

Publications presented to the Library.—A large number of valuable publications have been presented to the library, and for them grateful thanks are tendered to the donors.

Seismograph.—A Milne seismograph has been installed in one of the cellars, and is in charge of Mr. G. Hogben, M.A.F.G.S., C.M.G. The duties of daily attendance to change the records, wind the clocks, &c., fall to the Observatory. The seismograph is installed in the same cellar that was used by Professor C. S. Wright in his determination of gravity in conjunction with the Scott Antarctic Expedition. The pendulum pier used by Mr. Wright had to be removed to make space for the seismograph.

Orbit and Ephemeris of Comet 1915A (Mellish).—The Melbourne Observatory supplied the orbit elements and ephemeris of this comet, computed by Mr. C. J. Merfield, F.R.A.S., from observations by Dr. J. M. Baldwin made with the south equatorial of the Melbourne Observatory.

Wireless Time-signals.—The Melbourne Observatory supplies a time-signal by wireless at 1.30 a.m. and p.m., New Zealand mean time; and the a.m. signal has frequently been heard at the Wellington Radio Station. The value of a wireless time-signal, particularly in the winter-time when the weather is likely to interfere with observations here, is very great; and it is hoped, for the benefit of those who require accurate time-signals, that steps can be taken in the near future to arrange for the receipt of the signal at the Observatory.

A wireless time-signal was recently transmitted to the Arctic ship "Aurora" when she was about six hundred miles south of the Bluff, from the Awarua Radio Station, with very satisfactory results. The Governor of Tahiti has applied for a wireless time-signal from the Observatory, but so far the necessary arrangements have not been made for this service. Its usefulness to the shipping would be very great, but before this service could be undertaken with regularity it would be necessary to have some precision clocks to depend on.

Longitude of Islands.—Opportunities should now be taken of the radio station at the Chatham Islands to determine the longitude of these islands, and this work is recommended for the first available chance. In a similar way, if the Government steamer that visits the southern islands were fitted with wireless outfit the longitudes could be readily determined and at small cost. This important piece of work calls for urgent attention as soon as funds are available. It has already been undertaken successfully by most Governments with island possessions.

Cooke 4 in. Telescope.—The Lands and Survey Department has lent a 4 in. Cooke telescope with a tripod mounting, fitted with vertical and horizontal motions, to the Observatory. It is proposed to use this telescope in testing the "seeing" in other localities, and to obtain reliable data on this important question.

Equatorial Telescope.—This 5 in. equatorial telescope is mounted in a building in charge of the Astronomical Section of the Wellington Philosophical Society, and members of the section freely give their services to showing the general public the telescope on fine Tuesday evenings.

Equipment of Time-service.—Much of this equipment dates from 1868 and requires to be brought up to date as soon as possible. The service is deficient in that it has no precision clock. Those in use are in second and third order, and require an undue amount of care and attention to obtain an accurate time-service from them; and when bad weather prevents observations from being taken it is impossible to give accurate time-signals from the present clocks. This is a serious position for the time-service to be in, for an urgent call for accurate time-signals may come through at any time, and it is hoped that urgent steps will be taken to improve this portion of the equipment. Provision will also be required for a charging-plant and new batteries, for these are liable to a breakdown at any time.

Martin Kellog Fellowship.—Mrs. Adams and I left Wellington on the 7th January, 1915, for the Lick Observatory, Mount Hamilton, California, and arrived there on the 29th January, 1915. A comfortable cottage at the Observatory, partly furnished, was placed at our disposal rent-free. Every courtesy was extended to us, and our residence made as pleasant and comfortable as possible. Opportunity was taken to attend a meeting of the American Astronomical Society, and those of the American Association for the Advancement of Science, where the acquaintance was made of many eminent American astronomers, and a visit was also made to the great solar Observatory on Mount Wilson, Pasadena, California.

In addition to the many personal courtesies it is right to acknowledge here the valuable gifts of publications made to the library of this Observatory by Director W. W. Campbell, of the Lick Observatory, and by Director G. E. Hale, of the Mount Wilson Solar Observatory, and by Dr. R. V. Aitken, editor of the Astronomical Society of the Pacific.

We left the Lick Observatory on the 5th January, 1916, and arrived at Wellington on the 30th January, 1916.

I am now engaged in writing up the scientific results of this visit, and a report will be presented to the Hon. the Minister in due course.

C. E. ADAMS,
Government Astronomer.

The Under-Secretary, Department of Internal Affairs, Wellington.

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