our results with the interferometer measures recently published by Meissner, Mundie, and Stelson,[1] we found agreement within our limits of error for all lines except one, *viz.*, λ4132. For this double line MMS give the center of gravity wave-length 4132.173A, while we find from several plates, consistently within ±0.02A, the value 4132.60. The difference of 0.43A is at least 10 times in excess of our limits of error.

As an explanation for this discrepancy, we suggest that the inaccuracy of the wave-length data available in the literature[2] has led MMS to choose an incorrect order number in the interpretation of the Fabry-Perot patterns of this line. It turns out that a correction of 4, 5, 10, and 18 fringes for the 8-, 10-, 20-, and 36-mm spacers, respectively, would bring the interferometer values in close agreement with our observations. This change would decrease the wave numbers given by MMS for $2\,^2P-5\,^2D$ by 2.500 cm^{-1}, a correction which is confirmed by applying a Ritz formula to the series $n\,^2D$. In fact, after fixing the series limit of the sharp and the diffuse series at $2\,^2P_{3/2}=28583.19\pm0.02$ cm^{-1}, the four levels 3, 4, 5, 6 $^2D_{5/2}$ are reproduced by the formula

$$T=109728.6(n-0.0019350+0.3762\cdot10^{-7}T)^{-2},$$

with an accuracy of ±0.002 cm^{-1}.

As a consequence of the above observation, the figures given in *Atomic Energy Levels*[3] for $5d\,^2D_{3/2}$, $5d\,^2D_{5/2}$, and the limit, should be changed to 39094.93, 39094.94, and 43487.19, respectively.

[1] K. W. Meissner, L. G. Mundie, and P. H. Stelson, Phys. Rev. **74**, 932 (1948). Hereinafter referred to as MMS.
[2] It should be noted, however, that a higher value, 4132.66A, was given by S. Werner, Dissertation (Copenhagen, 1927).
[3] Circular of the National Bureau of Standards 467, Washington D. C., 1948.

Erratum: Structure of the ^2D Terms of the Arc Spectrum of Lithium

[Phys. Rev. **74**, 932 (1948)]

K. W. Meissner, L. G. Mundie, and P. H. Stelson
Purdue University, Lafayette, Indiana

A COPY of the foregoing letter to the editor was kindly sent to us by Dr. Edlén. Thus I am able to comment without delay on the origin of the discrepancy they found.

The authors are quite right in their assumption that the wave-length data available in the literature has led us to select incorrect order numbers for the line 4132A. I should like to point out that the order numbers we employed were the only feasible ones if one assumed that the wave-length values given in the literature were correct within one- to two-tenths of an angstrom.

Two wave-length values were at our disposal, namely, Fowler's value given in the MIT tables, 4132.16A, and Datta's value, 4132.244A. These values suggested that the true wave-length was approximately 4132.2A. With this assumption the comparison of the different possible values obtained with 8-mm and 10-mm spacers, the smallest employed with the atomic beam source, was sufficient to select the only permissible value. The different possible values of the strong component resulting from Perot-Fabry patterns are given in Table I.

Table I. Possible values for the strong components resulting from Perot-Fabry patterns.

8 mm	10 mm
4132.6176	**4132.6173**
2.511	2.532
2.405	2.447
	2.362
2.298	2.277
4132.1917	**4132.1919**
2.085	2.107
1.979	2.022
	1.937
1.872	1.852
4131.7658	**4131.7666**

As one sees, only three pairs of these values agree with each other, namely 4132.617A and 4131.766A. Considering the close mutual agreement of the two values of the literature, we had to choose, consequently, the value 4132.192A and to discard the two other ones. If we had known the greater wave-length reported by Werner, the first one would have been possible too and a definite decision could have been obtained by employing another properly chosen spacer, e.g., a 3-mm.

Unfortunately, we were not able to carry out grating measurements of sufficiently high accuracy when we started our work since the Purdue Concave Grating mounting was not ready yet. After the receipt of Dr. Edlén's information, Mr. Wannlund and the writer carried out measurements with this instrument employing a lithium vacuum arc as light source. The grating employed is a concave grating with 15,000 lines per inch and a 30-ft. radius. The wave-length values obtained confirm the greater wave-length given by Edlén and Lidén. The average value of our grating measurements (center of gravity of the unresolved doublet) is 4132.61±0.01A, in close agreement with the value obtained by Edlén and Lidén with the hollow cathode source.

The interferometric wave-length values of the two components of 4132A reported in our paper for the atomic beam source and the vacuum arc have to be changed accordingly. The average values obtained from patterns with 8-, 10-, 20-, 36-, and 66-mm spacers are:

strong component: $\lambda=4132.618$A, $\nu=24\,190.940$ cm^{-1};
weak component: $\lambda=4132.562$A, $\nu=24\,191.268$ cm^{-1}.

It may be stated that the conclusion regardingthe structure of the D terms is not affected by this change.

A Note on the Determination of the Rates of Energy Loss of H^1 and H^2 Nuclei in Gold and Aluminum

T. A. Hall and S. D. Warshaw
Institute for Nuclear Studies, The University of Chicago, Chicago, Illinois
January 24, 1949

OUR laboratory is extending the previously reported measurements[1] of the energy loss of slow nuclear particles passing through thin metallic foils. In these ex-