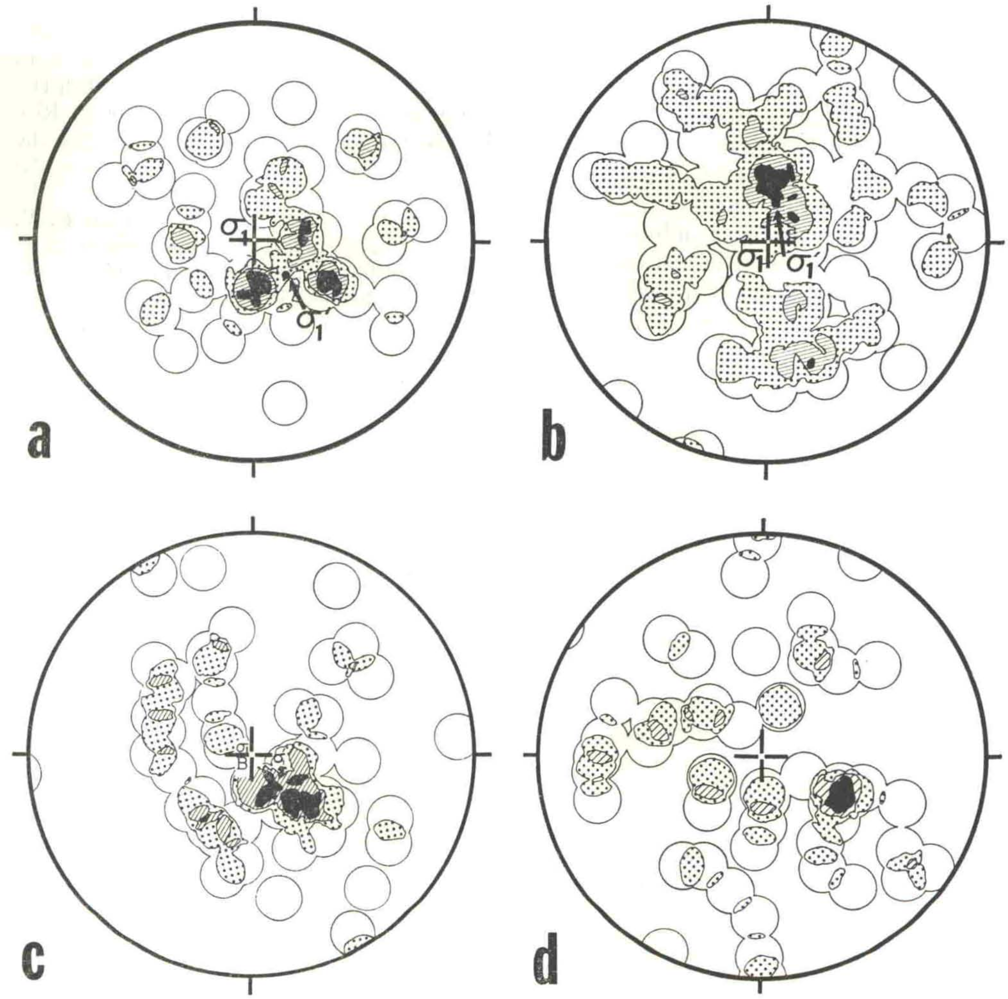

FIG. 16.—Diagrams illustrating orientation of compression axes derived from e_1 twin lamellae in specimens 762, 725, 778, and 780. Plane of each diagram is oriented normal to the long axis of the deformed cylinder, and σ_1 is at the center. *a*, specimen 762. Diagram of 50 compression axes. Contours: 2, 4, 6, and 8 per cent per 1 per cent area; 10 per cent maximum. Center of gravity (σ_1') is about 20° SE. of center. *b*, specimen 725. Composite diagram of 100 compression axes. Contours: 1, 2, 4, and 6 per cent per 1 per cent area; 10 per cent maximum. Center of gravity (σ_1') is about 10° N. of center. *c*, specimen 778. Diagram of 50 compression axes. Contours: 2, 4, 6, and 8 per cent per 1 per cent area; 10 per cent maximum. Center of gravity (σ_1) is 10°–15° SE. of center. *d*, specimen 780. Composite diagram of 50 compression axes. Contours: 2, 4, 6, and 8 per cent per 1 per cent area; 12 per cent maximum. There is a general grouping of the axes about the center.

11. The consistent preferred orientation of microfractures relative to the principal stresses indicates that, although stresses may be transmitted through grain contacts, the points of contact do not control the orientation of the fractures observed here.

12. Uniform pressure alone does not produce twinned calcite or fractured detrital grains. When these features are present, tectonism is most probably indicated.

13. In calcite-cemented sandstones both the twin lamellae in the calcite and the fractures in the detrital grains develop concomitantly under the same similated tectonic conditions.

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