

day, and the men seemed to grow hungry less rapidly, while tea soothed them after a day's hard labour, and enabled them to sleep better. They both operated upon fatigued and over-tasked men like a charm, and their superiority over alcoholic stimulants was very marked. The virtue of coffee used under the above-named circumstances I cannot overpraise, the only drawback to its frequent administration being the difficulty of preparing it, when the atmospheric temperature is low, and the traveller is obliged to depend upon a lamp with which to melt and boil the water."—*American Journal of Medical Science*, July, pp. 114-118.

CHEMISTRY.

ON AN EASY MODE OF PREPARING METALLIC CHROMIUM.

Wohler has given a simple mode of effecting this object. The process is as follows. One part of Chloride of Chromium is to be mixed with two parts of Chloride of Potassium and Sodium. This is to be introduced into a common crucible, packed tight, two parts of granulated zinc laid on it, and covered with a layer of alkaline salt. The crucible is then heated until the mass fuses, when on removing the cover for an instant, a zinc flame is observed, accompanied by a peculiar sound; the heat is diminished by closing the draught, and the whole kept fused for about 10 minutes. The crucible is then to be removed from the fire, gently struck to collect the metal and allowed to cool. On breaking the crucible a well formed regulus of zinc will be found under a green slag. This is to be well washed with water and thrown into dilute nitric acid, and the latter is to be added until all the zinc is dissolved. The Chromium remains as a crystalline powder, which is again to be heated with Nitric Acid, and then well washed. Its characters are stated to be as follows: A bright grey, highly crystalline powder. Under the Microscope the crystals are shown to be sharp rhombohedrons of great lustre and tin white colour. Its Sp. Gr. is 6.81 at 25° C. *It is not Magnetic.* Heated in the air it oxydises, becoming yellow and blue like steel, and gradually becomes covered with a thin layer of green oxyde. Heated in Chlorine it glows vividly, and changes into a Chloride of a violet colour. Hydro-Chloric Acid dissolves it, yielding a blue protochloride. Cold Dilute Sulphuric Acid has no action on it, but heated, a violent action sets in, and the remaining metal acquires the property of being easily dissolved after washing, even by the most diluted Sulphuric Acid. Concentrated Nitric Acid, even when boiling does not attack it in the least.—*Silliman's Journal*, Nov., 1859.

ON HÆMIN CRYSTALS.

In *Virchow's Archives*, Messrs. Buchner and Simon have contributed a valuable paper on the medico-legal importance of these crystals. Alluding to the discovery by Teichmann in 1853, of the production of rhombic coloured crystals in dried blood, which had been subject to the action of Acetic Acid, a fact so highly serviceable in determining between blood stains, and other marks upon articles of clothing, wood, iron, &c., the authors proceed to a precise description