

Inquiry No. 441.—For manufacturers of paste-board cans for baking powder.

Inquiry No. 442.—For manufacturers of insulated wire.

Inquiry No. 443.—For machinery for the manufacture of bricks as fuel.

Inquiry No. 444.—For manufacturers of patent novelties of malleable iron castings, also parties to line same with porcelain.

Inquiry No. 445.—For manufacturers of slot machines, such as scales, moving pictures, etc.

Inquiry No. 446.—For machines for cutting tobacco for making cigarettes; the tobacco to be granulated.

Inquiry No. 447.—For information concerning machines for rolling cigarettes. The paper is straw paper, not gummed, but turned in at the ends.

Inquiry No. 448.—For manufacturers of steel spiral belting and small spiral springs.

Inquiry No. 449.—For manufacturers of viscose and like substances.

Inquiry No. 450.—For manufacturers of electric clear lighters; the overhead form suspended by conducting cords preferred.

Inquiry No. 451.—For parties to manufacture a brand-new machine much in demand.

Inquiry No. 452.—For manufacturers of hand sewing machines, usually sold as useful toys.

Inquiry No. 453.—For parties to make sheep calls to be used in a wolf trap.

Inquiry No. 454.—For manufacturers of cowmilk-mixing machine.

Inquiry No. 455.—For rubber balloons of about one meter in diameter.

Inquiry No. 456.—For dealers in silk-worm gut for use in fishing tackle.

Inquiry No. 457.—For manufacturers of machines for making fish nets.

Inquiry No. 458.—For manufacturers of peat-pressing machines.

Inquiry No. 459.—For parties controlling plants for the manufacture of peat into paper.

Inquiry No. 460.—For manufacturers of outfits for canning factories.

Inquiry No. 461.—For the manufacturer of the outfit known as "The Home Canner."

found which was written by Noah. We scarcely can expect to find anything belonging to his period. There have been found, however, cuneiform tablets recording the stories of the Creation, Deluge, erection of Babel, etc., written by the Babylonians and translated in Assyrian. These record very closely resemble the Biblical account as recorded in Genesis. If you are interested in the subject, you can secure a book recently published, "The Monuments and the Old Testament," by Ira M. Price, published by the Christian Culture Press. The price is about \$1.25. Another work on the subject is "The Higher Criticism and the Monuments," by A. H. Sayre.

(8163) O. B. M. asks: Will you kindly inform some of your readers if the modern incandescent gas light is injurious to the eyesight, or unfit to work by at night, as draughting, using colors, etc.; also as to best light globes, shades, etc.? A. The incandescent gas light cannot be any more injurious to the eye than any other light of equal brightness. It should not be used near to the eye without a shade. All artificial light is injurious to the eye, if improperly used. The practice of the fathers to go to bed at dusk, or, at any rate, to sit with the light of the fireplace only, was better for the eye than our manner of turning night into day. An opal shade is the best white shade for any lamp, which is used for lighting a large space like a drawing board.

(8164) M. H. asks: What is a telephonograph? I would like to know where they are offered for sale, and at what prices, and the differences between them and the ordinary concert phonographs with the extra large wax cylinders? A. The telephonograph is a very different instrument from the ordinary phonograph. It has been the subject of several articles in the SUPPLEMENT, under the name "Telephonograph." See SUPPLEMENT Nos. 1286 and 1307, price ten cents each. The instrument has no wax cylinder, no style to scrape along the indentations made for it, and is said to reproduce the sound with a perfect preservation of its quality without any metallic or harsh tones added. We do not think it is yet for sale in this country.

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. 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. 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.

(8160) H. P. asks: 1. At what degree of heat do cast iron, steel, platinum, brass, and wrought iron become cherry red; also degree at which they fuse? A. The metals you name become cherry red at 1,400 deg. F. Cast iron melts at 2,250 deg.; steel, 2,500 deg.; platinum, 3,500 deg.; brass, various, 1,400 to 1,600 deg.; wrought iron, 2,700 deg. 2. Is there any other metal or alloy that will stand more heat than the foregoing? A. There is no available metal that will stand more heat than platinum.

(8161) C. W. C. asks: Will you explain how the earth can be proved to rotate on its axis by the use of the pendulum? A. If a ball of lead or other heavy metal be hung by a long wire from a firm support, it may be swung as a pendulum and will maintain its swing in the same plane in space, independent of the earth. Such a ball hung over the north pole would swing toward the same point of space as long as it continued to swing. If it could swing for 24 hours it would swing toward all points of the horizon during that time, because of the rotation of the earth. In our latitude the south end of the swing will deviate from a north-and-south line about 9 deg. an hour. A ball of lead of 20 pounds' weight, hung by a piano wire 40 feet long and set swinging in a north-and-south direction, should show the deviation in ten minutes. This could not be, if the earth were not turning on its axis from west to east. To set the pendulum swinging, tie a thread to the ball, draw the ball back as far as desired, and tie the thread to some convenient support. When the vibrations of the ball have died out, burn the thread with a match, and the pendulum will begin to swing without any jar or other inequality in its motion, which would cause the pendulum to swing in other than a straight line back and forth, and ruin the experiment. This experiment was first performed by Foucault in Paris at the Pantheon, but has since been repeated in many places. See SUPPLEMENT No. 627, price ten cents.

(8162) E. E. B. says: The fact that I have been a subscriber and reader of the SCIENTIFIC AMERICAN for the past 23 years is the only excuse I offer for the following question. On page 515 of appendix of a work entitled "Buried Cities Recovered, or Explorations in Bible Lands," by Frank S. DeHaas, D.D., fifth edition with appendix, published by Bradley, Garretson & Co., Philadelphia, in 1884, I find stated that a Mr. Rassam has discovered at the remains of the antediluvian city of Balawat, in the Euphrates Valley, a stone or terra-cotta chest containing tablets of antediluvian history written by Noah. Is this statement true? A. Nothing has ever been

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AND EACH BEARING THAT DATE.

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Advertisement for 'DICKERMAN'S DURABLE DESKS' with an illustration of a desk and text emphasizing its durability and value.

Advertisement for 'THE ELECTRIC HEATER' with an illustration of a heater and text describing its various uses and safety features.

Advertisement for 'THE NEW BRISTOL COUNTER' with an illustration of the counter and text describing its accuracy and ease of use.

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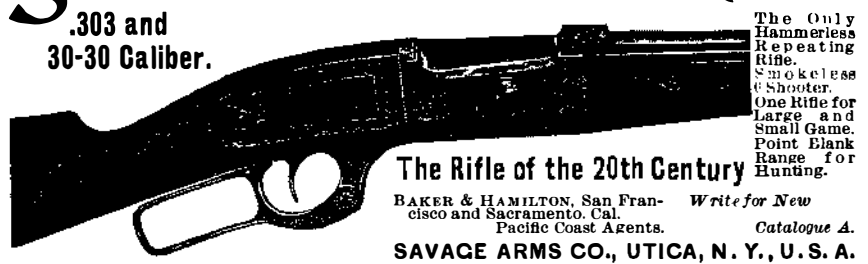
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A printed copy of the specification and drawing of any patent in the foregoing list, or any patent in print issued since 1863, will be furnished from this office for 10 cents. In ordering please state the name and number of the patent desired, and remit to Munn & Co., 361 Broadway, New York.

Canadian patents may now be obtained by the inventors for any of the inventions named in the foregoing list, provided they are simple, at a cost of \$45 each. If complicated the cost will be a little more. For full instructions address Munn & Co., 361 Broadway, New York. Other foreign patents may also be obtained.

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April 4, 1901.

Proposals will be received by the Commissioners of the New East River Bridge, at their office, at No. 258 Broadway, in the Borough of Manhattan, in the City of New York, at two o'clock in the afternoon of the 25TH DAY OF APRIL, 1901, endorsed "PROPOSAL FOR CONSTRUCTION OF THE STEEL SUSPENDED STRUCTURE OF THE NEW EAST RIVER BRIDGE," for furnishing the materials for and constructing the steel suspended structure of the New East River Bridge, in accordance with the proposed form of contract and the drawings and specifications therefor. All bids shall be enclosed in sealed envelopes, addressed to Lewis Nixon, President of the Board of Commissioners of the New East River Bridge, and presented to him on that day and at that hour at said office, and such bids will be opened in public meeting by the said Commissioners on that day at two o'clock in the afternoon.

Copies of the specifications and the general drawings for the work, with the proposed forms for the bid, bond and contract, may be obtained, and further information will be given at the office of the Chief Engineer, No. 84 Broadway, Borough of Brooklyn, City of New York, on and after the 8th day of April, 1901.

The Commissioners require that all bidders shall carefully examine the specifications, drawings and proposed form of contract, in order that no question as to their meaning will arise hereafter. It must be distinctly understood that no changes in the quality of the materials or of the workmanship will be allowed, and that the specifications will be adhered to strictly.

The contract is to be completely performed within eight months after the receipt by the Contractor from the Engineer of written notice to begin the erection of the suspended structure.

Bids will be made upon a form provided therefor, and only those bids will be considered which are complete, in proper form, comply with the requirements herein stated, and are offered by parties of known reputation, experience and responsibility.

Each bidder will be required to deposit, with his proposal, in the office of the Commissioners, a certified check for \$10,000, payable to the order of Julian D. Fairchild, as Treasurer of the New East River Bridge Commissioners, as security for the execution by him of the contract and the giving of the required bond, if his bid is accepted, within two weeks after notice of the acceptance of his bid.

Bidders are required to state in their estimates, under oath, that such estimate is made without any connection with any other person making a bid or estimate for the same purpose, and that it is in all respects fair, and without collusion or fraud, and also, that no member of the Municipal Assembly, Head of a Department, School Commissioner, Chief of a Bureau, Deputy thereof or Clerk therein, or other public officer, is directly or indirectly interested therein, or in the supplies or work to which it relates, or in any portion of the profits thereof, as principal, surety or otherwise. The estimate must be verified by the oath, in writing, of the party making such estimate, that the several matters therein stated are in all respects true.

The Contractor will be required to give a bond in the sum of \$300,000, in the form annexed to the proposed form of contract, with an approved surety company doing business in the City of New York, conditioned for the prompt and faithful performance of the contract and its covenants and the work thereunder.

As by far the greater part of this work can be executed only by bridge establishments of the first class, bids will be received only from such parties as have the requisite plant and facilities. The bidders must be, in the opinion of the Commissioners, fully qualified both by experience and in appliances to execute work of this character and importance according to the highest standard of bridge work at the present time.

The Commissioners reserve the right to reject any and all of the proposals offered, and to accept any bid offered.

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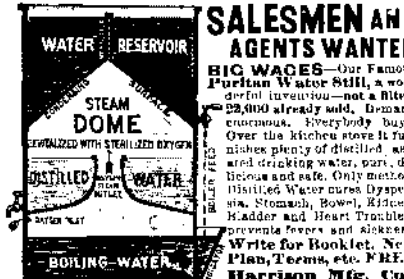
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