It is, however, very difficult to obtain a definite acid by any one of these methods, and the best plan is always to determine the strength of a given acid by an actual analysis and to dilute it accordingly. This analysis is exceedingly simple.

All we have to do is to precipitate a known weight or volume of the acid with an excess of nitrate of silver; cyanide of silver is thus produced, which is collected in a filter, washed and weighed.

From the weight of the precipitate, the amount of hydrocyanic acid is calculated without difficulty.

Dilute hydrocyanic acid cannot be preserved very long, especially when perfectly pure; the colorless transparent liquid soon becomes brown, and ultimately quite opaque.

The changes which occur under these circumstances are very complicated and scarcely sufficiently understood. It has been observed, that the addition of a few drops of a mineral acid, as of hydrochloric acid, renders the hydrocyanic acid more stable.

In its chemical relations hydrocyanic acid closely resembles hydrochloric, hydrobromic, hydriodic acids.

When treated with metallic oxides, the hydrogen of the acid combines with the oxygen of the base to form water, while the cyanogen unites with the metal, a cyanide being produced.

Of the cyanides, the cyanide of potassium is the most interesting, together with the cyanide of mercury.

The former is but seldom prepared by saturating hydrocyanic with potassa. This mode is never adopted except in the rare event of this salt being required in a state of absolute purity. It is generally extracted from the commercial yellow prussiate of potash, by a process which was suggested by Liebig, when this salt became of great importance in electro-plating.

Cyanide of potassium forms a soluble salt with cyanide of silver, which is obtained by adding cyanide of potassium to nitrate of silver, until the precipitate produced in the commencement is redissolved again. This salt is readily decomposed by the electric current, and furnishes a beautiful bright silver surface. It silvers even without the aid of electricity, but the layer of silver deposited is exceedingly thin. Since this important application, cyanide of potassium, which but a few years ago was a curiosity of the laboratory, is manufactured by tons, and it is not uninteresting to observe, that the service which chemists have rendered to the arts by discovering cheap and easy processes of producing cyanide of potassium, have been amply repaid by the introduction into the laboratory of this excellent reagent, which may now be employed for a great variety of processes for which it never could have been used, unless a great industrial application had reduced its cost of production. The use of cyanide of mercury is chiefly confined to the laboratory; as you have seen at the commencement of this lecture, it is employed in preparing cyanogen.

Cyanide of mercury is usually produced by treating oxide of mercury with dilute hydrocyanic acid, in which it is easily soluble. On evaporation, beautiful white needles of cyanide of mercury are deposited.

In the next lecture we shall consider the study of the cyanogen series.

CHLOROFORM IN HYPOCHONDRIASIS.

At the meeting of the College of Physicians in Ireland, in June, Professor Osborne stated that he had lately, in two cases, opportunities of observing a peculiar effect of chloroform taken into the stomach, in controlling the depressing and saddening feelings belonging to hypochondriasis. Considering that state to be produced by a depraved sensibility of the stomach or colon, and frequently of both, he was led to the internal employment of