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 This is for our information and not for publication.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 adver-tised in our columns will be furnished with addresses of houses manufacturing or carrying the same

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.

scriptions of steamers, warships, etc., I am

always confused as to the exact meaning of the

(9888) R. E. A. says: In reading de-

his turn.

### 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. 7848.—Wanted, address of a manufacturer of silk-covered head tacks, also glass bead tacks.

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

Inquiry No. 7849.—For manufacturers of a tool or machine that will engrave on celluloid or ivory. "U.S." Metal Polish. Indianapolis. Samples free. Inquiry No. 7850.-For manufacturers of air compressors and granite-cutting machinery.

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

Inquiry No. 7851.—For manufacturers of machinery for making buttons from shells; also for decalcomanie or transfer illustrations.

WANTED.-Purchaser for Monazite. Molybdenite and Wolfram. Apply Monasite. Box 773, New York.

Inquiry No. 7852.—Wanted, information concerning the Braum-Viga calculating machine.

1 sell patents. To buy, or having one to sell, write Chas. A. Scott, 719 Mutual Life Building, Buffalo. N. Y. Inquiry No. 7853.—Wanted, information on price of aiuminum paper, also makers and sellers of 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. 7854.—For manufacturers of moulds and machinery for making cement shingles and roof tiling, also the address of manufacturers making power and hand power concrete mixers of different designs.

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

Inquiry No. 7855.—For manufacturers of papier wache.

WANTED, -To secure a party to manufacture a patent Ratchet Drdl. Address Drill, Box 773, New York.

Inquiry No. 7856.—For manufacturers of hand power spoon-making machine (from a sheet of brass).

Bates & Peard furnace for bright annealing all nonferrous metals. Without oxidation. No pickling or cleaning required. C. M. Dally. Agent, 29 Broadway.

Inquiry No. 7857.—For manufacturers of a machine converting peat into fuel.

I have for sale the U.S. and all foreign rights of new patent Improvements in Water Tube Types of Boilers. Great economizer. J. M. Colman, Everett. Wash.

Inquiry No. 7858.—Wanted, information on shipplumbing, also manufacturers.

Well gotten up typewritten letters will increase you

Typewritten Letter Co., St. Louis

Inquiry No. 7859.—For manufacturers of small cast gears, also of moving picture slot machines.

Inquiry No. 7860.—For manufacturers of Lane's slow-speed rotary quartz crusher.

Inquiry No. 7861.—For manufacturers of nib-making machines, also machine for making the pin. Inquiry No. 7862.—For manufacturers of a machine for making bricks out of sand and lime.

Inquiry No. 7863.-For manufacturers of wire.

Inquiry No. 7864.—For manufacturers of Buckey tile ditchers.

Inquiry No. 7865.—For manufacturers of machines for renovating butter.

Inquiry No. 7866.—For manufacturers of machinery for making and nailing wooden boxes.

Inquiry No. 7867.-For manufacturers of veneering machinery.

Inquiry No. 7868.—For manufacturers of light metal wheels, such as are used in the construction of

Inquiry No. 7869.—For parties making mounted prings that would be able to coil up 50 feet of No. 14

Inquiry No. 7870.—For manufacturers of a three horse evener without a whiffletree; also manufacturers of pen holders with spring inside where pen is inserted. Inquiry No. 7871.—For manufacturers of razor-grinding machines.

Inquiry No. 7872.—Wanted, address of Zuchanas Mower Grinder Co.

Inquiry No. 7873.—Wanted, brass or copper tack % inch long, with long, oval head, narrow or one with head flat, round, % inch diameter, 1-16 inch thick on % inch wire or cut.

Inquiry No. 7874. -- For manufacturers of the Tornado stalk cutter.

Inquiry No. 7875.—For manufacturers of lathes or machines which will turn out any shape of briar tobacco pipes.

Inquiry No. 7876.-Wanted, the name and address of the manufacturers of the Babcock milk tester. Inquiry No. 7877.—For makers of cheap electric pocket lamps, and small electric novelties.

Inquiry No. 7878.—Wanted, a machine, patented by Mr. Christian Rotts, for cracking off lamp chimneys and tubular grassware.

Inquiry No. 7879.—Wanted, a water still, of capacity of 100 gallons dayly.

Inquiry No. 7880.-For manufacturers of blow

Inquiry No. 7881.—For makers of vulcanizers, rubber stamps, and supplies for same.

Inquiry No. 7882.-Wanted, Bowe's quick-opening hose couplings.

Inquiry No. 7883.—For makers of bottling machines; also for information regarding the manufacture and bottling of carbonated drinks.

Inquiry No. 7884.—For makers of saw machines, or saw mills for squaring small timbers, from 1 inch up to 8 inches.

Inquiry No. 7885.-For makers of luminous paint.

Inquiry No. 7886.—For makers of small castings cast in metal woulds, to exact size.

Inquiry No. 7887.—For makers of sewing machine needle-threaders, having a flange on both sides. Inquiry No. 7888.--For manufacturers of gas-making machinery, for illuminating purposes.

Inquiry No. 7889.—Wanted, addresses and cataloxues of companies manufacturing small dynamos.

Inquiry No. 7890.—For manufacturers (in Canada) to undertake the manufacture of a candy holder. Inquiry No. 7891.—For makers of brass trimmings for gosoline launches, etc.

Inquiry No. 7892.—Wanted, makers of leaded glass windows and doors.



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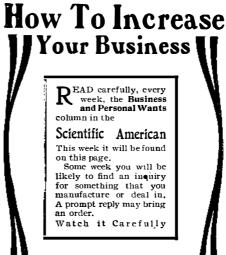




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There is no reason why you cannot own as good a boat as the best boat factory can produce if you will use your leisure time to advantage and build it yourself. The fact that anyone using the Brooks System. no matter how inexperienced he is in the use of tools, can build his own boat at the cost of a little lumber and a few nails, has brought boats within the reach of all. All the boats built last year, by all the boat factories in the United States, combined in one fleet, would not equal the number of boats built during the same time by novices using the Brooks System. Cur catalog gives pages of testimonials with photographs of the boats built by amateurs using the Brooks System.

The Brooks System consists of exact size printed paper patterns of every piece that goes into the boat, a complete set of halftone illustrations showing an actual picture of each step of the work properly done, detailed instructions to build, covering the entire construction of the boat and an itemized bill of all material required and how to

of the boat and an itemized bill of all material required and how to

of the boat aud an itemized bill of all material required and how to secure it.

We tell you how to lay the pattern of each particular part on the proper piece of material and exactly how to cut—you cut. We then tell you how to fasten each part in its right pluce—what kind of a nail to use—how to drive it—you crive it.

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Many professional men are taking up the Brooks System for mental relaxation—for the pleasure of working with their hands and for exercise.

We have started hundreds in the boat building business. One man built sixteen boats from one set of patterns last season. Another built ten. The materials cost very little. We furnished the design, they did the work and sold the boats at a big profit.

You need buy nothing from us but the patterns. We have them of all kinds and sizes, from small Row-boats and Canoes to Sea-going Yachts. We have over fifty styles and sizes of boats and boat patterns, each one perfect in design for its purpose. Our catalog illustrates the product of the best staff of designers in the

Over ten thousand amateurs throughout the world successfully built boats by the **Brooks System** in 1905.

When so ordered, Patterns are Expressed, Charges Prepaid, C. O. D., Allowing

#### KNOCK DOWN BOATS

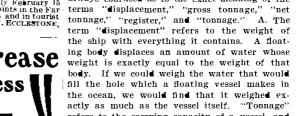
complete from keel to cushions and fittings. We send you a complete Knocked Down Boat, even to the paint, at a cost of very little more than the cost of the raw material.

Catalog with full particulars free. For 25c. large catalog showing several workingillustrations taken from the instructions of each boat and a full set for one boat; also valuable information for the amateur yachtsman; rules for sailing, steering, passing, fog and engine signals, etc.

### BROOKS BOAT MFG. CO.

Originators of the Pattern System of Boat Building 402 Ship Street Bay City, Mich., U.S. A.

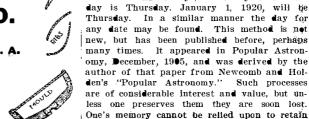




refers to the carrying capacity of a vessel, and this is determined by measuring the internal capacity of the ship; that is to say, the whole space within the hull and deck houses. This amount in cubic feet divided by 40 gives the gross tonnage. If we subtract from that the space which is given up to engines, cabins, etc., we have the net tonnage, or the tonnage that

can be given over to a cargo. The registered tonnage is the official tonnage as registered at the Custom House.

(9889) F. O. asks: 1. I am desirous of obtaining a formula for making a cement that will make wood firmly adhere to glass. A. Take 2 ounces of a thick solution of glue, and mix with 1 ounce of linseed oil varnish, or ¾ ounce of Venice turpentine. Boil together, agitating until the mixture becomes as inti-mate as possible. The pieces cemented should be clamped together for a space of forty-eight to sixty hours. 2. Please give a simple rule, if there be one, that I can tell what day of the week a date is on prior to our present year. A. To find the day of the week any event in the recent past occurred, we must consider that each common year begins and ends on the same day. 1905 began and ended on Sunday, 1906 begins and ends on Monday. A leap year ends one day later in the week than it begins. The days of the week therefore fall backward as we go back in the years one for all years and one more for every leap year. Find the number of years elapsed since the date we wish to find. Find also the number of leap years, by dividing the number of years by four, and reducing this number by one if the date is in the last century, since 1900 was not a leap year, and by two if the date is in the eighteenth century, since 1800 was not a leap year. The sum of the leap and common years will be the number of days of the week by which the day of the week has been moved backward. Divide this by 7 to find how many whole weeks this gives and what remainder there is. Now count the days of the week backward as many as the remainder after dividing by 7, and you will have the day of the week required. Thus, on what day was the Declaration of Independence made July 4, 1776? July 4, 1906, is Wednesday. Since 1776, 130 years have passed; 32 of these would have been leap years; but we subtract 2, for 1800 and 1900, which leaves 30 leap years. The day of the week has moved back one day for each of the 130 years and another day for each of the 30 leap years, or 160 days in all. This equals 22 weeks and 6 days, and 6 days back from Wednesday is Thursday, which was July 4, 1776. New Style was introduced in England in 1752; the 3d of September was called the 14th. This is the first day of New Style, and the day before was September 2, 1752, the last day of Old Style. The rule given above applies to all dates later than September 14, 1752, which day was Thursday. For dates in the future the same rule may be



 $followe \textbf{d}, \ excepting \ that \ we \ must \ count$ 

uary 1, 1906, occurs on Monday.

ward in the week instead of backward. Thus, on what day does January 1, 1920, fall? Jan-

years intervene, three of which are leap years.

This sets the day of the week forward 17 days,

or 2 weeks and 3 days, and 3 days from Mon-