disposing of the trouble you mention. In some places the gases are saved and made into sulphuric acid, but this we presume does not apply to your case. If a water tower could be used, so as to wash the escaping gases, some improvement would be effected.

(2666) R. asks how to run white wax gums out in cubic form, while the paraffine is hot and melted. We have tried iron, glass, marble, wood, and tin, but find it sticks to them all. A. Use powdered starch. Place it in a tray and form the mould by pressing down into it a cube of wood, slightly tapered to make it "draw."

(2667) Subscriber asks for a recipe for replating knives, Rodgers' make A No. 1. A. In our SUPPLEMENT, No. 310, you will find electro-plating decreased. Steel should receive a light deposit of copper before silver plating.

(2668) A. B. F. asks how to make a glue or cement which will hold copper and zinc filings to leather when exposed to dampness or water. A. Try shellac and alcohol, or varnish the surface with copal or other varnish, and when tacky sprinkle on the filings.

(2669) A. T. O. asks: 1. What is the present market price of aluminum, and how much of it is there in a cubic foot of common blue clay? A. The price depends on the quantity. It is about $4 a pound. The quantity in clay varies. It may be fifty per cent, generally it is much less. 2. How much carbon dioxide results from the complete combustion of 1 gallon of good kerosene? A. About 18 pounds. 3. I have applied strong water of ammonia to the red spots formed on a woolen coat by nitric acid, but it does not remove them. What shall I do? A. You cannot remove them except by instant application of ammonia. Any delay makes them ineradicable. 4. Would it be dangerous to grasp a "live" electric wire with both hands at once if the feet do not touch the ground or any other conductor? A. Not under ordinary conditions; it might be unpleasant. 5. Does increased speed in a dynamo result in increased voltage? A. Yes. 6. Is there anything in the following: "Smokers will be glad," says *Invention*, "to hear that tobacco may be enjoyed to any extent without injury to health. Dr. Gautrelet, of Vichy, has discovered that by inserting in the pipe or cigar holder a piece of cotton wool steeped in a solution of pyrogallic acid, all the ill effects of nicotme will be neutralized. The mischief frequently caused to heart, mouth, and nerves is thus prevented, while the taste of the tobacco remains unaffected." A. We do not know. We doubt it.

(2670) F. E. A. asks: 1. Is there any way you know of in which kid gloves can be cleaned without wetting them, that will work as well as wetting them? A. Stale bread is sometimes used for this purpose. The gloves are put on and the softer part of the bread is broken up into crumbs and the hands are rubbed one over the other as in the act of washing, the crumbs being thus rubbed over all parts of the gloves. Spongy rubber is often used for glove cleaning. It is applied in the same manner as in cleaning drawings, *i. e.*, it is rubbed over the soiled parts of the glove. 2. What are first class lantern slides painted with to produce the greatest transparency and brilliancy without light, etc., affecting the colors? Also how to apply the colors without showing brush marks when enlarged? A. Transparent oil colors are generally used. They are mixed with varnish and carefully applied. Large masses of color are sometimes applied to the back of the glass, where they will be out of focus, and while they tint the picture the brush marks will not show. The finest lantern pictures are tinted with colors insoluble in Canada balsam, and the slide cover is cemented on with balsam.

(2671) B. F. E. asks: 1. How is dry battery compound made, such as is simply dissolved in water, with no other addition? A. The bichromate battery compound is made by mixing sulphuric acid with dry powdered bichromate of potash. As the dust of the bichromate of potash is poisonous, and as the fumes given off during the mixture are deleterious, we would not advise a novice in chemistry to try to make the compound. Special appliances are needed to avoid unpleasant consequences. 2. When wire is said to be burned out, is it consumed or simply destroyed as a conductor, I mean in a small dynamo? A. An armature is burned out when the insulation of the wire is destroyed. In addition to this result of a heavy current, the wire may be fused. 3. How much wire should be wound on a magnet core (such as used for bells) to make it five ohms resistance, No. 28 wire? A. 74 feet, or about ½ ounce. 4. What is the resistance of 50 feet of No. 36 wire? A. About 21½ ohms. 5. Should a zinc and carbon be same size and thickness? A. They need not necessarily be of the same thickness. The carbon may be thicker.

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Starch, laundry, Burns & Hunt 18,739
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