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Notes & Queries

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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 This is for our information and not for publication.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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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.

(6879) C. L. says: Can you give me the formula and method of preparation of the so-called fire extinguishers in powder form? If not, can you advise materials to experiment with? A. 1. Fire Extinguishing Powder.—Eight parts common salt, 6 parts sodium bicarbonate, 2 parts Glauber's salt, 2 parts calcium chloride, 2 parts sodium silicate. 2. Common salt, 60 per cent; sal ammoniac, 60 per cent; sodium bicarbonate, 80 per cent. 3. Sal ammoniac, 100 per cent; sodium sulphate, 60 per cent; sodium bicarbonate, 40 per cent.

(6880) A. B. C. writes: 1. I have built a dynamo on linesone-half size of 8 light dynamo, using No. 14 wire on field and 19 on the armature. The machine works nicely and will quickly melt a piece of fine iron wire, but when connected to an ordinary Edison lamp it will not even make a spark. The lamp is one used on alternating circuit. Can you tell me what is the cause of failure? A. The voltage of the lamp is probably too high. Try a lamp whose voltage is adapted to your machine—say twenty volts or perhaps even less. 2. How much wire and of what size would be required to make an induction coil to give a ¼ inch spark? A. In our SUPPLEMENT we describe a coil which will at its best give a larger spark than the one you specify. One of about three-quarters the lineal dimensions of this one should answer your purposes.

(6881) J. R. T. asks: What number of heat units are given off by the combustion of one pound of ordinary kerosene oil when burned by a wick, as in an ordinary kerosene stove? What number of heat units are given off if the pound of kerosene is converted into a gas and burned as in an ordinary gas jet? And what number are given off if the gas, instead of being burned in an ordinary gas jet, be mixed with the necessary quantity of air and burned as in an ordinary Bunsen burner? A. The same quantity of heat is produced irrespective of conditions of burning, provided perfect combustion is produced. Allow 27,000 heat units per pound. The units will vary for different oils.

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Wagon, folding, V. Krotzinger 561,796
Wagon, self measuring oil, A. Bowser 561,650
Watchcase pendants, mechanism for making, Mink & Moore 561,942
Water purifying compound, J. B. Greer 561,884
Weaving, means for, R. Simon 561,622
Weigher and sacker, grain, J. M. Welbourn 561,742
Welding apparatus, C. L. Rowland 561,614
Wheel. See Chime wheel. Vehicle wheel.
Whist, apparatus for playing duplicate, L. W. Heath 561,786
Windmill, Peterson & Curtis 561,914
Window cleaning chair, H. G. Wilmerling 561,844
Window or skylight operator, J. Woodall 561,848
Wire stretcher, W. C. Hudson 561,991
Wrapping machine, newspaper, L. C. Crowell 561,567
Wrench. See Pipe wrench.
Wrench, J. Shafer 561,823

DESIGNS.

Bicycle bag, L. Dennies 25,618
Bicycle package carrier frame, T. Hoermann 25,619
Bicycle saddle, M. M. Garrison 25,620
Bottle opener frame, J. T. Burt 25,608
Bridle bolder, S. Donahey 25,613
Button hook, J. L. Sommer 25,602
Cane head, J. T. Morris 25,604
Carpet, F. M. Parker 25,630
Carpet, N. S. Stewart ..... 25,627 to 25,629
Cartridge shell, J. Gardner 25,611
Cork extractor frame, M. Redlinger 25,607
Eyeglass hook, S. J. Clulee 25,603
Fence fastener, J. Harris 25,614, 25,615
Game board, P. Rafalovitz 25,624
Hammock, I. E. Palmer 25,625
Horse bed or mattress, W. H. Burt 25,626
Jar, A. Gaskill 25,617
Lamp globe, arc, C. L. Danforth 25,616
Match, J. T. Commoss 25,612
Paper knife, H. C. Kirk, Jr. 25,605
Pencil, lead, A. Kaiser 25,606
Pocketbook, etc., P. O. Dickinson 25,600, 25,601
Pump chamber casing, C. C. Worthington 25,621
Rule or measuring stick, J. Davis 25,609
Tobacco case, S. H. Arrell 25,610
Valve pot, C. C. Worthington 25,622
Washing machine casing, C. Dietz 25,623

TRADE MARKS.

Beer, lager G. Ehret 28,360
Bicycles, C. S. Faulkner 28,373
Bicycles, tools and appliances for mending, F. C. Durant 28,372
Bottle washing machine, Hoyt Brothers & Company 28,375
Buttons and buttons manufactured from native shells, pearl, Boepple Button Company 28,355
Cement, imported, C. Zunz 28,363, 28,364
Copper, bronze, aluminum and other metals, and phonographs, typesetters and typewriters, Maguire & Baucus 28,368
Cutlery, table, bread, and butcher knives, table, American Cutlery Company 28,369
Fertilizing compositions or compounds, R. W. L. Rasin 28,367
Guano, phosphate, manure and similar compounds, R. W. L. Rasin 28,366
Guano, pbosphates, superphosphates and similar compounds, P. P. Dunan 28,365
Jewelry and silverware, Stone Sterling Silver Company 28,350
Lamps, bicycle, Adams & Westlake Company 28,371
Lamps, incandescent electric, C. G. Perkins 28,370
Medicated shoe pads, Antiswetsol Company 28,354
Metal polish, firm of S. Herz 28,351
Neckwear, J. Prenowitz 28,353
Oils, illuminating, Freedom Oil Works Company 28,361, 28,362
Ointments, J. Hughes 28,356
Remedy for diseases of the blood, liver, stomach and kidneys, H. Van Allen 28,357
Tobacco and cigars, Pendas & Alvarez 28,358, 28,359
Umbrellas and parasols, Hirsh & Brotber 28,352
Washing machines other than wringers, hand power, Boss Washing Machine Company 28,374
Watchcases, Bates & Bacon 28,349

LABELS.

"Chicago Yeast Powder," Chapman & Smith Company 6,546

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