	N.B.P. (°K)	$\Delta H_{vap.}$ (kcal/g atom)	ΔS (cal/g atom °K)	$T_{red.}$ based on Hg	$T_{crit.}$ (°K)
Fe	3160	83,900	26·7	0·31	10,000
Ni	3110	88,870	28·5	0·29	10,700

we obtain the values of 10,000 and 10,700°K for Fe and Ni respectively. If these values are correct it follows since the $D_{b.p.}/D_{crit.p.}$ given above would be the same for these two metals, that the slope of the D vs. T line and of the rectilinear diameter would be much more gradual than the experimental line. The D vs. T line for Fe, identified by D, if Fe corresponds to Hg, is the uppermost straight line in Fig. 1. It is apparent that the disagreement with the observed density line is outside of any
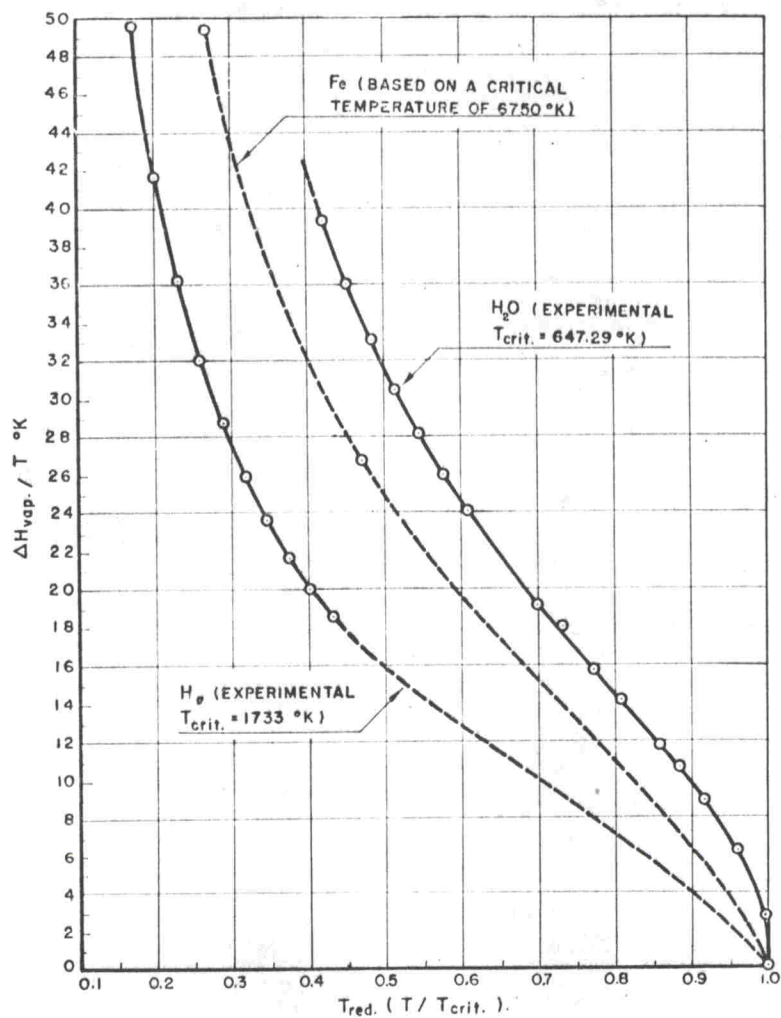

FIG. 2.

(10) D. R. STULL and G. C. SINKE, Thermodynamic Properties of the Elements, p. 112 and 135. Advances in Chemistry Series 18, American Chemical Society, Washington, D.C. (1956).