The raw pressure data were generally without hysteresis or significant curvature as is shown in Fig. 1. Several of the pressure runs were repeated and gave a reproducibility of slope of 2 per cent. On the other hand the independent and directly determined values of dC_{44}/dP are available from crystals A and C; these differed by only 1 per cent. The value for dC_{44}/dP quoted in Table 2 is the average of these two determinations. Taking into account other sources of error a maximum uncertainty of 5 per cent may be placed on the values of dC/dP reported in Table 2.

Comparisons of the dC/dP values for cadmium with the previously reported dC/dP values for aluminum and magnesium[7] show cadmium values to be on the same order of magnitude and to have approximately the same ratio between compressional and shear stiffnesses as the values for aluminum and magnesium.

As already mentioned, the application of pressure to hexagonal cadmium causes a change in (c/a) ratio in addition to a volume change. This complication in the deformation is much more important in cadmium than in magnesium because the linear compressibility of cadmium is quite anisotropic. In order to compare the pressure measurements for cadmium with