

(10) L. B. asks: What can I use that will render a paper butter or lard tray grease and brine proof...

(11) H. C. inquires of what metal those bright red or blue caps are made which are on many of the French bottles of medicines, etc.

(12) J. G. B. asks how to temper thin sheet steel, size 10 by 14 inches, and keep it straight.

(13) J. S. W. asks: 1. How to mend an ivory penstock which was broken square across? 2. Ivory cement.

(14) R. A. T. asks: 1. What is the difference between "draught pounds" and "avoirdupois pounds"?

(15) C. E. A. writes: I notice in your issue for January 13, page 25, an article upon the formation of sulphuric acid...

(16) W. H. D. asks: What is the per cent of potash in pine wood ashes? A. Red pine, 5.2 per cent potash; white pine, 15.5 per cent potash.

(17) J. W. F. asks: 1. What is the best book to buy for the use of analyses? A. Fresenius' "Manual of Quantitative Chemical Analyses."

(18) M. T. S. asks: 1. At about what temperature would pure oxygen attack copper, producing combustion or fusion?

(19) A. B. asks: Can you tell me if there is any quick method of transferring the film and image of an albumen photograph on to glass, linen, etc.?

(20) B. C. M. asks: 1. How the non-erasable lines are put on slated paper? A. The lines are ruled with zinc, after which one coat of the silicate coating is put over the slate.

(21) T. G. H. asks for a receipt for manufacturing the "hectograph," or gelatine pad, now much used in office and clerical work.

(22) F. T. H. asks: 1. If ordinary school crayon is just chalk, or of what is it composed, and in what proportions? A. Washed pipe clay and washed chalk, equal parts; mix them into a paste with sweet ale made hot...

(23) L. R. A. asks: 1 Where can I obtain directions for making a simple and efficient telephone transmitter, in which carbon is used? A. See SUPPLEMENTS, 250 and 163.

2. Please give the formula for computing the power of a celestial refracting telescope? Also, for determining the focal distance of a two-lens eyepiece? A. To compute the magnifying power of a telescope, divide the focal length of the object-glass in inches by the focal length of the eyepiece, or its equivalent in inches.

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

J. P. G.—The mineral is a slate containing pyrites.—J. E. H.—The mineral is a carboniferous shale.

COMMUNICATIONS RECEIVED.

On Fire Escapes. By A. C. A. On Flight. By F. P. H.

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