

agrees more closely to published dimensions of that species than it does to the screw dimensions of *A. swallovanus* (Condra & Elias, 1944, p. 132) which commonly has a somewhat thicker shaft.

*Fenestella* expanses are absent from the bed in which the *Archimedes* was collected. The slab on which the fossil was found was carefully ground and polished on both sides in the hope of finding isolated fragments of *Fenestella* but none was discovered. Other samples of the bed also failed to yield *Fenestella*. The screw is surrounded by isolated fragments of crinoidal material, brachiopod shells, and echinoid spines. It is not part of a clast within the ferruginous limestone matrix. The length of the specimen and fragility of the screw argue against the fossil's having been transported any great distance or reworked from preexisting beds.

*Associated Fauna.*—One of the most interesting aspects of finding *Archimedes* in lower Bird Spring rocks is its occurrence within the *Rhipidomella nevadensis* zone. Dott (1955) established this zone in northeast Nevada and considers it to be Springeran in age. He reports *R. nevadensis* to be rare in the upper part of his Tonga Formation and common to abundant in the lower member of the overlying Moleen Formation. The *Archimedes*-bearing bed in the Indian Springs contains abundant *Rhipidomella nevadensis* and seemingly should be correlated with the lower part of the Moleen Formation farther north. In northern Clark County the Indian Springs Member also yields well preserved specimens of *Flexaria* and *Inflatia*, both typically Chesteran productid brachiopods; a large *Schizophoria* quite unlike described lower Pennsylvanian species of the genus that occur in higher beds in the formation; and a large, coarsely plicate new species of *Punctospirifer* that is

confined to the *R. nevadensis* zone. This brachiopod fauna of the lower Bird Spring is under study.

If Elias' conclusions are accepted, that the Redoak Hollow fauna of the Springeran is late Mississippian and correlative with the Kinkaid Limestone of the type Chesteran, then the *A. cf. A. pseudoswallovanus* reported here provides evidence that the *Rhipidomella nevadensis* zone is Late Chesteran in age and that the Mississippian-Pennsylvanian boundary should be drawn at the top of that zone. Beds immediately overlying the red-weathering Indian Springs Member in northern Clark County contain a typically Morrowan fauna and correlate with lowermost Bird Spring beds in southern Clark County (Goodsprings area; Spring Mountains), where the *Rhipidomella nevadensis* zone is missing and rocks yielding typical Morrowan fossils overlie the Monte Cristo Limestone of lower and middle Mississippian age.

Correlative beds that are Springeran in age include the basal rocks of the Oquirrh Formation in northern Utah, and the uppermost beds of the Great Blue Limestone and Chainman shale. All of these rocks contain *Rhipidomella nevadensis* and seemingly should be regarded as uppermost Chesteran in age.

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