

yellow brass? If so, with what? A. For soft brass we think no lubrication necessary other than a solution of soap...

(26) W. W. asks: How can I make a liquid stove polish to be applied with a woolen cloth, and get the same luster, as the old style with brush, water, and carburet of iron?

(27) C. C. S. asks: 1. What can I use to make linen white—something that will do the work quick, so that it can be used in a laundry, and that does not injure the clothes?

(28) W. H. W. writes: Of late I have a great deal of trouble with my work and cannot tell the cause. My work is mostly on brass. The common yellow brass I do not have any trouble with; but when I have red brass to plate I am unable to make it hold...

(29) O. R. asks why adding water to sulphuric acid makes the mixture hotter. Is there any combination chemically? A. Water and sulphuric acid unite chemically.

(30) H. H. L. asks how the engineers in charge of the proposed tunnel under the English channel get the bearing in order that they may excavate from both sides and have the excavations meet beneath the channel.

(31) T. G. asks: Can you inform us in what way to use nitric acid to cut hard steel? A. Mix strongest nitric acid with three times its weight of hydrochloric acid, and warm before using.

(32) W. H. P. asks how to clean copper specimens, also silver specimens, so that they will stay clean and not turn black. A. Clean with a strong solution of cyanide of potassium and a stiff brush.

(33) H. C. C. asks: Can a varnish be made of pure amber, and how? A. Amber varnish is prepared as follows: Six pounds fine picked very pale transparent amber is fused in a suitable copper pot over a moderate fire...

(34) G. F. R. asks: Do you know some means to prevent the absorption of water by glycerine used in glue? A. Add a small quantity of chromic acid or bichromate of potash to the glue glycerine composition.

(35) J. E. F. asks how the panels are japanned for panel painting. A. Have the work dry and warm, and give it two coats of a solution of 4 oz. seed lac in 1 pint of alcohol.

(36) A. C. M. asks: What is the quantity of each ingredient used in silvering mirrors, as published in your issue of December 13, 1879? A. For details of the silvering process see SUPPLEMENT, No. 105.

same dry zinc such as painters use? A. No. Use metallic zinc in fine powder, such as filings.

(37) W. S. H. writes: I notice in the SUPPLEMENT, No. 364, a description of an improvement in the Bunsen battery, and the experiment was carried on with the salts of ammonia, but it does not say what kind of salts, whether nitrate, sulphate, or some other salts.

(38) E. J. M. asks: Can you inform me whether the asbestos roofing is durable? I have been told that it will not last over two years. A. So far as we know, we incline to a favorable opinion of asbestos roofing.

(39) A. B. & B. write: 1. We wish to know of a substance to impregnate wood with, that will prevent it from swelling and shrinking. It must not be affected by spirits or acids, and must not be poisonous.

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

D. Y. H.—The limestone contains much galena—lead sulphide, some copper, and a trace of silver. See Hints to Correspondents.

INDEX OF INVENTIONS FOR WHICH Letters Patent of the United States were Granted in the Week Ending March 15, 1881, AND EACH BEARING THAT DATE.

A printed copy of the specification and drawing of any patent in the annexed list, also of any patent issued since 1866, will be furnished from this office for one dollar.

Table listing various inventions and their patent numbers, including items like 'Abdominal supporter, M. T. Linquist', 'Agricultural implement, combined, M. M. Keith', etc.

Table listing various inventions and their patent numbers, including items like 'Crucibles, etc., manufacture of plumbago, S. A. Peto', 'Cultivator, L. K. Tipton', 'Cultivator, D. Unthank', etc.

DESIGNS. Bottle, L. E. Keeley, 12,187. Carpet, H. Honan, 12,185, 12,186. Carpet, J. B. Neil, 12,188. Pitcher, cream, H. J. Smith, 12,189.

English Patents Issued to Americans. From March 11 to March 15, 1881, inclusive. Fog bell, International Fog Bell Co., Bangor, Me. Globe holder, A. W. Crockett, New York city.

PATENTS.

MESSRS. MUNN & CO., in connection with the publication of the SCIENTIFIC AMERICAN, continue to examine Improvements, and to act as Solicitors of Patents for Inventors. In this line of business they have had thirty-five years' experience, and now have unequalled facilities for the preparation of Patent Drawings, Specifications, and the prosecution of Applications for Patents in the United States, Canada, and Foreign Countries.