RECENTLY PATENTED INVENTIONS.

Electrical Devices.

REGISTERING DIFFERENTIAL - SPEED INDICATOR.—J. RICHARD, 25 Rue Mélingue, Paris, France. The invention relates to an improved registering differential-speed indicator, and is useful in the study of alternating currents and for other purposes where it is desired to measure fluctuations of speed. The displacement of the differential train is recorded and amplified, so that a slip equal to a small fraction of a revolution can be observed.

Of General Interest.

PIPE OR CONDUIT.—C. H. WILSON, Red Oak, Iowa. A pipe or conduit is employed comprising a metallic frame, around which is applied or molded concrete or other composite material of which the structure may be formed, the frame becoming thereby embedded within such material. In manufacturing sections of which the pipe is made portions of certain members of the frame at each section are left free of composite material at ends of the section, thereby enabling adjacent ends of successive sections to be united, after which further composite material may be applied to joints between sections in completion of the pipe.

COMBINED SCOPE AND DISTANCE FINDER.—T. H. MITCHELL, New York, N. Y. The inventor's object is to provide a finder for use in connection with a camera and arranged to permit the user to conveniently and quickly determine the scope of the object to be photographed and the exact focal distance between the camera and object, to allow quick, convenient, and accurate adjustment of camera according to the distance obtained, to produce a sharp focus of the object and the subsequent production of photographic views of high quality and merit.

CALENDAR.—J. N. PARKER, Bedford City, Va. The calendar comprises a series of leaflets, a suspension-board, and triangular links connecting the ends of the leaflets and the adjacent ends of the board, the apex of the links being connected to the board and the base thereof passing through alined openings in the leaflets whereby to permit the leaflets to hang parallel. Each leaflet may be made of blotting-paper or preferably with calendered-surface on one side and a blotting-surface on the other. At the beginning of each week the leaflet of the previous week is removed and used as a blotter.

Hardware.

SAW-SET.—J. F. DORMAN, East Tallassee, Ala. The inventor's object is to provide a saw-set arranged to permit of accurately setting a large number of teeth in a short time without the aid of skilled labor and insuring long life to each saw-tooth, as the latter are hammered while being set, and hence are not liable to break off or spring back to former position. The several parts can be readily adjusted to permit of setting saws of different width, thickness, shape of teeth, etc., and by using a plunger or hammer the tooth is gradually hammered down onto the anvil, so as to remain perfectly set without danger of springing back.

Machines and Mechanical Devices.

WASHING-MACHINE.—R. J. DUNGAN, 28 East Oak Street, Norristown, Pa. In this case the invention has reference to improvements in machines for washing clothing, the object being to provide a washing-machine of simple and novel construction that may be of comparatively small size, yet capable of rapidly and thoroughly cleansing the clothing.

MECHANICAL MOVEMENT.—F. N. LIVINGSTON, Ballard, Wash. The invention pertains to a new mechanism for transforming reciprocatory into continuous rotary motion, and, conversely, for transforming continuous rotary into reciprocatory motion. It is useful principally as a substitute for the crank-shaft, although it may be put to other uses, as will suggest themselves to skilled mechanics.

CALCULATING-MACHINE.—C. A. MEILICKE, Hanley, Assiniboia, Canada. The object of this invention is to produce a simple mechanism which will enable charges or accounts of different kinds to be easily computed. It is especially applicable in computing interest upon notes, but is capable of use in various connections for the general purposes stated, and when in the latter the character of the scales and tables would be changed to suit particular units of measurement or requirements.

WASHING AND SCOURING MACHINE.—R. F. E. OKRASSA, Antigua, Guatemala. The object of this invention which relates to the washing and scouring of coffee, grain, and like materials, is to provide a scrubbing-machine arranged to insure a quick and thorough washing and scouring of the coffee, grain, or other material and a complete separation of the washed material from the water or like liquid used as a washing medium.

HAT-MACHINE.—C. P. WILDENBERG, New York, N. Y. This machine is for use in supporting wires and shaping them in order to produce frames for ladies' hats. Principal objects of the invention are the provision of means whereby the several wires forming a part of a hat-frame can be conveniently and accurately supported by means of hooks even when the frame is of unusual shape, having re-entrant portions, and the provision of means for conveniently removing the frames from the machine.

Railways and Their Accessories.

AIR-SUPPLY APPARATUS FOR AIR-BRAKES.—E. B. ALLEN, Louisville, Ky. This apparatus not only keeps the air-supply up to its standard pressure at all times, but also utilizes the power in compressing this auxiliary charge as a means for stopping the train, thus securing a double effect, since the power used to oppose the stopping of the train in one instance operates through the booster-pump of the apparatus to supplement or reinforce the pressure in the reservoir for subsequent stops in the application of the air-brakes.

SLACK-ADJUSTER. — C. O. ANDERSON, Omaha, Neb. In this case the invention relates to means for automatically taking up slack which may occur in the brake-rigging of railway-cars, due to wear on the brake-shoes or other parts. The apparatus may be used on either hand or power brakes and will not interfere with the employment of the usual manually-operated slack adjustment.

STEP-HOLDER FOR CARS.—J. EDWARDS, New York, N. Y. The improvement pertains to running-boards or steps of street-cars, such as used usually at the sides of so-called "summer cars." Where such cars are operated on double tracks it is usual for the inner board or step to be turned up out of the way, this step being usually mounted upon pivots or hinge connections for this purpose. The object is to provide simple means for supporting the running-board and for holding same in folded position out of the way.

DOOR-FASTENER.—J. P. SNELGROVE, Atlanta, Ga. The fastener is especially adapted for car-doors, although it may be used upon any class of sliding doors. It obviates the necessity of cleating the door and when sealed cannot be unlocked without breaking the seal. It is easily assembled, and broken parts can be easily replaced. There is but little liability of breakage from swinging outward of the door, since in such swinging the stress will be directed outward, which stress the latch is especially designed to resist.

Pertaining to Vehicles.

WAGON-WHEEL.—I. T. HURD, Lansing, Mich. The effect aimed at in this invention is the provision of a new and improved wagon-wheel more especially designed for use on road and farm wagons and arranged to combine strength with durability and to allow forming the wheel of wood with a hub and tire of metal.

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.**

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

Inquiry No. 8187.—Wanted, the address of the Crown Cap Co., manufacturers of the metal cap for bottles; also for makers of similar bottle caps.

I sell patents. To buy, or having one to sell, write Chas. A. Scott, 719 Mutual Life Building, Buffalo, N. Y.

Inquiry No. 8188.—Wanted, the name and address of a second-hand dealer in screw and drop presses.

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Inquiry No. 8189.—For makers of mail order goods.

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Inquiry No. 8190.—For makers of or dealers in magnets or loadstones of considerable power.

FOR SALE.—Water front in New York harbor with upland and riparian right. Address
X. Y. Z., Box 773, New York.

Inquiry No. 8191.—For manufacturers or jobbers of a hand or tubular lantern using calcium carbide to produce the gas for fuel in same.

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. 8192.—Wanted, address of Follett Steel Numbering Machine Co.

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

Inquiry No. 8193.—For machines for wall paper preparing.

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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.

Buyers wishing to purchase any article not advertised in our columns will be furnished with addresses of houses manufacturing or carrying the same.

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Minerals sent for examination should be distinctly marked or labeled.

(10032) W. J. B. asks: Is it preferable to have all south poles on one side and all north poles on the other to work independent armatures suspended above them, or will alternate polarity, north and south, give as good results? A. We do not see that it makes any difference in which way the several armatures are connected up, so long as each magnet works by itself, as your sketch shows that it does. It is more symmetrical to connect all the same, and then in any repair you will know from what point each wire comes.

(10033) F. S. asks: 1. Is there any destructive local action in a storage battery between the oxide filling and the lead alloy of the plates? A. No. 2. Will the presence of a saturated wooden diaphragm increase or diminish the resistance to a current passing through a liquid? A. It increases the internal resistance.

(10034) B. W. L. asks: If a bridged, grounded telephone wire came in contact with one wire of a lighting circuit carrying 5,000 volts, would there be any disastrous effects to either? A. It would be very bad for the telephone. You would need to put in a new one, since there would not be much left of the old. 2. If one wire of this lighting line were to break and fall across the telephone wire, what would be the probable effect? A. If these wires were bare, the best course would be to call out the fire department immediately. In the description which you give of what took place in your case, we judge that there was no contact of bare wires, and perhaps no wires came into contact at all. The swinging of the light wire near your telephone wire would produce all the phenomena you describe; while the fact that you could get no circuit from the ground showed that the wire had not broken and fallen anywhere along the line.

(10035) J. R. H. asks: Do you have a SUPPLEMENT that treats of intercommunicating telephones and setting up and construction of same? A. We have no article giving practical details on this point. You can find various systems described in Miller's "American Telephone Practice," price $3 by mail.

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