

Catarrah Cured.

A clergyman, after years of suffering from that loathsome disease, catarrh, and vainly trying every known remedy, at last found a prescription which completely cured and saved him from death.

Patent Rights for Sale. Apparatus for building Concrete Buildings and Walls. County rights, \$50. State rights, \$500. See descriptive notice in SCI. AMERICAN, May 22, 1886.

Hodges' universal angle union makes pipe connection at any angle. Rollstone Machine Co., Fitchburg, Mass. Send for new and complete catalogue of Scientific Books for sale by Munn & Co., 361 Broadway, N. Y. Free on application.



HINTS TO CORRESPONDENTS.

Names and Address must accompany all letters, or no attention will be paid thereto. This is for our information, and not for publication. References to former articles or answers should give date of paper and page or number of question.

(1) G. C. asks: 1. Is there any way to find the length of belt by figuring? A. You can only compute the length of belts by knowing the distance of centers and adding to twice the distance the amount of lap for both pulleys.

(2) B. A. H. asks: 1. Is there any method of cutting and polishing petrified wood? A. Petrified wood and minerals can be cut and polished in the manner of lapidary work.

(3) G. S.—A solder made of equal parts of tin and lead melts at 368° Fah. You can burn the vapor of gasoline by saturating air with the vapor and passing it through a Bunsen burner.

(4) J. V. D. asks: How many cells of carbon battery, small size, will be required to light one Edison 6 candle power light? A. About 27 cells, arranged 9 in series and 3 in parallel.

(5) W. L. asks (1) how to remove the apparent greasiness on a wood blackboard. I have tried soap and hot water several times without any effect.

(6) Old Reader asks: Please give formula for making photographer's paste. A. Mix thoroughly 630 grains of the finest Bermuda arrowroot with 375 grains of cold water in a capsule.

cold, stir in well 375 grains of alcohol and 5 or 6 drops of pure carbolic acid. Keep in well closed vessels, and, before using it, work up a portion with a brush in a dish.

(7) H. M.—The money made at the various mints goes into circulation on the order of the United States Treasurer, as called for by the different banks and financial institutions, in settlement of balances, the Treasurer filling orders for different coin according to the quantities being coined, and with regard also to date of application.

(8) J. D. M. asks: 1. Why did the moon during the late eclipse have a brown or smoky look rather than a black? A. We do not know that the moon ever looked black during its total eclipse.

(9) S. R. T. asks a composition of a cement which will join glass plates to brass, and which will not be soluble in bisulphide of carbon.

(10) S. D. W. asks: 1. If gold was as cheaply obtained and as plentiful as brass, which, for its commercial and mechanical uses, would be of the greater value? A. The less oxidizable metal—gold.

(11) J. H. K. asks: 1. What is the best method of filling and darkening ash and oak for antique finish? A. Spon's "Workshop Receipts," first series, which we can furnish for \$2, gives very full information on the staining and finishing of woodwork.

(12) W. W. asks the distance from the center span of the Forth bridge to the shore, in England. A. There are two central spans, of 1,700 feet each, with central pier on the Scotch island of Inchgarvie.

(13) R.—For articles on curved ball in ball playing see SCIENTIFIC AMERICAN SUPPLEMENT, Nos. 410, 423, 410.

(14) W. W. has a petroleum engine, and wants to know how to burn off soot on the flues. A. It cannot be burned off. Open the rear end by taking off the plate, and scrape or brush off the soot.

(15) N. S. C.—Hard water is not always due to the same chemical element. You will find an interesting article on the Softening of Water in SCIENTIFIC AMERICAN SUPPLEMENT, 270, 187.

(16) H. W. W. writes: I have trouble in brazing my band resaws. I use brass and borax as a flux, but the heat required is so great that it burns out my irons and damages the saws.

(17) D. L. desires a cement for amber. A. Two surfaces of amber may be united by smearing them with boiled linseed oil, pressing them strongly together, and heating them over a clear charcoal fire.

(18) A. C. C. J. writes: I upset a jug of ink (the blackest copying ink, at that) on the end of a closed volume of Blackstone.

(19) Bath Tub writes: I want to paint a zinc bath tub white. Can it be painted so it will hold and be durable, and if so, how should the paint be prepared? I am informed there are no prepared paints for such purpose.

ing: 1 part copper nitrate, 1 part copper chloride, 1 part ammonium chloride, dissolved in 64 parts of water to which 1 part of commercial hydrochloric acid is added.

TO INVENTORS.

An experience of forty years, and the preparation of more than one hundred thousand applications for patents at home and abroad, enable us to understand the laws and practice on both continents, and to possess unequalled facilities for procuring patents everywhere.

INDEX OF INVENTIONS

For which Letters Patent of the United States were Granted

February 21, 1888,

AND EACH BEARING THAT DATE.

[See note at end of list about copies of these patents.]

Table listing inventions with their respective patent numbers and inventors. Includes items like 'Acid distributing apparatus, sulphuric, F. W. Chappell', 'Aerial navigation, W. Gustafson', 'Agricultural implement, L. Whitty', etc.

Table listing inventions with their respective patent numbers and inventors. Includes items like 'Coupling and brake, combined, A. Hodgson', 'Cradle, Duffy & Reiling', 'Crate, berry or fruit, S. R. Krafer', etc.