

**On a New Chrome Green, by M. Mathieu Plessy.**

The following is my method of operating:—

In 10 parts of boiling water I dissolve one part of bichromate of potash: to this I add 3 litres of biphosphate of lime, then 1.250 kilogrammes of brown sugar.

After a little time a tumultuous disengagement of gas takes place, which must be moderated by sprinkling over the froth.

After calcination the whole is left to stand, and by the following day the green is deposited. The supernatant liquid, of the colour of salts of chromium, decant, and wash the precipitate with cold water until the acid reaction ceases: it is then placed on a cloth *essoré*, and taken to the stove.

The above quantities give 2.500 of product.

This green, containing, as we have shown no poisonous substance, is unalterable in the sun; sulphuretted hydrogen has no effect upon it; acids, even though concentrated, do not destroy it, or, at least, act very slowly as solvents. In fixing it by albumen, and printing with it, there is no inconvenience, except a slight paleness of tint.

By the firm of Betremieux it has been used in printing on a plain paper ground, producing an agreeable water-green colour. As a smooth ground it has also been employed as an oil colour at the Louvre, and the tint has remained unaltered since its application a year ago.—*Repertoire de Chimie Pure et Appliquée*.

**Oil of Asphaltum for the Preservation of Boilers.**

M. Dollfus reports to the *Societe Industrielle* of Mulhouse his success in using the heavy oil extracted by M. Lebal from the asphaltum and bitumen, at Pechelbronn. He says that it is perfectly successful and very economical as an unguent for heavy machinery. He applied it to the inner surface of his boilers and heaters by warming them so as to make the oil more fluid, and then applying it in a thin coat by means of a common broom. The results were very satisfactory; the calcareous crusts were gradually detached and the metal everywhere exposed. "I continue to use the oil whenever I clean a boiler, and I judge that the expense, which is about 10 kilos. (20 lbs.) for a boiler of 45-horse power, is largely compensated for by the economy of fuel in consequence of the metal being clean: repairs are also much less frequent, as the boilers do not burn out so freely."—*Bulletin de la Societe Industrielle de Mulhouse*.

**Floating Dock in India**

The last mail from India brought intelligence that the great iron floating dock, built at Sourabaya, Java, from the designs of Mr. R. W. Thomson, C.E., was successfully floated into deep water on the 23rd November. It was expected to be ready for lifting the largest ships by the end of the following month. Messrs. Randolph, Elder and Co., of Glasgow, have just completed a similar iron floating dock for the French Government. This structure is capable of lifting out of the water the largest man-of-war in the world, not excepting the "Warrior," with all her guns and armour-plates in their places. This dock is also from the designs of Mr. Thomson.—*Mechanics' Magazine*.

**Remedy for Poisoning**

We are informed that M. Jas. Bruce has recently discovered a remedy for poisoning by strychnine and by mushrooms. It consists in making the patient eat large quantities of refined sugar, and in desperate cases opening a vein and injecting sugared water. Its effects are to oxygenate the blood and restore the circulation. He recommends its application to all venomous bites, and considers that it may be tried, with much advantage, in "lock-jaw and accidents from chloroform." *Le sucre c'est le veritable ami des nerfs*. The effects of most poisons on the circulation are accurately determined microscopically in experiments with frogs, bees, flies, grasshoppers, ladybirds, snails, &c.; the pulsation of the heart being easily perceived.—*Mechanics' Magazine*.

**Organic Matter in the Atmosphere.**

M. Reviel has instituted a series of experiments at the Hôpital Lariboisière, Paris, and has shown the existence of a large amount of organic matter floating in the atmosphere. The dust of a ward was collected, and found to contain 36 per cent. of organic matter, chiefly in the form of epithelial cells. In the air of rooms containing the sufferers from contagious inflammation of the eyeball, small corpuscles were detected analogous to those of the virus thrown off from an inflamed eye. It is probable that infection, therefore, is mechanically conveyed from eye to eye by means of the air.—*Mechanics' Magazine*.

**Yellow Spots on Leather.**

Yellow spots on leather frequently occur, and these detract from its value. A correspondent of the *Shoe and Leather Reporter* says they are caused by decomposition in the hide, probably in the sweating process. The remedy, he says, is "more care in the manipulation or working of the hides. With good, cold spring water for soaking, and with a sweat-pit kept at the right temperature, with ice or otherwise, and a cool, sweet liquor for the first stages of handling, there is but little danger of being troubled with yellow spots on leather."

**A New Telescope.**

Among the many new companies that the plethoric state of the money markets is creating, one of a most novel and curious nature is talked of. The object is to construct a gigantic reflecting telescope, of far greater dimensions than Lord Rosse's celebrated 6 feet reflector, with which it is expected wonderful planetary sights will be revealed.

Professor Owen has communicated a paper to the Royal Society on a subject which has of late excited some interest among palæontologists, namely, the newly discovered fossil reptile with feathers. The strange specimen here referred to was found in the lithographic slate of Solhofen, and it was described by Prof. Andreas Wagner in a paper published in the "Sitzungsberichte," of the Royal Academy of Sciences at Munich, and named by him griphosaurus. A translation of this paper appeared in the "Annals of Natural History" last April.