RECENTLY PATENTED INVENTIONS Hardware.

BRACE.—A. S. E. METCALF, Driscoll, N. D. In this patent the invention relates particularly to improvements in a combined brace, chuck, and wrench, the object of the inventor being the provision of a device of this character having a wide range of adjustments for holding bits and drills and for removing nuts of various sizes.

Miscellaneous.

MEANS FOR CONSTRUCTING CISTERNS OR THE LIKE .- W. SKINNER and C. LIND-SEY, Wellington, Kan. Though applicable to the building or erection of various structures of masonry, the improvements are intended more especially for use in the construction of cisterns, sewers, caves, and the like; and the principal object is to provide means for this purpose which are both effective and reliable in use or operation besides being quickly applied and removed and also possessing capacity for long and repeated service.

BOTTLE-STOPPER.-A. BUCKMAN, Brookview, N. Y. Though applicable to nearly all forms of bottles employing a cork or similar stopper, the improvements are intended more especially for use in connection with beer and similar bottles, as well as medicine-bottles and the like. One of the principal objects is to provide a cork or stopper with means permanently applied thereto by which the stopper may be readily extracted from the mouth of the bottle without the use or aid of a corkscrew.

TIME HAND-STAMP.-W. F. BARTHOLO MEW, New York, N. Y. This inventor's object is to provide a stamp arranged with interchangeable dates, a fixed time dial-stamp, and a movable pointer-stamp, together with a face-indicating device to permit of quickly and correctly setting the pointer-stamp to allow of correctly stamping the date and time on letters, receipts, sale slips and other matter.

SUSPENDING ATTACHMENT FOR GAME BAGS, ETC .- G. F. CLARKE, Toronto, Canada. The purpose in Mr. Clarke's invention is to provide an attachment for suspending a game or other bag from the shoulders and body of a person so as to support the receptacle upright and hugged closely to the body in a perfectly secure manner, leave one shoulder and both arms free, and prevent displacement of the bag when the wearer assumes a leaning, kneeling, stooping, or crouching position, or when walking, or bicycling. The improvement is applicable to haversacks, school bags, and cartridge bags.

DEVICE FOR USE IN SHARPENING PENCILS.—W. S. Doe, Jersey City, N. J. In this instance the object is to provide a device for use in sharpening pencils and the like which is simple and durable in construction, not liable to get out of order, and arranged to permit the use of an ordinary knife to cut down the wood and core of the pencil to give a fine regular finish to the sharpened end.

WATER-TANK.—J. T. DONAHOO, Edgar, Neb. The improved tank in the present case is so constructed as to resist great pressure from without or within, and while it is adapted for general use it is particularly designed by the inventor for employment in connection with an air forcing and pressure apparatus.

BRACKET .- J. GARDNER, Lismore, South Wales, Australia. The invention is an improvement in locking angle-brackets for use on writing desks in schools, warehouses, etc.; also for shelves for displaying goods at any angle, for steps, trestles, folding wheelbarrow-legs, stools, and other locations wherein an adjustable bracket is desired.

JAR-CLOSURE .-- O. N. HOFFMAN, St. Johnsville, N. Y. This invention refers to closures for fruit-jars or other similar packing-receptacles, and has for its object to provide details of construction for a closure which are very simple, easy to apply and release, and that will effect a reliable air-tight fastening of a fruit or, other jar after filling the same and dispense with the use of tools to close or open the jar.

FOLDABLE STOOL.-W. B. S. HUSSA, relates to improvements in foldable stools; and be used without much heat. his object is to provide a construction in which all of the parts may be packed in a hollow member which in the assembled condition of said parts forms an essential part of the stool structure, whereby the article may be easily carried in the hand or pocket.

WOOD-HOLDER .- J. E. WALLIN, Tacoma, Wash. The object of the invention is to pro vide a novel portable device for holding a billet of wood in an upright position to enable the cutting of shavings therefrom to use as kindling material in the starting of fire to ignite larger wood in a stove or range.

Designs.

DESIGN FOR A GLOVE .- F. SCHMIDT, New York, N. Y. This ornamental design for a glove comprises a double U-shaped herringbone stitching of three rows on the back of the glove. The open end of the design ex tends to the knuckles and the lower end about on a line with the base of the thumb.

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.

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. 5049.—For makers of castings for a mall steam engine, for driving a small generator of 10

"U. S." Metal Polish. Indianapolis. Samples free.

Inquiry No. 5050.-For manufacturers of supplies for making rubber stamps.

AUTOS.-Duryea Power Co., Reading, Pa.

Inquiry No. 5051.—For manufacturers of very ight motors.

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

Inquiry No. 5052. For the address of the manufacturers of the Universal American accordion pleating machine.

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

Inquiry No. 5053.—For dealers in second-handingine lathes. Sawmill machinery and outfits manufactured by the

Lane Mfg. Co., Box 13, Montpelier, Vt. Inquiry No. 5054. - For the address of the manufacturers of the Spencer automatic damper regulator.

Hamburger, Equitable Building, Berlin, Germany.

Inquiry No. 50.55. - For manufacturers of machinery used in cider-making plants.

Edmonds-Metzel Mfg. Co., Chicago, Contract manufacturers of hardware specialties, dies, stampings, etc. Inquiry No. 5056.—For machinery for extracting fiber from flax straw.

Inventions developed and perfected. Designing and machine work. Garvin Machine Co., 149 Varick, cor.

Spring Sts., N. Y. Inquiry No. 5057.—For manufacturers of a complete apparatus and machinery for making concentrated acetic acid.

FOR SALE,-Patent on finest spike and bolt puller in existence. No. 714,107. For particulars write W. L.

Harris, Central City, W. Va

Inquiry No. 5058.—For parties to manufacture a registering face for a water meter.

Empire Brass Works, 106 E. 129th Street, New York. N. V., have exceptional facilities formanufacuring any article requiring machine shop and plating room.

Inquiry No. 5059.—For manufacturers of gasoline lamps. The largest manufacturer in the worldof merry-go-

rounds, shooting galleries and hand organs. For prices pressure of a gas held at a constant volume and terms write to C. W. Parker, Abilene, Kan. Inquiry No. 5060.—For manufacturers of large earthen vats.

The celebrated "Hornsby-Akroyd" Patent Safety Oil metal, such as platinum or nickel, while exposed Engine is built by the De La Vergne Refrigerating Mator of high temperature; others employ the chine Company. Foot of East 138th Street, New York.

Inquiry No. 5061.—For makers of all kinds of slot machines.

FOR SALE.—SCIENTIFIC AMERICAN, twenty volumes from 1872 to 1881, two volumes to a year, in perfect condition. Make us an offer. David Kahnweiler's Sons,

Inquiry No. 5062.—For makers of flat steel or phosphor bronze springs, similar to clock springs, of special dimensions.

437 Pearl Street, New York.

Manufacturers of patent articles, dies, metal stamping, screw machine work, hardware specialties, machinery and toois. Quadriga Manufacturing Company, 18 South Canal Street, Chicago.

Inquiry No. 5063.—For makers of Mrs. Teller's cooking knife and of hardware specialties for the mail order trade.

Wanted-Revolutionary Documents, Autograph Letters, Journals, Prints, Washington Portraits, Early American Illustrated Magazines, Early Patents signed by Presidents of the United States. Valentine's Manuals of the early 40's. Correspondence solicited. Address C. A. M., Box 773, New York.

Inquiry No. 5064.—For manufacturers of or dealers in diamond drilling machines, also for parties doing

SOUTH AMERICAN AGENCY WANTED. - Reliable warty resident in South America desires to represent or act as selling agent for manufacturing or export firms. Address A. M.,

122 Front Street, New York. Inquiry No. 5065.-For manufacturers of steel

The Imperial and Royal Austro-Hungarian Embassy has received a new supply of the publication referring to the international competition for prizes offered by the Austrian Government for plans for best boat-raising works in the construction of the Donau-Oder Canal. Parties interested in the mentioned competition can obtain a copy of said booklet at the Embassy's office 1304 Eighteenth Street,

Washington, D. C. Inquiry No. 5066.—For makers of machinery for making paper pulp from wood, also for dealers in pulp. Wanted-A waterproof cement for use on fabric and West Hoboken, N. J. Mr. Hussa's invention leather, which will be strong, will set readily, and can

> Address A. C., Box 773, N. Y. Inquiry No. 5067.—For a large hydraulic press capable of pressing 500 pounds to the inch of the plater; size of platen 5 x 3 feet, 6 feet preferred; also power pump for same; for makers and second-hand dealers in such dealers in such.

> Inquiry No. 5068.—For addresses of manufacturers of goods of all kinds.
> Inquiry No. 5069.—For makers of electrical vibration apparatus for massage, etc.

Inquiry No. 5070.—For tin cans of from 1/8 to 1 pound in size, also for parties to print and give wrappers on such. Inquiry No. 5071.—For apparatus for the destructive distillation of wood.

Togniry No. 5072.—For makers of portable band was for sawing logs into stave wood.

Inquiry No. 5073.—For makers of wrought iron fences and gates, also chairs for use in summer gar-

Inquiry No. 5074.—For addresses of gas, mineral oil, gasoline, motor. etc.. firms of America.

Inquiry No. 5075.—For makers of metal, celluloid and aluminium noveities. Inquiry No. 5076.—For manufacturers of or parties making cutting or grinding machines for brick.

Inquiry No. 5077.—For makers of an electrically heated from used by veterinary surgeons to burn the legs of horses. Inquiry No. 5078.—For dies and machines for embossing photographic cards, also a beveling machine for all kinds of cardboard.

Inquiry No. 5079.—For makers of machinery for handling peanuts, including hulling, etc.

Inquiry No. 5080.—For machinery for making lead pipe of the size of 14 inch upward.

Inquiry No. 5081.—For makers of steel hooks and eyes, such as used on waistbands.



HINTS TO CORRESPONDENTS

Names and Address must accompany all letters of 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.

his turn.

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.

price.
Minerals sent for examination should be distinctly marked or labeled.

(9304) H. F. S. says: 1. In your issue of January 2, in Notes and Queries, No. 9264, you say that water can only be pulled 33.9 feet with a siphon, in which I agree American inventions negotiated in Europe, Felix with you; but it has been disputed in our town. One man claims he raised water out of a well 70 feet deep, from the bottom; took all the water out. Now is this possible by just running an air-tight hose up out of the well and down a hill below the level of the bottom of the well? A. Water cannot be raised higher than stated in question 9264. The story of the man with the hose needs explaining by the man who told it. 2. Please explain why water will siphon at 700 deg. F. as you stated in query No. 9264. A. The 700 deg. F. was a misprint; it should have been **7●** deg.

> (9305) J, H. R. asks: Will you please inform me how the degrees of very high temperature are measured, say temperature of 2 000 deg. or 3,000 deg.? How is it ascertained at what temperature iron will melt? A. The instruments by which high temperatures are determined are called pyrometers. There are many kinds of these. Some depend upon the while heated; others utilize the calorimetric value of the heat acquired by a refractory change in electrical resistance of platinum when heated, and some use the light radiated from a highly heated material to determine its temperature. This last method is used to determine the temperature of a Bessemer converter. Finally, fusible substances such as Seger's cones are employed to determine the temperature of an oven in which pottery is baked. We have published at different times twelve articles in the SCIENTIFIC AMERICAN SUPPLEMENT upon pyrometers, which we can send for 10 cents each. The whole matter is fully treated in a recent book, "High Temperature Measurements," by Bondouard, which we can furnish for \$3 by mail.

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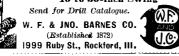
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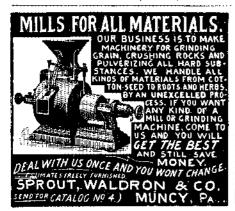
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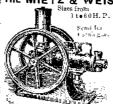




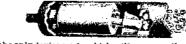




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