## The History of the Association triangulation scheme in the Ottawa area. By 1908 the geodetic survey was in a constitution of the Similar success was shown by Of Ontario Land Surveyors

**EYES NORTH** 

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Part IV:

The Lion. The Pine. The Eagle (and the Beaver?)

During the first twenty-one years of our Association the AOLS, like the young Dominion of Canada was looking to new frontiers. In both cases this frontier was the North. The North offered both challenge and potential. She promised economic, scientific and political benefits to both the nation and the men who chose to pursue them. Mining was virtually an untapped resource; forest reserves in the southern part of the Province were dwindling; and Ontario was losing immigrants to the prime agricultural lands of the West. The AOLS saw that the development of topographical and exploratory surveys would aid in the development of Ontario's northland. They also showed a national interest by founding a Committee to consider polar expeditions. An interest in the Poles developed out of a desire to obtain scientific information about the vast, untouched areas; but perhaps more importantly, the interest arose on a national level, out of the need for Canada as a nation to exert her international identity. Throughout this period the membership was as enthusiastic and proud of its new nation as it was of its fledgling association.

## **ECONOMIC FACTORS:**

The importance of mining as a plentiful natural resource for a young country, and its value to the Ontario Land Surveyor is demonstrated in C. H. Fullerton's paper, in 1911: Future Prospects for the Ontario Land Surveyor in the Mining Districts of New Ontario:

. . . when it is remembered that but a few years ago New Ontario was a wilderness, and that as yet it is scarcely more than scratched; when we consider the areas yet to be opened up, the railroads that were being built . . . I think we can safely say here lies the heritage of the Ontario Land Survevor.1

Throughout this period the economic importance of mining to Canada was emphasized. In 1894 papers were given on mining in the Lake of the Woods area, and the early history of Sudbury mines. In 1897 and 1899, papers ex-

pounded on the potential mineral wealth in the Rainy River District:

I believe that this new Ontario will be one of the richest gold districts in the Dominion within the next ten years; yes, on the continent.2

In the discussion that followed Mr. Whitson's paper, Mr. Kirkpatrick remarked that the more recent developments were principally among Canadians: "I think now people are waking up and realizing that they should not let everything go past out of their hands . . . . "3 The development of mines must necessarily go hand-in-hand with development of the railways — such papers as the Sault Ste. Marie and Hudson Bay Railway paper, 1897, supporting this idea. In 1906, 1907 and 1912 papers described the 1903 Cobalt silver discovery. In 1912 the Cobalt area was the "world's greatest producer of silver . . . it leads in the production of the metal cobalt, and stands third in the output of . . . nickel".4 It was predicted that the "production of nickel at Sudbury will increase rapidly within the next few years".5 In 1912-13 emphasis shifted to the west coast, with interest in the Alaskan-Canadian boundary and a report on the gold mining boom of 1896-7, in the Yukon. Juxtaposing this development in the field of mining was the development of the Committees on Topographical and Exploratory Sur-

The need for topographical surveys was called for in 1893 and in 1894 the first report of the Committee on Topographical Surveys was submitted to the Association. In W. Chipman's paper "A Plea for Topographical Survey" he suggests that such surveys are essential because of the inaccuracies and omissions which existed in the maps at that time and that without infringing on the duties of the Dominion Association the AOLS should press the Legislature for a topographical survey of the Province. He maintained that the latitude and longitude of several principal points in the Province and primary triangulation, plus hydrographic work be done by the Dominion, with secondary triangulation and all topographic work done by the Provincial Government. In 1896 W. Chipman reports that a memorandum was presented to the Commissioner of Crown Lands urging the Dominion Government to proceed with the primary triangulation work. In 1906 the Committee reported progress: work had commenced on a

triangulation scheme in the Ottawa area. operation. Similar success was shown by the Committee on Exploratory Surveys.

In 1894 a resolution carried "to appoint a special committee to report on the most economical methods of surveying and marking by permanent monuments, a meridian line to serve as a basis for future surveys and explorations; to estimate cost of same and a scheme for defraying the cost"6 In passing same the AOLS realized the potentially valuable resources of Northern Canada and believed that other nations were turning their attention to this part of our country with views of expropriation. Upon his election as President in 1896 Mr. Chipman commented that an important plank of his platform was the exploration and development of the north land of Ontario. This attitude was reiterated in his 1897 speech as ex-President. The Report of the Exploratory Surveys Committee in 1897 and 1898 explained that exploration should be done in advance of surveys in order that the Government be advised what areas should be opened for agriculture, mining, timber reserves, water power resources, and also to anticipate where highways and railways might be built. In 1899 the Committee notes that two exploratory surveys in Northern Ontario were undertaken by the Provincial government. While the Committee in 1900 has nothing new to report the President notes in his address "the propositions of the new leader of the Ontario Government, particularly in reference to the appropriation of \$40.000 to \$50,000 for preliminary exploratory work in the North part of the Province up to the shores of Hudson Bay".7 Two hundred and eighty miles of base and meridian lines were run by the Ontario government in Algoma district during 1905-1906. Over the period 1910-1911 eleven hundred miles of township outline, base and meridian lines were run and the Committee reported that fourfifths of the surveys carried on by the Province were exploratory. During 1911-1912 another one thousand and seventy miles of township outlines were surveyed. Commensurate with the reports of these two Committees were numerous articles extolling the virtues of Canada's north. These evidenced an attempt by members of the AOLS to stimulate its development. The Hudson's Bay area was lauded as an area of virgin mineral, vegetable (timber) and animal wealth, as well as a viable shipping route. The Cochrane clay belt was deemed of great agricultural potential because new settlers would not be lost to the western Provinces.

SCIENTIFIC AND POLITICAL FAC-TORS:

Interest in polar exploration was initiated in 1894, by W. Chipman, who appropriately headed the first Committee. He suggested that it would be possible to organize an expedition with some government's funding, staffed by . . . members of this Association who are so wedded to the profession that they would brave all the hardships, follow the line of collimation of their transits and be at the North Pole perhaps before they realized it".8 The objectives of the Committee were northern exploration, the establishment of Canadian sovereignity in the North and the establishment of Meridians as basis for further explorations. Unfortunately few of these were met. In 1895, the Committee reported that surveyors were well-suited for Arctic research, being "patient under adversities".9 They were not however sufficiently convinced of this fact to recommend that the AOLS spend \$1,000 to sponsor a member on an American relief expedition. Instead members were encouraged to volunteer to spend a year in North Greenland as a conditioning period. It was admitted to be unlikely the government would spend money on polar exploration, however spirits were high: "We should not rest until British North America has been fully explored and mapped."10 Even the economicallydepressed period of 1896 did not dampen the enthusiasm:

The present is no time to spend public money on railways and canals. but . . . upon the organisation of the next British or American (Polar) Expedition some of our members should volunteer for the service.11

In 1897 J. W. Tyrrell, an active proponent of the polar expedition, was refused permission to send an exploring party out with an expedition from the Department of Marine and Fisheries. Members of the Committee once again pointed out the valuable resources and pleaded that members ". . . not be contented to stand still and see other nations win the laurels . . ."12 In 1899 the Committee gave its moral support to Quebec's Captain J. E. Bernier's proposed expedition concluding that his plans appeared well laid, that his "project is not unlikely to be crowned with success",13 while regretting that no Ontario Land Surveyor would be in the party. Some support was given by Mr. Bowman and Mr. Niven to the idea that Mr. Tyrrell go, however Mr. Dickson reacted against this idea when talk of a grant was raised, saying: "It is said it would be an honor to the profession to have one of the Ontario Land Surveyors there. but I think the honor would be to the expedition."14 A resolution was drawn

up by the AOLS recommending that the Government finance Bernier's expedition and a circular was sent to all members calling for volunteers to accompany the expedition. Future reports fail to mention the number of volunteers! In 1907 Captain Bernier once again stood before the membership reaffirming that the race to the Poles was more than a competition in that it had scientific and commercial value:

With the index pointing towards the Pole, our word should be "Forward" and by our actions in following that direction we should show the world at large that we are worthy of being called sons of the foremost nation.15

He maintained science would be advanced in the areas of hydrography, geodesy, magnetism, geology, meterology, zoology, etc. While the Poles were not yet reached by 1903, the Report of the Polar Research Committee states that:

Within the past month one member of your Committee has received several letters from a New York millionaire with a view to securing him as a member of a 1903 American Polar Expedition. He does not expect to accept such a position, but why can we not find some such Canadian interest willing to stand behind our Canadian expedition?16

By 1906 the Committee had to report that Captain Bernier had not been successful in obtaining financial backing although an American team had showed agreement with the route Bernier proposed. The Committee gave a resume of the work done by explorers such as Peary, Amundsen, Abruzzi, for the previous three years. In 1907 they reported that back in 1903-1904 Mr. A. P. Low, Director of the Geological Survey of Canada had done the first Canadian Arctic explorations, in establishing stations, for the collection of customs, the administration of justice and enforcement of law by stopping at several harbors in Hudson's Bay, Ellesmere Island and other islands. Though not to the Poles Captain Bernier and the Canadian flag travelled North. In 1906-1907 he lead a government expedition to license whalers and collect customs duties from American fishing vessels in northern waters of Ellesmere Island and vicinity. In 1908 the Committee arranged a lecture by Commander Peary, to stimulate the younger men in the profession ". . . toward the possibility of obtaining fame for themselves and honor to our country"17 by volunteering to join Commander Peary's next expedition. Once again, future reports fail to mention the number of volunteers. While Bernier continued exploring the Arctic islands the Committee reported, in 1910 the success of

Captain Peary in reaching the North Pole (1909) and the "gold bricking" attempted by Dr. Cook in this regard. Attention then shifted to Antarctic. Reports in 1911 and 1912 describe the expeditions of Amundsen and Scott, in particular. In 1913 the race was over. Amundsen reached the Pole first, and Scott died in second place. Meanwhile in Canada, Tyrrell and Stewart did valuable exploratory work, in 1912, in the lands adjoining the southwest shore of the Hudson's Bay. A federally-funded expedition lead by V. Stefanson was deemed lost in the northern seas. Despite the apparent lack of Canadian conquests in the North over this twenty-year period perhaps men like Peary and Amundsen were spurred to success, at least in part, by the optimism and enthusiasm demonstrated by groups like the AOLS Polar Research Committee. No better exemplar of this spirit can be found than J. W. Tyrrell's own words:

Your Committee desires to express its sincere hope that ere long such Canadian patriotism may be found as will in the prosecution of Polar research and Arctic exploration place the Beaver side by side with the Lion, the Pine and the Eagle.18

## **FOOTNOTES:**

1. Pg. 100, 1911 AOLS Reports 2. Pg. 103, 1897 AOLS Reports 3. Pg. 107, 1897 AOLS Reports 4. Pg. 98, 1912 AOLS Reports 5. Pg. 99, 1912 AOLS Reports 6. Pg. 13, 1894 AOLS Reports 7. Pg. 22, 1899 AOLS Reports 8. Pg. 47, 1894 AOLS Reports 9. Pg. 26, 1895 AOLS Reports 10. Pg. 29, 1895 AOLS Reports 11. Pg. 30, 1896 AOLS Reports 12. Pg. 44, 1897 AOLS Reports 13. Pg. 30, 1899 AOLS Reports 14. Pg. 31, 1899 AOLS Reports 15. Pg. 99, 1901 AOLS Reports 16. Pg. 33, 1903 AOLS Reports 17. Pg. 50, 1908 AOLS Reports

18. Pg. 71, 1898 AOLS Reports



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