CANADA

MEDICAL JOURNAL.

ORIGINAL COMMUNICATIONS.

*Chloral Hydrate. A lecture delivered during the session, 1870-71 By WILLIAM WRIGHT, M.D., L.R.C.S.E., Professor Materia Medica, McGill University.

The chief steps for making chloral, C_2 HCl₃, by Liebig's plan, are to pass chlorine gas through absolute alcohol to saturation, to treat the mixture with concentrated sulphuric acid and collect the product.

Thus got, it is a limpid fluid, sp. gr. 1.502, boils at 201. When mixed with water it developes much heat and becomes a white, crystalline hydrate. It is commonly seen as a solid, in irregular fragments, made up of fine acicular pieces aggregated together. At first they are transparent, but they soon become opaque and have a tendency to effloresce They sublime unchanged by a slight heat, are easily soluble in water and exhale an odour something like that of melons. The taste is pungent, and approaches to that of a bad bitter orange. The watery solution when acted on by free alkalies, grows opaque and milky-looking, and is transformed into a formiate of the base and chloroform.

Chloral comes to us with a great flourish of trumpets; from what we hear of it, almost in every medical paper we take up, we would expect to find it a safer, surer, and quicker hypnotic than any other hitherto used.

Firstly.—It is safer. Opiates, as you know, after they are taken, leave behind a faulty state of the digestive system and of secretion. It is not so with chloral. One of its great advantages is, that it leaves after its action no dryness of the mouth, furred tongue, bitter taste, thirst, nausea, loss of appetite, constipation, &c.; nor does it cause dry kin, scanty urine, &c. On the contrary, after chloral, the appetite is often more keen and indigestion unheard of. Other narcotics tend to increase the destructive powers from the injury they cause in weakening the stomach. It is the reverse with chloral, it rather raises up the formative processes by promoting assimilation. The difficulty hitherto telt in chronic wasting diseases, as phthisis, cancer, &c., of giving sleep so

BB