In the presence of mannite the compound titrates as a tri-basic acid.

Di-potassium Boro-oxalate.—Evidence of compound formation was obtained when di-potassium oxalate was heated with ortho-boric acid under the conditions described above. The product upon careful examination appeared to be homogeneous so far as crystalline form was concerned. On being heated at  $110-120^{\circ}$ for many hours, no loss of weight occurred as would have been the case had the material been merely a mixture of the original components, due both to loss of water of crystallization on the part of the potassium oxalate and the change of orthoboric to meta-boric acid.

Several analyses were made and results were obtained indicating a formula,  $K_2C_2O_4$ . HBO<sub>3</sub>. On repeated recrystallizations the analytical figures varied to such an extent that the study of the substance was discontinued as not being justified by its interest or importance to the problem in hand.

## SUMMARY.

1. A compound has been prepared from potassium hydrogen oxalate and boric acid, and has been found to possess a different composition than that previously recorded in the literature.

2. A compound of boric acid and oxalic acid  $(H_2C_2O_4, H_3BO_3, 2H_2O)$  hitherto undescribed has been isolated and analyzed.

3. There appears to be no evidence to justify assigning an ester structure to these compounds.

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MELLON INSTITUTE OF INDUSTRIAL RESEARCH,

University of Pittsburgh, Pittsburgh, Pennsylvania, April 14, 1924.

## CALCIUM SULPHIDE AS A CHEMICAL ANTIDOTE IN POISONING BY MERCURIC CHLORIDE.

In the Journal of Laboratory and Clinical Medicine, in 1917, a recovery was reported of mercuric chloride poisoning, following the administration of calcium sulphide as an antidote. In a more recent paper a number of cases of successful treatment were reported to the extent that the statement is made in this paper (January 1923, Hospital Corps Supplement to the U. S. Naval Medical Bulletin) that "cases so treated (by mouth or intravenously) usually show an uneventful recovery." Experiments with rabbits reported in the aforenamed publication, for May, by Lt. J. M. McCants, are not so encouraging; in fact, an amount equal to that employed as antidote of calcium suphide produced death and, also, rabbits actually given mercuric chloride and then the antidote died more quickly than those only given the mercuric chloride. The author suggests that method of treatment may be at fault, possibly the purity of the sulphide. The experiments, however, indicate that further investigation is necessary to establish a reasonable reliability for the calcium sulphide treatment.