# Surveyors Of The Past . . .

BY CHARLES FAIRHALL

with acknowledgement to Pierre Berton's "The National Dream"



### SIR SANFORD FLEMING

Sanford Fleming, who was destined to become one of Canada's most distinguished surveyors, was born in Kirkcaldy, Fifeshire, Scotland on January 7, 1827.

In 1845 he emigrated to Canada along with his brothers. Possessor of a rugged physique and a questing mind, Fleming, with his vast beard, was a most impressive man. He began his studies in surveying in Scotland and continued his professional career in Canada by qualifying as a Provincial Land Surveyor on April 28, 1849. In 1852 he was appointed a member of the Board of Examiners, an office which he retained for about 15 years. In 1857 he became Chief Engineer for the Northern Railway and from 1864 to 1876 he was Chief Engineer of the Intercolonial Railway.

In 1862 Fleming placed before the government a carefully worked out plan for building a railroad to the Pacific Ocean. It was an impressive memorandum and undoubtedly did a great deal to advance his considerable ambition.

In April 1871 he was appointed Chief Engineer for the C.P.R. surveys. His task was not an easy one. No life was harder than that suffered by members of the C.P.R. survey crews. A special kind of man was needed and it was impossible to find enough of them.

In 1872 Fleming was determined to see for himself this vast continent that the railway was to span. He wanted to view the results of the field work and discuss the progress with the men on the ground. Along with George Munro Grant, a leather-tough Presbyterian minister, he set off on an exploratory expedition to the Pacific Ocean. In 103 days, these two remarkable men travelled 5,300 miles by railway, steamer, coach, wagon, canoe, rowboat, dugout, pack and saddle horse and their own two sturdy legs. This physical accomplishment, remarkable as it was, had a very significant effect on the future of the railroad. The details were published by Grant in a book entitled 'Ocean to Ocean' and this saga captured the public's imagination.

In the following five years, Fleming's survey crews had laboriously charted 12,000 miles of line, planted 600,000stakes, set 25,000 bench marks at a cost of \$3½ million and the lives of 38 men.

Fleming loved life. A robust man who thought nothing of warding off a bear with his umbrella or sleeping out in the open in the dead of winter, he enjoyed good food, champagne and gay parties. One thing he didn't squander though, was time. In the second half of his life, he found time to act as the initiator and principal agent for the reform in time reckoning and the establishment of the Universal Day. His efforts resulted in the adoption of the 24-hour system of time zones. He also helped plan and promote the Empire-girdling system of ocean cables. The Pacific cable was mainly due to his untiring propaganda. In addition, he acted as ambassador to Hawaii, became Chancellor of Oueen's University, which office he held until his death, and became a charter member of the Canadian Institute of Toronto. He also girdled the globe and published a book of 'Short Daily Prayers for Busy Households'.

Various honours and degrees were conferred upon him from time to time in consideration of his valued service.

He died at Halifax on July 22, 1915.

#### CLIENT

## **ASSISTANCE FUND**

By-law 76-3

Vote counted on Thursday, August 12, 1976 223 against, 159 in favour

**By-law defeated** 

# ETHICS How New Zealand Views Breaches

Ed. Note: The following notice was sent by the New Zealand Institute of Surveyors to its members. Al Burgham, of Kingston, submits this as an indication of how a sister association views breaches of ethics.

The following advertisement appeared in the "Evening Post" of Saturday, 28th February 1976 under the heading of "Tenders":

> "Registered Surveyor wanted for 16section subdivision in Khandallah. Tel. ......".

The attention of members is drawn to Rule 41 (e) (x) of the Institute's Rules, which precludes any member from tendering for work or assignments.

It is understood that tenders have been submitted in reply to the advertisement and it is therefore apparent that some members have no regard for the Rules of the Institute of which they are privileged to be members. They are therefore in danger of being required to appear before Council to justify their actions and could be subject to disciplinary action.

The identity of the advertiser is known and therefore any surveyor engaged by the advertiser will become known in due course.

Council is disturbed at any trend or actions which undermine the high standards of professional ethics and integrity which is expected of our members.

The main purpose of the recent extensive amendments proposed for the Rules and the Surveyors Act, and approved by the membership at the New Plymouth Conference, was to reinforce and strengthen the efforts of Council to maintain those standards desired of members of a professional body of our standing in the community at large.

I therefore draw attention to this matter with the request that for the good name of the Institute all members abide by the Rules, and in particular the Code of Ethics, in the hope that advertisements of this nature will be ignored.

Yours faithfully,

I. Service,

President.