

RECENTLY PATENTED INVENTIONS. Electrical Devices.

AIR-DRIER FOR STATIC ELECTRIC MACHINES.—M. R. FARRAR, Greensboro, N. C. This drier for such static machines as the Holtz or Wimshurst type is designed with a special reference for this use and combined with the machine as an integral part thereof, whereby the moisture is eliminated from the air within the casing by condensation and congelation on a refrigerating receptacle over which the body of air from the casing is continuously circulated in an endless cycle by means of a fan.

Of Interest to Farmers.

AUTOMATIC COTTON-TRAMPER.—E. H. CAMPBELL, Blooming Grove, Texas. The aim in this invention is to produce a tramper having means for controlling the feeding of the lint through the same, so that when the compressing plunger is in its withdrawn position the feeding operation proceeds, but when the plunger is advancing, the feeding operation ceases.

TRACK-CLEARER FOR MOWERS.—G. BRAUN, Duncan, Neb. The improvement has in view a device which will effectually throw the grass as it is cut from the standing grass, completely within the swath cut by the mower, and have a space on the outer side of the swath clear of cut grass, in which the horse can walk and follow in the succeeding cut.

PEANUT PICKER AND STEMMER.—J. T. BENTHALL, Suffolk, Va. In this device the vines are fed into a hopper, are seized by disk fingers and become partially wedged in the throats between the fingers and the teeth. The portion wedged the tightest will draw the vine through the other throats, stripping the nuts and passing the vine to the next pair of disks. The nuts and leaves fall on a screen, the leaves and vine being blown out while the nuts pass to the stemming device, which removes the stems, and the nuts then pass into a conveyer, the trash being blown away.

Of General Interest.

FLOAT FOR LOGS.—W. J. PIERPONT, JR., Savannah, Ga. In operation the fastening pin or spike may be driven into the log or timber and the buoy body be then secured upon the pin, and when the log has reached its destination the float, including its fastening pin, may be withdrawn from the log, thus avoiding the use of any nails or other metallic fastening which may be broken off in the logs and injure saws or other tools used in working the logs.

SYSTEM FOR MINE VENTILATION.—D. BELLONI, Edri, Pa. Mr. Belloni's invention relates to improvements in means for ventilating mines. It is especially applicable to the ventilation of coal mines in which noxious gases are liable to accumulate, but it is also applicable to any mine in which the removal of foul air is desirable.

COMPOSITION OF MATTER.—C. A. GOLDSMITH, York, Pa. The invention is a composition of matter designed for use in the treatment of smoking tobacco, and tobacco for use in making cigars, and the object is to provide a liquid for treating the tobacco for removing therefrom the musty odor and cellar smells and other foreign odors sometimes found in tobacco.

BOX.—P. H. KRAETSCH, Astoria, Ore. The object of the invention is to provide a box provided with a plurality of compartments, for containing postcards, each of the compartments being independently removable from the box. The cards may be inspected without removing them from the tray, a notch permitting the lowermost card to be lifted from the bottom of the tray.

SIPHON.—S. J. GRAHAM and A. E. FOWLER, Trout Lake, British Columbia, Canada. The discharge leg of the siphon is provided with a valve such as to prevent the suction of air into the leg through its discharge end, but permits the passage of a fluid in the opposite direction; and an air pump having a connection with the siphon for exhausting the air therefrom. In connection with the siphon is a vent opening having a manually-operated valve by which the flow of the liquid may be easily controlled.

WINDOW.—J. CHELEBORAD, Omaha, Neb. By releasing a locking pin, either of the window sashes may be rotated in its groove, whereby to open the top or bottom of the window, or to reverse the position of the sashes. In assembling the window the casement being in position, the front or upper sash is put in place, and the parting strip is inserted and the lower sash is put in place. The inside rim is then placed in position, and the annular ring or stop is secured in place by screws.

DOOR-HANGER.—G. L. SCHNEPF, New York, N. Y. The invention is an improvement in door hangers and tracks for sliding doors, primarily such as include free and lineally movable roller bearings between the track and hanger, and has in view a hanger and track by which the door may have an increased travel over doors supported on tracks and hangers of the same working length as hitherto constructed.

ROLLER.—H. R. DERBY, Jerseyville, Ill. The roller is suitable for pulverizing and smoothing the ground, the pulverizing taking place when the roller is moved one direction, and smoothing when moved in the opposite di-

rection. These two operations are performed by a single roller constructed with a series of disks independently revoluble, each disk having an approximately central rib with teeth projecting from each face of the rib, having radial or pulverizing faces at one side and rounded or inclined smoothing faces at the opposite side.

MOLD FOR MAKING FLUTED COLUMNS.—J. P. ARCHDEACON, Boston, Mass. The inventor provides a mold for making fluted columns of cement, plaster or other plastic material, the mold being arranged to permit of building the column at the intended place on a building or in a shop, and giving it the desired tapering form and producing the flutes on the exterior surface with gradually less depth and width according to the taper of the column.

LOCK FOR TOY BANKS.—C. HANSEN, San Antonio, Texas. The invention relates to toy banks, and has for its object to provide a bank with a door to which is secured a receptacle which is adapted to contain camphor, menthol, or other similar substance, which will gradually decrease in size when exposed to the air, there being a supported bolt on which there is a plate which is adapted to press against the contents of the box; and means provide for a pawl to slip off a bar when the door will be found to be unlocked.

FOLDABLE DISPLAY-TRAY FOR MERCHANDISE.—F. R. FAULK and T. BRATT, Allegheny, Pa. The purpose here is to provide a construction used for exposure of seed packages or other merchandise, in a prominent manner, and that adapt the trays for close assembling in a suitable receptacle, when the trays are not in use, or are to be shipped to different localities where the goods held in the trays are to be exposed for sale.

Household Utilities.

FIRE-LIGHTING DEVICE.—J. FERRO, Bellingham, Wash. The object here is to provide details of construction for a fire lighter which is controlled by the ordinary alarm mechanism of a portable alarm clock, and that will ignite fuel in the fire pot of a stove or range, when the alarm is put in motion at the instant of time for which it was set.

Machines and Mechanical Devices.

COMPUTER.—C. A. PIRKIN, Montpelier, Vt. The invention relates more particularly to that type of computer in which there are provided two relatively movable members, one of which carries a series of multipliers and the other of which carries a series of multiplicands, and for each of the latter a series of products resulting from the use of each of the several multipliers.

EXHIBITING DEVICE.—E. W. LIVERMORE, Bellingham, Wash. The object of this invention is to produce a device which is especially adapted for use in exhibiting fishes. The construction is such that the mounted fish will be presented to view within a glass jar and under water, so that they resemble closely their natural appearance in life.

Prime Movers and Their Accessories.

ELASTIC-FLUID TURBINE.—J. P. NIKONOW, Evansville, Ind. The invention relates to turbines of the general kind used in connection with elastic fluids, such as steam, compressed air or gases of combustion, the more particular purpose being to produce a device of this type having its parts so shaped and arranged as to be easily assembled, and in its complete form offering particular advantages as to replacement and interchangeability of parts.

Railways and Their Accessories.

RAILROAD-TIE.—E. A. BUELL, Norfolk, Va. The invention is an improvement particularly in metal ties. It provides a construction whereby rails may be securely held from spreading and will be cushioned, and the cushion will have its elasticity entirely confined within the tie and the rail can rise and fall without displacing the tie, thus permitting the rebound of the track without loosening the tie in its ballast, or other seat.

RAILROAD-TRACK.—E. A. BUELL, Norfolk, Va. The invention is an improvement in railroad tracks, particularly in the ties and the cushioning and fastening devices. The cushioning block of wood is confined in a recess and a metal cap which confines the cushion in the recess projects into the recess so that no portion of the cushion block is exposed and the elasticity of the block wholly available or fully utilized.

Pertaining to Vehicles.

WIND-SHIELD.—J. H. SPRAGUE, Norwalk, Ohio. The invention more particularly relates to improvements in the frame which supports the transparent section. One object is to provide improved means for connecting the lower portion of the frame with the dashboard or filler-board interposed between the wind shield and dashboard.

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.

NEW BOOKS, ETC.

FACTORY ORGANIZATION AND COSTS. By J. Lee Nicholson. New York: Kohl Technical Publishing Company, 1909. Quarto; 410 pp. Price, \$12.50.

This work is intended primarily as a handbook for manufacturers who are interested in modern methods of organization in systems of accounting, as a book of reference, and also as a text-book on cost accountings for the student. It requires a fully qualified accountant—be he private or certified—or a business engineer to deal with this most important subject. The author has a splendid grasp of the theory and technique of cost accounting. Critical examination of this book shows that not a single germane item of any description has been neglected or slighted in any way. The forms are given on a good scale, making it easy to compile forms adapted to the individual needs of the cost specialist. The book is beautifully gotten up and is a credit to both author and publisher. There are also chapters relating to office appliances, which are very full. If large concerns were aware of the savings that could be effected with the use of this machinery, they would not hesitate an hour to put in the necessary equipment. Many a firm has gone to the wall for the lack of statistics which an adding machine would have helped to turn out in a few days. One section of the book which strikes us as being particularly valuable is the distribution of indirect expenses, which is the bugbear of any one who attempts to analyze accounts.

EFFECTIVE MAGAZINE ADVERTISING. 508 Essays, About 111 Advertisements. Edited, with an Introduction to the Science of Advertising Copy, by Francis Bellamy. New York: Mitchell Kennerley, 1909. Large 8vo.; 361 pages. Price, \$5.

A couple of years ago Everybody's Magazine offered a series of prizes, ten in number, of \$25 each, for the ten best essays in answer to the pertinent question, "Which is the most effective advertisement in this November issue of Everybody's Magazine?—and why?" The aim of this offer was to gain information which would be of value to the science of advertising in general, and to the art of magazine advertising copy in particular. The people who are influenced by advertising are the only criterions of effective copy. The mere subjective theory on the part of the copy-artificer is valueless, unless proved by the effect on the magazine reading public. In other words, the advertisements were "tried on the dog," and the "dog" responded in the 500 essays which are herewith presented, which were in turn selected out of some 950 essays. This book is a clarification of the advertising pages in the issue. The selected advertisements are well printed, and are accompanied by excellent essays written by individuals. It is remarkable to see what a hold advertising has on the American people, and it is little wonder that advertisers continue to spend their millions in periodical publicity when they can see that their efforts are appreciated by such a highly intelligent audience of readers and buyers. The book is a very novel one, and we can heartily commend it to all who are interested in any way in buying or selling advertising space.

HANDBUCH FÜR HEER UND FLOTTE. Enzyklopädie der Kriegswissenschaften und verwandter Gebiete. Herausgegeben von Georg von Alten, Generalleutnant z. D. Vollständig in 108 Lieferungen reichillustrierten Textes mit farbigen Beilagen, Karten, Plänen, Gefechtskizzen, etc. Deutsches Verlagshaus Bong & Co., 1909.

The last four installments of this handbook are primarily distinguished by the insertion of longer essays, which discuss the handling of troops. The essays are to be found under the headings *Angriff* (attack), *Angriff und Verteidigung* (attack and defense), and *Armbeereserve* (army reserve). The author of these essays is a military instructor of repute, and evidently an authority. Many authors of note have covered important topics. Count von Beck, an Austrian general of infantry, has prepared an excellent biography of Archduke Albrecht of Austria, and has interestingly traced the career of this officer. The stirring events of 1866 are tactfully and yet ably discussed. General von Verry du Vernois outlines the generalship of Alexander the Great. The articles on "Algeria," "Tunis," "Arabia," and "Argentine Republic" ably discuss the military geography and military history of these foreign countries. The importance of the age of men, animals, and warships in their relation to military science is well brought out. Among the novel articles that deserve mention are those on "Amsterdam," "Anchor," "Antwerp." Under "Armament" an excellent discussion of the army and of warships will be found.

THE LIFE OF A FOSSIL HUNTER. By Charles H. Sternberg. New York: Henry Holt & Co., 1909. 12mo.; 286 pages. Price, \$1.60 net.

This is one of the "American Nature Series." This is a new and attractive series, the first volumes of which have already been published. The author is the oldest and best known of the explorers in the palaeontological field, and he has contributed some of the finest specimens from Kansas, Texas, Oregon, and other places, which adorn the museums of America and

Europe. It is a most interesting biography, bubbling full of adventure and representing a life of self-sacrifice worthy of record and recognition by all lovers of nature. It is handsomely bound and printed.

THE BIOGRAPHY OF A SILVER FOX. By Ernest Thompson Seton. With 100 illustrations by the author. New York: The Century Company, 1909.

Although Mr. Thompson Seton has been branded by a faunal naturalist now in foreign parts as a "nature fakir," it cannot be denied that he writes with sincerity and with charm. This little story of "the monogamy of the better class fox," to quote the author's words, may be regarded as a graceful narrative of animal life, the kind of narrative that has made Mr. Seton deservedly famous.

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INDEX OF INVENTIONS

For which Letters Patent of the United States were Issued for the Week Ending June 29, 1909,

AND EACH BEARING THAT DATE [See note at end of list about copies of these patents.]

Table listing inventions and their patent numbers, including items like Abrasive materials, flexible support for, C. B. Wattles (926,524); Acetylene generator, J. H. Ross (926,610); Adding and listing machine, L. S. Cranall (926,319); Adding and subtracting machine, Brown & Burks (926,169); Adding machine, J. C. Vincent (926,151); Advertising device, automobile, Heales & Neall (926,180); Advertising device for paints, calcimines, etc., H. W. Pearson (926,436); Aerodrome, H. A. Orme (926,593); Aim recording apparatus, J. E. Bolitho (926,124); Air compressor, Lampman & Kittelberger (926,705); Air inlet, fresh, Levy & Young (926,419); Animal trap, T. H. Huggins (926,419); Apparel hanger, F. N. Kershaw (926,337); Ash pan and burner, combined, J. F. Williams (926,531); Automobile top, folding or collapsible, H. M. Hoelscher (926,118); Automobile turn table, W. T. Coleman (926,388); Awning socket, J. Kennedy (926,190); Axles, spring buckle for securing springs to, P. Daimler (926,176); Barometric condenser, E. G. Helander (926,486); Barrel, W. W. Lytle (926,502); Barrel, D. Hughes (926,568); Barrel, Thomas & Piegrian (926,623); Barrel, double-walled, A. H. Handlan, Jr. (926,324); Barrel hooping machine, J. Henry (926,187); Battery, See Storage battery; Battery plate, bifunctional storage, A. O. Tate (926,710); Battery plates, making, G. J. Miller (926,278); Bearing, ball, K. Schmidt (926,294); Bed and mattress therefor, convertible, L. B. Jeffcott (926,421); Bed, folding, L. B. Jeffcott (926,420); Bed, folding, J. Ranko (926,438); Bed pan, J. M. Crater (926,103); Belt ringer, A. O. Van Dervort (926,444); Belt fastener, F. O. Stenzel (926,616); Billiard tables, construction and mounting of, Terrey & Warren (926,516); Bin, See Grain bin; Block mold, J. D. Barber (926,231); Block signal for trolley systems, automatic, P. N. Peck (926,437); Boat, sheet metal, G. H. Hyde (926,252); Boats, means for automatically releasing ships, R. Archibald (926,453); Boll weevil trap, J. M. & P. J. Coco (926,244); Bolt cutter, T. A. Hall (926,559); Boots and shoes, eyelet for, J. F. Chalk (926,317); Bottle capping machine, G. Kirkegaard (926,425); Bottle, filling and capping machine, G. Kirkegaard (926,424); Bottle holder, E. C. D. Legg (926,339); Bottle, non-refillable, T. W. Leonard (926,580); Bottle or receptacle, collapsible, L. P. Brown (926,237); Bottle stopper, E. Goldstein (926,403); Bottle, etc., stoppering device, Jones & Braun (926,571); Bottle support and stopper puller, M. A. Gould (926,111); Bottling device, F. W. Daeoe (926,550); Box, J. Cochran (926,640); Box or carton, C. C. Palmer (926,208); Boxes, machine for applying fastening devices to, C. O. Mason (926,670); Bracelet, expansible, J. Bagnall (926,089); Braiding machines, movable racer of, W. N. Edwards (926,106); Brake apparatus, limit stop, A. Sundh (926,620); Brake beam, E. I. Dadds (926,395); Brake head, S. J. Strid (926,299); Brake mechanism, A. Larsen (926,578); Brake mechanism, G. E. Titcomb (926,625); Brush, bath and complexion, W. R. Blowers (926,462); Bucket, turbine, C. H. Smoot (926,442); Buckle, C. O. Anderson (926,634); Buggy top support, W. C. Putman (926,604); Bulkhead doors, mechanism for operating water tight, H. M. Gleason (926,111); Buoy, acetylene gas, R. M. Dixon (926,475); Button, O. F. Talley (926,515); Button link or fastener, E. B. Bayliss (926,393); Cabinet card, G. B. Melaney (926,204); Cable squeezer, H. D. Robinson (926,509); Cameras, magazine plate holder for photographic, R. J. & J. A. London (926,662); Camp chair, portable, W. J. Curry (926,472); Camp, portable, G. R. Starnes (926,683)