

Little or nothing, however, is known about the position of the hydroxyl molecule; and, at all events, we have as yet no idea as to what constitutes the difference between the  $\alpha$  and  $\beta$  varieties, which presumably can only differ in this respect.

By simply pouring together solutions of the chloride of diazo-naphthaline, shown in the first formula, and of  $\beta$  naphthol, a red precipitate is quickly formed which consists of oxyazonaphthaline; and when this is treated with strong fuming sulphuric acid, the sulpho-acid compound results, which constitutes the beautiful red dye-stuff named "fast red" or "rocceline," as we mentioned at first.

If, however, at the corresponding stage of the operation, we add a solution of  $\alpha$  naphthol in place of the  $\beta$  naphthol, the solution acquires an orange in place of a red color, and on further treatment only yields a brown dye.

In place of introducing the sulpho-acid at the end of the operation, as above, it may be introduced either into the naphthylamine, forming naphthionic acid, or into the naphthol. In these two cases it is, of course, to be presumed that in the final compound the sulpho-acid will be in different parts of the molecule in each case. Where the sulpho-acid is introduced after the formation of the oxyazo compound—we as yet have no idea as to where it is attached.

The formation of the oxyazo compounds in these several ways was exhibited to the members present, the lecture table being illuminated by the electric light to show the various color changes.

President Morton then alluded to the statement in Maumene's recent work, that sugar inverted by boiling alone, or with acid, had a greater specific sweetness than cane sugar, and stated that as a result of a number of experiments made under his direction by Mr. Henry Beckmayer, in which the opinions of many persons unacquainted with the experiments and ignorant of the composition of the various solutions, had been collected, he found Maumene's statement to be confirmed in so far that the inverted sugar was weight for weight, somewhat sweeter than cane sugar, and that including the gain in weight by inversion, a given weight of cane sugar would certainly acquire at least ten per cent. more sweetening power by inversion. Solutions for comparison were presented to the members present.

## ERRATA.

Page	4,	Line	33.—Frehling, read Fehling.	
"	6,	"	3.— After, read after.	
"	64,	"	14 and 15.—	} Insoluble. } Soluble.
			Insoluble hydro. read Hydrocarbon. Soluble carbon.	
"	82,	"	20.— $C_8H_2Ba_3NO_6$ , read $C_8H_2ba_3NO_6$ .	
"	82,	"	27.— $C_8H_2Ca_3NO_6$ , read $C_8H_2ca_3NO_6$ .	
"	111,	"	3.—J. C. Battershall, read J. P. Battershall.	
"	111,	"	13.— $WO_3Na_3O + 2 Aq.$ , read $WO_3Na_2O + 2 Aq.$	
"	111,	"	28.—7th and 8th, read 7 and 8.	
"	113,	"	8.—parted, read pentad.	
"	116,	"	27.—divided, read derived.	
"	116,	"	32.—amide, read $\alpha$ anide.	
"	116,	"	38.—The acid, read the acid.	
"	117,	"	5.—into hydrochloric, read into metatoluic acid, by heating with hydrochloric.	