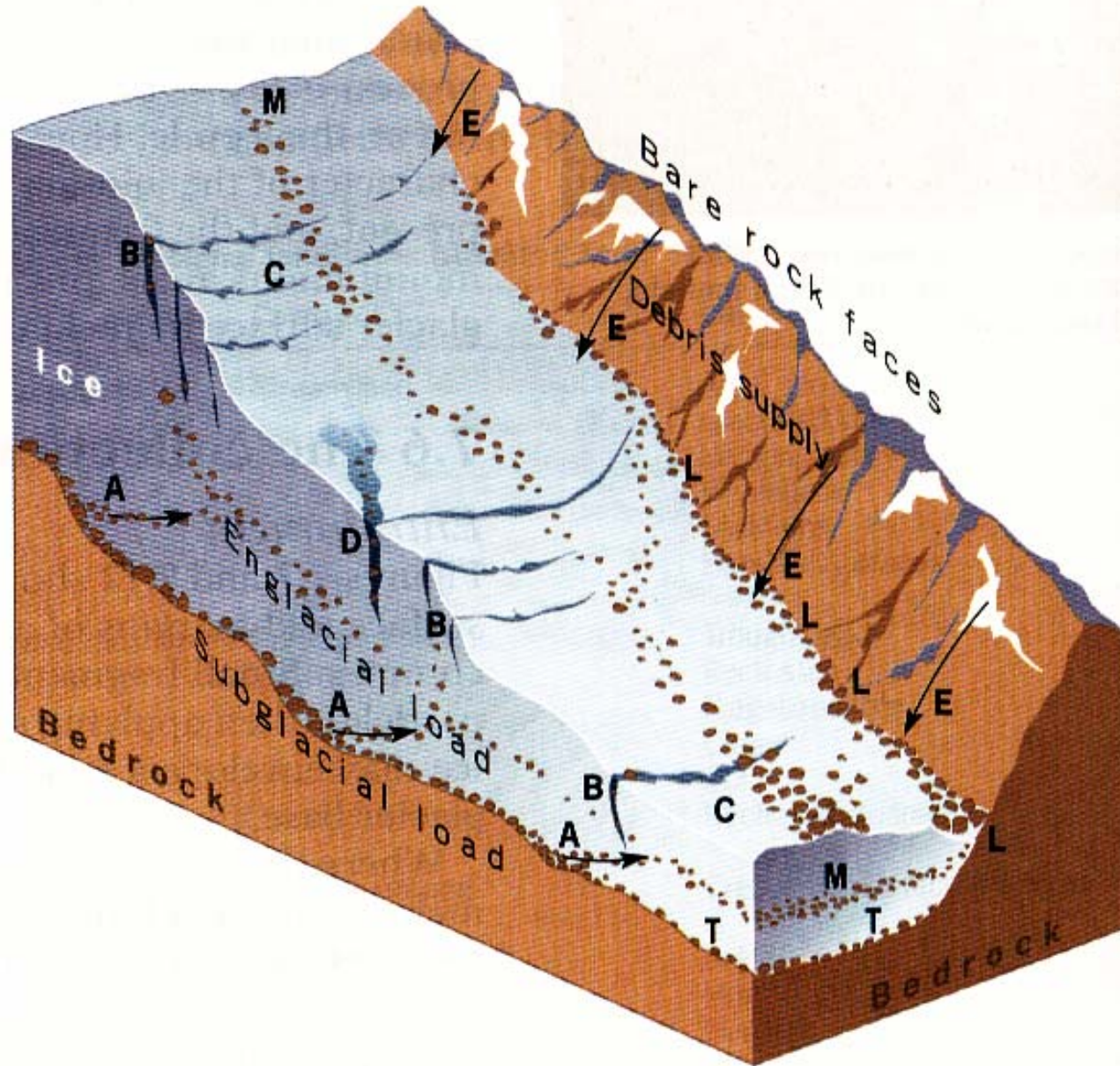


Glacial Transportation

Rock Debris enters a glacier, either directly due to glacial erosion (plucking or abrasion) or as a result of weathering and rock falls onto the glacial surface or into crevasses.

Rock debris is transported as:

- **Supra-glacial load** (carried on the surface).
- **En-glacial load** (carried trapped inside the ice) or
- **Sub-glacial load** (carried between the glacier and the bedrock).



A Glacier as a Conveyor belt.

- A) Ice shearing carries basal debris into the glacier.
- B) Debris enters ice through crevasses.
- C) Crevasses
- D) Meltwater streams carry debris into ice
- E) Rockfalls supply debris to the glacier
- L) Lateral Moraine
- M) Medial moraine
- T) Till or ground moraine.





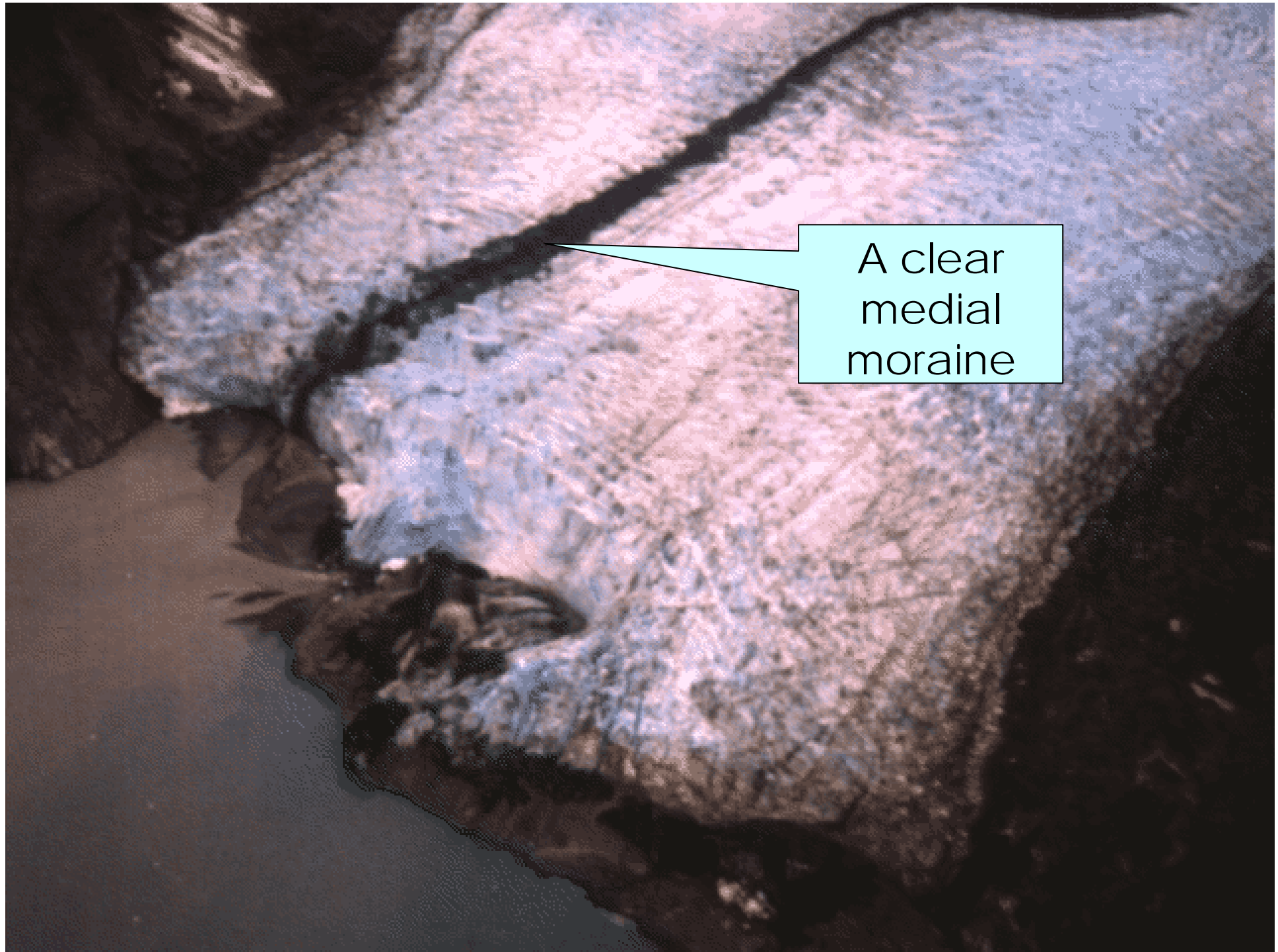
Supraglacial moraine on the Mer de Glace







Upper Kaskawulch glacier near Mount Logan, Canadian Yukon. © Charles Houston



A clear
medial
moraine



Large rock being moved by an Alpine glacier.
The figure on the right is almost 6 feet tall.



Light coloured rock protecting snow beneath it from insolation, whilst surrounding snow has melted.



Basal ice

Glaciers are rarely comprised entirely of clean, blue ice.

Instead, they are often characterised by a debris-rich basal zone known as the basal ice layer. This photo shows a debris-rich basal ice layer at the base of the Leverett Glacier in western Greenland.