

- Paterson, W. S. B. 1969. *The physics of glaciers*. Oxford, Pergamon Press. (The Commonwealth and International Library. Geophysics Division.)
- Patzelt, G. 1977. Statistik der Längenmessungen an den österreichischen Gletschern 1960 bis 1975. *Zeitschrift für Gletscherkunde und Glazialgeologie*, Bd. 12, Ht. 1, 1976, p. 91-94.
- Posamentier, H. W. 1977. A new climatic model for glacier behavior of the Austrian Alps. *Journal of Glaciology*, Vol. 18, No. 78, p. 57-65.

SIR,

The origin of the term "rock glacier"

During the course of our work on rock glaciers, a minor but unclear point of nomenclature emerged. Numerous researchers (Wahrhaftig and Cox, 1959; Potter, 1972; White, 1976; Corte, 1976) have all followed suit in attributing the first usage of the term "rock glacier" to Capps (1910). Capps himself contributed to this misunderstanding of first usage when he stated (Capps, 1910, p. 359-60), "The special agents with which I wish to deal at present . . . I have called *rock glaciers*".

While other terms were used in earlier literature, the term "rock glacier" first appeared in print in 1905 (the internal text date is 1903) in an indirect manner. In describing the occurrence of rock glaciers in the Silverton, Colorado, area, Cross and Howe (1905, p. 25) wrote, "So noticeable was this [apparent viscous flow] that in the field they were spoken of as 'rock glaciers' and upon the map received the name 'rock streams' ". Presumably the term "rock glacier" was used in the field at this time among some of the personnel of the United States Geological Survey of which Cross, Howe, and Capps were all members. Cross and Howe either voluntarily changed their usage of the term "rock glacier" to "rock stream" or an editorial change was suggested by someone else. Apparently Capps was not so restricted and has received most of the credit for first usage of the term.

Department of Geography,
University of Nebraska—Lincoln,
Lincoln,
Nebraska 68588, U.S.A.

JOHN R. GIARDINO

Department of Geography and Geology,
University of Nebraska—Omaha,
Omaha,
Nebraska 68132, U.S.A.
15 September 1977

JOHN F. SHRODER, JR.

REFERENCES

- Capps, S. R., jr. 1910. Rock glaciers in Alaska. *Journal of Geology*, Vol. 18, No. 4, p. 359-75.
- Corte, A. E. 1976. Rock glaciers. *Biuletyn Peryglacjalny*, No. 26, p. 175-97.
- Cross, W., and Howe, E. E. 1905. Geography and general geology of the quadrangle in Silverton Folio. *U.S. Geological Survey. Geologic Folio* No. 120, Silverton Folio, p. 1-25.
- Potter, N., jr. 1972. Ice-cored rock glacier, Galena Creek, northern Absaroka Mountains, Wyoming. *Geological Society of America. Bulletin*, Vol. 83, No. 10, p. 3025-57.
- Wahrhaftig, C., and Cox, A. 1959. Rock glaciers in the Alaska Range. *Bulletin of the Geological Society of America*, Vol. 70, No. 4, p. 383-436.
- White, S. E. 1976. Rock glaciers and block fields: review and new data. *Quaternary Research*, Vol. 6, No. 1, p. 77-97.