

gypsum. When ammonia is introduced and causes a reddish-brown precipitate, the water contains iron. When oxalate of ammonia is mixed with the water, and produces a cloudy appearance, it contains lime, which after a while will fall to the bottom, in the form of oxalate of lime.—(Oxalic acid is the cause of the agreeable acidity in rhubarb.) If effervescence takes place upon the addition of a little vinegar or oil of vitriol, the water contains carbonic acid. If a bulky precipitate appears when ammonia is poured into the water, a quantity of spirit of salt must be added, until the precipitate vanishes, and ammonia again introduced; if no precipitate appears, the last observed consisted of magnesia, coloured probably by iron. If the precipitate does appear in the same quantity as before, the water contains alumina—the body which gives rise to the tenacity of clay, but which is not always found to enter into the composition of vegetables or animals—if less in quantity, that which has vanished contains magnesia, and what remains consists chiefly of alumina. These experiments will serve to indicate the presence of the substances mentioned, in a soluble state in the soil, or in water of wells, springs, rivers, &c. They do not in themselves possess any other value. The correct analysis of a soil is a very tedious and difficult operation. None but a practiced chemist should attempt it, in the hope of obtaining reliable, and consequently useful, results. The nature of the necessary processes may be seen in the appendix to Johnston's large work on Agricultural Chemistry.

British Military Ration in Canada.

OFFICERS' HORSES, DRAUGHT HORSES, AND OXEN.

9 pounds of Oats, Barley, Indian Corn, or 14 pounds Bran.
16 ditto of Hay.
6 ditto of Straw.

When Oats or Bran cannot be had,

32 pounds of Hay.
6 ditto of Straw.

CAVALRY AND ARTILLERY.

10 pounds of Oats.
12 ditto of Hay.
8 ditto of Straw.