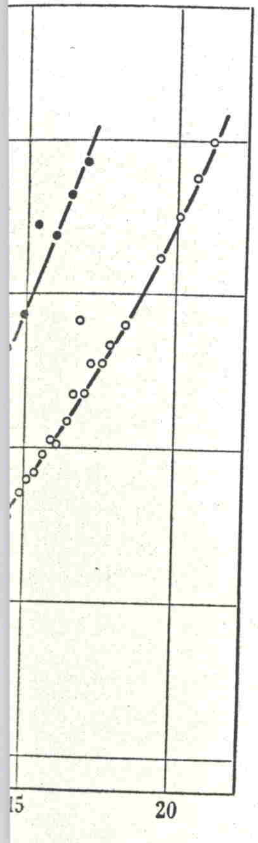
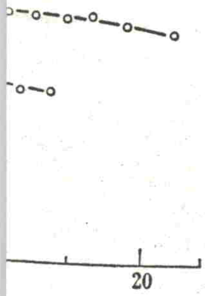
s also possible to treat the results
ies and temperatures so that they
is not so good. Such discrepancy
alues of $T/\phi < 0{\cdot}10$ our Debye θ
hile Keesom & Keesom's values



of solid helium.
l.; ▲, 14·4 ml.



t four molar volumes.

increase with falling temperature. We may notice that Webb, Wilkinson & Wilks (1952) have also observed this effect.

In view of this relationship it is convenient to present certain thermodynamic properties of the solid in terms of T/ϕ and table 4 gives C_v, S and $(U-U_0)/T$ as

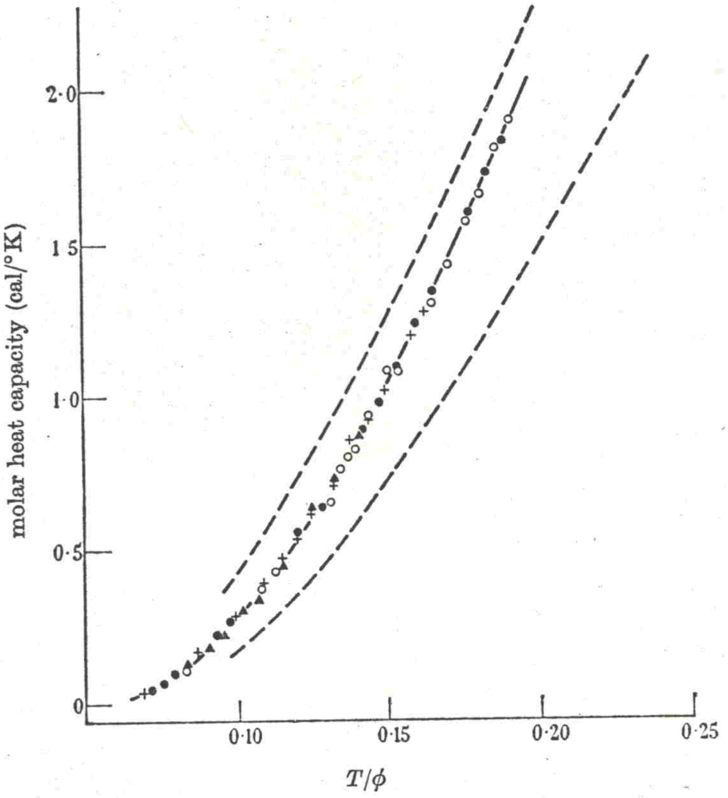


FIGURE 8. The molar-heat capacities of figure 6 plotted against the reduced temperature T/ϕ. ○, 10·6 ml.; ●, 11·7 ml.; +, 13·0 ml.; ▲, 14·4 ml.

TABLE 3. SMOOTHED VALUES OF THE PARAMETER ϕ AS A FUNCTION OF VOLUME

V (ml.)	ϕ	V (ml.)	ϕ
10·5	113	15	48·5
11	101·5	16	41·4
12	83·2	17	35·7
13	68·7	18	31·1
14	57·4	19	27·2
		20	24·2

functions of T/ϕ. (The units of ϕ are arbitrary; they have, however, been chosen so as to be similar in magnitude to the Debye θ's.) These values depend on an extrapolation of the specific heats to 0° K. This extrapolation entails some uncertainty owing to the above-mentioned discrepancy between our results and those of Keesom & Keesom. As, however, the maximum error will only be of the order of 0·01 entropy unit, it is quite immaterial for our purposes. For a fuller discussion of this point we refer to a paper by Webb & Wilks (1953).