accuracy is attained in the temperature measurements in the anvils. The experimental results of Hanneman and Strong[12] show no significant change in the calibration of chromel-alumel thermocouples in the pressure range of our experiments.

The observed increase in T_c at high pressure is shown by the data points in Fig. 5. The rate of change of critical temperature with pressure is given by Clapeyron's equation,

$$\frac{dT}{dP} = \frac{T_c \, V_t}{H_t}$$

where T_c is the critical temperature, V_t the volume change, and H_t the enthalpy change at the pressure where dT/dP is measured. The transformation volume at one atmosphere pressure is known from the high temperature x-ray lattice parameter measurements of Keating and Warren;[13] it is 2.25×10^{-2} cm^3/mole of atoms. The change in V_t with pressure is estimated using Siegel's[14] measurements of the elastic constants of the ordered and disordered phases at high temperature to compute the compressibilities of the two phases. A correction for the pressure dependence of the elastic constants can be estimated from Lazarus'[15] data on the pressure dependence of the elastic constants of Cu and Au. At 21 kbar V_t is reduced to 1.94×10^{-2} cm^3/mole but, because of the increase in T_c, dT/dP will be almost constant (the change of H_t at 21 kbar due to PV_t is negligibly small). Hence, to get the best value of the initial