APPENDIX IV.—WELLINGTON STANDARD SURVEY.

Mr. J. D. Climie, Inspector of Surveys, contributes the following remarks upon the closures obtained by him in his recent revision of his earlier 1881 (first) standard survey of the streets of Wellington:—

In the revision of the Wellington standard survey made by me in 1881 the following thirty-five circuits have been completed. Total length, twenty-three miles, embracing all the hilly portion of the city; average length of circuit, 52.6 chains. Error, 0.055 link north and south, and 0.067 link east and west, equal per mile to 0.084 link north and south and 0.102 link east and west.

The closures of the traverses to the triangulation (which was specially made in 1881 to a measured base in Pirie Street) are generally very good, indicating that the triangulation and standard of length are in agreement, and that Gale's system of traverse corrections gives satisfactory results. Apparently the position of Banks trig. is slightly in error, causing the rather larger differences in traverses affected by that position.

REVISION SURVEY OF WELLINGTON STANDARD, 1906.

Schedule of Standard Circuits computed by Messrs. Heenan and Hocking.

| No. of Circuit. | Name of Circuit. | Length. | Errors. | |
|--------------------|--|-------------|-----------|----------|
| | | | N. and S. | E. and W |
| | _ | Chains. | <u> </u> | |
| 1 | Cotterville Street and Featherston Terrace | 23 | 0.05 | 0.01 |
| 2 | Hobson Street, Tinakori Road, Thorndon Quay, and Davis | 80 | 0.00 | 0.31 |
| | Street | | E | |
| 3 | Fitzherbert Terrace, Hobson, Muturoa, Pipitea, and Murphy Streets | 61 | 0.06 | 0.06 |
| 4 | Tinakori Road, Hill, Molesworth, and Hawkestone Streets | 68 | 0.10 | 0.11 |
| 5 | Lambton Quay, Hunter, Featherston, and Customhouse Streets | 16 | 0.00 | 0.04 |
| 6 | May Street Circuit | 29 | 0.10 | 0.03 |
| 7 | Murphy, Pipitea, and Molesworth Streets | 41 | 0.03 | 0.07 |
| 8 | Tinakori Road, Hobson Street, and Fitzherbert Terrace | 34 | 0.02 | 0.01 |
| 9 | Tinakori Road, Hawkestone, Molesworth, and May Streets | 4.7 | 0.10 | 0.01 |
| 10 | Bolton Street, Wellington Terrace, and Aurora Terrace | 51 | 0.19 | 0.04 |
| 11 | Thompson, Nairn, and Webb Streets | 45 | 0.05 | 0.01 |
| 12 | Thorndon Quay, Mulgrave, Muturoa, and Davis Streets | 60 | 0.06 | 0.08 |
| 13 | Sydney Street and Hill Street Circuit | 84 | 0.03 | 0.01 |
| 14 | Ballance, Featherston, and Taylor Streets Circuit | 36 | 0.09 | 0.05 |
| 15 | Lambton Quay, Bunny, and Ballance Streets Circuit | 42 | 0.01 | 0.04 |
| 16 | Grey, Customhouse Streets, and Lambton Quay Circuit | 30 | 0.02 | 0.04 |
| 17 | Mowbray, Bowen, Bolton Streets, and Wellington Terrace | 15 | 0.04 | 0.00 |
| 18 | Sydney and Bowen Streets Circuit | 35 | 0.12 | 0.01 |
| 19 | Boulcott, Willis, Dixon Streets, and Wellington Terrace | 68 | 0.10 | 0.00 |
| 20 | Woodward and Bowen Streets, Wellington Terrace, and Lambton Quay | 49 | 0.00 | 0.02 |
| 21 | Manners, Cuba, Dixon, and Willis Streets Circuit | 38 | 0.02 | 0.05 |
| 22 | Farish, Manners, and Old Customhouse Streets | 19 | 0.00 | 0.04 |
| 23 | Clyde Quay and Oriental Bay Circuit | 102 | 0.01 | 0.24 |
| 24 | Roxburgh Street Circuit | 44: | 0.03 | 0.14 |
| 25 | Taranaki, Buckle Streets, Banks Terrace, Howard and Wallace Streets | 93 | 0.13 | 0.12 |
| 26 | Thompson, Webb, Taranaki, and Hankey Streets | 68 | 0.15 | 0.22 |
| 27 | Wright, Hargreaves, Wallace Streets, and New Road | 51 | 0.01 | 0.09 |
| 28 | Howard, Crawford, New Road, and Wallace Streets | 36 | 0.07 | 0.13 |
| 29 | Hall and Revans Streets and Adelaide Road | 45 | 0.05 | 0.01 |
| 30 | Crawford, John, Drummond Streets, and Adelaide Road | 33 | 0.03 | 0.02 |
| 31 | Adelaide Road, Stokes, Rintoul, and Hall Streets | 58 | 0.08 | 0.03 |
| 32 | Riddiford, Russell, Waripori, and Rintoul Streets | 92 | 0.02 | 0.10 |
| 33 | Stokes, Rintoul, Luxford Streets, and Adelaide Road | 84 | 0.06 | 0.05 |
| 34 | Hill, Molesworth, Hawkestone Streets, and Tinakori Road | 68 | 0.10 | 0.12 |
| 35 | Wellington Terrace, Woodward Street, Lambton Quay, Willis, and Boulcott Streets Circuit | 94 | 0.01 | 0.04 |
| | Totals | 23 m. 2 ch. | 1.94 | 2.350 |

For thirty-five circuits the average is—Length, 52.6 chains. Errors—N. and S., 0.055; E. and W., 0.067 = per mile, N. and S. 0.084, and E. and W. 0.102; and the largest errors, 0.19 N. and S. in 51 chains, and 0.31 E. and W. in 80 chains.