

ENGINEERING—*continued.*SURVEYS—*continued.*EXPLORATORY—*continued.*HORETZKY, C.—*continued.*

advocated by M. Smith, 1255.
 possible terminus at one time at Bute Inlet, *via* Pine Pass, 1255.
 describes Pine Pass to sea-board, 1256.
 rough country between Fort Assiniboine and Lesser Slave Lake, 1257.
 reasons for preferring northern line, 1257.
 climate probably worse than Kamloops, 1259.
 approach to Peace River Pass difficult, 1702.
 availability of Pine River Pass probable, 1702.
 photographed salient features of Bute Inlet (1875), 1702.
 from Vermillion River to Lake Wenebagon (1876), 1703.
 from Pie River to French River (1877), 1703.
 examined country between the Skeena and Peace River under Cambie (1879), 1704.
 alleged unpaid claim, 1706.
 cost of Peace River examination, 1706.
 manner of exploration, 1707.
 route *via* Pine River, 1710.
 extravagance and waste of stores, 1712.
 explorations *vs.* instrumental, 1715.
 system of taking levels by Major Williamson, 1716.
 instruments carried by witness, 1717.
 with Moberly between Winnipeg and Rocky Mountains (1871), 1718.
 no scientific training before this (1871), 1718.
 further as to Peace and Pine River Passes, 1719.
 expedition by Gamsby to Kitlope Valley, 1721.
 missed the country explored by witness, 1722—1726.
 further as to, 1726—1730.
 cost of, 1732, 1749.
 did not cover ground surveyed by witness, 1750—1752.
 suppressed report (1874), passage from, 1721.
 photographed on the Homathco, 1730.

McLENNAN, R.

district engineer in Yellow Head Pass region (1871), 1513.
 began at Kamloops, 1514.
 party : thirty five, 1514.
 all labourers except five, 1514.
 sent back most at Cranberry Lake, 1518.
 with reduced party proceeded to Yellow Head Pass, 1518.
 about six, 1520.
 fourteen left at Cranberry Lake to examine country, 1520.
 thinks a large party was necessary, 1520.
 examined pass in eight days, 1521.
 returned to Cranberry Lake 1st November, 1522.
 to Kamloops about 20th November, 1522.
 proceeded to Ottawa to report, 1522.
 in spring (1872) in the Chilcotin Plains, 1523.
 party : thirty, and twenty-five animals, 1524.
 instrumental examination, 1526.
 thinks explorations should have been made first, 1527.
 reasons for this opinion, 1527.
 further in reference to Albrede Lake and Canoe River, 1533.
 neither Green nor Mahood found a practicable country, 1533.
 during first season, (1871), in B.C., eastern slope of Yellow Head Pass not examined, 1533.

McNICOL, E.

on Bute Inlet survey under Cambie (1875), 1732.
 expedition to Kitlope Valley under Gamsby (1876), 1733.
 did not take latitude at Tochquonyala Lake, 1739.
 had Horetzky's tracing but did not take it from camp, 1739.
 one lake mistaken for another, 1743.
 thought that the lake found at an elevation of fifteen feet was the same as Horetzky discovered at 1,100 feet, 1748.
 complete antagonism between the two sketches, 1748.

LOCATION.

RUTTAN, H. N.

instructed to make location survey at Edmonton (1876), 23.
 party idle under pay for some weeks, 23.