

$$\left. \begin{array}{l} 2 \text{ PO} \\ \text{H}^6 \end{array} \right\} \text{O}^6 - \text{H}^2\text{O} = \left. \begin{array}{l} 2 \text{ PO} \\ \text{H}^4 \end{array} \right\} \text{O}^5 - \text{Pyrophosphoric or tetra-} \\ \text{basic acid.}$$

$$\left. \begin{array}{l} \text{PO} \\ \text{Na}^2\text{H} \end{array} \right\} \text{O}^3 - \text{Common phosphate of soda.}$$

$$\left. \begin{array}{l} 2 \text{ PO} \\ \text{Na}^2\text{H} \end{array} \right\} \text{O}^3 - \text{H}^2\text{O} = \left. \begin{array}{l} 2 \text{ PO} \\ \text{Na}^4 \end{array} \right\} \text{O}^5 - \text{Pyrophosphate of soda.}$$

$$\left. \begin{array}{l} \text{PO} \\ \text{NaH}^2 \end{array} \right\} \text{O}^3 - \text{H}^2\text{O} = \left. \begin{array}{l} \text{PO} \\ \text{Na} \end{array} \right\} \text{O}^2 - \text{Metaphosphate of soda.}$$

Laboratory, University College,  
May 4th, 1875.

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### SCRAPS.

BY "MONAD."

#### REACTION OF THE SALTS OF THE ALKALOIDS WITH POTASSIUM IODIDE IN PRESENCE OF FERRIC SALTS.

A short time ago I received the following prescription :—

℞ Potass iodid - - - ʒi.  
Tinct. ferri perchl - - ʒi.  
Strychnia sulph - - gr i.  
Aqua - - - - - ʒxv.

The strychnia sulphate dissolved in a little water was added last, and the mixture which had been clear, became filled with a dirty brick red precipitate, which gradually became darker. The precipitate on separation was seen to be finely crystalline, with many larger glistening needles, possessing the properties of free iodine.

A few experiments brought me to the following conclusions :—  
The salts of morphia, quinia, cinchonia, strychnia, and atropia, in the presence of persalts of iron, decompose potassium iodide, precipitating free iodine. The protosalts of iron have not this effect :

#### ESS BOUQUET.

Otto Rose	- - - - -	6 drams.
" Lemon	- - - - -	4 "
" Bergamot	- - - - -	2 oz.
Ambergris	- - - - -	36 grains.
Orris Root, grd	- - - - -	11 oz.
Alcohol deod.	- - - - -	60 oz.