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. 8299.—Wanted, to buy black skunks' tails which are brought on the market by furriers as a waste product.

"U. S." Metal Polish. Indianapolis. Samples free. Inquiry No. \$300.—For manufacturers of illuminating lamps that would burn denatured alcohol.

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

Inquiry No. 8301.—Wanted, parties who could manufacture pressed metal coat hangers. Sawmill machinery and outfits manufactured by the

Lane Mfg. Co., Box 13, Montpelier, Vt.

Inquiry No. 8302.—For a machine that extracts oil from all kinds of seeds.

I sell patents. To buy, or having one to sell, write Chas. A. Scott, 719 Mutual Life Building, Buffalo, N. Y. Inquiry No. 8303.—For the address of manufacturers of Victor collar button. The celebrated "Hornsby-Akroyd" safety oil engine

Koerting gas engine and producer. Ice machines. Built by De La Vergne Mch. Co., Ft. E. 138th St., N. Y. C. Inquiry No. 8304.—For firm making rustless pipe by the oxidizing process.

Inquiry No. 8305.—For parties who manufacture nevelties and patented articles.

Manufacturers of patent articles, dies, metal stamping, screw machine work, hardware specialties, machinery tools, and wood fiber products. Quadriga Manufacturing Company, 18 South Canal St., Chicago.

Inquiry No. 8306.—For makers of concentrators for treating low-grade gold and platinum bearing sands and gravels.

Automobile experts are in constant demand at high salaries. Our seven weeks' course is the most thorough and practical, fitting men to drive, handle and repair Day and evening classes. Special course for owners New York School of Automobile Engineers, 146 West 56th Street, New York.

. Inquiry No. 8307.—For manufacturers of collaps ible tubes for salves, etc.

Inquiry No. 8308, -Wanted, a wire mattress wearing machine for weaving wire labric for mattresses.

Inquiry No. 8309.—Wanted, address of Earl Mfg. Co., manufacturers of the new aluminum "Name in your coat" coat hangers.

Inquiry No. 8310.—For manufacturers of a paten cistern cleaner.

Inquiry No. 8311.—Wanted, a hand power machine for ginning, carding and spinning cotton.

Inquiry No. 8312.—For parties to manufacture home savings banks, or pocket size, by the thousand.



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 advertised in our columns will be furnished with addresses of houses manufacturing or carrying the same.

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.

Boks referred to promptly supplied on receipt of price.

Minerals sent for examination should be distinctly marked or labeled.

(10093) J. O. D. says: Do you publish an Encyclopedia of Receipts and a book on patent laws? A. We recommend and can supply you with the "Scientific American Cyclopedia of Receipts, Notes and Queries,' last edition containing 15,000 receipts, 736 pages, cloth bound, price \$5: Our "Scientific American Reference Book," price \$1.50, gives the patent laws. Always give full name and address when corresponding.

(10094) Constant Reader says: A constant reader wishes to know if bodies drowned in the middle of the ocean will sink to the bottom of the ocean, or remain stationary at a certain depth. You will oblige me greatly by answering these questions in your valuable paper. A. We do not answer unsigned communications as a rule. Always send your name and address. The name will not be published. The probability is that bodies would sink to the bottom, unless it was very deep. The specific gravity of the body is so nearly that of water, that slight water currents might keep it from sinking to the bottom. It would not stay there very long, however, as decomposition would produce gases which would distend the body and lower its specific gravity, and eventually bring it to the top.

(10095) J. G. B. says: I was much interested in your description, a few weeks ago, of the wire-wound gun, and I would like to ask if the exploding gases do not exert the same force between shot and the breech as they do between the sides of the gun; if so, where is the advantage of this form of gun?



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Or is there any compensating strength given by electric welding or otherwise, to prevent the blowing off of the breech? A. At the moment of explosion, the pressure on the sides of the powder chamber, on the breech and at the base of the shell, is uniform per unit of area. The advantage of the wire-wound system is that the wire possesses a considerably greater tensile strength per square inch of section than the hoops used in the ordinary hooped system of construction, and there is also more certainty as to absence of flaws. Sufficient longitudinal strength has been secured in the latest guns by the use of powerful reinforcing hoops. Electric welding would decrease the strength of the gun if it were applied to the whole mass of wire winding. (10096) W. V. says: 1. Will you

please give a receipt for softening chilled cast iron castings so as to be able to drill or file same easily? A. Chilled cast iron can be drilled by the use of specially-constructed drills, or the chilled part of the casting can be made soft by packing in red hematite in pots or boxes, from which the air is completely ex-cluded, and heating them for a prolonged period. 2. Give a receipt for brazing cast iron. A. With reference to brazing cast iron, we would say that it is difficult for one who has not had a great deal of experience in doing this work to make a satisfactory job. It is necessary to file or grind the ends of the pieces of cast iron, so that they will make a proper scarfed lap-joint. Be sure that the surfaces are perfectly clean and bright. Use powdered resin as a flux and hard solder. When all is in readiness, apply the flux to the joint, put on a few smal pieces of the solder and grip the joint tightly with a pair of blacksmith's tongs, the jaws of which have been heated to a bright red heat. The heat in the tongs is sufficient to braze the joint.

(10097) W. A. L. asks: Is there any other metal that can be used in a gravity battery besides zinc that will not dissolve? A. There is no way of obtaining electricity without using up some material. In the dynamo steam or water power is employed. In the bat-tery we usually burn up zinc. It is just as impossible to produce electricity without a disappearance of some other form of energy as it is to heat a house and still have the coal, or cool a refrigerator and still have the ice.

INVENTIONS INDEX OF

For which Letters Patent of the

United States were Issued

for the Week Ending

August 14, 1906.

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

| Basket making machine, E. Craig. | \$28,842 |
Battery cell, ary, A. E. Post. | \$28,335 |
Bearing, centrifugal machine, W. A. Saunders | \$28,628 |
Bearing flexible roll, roller, T. S. Crane. | \$28,628 |
Bearing flexible roll, roller, T. S. Crane. | \$28,337 |
Beating, roller, A. E. Putnam. | \$28,337 |
Bed bottom, T. B. Laycock | \$29,324 |
Bed brace, B. Shemwell | \$28,631 |
Bed pan, Lopitsch & Naumann | \$28,754 |
Bed riser, F. & J. M. Holland. | \$28,631 |
Bed riser, F. & J. M. Holland. | \$28,754 |
Bed tilting back and head rest, F. Deuerling | \$28,720 |
Bed cilting back and head rest, F. Deuerling | \$28,800 |
Bedstead, metallic, B. H. Jones | \$28,297 |
Blast furnace, L. Heckscher | \$28,297 |
Blast furnace, L. Heckscher | \$28,297 |
Blast furnace, L. Heckscher | \$28,310 |
Blue prints, liquid separator and distributer | for washing and potashing, C. F. Pease | \$28,773 |
Boot, loose leaf, J. W. Cleland | \$28,852 |
Book, loose leaf, J. W. Cleland | \$28,852 |
Book, loose leaf, J. W. Cleland | \$28,864 |
Book mark, J. A. Walsh | \$28,353 |
Bottle, D. C. Breed | \$28,614 |
Bottle and box wrapper and label, combined, J. H. Parrish | \$28,767 |
Bottle cap, wax paper, G. W. Harrington | \$28,767 |
Bottle cap, wax paper, G. W. Harrington | \$28,767 |
Bottle, non-refillable, B. B. Moss | \$28,646 |
Bottle, non-refillable, Mackin & Hammer | \$28,361 |
Bottle, non-refillable, B. B. Moss | \$28,405 |
Bottle, non-refillable, B. B. Moss | \$28,405 |
Bottle, non-refillable, B. B. Moss | \$28,361 |
Bottle, non-ref