

time. An ice axe brigade saved the day.

To the geologist the area is indeed a mecca. Books could be written on a single tributary glacier.

For the most part the mountains are metamorphic in origin. Schist was the main form found. Sedimentary rock was found at Pt. Glorious in the trough. The area is about 3500'. Fossils of clams were found in a sedimentary deposit at Pt. Glorious. Crustal movement is very evident on the south sides of the St. Elias Range.

A very large earth slide was seen on the trip out. It started about half way up one of the many peaks in the Hitchcock Hills. The slide flowed out onto the Seward Glacier. It was perhaps three miles long and one mile wide. We crossed within a few hundred feet of the lower end. The material was for the most part ice, mud, and covered with rock debris. It was indeed very impressive.

Glacier mills are very prominent on the Malaspina.

The lower reaches of the Malaspina have been studied in recent years by Dr. Robert Sharp, geologist, from California. The Arctic Institute of North America, under the direction of Col. Walter Wood, has been active in the general area for some years. Israel Cook Russell visited the area in 1890 and 1891 and carried on geological work. His reports were published in the National Geographic Magazine.\*

For the most part climbing has been the main objective of the visitors to the area.

\*Israel Cook Russell, "An Expedition To Mount Elias, Alaska," the National Geographic Magazine, Vol. III., pp. 53-200, plates 2-20 (I); Washington, 1891; id., "Second Expedition to Mt. St. Elias", Thirteenth Annual Report of the U.S. Geological Survey, 1891-92; Part II., "Geology", pp. 7-91, plates 3-21 (II); Washington 1893.