American.

reaction with a few drops of nitric and sulphuric acid bichromate of potassa, and caustic soda respectivel with a standard sample of the pure oil.

- (17) C. & Co. ask: What chemicals a used in the dyeing of Pampas grass, red, blue, yellow etc.? A. Use warm aqueous and alcoholic solutions any of the soluble aniline dyes.
- (18) R. M. asks: What book would you ac vise for new beginners in electroplating, brass, coppe tin, silver plating, nickel, etc.? A. Consult Fesque "Electro-Metallurgy;" Napier's "Electro-Metallurgy Roseleur's "Galvanoplastic Manipulations."
- (19) Z. C. writes: In No. 21 of the curren volume of the Scientific American, you give a receip for making a "copying pad" as follows: 1 oz. Cooper gelatine to 61/4 fluid oz. glycerine. I undertook to mal a pad, following the receipt to the letter, and foun that the pad would not abstract any ink (aniline accor ing to the receipt) from a piece of paper. I then heate the mixture again and added another ounce gelatine This time the pad would give four good copies, an only six which were at all legible. Then I added 1/2 oz more gelatine, and can now take 15 good copies. You will have better results if you use more glycerin as directed, and expel all or as much of the water a possible by heating over a salt water bath for son time. Pads made according to the receipt have yielde npwards of a hundred and fifty distinct copies.
- (20) J. K. asks for some good stove polish that can be prepared at home-something that will no burn off. A. Common stove blacking is graphite of plumbago reduced to a fine powder by grinding. W know of nothing better. 2. What will remove stair from stove zinc, and restore its look of newness? The planished surface is imparted by rolling the war sheet metal; the finish cannot readily be restored. The surface may be cleaned and brightened by moistening it with a strong solution of oxalic acid in water, and dr ing with sawdust, or better, with whiting.
- (21) H. B. asks (1) for a receipt for makin self-raising flour. A. The following are the compos tions of several of these powders in extensive use: Bicarbonate soda, 23 oz.; burnt alum, 19 oz.; starc 57 oz. 2. Bicarbonate soda, 241/4 oz.; sesquicarb. an monia, 21/4 oz.; starch, 47 oz.; burnt alum, 261/2 oz. 2. Bicarbonate soda, 31 oz.; burnt alum, 291/2 oz.; starc 39 oz. 2. For cementing leather on friction pulleys? Good glue is commonly employed, we believe.
- (23) G. O. asks how to clear a warehous of weevil. They live on the grain in the cracks of the floor when the house is empty. A. Dalmatian (Pe eian) insect powder, when well distributed, does ver
- (23) B. F. M. asks: What chemicals ar used for taking the solar spectrum in colors? Can yo tell me a compound that will turn yellow in dayligh also one that will turn red? A. Photographing in th natural colors has never been accomplished by dire means, although monochromatic prints in several colo have been obtained. The results in color photograph by indirect means, attained by Vogel, Vidal, Alfred and others have been noticed in the back numbers of the SCIENTIFIC AMERICAN. Consult some late work o photography and photographic chemistry. See p 132 and 133, Vol. 35, SCIENTIFIC AMERICAN.
- (24) J. W. asks how phosphor bronze formed, and how the phosphorus is added to the meta and how many ounces is given to a pound of meta A. Wrap the phosphorus-about 1-10th of one per cer in foil, and force it by means of an earthen rod ha ing a bell-shaped cavity at the end, beneath the surfa of the molten metal (bronze). The phosphorus must be free from moisture, and great care must be observed i handling it to avoid accident
- (25) R. H. B. writes: A correspondent o the Detrick states that gold was extracted from petr leum oil in New York city. Does pétroleum conta geld; if so, in what quantity? A. According to M. John Turnbridge, of Newark, New Jersey, small quan tities of gold have been found in petroleum residue See article "Petroleum and Gold," p. 377, No. 24, Vo 39. SCIENTIFIC AMERICAN.
- (26) C. C. asks (1) for the name of the aci for testing gold and silver. A. The acid used with th touchstone is pure nitric acid slightly diluted. 2. What is the best material for polishing steel and brass? A Emery flour andoilare in general use.

COMMUNICATIONS RECEIVED.

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AND EACH BEARING THAT DATE. Malt liquors, apparatus for drawing and preserv-

[Those marked (r) are reissued patents.]

cluding both the specifications and drawings, or any patent issued since 1867, will be furnished from this office Park Row, New York city.

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