

**October 3-4, 1884 telegraph cable breaks on the Tail of the Banks:  
the earliest recorded historical turbidity current?**

A. Ruffman

*Geomarine Associates Limited, P.O. Box 41, Station M, Halifax, Nova Scotia B3J 2L4, Canada*

“There is no sound, no echo of sound, in the deserts of the deep or the great grey level plains of ooze where the shell-burred cables creep”.

Rudyard Kipling, who wrote these words in the 19th century, knew nothing about turbidity currents. Recent research supported by the Atlantic Geoscience Centre has confirmed that the 1897 paper by the pioneer seismologist, John Milne, is essentially correct in reporting three near-simultaneous telegraph cable breaks at the foot of the continental slope south of the Tail of the Banks. Milne attributed the breaks to bradyseismic action...represented by secular folding, thrust or crush.

The 1884 breaks occurred over about an eleven-hour period, and the breaks in the three closely-spaced cables

apparently lay in a straight line. The opinion was expressed at the time “that all three of these breaks has been caused by a landslide”. Despite these observations and the traumatic experience of the twelve major cable breaks after the November 18, 1929 Grand Banks earthquake, geologists were not to realize that turbidity currents were responsible until the classic papers of Heezen and Ewing, Ericson, and that of Kuenen in 1952. The 1884 breaks are believed to be the result of a turbidity current, though we have been unable to establish any reports of a felt earthquake. The 1884 breaks were in two cases not repaired till the summer of 1885.