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Cotton duck, W. E. Hooper & Sons 9,804
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Silks, dress, Passavant & Co 9,801
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English Patents Issued to Americans.

From October 20, 1882, to October 27, 1882, inclusive.

"Cosmie," B. Arentz, New Britain, Conn.
Cards, playing, B. Dreyfuss, New York city.
Electric light, F. Vanchoate, New York city.
Elevator, pneumatic, C. A. Needham, New York city.
Friction clutch, D. Frisbie, New Haven, Conn.
Governor, steam, F. D. Cumnver, Detroit, Mich.
Iron ore, reduction of, L. Durand *et al.*, New York city.
Motor, G. D. Garvie *et al.*, New York city.
Pig metal, casting, G. A. Leishman, Pittsburg, Pa.
Ratchet wrench, G. W. Hight *et al.*, Nasnville, Tenn.
Razor blades, J. D. Frary, Bridgeport, Conn.
Sewing machines, Morley Sewing Machine Company, Boston, Mass.
Sewing machines, L. W. Miller *et al.*, Elizabeth, N. J.
Stench trap, C. Lightbody, Brooklyn, N. Y.
Tramway, rope, A. S. Hallidie, San Francisco, Cal.
Vise, H. F. Read, New York city.
Watches, J. W. Bell, Conowingo, Md.
Water purifier, D. Hanna, Ogdensburgh, N. Y.

NEW BOOKS AND PUBLICATIONS.

HYGIENIC AND SANATIVE MEASURES FOR CHRONIC CATARRHAL INFLAMMATION OF THE NOSE, THROAT, AND EARS By Thos. F. Rumbold, M.D. St. Louis: Medical Journal Publishing Company. 1882.

The first edition of this work was favorably noticed about a year ago. The author is more than ever confident that the most successful method of eradicating catarrhal inflammation of the respiratory organs is through the enforcement of proper hygienic and sanative measures; this especially with the young.

TREATISE ON THE METALLURGY OF IRON. By H. Bauerman. No 176, Weale's Rudimentary Series. London: Crosby, Lockwood & Company.

The improvements in this, the fifth edition of Mr. Bauerman's well known treatise are found in a revision of the chemical notation; considerable additions to the chapters on steel making to cover the more important recent advances in the art; and some valuable new matter with respect to the hematite deposits of Spain and North Africa, the oolitic ores of Luxemburg and Lorraine, and the more important ore deposits of America and India.

DRESS AND CARE OF THE FEET. By Prof. Peter Kohler. G. P. Putnam's Sons, New York.

This is a very short treatise on a very important subject to most persons The venerable author has treated the feet of some of New York's most distinguished citizens for a quarter of a century, and at the end of his volume he prints the names and addresses of his patrons.

Notes & Queries

HINTS TO CORRESPONDENTS.

No attention will be paid to communications unless accompanied with the full name and address of the writer.

Names and addresses of correspondents will not be given to inquirers.

We renew our request that correspondents, in referring to former answers or articles, will be kind enough to name the date of the paper and the page, or the number of the question.

Correspondents whose inquiries do not appear after a reasonable time should repeat them. If not then published, they may conclude that, for good reasons, the Editor declines them.

Persons desiring special information which is purely of a personal character, and not of general interest, should remit from $1 to $5, according to the subject, as we cannot be expected to spend time and labor to obtain such information without remuneration.

Any numbers of the SCIENTIFIC AMERICAN SUPPLEMENT referred to in these columns may be had at this office. Price 10 cents each.

Correspondents sending samples of minerals, etc., for examination, should be careful to distinctly mark or label their specimens so as to avoid error in their identification.

(1) A. F. W. asks: Will you inform us what is the active substance used in the so-called bleaching powders (used for bleaching hair, etc.)? Is it sulphide of barium? Also please explain its action. A. It is the peroxide of barium, to be bought in bulk in the market, and contains a large proportion of loosely combined oxygen gas, which in the peroxide of hydrogen produced has the powerful bleaching action.

(2) G. C. W. asks: 1. What size propeller must I have to run a skiff 15½ feet long by 3½ feet beam, to make six to seven miles per hour? A. 18 inches diameter and 2½ feet pitch. 2 How many revolutions should the propeller make per minute? A. 300 to 350. 3. Is a two or four bladed propeller best? A. Two bladed. 4. What should the weight be of it? A. About 70 or 80 pounds.

(3) C. W. G. writes: I recently bought a lot of books at auction that are very badly stamped with blue ink which greatly disfigures them; can you give me a recipe that will remove the blue ink without disfiguring the paper? A. Try a little peroxide of hydrogen solution, and if this fails, diluted hydrochloric acid, 1 part acid to 7 of water.

(4) E. E. P. asks: 1. Where can I obtain Dr. Henry Draper's paper on silvered glass specula? A. Draper's Method of Silvering Specula, SCIENTIFIC AMERICAN SUPPLEMENT 105. SUPPLEMENT 121 has several other methods. 2. How large should the small speculum of a telescope of the Newtonian form of 8¾ inches aperture and 80 inches focal length be, and in what position should it be placed, its shape being oval? A. The size of a small speculum for a Newtonian form of telescope should be one-fifth larger in its lesser diameter than the field glass of your lowest eye piece, and should be an ellipse of the proportions of a cylinder cut at 45°, and may be placed in the optical axis of the telescope for the best effect, although they have been placed in all positions between the center and edge of the tube, with the eye pieces at other positions than at right angles to the tubes, as well as being dispensed with, as in the Herschelian and Ross form with their accompanying distortion of image and increase of light.

(5) T. H. J. asks for directions for softening or annealing steel sufficiently to admit of cutting letters on the face of block by hand. A. For annealing steel for cutting with a graver by the water process, heat the steel to a full red, let it cool slowly in dry lime or fine ashes until it is black, then dip in water.

(6) G. G. G. asks how bort and carbonado are attached to drills, and how the drills are worked to prevent fracture of the brittle minerals? A. The setting of bort or carbons in drills is done by boring holes in the iron, where the bort or carbon is required to be placed, and cutting the sides of the holes with small chisels or gravers of the proper shape to receive it to the depth sufficient to allow of the adjoining metal being driven up against the bort with small sets or chasing tools, so as to partially inclose it with a firm metallic border, leaving the carbon projecting just above the surrounding surface. Such drills must be handled very carefully and should never be dropped upon the bottom of the bore. The drills are generally made hollow, or of iron tubing with the carbons set on the outer and inner edge, so as to make a cut that will clear the tube and take out a solid core of rock in the center. They are revolved quickly with light feed, and cleared with a stream of water down the center.

(7) J. S. G. asks: 1. Is it unhealthy to use pulverized borax in washing the hands and face, say several times a day, for years? It is better and cleaner than soap. A. Borax is an excellent detergent and harmless to the skin, even if used as often as you mention. 2. Are cockroaches not useful from a sanitary point of the question? I know they are disagreeable to have around. A. Cockroaches are probably excellent for removing the filth that brings them to a locality.

(8) L. R. S. asks how to remove paint spots from a rubber coat? A. Try some aqua ammonia, or if this will not answer, spirits of turpentine rubbed on with a rag.

(9) C. S. asks: Can you give form of furnace and process for annealing gray iron casting? A. Gray iron work is annealed by packing in iron boxes (cast or wrought) with lime and charcoal, pulverized coke mixed with fine ashes. In fact, any material that does not melt will exclude air or prevent oxidation. Furnaces are made similar to the reverberatory furnace for ores and iron or a puddler's furnace. Heat only to a cherry red, and continue from one to three hours according to requirements.