. APPENDIX II.

HEAD OFFICE DRAUGHTING STAFF.

ONE feature of the past year has been the amount of time lost by the absence on sick-leave of several members of the staff for unusually long periods, which has had a detrimental effect on the output. Other and unusual features have been the preparation of maps of the war areas in Europe; and the preparation of examination-papers and details for a draughtsman's examination, for which, however, no candidate sat. Owing to the absence of the Chief Computer on leave at the Lick Observatory, California, the duties of Secretary to the Surveyors' Board were taken over by the Chief Draughtsman. The completion of new fittings has made possible the proper indexing of records as soon as clerical assistance is available; and an investigation of the state of the publications generally has enabled the volume of work of that nature required to be done to be grasped, and it is very considerable. Of the 125 counties in New Zealand, 33 remain still to be drawn and published, while a large part of those published are marked "Provisional." Of the 997 survey districts, 553 are unpublished still, and no definite plan of completing this, probably the most useful publication of the Department, is yet properly in action. There are also probably well over a thousand small centres of population, towns and villages, of which maps would be useful but are not drawn.

Revision and redrawing of the 4-mile sheets of the North Island is in progress, but there is still a good deal to be done to the large map of Wellington. The new map of New Zealand, after the outbreak of war, was put aside; it requires, however, but two or three days' work to

bring it to completion.

A new protractor was plotted by co-ordinatograph and put to stone during the year, and is of rectangular shape, giving greater clearness. The work of standardizing drawing-papers is so far advanced in that some 200 samples from the best makers are in hand for selection of suitable grades and characters for departmental work and records. Colours and other materials likewise are receiving attention, and it will be possible, it is hoped, shortly to issue a list of standard draughting materials of unexceptionable character from which to order supplies.

A large amount of miscellaneous work passes through this branch in the preparation of tracings, descriptions, maps, and similar matters for other Departments and the legislative; and index-maps of all parts of New Zealand are kept up and available for consultation by all

Two sheets of the international map subdivisions were compiled as an experiment from the mile lithographs and reduced to the standard natural scale of $\frac{1}{125000}$, but were not very satisfactory, and a further sheet required will be controlled by plotted points.

Seventeen schedules for the Local Bills Committee were examined and certified to, 185 plans of towns were examined and prepared for statutory approval, 103 drawings were photo-lithographed, 176 technical descriptions were written, 9 surveyors' bands were tested, 70 plans of registration districts and 37 loan-blocks maps were made. Large numbers of maps were mounted and lithographs disposed of, and all the town plans were traced, and many miscellaneous tracings and maps were made, while all the land transactions of the Department were brought up on the county maps.

M. C. SMITH, Chief Draughtsman.

Table 1.—RETURN OF FIELD-WORK EXECUTED BY HEAD OFFICE STAFF.

| | * Secondary Triangulation. | | Minor Triangulation. | | Town Standard Surveys. | | Rural Standard Surveys | | Inspections. | | | |
|----------------|-------------------------------|------------------|-------------------------|----------------|---------------------------|-------------------|---------------------------|-------------------|-------------------|----------|-------------|----|
| Land District. | Area. | Cost per Acre | Area. | Total Cost. | Miles. | Cost per Mile. | Miles. | Cost per Mile. | No. of Surveyors. | | Other Work. | |
| | | | | | | | | | Staff. | Private. | | |
| Auckland | Carried | forward | | £ | 23 | £ 39·75 | | £ | | | £ s. | d. |
| Wellington | | forward | | 135 | | ed forwa | | | | 18 | 696 2 | - |
| Nelson | | •• | | | 37 | 41.00 | | | | •• | ļ | |
| Totals | | | •• | 135 | 60 | 80.75 | | | | 18 | 1,792 9 | 7 |

^{*} A large area of triangulation as shown on litograph is in progress in the field.