Table 1. The start material of bladed aragonite on druzy calcite is specimen no. 1201, Rand Collection, Bryn Mawr College. Collected from the Knickerbocker quarry, 2 miles north of Frazer, Chester County, Pennsylvania.

| Analyses of Start Materials | | | |
|---|---|---|---|
| Oxide | Druzy Calcite | Bladed Aragonite | |
| CaO | 54.6±0.4 | 56.1±0.5 | wt.% |
| BaO | 0.9 | 0.98 | wt.% |
| SrO | Nil | 200 | ppm |
| MgO | 10200 | 500 | ppm |
| FeO | 100 | 80 | ppm |
| MnO | Nil | Nil | |

Table 2. Results of calcite-aragonite experiments: C, calcite; A, aragonite; parentheses denote minor phase. Starting material bladed aragonite on druzy calcite.

| Temp (°C) | Pressure (kb) | Products | Time (days) |
|---|---|---|---|
| 128 | 5.18 | A + (C) | 21 |
| 132 | 5.18 | A +(C) | 21 |
| 153 | 4.83 | C + (A) | 35 |
| 76 | 4.48 | A | 3 |
| 90 | 4.14 | C + (A) | 28 |
| 93 | 4.14 | C | 17 |
| 56 | 4.14 | A + (C) | 28 |
| 73 | 4.14 | A + (C) | 17 |
| 70 | 3.69 | C | 8 |
| 81 | 3.52 | C | 36 |

parison of X-ray diffraction patterns of the product with that of the start material (Table 2). The results are plotted in Figure 1.

Table 3 contains the slope of the boundary curve at lower temperatures, its intercept at 0°C, and the resulting pressure at 100°C as obtained from our data, that of Boettcher and Wyllie (1968), and that of Johannes and Puhan (1971). The slope and 0°C intercept of our data and that of Boettcher and Wyllie are in near agreement. Both of the 100°C points are within the limits of experimental error of the 4.35 ± 0.15 kbar pressure of Crawford and Fyfe (Fig. 1, C and F). The slope, intercept, and 100°C point obtained from the data of Johannes and Puhan are not in agreement with the above information. Perhaps this discrepancy results from the difficulty they acknowledge