

(2) G. H. B. asks a receipt for cheap, substantial gold plate, to use on nickel plated roller skates for exhibition, to apply without the aid of any machine.

(3) H. R. asks: Will you be kind enough to give me a receipt for making soft yellow solder, as I have a number of joints to make, and common soft solder shows too plain, and cannot use hard solder, for the work will not stand to be heated hot enough to melt hard solder?

(4) W. K. L. asks: Of what and how are grindstones made? A. Grindstones are made from natural sandstone, the stones being cut roughly into shape and afterward turned.

(5) W. A. P. writes: 1. I am making the dynamo described in SUPPLEMENT, No. 161, and I have been at a loss to know how to make the armature. Should it (the cast iron part) be like the letter H, and the brass heads fastened to the side pieces?

(6) W. B. asks: If I take two carbon plates 3x4, and place them in a jar containing a solution of sulphuric acid and bichromate of potash, with a zinc plate of similar size between them, would I get electricity of sufficient electromotive force to run an incandescent lamp, and if so, what number of candle power lamp would six similar cells run?

(7) J. C. S.—The affection indicated (pimples on the face) is known in medical works as acne. It is not of the slightest consequence, except that its presence on the face causes annoyance as a disfigurement.

(8) H. L. G. asks: 1. If a supply steam pipe is at the end of a boiler, would it cause the water in the boiler to foam? A. Not necessarily.

(9) A. W. M. asks (1) how to make a Leyden jar. A. Take a thin wide mouthed jar; varnish it with shellac inside and outside; allow the varnish to dry; then take some sheets of tin foil and varnish them with shellac, and as soon as the varnish becomes tacky, apply the varnished surface of the leaf to the varnished surface of the jar, rubbing it down thoroughly over every part to insure perfect adhesion.

(10) M. L. asks: 1. Can a battery of Leclanche cells that have been run out on closed circuit be renewed by being repacked with fresh oxide of manganese, or are the carbons injured as well as the manganese that the cells polarized?

(11) M. E. R. desires a method of dyeing fur without injuring the fur or skin. A. Experience is very important in dyeing valuable furs. For brown, tincture of logwood is used. For black, logwood and copperas. For red, ground Brazil wood 1/4 pound, water 1 1/2 quarts, cochineal 1/2 ounce; boil the Brazil wood in the water one hour, strain, and add the cochineal; boil 15 minutes.

(12) E. P. M. asks: What preparation or salt of mercury is known as the protosulphate? What other name is it known by? A. It is also known as mercurous sulphate. It is prepared by adding sulphuric acid to a solution of mercurous nitrate. It forms a white crystalline powder, and is but slightly soluble in water.

(13) E. G. asks: Will a turpentine bath soften or bring the surface of carbon paper to life again? If not, what will do it, and how applied? A. It will not. It is probable that you are using a poor quality of paper. It may perhaps be improved by laying between oil sheets.

(14) E. H. C.—There are stringent laws in most of the States prohibiting the sale of kerosene unless it be of proper grade. There is no danger from kerosene if properly handled.

(15) E. F. B.—The attraction of gravitation is greatest at the earth's surface. It is nothing at the center.

(16) H. S. asks what the word antipyrine means. A. Antipyrine is the name given to a recent derivative from coal tar. On account of its similarity to quinine, and its like properties, it has been sold as a substitute for this well known febrifuge.

(17) M. J. desires (1) something that will keep the hair curly, that is, the bangs. A. Use the liquid obtained by boiling, for ten minutes, 1 drachm quince seeds in 1/2 pint water and straining, or steep 6 ounces gum tragacanth for 30 hours in 1 gallon rose water, stirring frequently; strain through a cloth, and let stand for a few days; then strain again, and work into it 4 drachms oil of rose.

(18) J. R. M. writes: The top of the cold air pipe which supplies the air to my furnace is one foot below the level of the floor where the first registers are; and I would like to extend the pipe higher, so as to avoid getting the air so near the surface of the ground.

(19) L. V. would like (1) some simple process of purifying skunk's oil. A. Agitation with charcoal and filtration are the only simple means that we can suggest.

(20) E. C. asks why slate forms between the layers of coal. Also, why hydrogen contains more latent heat or produces more intense heat in its flame than any other gas? A. Coal has been formed by the growth and decay of vegetation, in the presence of water, as in our present peat swamps. It was therefore accumulated at the mouths of rivers or in localities subject to floods.

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