A Method for Preventing Salts from Creeping over the Sides of Evaporating Dishes.—In the course of mineral or soil analysis it is frequently necessary to evaporate saline solutions to smaller volumes or to complete dryness to expel ammonium salts. When, during evaporation, the solution becomes saturated and solids separate on the sides of the dish, the deposited solids, particularly if calcium and magnesium chlorides be present along with ammonium chloride, have a tendency to draw the less concentrated solution further up the sides of the dish and deposit crystals there. If determinations are left to run overnight or unwatched in the daytime, they are frequently ruined in this manner.

Creeping can easily be prevented by painting a strip about $^1/_4$ inch wide around the inner rim of the dish with collodion. Salts will not creep over this strip. The collodion dries immediately after being put on so there is no time lost in this operation. The film contains no non-volatile residue and can easily be burned off.

W. O. Robinson.

Bureau of Soils,
U. S. Department of Agriculture,
Washington, D. C.

CORRECTIONS.

On p. 1568 of our paper on Heterogeneous Equilibria between Aqueous and Metallic Solutions,[1] the statement is made that by the extrapolation of the logarithmic curve (curve No. 3, Fig. 4, p. 1563), a C_o value of 2.32 is obtained at an amalgam concentration of 0.225 milli-equivalent per 10 g. of mercury. And this value, 2.32, is subsequently made use of in the paper as the actual C_o value.

Also, on p. 1569, it is stated that C_o values at certain other amalgam concentrations are similarly obtained by the extrapolation of curves 1, 2 and 4, in Fig. 6.[2]

Owing to an unfortunate confusion of the zero point on the (log. total salt concn. × 10) abscissa, Fig. 4, p. 1563, with an actual salt concentration of zero, it was concluded that values of C_o could be obtained by the extrapolation of the logarithmic curves. This error has just been discovered. The values arrived at are not the C_o values in question, but the corresponding C_c values for the 0.1 *N* mixed salt solution (since $0 = \log 0.1 \times 10$).

This error will necessitate a new study of the experimental data in the case of the sodium-strontium chloride mixtures; and this we hope to have ready for publication in the near future.

G. McP. Smith and S. A. Braley.

Nov. 17, 1917.

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[1] This Journal, **39**, 1545 (1917).

[2] The statement should be "in Fig. 4;" owing to a typographical error, Fig. 6 is mentioned at this point.

The formula given on p. 2297 in the November number of THIS JOURNAL in the paper entitled "Solubility and Internal Pressure" should have been written

$$\log N = \frac{-L(T_m - T)}{4.58TT_m}.$$

The correct form was used in the calculation of the data used in the paper.

The value N for anthracene in Table I on p. 2298 should be 0.0107.

JOEL H. HILDEBRAND.

[CONTRIBUTION FROM THE SCHOOL OF CHEMISTRY, UNIVERSITY OF PITTSBURGH.]

PHTHALIC ACID DERIVATIVES; CONSTITUTION AND COLOR, V.[1] SOME DERIVATIVES OF TETRACHLORO- AND TETRAIODO PHTHALIMIDES.

BY DAVID S. PRATT AND GRANVILLE A. PERKINS.

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One of the most interesting sections in the vast field of investigation attempting more or less successfully to correlate constitution and color is the study of substances related to phthalic acid. Since the primary interest of such study, in the beginning if not now, was connected with visible color, investigations have dealt chiefly with the more complex members of the group, such as the phthaleins and related compounds. Such work was sufficient to establish certain theories of chromophores, auxochromes, etc., which must, however, be considered mere approximations. The *exact* correlation of absorption and constitution even in the simplest known substances seems at present such a complex affair that in the opinion of the authors it is not logical to expect to improve much on the present theories of color by a study confined to complicated substances such as the phthaleins or indeed any colored compounds. Our present knowledge indicates that while the physicist is approaching the problem of chemical affinity and its relation to radiant energy from the standpoint of molecular dynamics, the corresponding task of the organic chemist is to trace the relations between the absorption spectra of large numbers of closely related substances, thus linking the complex with the simple.

The already large literature dealing with absorption spectra unfortunately has the fault of being so detached in all but a few marked exceptions that it is generally impossible to trace accurately the connections between spectra even of substances in the same class. Information is lacking as a rule concerning the progressive changes brought

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[1] For previous papers on simpler derivatives such as the anhydride, imide, oxime and anil see *Am. Chem. J.*, **47**, 89 (1912); *Phil. J. Sci.*, (*A*) **8**, 165, 399 (1913); *Ibid.*, **9**, 105 (1914).