

(31) A. W. writes: I wish to become a locomotive engineer, but have had no experience in that direction.

(32) "Wisconsin" writes: 1. I have a stationary engine having an 8 x 20 cylinder that was bored out in good shape 4 years ago.

(33) K. K. writes: The ceiling of our cellar is very low, being only about a foot above the top of the furnace.

(34) J. C. B. writes: 1. In a recipe for a process of preparing gelatin plates for making stearine relief pictures.

(35) In answer to J. G.: A well built cistern, properly faced with genuine Portland cement.

(36) J. S. A. asks how to stain wood in various colors. A. Brown: Concentrated solution of potassium permanganate in water.

(37) F. P. H. asks: 1. What battery do you consider best for small electrotypes and also for silver plating?

(38) F. M. S. writes: I am constructing an electric bell to be used in connection with a telephone over a wire line about 500 feet in length.

(39) W. R. asks: What will remove ink from law binding, yellow leather or morocco?

(40) E. W. asks: 1. How can small castings be nickel plated? A. See Scientific American, June 30, 1877, p. 408; and April 6, 1878, p. 209.

(41) R. B. R. asks: What is the simplest and least expensive mode of rendering shingled roofs fire or water proof, or both.

(42) J. L. writes: I have heard that it is beneficial to persons troubled with rheumatism to place glass tumblers under the bedposts of the beds they sleep in.

(43) W. M. M. asks how to render light rowboats waterproof along the joints.

(44) F. W. D. asks: How many leaves of gold (such as used by bookbinders) would make a block 1 inch high.

(45) C. M. B.—The recipe referred to is not satisfactory; lampblack alone is not a suitable basis for blacking.

(46) J. C. M. asks: 1. How is dextrin made? A. Commercial dextrin, or "British gum," is obtained by heating dry potato starch to a temperature of 750° Fah.

(47) J. W. S. writes: 1. If I should construct a battery on the following principles, would it be a success? Take a one gallon glazed crock.

(48) J. W. S. writes: I am building a small steam yacht. It is to draw only about 1 foot of water. I propose using a propeller 1 foot in diameter and 16 inches pitch.

(49) E. H. R. writes: I have an interest book which says that the relative divisor of 12 per cent is 3,000; of 10, 3,600; of 9, 4,000, etc.

MINERALS, ETC.—Specimens have been received from the following correspondents, and examined, with the results stated:

J. A. McK.—It is asbestos (amianthus), used extensively for boiler felting, fire proof paints, etc. See address of dealers in our advertising columns.—H. L. C.—Minerals not received.—J. W. K.—Principally impure amorphous silica.

—It is sulphide of iron—marcasite.—T. O'N.—The sample was too small to admit of positive tests.

COMMUNICATIONS RECEIVED.

The Editor of the SCIENTIFIC AMERICAN acknowledges with much pleasure the receipt of original papers and contributions on the following subjects: Cinders in the Eye. By W. S. N.

LISTS AND SPECIFICATIONS OF PATENTS.

A circular issued from the Patent Office at Washington states that, the appropriation made by Congress for printing and binding having been exhausted.

English Patents Issued to Americans.

March 28 to April 8, inclusive. Aerial machine.—F. A. Lehmann et al., Washington, D.C. Baling hoops.—J. B. Gould, U. S. Consul at Birmingham, Eng.

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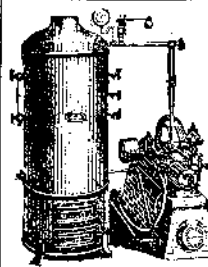
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