksman to plainly read the target immediately after firing.

TRIPOD.—W. F. FOLMER, New York, N. Y. This tripod is especially designed for use with cameras, but it may be employed wherever a tripod is necessary. It is so constructed that the legs while pivotally connected with the head, preferably in a detached manner, can be quickly and rapidly spread apart and locked to the head, remaining until purposely released.

SUBCALIBER FIREARM.—G. H. GARRISON, Rockford, Ill. The claim of the inventor of this firearm is, that he provides an attachment or auxiliary means adapted to be placed in the breech of standard-gauge rifles in order to make the arm available for use in discharging cartridges of smaller caliber. An insertible subcaliber device is equipped with means arranged to receive the impact of the center-fire firing-pin of the main rifle and to transmit the force to the rim of a subcaliber cartridge.

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.

THE IDEAL LAWN MOWER GRINDER.

This is an article which is as novel as it is useful. It needs no practical specialist. And the sharpening can be done in a fraction of the time formerly required.

The mower is placed upside down on two horizontal adjustable iron bars, the blade fastened to the emery wheel by a little clamp on its side, and by turning the crank now, the emery is made to revolve and slide along the lower shaft from left to right, taking out, in less than a minute per blade, every inaccuracy, making the bevel exactly uniform. The knife bar can be sharpened in the same way. The machine is guaranteed to do all that is claimed for it as above, and can also be used for grinding chisels, plane bits, etc. Its cost is \$18 and it is manufactured by the Root Bros. Co., Plymouth, Ohio.



Business and Personal Wants.

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. MUNN & CO.

- Marine Iron Works, Chicago. Catalogue free. Inquiry No. 4380.—For contractors to drive concrete piles. AUTOS.—Duryea Power Co., Reading, Pa. Inquiry No. 4381.—For a small steam turbine for laboratory use.

Notes and Queries.

HINTS TO CORRESPONDENTS. Names and Address must accompany all letters or no attention will be paid thereto.

(9089) M. H. N. asks: If a raceway measures 2 feet 6 inches deep and 5 feet 8 inches wide, and water flows at the rate of 60 feet per minute, what is the flow per hour, and what is the probable amount of horse power obtainable from a head of 18 feet? A. A flow of water 2 feet 6 inches deep by 5 feet 8 inches wide at the rate of 60 feet per minute, at a head of 18 feet, is, theoretically, equal to 28.9 horse power.

(9090) J. N. R. says: You will do me quite a favor if you will solve the following problem for me: Supposing we have a vessel with a hole in the bottom into which fits a hollow tube closed at both ends and six inches long. We will say this tube fits the hole so that no water could leak through, yet works with perfect ease.

INDEX OF INVENTIONS. For which Letters Patent of the United States were issued for the Week Ending July 7, 1903, AND EACH BEARING THAT DATE.

- Abrading tool compound, K. Sakurai 733,082 Adjustable extension hanger, H. S. Burley 733,003 Advertising device and street indicator, electric, R. D. Lamson 733,053 Air brake, direct acting compressed, W. K. M. Hillbrand 732,856

- Bicycle repair plug, D. H. Cox, Jr. 733,014 Blackboard attachment, F. D. Jones 732,863 Boat torch, vest pocket, F. J. Walter 732,805 Bolt, submarine, F. T. Cable 732,920 Boiler furnace, F. F. Edgar 732,723 Bolt, O. O. Bable 732,817 Bolster roll, J. B. Jones 732,864 Book, duplicating sales, N. S. Wright 733,309 Book or periodical, I. Kitsee 733,218 Book, orders out, E. M. Davis 732,717 Book page marker, R. R. Miller 733,326 Bookbinding machine, G. Wallner 732,910 Boring holes for screw pins or dowels in wooden railway sleepers, etc., tool for, F. Stahl 733,340 Boring machine, variety, M. L. Andrew 733,115 Bottle cap, H. S. Brewington 733,352 Bottle holder and protector, J. W. Graeme 733,936 Bottle manufacturing machine, glass, T. W. Simpsom 732,902