

Notes & 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 This is for our information and not for publication.

(8363) E. E. P. asks: Please inform me in what way will copper wire submerged in a bath of mercury be affected by the latter, particularly whether it will be dissolved.

(8364) H. E. H. asks: Metal roofed dwellings are so common here as to be almost the rule for all except the more pretentious ones. I have never known of one being struck by lightning, and have considered them practically immune from damage by lightning stroke.

(8365) F. S. asks: Can you inform me in your Notes and Queries column of an insulating composition something like marble, hard, but not brittle, that can be molded, pressed or cast to shape in weights under one-half ounce, to take the place of fiber?

(8366) E. E. W. asks: I wish to find out the cost per hour of a 25 candle power light burning kerosene, also the cost, practicality and endurance of a lamp burning acetylene gas per hour in carbide at 25 candle power.

or oxygen. If mixed with air it is very explosive. The light of acetylene is very much more concentrated and hence brighter than that of kerosene.

TO INVENTORS.

An experience of over fifty years, and the preparation of more than one hundred thousand applications for patents, at home and abroad, enable us to understand the laws and practice on both continents, and to possess unequalled facilities for procuring patents everywhere.

INDEX OF INVENTIONS

For which Letters Patent of the United States were Issued for the Week Ending September 10, 1901,

AND EACH BEARING THAT DATE.

[See note at end of list about copies of these patents.]

Table listing inventions with names and patent numbers. Includes entries like 'Abdominal supporter, F. Portugal-Hirschberg', 'Automobile Engine for Business', 'High Class Hydro Carbon Motors', 'Gas Engine IGNITER', 'The Waterbury Emery Grinder', 'The Mietz & Weiss Kerosene and Gas Engine', 'The "Wolverine" Three Cylinder Gasoline Marine Engine', 'SAVE YOUR FUEL', and 'New Microscope for Nature Study'.

"Star" Foot and Power Screw Cutting Lathes. FOR FINE, ACCURATE WORK. SENECA FALLS MFG. CO. 695 Water Street, Seneca Falls, N. Y., U. S. A.

ENGINE & FOOT LATHES. MACHINE SHOP OUTFITS. TOOLS AND SUPPLIES. SEBASTIAN LATHÉ CO. CINCINNATI, O.

B. F. BARNES ELEVEN-INCH SCREW CUTTING LATHE. For foot or power as wanted. Has power cross feed and compound rest. A strictly high grade, modern tool. Ask us for printed matter. B. F. BARNES COMPANY, Rockford, Ill.

Automobile Engine for Business. After careful testing we offer to the public, with confidence, the B. & M. Compound Engine. Dimensions of Cylinder are 2 3/4 and 5 in. x 4 in. stroke. Height of Engine 21 in. Base 8x12 in. Weight, Engine, 35 lbs. 3 crank shaft bearings. All working bearings of bronze. Piston rods of machinery steel. Air and boiler pumps connected from cross head. Plain side valves. We also build running gears and make parts. SHAEFFER, BUNCE & MARVIN, Lockport, N. Y.

High Class Hydro Carbon Motors. whose production is the result of science, skill, patience, time and money, are manufactured in two sizes, 4 and 5 h. p. and are of the balance type with opposite end air-cooled cylinders. For light and medium weight runabouts and are thoroughly tested. Will start at any time, it makes no difference how cold or warm the weather is. Air and water cooled cylinder. Interchangeable in half hour. Bearings made of best Phosphor Bronze. Length 28 ins. BRENNAN MFG. CO., Syracuse, N. Y., U. S. A.

Gas Engine IGNITER. Complete with spark coil, \$12.00. The Best Thing on the market. Latest and most improved model. Send for Circular. Carlisle & Finch Co., 233 E. Clifton Av., Cincinnati, O.

THE WATERBURY Emery Grinder, with adjustable table, for flat surface grinding and finishing, and for ordinary tool grinding. BLAKE & JOHNSON, P. O. BOX 7, WATERBURY, CONN.

OREST 3, 5, 7 H. P. MOTORS. Sparking Plugs and Coils. CREST MFG. CO., Cambridge, Mass.

THE MIETZ & WEISS KEROSENE and GAS Engine. burns KEROSENE cheaper and safer than gasoline. Automatic, simple, reliable. No electric battery or fuse used. Perfect regulation. Belted or directly coupled to dynamo for electric lighting, charging storage batteries, pumping and all power purposes. A. MIETZ, 128-128 Motte St., New York. Markt & Co., L. F. on, Hamourg, Paris

The "Wolverine" Three Cylinder Gasoline Marine Engine. The only racing and self-starting gasoline engine on the market. Lightest engine for the power built. Practically no vibration. Absolutely safe. Single, double and triple marine and stationary motors from 3/4 to 30 H. P. WOLVERINE MOTOR WORKS, Grand Rapids, Mich.

A Marvelous Machine! Watch the wonderful work done by our Apex Nipple and Pipe Mill Machine. Threads nipples of all sizes. So swiftd that it can be reversed and pipe cut off close to grippers. Vise can be opened or closed while machine is in motion. Send for Catalogue. THE MERRELL MFG. CO., 501 Curtiss Street, Toledo, Ohio.

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New Microscope for Nature Study and for use in the Examination of Ores, Metals, Woods, Fibre, etc. Queen Acme No. 6 in 1. Objective giving power of about 100 diameters, 1 set of 12 prepared slides of insect parts and other interesting specimens, all in case, \$16.00. Ask your nearest optician for it. QUEEN & CO., Inc. Optical and Scientific Instrument Works, 1010 Chestnut St., Philadelphia, Pa. Write for Circular. 59 Fifth Ave., New York.

Table listing various mechanical and electrical inventions with names and patent numbers. Includes entries like 'Corn etc., machine for cutting, F. Nach-tigal', 'Corner bracket, J. F. Hazen', 'Coupling joint, J. H. Glauber', 'Cradle, child's, P. F. Schroder', 'Cultivator, W. Roth', 'Cut-off for cisterns, automatic, W. E. O'Conner', 'Cyanids making, S. Zuckschwerdt', 'Demijohn frame, A. L. Wood', 'Dental engine, M. N. Callender', 'Diffusion apparatus, L. Hirt', 'Door, F. J. Cronin', 'Door, sliding, J. F. O'Brien, Jr.', 'Door track, sliding, A. J. Ricker', 'Drill, H. J. Kimman', 'Drill bit sharpener, W. Owens', 'Dust excluder, J. F. Martin', 'Dye and making same, blue, R. Bohn', 'Dye, blue disazo, W. Voigtlander-Tetzner', 'Dynamometer, transmitting, J. T. Fanning', 'Electric battery, W. Mills', 'Electric heater, J. P. Erie', 'Electric lighting by low frequency currents, W. C. Fish', 'Electric regulator, M. Moskowit', 'Electric switch, Gaffney & Tibbetts', 'Electric traction road, L. Dion', 'Electrical conduit bushing, Mauer & Billings', 'Electrical power transmission system, N. G. Warth', 'Electrical transformer, A. F. Berry', 'Electromagnet, Wurm & Baumann', 'Elevator, G. A. Wheeler', 'Embroidery hoop, J. H. Post', 'Emergency brake, J. L. Cushing', 'Engine, W. K. Riley', 'Engines, electric spark for gas, F. R. McMullin', 'Envelope fastener, C. W. Allen', 'Envelope or wrapper opener, W. S. Timmis', 'Etching, R. Widmann', 'Explosive engine, multiple cylinder, S. W. Zent', 'Fabric, C. A. O. Rosell', 'Farm gate, A. J. Arthur', 'Fastening, dress, E. B. Watson', 'Feed water purifier, Wohlgamuth & Williams', 'Fence machine, wire, C. Pace', 'Fence, picket, J. Lanz', 'Fertilizer distributor, J. Zbornik', 'File sharpening apparatus, A. H. Radell', 'Filter, J. F. Geisler', 'Finger ring expanding device, A. Lemmert', 'Finger ring mold forming device, L. Lehr', 'Fire doors or shutters, device for closing sliding, I. Besse', 'Fire kindlers, etc., machine for making, H. H. Klotter', 'Fire lighter, time, C. L. Hood', 'Fire pot, J. W. Gheen', 'Fireproof covering, M. Sullivan', 'Fireproof partition for buildings, S. E. Rabbitt', 'Fire resisting door, blind, etc., W. R. Kinneer', 'Fish plate, J. Swanson', 'Flat iron heater, C. A. Landgren', 'Flier, W. A. Wilson', 'Floor or sidewalk, R. Fleming', 'Flour, manufacture of, S. T. Green', 'Flush tank, F. Rhind', 'Foot rest, J. C. Garrett', 'Foot switch, D. P. Sims', 'Frequency indicator, Chesney & Lloyd', 'Funnel and strainer, measuring, G. Neudecker', 'Fur goods, manufacture of imitation Crimean or Persian, S. Lewin', 'Furnaces, device for introducing and distributing air to, A. Heberer', 'Game, H. C. Pigeon', 'Garment supporter, C. L. Van Doren', 'Garment supporter, R. Gorton', 'Gas, generating acetylene, H. S. Blackmore', 'Gas generating apparatus, acetylene, Feurt & Martin', 'Gas service pipes, automatic cut-off for, E. Raud', 'Gate, W. S. Witten', 'Gate, D. Bashere', 'Gearing, changeable speed, J. E. Sweet', 'Gearing, variable speed, W. P. Shattuck', 'Gelatin, machine for packing explosive, J. C. Schrader', 'Glass articles, machine for fire finishing, Owens & Wilson', 'Glass bending apparatus, H. J. Sage', 'Glass mold, blown, E. J. Lutwyche', 'Glass tank furnace, L. L. Mount', 'Globe tester, H. Etheridge', 'Gold washer and amalgamator for placer mining, combined, W. L. Harraman et al.', 'Grain drill seed tube, J. W. Peindexter', 'Grain or seed screen, adjustable, Schill & Heintz', 'Grinding, crushing, or feeding apparatus, D. L. Adelsperger', 'Grinding or crushing mill, D. L. Adelsperger', 'Gun, machine, G. Perine', 'Hair retainer, W. S. Bechtold', 'Hammer, fluid pressure, W. Payton', 'Handle. See Brush handle.', 'Hank, W. Wood', 'Harp or zither, box, J. P. White', 'Harrow and roller, combined, J. A. Altenbaugh', 'Hasp lock, I. C. Drake', 'Hay gathering and handling machine, M. Beck', 'Hay rake, D. Lutz', 'Hay rake and cocker, C. E. Paulson', 'Heat indicator, Lemmon & Cope', 'Hides or skins, removing hair, wool, fur, etc., from, H. R. Riches', 'Hoof shield, A. E. Wheatcroft', 'Horse detector, E. V. Velasco', 'Horseshoe, O. Swanstrom', 'Horseshoe calk attachment, S. P. Smith', 'Horseshoe calk fastening device, E. Hammesfahr', 'Hose coupling, C. A. Tripp', 'Hose machine, J. S. H. Lovett', 'Ice cream molding machine, G. W. Cuscaden et al.', 'Incandescent burner, J. J. Byrnes', 'Incandescent lighting, manufacturing, in can- ducing media for, R. A. Nielsen', 'Index and reference indicator, combined, W. R. Rathvon', 'Insulation of electric conductors, device for indicating leaks in, I. Kitzee', 'Internal combustion engine, F. Reichenbach', 'Jar cover and clamp, J. W. Everhart', 'Lamp regulating device, electric arc, P. Kassbauer', 'Lard cooling and mixing machine, W. Sukalle', 'Latch pivots into latch needles, machine for inserting, Currier & Dodge', 'Lathe, G. L. & A. H. Fairbanks', 'Lawn or garden sprinkler, graduated, T. J. Greer', 'Leather, making ornamented, P. Martens', 'Ledge, A. E. Partridge', 'Leg fastener, P. H. Dunn', 'Lock, C. T. Thomas', 'Locket, concealed hinge, J. Forsheim', 'Locomotive boiler, C. Vanderbilt', 'Loom, E. H. Ryon', 'Loom, filling replenishing, J. Northrop', 'Loom for weaving tufted fabrics, C. Hughes', 'Loom shuttle filling carrier, G. O. Draper', 'Loom stop motion, H. Wyman', 'Loom weft fork clearer, B. Janelle', 'Mail bag, L. M. Kelley', 'Marking the ears of animals, device for, J. Hinz', 'Match machine, W. H. Park', 'Meats, curing, L. M. Schlarb', 'Medicated fabric, C. A. O. Rosell', 'Mercerizing short staple cotton, Reichmann & Lagerqvist', 'Meter, J. S. Warde', ' (Continued on page 190)