REFERENCES


Sir,

Advance of a Patagonian glacier*

The Glaciar Bruggen (or Pio XI) is a very active tidewater outlet of the southern Patagonian icefield. More is known of its variations than of any other glacier on the Pacific side of the icefield.

In 1830 H.M.S. Beagle sailed to the head of Fiordo Eyre, and King (1839, p. 337) reported a
river flowing through a lowland from a large glacier, presumably the Greve but possibly the Bruggen. He did not mention a tide-water glacier nor did he refer to floating ice.

In 1925 a sheep farm was established in the valley between Fiordo Eyre and the Glaciar Greve. At the end of 1926 the Glaciar Bruggen advanced and closed off the valley, and the farm was abandoned (Agostini, 1941, p. 60). When and where this advance ended is not known, but by 1945 the terminus was about 3 km. back from its 1926 position. The aerial photographs taken in that year by the U.S. Air Force for the Chilean government are the basis for all recent maps.

In early 1962 a Chilean expedition crossed the icefield from Fiordo Exmouth to the Cerro FitzRoy area on the Argentine side. Senor Marangunic of the Geology Department, University of Chile, a member of the expedition, noted that the ice front was far in advance of its mapped position and had reached a group of small islands on the west side of Fiordo Eyre (personal communication). This represents an advance of about 5 km. and a doubling of the length of the calving front between 1945 and 1962.

The recent advance of the Glaciar Bruggen may or may not be anomalous. Many of the glaciers on the western side of the icefield including the Greve appeared close to a maximum position in the 1945 aerial photographs but they have not been photographed or visited since.

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10 December 1963

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