the remaining short distance to the summit was class 3 and easier. About 25 pitons were used on this six hour climb.

EDWARD COOPER

## Canadian Arctic

Cambridge Arctic Canada Expedition, Cumberland Peninsula, Baffin Island. Robert E. Langford, leader, T. A. J. Goodfellow, A. R. Crofts, G. F. Bonham-Carter, C. W. Barlow and J. W. Dale, all from Cambridge University, spent two summer months on Baffin Island in an area southeast of the Penny Icecap (67° N., 66° W.). During the course of the expedition, we crossed the Cumberland Peninsula on foot from Broughton Island to Pangnirtung and climbed five virgin peaks in the Pangnirtung Pass area, which offers considerable scope to mountaineering expeditions for several years to come. In 1953 the Arctic Institute expedition, led by P. D. Baird, carried out scientific work on and around the Penny Icecap, but the region southeast of the pass remained unknown. The aims of our expedition were to climb the peaks in the area of the Pass and to complete certain research projects. Glaciological work involved surveying and photographing the Rundle Glacier, east of the Pangnirtung Pass, as a check for future movement. A small geological collection was made in the region of the tertiary age outcrop near Cap Dyer and mountain tops in the area of the pass were studied for evidence of possible previous glaciation. Certain physiological phenomena, such as the relation between activity, energy expenditure and human microclimate, were investigated at intervals throughout the expedition. On July 6 we were flown to Cape Dyer by commercial transport. The DC-3 which serviced the DEW Line was temporarily grounded, but after a week we flew to Broughton Island. When the land-bound fjord-ice cleared, the Eskimos took us up the fjord by whaleboats, leaving us at the head on July 19. The following two weeks were mostly spent carrying heavy loads on pack frames up the Owl Valley. Mount Fleming, an impressive mountain named in 1953 but unclimbed, which dominates this valley, was climbed from a high camp by a party of four, who the following day also climbed a striking obelisk-shaped peak. The other party climbed Mount Battle, a good belvedere overlooking the pass, and during this period set well underway the survey work on the Rundle Glacier. Two more peaks to the east of the Pass were climbed from the survey camp. We found a change in the geography of the pass since the map was made. Glacier Lake, which formerly flowed north, had joined with Summit Lake, which flows south. As we had planned to descend on the other side of the valley, it was necessary to cross the stretch of water between the lakes to avoid a long detour. We constructed a twin-hulled raft and this enabled us to site a camp high up the Turner Glacier, although it was now snowing frequently. Mount Asgard, the throne of the Norse gods, climbed and named in 1953 by the Swiss members of the Arctic Institute expedition, dominated the camp. Opposite Asgard stands a mountain massif supported by several sheer rock buttresses and topped by two snow summits. By a long route involving some steep ice, we all climbed the more southwestern of these virgin summits. In spite of very severe conditions and difficulties on steep, ice-covered rock pitches, we managed to climb within 450 feet of the summit. One more peak, at the end of the Turner Glacier, lower than Asgard but dramatically shaped to a pointed summit, was attempted, but minor frostbite caused the party to turn back. The survey work was then completed prior to evacuation down the South Pangnirtung Valley. We had resolved to complete the move in one journey, with the result that our loads were initially 120-130 lbs. each. The R.C.M.P. Peterhead boat took us aboard near the head of the fjord on September 2, reaching the Eskimo settlement of Pangnirtung that evening. After a week there, aboard the icebreaker C. D. Howe, we sailed to Frobisher Bay, whence we returned by air to Montreal on September 15.

ROBERT E. LANGFORD, Alpine Club

## **GREENLAND**

Birmingham South Greenland Expedition. Between May and September, the three members of the expedition Michael Kelly, Michael Rhodes and I, spent eleven weeks in the Tasermuit Fjord region of South Greenland. The fjord lies 75 miles northwest of Kap Farvel, Greenland's southernmost point, and extends for 50 miles from Davis Strait to the Inland Ice. To the northwest lies a series of complex ranges of no particular merit rising to 4000 to 5000 feet, and above them rises the splendid unclimbed peak of Napassorssuaq (5100 feet). To the southeast the country is higher, rising to 7000 feet, and it is a heavily glaciated, alpine terrain. The chief mountaineering interest lies in the granite aiguilles and peaks, which provide 2000- to 4500-foot face climbs. The main purposes of the expedition were to make glaciological, surveying, meteorological, and glacial-geological studies of the 12-mile long Sermitsiag Glacier at the head of the fjord and to make a primary geological survey of the region. We found time to climb seven peaks in the area, including the three highest climbed to date in this area of southern Greenland. We three climbed "Akerna" (6720 feet) on July 2 from a 3700-foot camp on Sermitsiag, following an ice couloir on the southern side until a 120-foot pitch of class 4 rock led to the southeast ridge. We followed this to the east summit