

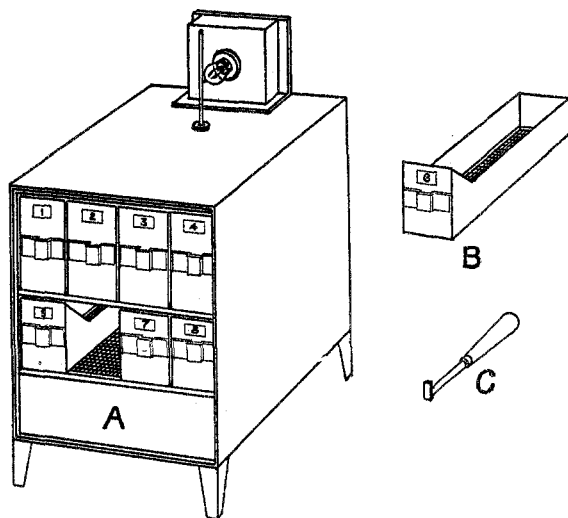
as solutes when compared together, thus permitting the inference that the salts belonging to the same group are hydrated to the same extent and equally acted upon by electric forces in the solvent within a very considerable domain of concentrations.

It may be added that the occurrence of constant solubility ratios in the case of easily soluble salts must be looked upon as an essential requirement for the carrying out of the thermodynamic calculations of affinities referred to in a previous paper.¹

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NOTES.

An Equipment for Drying Ovens.—The effective capacity of the ordinary drying oven can be increased from 5- to 10-fold by equipping it with metal drawers or trays as shown in the accompanying sketch. Each tray can hold a number of crucibles, small dishes or drying bottles, and because it is so easy to insert or withdraw one of the trays with its load without disturbing the others, the back part of the oven space is as available as the front. The supports of the trays are the wire mesh shelves of the oven; and to provide for the insertion of the thermometer



in the usual way one tray should be made shorter than the others.

With the design as shown, the whole front of the oven is closed when all of the trays are in position. This is a decided advantage because with such an arrangement, opening the oven doors has little effect in decreasing the temperature, and since the withdrawal of one tray does not leave a large opening, and also

because of the mass of hot metal of the remaining trays, the cooling is slight when objects are put into or taken out of the oven. The idea of keeping the front closed is carried still further by inserting a metal sheet at A to close the space below the first shelf.

The detail of a tray is shown at B. The bottoms are made of 12 mm. wire mesh to permit a free circulation of air throughout the interior of

¹ *Medd. K. Vetenskapsakad. Nobelinst.*, 5, No. 25, 18 (1919).

the oven. A metal loop on the front engages the handle C with which they are lifted while hot.

This equipment has been in use for several years in the writer's laboratory and has proved its worth. In laboratories used by students its value is especially high because the rule, one tray to a student, can be followed and one student in inserting or removing his material need not interfere with the work of the others.

Since the trays rest on the original shelves of the oven, it takes but a minute to remove them all and again convert the oven interior into one large compartment.

Although this equipment increases the amount of metal subject to corrosion it cannot be said to increase the danger of contamination beyond what any increased use of the oven would involve. C. W. FOULK.

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Correction.—The figures for the ordinates of Fig. 5, in our article on "The Transference Numbers of Lithium Chloride, etc." in the June 1920 JOURNAL, have been printed one division too high in each case; for instance, the figure 0.270 should be 0.280.

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[CONTRIBUTION FROM THE CHEMICAL INSTITUTE, SCIENCE COLLEGE, TOHOKU IMPERIAL UNIVERSITY.]

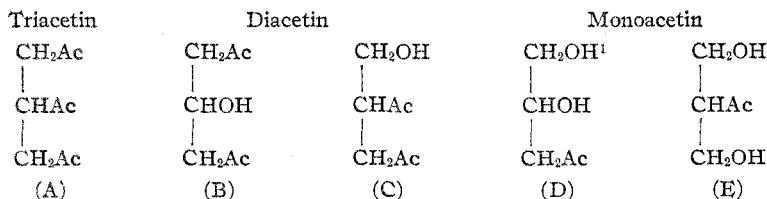
THE SUCCESSIVE STAGES OF THE HYDROLYSIS OF TRIACETIN.

By EIICHI YAMASAKI.

Received March 22, 1920.

Introduction.

The various acetins, or glycerin esters of acetic acid, some of them, however, being still unknown, are as follows:



If the ester A is hydrolyzed, the reaction will proceed successively by the following steps to glycerine, C₃H₅(OH)₃ (G)

¹ Esters (C) and (D) have one asymmetric carbon atom, respectively. Hence both of them must have 3 modifications, *i. e.*, the racemic and the optically active antipodes.