

Attention is called to the large amount of work required to be done to bring publication maps up to date, which work demands an increase of draughting staff.

SURVEYORS' BOARD.

The work of the year presented no unusual features. At the September examination fifteen candidates sat, of whom five completed the examination, having previously passed in some subjects; and at the March sitting eleven candidates sat, of whom one passed the whole examination and three completed and passed.

The Secretary, Mr. C. E. Adams, resigned in December, and left for the Lick Observatory, California, where he is to spend a year on leave studying in connection with his work as Government Astronomer. Mr. M. C. Smith was appointed Secretary to the Board in Mr. Adams's place.

The Board records with regret the death during the year of the following surveyors: Messrs. H. Baker, J. O. Barnard, P. Bedlington, G. B. Beere, J. L. Dickie, L. Simpson, W. C. Spencer, J. Stewart, and H. Trent.

TIDAL SURVEY.

From March to December, 1914, the work was carried out under the direction of Mr. C. E. Adams, Chief Computer. In January, 1915, Mr. Adams left for America, and since then the work has been carried on by Messrs. J. J. Hay and T. G. Gillespie.

The work has comprised the predictions, from harmonic tidal constants already obtained, of the times and heights of high and low waters for the Ports of Auckland and Wellington, 1916. Predictions for Wellington, 1917, are nearing completion.

During the year further investigations were made into an improved method of harmonic analysis. About three months were taken up in this, and some valuable work was done. On the completion of the predictions for Auckland, 1917, this investigation will again be taken up, and if the new method of analysis is found to be more practicable it will be used in preference to that of Sir George Darwin's.

A start has been made on a new harmonic analysis for Wellington. The hourly heights for about the first three months have been measured from the gauge-sheets supplied by the Wellington Harbour Board. These measurements have been done in duplicate, and checked. This work will also be continued on the completion of the predictions for Auckland, 1917.

MAGNETIC OBSERVATORY.

At Christchurch the usual work of the observatory has been carried on with efficiency by Mr. Skey, whose report, with its illustrative diagrams and seismic records, may be found among the appendices.

HECTOR OBSERVATORY.

The observing for time and time-signalling have gone on as usual at the observatory. Mr. Adams, Chief Computer, who acted as Government Astronomer, left at the beginning of this year to take up a fellowship at Lick Observatory, and since his departure a well-known amateur astronomer from Canterbury, Mr. Westland, has taken charge of the work.

OBITUARY.

During the past twelve months, though there has been much sickness, I have only to record the death of one officer, Mr. John Dickie, by which the Department lost the services of a zealous and efficient officer. At the time of his death he was in the position of Land Transfer Draughtsman at Invercargill, which position he had held with credit for some years.

There passed away, however, two retired officers, Mr. Horace Baker and Mr. Henry Trent, each of whom at the time of his retirement was holding the position of Chief Surveyor. The former had held the position also of Commissioner of Crown Lands, while the latter, starting as a cadet in 1863, had risen through the various grades to the joint position of Commissioner of Crown Lands and Chief Surveyor.

I have also to record the death of Mr. W. C. Spencer, a private surveyor, who at one time was on the staff, serving both in the field and office.

CONCLUSION.

I cannot conclude this report without paying a tribute of praise to those officers—young men with "all the world before them"—who have nobly decided to serve their country, giving their lives it may be, in this time of its trial. Their names and positions are as follows: Staff surveyors—V. Blake, W. M. Gray, G. Pirrit, S. T. Seddon, F. W. Watson, W. B. de L. Willis; temporary surveyor—W. S. Thomson; survey cadets—R. F. Burgess, L. W. B. Hall, T. R. Hancock, N. A. Middlemas, L. J. Poff; draughtsmen—G. J. B. Cairnie, T. S. Couch, E. H. Ingram, C. L. Purdie, H. B. Randrup; draughting cadets—F. Coleman, R. J. Cornwall, F. H. Hudson, H. L. Wake, and E. H. Whiting. All honour to them!

The enlistment of these officers, and the unusual amount of sick-leave granted to officers during the past year—several of these have had to undergo serious operations—has resulted in the Head Office and several of the district offices having to work short-handed, and I have now pleasure in recording my appreciation of the way in which, under these difficulties, officers in general have kept the work going.