

## CORRESPONDENCE

The Editor,  
*Journal of Glaciology*

SIR,

### *A patterned marginal plain in Norway*

To the communication by W. L. Raitt on the striated field in front of the dead Omnsbreen, I wish to add a few words.

Omnsbreen has been a regular feature of our geomorphological excursions since 1950, and I have had personal knowledge of it since it was an active glacier in 1922.

It is extraordinary in being a very flat shield glacier. The southern front with the striated field is at an altitude of about 1,500 m.; the summit of the shield is only at 1,600 m. It is thus easy to understand that a slight elevation of the snow line will cause a change from an active to a wholly dead glacier.

Concerning similar frontal areas, whatever may be the exact explanation of the general striations, and there has been quite a discussion on this theme, there seems to me little doubt that they are due to glacier movement.

At Omnsbreen this is certain at least when considering the very distinct striation caused by the big stones that can only have been moved by the glacier. Moreover they have been moved slightly uphill.



Fig. 1. Field in front of Omnsbreen, looking towards glacier.  
28 August 1954



Fig. 2. Field in front of Omnsbreen. Looking away from glacier.  
28 August 1954

As is well illustrated in the accompanying two photographs, the big stones were pushed by the glacier near its snout at the interface of ice and ground and they left a hollow behind them until the weight of ice above became insufficient. That the glacier was also still moving at that time can be seen from the accumulation of morainic debris causing a miniature "crag-and-tail" phenomenon, the big stones acting as "crag". It is not just the question of material being pushed by the stones. The length of the tail on the distal side of the stones is best seen to the right of the white-hooded person in Figure 2, in Figure 1 it is cut short by the left margin of the photograph.

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