

FOSSILS IN METAMORPHIC ROCKS: A REPLY

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I deserve censure for having used the name *Spirifer purchisoni* in the legend to Plate 1 without indicating that legitimate doubt exists concerning the specific identification which Doll had merely suggested as a possibility. To correct this error, the reader should put one question mark after *Spirifer* and two after *murchisoni*. But I see no reason to doubt that the specimen is the impression of a rather large spiriferoid brachiopod. The radiating pattern of costae widening toward the anterior margin with its characteristic crowding of the growth lines cannot well be the ghost of totally vanished crystals (of which no trace exists elsewhere in the rock) nor a mechanical trick, a *lusus naturae*.

When years ago Doll showed me the specimen, I looked it over carefully. Having seen many deformed fossils in nonmetamorphic rocks and recognizing the abnormal curvature of some of the ribs, it never occurred to me that the plications on this specimen were "bifurcating". Observations on deformed spiriferoid shells show that "squashing" readily changes the shape and crowding of the costae and can even create narrow secondary plications where they do not belong. In these features Doll's specimen does not go beyond the changes known from other deformed fossils in unmetamorphosed rocks.

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