

APPENDIX IV.

REPORT OF THE SURVEYORS BOARD.

THE Board for 1912 consists of Mr. John Strauchon, Surveyor-General, to 31st March, *ex officio*, when he was succeeded by Mr. James Mackenzie, Surveyor-General; Mr. Thomas Humphries, President of the Institute of Surveyors, Lower Hutt; and Mr. T. N. Brodrick, Chief Surveyor, Christchurch, nominated by the Minister of Lands; Mr. H. Sladden, Councillor, Institute of Surveyors, Wellington; and Mr. J. W. Harrison, Auckland, nominated by the Council of the Institute of Surveyors. At the first meeting of the Board in 1912 Mr. John Strauchon was unanimously elected chairman.

The Board, acting in conjunction with the six Australian Surveyors' Boards, conducted examinations of candidates for surveyors licenses in September, 1911, and March, 1912.

At the September examination twenty-six candidates sat. Of these, Mr. Edward Fletcher Roberts, Dunedin, passed the examination with credit, obtaining over 80 per cent. of the maximum marks; Mr. David Nelson, Lands and Survey Department, Gisborne; Mr. Jarl Adolph Sylvester, Greytown; and Mr. Henry Louis Percy Dyett, Lands and Survey Department, Wellington, passed the examination; while Mr. Allan Francis Waters, Lands and Survey Department, Wellington, and Mr. Ernest Gordon Wilson, Gore, who had previously passed in some of the subjects, completed the examination.

At the March examination twenty-six candidates sat. Of these, Mr. William David Armit, Lands and Survey Department, Nelson; Mr. Burnham Hirst Horner, New Plymouth; and Mr. Arthur Campbell Cooke, Nelson, passed the examination; while Mr. Valentine Blake, Lands and Survey Department, Wellington; Mr. William Brian de Laval Willis, Lands and Survey Department, Auckland; Mr. John Kirwood Ledger, Lands and Survey Department, Auckland; Mr. Francis Alfred Stevens, Hamilton; and Mr. Frank Lewis Davie, Christchurch, completed the examination, having passed in some of the subjects at a former examination.

The Board issued certificates of competency and licenses to the successful candidates.

The papers for the September examination were set by the South Australian Board, while those for the March examination were set by the Western Australian Board.

The list of 452 licensed surveyors as at 1st January, 1912, was published in the *Gazette* of 25th January, and a copy of the list was posted to each surveyor.

The deaths of the following surveyors were reported during the year 1911: Eugene Bellairs, Auckland; Edwin Fairburn, Auckland; Charles Wilson Hursthouse, Wellington; John Henry Jennings, Karamea; Edward Iveagh Lord, Greymouth; Peter McKenzie, Dunedin; Samuel Hayward Mirams, Dunedin; John Ainslie Montgomerie, Reefton; Arthur O'Neil O'Donahoo, Gosford, New South Wales; Alfred Pearson Rawson, Masterton; Robert Charles Lucas Reay, Wairoa; John Alexander Robertson, Dannevirke.

The number of cadets and articled pupils is now sixty-two.

JOHN STRAUCHON, Chairman.
C. E. ADAMS, Secretary.

Wellington, 31st March, 1912.

APPENDIX V.

TIDAL SURVEY.

[By C. E. ADAMS, M.Sc., F.R.A.S.]

HARMONIC ANALYSIS.

THE records for the year beginning 1908, December 1, of the Auckland self-registering tide-gauge have been harmonically analysed from the hourly ordinates measured to the nearest one-eighth of a foot, using the tidal abacus of Sir G. H. Darwin, K.C.B., F.R.S. The period for the analysis was selected to give as complete a series of observations as possible, the total breaks in the record aggregating about six days, and ranging from five hours to two days. The missing records were interpolated, using the method described in last year's report. The scales of the Auckland tide-record were—vertical 1 in. to 1 ft., and horizontal, 1 in. to 1 hour. Generally, the same methods and equal care were taken as in the analysis of the Wellington records, and the whole work was done in duplicate. It is hoped therefore that no serious errors remain undetected.