RECENTLY PATENTED INVENTIONS.

Electrical Devices.

STATIC ELECTRIC MACHINE.—J. G. H. BURBOA, Chihuahua, Mexico. In this patent the invention has reference to means for generating static electricity, and more particularly to the production of a simple, compact, efficient, and reliable form of machine of the so-called "induction" type. The action of the machine is continuous and the machine is double-acting.

PARTY-LINE TELEPHONE SYSTEM.—W. PARKER, Leicester, N. Y. This party-line telephone system is so arranged that a subscriber, by pressing a button, cuts the line in two and produces a comparatively short metallic circuit of low resistance. Each station is provided with a revoluble commutator actuated by the weight of the receiver so that the simple act of hanging up the receiver cuts the resistance of the station out of the talking circuit, but leaves it in the calling circuit.

Of Interest to Farmers.

FLOOD-FENCE.—J. ELLIOTT, Martinsville, Ill. In this instance the invention relates to an improvement in flood-fences or water-gates which are used for closing gaps in a line of fence where it crosses streams of water or on very low lands. It may also be used as a cattle-guard to prevent the cattle from straying from a pasture where a stream of water passes through such pasture.

BEET-TOPPING MACHINE.—W. D. BUCHTEL, SR., and W. D. BUCHTEL, JR., Brady, Neb. This improvement relates to a beet-topping machine, and more particularly to that class adapted for topping beets while they are in the ground. The object is to provide a machine for topping beets and to construct the same in such manner that it may be propelled by horse or other power and operated with the greatest ease.

Of General Interest.

ORE-LEACHING APPARATUS.—W. S. JONES, Greensburg, Pa. This invention is an improvement in the apparatus for use in leaching ores and for similar operations, and is especially applicable to the cyanid process of extracting gold or silver, although the invention will be found useful in other leaching processes, and is particularly advantageous in agitating slimes, i. e., the very fine part of ore obtained in crushing.

STOVEPIPE-CLEANER.—W. J. YEOMAN, Mankato, Kan. The aim of the inventor is to furnish a means or device for cleaning stovepipes and chimney-flues, so constructed that it is adapted to be conveniently inserted in and removed from the pipe or flue. The chief feature is a scraper consisting of a metal blade, which is so attached to a handle that it may be adjusted in the same plane therewith, or at right angles thereto, as required for inserting it in the stovepipe and for effective work therein.

BABY-JUMPER.—JANE A. MOREHOUSE, Newark, N. J. The purpose of the improvement is to provide a spring-supported rest or seat so constructed and suspended that a saddle is formed beneath an opening in the frame, which saddle is connected with the frame at front and rear of the opening and is fitted with an upholstered seat shaped to afford perfect freedom to the lower limbs when seated and to so sustain the frame from an overhead support that a spring-controlled action will be obtained in vertical direction while the frame is free to swing laterally.

Household Utilities.

CLOTHES-RACK.—N. M. COYNER, Frankfort, Ohio. Mr. Coyner's improvement is in that class of racks having a series of hinged or pivoted arms adapted to be extended horizontally and radially or folded in vertical position parallel to each other when not required for use. He has combined a series of such hinged arms with a box adapted to contain them when not in use, the swinging cover or door of the box being adapted to support the arms horizontally in position for use.

Machines and Mechanical Devices.

SUCTION DEVICE FOR PULP-MACHINES.—J. L. YOUNGS, Chateaugay, N. Y. More especially this invention has reference to the class of suction devices or apparatus employed in the manufacture of paper and other pulp for the purpose of eliminating or withdrawing therefrom as much as possible the moisture contained therein (previous to the delivery of the pulp to the driers or presses therefor), and is intended as an improvement upon the device set forth in former Letters Patent granted to Mr. Youngs.

MACHINE FOR MOISTENING, LAYING, AND BINDING GUMMED PAPER.—BEATRICE SIMPSON, New York, N. Y. The object is in this case to provide a hand-machine more especially designed for binding the edges of lantern-slides, picture-frames, and other passepartout articles with a gummed strip of paper, leather, or other flexible material, the machine being arranged to pass the gummed flexible strip over a moistening device to moisten the gummed face of the strip, to pay out the latter, and to press a portion thereof directly onto the edge of the article to be bound by the flexible strip.

Railways and Their Accessories.

BLOCK-SIGNAL SYSTEM.—T. SILVENE, Victoria, British Columbia, Canada. Among the several objects of this invention are the following: first, to enable trains upon the same track to warn each other with greater certainty; second, to render the action of the semaphore-arms more efficient; third, to enable the engineer of each train to know whether certain signals are made by his own or by another train, and, fourth, to make certain improvements in the contact mechanism and connection. The invention embodies certain improvements upon Mr. Silvene's former patent for an electric block-signal system, and has features that are very advantageous, as for examples, if an engineer fails to heed a warning presented, the brakes are automatically applied. No false alarms can be given. Signals are ascertained at a glance.

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.

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. 6362.—Wanted, a strip of sheet metal about 8 inches wide, 4 feet long, covered with sharp, needle-like points about ½ inch long and 1-16 inch apart.

AUTOS.—Duryea Power Co., Reading, Pa.

Inquiry No. 6363.—For manufacturers of an automatic funnel.

For logging engines. J. S. Mundy, Newark, N. J.

Inquiry No. 6364.—For manufacturers of hot water heating apparatus, for building 25 x 75 feet, four stories high.

"C. S." Metal Polish. Indianapolis. Samples free.

Inquiry No. 6365.—For manufacturers of electric motors and 10 to 20 h. p. machines for grinding corn, etc.

Perforated Metals, Harrington & King Perforating Co., Chicago.

Inquiry No. 6366.—For the best and latest improved diamond drills.

Handle & Spoke Mchy. Ober Mfg. Co., 10 Bell St., Chagrin Falls, O.

Inquiry No. 6367.—For estimates of cost of hydraulic turbine wheel complete with bevel gear and 12 feet of horizontal shaft, delivered at Liverpool.

Adding, multiplying and dividing machine, all in one. Felt & Tarrant Mfg. Co., Chicago.

Inquiry No. 6368.—For a welding machine to weld steel bars from 1-inch to 2-inch material to be tool steel as a rule.

Sawmill machinery and outfits manufactured by the Lane Mfg. Co., Box 13, Montpelier, Vt.

Inquiry No. 6369.—For makers of the Poulsen telegraphone.

Robert W. Hunt & Co. bureau of consultation, chemical and physical tests and inspection. The Rookery, Chicago.

Inquiry No. 6370.—For makers of centrifugal tinning equipments, or tinning outfit by centrifugal method.

The celebrated "Hornsby-Akroyd" Patent Safety Oil Engine is built by the De La Vergne Machine Company. Foot of East 138th Street, New York.

Inquiry No. 6371.—For a combination dynamo and gasoline engine for an electric plant.

I have every facility for manufacturing and marketing hardware and housefurnishing specialties. Wm. McDonald, 190 Main St., East Rochester, N. Y.

Inquiry No. 6372.—For makers of machines for distibering banana plant.

The SCIENTIFIC AMERICAN SUPPLEMENT is publishing a practical series of illustrated articles on experimental electro-chemistry by N. Monroe Hopkins.

Inquiry No. 6373.—For manufacturers and jobbers of novelties, such as dice and novelties.

Sheet metal, any kind, cut, formed any shape. Die making, wire forming, embossing, lettering, stamping, punching. Metal Stamping Co., Niagara Falls, N. Y.

Inquiry No. 6374.—For parties to manufacture a bag about size of 2-gallon water bag, strong enough to resent about 135 pounds internal pressure.

We manufacture gasoline motor and high-grade machinery, castings best quality gray iron. Select patterns, and let us quote prices. Frontier Iron Works Buffalo, N. Y.

Inquiry No. 6375.—For makers of medicinal tablet machines, also of small paper boxes.

Manufacturers of patent articles, dies, metal stamping, screw machine work, hardware specialties, machinery and tools. Quadriga Manufacturing Company, 18 South Canal Street, Chicago.

Inquiry No. 6376.—For makers of wood alcohol and acetic acid plants, also paint machinery and felt for manufacture of ready roofing.

The Clyde Salvage Company, Limited. 40 St. Enoch Square, Glasgow, desires to get into communication with merchants requiring shipments of scrap iron, chain cable, old horse shoes, anchors and general hard goods, new and old. References: The Union Bank of Scotland, Limited, Scotland.

Inquiry No. 6377.—For manufacturers of voting machines.

Patents sold. No advance fee charged inventors. S. H. Human & Co., 171 Washington St., Chicago, Ill.

Inquiry No. 6378.—For makers of bicycle attachments for railroads.

Inquiry No. 6379.—For parties making instruments for dentists' use, such as nuts, threaded bars, jack screws, etc.

Inquiry No. 6380.—For makers of kerosene oil engines.

Inquiry No. 6381.—For makers of a specialty covered by patents, which can be worked up.

Inquiry No. 6382.—For makers of compressed air machinery for carpet cleaning.

Inquiry No. 6383.—For metal frames or clasps used in manufacturing pocket books, also for a simple, inexpensive apparatus for burning on leather with brass or other type.

Inquiry No. 6384.—For parties to manufacture 5,000 or 10,000 thin brass plates, stamped, raised letters, as ordered.

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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Special Written Information on matters of personal rather than general interest cannot be expected without remuneration.

Scientific American Supplements referred to may be had at the office. Price 10 cents each.

Books referred to promptly supplied on receipt of price.

Minerals sent for examination should be distinctly marked or labeled.

(9515) J. H. B. asks: 1. How is it possible for a horse to receive a severe shock by stepping on the track rails of an ordinary electric road using overhead trolley? I know of a well-authenticated case of this kind. Has the nearness of a car anything to do with it? How could a circuit through the horse be completed? A. We cannot give a decisive judgment regarding the horse receiving a shock by stepping upon a rail of a trolley line. It may be said that many suppose the horse to be peculiarly sensitive to the electric current. Its iron shoes with nails reaching into the inner portion of the hoof are thought to facilitate the entrance of the current into its body. Again, there must have been a difference of potential between the rail and the adjacent ground sufficient to produce a current through the horse when he stepped upon the rail with one foot, and thus made a path of less resistance to ground for the current than was afforded by the earth in contact with the rail. If these several conditions were realized, a horse might receive a shock between the rail and the earth at its side. 2. What would be the effect of varying the resistance in the secondary of a transformer, the primary of which is fed by a constant current transformer. Please state effect on lamps on circuit B and explain action in full. A. We have not seen the arrangement you show in your sketch, a variable resistance in a transformer circuit, in multiple with lamps. We have not the means for testing the arrangement, but it seems to us that the variable resistance, if non-inductive, would short-circuit the lamps, and as the resistance was cut out, the lamps would give less light, since they would get less current.

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