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HINTS TO CORRESPONDENTS.

No attention will be paid to communications unless accompanied with the full name and address of the til a proper consistence is attained. The quantities ar writer.

Names and addresses of correspondents will not be given to inquirers.

We renew our request that correspondents, in referring to former answers or articles, will be kind enough to name the date of the paper and the page, or the number of the question.

Correspondents whose inquiries do not appear after a reasonable time should repeat them. If not then published, they may conclude that, for good reasons, the Editor declines them

Persons desiring special information which is purely of a personal character, and not of general interest, should remit from \$1 to \$5, according to the subject as we cannot be expected to spend time and labor to paper which may be kept for use without curling, an obtain such information without remuneration.

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Correspondents sending samples of minerals, et for examination, should be careful to distinctly mark a label their specimens so as to avoid error in their ident?

- (1) H. W. writes: I have some gutta percha chips: how cau I soften them and then make them hard again, like gutta percha buttons? A. Soak the fragments in hot water. It will quickly soften them, and they will become hard on cooling.
- (2) J. R. H.—The ordinary solid bluing consists of indigo and starch, or of artificial ultramarine. To make liquid bluing the following is a good receipt: Powder one ounce Prussian blue very fine, add it to one quart of very pure water, to which add one-fourth of an ounce of oxalic acid. This is very powerful. The oxalic scid is poison.
- (3) O. T. asks: Can you give me a formula or two for brilliant, quick drying furniture polish? A. The following will dry in a moderate time: 4 ounces shellac is dissolved in 2 pints strong alcohol; to this is added pints linseed oil and 1 pint spirits of turpentine. When mixed, add 4 ounces common ether and 8 ounces ammonia water. Apply with a sponge. For French polishing, shellac varnishes are often used. The followis good: Shellac 2 pounds, mastic and sandarach, of if it is likely that the sand would find a market as a each 1 ounce, copal varnish 12 ounces. Alcohol 1 gallon. Make in the cold in a stoppered can or demijohn, and do not filter. This is for use in French polishing, which involves rubbing in with a rubber.
- (4) W. L. T. asks for a receipt for gilding and silvering on wood. A. The wood must be coated with size. To make this boil half a pound parchment shavings with three quarts of water, constantly stirring. This gives a clear solntion of gelatine, which must be passed through a sieve. Paint over the wood with this, and while it is still moist apply gold or silver leaf or Dutch metal. Much manual skill is necessary, and you should see the exact details practiced by a gilder. You may also gild wood by mixing bronze powder with copal varnish and painting it with the mixture. Final-, gold paint may be bought all ready for use and this will probably give you the most satisfaction.
- (5) E. G. H.—To prevent the rotting of seines, we would suggest the use of raw linseed oil, applied to the seine while it was perfectly dry.
- (6) A. R. J. writes: How can I remove pressed in one-sixteenth of an inch? Can the indentation be entirely taken out? Also, is there any preparation to renew the muslin or leather covers of old books? or porcelain surface. This must then be revarnished. Also can the stains of dampness, mould, or other discolorations be removed from the cover and leaves? A. The impressions on the outside of the book cannot be removed. It would also be very difficult or impo-
- (7) D. J. P. asks: 1. Is there any solvent It depends on what kind of ink the bottles held. of coal tar other than heat or "dead oil"? A. Turpenlar liquids will dissolve coal tar. 2. How may the odor of coal tar be destroyed or disguised? A. It is extremely hard to remove or disguise its odor, as we have found by experience.
- (8) T. F. asks (1) what two colorless or nearly colorless liquids when mixed will become black. A. Mix a dilute solution of copperas with an infusion of nut galls. 2. What colorless or nearly colorless vegetable or mineral solution will become dark by contact with a metallic solid, and what metal will effect the change? A. Mix a dilute solution of nickel sulphate with a very little hydrochloric acid and add sulphide of ammonium. A piece of metallic zinc will neutralize the acid and cause a black precipitate of sulphide of nickel which will color the solution beforesettlingout
- (9) E. C. S. writes: 1. I have a lot of surgeon's isinglass adhesive plaster which is not very proof against water or moisture. What should I apply

to the silk side to render it entirely waterproof, so won't wash off when slightly wet? A. After applyin it give it a coat of shellac dissolved in alcohol, or it and the skin surrounding it with collodion. 2. Wha is the liquid used on muslin drilling, or cotton duck t make it waterproof, and fit for coats, horse and wago covers, etc.? It gives the material a slightly yellowis tint. A. Linseed oil.

- (10) H. C. W. writes: 1. Please give us i "Notes and Queries" the formula for a good liquid shoe dressing; one that will not injure the leather an C. B. Rogers & Co., Norwich, Conn., Wood Working which will give a luster without rubbing, and which will also answer for harness? A. Many receipts are given We give the following, as it contains no oil of vitriol, an can be tried cheaply. Ivory black, 1 pound; molasses 34 pound; sweet oil, 2 ounces. Mix well and rub to gether, then add beer, 1 pint, vinegar, 1 pint. Also se SCIENTIFIC AMERICAN, Vol. 48, No. 10. 2, Can you als give the formula for Day's liquid blacking, an Englis preparation? A. The formula for Day & Martin' English blacking is thus given: Fine bone black is mix ed with sperm oil until a thorough mixture is effected Sugar and motasses is mixed with a little vinegar, an added to the mass. Oil of vitriol is next added, an when effervescence has ceased vinegar is poured in un not given; they probably run about as follows: Bon black, 1 pound; sperm oil, 1/4 pound, or enough to mix molasses, 1 pound; oil of vitriol, 1/8 pound; vinega enough to secure proper consistency.
 - (11) C. F. S. asks: Is there any way we can keep glue from getting thick after reducing down very thin? What can we put in it to destroy the offensive odor while cooking? A. Add acetic acid to the glue This will keep it liquid and tend to overcome the odor Try also muriatic acid or acetate of lead; both ar gøod.
 - (12) E. Bros. ask if this is intended to make a first class mucilage for gumming large sheets of stick well on glass or other substances when wet, viz. paste or glue for paper labels:

Starch	2 drachms.
White sugar	1 ounce.
Gum arabic	2 drachms.
Water	a.s.

Dissolve the gum, add the sugar, and boil until the starch is cooked. A. This seems to be a good paste Try the following, said to be that used on postage stamps: Gum dextrine, 2 parts; acetic acid, 1 part Water, 5 parts. Dissolve in a water bath and add alco hol, 1 part.

- (13) J. W. R. asks how to make green japan for tin, such as is used on toy cups, bird cages, etc Say what ingredients to use, and how to mix? A. Colo the japan green by adding a mixture of King's vellow (or other good yellow) and Prussian blue: also try ani line greens.
- (14) F. W. writes: 1. Will you please answer the following questions, and oblige: At what de gree of heat will platinum melt ? A. 4,5910 Fahr. 2 Has it a clear ring like silver? A. It is not nearly se sonorous as silver. 3. What is it worth per pound? A About \$155.00.
- (15) L. R. G. writes: I forward you with this a sample of white quartz sand from a deposit in this State. Would you inform me whether the sample is of a kind suitable for fine glass manufacture, and also commercial article if suitably prepared? Would you also acquaint me through the Scientific American what are the requirements of manufacturers in their choice of sand for different classes of articles, and wherethe most suitable are found in this country? A The value of sand for manufacturers in general consists especially in its freedom from iron. The sample you send seems very pure and well adapted for glass making Correspond with some of the large glass factories, and send them samples if they ask for them.
- (16) G. W. H. writes: Will you please inform me in your answers to correspondents how steel plate engravings can be transferred to vases and other articles for ornament. Some method by which the ink can be softened and transferred to any kind of hare surface? A. Varnish the surface to which the engraving is to be transferred with copal or dammar varnish. After it has dried for six hours and is still sticky, wet or soak (if necessary) the engraving, using soft water for the purpose. Then press the engraving well npon the varnished surface, carefully avoiding the formation of bubbles. Let the whole dry perfectly (which will the gold gilt and name from the cover of a book that is takea day more). Then with a wet sponge and the fingers and soft rubber wash off the paper in pieces, and the lines of the engraving will be left upon the glass
 - (17) A. A. R. asks: Can you give a process whereby empty ink bottles can be sufficiently cleaned, so that they may be used without injury to health in
- (18) A. G. asks: Are the colors used in maktine, naphtha, kerosene, benzine, and many other simitime? A. Most of the colors are very permanent.

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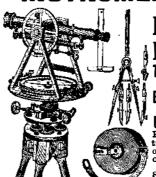
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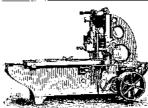


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