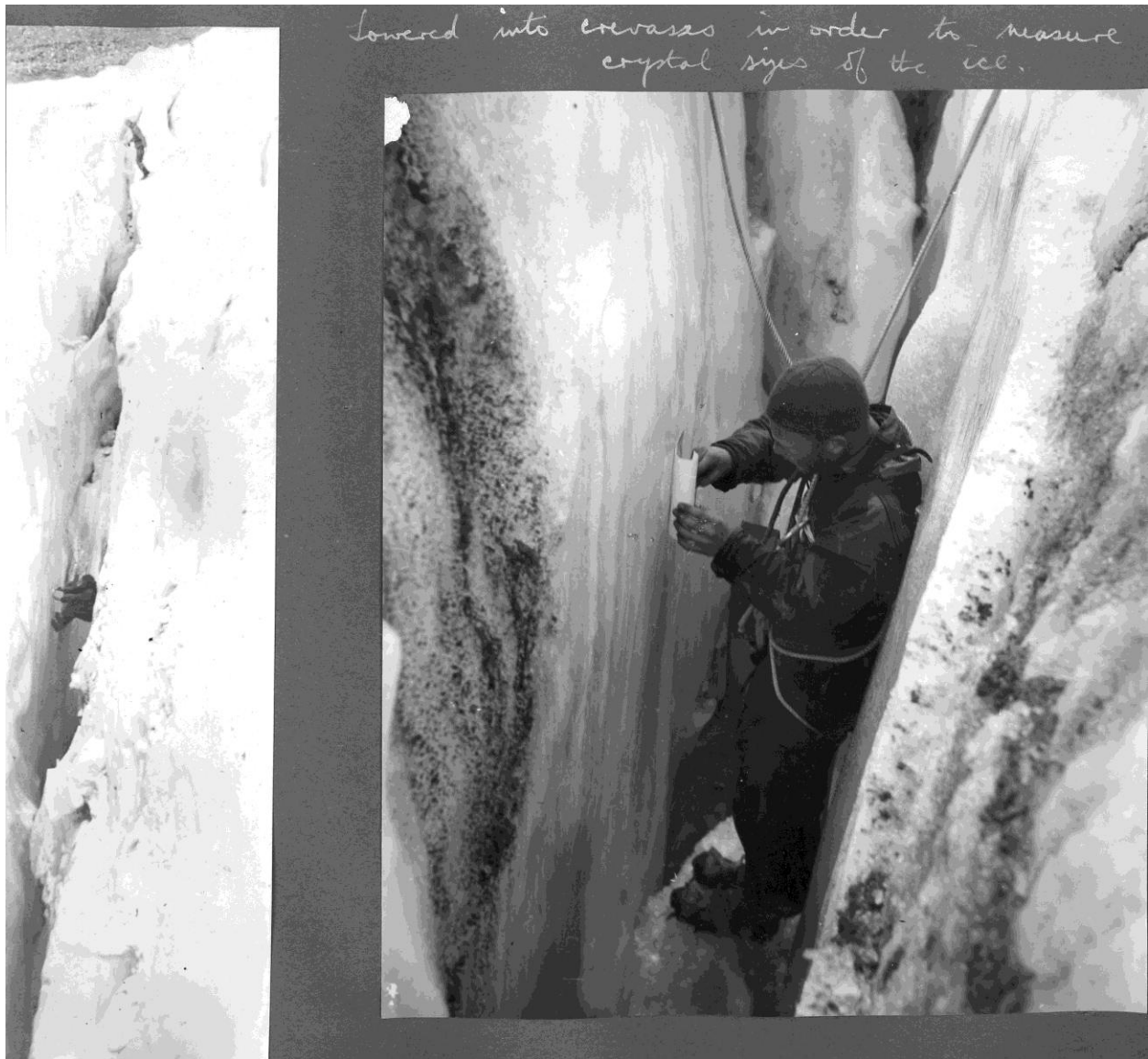


Peter J. Wyllie

GREENLAND PICTURES



**British West Greenland Expedition. Crossing the Rink Glacier, 1950.
The summer melt has carved deep streams into the glacier surface.
Peter Wyllie with the big box following Trevor Ransley.**



A

B

Inside the Rink Glacier, 1950.

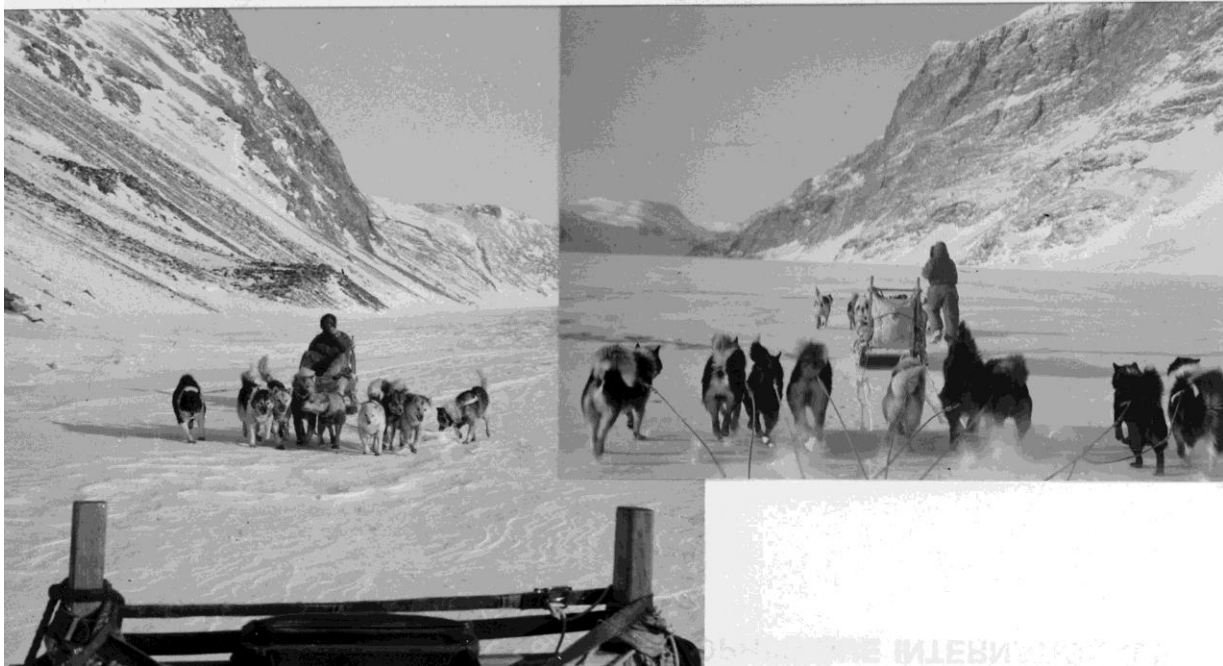
- A. Peter Wyllie being lowered into a crevasse to study the ice crystals.**
B. At the bottom of the crevasse: making crystal rubbings with pencil and paper. The orientation and shape of the crystals provides information relevant to the mechanism of flow of the solid ice.



London Bridge, England, 1952

Her Majesty Queen Elizabeth and Winston Churchill were Patron and Vice Patron of the British North Greenland Expedition. Shortly before the expedition ship sailed, Queen Elizabeth inspected the explorers onboard ship, wearing their arctic clothes (in warm London summer).

We sailed the Atlantic in this Norwegian sealing vessel. We unloaded the ship in a fjord, and a squadron of Sunderland flying boats came in to fly us and up to 2 years' supplies to an isolated lake in Dronning Louise Land, which was unfrozen through about 5 summer weeks



We did our share of back-packing in Dronning Louise Land, but the real treat was driving a husky dog team. Peter Wyllie and Angus Erskine in scenes from 1955, snow-covered glaciers. Sometimes sledging was routine, but:-

-- sometimes, the sledging got rough

The scene below shows that at lower elevations ice ridges interfere with smooth mushing. The ridges of ice may be high enough to separate the dogs and sledge, leaving the driver unable to reach the dogs with his “guiding” whip. My sledge has just reached the top of such an ice ridge.





When the beautiful arctic foxes stole our dog food during the dark winters, we had to resort to trapping. I caught two, skinned them, brought them home for sister & future bride.

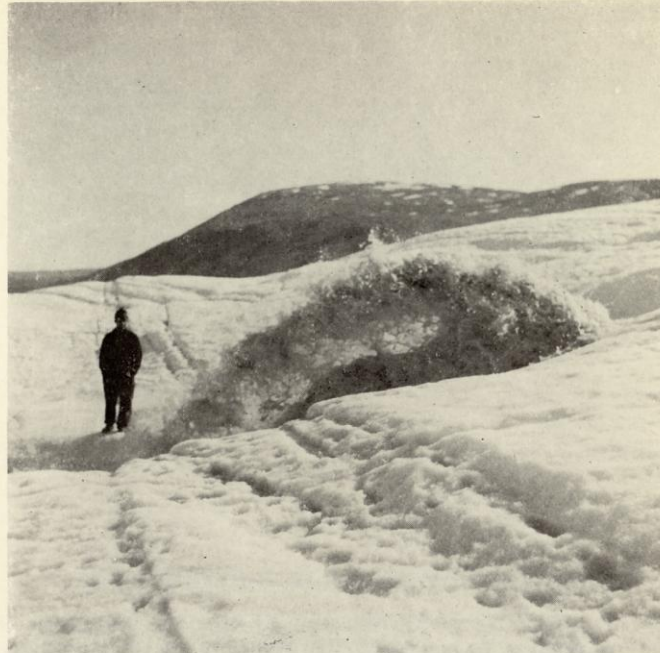


Fig. 1. Water-spout on the Britannia Gletscher, north-east Greenland. The radial surface drainage flows from right to left towards the glacier snout. The small scarps extending from the front of the figure towards the left rear are surface expressions of shear planes dipping up-glacier. The slope of these planes may control the trajectory of the water-spout

SIR,

*Water-spouts on the Britannia Gletscher, north-east Greenland**

Wiseman's (1963) letter to this *Journal* describing a water-spout on the Aletsch Gletscher reminded me of the water-spouts encountered by members of the British North Greenland Expedition (Simpson, 1955) near the snout of the Britannia Gletscher in the summer of 1954, and prompted me to exhume two photographs from my files (Figs. 1 and 2). These water-spouts were not intermittent like those described by Wiseman (1963) and Rucklidge (1956), but were continuous gushers lasting for several days, and forming an integral part of the drainage pattern of the glacier. They are thus more akin to the spouts described by Glen (1941), who stressed the role of crevasses in englacial and subglacial drainage and stated that sometimes the water carried in this way from higher levels "attains such a pressure that it literally bursts its way through the ice, sending up a small water-spout which may continue for as long as an hour, then dying down into a more gentle fountain".

~~~~~ [Pages 522-523] ~~~~~

point of exit of the water appears to have migrated down the glacier.

The water-spouts persisted for extended periods, indicating that the water followed reasonably permanent routes through the ice. I have no information about the duration of the water spouts beyond the "several days" already mentioned. Since the Britannia Gletscher has relatively few internal openings, there would be little opportunity for internally flowing water to transfer from one established route to another. These water-spouts appear to be exit points of an internal drainage pattern which approximately parallels the surface drainage pattern, and appears to remain fairly constant like many of the deeply incised surface channels.

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