From the observations with low ion density the largest observed difference between the average collecting time for positive ions and that for negative ions was 0.7 percent of the mean collecting time; the probable error in each average was less than 0.4 percent. Half of the averages showed the positive current larger than the negative, thirty-three percent showed the opposite effect, and in all cases the difference between averages was less than the mean deviation of individual collecting time readings.

The ion density used by Broxon and Meredith was of the same order of magnitude as the low ion density here used: i.e., about ten to twenty times the residual ionization. Clay and Van Tijn have used an ion density of about 3000 times the residual ionization, and it was thought that this great factor might produce some difference between positive and negative collecting times. Again, however, when an ion density comparable with that of Clay and Van Tijn was used the differences between average times were all within 0.3 percent and showed no general preference.

It is a pleasure to acknowledge the courtesies of the California Institute of Technology in allowing me to perform these experiments with their facilities.

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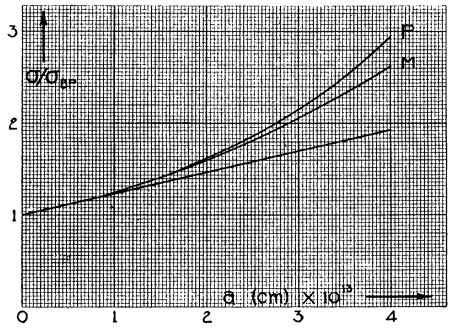
[1] I. S. Bowen, Phys. Rev. **41**, 24 (1932).
[2] E. F. Cox, Phys. Rev. **45**, 503 (1934).
[3] J. Clay and M. A. Van Tijn, Physica II **8**, 825 (1935). Clay and Van Tijn state by correspondence that the words *positive* and *negative* are to be interchanged on pages 827 and 828.
[4] J. W. Broxon and G. T. Meredith, Phys. Rev. **49**, 415 (1936).

Correction to The Photoelectric Effect of the Deuteron

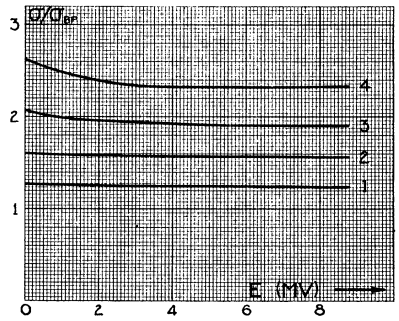
Two of us[1] published formulas and graphs for the collision cross section of a photon with a deuteron. Miss Katharine Way of the University of North Carolina has been comparing the calculations with some of her own and she has found arithmetical mistakes in the graphs. These mistakes were made in the calculations which involved the Majorana interaction. The calculations have been repeated and checked. The corrected graphs are reproduced below. They are numbered in the same way as in the paper.[1] Instead of Fig. 3b one should use the following values of $10^{27}\sigma$ (accurate to approximately 1 percent):

TABLE I. *Values of* $10^{27}\sigma$ *(Majorana).*

E	$a=1\times10^{-13}$ cm	$a=2\times10^{-13}$ cm	$a=3\times10^{-13}$ cm	$a=4\times10^{-13}$ cm
0.275 Mev	0.45	0.57	0.72	0.92
0.55	0.92	1.17	1.47	1.86
1.1	1.51	1.90	2.39	2.97
2.2	1.78	2.26	2.82	3.41
3.3	1.68	2.12	2.60	3.14
4.4	1.50	1.89	2.31	2.78
6.6	1.16	1.45	1.78	2.17
8.8	0.92	1.14	1.38	1.72



Corrected FIG. 1. Dependence of cross section on range and type of interaction law at the photoelectric threshold, $E=0$. Ratio σ/σ_{BP} is plotted against a in 10^{-13} cm. P refers to ordinary, M to Majorana interaction.



Corrected FIG. 2b. (Majorana interaction.) Dependence of cross section on range and type of interaction law for energies up to $E=8.8$ Mev. Ratio σ/σ_{BP} is plotted against E in Mev. Curves are labeled by values of a in 10^{-13} cm.

In Fig. 4 the curve M should be replaced by a straight horizontal line corresponding to $\sigma(h\nu=8.8\ \text{Mev})/\sigma(h\nu=4.4\ \text{Mev})=0.64$. It is seen that the photoelectric effect of the deuteron in the region $h\nu=0\rightarrow10$ Mev is not very suitable for distinguishing between exchange and non-exchange interactions, the collision cross sections being nearly the same in the two cases. The determination of the radius of the deuteron from experimental material on the photoelectric cross section is simpler, taking into account the above corrections, because nearly the same values for the radius are obtained whether one uses Wigner, Heisenberg or Majorana forces.

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[1] G. Breit and E. U. Condon, Phys. Rev. **49**, 904 (1936).