RECENTLY PATENTED INVENTIONS.

Apparatus for Special Purposes.

AMMONIA-WATER APPARATUS.—H. A. ABENDROTH, Berlin, Germany. This invention relates to evaporation and condensation; and its object is to provide certain improvements in amomnia-water whereby the overflow-pipes for the water can be readily removed from the cells for cleaning and other purposes and without requiring interruption of the process or unduly reducing the strength of the walls of the cells.

Of Interest to Farmers.

FERTILIZER-DISTRIBUTER.—J. C. SPARKS, Mechanicsville, S. C. In this patent the invention is an improvement in fertilizer-distributers, having for an object to provide a novel construction which can be applied to an ordinary plow-beam, can be set in any desired adjustment on said beam, and will efficiently serve the purpose for which it is designed.

Of General Interest.

SUSPENDER ATTACHMENT.—L. SELIKOWITZ, New York, N. Y. The attachment comprises a friction plate with means for attachment to one end of the suspender, said plate being provided with a hinged bar. The plate and bar are constructed with co-operating clamping members for securely holding in place a pull device constituting the medium by which the sliding movements of the adjusting device are effected for the purpose of altering the length of the suspender member.

Hardware.

REGISTERING-LOCK.—J. G. RAMEY, Rome, Ga. A lock constructed according to this invention has merit over all similar locks in the construction involved, as well as the simplicity of its working parts, which are not so liable to get out of order. It has utility or usefulness in recording its unlocking and the registering of the number of times it has been worked or unlocked.

WIRE-STRETCHER.—O. C. A. SCHWIEN, Davenport, Iowa. This improvement is in that class of stretchers whose main feature is a lever having a curved portion adapted to engage or partly embrace a fixed post and provided with a wire-grip, which is located at a point between the post and the handle end of the lever. A flexible tension device, preferably a chain, is employed, it being connected with the portion of the lever applied to the post and adapted for ready attachment and detachment, so that the apparatus as a whole may be quickly applied to and removed from the post.

Heating and Lighting.

FURNACE.—G. S. KENT, Lyndon, Vt. The aim of the improvement is to provide a furnace of economic construction capable of utilizing all the products of combustion to a maximum extent, in which furnace a continuous combustion-chamber is provided and two fuel-chambers in communication with the combustion-chamber, together with means for admitting air and steam to the combustion-chamber and for the admission of stoking-tools to the fuel-chambers.

Machines and Mechanical Devices.

HOIST.—S. T. WALLACE, Los Angeles, Cal. This hoist is intended especially for use in the construction of buildings to hoist building materials from one floor to another. The hoist lies outside of the building, being erected on the sidewalk immediately in front of the structure where it will occupy very little space. The arrangement of the hoist is such that it will elevate beams of a length too great for elevation through the interior of the building.

MACHINE FOR FORMING CURRY-KNIFE EDGES ON ROTARY CUTTERS.—E. SCHROEDER, New York, N. Y. The object of the improvement is to provide a machine more especially designed for accurately forming an annular curry-knife edge on a circular cutter—such, for instance, as is used in a fleshing and shaving machine for raw and dressed furs or skins, for which former Letters Patent were granted this inventor. The present invention is a division of the application for Letters Patent of the United States for a machine for grinding and forming cutter edges, formerly filed by Mr. Schroeder.

Designs.

HAMMOCK CLOTH.—D. W. SHOYER, New York, N. Y. The design consists of a central initial letter surrounded by scrolls and flower ornaments which are artistically arranged.

DESIGN FOR A CHAPLET OR SHRINE OF THE HOLY ROSARY.—C. GAY, New Haven, Conn. This is a design in which the figure is a perspective view of the chaplet or shrine of the Holy Rosary. Around a prominent crucifix and two small crosses, are inscribed St. Dominic's Chaplet of the Holy Rosary. The face of the ornamental design is oblong, square at the bottom and round at the top. A square in the center is surrounded by a chain looped at the lower part.

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. 6081. For the manufacturer of a clip or band used in construction of brick walls, called the "Don't Clip Brick Band," patented July 7, 1903.

AUTOS.—Duryea Power Co., Reading, Pa.

Inquiry No. 6082.—For makers of apparatus, etc., for fitting up corn mills.

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

Inquiry No. 6083.—For a small, triple-expansion marine engine, developing about 25 h. p. on 200 pounds of steam at about 700 r. p. m.

Perforated Metals, Harrington & King Perforating Co., Chicago.

Inquiry No. 6084.—For the manufacturers of the "Kleen U Rite."

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

Inquiry No. 6085.—For dealers in peat for use as fuel.

If it is a paper tube we can supply it. Textile Tube Company, Fall River, Mass.

Inquiry No. 6086.—Wanted, a gasoline motor of 4 to 6 h. p., for plowing purposes.

Sawmill machinery and outfits manufactured by the Lane Mfg. Co., Box 13, Montpelier, Vt.

Inquiry No. 6087.—For the latest and best appliances for a crematory.

D. A. Beaton, Practical Lead Burner, P. O. Box 334 Woburn, Mass. Fifteen years' experience.

Inquiry No. 6088.—For makers of blank name checks on which to stamp names, addresses and emblems, also of stamps with which to stamp them.

MICROSCOPE.—$15; cost, $35. Also valuable accessories separate. List. J. Phin, Paterson, N. J.

Inquiry No. 6089.—For makers of round glass covers 6 inches diameter by 8 inches high.

American inventions negotiated in Europe. Wenzel & Hamburger, Equitable Building, Berlin, Germany.

Inquiry No. 6090.—For dealers in second-hand electric instruments and machinery.

Agents wanted to sell the Ryede puzzle. Sample by mail for 10c. Ryede Specialty Works, Rochester, N. Y.

Inquiry No. 6091.—For a machine for printing on toothbrush handles.

In buying or selling patents money may be saved and time gained by writing Chas. A. Scott, 719 Mutual Life Building, Buffalo, New York.

Inquiry No. 6092.—For machinery for peeling, cracking, cleaning and bleaching walnuts.

We manufacture anything in metal. Patented articles, metal stamping, dies, screw mach. work, etc. Metal Novelty Works, 43 Canal Street, Chicago.

Inquiry No. 6093.—For outfits and supplies for confectioners, bakers, etc.

Patented inventions of brass, bronze, composition or aluminum construction placed on market. Write to American Brass Foundry Co., Hyde Park, Mass.

Inquiry No. 6094.—For manufacturers of broom-making machinery.

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. 6095.—For manufacturers of wood and metal lathes, saws, drills, work benches, etc., for manual training school.

WANTED.—Experienced office man who will invest $15,000 in a well-established manufacturing company in Central Indiana. Investment, Box 773, N. Y.

Inquiry No. 6096.—For builders of steam engines for automobiles, or makers of steam automobiles.

Want manufacturer to buy pat. No. 760,280 elect. water heater. Boils pint of water in 1 minute. Sample with attachment plug, $1.25. Richard Toennes, Box 344, Boonville, Mo.

Inquiry No. 6097.—For manufacturers of machinery for excelsior plants.

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

Inquiry No. 6098.—For makers of compressed paper, to be used as a substitute for leather.

PATENTS FOR SALE.—Cantwell & Co., patent agents, Calcutta, India, has now for sale several valuable patents, principally for railway improvements. Full particulars on application.

Inquiry No. 6099.—For dealers in new and second-hand gasoline launches, 30 to 35 feet long.

Inventor wants prominent business man as partner to finance some series of first-class inventions: Auto, railroad, iron, building and other branches. A. von Duczynski, P. O. Box 54, Bellevue, Pa.

Inquiry No. 6100.—For the makers of an apparatus called "Long Tom" which is fixed on the wall, and a coin is fired by a small cannon.

FOR SALE.—Canadian patent No. 83,867, dated Nov. 10, 1903. Covering vital points in telephone development. Important subsequent improvements free to purchaser. Address Dennis O'Brien, Limestone, New York.

Inquiry No. 6101.—For manufacturers of keys, without heads, to be used in the manufacture of farm machinery.

Winona, Minnesota.—Population, 24,000—Wants Manufacturing Plants. For particulars address Geo. W. Gregory, Secretary of Board of Trade

Inquiry No. 6102.—For manufacturers of soldering iron for aluminium.

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. 6103.—For a freezing apparatus for making ice in small and large quantities.

☞ Send for new and complete catalogue of Scientific and other Books for sale by Munn & Co., 361 Broadway, New York. Free on application.

Inquiry No. 6104.—For manufacturers of screw machines, monitor lathes and drill presses.

Situation wanted by young German with commercial experience, having studied engineering in Berlin, wanting a start. G. K., Box 773, N. Y.

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 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.

(9469) C. R. W. asks: Can you give me any information on the computation of time as we now have it—months, weeks, days, hours, minutes, and seconds? When did this computation begin or come into use, and what preceded that computation, and so on as far back as we have any history on this subject? A. There is not so much exact data as one might expect regarding the time of the introduction of the different units of time we now employ. Probably many of them came into use gradually and without any official determination, just because they were convenient and serviceable. The year was naturally connected with the seasons, and has been kept with the seasons by most nations. It is more essential that it should begin at about the same time with reference to seed time and harvest than that it should be invariable in length. Thus our years are not of the same length. The month was also a natural epoch, in the earliest times, dating from the phases of the moon. While the day has always been a natural unit of time, the time of its beginning and its division into parts have varied greatly. This is discussed in answer to Query 8744, Vol. 87, No. 19. Our calendar, the Julian, dates from 45 A.D., and its reformation by Pope Gregory in 1582 A.D., while its adoption by England was in 1752 A.D. All that is known on these points may be had from encyclopedias.

(9470) W. L. asks: Will you kindly advise me whether the current in Western Union telegraph wires would interfere with the working of a ground circuit telephone line on the same poles, and if so, what could be done to equalize the current, or as a remedy? A. A telephone line is liable to disturbance from any unsteady electric current in its neighborhood, if a ground return is employed. The remedy is to use a metallic circuit, with the wires twisted, as is done in cities. The effect of induction is thus done away with.

(9471) C. H. W. asks: What would be the result of an electro-magnet which is capable of lifting ten times more than its own weight, and a piece of metal that weighs say eight or ten times as much as the magnet, say iron, be both placed on a level surface about one-half foot or a foot apart, with nothing to hold either stationary, and then turn on the current? What would be the result? Would the magnet go to the metal, or would the metal go to the magnet? A. If a magnet and a piece of iron such as you describe were placed as you state, the magnet would move to the iron ten times as fast as the iron moved toward the magnet, since both would be pulled with the same force, and the motion of the two would be in the inverse ratio to the weights. It is not probable that either would move at a distance of a foot from the other. The magnetic force would not be able to exert pull enough at so great a distance.

NEW BOOKS, ETC.

THE CHEMISTRY OF GAS MANUFACTURE. By W. J. Atkinson Butterfield, M.A., F.I.C. London: Charles Griffin & Co., Ltd. Philadelphia: J. B. Lippincott Company, 1904. 8vo.; pp. 257. Price, $2.50.

The present is the first volume of this work which has been greatly enlarged in this, the third edition. Volume I. treats of the materials and processes of gas manufacture. All the materials and methods of producing coal, water, oil, and air gas, and of enriching gas of low illuminating power, as well as the methods of producing simple gaseous hydrocarbons, are thoroughly described. The production of acetylene was treated in a separate book written in collaboration with Mr. F. H. Lee, and which has been recently published. The second volume of the work, which is now in course of preparation, will cover the testing and use of gas.

EARTHQUAKES IN THE LIGHT OF THE NEW SEISMOLOGY. By Major Clarence Edward Dutton. London: John Murray. New York; G. P. Putnam's Sons, 1904. 12mo.; pp. 314.

So rapidly has the method of studying earthquakes developed during the last thirty years, that the science, as it now stands, has been aptly termed the "new seismology." This modernized science investigates its phenomena by means of instruments that measure force and motions, speeds and accelerations. For that reason it may well be considered a branch of physics, a branch moreover that treats of elasticity and wave motion in a solid medium, the earth. Chapter I. of this book sets forth the nature of the earthquake according to modern concepts. Chapter II. is devoted to a general discussion of the causes of earthquakes. The two groups of quakes, the volcanic and the tectonic, have many distinctive characteristics which are described in Chapters III. and IV. The next two chapters, V. and VI., are devoted to detailed explanations of the instruments used in seismometry. Chapter VII. deals with seismic vibratory motion. Passing then to the kinetic aspects of seismic vibration, the subject of intensity is discussed in two chapters. The chapter on Variations in Intensity points out the method of computing the depth and origin of an earthquake. The final chapter is devoted to the discussion of seaquakes, a subject which has been investigated with great diligence by Dr. Emil Rudolph, of Strasburg.

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