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# PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS.

## REPORT,

TOGETHER WITH

MINUTES OF EVIDENCE AND AN APPENDIX,

RELATING TO THE PROPOSED

## ERECTION OF COMMONWEALTH NOTE PRINTING OFFICES.



MEMBERS OF THE PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

(Second Committee.)

The Honorable HENRY GREGORY, M.P., Chairman.

*Senate.*

Senator George Henderson.

Senator Edward Needham.

Senator John Newland, Vice-Chairman.

*House of Representatives.*

William George Mahony, Esquire, M.P.

James Mathews, Esquire, M.P.

Sydney Sampson, Esquire, M.P.

Hugh Sinclair, Esquire, M.P.

The Honorable William Henry Lord Enoch, M.P.



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4. PUBLIC WORKS COMMITTEE.—REFERENCE OF COMMONWEALTH NOTE PRINTING OFFICES.—The Order of the Day having been read for the resumption of the debate on the following motion of Mr. Groom—That, in accordance with the provisions of the *Commonwealth Public Works Committee Act 1913-1914*, the following work be referred to the Parliamentary Standing Committee on Public Works for their report thereon, namely:—Erection of Commonwealth Note Printing Offices on the site recently acquired in Victoria-parade, Fitzroy, Melbourne—and on the amendments moved thereto by Mr. Charlton, viz.: That all the words after the word "Offices" be omitted—Debate resumed.

Question.—That the words proposed to be omitted stand part of the Question—put and negatived.

Question.—That, in accordance with the provisions of the *Commonwealth Public Works Committee Act 1913-1914*, the following work be referred to the Parliamentary Standing Committee on Public Works for their report thereon, namely:—Erection of Commonwealth Note Printing Offices—put and passed.

## PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS.

### NOTE PRINTING OFFICES.

### REPORT.

THE PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS, to which the House of Representatives referred for investigation and report the question of the erection of Commonwealth Note Printing Offices, has the honour to report as follows:—

#### INTRODUCTORY.

In the year 1908 the Department of the Treasury, by arrangement with the Department of Trade and Customs, took over control of half of the Customs premises in Flinders-street Extension, Melbourne, known as the King's Warehouse, in order to provide accommodation for the Commonwealth Stamp Printer. Four years later the remaining portion of such premises passed to the control of the same Department to provide accommodation for the Commonwealth Note Printer. As the volume of business increased, certain additions of a temporary character were made to the premises to provide further accommodation shown to be necessary.

The positions of Stamp Printer and Note Printer are now amalgamated, and the control of the operations is in the hands of the Note Printer.

2. On 28th May, 1919, Parliament being then in recess, a communication was received by the Chairman of the Committee from the Acting Prime Minister advising that it was proposed by the Government to erect new Note Printing Offices, and asking that as the project was one of urgency, the Committee should give the matter attention in anticipation of a motion of reference by the House of Representatives. Having learned of the congested and dangerous conditions existing at the factory, a reply was sent on 3rd June intimating that the Committee, appreciating the urgency of the reference, was prepared to commence its investigations into the question as soon as the necessary plans and estimates were available for submission to it. It was added, however, that as the reference did not come within the provisions of section 15 of the *Commonwealth Public Works Committee Act 1913-1914* it was presumed that steps would be taken to validate the reference as early as possible after the meeting of Parliament. In the meantime the Chairman would not certify for fees for the attendance of members of the Committee while engaged on the inquiry until such time as the reference was validated.

3. On 10th June the Acting Prime Minister intimated that the Committee's request that the matter of validating the reference as early as possible after the meeting of Parliament had been noted for attention, and on 19th June the preliminary inquiries of the Committee were commenced.

#### SITE.

4. On 27th June, 1919, the Commonwealth acquired as a site for the proposed new building certain land in Victoria-parade, Fitzroy, together with the buildings thereon known as the Turn Verein, formerly used as a social club by the German residents of Melbourne.

The land, situated almost opposite Lan-downe-street, and distant about a quarter of a mile from the Commonwealth Treasury, has a frontage to Victoria-parade and to Little Victoria-street of 130 ft. 11 in. by a depth along Young-street of 248 feet. On the site are some buildings, which, although not of modern construction, may with a little alteration be utilized by the note sorting staff of the Treasury, which is now accommodated partly in the Treasury and partly in rented premises in the city.



### MOTION OF REFERENCE.

5. On 31st July, 1919, the Minister for Works and Railways in the House of Representatives moved that the following work be referred to the Parliamentary Standing Committee on Public Works for their report thereon, namely :

" Erection of Commonwealth Note Printing Offices on the site recently acquired in Victoria-parade, Fitzroy, Melbourne."

but, after debate, such motion was amended to read —

"Erection of Commonwealth Note Printing Offices."

leaving the question of the site open so that the Committee should not be restricted to consideration only of the site which had been acquired.

### PRESIDENT PROPOSAL.

6. The proposal now under consideration is to erect a fire-resisting building of modern construction to replace the building in Flinders street Extension. It is proposed that this building, which is designed on the lines of the British and United States Note Printing Offices, shall be of four storeys and a half-sink basement, and have brick walls, reinforced concrete floors, and floor supports, large rooms the full width of the building with steel and wire divisions between the various printing machines, and a flat reinforced concrete roof.

The reinforced concrete construction will be the cantilever floor slab system, more popularly known as the "mushroom" system.

Provision is included for one electric goods lift and one electric passenger lift, as well as a fireproof staircase, and the windows are to be of wired glass with steel sashes.

The heights inside the building from floor to floor are proposed at: basement, 8 ft. 6 in.; ground floor, 14 feet; first floor, 14 feet; second floor, 13 feet; and third floor, 13 feet.

7. Lavatory accommodation is to be kept distinct from and outside the building, and there will be seven lavatory blocks on mezzanine floors. Incidentally the stairs to the lavatory blocks giving access to all the different floors will provide a second staircase, which could be used as a fire escape.

It is proposed to provide a separate luncheon room for male and female employees, with a suitable kitchen for boiling water, heating food, &c.

The whole building is to be heated by means of hot water radiators.

## ESTIMATED COST.

8. The estimated cost of the building is \$44,200, including all engineering services, lighting, heating, and lifts. To this should be added laying of electric mains, 11,500, and moving and installing machinery, 12,000, making a total of \$47,800.

The time for completion is set down at eleven months from the date of signing the contract.

### COMMITTEE'S INVESTIGATIONS.

9. The Committee was aware from the debate which took place in the House of Representatives that there was a feeling amongst certain Members of Parliament that it might be preferable to locate the Note Printing Office in Canberra or Sydney, consequently particular attention was paid to this aspect of the question. In addition to visiting the present Note Printing Office in Melbourne, and inspecting the property in Victoria parade, Fitzroy, Melbourne, upon which it was originally suggested that the new Note Printing Office should be erected, the Committee went to Sydney and investigated locations suggested as suitable in that city. Invitations to place before the Committee any representations they desired to make in the matter were addressed to the Town Clerk, Sydney, the Chamber of Commerce, and the Chamber of Manufacturers, Sydney, and the Australian Federal Capital League. Members of the Committee were acquainted with the conditions at Canberra and the plan of the proposed city, so that there was no necessity for them to go there, but at their request a duly accredited witness was selected by the Municipal Council of Queanbeyan to visit Sydney for the purpose of placing before the Committee the views of the people of the district in the matter of the early establishment of the Office at the Federal Capital, and the prospect of obtaining locally the labour necessary to carry on the work, &c. Inspections were also made of structures erected in accordance with the mushroom system of reinforced concrete construction such as is proposed for the building under consideration.

*Existing Premises.*

10. The premises in Flinders-street Extension, Melbourne, in which the work of the Note Printing Office is at present carried out, were selected as a matter of urgency when stamp printing was first taken over by the Commonwealth, and from a make shift beginning have grown by more or less unsuitable additions and further accommodation has been found to be necessary. After taking into consideration the operations involved in the production of Commonwealth notes, stamps, war

bonds, &c., seeing the cramped conditions under which the work is performed, and hearing the evidence tendered by the Australian Note Printer, it was patent to the Committee that the best interests of the Commonwealth the establishment should be removed from its present quarters with as little delay as possible. The premises constitute a very grave fire risk by reason of the fact that several of the buildings are of a temporary character, and are not only in danger of fire on account of the nature of the materials used in the process of note printing, but are contiguous to the Customs shed, where inflammable materials are stored and where smoking is indulged in. In the event of a fire occurring, there is a possibility of serious loss of life, especially amongst the female employees, on account of the limited opportunities for escape from the building, added to which the destruction of certain machines which are obtainable only from abroad would seriously interfere with the output of the establishment. The damp atmosphere of the neighbourhood is said to be a disadvantage to the work carried out, while the fumes from the near-by gasworks machinery of its kind in the world, but also have a damaging effect on certain of the colours used in the printing of the Note Issue.

Further, the Customs Department, for whom the premises were originally erected, have recently made representations to the effect that pressing need exists in that Department for storage space, and, in view of revenue being lost through want of such storage space, consideration has been given to the question of the erection of a new King's Warehouse.

11. Having satisfied itself of the disadvantages of the present position and premises, and being convinced that no reasonable expenditure would remedy these disadvantages, the Committee occupied itself with a consideration of the best position to which the Note Printing Offices could be transferred. Eliminating the smaller State Capitals, which offered no advantage over the larger cities, the choice was narrowed down to a consideration of the relative advantages to be derived from location of the establishment in Sydney, Canberra, or Melbourne.

*Sydney.*

12. The Committee is of opinion that the claim of the advocates of the early transfer of the Seat of Government to Canberra, that any building erected for Note Printing Offices in Melbourne building in Sydney, and endeavored to ascertain whether any Government or privately owned premises could be obtained in that city which would preclude the necessity for expending money on the erection of a building. It will be readily seen that in considering the lease of any building for note printing purposes, it is essential in order to minimize risk of burglary or theft that the Commonwealth should be the sole occupant, that the locality should be free from dust, smoke, or sulphur fumes, and that the building should be as fire-resisting as possible and be free from adjoining fire risk.

13. Approximately 50,000 square feet of floor space are required, and the inquiries made by the Committee from Government officials and private estate agents showed that it was not possible to obtain a privately owned building in Sydney possessing the qualities mentioned, neither is any State building available, and, as a matter of fact, the Committee was informed that the State Government is leasing privately owned premises to meet its own needs. The only Commonwealth building mentioned as likely to be suitable was the Parcels Post Office, near the Sydney Railway Station. This building was erected by the Commonwealth on State land some years ago at a cost of £82,708, and is held by the Commonwealth on a ninety-nine years' lease. The premises were inspected by the Committee, and also, at the request of the Committee, by the Australian Note Printer, and might be suitable for note printing purposes should it be decided, as has been suggested, that to meet postal requirements the Parcels Post business be removed from its present position. It was ascertained, however, that any such removal would be contingent on the provision of other accommodation for Parcels Post purposes, and could not well be effected under three years.

14. The transfer of the note printing to Sydney, in addition to involving dislocation of business and no little expense, could be regarded only as a temporary measure pending the eventual transfer of the establishment to its permanent position at Canberra when the seat of Government is established at that place.

In view of all the facts, therefore the Committee is unanimously of opinion that no good purpose would be served by transferring the Note Printing establishment to Sydney.

Canberra.

15. The question of the feasibility of erecting immediately at Cumberna a building suitable for note printing purposes was examined thoroughly in view of this desire expressed in Parliament and by certain witnesses examined by the Committee. In the first place, it might be explained that the note and stamp printing establishment is working about 21 printing presses and employs about 220 hands, and although both machines and employees are working at high pressure, the supply of notes is scarcely equal to the demand. It will be seen, therefore, that the dismantling



transportation, and re-erection of machines necessary in removing from the present building to any new location will need to be carried out very gradually and with considerable care in order to avoid any serious interference with the output of the factory, while the improbability of obtaining suitable labour locally would necessitate the transfer of most of the present staff from Melbourne. Some idea of the magnitude of the removal may be gathered from the fact that it is estimated that the weight of material which would be removed, including machines, stores, furniture, &c., would be about 2,000 tons, and that it has been stated in evidence that it is considered that to dismantle, pack, and transport a machine by ship and rail to Canberra, and re-erect it in a building at that place, would take about one month.

16. Concurrently with the erection at Canberra at the present time of a note printing establishment which it is estimated would cost at least 25 per cent. more than a similar building erected in Melbourne it would be necessary to erect also accommodation for the people employed in the factory, as no suitable houses are available in the Federal Territory. This accommodation and the other facilities provided for employees should as nearly as possible approach what they have been used to in Melbourne, otherwise further expense may be involved by having to pay them something in the nature of a district allowance. Of the number of employees at the factory, it is estimated that 100 are married, the remainder being made up of about 50 youths under 21 years of age, and about 70 unmarried females. To effectively house this body of employees it would be necessary to erect 100 cottages for the families, and two hostels, in one of which would be accommodated the single men and in the other the female employees. Allowing for average families, it would be necessary to provide services for approximately 600 souls. The establishment of a community of this description at a distance from any centre of population would immediately involve the provision of at least a store, a hall, and a school, together with roads, sewerage, lighting, water supply, &c.

17. In order to carry out the plan of the designer of the Federal Capital, the Note Printing Offices would have to be erected on the position in the Governmental group allotted by him to that activity, while the employees would be housed in a residential area probably  $1\frac{1}{2}$  to 2 miles distant. This then would necessitate the provision of transport for the employees from their homes to their work and return each day.

18. The Commonwealth Director-General of Works was asked by the Committee to furnish an approximate estimate of what it would cost to provide the facilities which the Committee considered essential in an establishment of this kind, and supplied the following figures.—

*Cost of Establishing at Canberra.*

|   | £      |
|---|--------|
| 100 Brick Houses .. .. .  | 60,000 |
| Fencing .. .. .   | 1,500  |
| Two Hostels .. .. .   | 10,000 |
| Furniture and Equipment .. .. .   | 2,000  |
| School .. .. .  | 1,000  |
| Hall .. .. .  | 1,800  |
| Co-operative Store .. .. .  | 1,000  |
| Water Supply Mains .. .. .  | 4,000  |
| Water Connexions to Houses .. .. .  | 1,280  |
| Storm Water .. .. .   | 1,070  |
| Roads, Paths .. .. .  | 4,280  |
| Sewerage Main and Treatment Works .. .. .                                   | 3,000  |
| House Connexions to Sewer .. .. .   | 2,140  |
| Manager's House .. .. .   | 1,500  |
| Cost of Factory .. .. .   | 55,000 |
| Power—A.C. to D.C., including motor generator .. .. .                       | 2,500  |
| Electric Mains and Transformers at Factory .. .. .                          | 760    |
| Distribution of Current to Houses, including Mains and Transformers .. .. . | 2,000  |
| Chars-a-banc .. .. .  | 4,500  |
| Garage .. .. .  | 800    |
| Motor Road from Settlement to Factory .. .. .                               | 1,500  |
| Transfer of Plant .. .. .   | 9,000  |
| Transfer of Employees .. .. .   | 8,000  |
| Fares and Allowances to Employees during process of transfer .. .. .        | 2,045  |
| Mond. Gas Plant .. .. .   | 3,500  |
| Mond. Gas Main .. .. .  | 1,500  |

£186,265

19. It is realized that the whole of this expenditure cannot be rightly charged to the Note Printing Offices, but is part of the general cost of establishing the Federal Capital, still the fact remains that the transfer of the note printing premises to Canberra at the present time would involve this large outlay which the Committee considers under existing circumstances cannot be justified.

20. Apart from the disadvantages of having located at Canberra an activity which it is desirable should be as near as possible to the Commonwealth Treasury in consequence of the close touch maintained between those Departments, and the possible danger of loss by robbery, &c., the Committee was informed that it would cost a sum of £1,343 per annum more to provide for the escort of notes from Canberra to the various centres than it does now from Melbourne. In addition to this, the cost of providing motor vehicles to convey the employees to and from their homes, including upkeep, interest, depreciation, and loss on the service, is estimated at £1,020 per annum, so that, apart from the capital cost already mentioned, an annual expenditure of £2,363 more would be involved by having the Note Printing Offices at Canberra than in Melbourne at the present time.

21. However anxious the Parliament may be to see the Seat of Government removed to Canberra at an early date, there are many disadvantages attendant on having the Note Printing Offices at that place while the rest of the Governmental activities are located in Melbourne. It is a branch of the Commonwealth Treasury having close relationship and daily transactions with that Department, and, in the opinion of the Committee, cannot reasonably be asked to pioneer the establishment of the Federal Capital, but should await removal to Canberra until such time as the Seat of Government is established there.

*Melbourne.*

22. The Committee has been somewhat hampered by the absence of any information as to when the Seat of Government is likely to be transferred from Melbourne to Canberra. The Federal Capital Director of Design and Construction in the course of his evidence stated that he considered that a reasonable time for establishing the Seat of Government at Canberra would be five years. The Committee has, therefore, adopted that as the minimum period for which it will be necessary to provide accommodation for the note printing establishment in Melbourne if it has not to be removed to Canberra until the other Commonwealth Departments also are transferred.

23. Inquiries were made as to the possibility of obtaining the temporary use of any Commonwealth or State building, but it was ascertained that both the Commonwealth and State Governments lack sufficient buildings to provide for their own requirements, and are leasing additional premises. Evidence obtained from private estate agents also showed that there was no possibility of being able to lease any privately-owned premises which would be suitable for note printing requirements. Under these circumstances, no alternative presented itself to the Committee more favourably than the original proposition to erect premises suitable for the purpose.

24. The location of the notes printing business in Melbourne while most of the Commonwealth Departments, and especially the Treasury, is in that city, offers several important advantages over location at Canberra. In the first place, a large amount of labour is available from which can be selected persons most suitable for the work to be carried out, and the staff can always be retained at the necessary pitch of efficiency; the employees have not to be subjected to isolation and the absence of the amenities of civilization; Melbourne is in such a position that the transportation of the raw material to the factory and of the finished product to the various centres required can be carried out as cheaply as from any other city, and considerably cheaper than from Canberra.

25. The transfer of the machinery to a suitable building in Melbourne can be carried out more quickly, more cheaply, with less possible danger to the machinery, and less dislocation of business; no cost will be involved in transporting the employees, and no loss of the services of any of the employees need be feared.

26. It was stated in evidence that the return of the present note printing premises to the Customs Department would enable that Department to reap a profit of about £2,000 per annum by utilizing them for the purposes of a King's Warehouse. Further, that the buildings on the property acquired would provide accommodation for a number of the Treasury staff engaged in the sorting of Commonwealth notes, and so saving an amount of £622 per annum now being paid as rental for accommodation. Capitalized at 6 per cent., this saving of £2,622 per annum alone would amount to £13,700, or almost the sum proposed to be spent on the erection of the building under consideration.

27. It will be seen that the proposition from a financial point of view is a sound one, as the building proposed to be erected in Melbourne would be of such a character and in such a locality that the Committee is satisfied that there should be no difficulty in disposing of it to advantage when the time arrives for the transfer of the Seat of Government to Canberra, if it be found that those Commonwealth activities which must always remain in Melbourne are not sufficient to absorb the accommodation provided in the Commonwealth-owned premises in that city.



28. In the course of its investigations, however, information was obtained by the Committee to the effect that excluding war activities the space occupied by Commonwealth Departments in Commonwealth-owned buildings in Melbourne is 495,480 square feet, and of this space 155,000 square feet will be vacated by those Departments which will be transferred to Canberra when the Seat of Government is moved there, leaving 340,480 square feet still required by those Departments which will remain in Melbourne; 337,800 square feet of space is occupied by Commonwealth Departments in rented buildings in Melbourne, of which an amount of 194,033 square feet will still be required when the Seat of Government is transferred, so that a total floor space of 534,513 square feet will be required for Commonwealth Departments remaining in Melbourne after Canberra shall have been established, and there will be only 495,480 square feet of space in Commonwealth-owned buildings to meet this requirement. Consequently, it will be seen that even if no expansion takes place during the next five or ten years, any building erected in a position so conveniently situated to the present Commonwealth Offices as the site in Victoria-parade, Fitzroy, recently acquired, could be readily utilized for those Commonwealth activities which will remain in Melbourne for all time irrespective of where the Seat of Government is situated.

#### RECAPITULATION.

29. Recapitulating the facts set out in previous paragraphs it will be seen, therefore, that to establish the Note Printing Offices on the site acquired in Victoria-parade, Fitzroy, Melbourne, would cost—

|   |                |
|---|----------------|
| For building proposed .. .. .                             | 44,200         |
| Less saving in floor recommended by the Committee .. .. . | 1,000          |
|   | <u>£43,200</u> |
| Laying electric mains .. .. .                             | 1,500          |
| Moving and installing machinery .. .. .                   | 2,000          |
|   | <u>£46,800</u> |
| Total .. .. .   |                |

and the saving which would be effected would be £2,022 per annum, *vide* paragraph 26, £2,000 of which would also be effected if removed to Canberra.

A similar establishment at Canberra would involve the expenditure of—

|   |                 |
|---|-----------------|
| Building .. .. .  | £55,000         |
| Electric mains, including generator and transformer .. .. . | 3,250           |
| Moving and installing machinery .. .. .                     | 9,000           |
| Other services mentioned in paragraph 18 .. .. .            | 119,015         |
|   | <u>£186,265</u> |
| Total .. .. .   |                 |

plus an additional annual expenditure of £2,265, *vide* paragraph 20.

#### COMMITTEE'S RECOMMENDATIONS.

30. In view of all the circumstances of the case, the Committee is convinced that it would be in the best interests of the Commonwealth that new Note Printing Offices be erected on the site acquired by the Commonwealth in Victoria-parade, Fitzroy, Melbourne, and recommend accordingly.

The decision arrived at by the Committee in this matter is shown in the following extract from its Minutes of Proceedings:—

Mr. Mathews moved—That the Committee recommend that a building for the purposes of the Commonwealth Note Printing Offices be erected on the site acquired by the Commonwealth at the corner of Victoria-parade and Young-street, Fitzroy, Melbourne. Seconded by Senator Newland.

The Committee divided on the motion—

Ayes, 7.  
 Senator Henderson  
 Senator Needham  
 Senator Newland  
 Mr. Gregory  
 Mr. Mathews  
 Mr. Sampson  
 Mr. Laid Smith.

No, 1.  
 Mr. Sinclair.

And so it was resolved in the affirmative.

31. Careful consideration was given to the plans of the building suggested, the conveniences to be provided for the employees, &c., and the type of construction proposed, and the Committee is unanimously of opinion that the building as proposed by the Department should be erected.

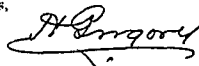
32. An inspection was made of certain printing works in Melbourne, in which the floor finish adopted was a composition of jarrah sawdust, Portland cement, and sand, 1½ inches thick, covered with three-ply ruberoid or malthoid. Such a floor is silent, soft to the feet, and relatively impervious to the soaking of oil, more or less inseparable from printing machinery, and provided those portions of the floor exposed to excessive wear and tear were laid in val-de-travers or some equally high-class asphalt material, the Commonwealth recommends that a floor on similar lines be adopted in this building rather than the jarrah block finish originally proposed. By this substitution it is anticipated that a saving of £1,000 will be effected in the building.

33. The accommodation to be provided for the note printing establishment in the building proposed should be sufficient under all ordinary circumstances to meet requirements until the transfer of the Seat of Government to Canberra, if that event occurs within the next five or ten years. To preclude the possibility of any extension of the building being necessary before that time, the Committee is strongly of opinion that no additional printing work which could be as efficiently carried out elsewhere should be imposed upon the Australian Note and Stamp Printer until such time as the Note Printing Offices are established at the permanent Seat of Government.

34. In conclusion, the Committee desires to emphasize the necessity of proceeding with the erection of the proposed new building with the least possible delay, as it considers it is imperative that the existing factory should be vacated as early as possible.

H. GREGORY,  
 Chairman.

Office of the Parliamentary Standing Committee on Public Works,  
 31 Queen-street,  
 Melbourne, 7th October, 1919.





# MINUTES OF EVIDENCE.

(Taken at Melbourne.)  
THURSDAY, 10TH JUNE, 1910.

Present:

|                       |                  |
|-----------------------|------------------|
| Mr. GUNSON, Chairman; |                  |
| Senator Henderson,    | Mr. Sampson,     |
| Senator Needham,      | Mr. Sinclair,    |
| Senator Newland,      | Mr. Laird Smith, |
| Mr. Mathews,          |                  |

Percy Thomas Owen, Director-General of Works, Department of Works and Railways, sworn and examined.

1. To the Chairman.—It might, perhaps, be of interest to the Committee to have a *résumé* of the facts leading up to the occupation of premises in the Flinders-street Extension as note-printing works, as well as a statement of the disabilities attaching to their occupation, and an outline of the project for the provision of new premises. Note printing was first carried on for the Commonwealth in a building adjoining the Gns Works in Flinders-street Extension. This building, which was originally the King's Bond, is fire-resisting, and was first taken over by the Treasurer for stamp printing in 1910. For the purposes of stamp printing we took over about two-thirds of this building, including a strong-room. In 1912 note printing was undertaken there in a comparatively small way. Certain modifications in the building were carried out to fit it for this work, and it proved sufficient for the functions to be performed there until 1915. In that year there was a great pressure of work in respect of war bonds and other printing for the Treasury, and machinery had to be got rapidly together, and the building was added to. At that time the Treasury was in great difficulties in coping with the volume of printing required. I believe that three shifts a day were being worked to try to keep up with the demand for this class of work, which has no association with the work carried on in the Government Printing Office. It would not have been possible at that time to make any change over to other premises. Since then additional machinery has been purchased, which has obviated the working of three shifts, and further machines are required now to cope with prospective printing. In 1918 a question was raised as to the amount of insurance that should be paid. The original part of the building was fire resistant, but the new part, which was erected as a matter of great urgency, was not. The question was referred to the Commonwealth Fire Board, and the consultant member of that Board, Mr. H. B. Lee, after visiting the premises, reported that from the point of view of fire risk the new part of the building was most unsatisfactory. He pointed out that there were both internal and external risks. At the next meeting of the Fire Board he advised that communication should be sent to the authorities recommending the purchase of another site, on which buildings properly designed for printing purposes, and possessing fire-resisting qualities, should be erected. He also stated that it would be necessary to expend a considerable amount on the existing building to place

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it on a more satisfactory basis from the point of view of fire resistance. Briefly, his recommendations were that a water-sprinkling system should be installed throughout, and that all the appliances should be brought under periodical inspection by fire brigade officials. The amount that would be involved in giving effect to his direct recommendation on was estimated at £3,720. The Fire Board, in addition, thought that a brick wall should be erected between that portion of the premises occupied by the Department of Trade and Customs and that occupied by the note printing, and that an additional fire escape should be installed to permit of the rapid egress of employees in case of fire. Mr. Harrison, the Government Note Printer, with whom I have had interviews, has told me that in the process of printing notes there is danger of the spontaneous combustion of the compounds that are put on the steel plates, and that he has actually seen them catch fire during the process. He has informed me, further, that at night these steel plates have to be placed where they can be under observation; that in the building at present occupied for this purpose the only course to be followed is to provide for a constant watch, so as to prevent the risk of fire. It was thought that I, as Chairman of the Commonwealth Fire Board, should see Mr. Collins, Secretary, and Mr. Cerrity, Assistant Secretary to the Treasury, and Mr. Harrison, the Note Printer. I had consultation with them. Mr. Harrison was kind enough to show me right through his premises, and I learned, also, that extra accommodation would be required for machines that are forthcoming. On the whole, the opinion was formed that the stage had been reached at which the Commonwealth should think of providing satisfactory accommodation both from fire risks and other points of view. During my visit to the Note Printing Office—and note printing instead of stamp printing, for which it was originally designed, is now the principal function of these premises—I found some disabilities of the present site, due to atmosphere, for instance, sulphur fumes, from the adjoining Gns Works, dust—which, I understand, is an enemy of the printing process—and moisture in the air. It is also unnecessary for the employees. The Note Printer was particularly anxious to secure as dry an atmosphere as possible, because in this process the notes have to be dried singly; they cannot be dried drastically. The Treasury authorities favorably entertained the idea of moving the works to proper premises, allowing for future expansion, and I offered to have a look round with the chief architect, Mr. Murdoch—in touch with the Department of Home and Territories—to see what sites were available. We looked for a site close to the Treasury, believing that to be very desirable, because of the constant intercommunication between the Treasury and the Note Printer. The conditions to which I have just referred pointed generally to the selection of a high site away from the river and close to tram routes. Naturally, in these circumstances, we made an inspection of East Melbourne. We looked also at sites near the Yarra; one of these comprising Varley's Printing Office. We also discussed a site near the Victoria Barracks, but both these sites were discarded, because, undoubtedly, on



many days of the year there is in that neighbourhood a heavy mist which, if possible, ought to be avoided in choosing a site for premises for this purpose. There was also the further objection that these sites were not so close to the Treasury as the Treasury officials would prefer. We looked likewise at sites further east than Eastern Hill. After Mr. Murdoch and I had made an inspection the matter was referred for further search by the Department of Home and Territories. It seemed conclusive from the inspection that we would not be able to obtain a building, already constructed, of the type required; that is to say, a fire-resisting building capable of taking machinery on its upper floors. Most buildings complying with these requirements have been erected in the city for specific purposes, and are occupied. Another requirement which I should have mentioned before was that there should be no other occupant of the building to be used for note-printing purposes. The Commonwealth desired to be the sole occupant of any building entered for this function. The reasons for this are obvious. Mr. Murdoch and I had seen the property known as the Turn Vercin, which is no longer used by the German residents, and we thought it would meet the requirements. Half of its ground area is unoccupied, but the back half was occupied by an athletic club, with a large hall and accessories, including lavatories, in addition to the old residence which had been used for club-rooms. I saw Mr. Cerutti again, and said I thought it would be worth while getting Mr. Harrison to look at this property to see if it would meet the requirements he had stated to us. Mr. Harrison did so, and was very pleased with the premises. He found that it fulfilled, as well as he could expect, the requirements I have stated. In the interim various sites had been suggested. One of these was the Eastern Market, which, however, was quite hopeless. Another was at the corner of Lonsdale and Exhibition streets, and would have been very expensive, although not as good as that now proposed. Still another site suggested was somewhere near Flagstaff Hill, and erected on it were premises that were not fire-resistant. After considering all these sites, it was decided to suggest to the Treasury, through the Department, that the Turn Vercin should be brought under the notice of the Treasurer. During the visit paid by Mr. Cerutti, Mr. Harrison, the Chief Architect, and myself to the premises, Mr. Cerutti had said that the existing athletic hall or theatre could be immediately used for note-printing, for which at present a large floor area in the Commonwealth building in Lonsdale-street is appropriated, and for which work the Treasury is also renting premises in the city. Mr. Cerutti's opinion was that the existing structures on this site which is now being acquired would be worth £500 a year to the Treasury as they stand, or, possibly with some improvements in the matter of lighting. The premises are of brick, but the lighting requires to be improved, and other work will undoubtedly be necessary. The Comptroller of Customs, Mr. Oakley, has said that his Department is anxious to again obtain possession of the King's Bond; that they can use all those premises; and that they want them so badly that if they could have them at the present time it would result in a saving of them of £2,000 or more per annum. He cannot, of course, get them at present, but I must stand from him that even if it were a matter of several months later he would still need them, so that any construction work that has been done for note-printing purposes at the King's Bond will turn over to the Department of Trade and Customs. I had interviews with Mr. Collipis, the Secretary to the Treasury, who delegated the discussion of this matter to Mr. Cerutti for the time being. Having had these discussions with Mr. Cerutti, the Chief Architect was asked to prepare a sketch

drawing showing the size of the buildings that could be erected for note-printing on the unoccupied portion of the site which is being acquired. Mr. Murdoch, the Chief Architect, was put in direct touch with Mr. Harrison to ascertain his present and prospective requirements, and a plan was prepared and sent to the Note Printer with a rough estimate of what the building would cost. That rough estimate did not include the cost of machinery and the fixing of same, or special appliances, or the cost of providing for cooking and dining-room fittings for employees. The estimate was exclusive, of course, of the cost of the land. It provided only for the erection of the new building. Mr. Harrison went very carefully through the plan, and I had a further conversation with him and Mr. Cerutti. Mr. Harrison informed me that the plan as submitted, subject to some modification of existing particulars, would meet his requirements, and that generally he was well satisfied with it as a project. The matter was then submitted to the Secretary to the Treasury, and, I understand, to the Treasurer, who approved of the scheme, and as a consequence, I assume, communicated with your Committee. I should like to have been able to-day to submit a sketch plan to the Committee, but we have suffered a disability in connection with the acquisition of the site. For some time the Department of Home and Territories tried to negotiate with the trustees of the property which is being acquired, but with no avail, since the trustees could not deal with the matter definitely without calling a meeting of the members. At all events, it was found impossible to come to an arrangement in regard to giving the Commonwealth, as we desired, an option over this site. Whilst these negotiations were going on it would have interfered with the prospect of our securing the property at a reasonable price had Commonwealth officials visited the premises and started to measure them out. In that way we would have shown at once that we wanted the property. We obtained some old drawings which gave an indication of floor areas, but were not sufficiently accurate for the purpose of preparing plans for the Committee or for the construction of the work. It was only yesterday that I obtained consent for the architects to go into the buildings to measure them up. Hence it has been impossible for me to submit to the Committee the drawings which they would have liked, and which I am anxious to supply. I hope, however, that that may be accomplished within the next ten or fourteen days. The proposal is to erect a reinforced concrete building on the southern end of the site, and to allow the existing buildings to stand until such time as it may be necessary to extend the new fire-resisting structure. This fire-resisting structure is to contain all the machinery for printing, as well as provision for storage and strong-rooms. It will provide for everything that is really essential to the processes of note-printing. The administrative functions, and possibly the work of engraving and other details, may be carried on in the old premises. I think that you would probably obtain a far better idea of the potentialities of this site if you were to visit it. One important feature of the site is its accessibility by train from various parts of Melbourne. From your general knowledge of Eastern Hill you will know that trains along Bourke-street, Collins-street, and those running down to the Yarra along Victoria-parade to a great extent converge towards that particular point. As Mr. Matthews says, it is one of the most central sites in Melbourne from the point of view of accessibility, and is therefore well situated from the point of view of bringing the employees there. It is also within a few feet of the highest point in Melbourne. This, I think, is all I can tell you in a general way of the project. The additions made by us to the buildings in Flinders-street Extension now occupied by the Note Printer were of match-boarding. They con-

sist of wooden framed buildings. I do not know that the Melbourne City Council permits the erection of such structures in the city, but in the war area I do not think it was asked to approve of these additions. During the ante-war period we erected for the Customs Department buildings of light construction. One of the difficulties of the King's Bond site is that to erect a heavy building upon it it would have to be piled. The old King's Bond is on piles. I believe the notice of resumption of the Turn Vercin site will be in the next issue of the Gazette. The proposed building will be used for the printing of notes, bonds, and stamps. It will be needed to serve all those requirements. The buildings now existing on the site will be used temporarily. It is difficult to estimate how long it may be from ten to twenty years. That, I think, would be a fair margin to allow. It is thought that they will serve for at least ten years. They will not in any sense affect the fire risk so far as the new buildings to be erected are concerned. These new buildings will be detached from the existing premises with a sufficient break to avoid external risk. Another point in favour of this site is that it is within a stone's throw of the headquarters of the Metropolitan Fire Brigade. Once the notice of resumption has been given you will have no difficulty in inspecting it. In addition to the sites I have specifically mentioned, there were others which we considered, but I do not know the names of the streets in which they are located. We studied them from the point of view of contingent risks, locations, and distance from train routes. We travelled a considerable distance on foot in this general locality. One proposal was made for the selection of a park site down Victoria-parade, but we were told that there would be no hope of our securing it. Mr. Harrison would have liked these buildings to be erected on a section of the Fitzroy Gardens, but that, of course, would be impossible. I think I have given you an outline of all the premises we considered. The drawings will provide for a new building of four stories. It will be possible to supply the Committee with a rough ground plan before they visit the site. Mr. Murdoch, I am sure, will be glad, if you wish it, to accompany the Committee on its visit of inspection. It would be an advantage to our Department to know that the Committee had inspected the site, and either approved or disapproved of it. The Scotch College site was considered, and very favorably considered, for some time; but I do not think the Treasurer approved of the idea of taking it for this purpose. Part of the Scotch College site could have been obtained within the next few months, we understood, but a large proportion of that site was used for school purposes for some time, until new premises are available. So far as I know, the Scotch College site was not placed under offer to us.

2. To Senator Newland.—The old premises on the site now being acquired could be used to some extent for necessities, but not for the absolute printing part of the business. It is the intention of the Department to remove the whole of the note and stamp printing works from the buildings now in use in Flinders-street Extension. It is proposed in the scheme to provide dining room accommodation for the employees. It is very important in this particular case that such accommodation should be provided, because there will be only one means of ingress and egress to and from the establishment, and the less officials are going in and out the better the Note Printer will be pleased. The area of the land is about 132 feet by a depth of about 250 feet. Its main frontage is to Victoria-parade. There is a side street on its western boundary and a lane on its northern boundary, so that it has run-ways on three sides, which give it the advantages of light and isolation.

3. To Senator Ascham.—As a risk, the Commonwealth does not assume a property against fire. I do not think whether this building will be insured against fire, at a rate of interest, is a matter which is doubtful. The authorities have been meeting the old buildings in Flinders-street Extension, but my own view is that in regard to these works insurance is practically useless. It is not so much a question as to the money that the Commonwealth would obtain from an insurance office in the event of the premises being destroyed by fire, but rather the debilitation of the business of the Commonwealth which has to be considered. If the new printing was stopped the business of the Commonwealth would be thrown into a chaotic condition, so that prevention is the best form of insurance. The Commonwealth Fire Board is an inter-departmental body. The Defence Department, Naval Works, Quarantine, and the Postmaster-General's Department each have a representative on it. The Board meets periodically to discuss subjects of general policy in regard to fire protection, and fire regulations and instructions dealing with special matters. The Chief Officer of the Metropolitan Fire Brigade Board, Mr. Lee, is also a member and a consultant. On the eastern side of the site, we shall be building right up to the boundary of the adjoining property. A light area will be left, so that the building will be C-shaped.

4. To Mr. Lord Smith.—I know of nothing in the vicinity of this site likely to give rise to that which happened recently in Sydney, where a highly inflammable building caught fire, and was blown off, prevented the fire brigade men from getting within 100 yards of it. To the north of the site there is a small building, which is being used temporarily as a water gauge, but there is nothing else of a risky character. The cable tram way station lies to the west of it, but I would not look upon that as a bad fire risk. I do not think it is likely to become a factory area. I do not respect the triangular-shaped piece of land to the north of Parliament House as a site for this purpose. We thought it would be hopeless to approach the State Government with the object of obtaining the fee simple of that piece of land, and anything short of the fee simple would be useless.

5. To Mr. Simpson.—It is intended that this shall be a permanent note-printing establishment for all time. The question of establishing such an office at Canberra has been discussed with Mr. Cerutti. He is fully alive to the question raised by you. I had better perhaps allow him to give you his own remarks, but I think he views it that, even when the capital is established at Canberra, it is not likely to prove a suitable place for the Commonwealth note-printing. I asked Mr. Harrison why the note-printing should not be done in Sydney. I think he said the humidity of the climate there for a great part of the year would be such as to interfere with the drying of the notes. The establishment of the note-printing office at Canberra was discussed before the recent agitation in New South Wales as to pushing on with the work of building the Federal Capital. Ordinary Government printing, the printing of *Hansard*, and so forth—will certainly be carried out at Canberra. Mr. Cerutti points out that Commonwealth notes are distributed all over Australia, and that a large quantity of material would have to be taken to and from Canberra in connexion with such work as these, and, in his opinion, the note-printing works should be here.

6. To the Chairman.—Should it be decided later to remove to Canberra the works for the printing of notes, bonds, and stamps, the building that we propose to erect here would prove very strong enough, and the lighting will certainly be good enough to meet the requirements of manufacturers.



FRIDAY, 20th JUNE, 1919.

Present:

Mr. GRIGORY, Chairman

Senator Henderson,  
Senator Needham,  
Senator Nowland,  
Mr. Mathews,

Mr. Sampson,  
Mr. Sinclair,  
Mr. Laird Smith.

Charles John Caruty, Assistant Secretary to the Commonwealth Treasury, sworn and examined.

7. To the Chairman—For a considerable time the present premises of the Note Printing Office at King's Warehouse have been found rather small for our requirements, and the extension has become necessary. A few months ago the fire risk at those premises was brought very prominently under notice by Mr. Leo, the Chief of the Fire Brigade Staff in Melbourne. In addition to that consideration, the Customs Department about the same time intimated that they wished to secure further premises adjacent to their own, the result of their lack of accommodation being that considerable loss has been sustained by way of rent by the Customs Department. A proposal was made thereafter for the erection of a new building for note and stamp printing. The existing site is unsuitable from an atmospheric stand-point, particularly owing to its proximity to the gas-works. If the premises were to be removed from there, it would be necessary to secure a site where atmospheric conditions were suitable. The present site is too low-lying. The atmosphere is damp, and that interferes with the printing process, which is necessarily of a fine character, and should be carried out under the most favorable conditions procurable. Our next step was to ask the Land and Survey Branch to look around either for a suitable building or a site. The Commonwealth Survey-General, Mr. Goodwin, reported that there were no available erections around Melbourne which were fire-proof, and that it is an absolutely necessary factor. A number of sites in the neighbourhood of King's Warehouse were inspected, some of them down towards the Victoria Barracks also, and at the back of those premises in the direction of South Melbourne. No spots were considered after careful search, and the whole was fixed upon either the Turn Veroin site, or a portion of Scotch College, East Melbourne. The latter site, however, would not be available for a year. The Turn Veroin premises, apart from being recently available for our work, also have the advantage that there are certain buildings at present standing in the front portion of the block which could be made use of by the notes sorting staff. That staff is divided between our own central offices and No. 9 Queen-street. In Queen-street we have several rooms, and we pay in rent, I think, £340 per annum. There are about eighty girls there at present. About 100 girls are employed at our own offices. The space which the girls occupy at our head-quarters offices is very small, and is required for extension of departments at that building. I thought, when I saw the buildings existing on the Turn Veroin site, that we could make very good use of them, and especially with regard to the large hall, which could be occupied for the note-sorting work. It would be necessary to incur a little expenditure to provide window openings, so as to secure more light, but otherwise the accommodation would be very good, and it should be sufficient for quite a number of years. It will save the Queen street rental, and, in addition, we would have some space made available in our main building by the transfer of some of the girls from the present central office to the Turn Veroin buildings. We will remove nearly all our staff there, including all those in Queen-street, and nearly all those in our present offices. We would have to keep some of the latter

where they are for the purposes of counting the notes coming up from the King's Warehouse every morning, and also for destroying redeemed notes. We would be keeping only a small staff there, however. Out of 180 girls whom we have now, we should be able to transfer on the front portion of the block; that is the portion facing Victoria-parade. The Department of Works and Railways drew up tentative plans, which were considered by the Note Printer (Mr. Harrison), who wrote approving of them generally. Some internal alterations would be necessary, but would not affect the main structure. The site itself would be available for the extension of the buildings over almost the whole area. A very important consideration is the fire-proof construction. At present, you will see that the fire risk is very considerable owing to the nature of the building now occupied at King's Warehouse, and because of the character of the goods stored in the buildings contiguous to the King's Warehouse itself, where the note-printing is carried on. If a fire occurred at present, we would have to shut up the whole of the business, and we could not safely have the note-printing done by outside firms. The risk of forgery is too great to trust to printers who have not the requisite machinery to turn out the very high standard of note-printing such as we have. In the event of a fire breaking out, it would put our note-printing office into a chaotic condition. The building is not in a convenient position. It is an undesirable locality in which to employ a large number of girls. The present buildings are too small to permit of the extension which is necessary. A few years ago, at my instigation, a building of galvanized iron was erected close to the Notes Printing Office to allow for putting up certain machinery which had come to hand. At that time, we could not consider the prospect of moving the site, because we were working practically three shifts, not only on notes, but also on bonds and warrants. Had that building not been erected, so that we were able to make use of the imported machinery we could not have coped with the work. At the present time, they are working overtime there in connexion with note-printing and additional machinery has been ordered from England to meet the heavy demand. Most of the machinery there is fairly new, but in time it will, no doubt, require repair, and we must look forward to certain of the machinery being laid up now and again. At present, there is no margin for exigencies of that nature. On the 6th May, a letter was sent by the Acting Comptroller-General, Department of Trade and Customs, to the Secretary to the Treasury, urging that the Note Printing Office be made available for his Department, if possible, otherwise, they were contemplating securing a new site somewhere near the wharfs. That letter is as follows:—

The position at this port in regard to accommodation for goods in the King's warehouse is most unsatisfactory. The existing storage space is filled to overflowing, and after making provision as far as possible for the overflow in the various general warehouses licensed for the storage of dutiable goods, a surplus still remains, which, for want of proper accommodation, it has been necessary to leave lying in the wharf sheds and in the King's warehouse and Customs House yards.

This unsatisfactory state of affairs has arisen to a large extent from the fact that this Department has been gradually crowded out of its own premises. The King's warehouse, a two-storied brick building with a floor space of 21,000 square feet, in Flinders-street extension, was built for the Customs about the year 1890. Half of the build-

ing, however, was taken over by the Treasury in 1908 for the accommodation of the Commonwealth Stamp Printer, and four years later the remaining portion was also acquired by the same Department for the Commonwealth Note Printer.

Temporary erections of galvanized iron were placed in the King's warehouse yard, but of these the greater portion (some 50,000 to 60,000 square feet) is being used as store rooms by the Treasury Note and Stamp Printer, and the Audit Office. The total floor space available for Customs purposes is at present 24,000 square feet. In view of the pressing need for further storage space, consideration was recently given by my Minister to the question of acquiring a site for the erection thereon of a King's warehouse adapted to the needs of the port. Such a site is now under offer to the Department by the Melbourne Harbor Trust. The questions of cost and probable revenue were being gone into when it was learned that there was some possibility, owing to the unavailability of the existing accommodation, of the removal of the Stamp and Note Printer's Branches to other premises. As this, if carried into effect, would presumably leave the original King's warehouse building free for Customs purposes, action in the matter has been suspended pending information from the Treasury Department as to its intentions.

My Minister will be glad, therefore, if early advice can be furnished as to whether it is proposed to so remove the Note and Stamp Printers; and, if so, as to when it is estimated the buildings now in use can again be made available to this Department.

It may be mentioned that, in connexion with the proposal to erect a new King's warehouse, the Collector, Victoria, furnished an estimate that the probable revenue would be approximately £3,000 per annum. As the labour and other running costs of a King's warehouse are small, this would return a handsome profit, which within a few years would return the capital cost of the undertaking. Owing to the inadequate accommodation of the present temporary King's warehouse, a considerable amount of revenue has been, and is now being, lost to the Department.

The letter mentions probable revenue as approximately £3,000 per annum. I take it that working expenses, which would be small, must be deducted from that sum. I should say that the net revenue would be at least £2,000. If we vacated our present buildings, they would be able to get £3,000 revenue each year, and they would be able to get £2,000 revenue each year, being able to occupy them. Another point which has to be considered is the cost of additional fire appliances. The Commonwealth Fire Board stated that it would require £2,000 to be spent on a sprinkler installation, and £600 upon additional water supply, besides very heavy watching expenses. That last-named consideration was not actually an additional matter, because we never leave the Note Printing Office without a guard. There are always three men constantly on duty. The additional fire appliances would run into £3,000, and that additional expenditure would not be necessitated if the Customs Department took over the buildings over. Those generally are the reasons actuating our Department in its desire to have a new building erected. The construction, which was built about two or three years ago, is not, I think, a grave fire risk. It is galvanized iron lined inside with fibro-cement. It has a concrete floor at the bottom and a wooden floor above, but it does not strike me as being worse than the old buildings which were there before. I think the worst risk there comes from the goods which are in the King's

warehouse. Portion of that building really overlaps part of our Note and Stamp Printing Office stores. I doubt whether they were sorted there. I have not seen them, but there are a lot of very inflammable cases goods there. In regard to the various sides, there were others inspected beside those at Scotch College and the Turn Veroin property. Some, however, were too low lying, and others were not suitable owing to other buildings having been constructed too close to them. One of the important features of the site which I favour is that it is open to streets on three sides. The height of the proposed new building is four stories less the basement. It would occupy the whole of the frontage. The building, as at present proposed, would be just a little over the area of the existing accommodation at the King's warehouse. When the new proposed building is erected, and the old buildings on the property are made available, we will be able to carry out the whole of the note printing, and the other work connected with it, upon that one site. Apart from the note-sorting staff, there is the consideration that there are certain rooms in the old house—which was at one time occupied, I understand, by Sir John Grico—in which could be housed the engraving section of the Note Printing Office. Those employees do not need to be in the main building. It is an advantage, in fact, for them to be away from the machinery, which sets up some amount of vibration. Some of their machines are of a delicate character, so that apart from the note-sorting staff, we would be able to provide for three or four engravers who require quietness for their work, and they would be placed in the old residence. I understand that the total cost would be about £40,000. That includes the estimate of about £33,000 for the proposed building construction. The buildings we now occupy are Government property. Their value to the Customs would be worth about £3,000, less the expense of running them. It would be a good £2,000 per annum. Then there is the rent of the Queen-street rooms, amounting to about £400, and we could make available room at our own central buildings, which would be worth, say, about £150 per annum. That is how I arrived at the figure which I gave to you at the beginning of my evidence. In interest and sinking fund at 6 per cent, the proposed new buildings would cost about £2,400 a year, which we would be saving probably more than that in the added revenue made available to the Customs Department, and in the rents now paid. It is a good financial proposition, apart from the vital necessity of making a change in location. I am quite satisfied that the proposed site would fulfil all our requirements. Indeed, I cannot imagine a period when the site would not be able to provide all the room we should want. An extension of the immediate proposals, within the property under discussion—that is, along the side and the rear, leaving only a court-yard in the centre of the block—would provide an enormous amount of accommodation altogether. It should last us probably for nearly a century. I do not think there should be any necessity for the buildings to be recessed back from the street frontage at all. They can be constructed without risk or danger right on the main street. Everything, of course, would be iron-barrel, and there would be the guard of three men constantly on duty. We can have no risks whatever in that respect. Of course, we have a strong room, in which the finished stock is kept, but in the process of manufacture, notes half-printed are kept in iron grids with wire netting inside, in order that the paper may dry between each process of printing. So we could not put away all the stuff into a secure place like a strong room, and that, indeed, is one of the reasons for a guard. I am asked to consider the Government being removed from Melbourne, and whether the note issue could be carried on just the same elsewhere as in Melbourne. It would be still



necessary to have the printing office in a place like Melbourne, because it is so centrally situated for distribution to the various capitals. If the plan were established in Sydney, there would be no advantage gained, at any rate, in the respect which I have indicated. But there would be little difference between establishing ourselves in Sydney and in Melbourne. I look upon the circumstances to-day as so pressing that action should be taken. We must erect a new building, but if it is desired in Sydney, the authorities could have it there. Melbourne, in my opinion, is actually the better place, however. At present we appear to be faced, and this is central. I think that the proposed site, if it were required to make the fullest use of it, would meet all requirements for 160 years, and that the buildings at the stage proposed, together with the standing buildings—altered to meet requirements—should be sufficient for pretty well twenty years. It should not be overlooked that the site affords great scope for extension when necessary, and is exceptional and, in fact, incomparable from that point of view.

8. To Senator Needham.—At our Note Printing Office, including the Stamp Printing Department, there are altogether about 260 employees. I think there are about 80 connected with the stamp printing, and about 180 or 190 in the note printing branch. It is intended to do the stamp printing at the proposed new site. The note printing is under the one direct, and it should not be forgotten that note working is altogether different operation from the printing. The former includes recording and checking of all cancelled notes returned, and we would still keep a staff at our own central offices for checking notes which come in the first place, from the Note Printer before being sent out to the different capitals. I propose, however, that we should retain at least quarters only a small portion of our present central staff, and that the balance should be housed in the old existing buildings on the Turn Verein site. Almost all the sorting of the cancelled notes, and the recording and checking of them in the registers, would also be done on the proposed site. As to the next question of our necessary machinery being either obtained in or made in Australia, I do not think there is the slightest chance of that. The main machines are the Hoe printing machines. These are made in England. One or two have been imported from America, but in both countries they are the same firm. Then there are the Wharfedale and the Miehle machines. These, I presume, are patented, and there is not the scope for establishing factories for machines capable of turning out such fine work. We have not the demand. Our general policy is to make our purchases in Australia first where possible, and then in Britain. The guard to which I have referred is an armed guard. Hitherto we have employed policemen, not only at the Note Printing Office, but also at the Treasury, in the guard room, immediately outside our main strong room. In addition, there was a military guard on duty while the war was in progress. After the cessation of hostilities that guard was dispensed with. The police are on duty now, but there is a single special guard mainly composed of returned soldiers, if not all of them, returned soldiers. A letter has just gone to the Public Service Commissioner finally approving of that project. It will be a guard altogether of sixteen men who will take duty alternately at the Note Printing Office and at the Treasury. This will mean a saving to the Department. I am asked whether atmospheric conditions are a guiding principle in the printing of our notes, and whether they must be printed in Melbourne, because of these conditions. I would say "No." Mr. Harrison told me, however, that he considered the Sydney climate was not very suitable for printing notes, particularly in

summer when the humidity is so great. There must be a dry atmosphere, he says, and undoubtedly the atmospheric factor is a big one.

9. To Mr. Lord Smith.—I am reminded of the profit accruing to the Commonwealth Government in connection with the note issue, and I am asked whether it would be possible to meet the expenditure upon the proposed change of location out of that profit. I only say that the intention is to charge it to the Trust Fund of the Australian Notes Account. It is an expenditure properly due to the printing and issue of notes; but, in our case, the rental value of the portion of the present buildings occupied by the Stamp Printing Office is passed on to the Postmaster-General's Department as part of the cost of bookkeeping, &c. That, of course, is a matter of bookkeeping. We run that branch, as far as possible, on reasonable business lines.

10. To Mr. Sampson.—The staff at present engaged is approximately the same as it has been throughout the war. I think the volume of note printing is likely to remain practically as it is at present. Although our issue is large in amount, the big increase is mainly referred to the ten-shilling and five-shilling notes, which, however, was a very small thing indeed. The cost of printing the ten-shilling and the five-shilling notes, and, perhaps, the five-pound notes—will remain fairly constant for all time. The question of the cost of the location of the amount of the note issue has been frequently discussed in our office. We have expressed opinions as to the likelihood of the location of the issue, and the consensus is that the reduction would not be great. Allowing for the increase in our population, the circulation of notes will probably increase in the course of years. There is the further likelihood of the printing of five-shilling notes. We hope now to be able to continue our work with one shift only. The necessity for working three shifts was due to the excessive rush, and we are neither anxious nor intending to keep that up more than we can help. We hope to employ the whole of our existing staff on the single shift. We look forward to that, indeed, as a proper thing. After the galvanised iron structure was erected we put a number of machines in, and there are seven or eight of them there now; that has helped to do away with the necessity for working on the three-shift basis. At present, owing to the stress of producing war-savings certificates, we have had to institute overtime in order to pull up our notes, but that, again, is only temporary. We are getting one or two additional machines in order to provide a margin for any breakdown, so we anticipate that for some time the present staff will just about meet requirements. I do not see any hope of making a saving by the reduction of our staff due to being able to house them all in the one building. I am asked whether the Customs Department is occupying any premises outside of its King's Bond premises, owing to our occupancy of their building at the King's warehouse. When we took over that building in 1908, they erected a galvanised iron structure out towards Flinders street extension, and even with that they had not the whole of its use, because it is occupied partly by the Government Printer and the Audit Office, and by a third party. The Customs Department would, if we vacated the present note printing office, according to their letter certainly make full use of the structure for the storage of goods. The Customs Department have indicated that they have no control over the charges made by licensed bond-holders in regard to the storage of goods. The question of the rents paid to the bond-holders is now a matter quite between the parties concerned, and cannot be regulated by the Customs Department. It is a case of complaint by the latter that they have not the proper control over the bond-holders.

11. To Mr. Mathews.—The average life of a note is about eighteen months—that is, of £1 and 10s. notes. As to the manufacture of a 5s. note, I think the buildings standing on the proposed site would meet all requirements for some ten years. Even if the 5s. notes were produced, there would probably be some little reduction of work owing to the war-savings certificates not being further printed. About one-third of our staff is concerned with the stamp printing and production, about one-fourth with bonds, and the remainder with notes. The proposed building, as submitted by the Department of Works and Railways will, I have little doubt, last us for twelve to fifteen years. It may be twenty years, or even more.

12. To Senator Needham.—We are only paying rent for the one building—that is, for the rooms in Queen-street. I am asked why the proposed new building could not accommodate the whole of the staff. The only staff that we shall keep will be about twenty or thirty note sorters in the Treasury for the purpose of sorting and counting the notes from the Note Printer, and counting prior to the destruction of notes. That work is under the immediate supervision of the chief officials. It could not be transferred from the present building owing to the storing in the strongroom of these notes, and to their being sent away to the other capitals. It would not be practicable to transfer that work to the new site. It would mean quite an alteration in our system of administration. Our main strong room is in the Commonwealth Treasury, and the bulk of the stock of notes is kept there as well. Besides that, the administration of the whole work is carried on from the Central Office, and that section of the work should be kept at the Central Office. The cost of bringing notes to Queen-street and taking them back again is a rather considerable factor. We have to employ motors every day to carry notes to and from, also they do similar services from the Note Printing Office. Altogether, it means a somewhat considerable item in motor hire. The buildings standing on the proposed site are very close to our Central Offices, which means that three parts of that work with the motors will be done away with. Besides, there is the great advantage of the supervision all being in the one office. The bulk of the employees are young people. Half are young girls who have passed the examination, and are coming in at the ages of about seventeen and eighteen. The other half have been transferred from the Telephone Exchange. Since our occupation of the King's warehouse building we have not spent any great sum, except in the case of the additional galvanised iron building. We spent, of course, a good deal of money upon inside fittings, but did not expend much in fire provision and appliances. They are, in fact, of a very poor character at present. There is no sprinkler system, and even the hydrants are inadequate.

13. To Mr. Lord Smith.—With regard to the return of old notes, we do everything possible to keep the note-issue clean. We arrange with the banks to sort the notes, and send them back to us as opportunity offers, and we actually pay all the postage incurred by banks in transferring notes from any branch to any other branch. I am asked whether the inadequate scope for printing at present has anything to do with the notes remaining out at issue for so long that many of them become in a worn and filthy condition. I would say "No." The trouble is in regard to notes getting out of the very places, where banking facilities are not great. If the notes are to be kept cleaner, the public will have to play a part in it. Very few people carry wallets for their notes. As to whether it would be advisable to close on a note immediately upon its return to the bank—as with the Bank of England—we cannot say to a bank that it must never issue a note a second time. Great numbers of

out notes come back to the banks practically new. The Commonwealth Bank acts as agent for the distribution of notes to other banks, and to their own customers. We are printing of present a million notes a month, and I do not think we can do anything more in that way. The public must help if they want a cleaner issue. I am reminded that recently a large number of our notes were sent from time to time to us to allow notes to be taken away, and we naturally gave permission, without any question. I do not know why they ask us. A special arrangement was sent to Norfolk Island. I am informed that it was announced in the press that £80,000 worth of Commonwealth notes had recently been sent to the Pacific Islands. The Commonwealth Bank sent a lot of notes to Rangoon.

14. To the Chairman.—I am asked whether in connection with the proposed new buildings, it is suggested that by their erection some reduction in the cost of administration, and in connection with the working of our staff, can be effected. I would say that economies must follow. Supervision will be much facilitated, but I do not anticipate any great reduction in the actual staff.

15. To Mr. Lord Smith.—In considering the probable work ahead of us, I did not go into the possibility of large parcels of notes being forwarded to the Pacific Islands after the establishment of peace. When the mandates for the administration of the Pacific Islands are issued, there will no doubt be some increase of the Australian note issue, but it is not likely to be sufficient to be an important factor for our consideration.

16. To Senator Needham.—Whatever may be the trade extension around Australia in the near future, our proposed buildings on the Turn Verein site will, very probably meet all requirements for quite fifteen years, and, as our business eventually increases, there is any amount of room for extending the buildings.

(Taken at Melbourne.)

MONDAY, 23rd JUNE, 1910.

Present:

Mr. GREGORY, Chairman;

|                    |                  |
|--------------------|------------------|
| Senator Henderson, | Mr. Sampson,     |
| Senator Needham,   | Mr. Sheelair,    |
| Mr. Mathews,       | Mr. Laird Smith. |

Thomas Samuel Harrison, Australian Note and Stamp Printer for the Commonwealth Government, sworn and examined.

17. To the Chairman.—I have held my present position for six years, having been engaged in London by the late Sir George Reid, who was then High Commissioner, to undertake the printing of the Commonwealth note issue. Like my people before me, I have had experience in identically the same class of work all my life. I have the printing of all the securities of the Commonwealth, besides the Australian notes, bonds, war savings certificates, including postage stamps, postal notes, brewers' duty stamps, entertainment tax tickets, &c. In the Stamp Department alone there are nearly 200 varieties of work to carry out. I have also taken over recently the printing of all the Commonwealth Government Department cheques. I have expert knowledge as to the essentials for a factory for this purpose. I arrived here in September, 1912, and commenced the printing of Australian notes on 1st May, 1913. The Commonwealth took over the business of stamp printing before I came here, Mr. Cooke, who was



other parts of the world where this class of printing is carried out, the establishments are so located as to be free from gas fumes and smoke. At Washington the note printing is done in a room free from smoke and dirt, and in London most of the high-class note printing has been removed to Watford, Aylesbury, Harlow, Hford, &c., in order to avoid the smoke nuisance. We have in our premises the finest machinery of its kind in the world. This particular machinery that I have in mind is located in a room that is virtually air-tight. We dare not allow any dust to get into it. It is just like the works of a watch or a camera in its care. Suspended over this machinery is a very large sheet of plate glass to keep the dust out; but even this is constantly getting tarnished, and dirty because of the fumes from the gasworks, which we cannot entirely shut out. The tarnishing of our machinery means the wearing of it. It means oxidation. In London the note printing firm, who possess a similar but inferior machine, do not even allow gas near it. They use paraffin lamps; out here we use electricity. The transfer presses, the ruling machines, and the machinery in the engraving room suffer severely by reason of the proximity of the gasworks, the fumes from which have known to turn the dirty grey in one night all to the brown and green and put the machinery out of the buildings. The fumes given off by the gasworks interfere largely with our work. Such a factory as ours should not be in juxtaposition to such a dirty place. We are never sure of our lead colours when sulphur fumes are present. Then, again, the damp atmosphere of the neighbourhood is right against us. We cannot dry the notes as readily as we should be able to do. The notes are printed from steel plates primarily, and the paper has to be damped twice, so that a very moist atmosphere is needed for drying purposes. We have at present a drying machine, though a big gas-heated gumming machine, although it is not a heated machine. The result of this rapid drying is that the paper stretches unequally, and the consequence is that our register for other later processes is not equal. The paper being, as it is, virtually linen, pulls and dries in all sorts of ways. This would not apply to a common paper. The atmosphere in Flinders-street extension is damp and muggy, and not conducive to good work. To secure the position, therefore, the present premises are obviously the worst place, first place, because of the danger of fire. Only a small section of iron separates some of our buildings from a Customs warehouse, inflammable materials are stored, and where men, particularly carriers, are allowed to smoke. The premises are unsatisfactory also because of the serious risk which the female employees on the top floor would run in the event of fire. The premises are unsafe because of the fire risk. Their destruction by fire would mean that we should be unable to replace some of our machinery and the stoppage of work would mean commercial disaster. The proximity of the gasworks and the atmospheric conditions constitute other disadvantages. Altogether, the premises are unsuitable for the making of the paper currency of the Commonwealth. The erection of new buildings is a matter of urgency. I should have pressed for them before but for the war. I know that more than one site has been suggested for the new premises, but I have not been officially informed of that fact. I have seen the Turn Verein site, and regard it as excellent from the point of view of elevation and atmospheric conditions. I was consulted as to my requirements before the study was made. I have not been asked as to the size of buildings necessary to meet future requirements, but I have been told that the provision is being made for future extensions, which I consider is most necessary. I have been consulted as to the class of buildings that will meet my present require-

looked after by Mr. Collins, Secretary, and Mr. Curatty, Assistant Secretary. The Treasury, Colonel Owen, and Mr. Matloch have all tried to meet my requirements in every way. They could not have done more for me. The proposal now being submitted will meet all my requirements, including the element of safety, which is all important. I have given the Town Vermin suit with Mr. Lee, Chief Officer of the Metropolitan Fire Brigade. He offered me some slight objection to the proposed arrangement on the south-east side and a garage on the north-west side, but he pointed out that there was no danger of fire just now, inasmuch as the old theatre is on the corner, and presents the barrier of a brick wall. The only danger, he thought, might be in connexion with the little cottages, but they are of brick, and he did not think it was much to be feared in that direction. With regard to the doubt that the perfect one from the stand-point of fire risk. If a first-class fire-resisting building it would not touch the main building to be erected, and any damage done would be remediable. It is essential that the main building, as far as is humanly possible, should be made fire-proof. In connexion with the risk of fire attaching to the dangerous materials we use, I may point out that some of the materials of yards of office are employed in connexion with the 110-ton steam engine and as a person removing ink from the surface of the steel printing plates. On one occasion, in London, I saw a hose machine catch fire while, with a friend, I was looking at it after the men had knicked off work. These strips of calico go into the machine clean, but when they come out they are heavy with a red copper plate oil—so heavy that they are carried with the steam. I have seen the same thing in the main in the same place for a few days they would be come almost red hot, but every Saturday they are put out, where they can be kept under constant watch. In the new building we shall use electric motive power. At the present time the Victorian Railway Department supplies the Stamp Printing Branch with an alternating current, and the Melbourne City Council supply with a direct current for the note-printing plant. We would have a few of the latter, which I think to be a little difficulty in this respect in connexion with the new site, since it is outside the radius of the Melbourne City Council electric supply.

18. To Mr. Stor Needham. I signed my agreement in London. Secondly, we employ about 220 hand- men. My staff this morning consists of 126 males and 70 females. The number of girls employed by us is likely to be reduced, because of a new system of darning paper that we are introducing. If any of my machines were destroyed by fire they could not be replaced in London. We have no printing machinery in London to replace here any of the ordinary printing machines. I do not think you can buy a new printing machine here to-day. When I came out a fine machine cost £870; recently we were told the price was £2,000. Hoag and Company, of New York and London, are the only makers of bank-note printing machinery such as we require. I do not think any firm here could make these machines. However, we produce them in London to supply them more speedily than we could obtain them from London. The Turn Verdin site is sufficient to allow of a separate store apart from our main building. It has been suggested by the Secretary to the Treasury that my stocks of materials should be stored in different places. The buildings which it is proposed to erect would be provided for all my stores, and the materials of the printing goods and stock should be stored in different places. I should like to have them all on the one site if they could be isolated. They could be isolated on the Turn Verdin site if the treasury were



ent out, but that is wanted for the sorting and burning of notes. I shall keep at the new works sufficient supplies to carry me over a couple of months. It is always necessary for us to carry a fairly large stock, particularly of oil, calico, and dry colour. Nearly everything that we use is the better for maturing. It is not economical to have our stores scattered over different places, since that involves loss of time and cost of labour and cartage, less from the standpoint of greater safety the position is different. The fact that we could not have a separate store to carry all our stock on the present site without cutting out the theatre is a disadvantage. It is proposed, as you say, that a number of officials who are now accommodated in the Treasury building, and are engaged in the sorting and cancellation of old notes, shall be accommodated in the theatre on the Turn Verein site. I shall thus have the whole of the work under my supervision, but I do not think I shall actually control the sorting and burning. This would not be good. It will certainly help the Treasury officials, who are very cramped for room, and I think the idea is a good one. It is an advantage to have the note printing establishment as near as possible to the Treasury. The necessity of removing the note printing works to Canberra when the Seat of Government is established there, so as to be as close as possible to the Treasury, is quite apparent; the only difficulty would be in regard to the procuring of labour. I do not know where we should obtain our printers and boys and girls that we need if we were established at Canberra or any other new locality.

19. To Mr. Laird Smith.—I did not approach the Treasurer with the object of obtaining better premises during the war. The Treasury did not bid all that it could for me. I was told I could have what I wanted, but I did not dare to ask for a new building during the war. The Treasury require the notes from me as soon as they are printed. I hold no reserve worth considering, and the process of removing from the present to the new building will have to be a gradual one, in order to avoid any dislocation of business or stoppage of issues. During the stress of the war period I could not have tackled the problem of moving, but having regard to the fire risks and other disadvantages, and especially to Mr. Lee's remarks as to the danger to the girl employees in the event of an outbreak of fire, we must obtain more suitable premises. Having regard to the highly inflammable character of much of the material used by us, it would not be wise to have all my stock in the one building, and we must face the problem of storing it in different places and bringing it into the factory from time to time as required. I am certainly opposed to having all our stock stored in one building, since if it were destroyed, we could not replace it here, and would be brought to a standstill. That is particularly the case with regard to certain oils used by us. It would be a great advantage to have the building constructed in fire-proof compartments rather than to have one great room. In my opinion, there is no site at all suitable on which we could put a one-story factory. If it had been decided to erect a building of one-story, fire-proof partitions would have been proposed. A series of compartments, such as you speak of, would be a disadvantage so far as supervision was concerned. It would lessen the effectiveness of observation and supervision. We make our own printing ink here.

20. To Mr. Sampson.—I cannot say that the work of my Department will increase, but experience leads me to think that it will. There are indications from the Treasury that it will, but the Treasury officials have not told me in what direction that increase is likely to take place. The note issue during the period of the war increased from about £10,000,000 to something like

£20,000,000. It was a gradual development, and the renewals to take the place of the notes issued during the last four or five years must involve more work. I do not anticipate much reduction of work in connection with the printing of war bonds, although the printing of war saving certificates of long redemption may diminish. As you say, we have to print new notes to take the place of those cancelled, because of their being soiled or dirty. To a certain extent, the same process takes place in connection with the issue of bonds. The note and stamp printing staff comprises over 200 employees. I do not anticipate any saving in the cost of administration as the result of the erection of these new buildings. With the advent of additional machinery we shall have, of course, to increase our staff. There are indications that the Treasury will give me all the work that I can carry out with the plant at my disposal. Eventually, I presume, I shall be called upon to do more printing work of the Commonwealth. There has been no falling off in the demand for postage stamps since the war. As a matter of fact, the demand is increasing. The quality of the work in the Stamp Department I am desirous of improving.

21. To Mr. Mathews.—The premises at present used by us are inconvenient from the point of view of accessibility to the employees. Because of their situation, I cannot get the staff or the quality of the employee that I desire. Many a desirable boy or girl has given up work in the factory for this reason. I have had many ladies refuse to work there because of the distance from town, and the dirt and dust. I experience great difficulty in retaining my staff there, particularly in the case of the younger members, who are irresponsible. The premises are so out of the way that the employees have not time to come into town for lunch, and if we are working late at night I have to send the girls into the city under an escort. I wish it to be understood that I have not come here to grumble. The Treasury has shown me every consideration; but the note printing office should not have been established where it is. The new site is first class, and the neighbourhood is one from which I should have no difficulty in obtaining a staff. The locality of the present premises is open to many objections. We keep a fair-sized guard there, and that will always be necessary. The presence of this guard is a very great safeguard against fire. We have fire alarms all over the building, and if the men did not use the tell tale clocks every ten minutes or so the fire brigade would come down. Even if we had a perfectly ideal site it would be desirable that certain portions of our stock and material should be stored in different buildings. There is always a danger of spontaneous combustion. A fire might smoulder for a long time, and suddenly burst out and do enormous damage. I am of the opinion that all our stores should not be kept in one building. It is not safe to have them altogether. I do not think it is possible to manufacture in Australia the paper used by us for note printing. I believe it to be impossible to make high-grade paper in Australia, unless we can obtain a stream of clean chalky water free from iron and perfectly pure from organic matter. Water used in connection with the manufacture of first-class paper must not have a particle of iron in it. Ordinary and excellent paper can, and is made here, but not high-grade papers that will retain their whiteness and colour. There are eight different operations in the printing of a note.

22. To Mr. Sinclair.—I was told by officers of the Works and Railways Department, who were making inquiries as to the electrical requirements for the new factory, that the Turn Verein site was well outside the control of the Melbourne electrical supply, but that the current required by us could be supplied by the Railway Department. They informed me that we could

buy the alternating current supplied by the Railway Department, and transform it to the direct current. That, however, would be rather costly. The best course to pursue, I was informed, would be to put in a new main. The Commonwealth owns the best of the printing machinery that is in the Victorian Printing Office, as I am informed. The work of sorting out and destroying notes unfit for re-issue is carried out by the Treasury. The sorting out of these notes and the destruction of those unfit for re-issue will be carried out in the old theatre on the Turn Verein site.

23. To Mr. Laird Smith.—Some time ago I made provision for a dining-room in our present factory premises, but the boys misbehaved themselves so, and allowed it to fall into such a very dirty state, that the men would not use it, and so I discontinued its use. I put in a gas stove, and tried to make it comfortable, but the boys allowed it to get very dirty, and even swung on the hot pipes and broke them off the wall. The conditions to-day, however, would, I think, be different. I do not think the girl employees at the present moment go out for their meals. It is essential that they should have a dining-room, but I very much doubt the wisdom of providing dining-room accommodation for the boys, whom it is impossible to keep apart from the men. I recommend, however, that dining-room accommodation should be provided in the new building for both the men and the girls, also that a small kitchen be supplied.

#### PUBLIC WORKS COMMITTEE

(Taken at Melbourne.)

TUESDAY, 15th JULY, 1919.

Present:

Mr. GREGORY, Chairman.

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|--------------------|------------------|
| Senator Henderson, | Mr. Mathews,     |
| Senator Neillman,  | Mr. Sinclair,    |
| Senator Newland,   | Mr. Laird Smith. |

Thomas Hill, Engineer, Department of Works and Railways, sworn and examined.

24. To the Chairman.—I have been investigating the provision of electric lighting and power for the new premises of the Commonwealth Note Printing Office. I have been in direct consultation with the manager of the office, and have prepared proposals to meet the immediate requirements of the establishment, with a reasonable provision for probable expansion. The existing plant is supplied from two sources, namely, the Victorian Railway Department at 200 volts, a.c., 42 h.p., of motors being connected to that supply, and from the Melbourne City Council, 400-230 volts d.c., 145 h.p., being connected to that supply. I submit to the Committee a list of the motors actually connected, and the use to which each is put. In reference to the 200 volts supplied by the Victorian Railway Department, it shows that 36 motors varying from .33 h.p. to 5.8 h.p., are supplied with the alternating current from the Railway Department, and 41 motors, totalling 145 h.p., and varying from .25 h.p. to 8.5 h.p., are worked by the direct current from the City Council. The total number of motors connected is 67, with a total of 187 h.p. The manager of the factory has stated that an additional 60 h.p. will be connected shortly, so that the total connected load then will be 237 h.p. or 180 kilowatts. In order to determine the maximum, minimum, and average load of the motors actually connected to the machines, recording meters were attached at the factory to motors representing 96 horse-power. The Committee will see from the diagram submitted that out of the 96 horse-power the maximum load was

a little over 31 kilowatts, the average load, 184 kilowatts, and the average maximum load, 27.6 kilowatts. That result was checked by the actual meter readings, which are given on the top of the diagram. It will be seen that, from 2 p.m. on 25th June, 1919, to 1 p.m. on the 26th June, 1919, 100 motors passed through the meter, from 2 p.m. on the 26th June, 1919, to 1 p.m. on the 27th June, 1919, 121 motors were recorded; and from 2 p.m. on the 27th June, 1919, to 12 midnight on the 28th June, 1919, 60 motors were recorded. On each day there was an hour during which the machinery was shut down. But, taking the number of hours in which the machinery was actually in use, the units passed through the meter gave an average load for ten hours of 12 kilowatts, or 10 horse-power out of 96 horse-power actually connected. Roughly stated, the average load is 17 per cent of the connected load. Applying this data to the total load that will be expected, including the manager's proposed additional 50 horse-power, we get a total connected load in the factory of 237 horse-power, or 180 kilowatts, of which the maximum load will be 75 kilowatts, and the average load 30 kilowatts. The next point to be determined was the source from which we could get the necessary power. A great proportion of that load is for direct current motors attached to the printing machines. It is considered essential that direct current shall still be supplied, and, in view of the character of the machines to which the motors are attached, it is not considered advisable to alter them to any other form. By Orders in Council, the areas to be supplied by the Melbourne City Council and the Melbourne Electric Supply Company are defined, and hitherto the Note Printing Office has been situated in the area supplied by the Melbourne City Council. The new site is in the area supplied by the Melbourne Electric Supply Company. I have shown on the plan, by means of a red line down the middle of Victoria-parade, the boundary line between the areas of the two supplying authorities. The new factory site is indicated in solid black. The Melbourne Electric Supply Company has no direct current, it supplies only alternating current, and the nearest point of supply for direct current from the Melbourne City Council is at the corner of Spring and Bourke streets. There are small cables carrying a light load of direct current to the lifts in the Commonwealth offices, Treasury Gardens, and a further line carries about 30 kilowatts to the printing office at the Salvation Army Home, behind Victoria-street. To get direct current for the motors, two methods are possible; one is to extend the direct current from the Melbourne City Council's mains at the corner of Spring and Bourke streets to the new office site, and the other is to take a supply of alternating current from the Melbourne Electric Supply Company, and, by means of motor generators, transform it to direct current. To install motor generators would cost at least £2,500. The cost of running a 37-1/2 concentric lead-covered cable underground, laid in red gum boughing and bitumen, from the corner of Spring and Bourke streets to the Note Printing Office site is roughly estimated to be £1,600. We thought it advisable to consult the Melbourne Electric Supply Company as to how it would regard the fact of the office being supplied by the Melbourne City Council within the area reserved to the company. I interviewed the manager of the company, who in turn saw the engineer of the Melbourne City Council, and, in accordance with the suggestion that was made, an arrangement has definitely been made in the terms of the following letter I have received from the manager of the Melbourne Electric Company.

The council will supply direct current in bulk at their own and our boundary line at Victoria-parade, involving the consumption direct to us at



their most favorable tariff. We shall, therefore, be in a position to give the supply required, which, in view of the special circumstances put before us, we are quite prepared to charge for at the exact figure charged us for bulk supplies by the City Council.

Therefore, the objection to taking supplies from the Melbourne City Council outside the area in which the council operates has been overcome. The only point remaining to be settled is the route for taking the direct current from the City Council's main in Spring-street to the new site, and the distribution of the cost. I expect that that matter will be settled within a few days. The Melbourne City Council's rates for electric power last month were: First 1,000 units per month, 1.75d. per unit; next 2,000 units per month, 1.25d. per unit; all units over 3,000 per month, 1d. per unit. In the past the consumption of direct current at the Note Printing Office has been about 48,000 units per annum, or 4,000 units per month. At that consumption we should be able to get our supply at 1d. per unit. We are proceeding now on the basis that it will be best to take the direct current from the City Council through the company, but the supply for the a.c. motors and lighting will be taken from the company. The annual cost of power for the factory, allowing for any reasonable increase in requirements, will be: Alternating current, about 24,000 units per annum, £162 10s.; direct current, 48,000 units per annum, £312; total, 72,000 units at £174 10s., or an average of 1.58d. per unit, exclusive of interest, depreciation, and maintenance of the suggested direct current cable. The Committee will see that the Melbourne Electric Supply Company charges for the first 1,000 units per month 2.25d. per unit, and for the next 4,000 units per month only 1d. per unit. We propose that the direct current cable to be laid from Spring-street to the factory site shall have a capacity of 100 kilowatts, which we consider will be ample to meet all requirements for many years.

25. *To Senator Needham.*—The figures I have quoted do not include the cost of lighting, which last year amounted to about £50 from both sources of supply. Probably the cost will be a little more at the new premises.

26. *To the Chairman.*—It is considered essential that certain printing machines shall have direct current. An alteration to alternating current would involve the scrapping of the motors, and the purchasing of new ones, which would not be an economical proposition. It is not essential to have an alternating current, but it is desirable and as there is the supply of alternating current at the site, it is considered economical to continue using the existing alternating current motors. Of course, if I was installing an entirely new plant, I should recommend that direct current be installed throughout, and then we should need only the one source of supply. I have said that the cost of installing motor generators, in order to transform the alternating current into direct current, would be £2,500 but, in addition, there would be a loss of 25 per cent. of the energy in the process of transformation. Under the scheme I have put before the Committee the converted land will be 180 kilowatts, and the converted land is always in excess of the maximum or average load. I think a direct current cable with a capacity of 100 kilowatts will provide for all increased requirements that can be reasonably anticipated. It would not pay to install a 260 kilowatt cable with a view to possible expansion in the distant future. A 100 kilowatt main will provide an ample margin for many years.

27. *To Senator Needham.*—In the building at present occupied, appliances are provided by which

the employees may heat water for tea and meals, and similar provision is being designed for the new building. I have not given any consideration yet as to what medium of heating shall be used for this purpose, but I feel sure that a gas apparatus will be more economical and satisfactory.

28. *To Mr. Laird Smith.*—The proposed new main will be used solely for the purpose of carrying direct current to the Note Printing Office. It is proposed to tap the feeder-main at the corner of Spring and Bourke streets. The future ownership, control, and maintenance of the new cable are points in regard to which finally has not yet been reached. If the Commonwealth pays the whole of the estimated cost, the cable will become the property of the Commonwealth, and the maintenance also will be our obligation, although it will be small. We anticipate no trouble from electrolysis. We are not likely to have any difficulty in that way until electric trams driven by direct current are operating in the vicinity of the cable. I am seeking now the most safe and economical route for laying the cable, and I believe it is possible to avoid laying it under the tram line more than once, and even then it will be carried in a special tunnel. The total connected load of both direct and alternating currents will be 237 horse-power, or 180 kilowatts, whilst the maximum load is only 135 horse-power. The quantity of current required is not great enough to warrant us putting in a special plant at the office when power is available at such cheap rates. In the circumstances the 37-14 direct current cable is an economical section to lay. If we reduced the copper in the cable beyond that we should effect only a small saving, because all the underground costs would remain the same. The reason why direct current is essential for the printing machines is because they have what are called inching devices, which enables them to be moved and adjusted very freely both in setting up and in proving. The machines are supplied from New York, and the regulating appliances which require the direct current are very valuable adjuncts. The great variation in the load, as shown on the graph, is due to machines being in use and out of use. The manager of the Melbourne Electrical Supply Company informed me that in an ordinary printing office the average load is only 10 per cent. of the connected load. The meters are to be situated at the switchboard in the factory. The Department will not pay for transformers. The company has transformers at a small station at the corner of Gertrude and Fitzroy streets, and will increase the secondary mains from that point to the Note Printing Office.

29. *To Mr. Mathews.*—When this class of printing work was first commenced by the Commonwealth the Stamp Printing Office was established first, and the machines for the purpose were moved from the State Government Printing Office to the King's Warehouse site. The Government Printing Office was supplied with current by the Railway Department, and the motors on the printing machines were adapted to use that current. When the transfer took place it was easy to move the stamp printing machines, with the motors attached, to the King's Warehouse site, and to couple them up afterwards. About eighteen months later a note printing plant was established, and the whole of the machines arrived from the United States of America with motors for direct current. We did not know what current the motors would be made for until we opened them on the wharf. We then had to arrange for a supply of direct current from the Melbourne City Council. Now we have direct current and alternating current motors, and in the circumstances that now exist, we think it

is more economical to be able to get the two kinds of current from different sources. It would not pay us to install transformers at a cost of £2,500, because we should have to scrap the existing motors, and, in addition, bear a loss of 25 per cent. of the energy in the process of transformation.

30. *To Senator Newland.*—I expect that my estimate of £1,000 for undergrounding the direct current cable to the site will be excessive. Overhead construction would reduce the cost considerably, and I should prefer to adopt that if I could overcome the various difficulties such as interference by telephone poles, existing electric wires, and trees, and general unsightliness.

31. *To the Chairman.*—I believe that, even if the factory is carried to a height of four or five stories, the water supply will be sufficient to cope with the fire risk. That matter is still under consideration, and I am not yet in a position to make a definite statement regarding it.

(Taken at Melbourne.)

WEDNESDAY, 16th JULY, 1919.

Present:

Mr. Gwynne, Chairman;

|                    |                  |
|--------------------|------------------|
| Senator Henderson. | Mr. Mathews.     |
| Senator Needham.   | Mr. Sinclair.    |
| Senator Newland.   | Mr. Laird Smith. |

Harry Benjamin Lee, Chief Officer, Metropolitan Fire Brigade, Melbourne, sworn and examined.

32. *To the Chairman.*—I am well acquainted with the site selected for the new Commonwealth Notes Printing Office. I recognize the necessity for the note issue being in a place where there is very little risk of fire. To my mind the chosen site is an ideal one from that stand-point. The adjoining risk is practically nil, and there is no likelihood of that risk ever increasing, because the site is surrounded by residential properties. The fire risk in connexion with the old building is a very considerable one—I am speaking now of the internal risk. The Department officials have shown me some rough plans of the proposed new building, and from these I have formed the opinion that the structure will be one of the finest specimens of fire-resisting construction to be found in Australia. The back portion of the existing building on the new site can be made reasonably safe. I am quite satisfied with the water supply that is obtainable there. You can get a pressure up to 70 lbs. to the square inch. An additional safeguard is that the site is within a stone throw of the fire station, where, should the water supply fail, we would be able to supply the required pressure by means of our pumps. It will be some time before the complete plans for the proposed new building are available. In case of an outbreak of fire in the present Commonwealth Notes Printing Office, there is very grave danger to the girls who are employed there. I have already reported that this risk is such, that under our State Factories Act it would not be tolerated for a single day. In the new building a great many girls will be employed, but the conditions under which they will work will be better than the conditions which obtain in any factory. If my advice be adopted, the structure will be fitted with automatic sprinklers, and the fire risk will, therefore, be a very small one. Notwithstanding these circumstances, however, an additional escape for these girls should be provided, and I understand that there is to be a staircase constructed from the roof of the new building, which will tap each floor to the ground floor. That

will be an internal stairway. If that stairway be provided I think the structure will be reasonably safe. The only plans which I have seen are plans which gave me an idea of the design and construction of the proposed building. I gather that the life-risk in connexion with the old building, at the back of the site, will be small, because practically all the employees will be located on the ground floor, and adequate means of escape, in case of fire, will be provided. The vital machinery, I understand, is to be housed in the new building. I do not think that the wall facing Little Victoria-street should be built higher than it is. The windows should all be reinforced with wired glass in steel frames. If plate glass be installed very little light will be lost by reason of the use of the wire. The fire risk in the old building will not be any menace to the new building, because it is practically isolated from it by a space of 60 feet, and all windows facing the old structure will be protected so that, in the event of an outbreak of fire in that building, the water supply will be all right. With the fire brigade close at hand the premises would, I think, be reasonably safe. I see no objection to gas being installed in the building under proper conditions. In a structure in which it is proposed to print Commonwealth Notes, pigments will be used which are liable to spontaneous ignition. As, however, the officers are fully aware of the risk which their use involves, the risk will be reduced because of the constant watchfulness which will be exercised. I should not be nearly as anxious about a factory of this kind as I should be about an ordinary factory, because of the great care that will be taken to safeguard it against an outbreak of fire.

33. *To Mr. Laird Smith.*—The stairway in the new building will be just the ordinary inside staircase, which will tap each floor. In my opinion it will be quite safe. If the building were an ordinary factory, I would advise the erection of a tower staircase. But as this will be a note printing office it must be made safe for the employees. I don't very much whether the business of note printing could be carried on if the same conveniences were provided as are to be found in an ordinary factory. But, as I said before, the fire risk in a building of this character will not be so great as the fire risk in an ordinary factory, on account of the greater care and supervision that will be exercised. The heads of the various Departments will be so anxious to insure the safety of the contents of the structure, that their eyes will be skinned the whole time. The ordinary 'O' chemical extinguisher is an excellent device of its kind, and one which is in use everywhere. It would prove satisfactory if it were installed in the new structure. It is already installed in the old building. I would strongly recommend its installation throughout the new building as a first-aid fire extinguisher. Moreover, its use will not injure anything. It may be played on to foodstuffs without damaging them in any way. In the event of a panic in any building, the people employed there will always make for the staircases to which they are most accustomed. To counteract this habit fire drill is practised in all large factories, and the employees are shown the advantage of using certain staircases in case of fire. Unless this be done, in case of panic they will take the risk of running to the staircases to which they are accustomed rather than use another staircase. I suggest that the smallest possible stock of oil should be kept in the building.

34. *To Senator Newland.*—I have no doubt whatever that a sufficient pressure of water would be obtainable on the top of the new building. But if we found that the pressure there was weak upon a hot day, I could, in a very short time, pull the water out of the main and put it on the top of the building at a pressure of 150 lbs. I do hope that sprinklers will be installed, because I have seen so many cases of the good work



done by them. Mr. Harrison may tell you that the use of sprinklers will damage his paper, but that circumstance might not be so readily weighed with you. Sprinklers do not put out a fire but they hold it in check, thus allowing us an opportunity to get upon the scene. I know that in connexion with some of the note-printing machines gas jets are used under the plates. I admit that this constitutes a risk from the fire standpoint. But gas is also the only thing which can be used for the purpose. The officials know that it is no more dangerous a risk, and that circumstance in itself is a check upon any possible outbreak of fire. I have seen the girls who work in the present factory enclosed in little cages. Undoubtedly they had to be secured there in some way or other. In the new building the risk of fire will be very small. I cannot say whether it is necessary to have the girls caged up as they are at present. Perhaps Mr. Harrison may be able to enlighten you upon that point. Certainly I cannot advise upon it. I do know, however, that a whiff of smoke going up the present staircase in the old building would be sufficient to prevent those girls from ever getting out of it. I would suggest that the guarding of these employees by means of fences should be reduced as much as possible. At the same time, I recognize that this is a matter of internal management to be decided by the new building, perhaps. Mr. Harrison may see his way to house the girls quite differently from the way in which they are housed at present.

35. *To Mr. Sturges.*—The temperature at which sprinklers will begin to operate can be regulated. For instance, in a boiler room, sprinklers would not go off at the same temperature as they would when in a hall in a cooling chamber. The ideal in the matter of fire protection is represented by sprinklers, the thermostat, and a checked watchman. Where these safeguards are provided the fire risk is reduced to an absolute minimum. If I were the owner of a building, I could not afford to provide all these safeguards, and I would regard their importance in the following order:—Automatic sprinkler, checked watchman, and an approved thermostat. The best of thermostats are bound to get out of order. With them it is largely a matter of management and upkeep. A firm may let a contract for the installation of thermostats throughout a factory. The thermostats may be installed and, upon testing, may work perfectly. Yet, five minutes afterwards it is quite possible for something to go wrong with them. This remark, however, does not apply to the sprinkler. In nearly every thermostat there are very fine adjustments which need to be carefully watched. A firm in Sydney may be engaged to install thermostats throughout a building in Victoria. Having installed them it will receive payment and, in many cases, that will be the end of the matter. My own eyes are continually testing thermostats, of which there are quite a number in this city. They are valuable auxiliaries to other fire precautions.

36. *To the Hon. Mr. Sturges.*—I did not see the automatic fire alarm that was on exhibition at the Commonwealth Parliament a little while ago. But I have known a telegraph, in Sydney, to announce to the fire brigade there that there was a fire on the third floor of a building in O'Connell-street. It is very probable in actual whether such a device would prove effective in ordinary circumstances. The principle underlying the thermostat is, that when the temperature rises to a certain point a connexion is made with an electric bell which rings the alarm. All thermostats will give a warning of a fire if they are in perfect order when a fire occurs. For heating or cooking purposes I would prefer an electric stove to gas every time, provided always, that it is properly installed. I do not know of any factory in Melbourne in which the heating is done by electricity. This method is a very expensive

one, and, for that reason, is not popular. Under proper conditions I have no objection to the use of gas for heating or cooking purposes.

37. *To the Chairman.*—On account of the grave element of danger to the girls employed in the present Commonwealth Note Printing Office, I would advise the Committee to get a new building. The existing structure adjoins an old King's warehouse, which, in itself, is a big risk. Even while the new building is being erected something should be done to make the present structure safer than it is from a fire standpoint. I suggest the erection of a wall to cut off the place from the warehouse I have mentioned. There is a timber yard close by, and all the windows of the present note printing office are exposed. A fire would only need to get started to crack those windows, and the building would be gone. The site for the new note printing office is an ideal one. There is water all round it, and the adjoining risk is practically nil, in addition to which, the fire brigade is close handy.

38. *To Mr. Lord Smith.*—We exercise no authority whatever over electric light installations in buildings. They are carried out under the Underwriters' rules. The Underwriters have a very fine standard, which, I understand, is taken principally from the rules which are operative in London. I think that any installation made under those rules would be an excellent one.

(Taken at Melbourne.)

WEDNESDAY, 23rd JULY, 1919.

Present:

Mr. O'Connell, Chairman,  
Senator Henderson, Mr. Sampson,  
Senator Nicholson, Mr. Sinclair,  
Mr. Mathews, Mr. Laird Smith.

John Smith Murdoch, Architect, Department of Works and Railways, sworn and examined.

39. *To the Chairman.*—I have been intrusted with the preparation of plans and designs for the proposed new Note Printing Office at Victoria-parade, Melbourne. There has been complete collaboration between the controlling officials of that Department and my Department, that is, up to a point. I anticipate that there will be further collaboration, which may possibly lead to a modification with regard to the disposal of the various functions of the institution on the different floors. In the matter of size and construction and design the authorities concerned. Consideration has been given to the probable future extension of the building. We have not consulted persons concerned in note printing other than the Government officials and those in the Treasury Department. I regard the removal of the note printing branch from its present accommodation in Flinders-street extension as a matter of urgency. The history of the Government originally is that the Commonwealth Government. A rather started the printing of postage stamps. A rather hurried beginning was made in a building which was an old bank store, near Victoria Docks. Afterwards, the function of stamp printing the work of printing the Australian notes was intrusted to the Stamp Printer. Other developments in the way of very high-class printing and engraving have since, so that the makeshift beginning has grown by more or less unsuitable extensions of the original premises, which are badly lit and constitute a very dangerous fire risk. The premises are not at all designed to carry on high class work of this character. Since instructions were first issued to consider the building of new premises

for the note-printing branch there has been some little inevitable delay. It has amounted, however, to the matter of only two or three months since the project was mooted. I am strongly of opinion that relief should be given to the Note Printer as early as possible. The building proposed to be constructed may be described as a good class of factory building, extravagance has been avoided. It will be the most fire-proof construction that we can erect. It will be built of brick walls, and will have concrete floors, concrete supports for floors, concrete roof, steel windows, open floors as far as possible, with steel and wire divisions or cages between the various printing machines. The building really will be a very simple one, but it will be suitably designed for the work to be carried on. I have studied plans and descriptions of the United States and in no way inferior, indeed, they are on just the same lines. Much consideration was given to the selection of a site, and that which has been chosen was considered to best meet the conditions. That is the under which the work has to be done. The site at Victoria-parade, previously used as a social club by German residents of Melbourne. Its elevation is high. The air is as good as can be secured in the city, and it is near to the Treasury, which is considered an advantage, more particularly because there are other functions of the Treasury Department which are intended to be transferred to the Victoria-parade site. Among those is the work of note destruction, though not the site at present there are some useful, though not a modern buildings. They will be quite suitable, with a little alteration, for the various classes of work intended to be done there. I have referred to the transference of the note destruction work, which is done by a large number of young women employed at present in the Treasury Office. The administration of the whole work of note printing is proposed to be conducted from the new building. The site of the old building, office accommodation to be provided in the portion of the site. Therefore, the first portion of the new building will be exclusively given up to the practical work of printing only. The Minister of the Department concerned has approved of the sum of £575 being allocated for the alteration of the old existing structures, and for the improvement of the lighting and to provide for heating and the installation of a strong room so as to make the place thoroughly suitable for the work of note destruction. In a few weeks, therefore, that latter branch will be transferred from the Treasury. The site comprises a frontage to Victoria-parade of 120 feet 11 inches, and the same to Little Victoria-street, while there is a frontage of 248 feet to Young-street. It is thought that the printing office will develop eventually so as to cover the whole site. It is considered, however, that present requirements will be met by the construction of a building on the alignment of Victoria-parade—that is, of a structure 120 feet 11 inches long by 80 feet wide internally. That first section of the building would leave all the buildings now existing on the site intact, to be used for the purposes I have indicated; and, eventually, as for extension goes on, and when the expansion does occur it is proposed that a block exactly similar in size and general arrangement to what is now planned shall be erected on the opposite corner—that is, the corner of Young and Little Victoria streets. There will be a connecting portion of the whole structure between the two main blocks. Drawing No. 5 illustrates the building as it will appear when fully developed. It will cover the whole of the site. In the portion proposed to be built now, it is proposed to construct a half-story basement and four floors above, with a flat roof. That will leave intact the existing buildings. The area which the first portion of the building will comprise has been worked out at 51,000 square feet on the five

floors. The maximum of light possible is proposed to be secured, while a minimum of obstruction to the work in the building is to be obtained. The supports of the floors will be as far apart as it is advisable to put them; that will be in bays about 20 feet by 21 feet. It is proposed to build the walls of brick and the floors of concrete. The floors will be constructed on the same system as in the case of the most Leichhardt stores. That is, it is considered the most economical, not only in regard to money, but also that it affords the greatest resistance to possible vibration. Vibration will be reduced to the lowest minimum that can be obtained, by adopting the same mushroom system as at Leichhardt. The floors will be loaded with machinery having a weight of about 2 cwt. to the square foot. Arrangements can be made with the engineer, who is the patentee of this system, on even more advantageous terms than at Leichhardt. The more advantageous terms that he is gratified at having reason for this is partly that he is gratified at having his system adopted by the Government. He is anxious to extend its use, and is willing to meet us on even more favorable terms than in connexion with the other job. The method of access is a peculiar one. It is governed by the individual necessities of the building. Access can only be had from a fore-court. Everybody coming into the institution must enter through a gate into the fore-court, and will be under observation by some superintendent. That applies both to vehicular and pedestrian traffic, so that everybody entering will be under control. From the fore-court, entrances to the right and left will be afforded. Just at present, the left-hand side of the present garden existing between the portion intended to be erected and the old building, Street No. 2 shows the portion of the building which we propose to erect, in its relation to the old building. The south side shows the new building, and at the north end the old erections are shown. Beginning at the basement floor, and working up through the building, the basement is shown on plan No. 1. I will describe the main staircase, which contains the main entrance. As soon as one enters the main entrance, the main stair communication enters the main entrance. Opposite the stair there will be two lifts, one for goods and one for the staff. To the right and left of the main entrance are the work the note printer terms his grilles. At night, the work in hand is taken from the various printers, and is placed for safety in the grille, and is shut up until the printers again are given out their work from the grilles. Spare paper has to be given out from the grilles, and great care is naturally taken in regard to the plan. The whole of the rest of the floor is subdivided into compartments, or cages, to be occupied by different classes of machines. On the ground floor there will be accommodation for twenty-five machines. There will be no connexion between the various compartments and a passage-way 3 feet wide, so be divided by a partition which can be maintained, so that complete permeation can be maintained between the outside walls and the compartments, or cages. Each printer conducts his own operations individually, and must account for every scrap of paper, and he must be left without interference, and he gets. He must be left without perfect security, must be able to carry on his work in perfect security, without interruption from any extraneous sources. This plan provides for that principle. The central passage will be 8 feet wide, with stanchions in the middle of the passage. Drawing No. 1 shows the bottom floor. It will contain the switchboard for the power and electric light current, also the heating apparatus, a grille for holding postage stamps ready for issue, and a compartment for damping the paper. The paper storage is not altogether a bulk storage, although it amounts to a very large quantity. It consists of paper about to be put into current use. Then



There is also the electro-typing and the colour grinding; and what is one of the most important departments in the whole institution—the strong-room and the inner strong-room, where all the notes ready for issue, as well as other valuable paper such as bonds, will be kept. That will be on the floor which will be under the third floor, the ground floor being the first floor above to secure adequate ventilation. The floor above the ground floor is shown on drawing No. 3. That is the first floor, and it will be entirely given over to machinery. It will contain the rest of the 1100 machines which are not disposed on the ground floor, and will also contain the Wipacraft, the planing, the turning, the boring, the sawing, the mill providing for all the machines which the branch has shown, and for a slight expansion. The second floor, shown on drawing No. 4, will contain the paper counting and hydraulic room, the guillotine, the drying room, the gunning room; and the stamp-printing, including printing, checking and perfecting machines. The third floor, shown on drawing No. 5, is proposed to be given up to the engineer, electrician, and case room. There will also be the men's luncheon and recreation room and the women's lunch and recreation room, and a suitable kitchen for heating tea, washing dishes, and the like. Over that, again, is the flat roof. The building is constructed so that it can be used when additional expansion is desired. Some day, possibly, the lunch and recreation rooms may be removed from the third floor and placed on the flat roof. The floor has been made strong enough to carry any installation of machinery which may be desired there. The lavatory accommodation is to be situated on the ground floor, the building altogether. The levels of the lavatory will not necessarily follow the levels of the floors in the main building. The heights inside the building from floor to floor are—Basement, 8 ft. 6 in.; ground floor, 14 feet, first floor, 14 feet; second floor, 13 feet; and third floor, 13 feet. The lavatory, which was to be situated on the economic waste if they were made 13 feet high. What is proposed, therefore, is to introduce mezzanine floors. Instead of five sets of latrine, there will really be seven. Incidentally, the stairs to the latrines, giving access to all the different floors, will become a second staircase, which could be used in a fire emergency. Probably the lavatory will be divided into two lavatories to be given over to the women employees. These are the most private, and will be contiguous to the space provided for the women's lunch and recreation branch. The lifts will be in their own enclosures, and, of course, the main staircase will be separate. I believe that all dangerous fire will be confined to the ground floor of the building. I have secured an estimate, however, of the cost of installing sprinklers for the whole building, that would amount to about £1,700. I think that, under the system of work to be carried on, it would not be necessary to install sprinklers throughout, they could be confined to the ground floor of the building, the basement. There is nothing inflammable within the building. Even the paper, stacked solidly as it will be, will not be inflammable. I do not think a general application of sprinklers will be requisite. For one thing, the fire brigade station is practically a neighbour of this block. If a fire should break out, it would be so close that the elements are to be stored, I do not believe it could extend beyond that room. With regard to the support columns in the main passageway, I do not think they will constitute an obstruction to the carriage of goods. If they were to be built upon one side of the passageway, instead of in the middle, it would make a great passage for the wind, and would not be the intention of the design. Generally, in regard to the lay-out in compartments. One must keep in mind the adaptability of the building generally. The point with regard to the construction of the columns has been

thoroughly considered. At present, each column has been designed to exactly support the same floorage weight. If the columns were built other than as proposed, it would mean an eccentric loading of the weight. The subdivision of the rooms must also be considered subordinate as compared with the principle of the self-sufficiency of the structure. The structure itself will probably not be erected until the necessary machinery has been installed within each cage area; and, even if that were not so, the cages will be of a character which will permit them to be easily dismantled to permit of the transport of machinery on the floor necessary. I do not think that much more alteration will be required in the design of the structure for alterations necessary in the present old buildings. It is proposed that four rooms shall be occupied, and that one wall shall be knocked down and new stairs put in. It is proposed that the geometric lattice shall be housed within the old existing building. One reason for its being placed there is that, if the cages are to be used for the purpose of transporting the other machinery; but it would be better, I think, to have it in the main building, for it is advisable that it should be in an absolutely fireproof compartment. There is greater danger from fire in the old existing buildings than will be the case in the new block. Figures which I shall present as to the cost are tentative, and will be subject to necessary alterations, even after further close consideration. For the new building, and not including fire sprinklers, the cost is estimated in round figures to be £44,000. That works out at 17.83 shillings per square foot, or, per cubic foot, 1.21 shillings—that is, about 1s. 2½d. per foot. I have included the basement. The sum quoted includes all the machinery, the lifting gear, the hoists, the hoisting of the lifts; but, of course, not the moving and installing of machinery. It includes the laying on of power to the machinery; and the arrangement to be made in regard to the power is that the cables shall be on the rental basis, so much being paid per annum to the authority supplying the current. The cost of the power, if a fire sprinkler installation were introduced for the whole building it would cost about £1,700 more. As for the time likely to be occupied in building the new block, it is difficult to spend more than £50,000 in Australia on a single building in one year. I think it would be a year after the contract was let before the building would be started, and a minimum I have not taken out the square foot space in the building at present occupied by the Note Printing Department, and therefore cannot compare the increased accommodation proposed over what exists to-day. Provision for fire escape from the new building will be made. There will be a fire escape from each, and one of them on the outside of the building, together with the lifts. When the whole building is completed according to the designs submitted arrangements would have to be made, in the case of fire, for those employees who might come down on the stairs—cages through the lavatories to have access through the gates to the building. The stairs, of course, would be otherwise still another additional precaution in a neighbouring property. I do not think, however, that the fear of a destructive fire need be a consideration. I cannot imagine any danger from fire. Special provision has not been made to secure greater safety against fire from adjoining properties. It is intended to construct a substantial building, and it is not intended that the building. That is part of the work covered by the authorized expenditure which I have already indicated, namely, £575. Additional lighting provision will also be secured under the same allocation. I would not advise spending much money at all upon the old buildings. There will be about 100 young women transferred to the new building. One building will be built on the Victoria Parade site in connexion with the transference of the note destruction branch. Ample

lavatory accommodation will be provided in the old building for all the purposes intended to be carried on there. Arrangements for meals also will be made entirely separate in the old building. The employees engaged there will not be under the direct control of the Note Printer; they will remain under the authority of the Treasury Department. The present dwelling house will be availed of as the Printer's office, while the existing hall will be occupied for the purposes of note destruction. I am satisfied as to the suitability of the foundations for the erection of the proposed new building. The width of the staircase is a few feet ample for the passage of a crowd abreast. I favour the use of blue stone instead of concrete for the building of the staircase. I am confident that the building as planned will constitute one of the best fire risks in the city.

TUESDAY, 20th JULY, 1919

*l'excuse:*

Mr. GREGORY, Chairman

|                    |                 |
|--------------------|-----------------|
| Senator Henderson, | Mr. Sampson,    |
| Senator Needham,   | Mr. Sinclair,   |
| Senator Newland,   | Mr. Laird Smith |
| Mr. Mathews,       |                 |

Thomas Hill, engineer, Department of Works  
 Railways, recalled and further examined.

40. To the *Chairman*.—When giving evidence last, I said I had not completed negotiations with the City Council Electric Light Supply regarding the course the suggested direct current main was to take from their direct current supply to the Note Factory. Since then I have consulted with the City Electrical Engineer, and a definite route has been decided upon, as shown on the attached plan E.568. It is now proposed that 25 ft. of the main be run underground in a red concrete pipe and laid in a red gum box with bitumen surrounding it, to be held from the feeder pillar at the corner of Bourke-street and Spring-street to the new site of the Note Factory, along the following course:—From the corner of Bourke and Spring streets north-westerly along Spring-street to the corner of Little Bourke-street; thence north along Evelyn-street to the northern side of Albert-street; thence westerly along Albert-street to the road between Gibbston and Lansdowne streets; thence northerly along that road to the centre of Victoria-parade; thence easterly along Victoria-parade to a point due south of the Note Factory, and thence into the Note Factory on its westerly side. It will be all underground, and where it passes underneath the cable tram-lines it will be in concrete tunnels. The length will be about 2 1/2 miles, with only four open air sections, and from a bushy main it will, therefore, have a direct run to the bushy main wells of the City Council, so that it will not be liable to any interruption from other causes. The estimated cost is £1,000, and the City Electrical Engineer advised the Department on the 23rd instant that the City Council would be pleased to undertake the laying of the main. It was also stated, with regard to the terms of payment, that the City Council would be prepared to make an agreement on lines similar to the existing agreement between the Commonwealth and the Council in regard to the supply of another main to the Serum Depot, where the line had to be run a distance of a mile or more through country which had no other consumers along the route. Thus the Council's proposal is that the cable shall be laid at the City Council's expense, the Commonwealth to pay the City Council for the cable giving it 5 per cent. interest on the £1,600 for that term, and providing a sinking fund based on such a sum set aside annually for ten years as well, at 5 per

ent interest—approximately, was off the cost of the main. The respective costs would be \$20 per annum for the 3 per cent rate and \$25 on the \$1,000, and \$121.45 per annum, being the sum necessary to lay aside each year for ten years at 4 per cent compound interest. This made a total of \$201.45 per annum for ten years, as against a direct payment of \$1,000. The matter has been submitted to the Manager for Works and Fuel, who, with his approval of the proposal, has directed me to refer to you, and to the City Engineer and the Town Engineer. I endeavored to obtain that engineers were before sitting here this afternoon, but the matter had not been then decided. With the Treasury, however, it will only be a matter of whether payment shall be made in a lump sum, or spread over the ten years. The course of the main, and the necessity for direct current, are definitely settled and approved. One of the points in an agreement to spread the payments over ten years would be that the City Engineer would agree to allow, along the route of the main, a deduction in the charge to the Commonwealth would be considered, as expressed in the following terms in the letter of the City Electrical Engineer: "Should the Melbourne City Council obtain other customers along the line during the continuance of this agreement, the Commonwealth shall receive such corresponding reduction in the above charges as shall be normally obtained." The suggested agreement is a copy of that in force in connection with the Southern Main, where, there, it is probable that many other customers being obtained along the route of the main as years go on. In this direction, however, the likelihood of direct current being used is very small. The supplies of alternating current that are available along there would quite meet the case, and the City Electrical Engineer advises me that the Council has a strong objection to extending its direct current mains beyond Spring street. This extension may be taken as a concession to the Commonwealth. Even if the main could be laid out and put to the Council's disposal, it should be kept, in the circumstances, wholly for the use of the Factory. If other customers came along, I would not like to see them get more than a quarter of the current that can be carried along that cable, even with the present proposals for the Factory. The economy would therefore be small, and the supply would not be so reliable as if the Commonwealth had the main absolutely as its own property for its own use direct from the main feeder pillar. It would be preferable in this case to have the Council buy the main, by the way, and then refer to the Council, as the Council has the main to become and remain the property of the Commonwealth. In that case, it would follow that no connexion could be made with the main without the concurrence of the Commonwealth. If the Commonwealth agreed to a connexion being made, any refund would be small, and I think it would be better to keep other customers off the main. If circumstances arose where the Commonwealth was willing to allow another customer to come in, I presume the Commonwealth would be forced to refund a small portion of the cost of the main. If the Commonwealth paid for the main right out, the City Council would no longer be an intermediary.

41 To Mr. Laird Smith. In this case the City Council is willing to allow the control to pass out of its hands into those of the Commonwealth.

42. *To the chairman.*—In the case of the Serum Depot, connexions can be readily made, as it is an overhead system; but this proposal is for an underground main, and in view of the purpose for which the current is wanted, and the small size of the cable that is being put down, I would not recommend that other customers be supplied from it. I am emphatic in the



opinion that it would be much better for the Commonwealth to keep the main entirely for itself. The question of maintenance was also considered. The Commonwealth will pay for any maintenance, but the maintenance will be very small. It will be due only to accident. The City Council, having the staff, will do the maintenance work, and the Commonwealth will refund the actual cost. If the cable cars are electrified, this main will not be at all affected. The method proposed makes it absolutely safe against electrolysis. We have determined the size of the main by taking a maximum of 100 kilowatts, with a certain voltage drop. This will meet present requirements; immediate future requirements as laid down by Mr. Harrison, and also very probably the requirements due to the expansion of the factory for a good many years for direct current. Of course, the alternating current can be got from the full capacity of the direct current main was reached, the factory would aim at using alternating current as much as possible. We consider the main quite large enough for probable future requirements on the data submitted to us.

43. *To Senator Neillham.*—When I say "a good many years" I have in my mind a period of about ten years. It is very difficult to foresee developments in a factory of this sort.

44. *To the Chairman.* The supply of alternating current has been arranged with the Melbourne Electric Supply Company. They will lay any necessary mains into the building, and give us the connection right on to the switchboard, alongside the suggested hot-water boiler house. Assuming that, in connection with the direct current supply, the sum of £207 4s. was paid every year for ten years on a consumption of 48,000 units of direct current per annum, it would represent a charge of, roughly, 1d. per unit for that period over and above the estimated cost of 2d. per unit for current. This would make the total cost of direct current about 1.5d. per unit per annum.

45. *To Mr. Laird Smith.*—If I said it would be 1d. using as a basis 4,000 units. I took one-twelfth of the yearly consumption. Even with the cost of the main in, it will not be dear for a city supply.

46. *To Mr. Mathews.*—This is to be a six-story building. There are to be only two lifts, which will be used only for eight hours per day. In this case the current available will probably work out to be the best proposition. We have not yet worked out the cost of the cheaper system, but I think in this of the main, we were guided by the knowledge of the Mr. Albaster, the City Electrical Engineer. That is the reason why the route goes three times under the cable tram lines. In two of those cases there are tunnels already in existence, put down by the City Council, and they can be used for this main. Taking all the factors into consideration, this is the cheapest and best route. There is a tunnel already under the tram lines in Evelyn-street, and I think there is another in Gibson-street, so that only one more tunnel will have to be made. If we took any other route it would bring us into other difficulties. Every possible route was considered on its merits. This is undoubtedly the best. It is our recommendation, and the recommendation of the City Electrical Engineer, whose Department has laid all the mains in the city. The proposal for carrying the alternating current to the Cordite Factory at Maribyrnong has been down for ten years, and has never given the slightest trouble. The heating apparatus at the new factory will consist of an ordinary

47. *To Mr. Southey.* At the existing Government Printing Office, near Parliament House, alternating current is used. It is obtained from the Railway Department. That is the cause of alternating current being used at West Melbourne, because some of the machines were moved from the Government Printing Office to that office when the Commonwealth took over the stamp printing from the State. The alternating current will be quite suitable still for that type of machine. It will be used for a great deal of the stamp printing, but not for printing machines of a different character, and are best adapted for direct current. We are adapting the current to the present motors in preference to scrapping them. That is more economical than to scrap them, and put in the one class of current for alternating current as well as direct current. There will be no trouble in getting all the alternating current side is alternating. It is in the Melbourne Electric Supply Company's area. It is all alternating current also in the area of the Melbourne City Council, except in that part of the city which is bounded by Spring, Flinders, Spencer, and Lonsdale streets. Direct current is supplied within that area only.

48. *To Senator Neillham.* I brought the matter of heating apparatus for the use of the employees under the notice of Mr. Murdoch after I last gave notice, and I also had another look through the plans for the boiler house and the various food. There are a number of gas stoves for cooking food at the present site, and the will have to be installed for other purposes at the factory, and taking into account the number of employees—about 150—I think gas will give the best service. I understand that that is what the Department is recommending.

49. *To Mr. Laird Smith.* I think the lifts will be electric. It is proposed to call for tenders for their erection. As an example, we are cutting tenders for a lift for the old General Post Office now. The plans and specifications give the widest possible range. Tenderers can tender for any portion, or they can tender for the complete job, according to our designs, or submit a tender on their own designs. We give the greatest latitude, and similar action will be taken in this case. I do not think I will pay to put in hydraulic lifts for the proposed building at this factory, in view of the heavy piece that I could find there for the goods lift, in consultation with Mr. Harrison, was the frame of the lift machine. That is 6 feet by 6 feet, and weighs about a ton. The paper is to be kept in the basement, and distributed in the quantities required. Mr. Harrison said he would be quite satisfied with a good lift of about half that size to carry 30 cwt., and a passenger lift of about half that size to carry about twelve employees. Mr. Cerdity, Assistant Secretary to the Treasury, considers it preferable that the Commonwealth should pay the full cost of the main as soon as it is laid. The main will not be in a conduit. It will be in its own rigid box surrounded by bitumen, except where it passes into the tunnels under the tramways. The rigid box will be made out of sufficient size to carry the main only.

50. *To the Chairman.*—The box will be dipped in tar or bitumen, but I do not think that is necessary. The lead-covered cable. A good many miles of cable have been laid in Melbourne on that system. There are no white ants to be feared in Melbourne. A similar cable, carrying the alternating current to the Cordite Factory at Maribyrnong, has been down for ten years, and has never given the slightest trouble. The heating apparatus at the new factory will consist of an ordinary

liberal boiler, with wall radiators connected by steam piping, and a small electrically-driven pump for circulation. I do not think there will be much danger of fire with the heating chamber close to the boiler, but there, because on some occasions oil rags or paper might be used as fuel, and might blow about. The ideal boiler can be changed every two or four hours, and do not need a man always in charge of them. I understood that a fireproof door was to be provided under present conditions, with no other fire, but I understood that there is no need to have the boiler constructed with wired glass and steel frame. In any case, I would consult Mr. Les White as to the best way with us.

TUESDAY, 5TH AUGUST, 1913

(Taken at Melbourne.)

Present:

Mr. GIBSON, Chairman;

Senator Henderson, Mr. Sampson,  
Senator Neillham, Mr. Sinclair,  
Senator Newland, Mr. Laird Smith,  
Mr. Mathews.

Hugh Ralston Crawford, Acting Chief Engineer of the John S. Metcalf Company Limited, and the representative of the patentee of the Cantilever Floor Slab System of Reinforced Concrete, sworn and examined.

51. *To the Chairman.*—The Cantilever Floor Slab System is popularly known as the "mushroom" system of construction. Amongst others, the advantages claimed for the system are that theoretically and practically the loads are transmitted directly to the columns. In other words, they have not to go through a series of right angles in order to reach the main support. Another advantage is gained in the matter of height, in which there are no obstructions to light, in addition to which, in case of fire, the hose can be sprayed right along the ceiling. It is a method of construction to which I am very partial, because of the certainty of computation and simplicity of construction. When I became interested in this method of concrete construction, I wrote to Mr. Turner, in America, and obtained from him a full explanation of it, together with his mathematical deductions, all of which have been derived from actual tests. Since then I have advocated this system of construction on a class of building such as a warehouse, or a structure which has a large area, and which is required to carry a fair load on its floor. There are 1,400 acres of floor space erected in the United States under this system. It is also used in India, and, I believe, in South Africa. I erected my first building under the mushroom system in Melbourne in 1909, but the principle was in operation about four years previously. I know that the floors have been tested under the cantilever system to a test load of about 600 lbs. per square foot. Of course, there is a limit to the thickness of the floors. For economical working we usually calculate one thirty-fifth to one thirty-second the distance between centres of columns. As a rule, concrete floors are not built higher than ten or twelve framed building. I have not compared the cost of the latter class of building with the mushroom system, but certainly the cantilever method of construction is more fireproof, and costs less. How much less I cannot say.

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without any doubt, concrete about 15 to 20 per cent. The system was adopted some thirty to forty years ago, when it was a new class of construction. There is an excellent example in Sydney, in the building of the Sydney Municipal Council. I supplied Mr. Reed with the design for the system. To a certain extent, the cost of any building erected on this plan depends upon the load which the floors are to carry. The heavier the load, the more the cost of the system. Where there are heavy loads, only light loads, its cost approximates that of a slab and girder type. The locality which will be cleared to the Commonwealth in connection with the proposed building amounts to 14, per square foot. That includes the registering design for the building. I sold one unit of each plan to Mr. Turner, in America. The Commonwealth Government will have nothing to do with the payment of said that the proposed building for the printing of Commonwealth bills will contain about 54,000 square feet. This is a payable unit of it will therefore amount to about £212 10s.

A representative of the connection with the process. But I know that Mr. Turner has guaranteed his floors to the amount of £35,000. Of course, any guarantee of that kind would always be subject to the plans having first been approved by him, as well as the construction. An engineer always gives good plans, but if it is not given to them by the architect, it is not good. I told Colonel Owen that when he was in the City, I put the steel in the floor of the Ordnance Store at Leichhardt, Sydney, I would go over there and see the work properly done. In addition to that, I also inspect and approve the plans. I can show the Committee the buildings in Melbourne which have been erected on the mushroom system. One of these was built in 1909, and the other process does not require the employment of particularly skilled artificers. The whole system is so simple that a good inspection can stand on one floor and see that everything goes on properly. The position is quite different from that which obtains on a building constructed of reinforced concrete girder. If it is possible to do so, I prefer that the laying of the concrete should be a continuous process on the whole of any floor, but very often that is not practicable.

52. *To Senator Neillham.* Where the cap tops the top of a column there should not be any cracking of concrete should be carried to the bottom of the floor. The cap should be made an integral part of the cap, and in the Sydney building the cap was cast with the column. There should be no cracking in the joints if the work is properly done. I told Colonel Owen that wherever we place in charge of the work. The building rooms which have been erected on the mushroom principle I erected myself. I employed no contractor. If machinery is installed on high floors in tall buildings, there is always a certain amount of vibration. But no matter in the slightest degree whether the machinery, such as motors, is hanging from the ceiling or not as far as the construction is concerned.

53. *To Mr. Mathews.* There are all sorts of concrete systems in the United States of America, and each adopts its own system. There are, for example, the square slab, supported on girders, the flat slab, and the girder system. In engineering, one system of construction is not universal. From the fact that 1,400 acres of flooring have been



built up on this system in America, and an understanding that it is used fairly extensively. There are only four buildings in Australia built in accordance with this system, and three of them I have erected myself. It must be remembered in this connection that we have always been pretty far behind the times in our reinforced concrete work. It is not long since we were granted permission to use this method of construction in Melbourne, and the regulations allowing it in Sydney have been issued only about a year. There are no rival claimants to the mushroom system in the United States of America. The term "mushroom" is only a fancy name given to this particular class of floor. The Spencer system is not the same as the mushroom system. There was litigation in the United States of America between the claimants to these two systems. The Spencer system provides a flat floor, but it has not the radiating head on the column. The mushroom system is the only one which uses the cantilever principle integral with the columns.

54. *To Mr. Sinclair.*—Probably the cracks in the floor which you noticed in Wrigley's Buildings in Sydney were the result of the steel getting a little too near the surface of the floor. Instead of the steel being covered by three-quarters of an inch, it may have been covered only about a quarter of an inch. In such circumstances, when the tension came on the steel, the concrete would show some slight cracks. It might possibly show fine hair cracks after it had set. I would allow about 18. per square foot for the cost of timbering buildings. On a building of the size of that proposed, I certainly would timber over the whole of the floors. It would not be possible to lay concrete without timbering. I have made complete drawings of the timber required for the mushroom system in the proposed structure. I gave a copy of these to Colonel Owen. The timber can be very easily erected, and just as easily taken down. I have some timber which I have used upon two buildings. It is not new, but it is not far from new. As a matter of fact, I have sold timber that I used in the erection of one building, and I obtained more for it than I paid for it. This, of course, was owing to the increased cost of timber between the time it was purchased and sold. It is possible to drill through a mushroom floor machinery can be laid out below the floor in cast, the operation can be avoided, and bolts can be put in. If a man, in drilling through a floor, strikes a reinforcing bar, he always knows it. It will then make his hole a little bit larger, and get away from the bar. The floor laid under the cantilever system is carried direct to the columns. The rods go up the columns and bend over. There are at least eight bars in a column, and on top of these rods there are two or three circular rings. These rods and rings together form the frame of the cantilever or mushroom head, and the remainder of the slab is supported round these cantilevers. It is rather an intricate calculation that is required in connection with this system. Mr. Eddy, Professor of the Minneapolis University, has taken a very great interest in the cantilever and verified his computation by practical test. So the bars finally top the rods, and we use the hooped reinforced concrete columns. The hoops assist considerably in carrying the load that comes on to the columns. At the price at which the cost of concrete would run from about 2s. 6d. to 2s. 8d. per square foot of floor. That represents roughly about £9 per cubic yard. That price includes the cost of timbering—indeed, everything complete.

55. *To Senator Needham.*—Whether it would be cheaper in a building of the size proposed to timber all the floors so as to enable the work of concreting to be

carried on continuously depends entirely upon the contractor. He might prefer to timber two floors—overlapping the other—so that, as soon as concreting the first floor was completed, he would be able to erect the second-floor timber. I would not reduce the cost of construction to timber right through. I would prefer to have timbering on two floors, one overlapping the other.

56. *To Mr. Laird Smith.*—Any ordinary soft wood is suitable for timbering purposes. Hardwood may be used, but it is rather heavy to carry about, and liable to shrink and warp. There are three buildings erected on the mushroom principle in Melbourne. I am quite sure that the carrying capacity of the floor would be the same throughout. When we have sufficient strength in the centre of the slab, we always have a surplus of strength in the cantilever system. We design for the weakest section. If the columns were moved, it would not interfere with the stability of the building, so long as the columns were carried on the centres of the column below it. Our royalty is fully protected under our patent rights. For the proposed building there is ample stone available practically on the site. Indeed, there is first class blue-stone obtainable in Melbourne for concrete purposes, and also first class sand.

57. *To the Chairman.*—I covered the floor of a printing factory in Queen-street, Melbourne, with a mixture of jarral sand, and concrete. That is what is known as pulp concrete. My object in laying down that floor was to make it softer underneath than an ordinary sand or cement floor would be. I covered the whole of it with malthead, and it appears to have given satisfaction. The malthead stands the test of wear very well. Of course, in the building to which I refer the floor has a very rough usage. The people did not allow it a chance to set. They required the building before the floor was properly set. The floor used by the owner is a wooden one, and the other floors have been covered with pulp concrete and malthead. The latter is a cheaper floor than wood. It is also warmer to the feet of the men employed there than a cement floor. In my opinion, such a floor would be cheaper than jarral blocks in the proposed building. It would be quite possible, after a concrete floor had been laid down in the structure, to put down wooden beams and lay machinery on to them. Personally, I believe in putting machinery on a bed of timber, because the timber is more resilient than is concrete. The concrete is hard and liable to affect the bearings of machinery. The pulp concrete should be about 14 inches in thickness. That would not form a suitable bed for a Warfale printing machine. The frame would not be thick enough. We can erect to permit of permanent machinery being properly bolted down without drilling holes right through the cement floors. But there is no harm in putting expansion bolts into the concrete in connection with the timber bed. In the existing establishment which I built, they did not know to carry. The only thing they could place was the gas engine, and I put that on a wooden bed. I understand that the third floor of the old building is being utilized as a men's luncheon room, and that, later on, it may be required to house machinery. In that case, there would be no need to break through the floors. I would have a bolt-hole straight through the floor.

58. *To Mr. Laird Smith.* The chief advantages of the mushroom system over steel structures are its cost, stability, and fireproof qualities.

59. *To Mr. Sampson.*—This method of construction has been operative in the United States of America for about fourteen or fifteen years. It is in fairly general use there. The structures erected under this system

usually range up to ten or twelve stories. One large building of twelve stories in Philadelphia was originally designed to be erected on the girder system, but was altered to the mushroom system. I have already said that 1,400 acres of floor space have been constructed on this principle in the United States of America, and no failure has yet been recorded.

60. *To Senator Needham.*—If the officers of the Public Works Department supply me with information as to the number of machines it is proposed to install in the new building, and of the places where they will be situated, undoubtedly I shall be able to prepare bids for them so as to obviate interfering with the floors afterwards. But I do not attach very much importance to having a fixed bed on the floor, because I have seen a man had to drill a floor, and bolt the framework of a machine down. It would not be cheaper to avoid that, because a contractor usually does a like putting in bolt-holes while he is proceeding with his concrete. Nevertheless, it can be done.

(Taken in Melbourne)

TUESDAY, 26TH AUGUST, 1919

Present:

MR. GREGORY, Chairman.

Senator Henderson,  
Senator Needham,  
Mr. Mathews.

Mr. Sampson,  
Mr. Sinclair,  
Mr. Laird Smith.

Edward Woodrow, Chief Inspector, Postmaster General's Department, Melbourne, sworn and examined.

61. *To the Chairman.*—I have learned from reports in the newspapers that the Committee is inquiring into the question of accommodation for the Note Printing Department. We have no vacant building in Melbourne under the control of the Postal Department for that purpose. So far as I am aware, there is no proposal for any considerable enlargement of the Elizabeth-street Post Office building with a view to accommodating the whole of our post and telegraph services, and vacating the Spencer-street building. It is not a fact that the Spencer-street building is unsuitable for postal work. We occupy the whole of those premises. At the present time, a building is being erected in Elizabeth-street to house the Telegraph Branch. The demolition of the old building was proceeding until quite recently, when I understand the work was dropped at the request of the Economy Commission. The proposal was to erect a building with two floors. The telegraph operating room is on the second floor of the old General Post Office in Elizabeth-street, and the accommodation there is not sufficient. The additional building to which I have referred was intended to provide for operators, and is necessary. I believe the Minister did make a statement to the effect that the erection of the General Post Office at Spencer-street was a mistake, and that arrangements should have been made for the remodeling and enlargement of the old General Post Office in Elizabeth-street. This matter is referred to in his last Economy Commission, but I do not know what conclusions were arrived at by that body. The removal of all employees from Spencer-street would, of course, be contingent on the erection of a suitable building in Elizabeth-street, or the remodeling of the existing structure. In order to carry out this work, a very large expenditure would be involved. I believe this matter has been considered by the Economy Commission, but it has not been dealt with in detail by the Department. Some years ago, before I came on to the central staff, work at the Elizabeth-street office was

congested, and it was then determined to erect the Spencer-street building. This work was carried out at a cost of over £250,000. It is a point of question whether it would have been better to erect a new building in Elizabeth-street. But as we now have the Spencer-street office, we can carry on satisfactorily. So far as I know, no recommendation has been made for the alteration of the Elizabeth-street office, in order to house the whole of the central staff there, and vacate the Spencer-street building. I know of no building under the control of the Postmaster-General that would be suitable for the purpose of the Note Printing Factory.

62. *To Mr. Mathews.* The Spencer-street building is used entirely for post-office business. No other section of the Public Service has accommodation there. At Elizabeth-street, two of the floors are given over to the Federal Commissioner of Taxation, and some accommodation is also provided for the General Staff. Across Little Bourke-street we have a free light house, 50 feet x 50 feet, formerly used for the Money Order business. Two of the floors are occupied by the Lands and Survey Department, and the Federal Criminal Court. One of the rooms in the Elizabeth-street office, occupied by the Finance Department, is given over to the Taxation Department. I should say that an area of about 11,000 to 12,000 square feet is taken up by the Taxation Department. There is access to this portion of the building by lift and stairway from the Little Bourke-street entrance. Alterations now in hand provide for a lift and stairway from the Little Bourke-street entrance. Facing Little Bourke-street there is another building, used for parcels post purposes. It is proposed to demolish portion of this structure, and erect a new building with two floors, at a cost of about £12,000. I know of no record in the Department to indicate that consideration was given to the question of remodeling the Elizabeth-street office instead of erecting the new building in Spencer-street. There was a project for a tube connexion to carry first-class mail matter between the Elizabeth-street and Spencer-street buildings. It was always understood that the old building would be necessary, because it is in the posting centre of the metropolis, and it was the general opinion that both buildings would be necessary for General Post Office work in Melbourne. I would not like to pin the Minister down to any statement that this opinion prevails to-day. The matter is referred to in my report. So far as I know, the Minister is of the opinion that full consideration should have been given to the question of erecting a building on the Elizabeth-street site, instead of at Spencer-street.

63. *To Mr. Sinclair.*—We make full use of the Spencer-street building, including the two basements, one of which is used for parcels post business, and the other for storage purposes generally. The corner of one basement is used for the storage for the account section, and the ordinary records, and the opening section of the mail branch is accommodated in another portion. We have a pneumatic tube connecting the Spencer-street railway station and Elizabeth-street offices for the conveyance of telegrams, and I understand that part of the original scheme was to construct a sub-way from the new General Post Office to the Spencer-street railway station, but this work has not been carried out. The floors in the Spencer-street building are of concrete, covered with parquet. I have no knowledge of the carrying capacity of the floors, but I have no doubt they are far above existing requirements, and I have no doubt they would carry machinery, because the building is a very substantial one. It is regarded as being one of the best fire-proof buildings in Melbourne. We could not, with advantage, vacate any portion of the Spencer-street building. The mail work is scattered over three floors, and no advantage would



be gained by moving part of that section. I do not think the remodeling and enlargement of the Elizabeth-street building will be carried out for less than £150,000. The policy in doing this work, and vacating the Spencer-street office, all turns on a question of cost. I have stated before that, in my opinion, the whole of the postal work should be concentrated in Elizabeth-street, which is the paying centre of Melbourne. In order to handle mail matter economically, all operations should be as near to the paying centre as possible. Therefore, I am of the opinion that to make a mistake was made years ago by the creation of the Spencer-street building, instead of remodeling the Elizabeth-street office. It is difficult, now, to say whether it would be wise to complete the Elizabeth-street improvements, and use the Spencer-street building for a Note Printing Office, or some other departmental activity. Postal work can be carried out satisfactorily in the two buildings. It is not absolutely necessary, in the working of the Department, that we should go to Elizabeth-street, but there is no doubt that if all branches were based there, we could handle the work more economically than at present. The proposed expenditure of £120,000 to which I have referred was to provide proper accommodation for the Telegraph Branch of the office.

54. *To Senator Ardath.*—The Economy Commission, I understand, reports to the Governor General, and I presume that any recommendation in respect of the Postal Department would, in the ordinary course of events, be presented to the Postmaster-General. I have not seen any report from that Commission concerning our Department. I should say that, as far as possible, any recommendation made by the Economy Commission would be expected and given effect to.

55. *To Mr. Lord Smith.*—This matter, of course, would be one of policy for the Minister to decide.

56. *To Senator Ardath.*—The Economy Commission, I understand, inquired into the practicability of concentrating post-office work at the Elizabeth-street building. In my opinion, it would be necessary to demolish the whole of the Parrels Post building, in order to provide a building suitable for mail handling. I should imagine it would cost at least £150,000 to provide all the accommodation required for centralized postal work in Melbourne.

57. *To Mr. Lord Smith.*—At the Spencer-street building, accommodation is provided for the whole of the mail branch, the customs traffic branch, records, correspondence, accounting, engineering, and stores. Altogether, there are about 1,500 employees there. It might be said that the whole of the work, with the exception of the telegraphic operator and receiving sections, and dealing with the public in connection with registration, private letter-box section, money orders, and parcels, at Elizabeth-street, is done at Spencer-street. The telephone work-rooms are at the corner of Spencer and Little Bourke streets, in an old building adjoining the new structure. The postal block extends from Bourke to Little Bourke-street. I do not think any proposal would be made to remove the work-rooms from Spencer-street to Elizabeth-street, because they do not form part of the main building. At present, we have sufficient accommodation on hand available for postal work. I am assuming, of course, that the telegraphic printing building will be completed. I should say that the Department will, when that building is completed, have sufficient accommodation for the present, but I think that in a short time it will be necessary to make further provision for work-rooms. When that has been done, the accommodation in Melbourne should be equal to requirements for the next twenty-five or thirty years. The money order building is not a modern structure, and I do not know whether it could be regarded as a fire-proof. I dare say that the Land and Survey and

Federal Capital staffs, at present located there, could be provided for elsewhere, if necessary. Only the central staff of the Commissioner of Taxation is located in the Elizabeth-street Post Office building, but when we move the telegraph operators to the proposed new building, we will be able to make available sufficient room for the whole of the Taxation staff. All of the new accommodation proposed would be readily occupied by General Post Office officers. I could not say whether or not it would be easy to find a suitable building in Melbourne for the purpose of a note printing office. There is no room at the Spencer-street Post Office.

#### Water-s withdrawn.

John Thomas Hall Goodwin, Commonwealth Surveyor-General, sworn and examined.

Q. *To the Chairman.*—In connection with the proposal to erect new Commonwealth Note Printing Office, I was asked to see what land was available for the purpose. I was not directly requested to investigate atmospheric conditions, the disadvantage of shade, fumes, &c., as that does not concern my Department very much. I was simply requested to submit a report on the various sites, as to value. In the selection of a site, it is my duty to select a site suitable for general purposes. The suitability of a site for any special purpose is the responsibility of the experts concerned. I submitted several sites, and the one selected is the one on Victoria-parade known as Turn Verein. I understand from the debate in the House of Representatives on this question that the Committee have to consider the advisability of erecting a building either at Sydney, Canberra or in Melbourne, and that the manager has stated that there are inconveniences connected with the present site. I am not an expert on note printing, and I am not in a position to say whether the Victoria-parade site is suitable or not. The special requirements for a note printing office were not explained to me in detail, but the Honorable General of Works informed me that anywhere on the Eastern Hill would be suitable, because the atmosphere there is clear. I believe a test was made some time ago of the atmospheric conditions in and around Melbourne, and that the atmosphere on the Eastern Hill was particularly clear. I made inquiries regarding certain vacant sites, inspected some, and others I did not inspect personally. As a result of my investigations, I reported that no available site was suitable, and by that I meant that no conveniently-situated vacant land was available at a reasonable price. After full inquiries had been made, I found that the Victoria-parade site was the most suitable. I did not recommend any other site, but suggested that if the Scotch College ground could be obtained, possibly it might be suitable; but at that time it was not immediately available. In considering the suitability of a site, I took into account accessibility to the head office, and fire risk. I believe it desirable to have all branches of Commonwealth activities as close together as possible. There are no objectionable features associated with note printing, and there is no reason why a note printing office should not be near other Government offices. I do not think there is much to be gained by having a note printing office quite close to other Government offices for convenient carriage of work. A site some miles out would not be convenient. I am not aware of the need there would be for communication between the central Department and the Note Printing Branch, though I take it there would be some. I do not think it absolutely necessary to have the Note Printing Office adjacent to the Treasury. I could not say whether it would be inconvenient to have the office in Canberra or Sydney, or some distance from the Treasury in Melbourne, as I do not know the system of distribution. The area of Victoria-parade site is 2 roods

32 3/10 perches and has a frontage of 130 ft. 11 in. to Victoria-parade and 214 ft. to Young-street. No claim has yet been sent in in connection with the Victoria-parade site, as the owner has 120 days from the date of acquisition in which to submit a claim. The Victoria-parade site was acquired on 27th June, 1919, and since that date it has been Commonwealth property. The owners of the Victoria-parade site need not send in a claim for six months from that date. I was also directed to look out for a suitable building for leasing as well as a building site, and in addition to making inquiries regarding land, I also made inquiries concerning buildings. So far as I know, no Government buildings are available that would be suitable for the purpose. I have not heard that the Spencer-street Post Office building may be available for such a purpose. Varley Brothers' building, on the Yarra bank, was inspected by Colonel Owen, but the fire risk there is not less than at present, and he considered it unsuitable. We were not able to recommend any building in Melbourne as suitable for the purpose. In fact, I may safely state that a suitable building is not available at the present time, nor is there any vacant Commonwealth land in or near the city likely to meet the purpose. I have not made any inquiries in Sydney, but, knowing it as I do, I do not think there is the slightest chance of securing a suitable building there. As I understand the Committee intend visiting Sydney, I shall write Mr. Bain, Commonwealth Staff Surveyor, explaining your requirements, and ask him to see whether any building or land is available. At the same time, I will ask him to make full inquiries regarding fire risks, fumes, and atmospheric conditions, and be prepared to give evidence before your Committee next week. The rent at present being paid for the building occupied by the note sorting staff is approximately £340 per annum, and the lease expires on the 10th October next. I believe 60 people are employed on that sorting staff, and I believe they will ultimately be accommodated on the site recently compulsorily acquired. I do not know the number of girls engaged in note counting at the Treasury who will be transferred to the new building, but I believe most of them will be. I have been informed by the Treasury that the building of the proposed new printing office will not make available any floor space in the Government offices at present occupied by the Treasury Department, Central Administration, but the new building would accommodate all the girls employed at 318 Post Office place, and also at Queen-street, as well as the employees actually engaged on note printing. I do not think many note counters are employed in the Treasury, but I know some are employed at the building in Little Bourke-street, now known as the old Money Order office. The old Money Order office is dark, dingy and altogether unsuitable for office purposes in its present condition, and nobody cares to go there. The portion to which I refer is on the ground floor and is really a very valuable part of the building. As a matter of fact, no rent is being paid at all, as all Departments occupying transferred property are debited with the proportion of value of the space they occupy. The rent is based on the capital value of the building as it appears in the transferred property list. The ground floor of that building is put down at, approximately, £282 a year, for 2,540 feet of floor space. If the girls were taken from 12 Queen-street and Bourke-street premises, approximately £222 per annum would be saved in rental, and that amount would be credited to the new building. If girls were also taken from the Treasury, an additional saving would be made. I have not considered the feasibility of erecting a Commonwealth Note Printing Office at Canberra, but I see no reason why it should not be done. If it were decided to erect such an office at Canberra, it should be built in the vicinity of the

Government offices. Mr. Griffin's proposal is to put all the Government offices together, and as there is ample room there is no reason why the Note Printing Office should not be constructed in proximity to the other Government offices. In that connection, there would be no disadvantage in the way of time, as I understand the work would be done by electricity, and that fire furnaces would not be necessary. Mr. Griffin has laid out a manufacturing centre on the northern portion of Canberra, but I do not know whether a note printing office could be called a manufactory or whether furnaces are necessary. Perhaps it would not be desirable to erect a note printing office at Canberra before the Seat of Government is removed to Canberra, and I would not recommend the work being undertaken there until that is done. I should say it is inadvisable at present, because the work could only be done at considerable expense, as compared with the cost in Sydney, Melbourne. We have to realize that arrangements would have to be made for housing the people employed there. Girls could not be obtained easily, and the labour available generally is limited. I would suggest that the question of erecting an office at Canberra be held over pending a definite decision regarding the removal of the Seat of Government to Canberra. There are about twenty girls employed in the note sorting branch in Little Bourke-street. If the Government decide to acquire land at Canberra for the purpose, there are no long-dated leases to prevent its being done, and any of the leases issued up to the present in the vicinity of the Commonwealth premises, at least some of them, are giving three months' notice. Such areas can be immediately resumed.

59. *To Mr. Mathews.*—If a building were erected at Canberra, the danger of fire would be comparatively great, as no fire-fighting appliances would be available, although there would be a good supply of water under strong pressure. The risk of fire will be considerably reduced by having an isolated fire-proof building, but if a fire did occur, a volunteer fire brigade would have to be depended upon. Some provision would also have to be made to prevent burglary, and although it might be considered an easy matter to rob the place, it would not be easy to dispose of the spoil. Additional police protection would doubtless be necessary. The fire risk would not be taken as a serious drawback to the Canberra site. I do not think the Little Bourke-street building could be converted into a note printing office, because, in the first place, the available space is insufficient.

60. *To Senator Henderson.*—The Little Bourke-street building is about 30 years old.

61. *To Mr. Sinclair.*—I do not know the carrying capacity of the floors of the Little Bourke-street building, nor am I therefore enabled to say whether they are sufficiently strong to carry the necessary machinery and plant. The lower floor accommodation is dark, but could be improved by enlarging the windows on one side, although direct sunlight could not be admitted. The building would be rather unsuitable for office purposes if tall buildings were erected on either side. At present, there is a two-storied building on the eastern side. The fire risk is relatively small, although the adjoining buildings are of a ramshackle nature. The building is accessible, as it is in a main street, with plenty of space in front, and a right-of-way adjoining. I would not like to express an opinion on its suitability for note printing purposes, because I do not really know what is required. The value of the old Money Order office premises totals £35,791—value of structure £18,791, and value of site £17,000. The building consists of basement, ground floor, and five other floors, the total rental value of which is £1,127. The total accommodation in the building is 16,700 square feet. There is sufficient power available at Canberra to meet the requirements of the Note Printing Office. I do not



know whether the current available is direct or alternating, but it could be transformed, if necessary.

72. To *Senator Steadman*.—Although I stated that I was not an expert in the matter of the suitability of a site, I can make a recommendation that a site is apparently suitable. My particular function is the purchase of a property, and to see that too high a price is not paid. I recommended the Victoria-parade site as apparently suitable, after it had been reported upon by experts as being so. After consultation with Mr. Cerutti and the Director-General of Works, I was advised to secure it. I did not have a conversation with Mr. Harrison, and I do not think I have ever seen him. I understand it has been stated in evidence that "It should not be forgotten that note-printing is an altogether different operation from printing. The former includes recording and checking of all cancelled notes returned; and we would still keep a staff at the Treasury central offices for checking notes which come in the first place from the note printer before being sent out to the different branches." No matter where we have the Note Printing Office, I suppose a certain number of checks will still have to be retained in the Treasury building. I have not any details concerning the atmospheric conditions of Canberra, nor can I say whether they are comparable with the atmospheric conditions on Eastern Hill, particularly as regards humidity; but Canberra should compare more than favorably with Eastern Hill. I believe the total number of employees engaged in the work is approximately 250, and there is not the slightest chance of securing that number in the vicinity of Canberra. Labour would have to be engaged elsewhere, and that would add considerably to the cost.

73. To *Mr. Lord Smith*.—I have been asked whether I think it advisable to remove such an important industry away from the Seat of Government, and particularly away from the Treasury, and I may say that whilst the Treasury is in Melbourne, the note printing should be done in Melbourne, or somewhere adjacent. I have had considerable experience in the matter of leasing offices for Commonwealth purposes, and find they are very difficult to secure, both here and in Sydney, as rents are on the increase. There is not a suitable building in Melbourne that could be acquired. We have had offers from different firms to build, but they have never been availed of, nor have we deemed it necessary to enter into long leases, because the time that Melbourne is to be the Seat of Government is as indefinite. The value of having our offices all together far outweighs any price per square foot that is within reason. When I am asked to inspect land, I am not expected to go into details concerning the purposes for which it is being acquired, although I may be told that it is for certain purposes. I make inquiries as to what land is available, and I submit particulars of anything suitable to the responsible officer.

If buildings are required for technical purposes, a technical officer is consulted, and if he is satisfied with the locality, I am asked to purchase it. I am not concerned with the utility of the site, but simply with the price to be paid. I look upon this as purely a technical matter, and if a site were selected in some extraordinary position, I would ask the reason.

74. To *Mr. Sampson*.—I have in tabulated form the rents charged for buildings within the city area, and they vary from 2s. 6d. to 3s. 6d. per square foot, and specially good ones from 7s. 6d. to 10s. per square foot, the average may be put down at 3s. 6d. per square foot. Sometimes the rents we pay are higher than the amounts we would be debited with if occupying a building of our own. If a building is purchased as it stands, inconvenience is sometimes experienced. If we were able to acquire a building absolutely suitable, which is unlikely, it might be slightly cheaper than one of our own specially erected. In connection with a

building suitable for note printing purposes, we did not advertise, but asked some of the leading firms, who have the leasing of such buildings, if anything were available, either for leasing or purchasing, but no suitable offers were forthcoming. A building that is of any use at all is generally encumbered with long lease, and the only way to secure one is to negotiate shortly after its construction has been commenced. It has been found very unsatisfactory to compulsorily terminate leases. I think I have exhausted the possibility of obtaining a lease of a suitable building in Melbourne, as I have had one of my most capable officers making careful inquiries. I have placed a value on the Victoria-parade site, and it is a site that is sure to increase in value. When the Seat of Government is transferred to Canberra a note printing office building here would be of use for other purposes. If a building is constructed on the Victoria-parade site, it would be on the edge of Collingwood, and could be used for manufacturing purposes. On the other hand, if the Commonwealth desired to use it, it would be in a most convenient spot. I do not know who tests the atmospheric conditions, and the information given earlier in my evidence was obtained from a medical gentleman who made certain investigations into the clarity of the Melbourne air.

75. To the *Chairman*.—I do not know of any available Commonwealth or State building in Melbourne or in Sydney suitable for note printing work. I shall see that further inquiries are made from estate agents to see if any suitable buildings can be obtained before the Committee comes to a determination. At the time I submitted my report, no building, fireproof or otherwise, was available in or about Melbourne, owing to the demand for such premises owing to increased trade activities caused by the war. There was no opportunity of even renting or leasing in the near future, as any building to suit the Commonwealth's requirements would necessarily be an up-to-date factory or business concern, and would be well held by the present lessee.

(Taken at Melbourne.)

WEDNESDAY, 27th AUGUST, 1919.

Present:

Mr. GREGORY, Chairman;

|                    |                  |
|--------------------|------------------|
| Senator Henderson. | Mr. Sinclair.    |
| Mr. Mathews.       | Mr. Laird Smith. |
| Mr. Sampson.       |                  |

Charles John Cerutti, Assistant Secretary Commonwealth Treasury, recalled and further examined.

76. To the *Chairman*.—I have seen the report of the debate which took place on the motion referring the erection of the Note Printing Office to the Public Works Committee, and notice the desire expressed during the debate that the office might be located at some place other than Victoria-parade, Fitzroy, suggested by the Department. I have had some figures prepared showing the relative cost of our escorts of notes if distributed from Melbourne, or from Canberra. At the present time, all our escorts of notes are from Melbourne. The figures show that we spend about £4,805 per annum on our escorts of notes at the present time. If the Note Printing Office were established at Canberra, that cost would be increased to about £6,054, or an increased cost of £1,249, which, of course, represents a considerable capital expenditure. In addition to the cost of escort, there would also be additional expense involved in the transport of raw material, paper, machinery, stores, and so on to Can-

berra, which can now be landed in Melbourne direct. I suppose that would account for an increase in expense of a few hundred pounds, but I have no figures giving a definite estimate of that increase. Apart from these conditions, there are practical difficulties in the way of transferring the Note Printing Office from Melbourne at the present time. Notes are brought up daily from the Note Printing Office to the Treasury, and are there placed in the strong room with our bulk stock of notes. At intervals escorts are sent to the other State capitals and centres of distribution. In the course of a year there are twenty escorts to Sydney, costing about £50 each; seven to Brisbane, costing £100 each; eight to Adelaide, costing £50 each; five to Perth, costing £120 each; ten to Hobart, costing £70 each; one to Normanton, costing £225; four to Rockhampton, costing £135 each; and four to Cairns, costing £160 each. In escorting notes, we have to reserve coin compartments, and as the members of the escort have to sit up all night when travelling, there are additional expenses for overtime. There are always two Treasury officers and usually one or two policemen to form an escort, and all are armed. Of course, the notes must be watched all the time. In escorting notes to Brisbane, the escort make a break at Sydney for one night. In going to Perth they make a break at Adelaide in the same way. We have two policemen always on the Perth trip. At the present time the Note Printing Office is very fully occupied in the printing of war loan bonds and war saving certificates, and it has been very difficult to have sufficient notes printed to meet the ordinary requirements of the note circulation. Even if the new Printing Office is erected in Melbourne as proposed, considerable inconvenience will be involved in the transfer of the machinery and setting up in the new office. It will be necessary to transfer one machine at a time. I hope that as time goes on, and the need for printing war loan bonds and war saving certificates becomes less, we shall have a little margin which will enable the transfer of machinery to the new office to be carried out satisfactorily. Under existing circumstances, it could not be attempted. If the Note Printing Office were established at any place other than Melbourne, it would be a matter of great difficulty to transfer the machinery. That difficulty might be overcome if extra machines were imported and we were thus given a margin to work upon. The extra work of printing of Commonwealth Bank cheque forms was undertaken by the Note Printing Office, because the Note Printer had a special method of printing such cheques, and they were wanted in a great hurry. At present we are hoping to make arrangements to transfer that work. It is not essential that these cheque forms should be printed at the Commonwealth Note Printing Office, and the work was undertaken because we had special facilities for it. The heavy work of printing extra forms as they are required. The transfer of the Note Printing Office to Canberra, would add very much to the difficulty of reupping the machinery. Apart from that, questions requiring urgent consideration are: the facilities afforded for the prevention of fire, and satisfactory atmospheric conditions. I understand that it would take several years to transfer the Departments to Canberra, and the need for a transfer of the present Note Printing Office is so urgent that we could not wait so long. With respect to the transfer to Sydney, Mr. Harrison has expressed the opinion that the humidity of the climate of Sydney would militate against the successful production of the notes there, particularly in the summer time. On that point you will probably obtain evidence from him direct. I do not think that prior to the Commonwealth taking over the printing of notes any notes were printed in Sydney. There were some notes printed in

Melbourne for the English and Scotch Bank of Scotland and Melbourne. I was not aware that any other notes were printed in Melbourne, nor was I aware that the words and Melbourne are now printing notes for the New Zealand Bank. In connection with the note printing, the paper must be damp for each operation and dried between each operation, and that makes the atmospheric conditions important. If our notes were printed in Sydney, it would be necessary to have an organization there for distribution purposes. The separate office and the extra cost are the principal disadvantages as compared with the establishment of the Office in Melbourne. It is, of course, open to the Government the purpose of distribution. It is clearly more convenient to send notes to Adelaide, Perth, and Hobart from Melbourne than from Sydney, and would be much less expensive. If the Office were established in Canberra, each of the capital cities would have to be supplied from there, and that would involve considerable extra expenditure. Allowing for twenty escorts per year from Canberra to Melbourne, the cost involved would be £1,200. The cost of escorts from Canberra to Sydney, allowing for twenty each year, would be £160, as against £1,400, the present cost of escorts from Melbourne to Sydney. Of course, the escorts from Canberra to Adelaide, Perth, and Hobart would be very much higher than the cost from Melbourne. I have estimated that the cost of escorts of notes from Canberra to the various centres of distribution would amount to £6,054 per annum as against £4,805, the present cost of distribution from Melbourne. The cost of distribution from Sydney would be about £350 a year more than the cost from Melbourne. If the Note Printing Office were established at Canberra or Sydney, it would not, I think, be essential that the whole of the Note Issue Branch should also be established there, but it would be necessary to have a staff for distribution purposes. When it became obvious that a change from the present building was necessary, we had the Public Works Department and the Land and Property Office looking around for suitable premises, but none were found to be available in Melbourne. I think I am justified in saying that, so far as Melbourne is concerned, it is not possible to find a building suitable, in respect of safety from fire and proper atmospheric conditions, for the printing of notes. The possibility of securing a suitable building was very fully considered, because we did not desire, if it could be avoided, to go to the expense of the erection of new offices. My own opinion is that the proposal which has been submitted by the Department is the best that could be adopted. If the Seat of Government were transferred to Canberra, it would be desirable, but not essential, that the Note Printing Office should be established there. No inquiry has been made as to the suitability of the atmospheric conditions at Canberra for note printing, but from what I know of the place I do not think that there would be any objection from that point of view to the establishment of the Office there. No inquiries were made to discover where suitable premises for a note printing office could be obtained in Sydney. I certainly think that if the proposed building were erected and the note printing was subsequently transferred to Canberra, it would be possible to leave the building at a profit. The State Government Printing Office in Melbourne will in course of time require more space; but, in any case, there should be no difficulty in finding tenants for such a building as is proposed. I am not an expert in such matters, but I should say that, in accordance with the general tendency of property to rise in value, the proposed building, if erected, would increase in value. It would be very centrally situated for many classes of business, and, as an investment, would return good interest on the capital expended on its construction. About



80 girls are employed in our Queen-street Office, for which a rental of £400 a year is paid. About 25 girls are employed at the old Money Order Office in Little Bourke-street. A rental of £280 is paid for the portion of that building which we occupy. We have occupied the building in Little Bourke-street for only about four weeks, pending the completion of the Turn Verein building, and expect to leave it in about seven weeks' time. A few girls employed at the Treasury building will be removed to the Turn Verein building. They are very much cramped for room at the Treasury at the present time, and the Prime Minister's Department has already approached us for further space. I think that the value of the space we now occupy in that building would be about £200 a year. The girls who are now accommodated in the old Money Order Office previously occupied a portion of the Treasury building, which is now occupied by the paying staff under the new system of paying accounts at the Treasury. In the Note Printing Department there are employed 202 persons—120 males and 82 females. There are 155 girls employed in the Note Issue Branch. It should be remembered that cramped up with this matter there is the stamp printing business as well. If the Note Printing Office were transferred to Canberra, special police protection would be required there. At present we have a guard always on duty. If the Office were transferred to Canberra, special police protection would need to be provided and a fire brigade would have to be organized. The isolation of Canberra at present would be a serious factor.

77. *To Mr. Sinclair.* Notes for distribution are at present kept in one bulk stock in the strong room at the Treasury. If the Office were established at Canberra, there would have to be strong room accommodation provided. It is not desirable to carry notes under escort any more than is necessary. They should, if possible, be escorted direct from the Note Printing Office to the place at which they are required. Some place would have to be found for the accommodation of the girls who are now at the old Money Order Office at Little Bourke-street. There is no room for them at the Treasury. I estimate that the space occupied by the note issue staff is worth quite £200 a year. It would be necessary to continue the employment of some officers at the Treasury building. Having in view the necessity for doing away with the great fire risk which we run at the present time, and of providing proper accommodation with suitable atmospheric conditions, I consider the proposal which has been made by the Department the only one which is really practicable. If the Note Printing Office were established at Canberra, it would take so long to make the change that it would not be satisfactory. It would also involve considerable additional expense, for which, I think, there would be no justification. The unsuitability of the atmospheric conditions would seem to be a fatal objection to the establishment of the Office at Sydney. It would require a good many thousands of pounds to effect such alterations at the building at present occupied as would sufficiently reduce the fire risk. Apart from the fire risk, it might be possible to carry on without additions to the present building, in view of the probable reduction of the bank work business. But we are running a big risk there every day now, and it causes me a good deal of concern. In considering any proposal to transfer the Note Printing Office to Canberra, the time it would take to make the transfer of the Departments would be an essential factor in determining whether the proposal should be gone on with in Melbourne. I have heard it stated that the Seat of Government could not be transferred from Melbourne to Canberra in less than six years. I have gone into the matter myself to a certain extent, and I know that it would be

a long and expensive business under the best conditions. I think that the removal of the note printing to Canberra is quite impracticable at the present time. It will be a difficult matter to remove the Department from the present building to the building proposed to be erected in Victoria-parade, but it would throw the business of the Department into serious disorder to attempt to remove it to Canberra.

78. *To Mr. Laird Smith.* To accommodate the Note Printing Office in any building that could at present be obtained in Melbourne would necessitate very considerable and expensive alterations. Heavy machinery would have to be accommodated, and this would involve expensive alterations to strengthen an existing building. The expense of such alteration would, of course, have to be borne by the Commonwealth Government. The Works Department and the Land and Property Office made exhaustive investigations to see if any suitable building were available. They had several houses and land agents making inquiries for them, but all the inquiries led to nothing suitable being offered. Cheque printing does not require the kind of thing that is required for note printing, but our Note Printer had some special secret to safeguard cheque printing, and that is why he was given the work which has been referred to.

79. *To Mr. Sampson.* I regard the rent being paid for the premises at present occupied by the Note Issue Branch as fair for the accommodation provided. This could scarcely be compared with the rental required to house the whole of the Note Printing Department in one building as is now proposed, because the conditions are entirely different. It is proposed to erect a building of a special character. I could let you know what would be the probable rent of a building in Melbourne suitable for the accommodation of the Note Printing Department assuming that we must remove from the premises at present occupied. I have said that the proposal is to erect a special building, and, therefore, job information might not be of great value. I might give you an estimate of what it would cost to rent a building of the requisite strength giving the floor area required and in a suitable locality. Before the Commonwealth Government took over the note issue, the banks in distributing their notes followed much the same plan as we adopt in carrying them. Their notes, for instance, would be escorted from the central Melbourne office in various centres in Victoria, and in the same way from the central offices of the other capitals to various places in the other States. The notes were imported from England. In most cases they came in book form, about 100 being bound up in one book. The only printing of notes in Australia to my knowledge was that done by Smith and McDougall for the English and Scotch Bank.

80. *To Senator Henderson.* I have considered in a superficial way the labour problem that would have to be faced if it were decided to transfer the establishment to Canberra. It is, I think, evident that we would have considerable difficulty in securing necessary labour there. The great majority of the girls we employ at the present time live at home with their parents, and, even if their parents permitted them to go to Canberra, we should probably have to make them some allowance for extra cost of living there. We could not expect that girls would go so far away from their homes without some extra allowance.

81. *To Mr. Sinclair.* No matter where the Note Printing Office is established, it will be convenient to have the note sorting staff at the central office of the Treasury, where it can be properly administered. There is another phase of the business which is important:

we have all our bonds and coupons entered into registers in Melbourne. That is carried out by the girls employed in connexion with the note issue, and it is work that should be carried out at the Seat of Government. We keep a complete record of all notes issued, and the business should be under the immediate control of the central office. We keep a complete record and double check of notes destroyed and paper issued and destroyed. We have an elaborate system of double-entry accounts to effectively control the business.

(Taken at Melbourne.)

THURSDAY, 28th AUGUST, 1919

Present:

Mr. GIBSON, Chairman;  
Senator Henderson, Mr. Sinclair,  
Mr. Mathews, Mr. Laird Smith,  
Mr. Sampson.

Walter Burley Griffin, Federal Capital Director of Design and Construction, sworn and examined.

82. *To the Chairman.* In approaching this question one has to consider the urgency of providing facilities for note printing at the present time. Note printing is essentially a part of the Federal printing business, and is a very important function of the administration of the Government. Therefore, it should be connected as closely as possible with the Seat of Government wherever it is situated, and whenever the Seat of Government is removed to Canberra provision must be immediately made for note printing. Industrial exhibitions costing between £5,000,000 and £7,000,000 have been built in the United States of America within a period of two years. In connexion with the building of the Federal Capital, I do not advocate a rush of that sort. At the present rate of progress, even during the most active period of work at Canberra, it would take 30 years to build the Federal Capital. A reasonable period for building it would be five years, but that time could easily be reduced to two years as a rush job. Although there is the possibility of the Seat of Government being removed to Canberra, I will not advocate the establishment of the Note Printing Office there at the present time. There are too many other questions involved; for instance, the matter of simultaneously providing housing accommodation. It strikes me that it is really a proposition for renting temporary quarters in Melbourne until the whole subject is dealt with.

Accommodation could be provided at Canberra for 210 employees of a note printing establishment. I do not think the requisite labour could be found in the locality, as I take it that the employees of this Department are more or less experts in their work. However, I suppose that note printing is just at present a larger function than it is likely to be at a later period. In the lay-out of the Capital provision is made for a site for a note printing office in conjunction with the Treasury, which Department will be situated closer to Parliament House than any other. I would have the whole bureau of printing in one block. It would prove to be the simplest method of arrangement for handling materials. The site is just off Commonwealth-avenue, between Parliament House and the bridge. Note printing can be carried on separately from the general Government printing, but, in my opinion, it would be better to have all printing facilities in the one building or in one group of buildings.

83. *To Mr. Laird Smith.* Paper can be manufactured without excessive expense. On that point it would not be necessary to have the note printing establishment situated in the factory area at Canberra. Some of the exhibition buildings in the United States of America were built to resemble the art galleries and museums were constructed so that they could be utilized for other uses. They were of the permanent type that characterize large numbers of buildings in Australia, such as building of a permanent character. In America, however, owing to the climatic conditions, cannot be used on the surface as it can be used in Australia, and since finish, which can be fresh used in Australia, is regarded mostly as temporary work. It could not be a really interesting to establish fire protection for an isolated building at Canberra. I would suggest having a one-story building. The best factory building can be obtained in such buildings. There will be ample building space at Canberra. The establishment could be made absolutely fireproof, because of the lack of the risk of conflagration. It would not be necessary to have a permanent fire brigade in the Federal Capital at once if a note printing establishment were built there. The building would be absolutely protected from outside conflagration, and it would be quite easy to provide against a fire of internal origin. The question of a fire staff at the Capital could not be connected with my plan. My idea as to the development of the whole area is based very largely on one-story buildings, which give really a garden effect, and on a city effect. A city spread over a large area and containing ample garden space and one-story buildings at the same time the cheapest and the most effective form of construction. I do not agree with the suggestion that it will take seven years to build the Capital, but it is purely a matter of finance. No matter what is done at Canberra, I would not advocate the plan of constructing a temporary building there, as all our conditions are in Australia, almost as good as a permanent structure would. It has been suggested that on account of the difficulty in obtaining labour a contractor cannot spend more than £50,000 in any one year in any part of Australia, but I may point out that a very much greater sum is spent each year in any of the capital cities on building construction. It is only a matter of organization. Our contractor is limited by capital consideration. He is not controlled by the supply of labour. Labour is largely movable. It is only a question of shifting it from one place to another. During the war we have seen that building progress can be suspended throughout the world for three or four years and the labour diverted in other directions. The printing establishment in Washington is situated across the Mall from the Treasury Department.

84. *To Senator Henderson.* I am informed that there are 80 women employed in the Note Printing Office. There would be a possibility of employing women if we go to Canberra if the building were erected there immediately, but the only question in my mind is whether, by carrying out the work at Canberra, you are not separating, instead of concentrating, the functions of government. Under conditions of extreme urgency, I should say that the only thing to do is to seek suitable temporary accommodation in Melbourne rather than attempt to provide it at Canberra in the present circumstances.

85. *To Mr. Mathews.* I am partial to one-story buildings from the point of view not only of cost, but also of utility, especially for large factory establishments required for carrying out work such as printing. The erection of many-story buildings would have no effect on the lay-out of the Capital, because the street accommodation is ample enough to take care of a



be a rational thing to do under the conditions that will apply at the Federal Capital. So far, we have not reached the stage at which we could fix a limit to the height of the buildings there, but that is what I propose to do. It is my idea that the height of the buildings should be rigidly restricted, so that we should have much lower units than are common in other cities. Apart from the question of the availability of the horizontal system of distribution, involving the necessity for providing light wells, makes a much cheaper method of construction for the whole of the city. The reserve for Government buildings contains about 400 or 500 acres. The horizontal method of distribution, being cheaper in the beginning and more effective from an architectural point of view, would give an idea of completing much sooner than would otherwise be obtainable. Of course, in the event of a greater concrete arching later on, there will be no need to provide the one-story buildings being carried up higher. A one-story building requires practically no support, and the columns for an overhead structure—all modern construction is frame construction—can be carried on columns through the lower structure. The possibility applies to all such buildings that they may be elevated as required, and if it is possible, because it will not seriously affect the ground would be greater differences in the elevations of the buildings. The method of enhancing architectural effect in a building group is to have differences in the elevation. In this way we can supplement the great advantage we have at the Federal Capital site in the varying levels of the ground. For the last fifteen years in America the reinforced concrete buildings have been built on factory purposes, because it is the cheapest method of construction for buildings of this type. In the lighter buildings, such as offices, in the majority of cases, the frame construction has been used. I have seen magnesian cement used. It is a mixture of jural and sylvest and recent, magnesium salt and oxide, laid on

90. To Mr. Mathews.—Under permanent conditions at Canberra, I have no reason why employees should receive any allowance. At present the employees there receive no allowance because there is no possible provision for them to settle permanently. As soon as provision is made so that they can fairly settle down, as they can do in Melbourne, there will be no necessity for any allowance. The existing conditions will terminate as soon as the land settlement scheme is commenced. At present the Government does not project making a start with the housing of the Federal Capital. It is a purely money matter to a family to go to Canberra at present to find employment at a note printing establishment there. There are no conveniences there for the housing of people.

32. To the *Charmouth*.—I have had a careful glance at the plans of the proposed building for the Note and Stamp Printing Offices. It would take about twelve months to build properly and finish a building of this description of the reinforced concrete type from the time the work was started, but for an exact estimate I should like to go into the question a little more carefully. I think the air in the city of Sydney is fairly free from noxious gases or fumes, and I judge, like the condition of the some towns. In a suburb like Waterloo, where there is more factory, the air would probably be polluted. For a building of the kind that you require, a site in the suburbs would be better than a site in the city. In the summertime, when the north-easterlies are blowing, the humidity in the air in Sydney is very great; the humidity decreases as you go inland. It is not so noticeable in the winter months. Sydney is in the lower latitudes. The main room type of construction was a admirably suited for a building for this reason of the *luzo* type of building has been drawn in the merits of the *luzo* type of flooring, which is good, pleasant to the feet, and does not feel like a chill. The exact composition is a trade secret, but it contains sawdust and magnesia. It is like like cement, with a travel, a thickness of from half an inch to three-quarters of an inch. I would recommend a three-quarter inch. It makes a fairly good bed for a workshop, but is rather absorbent. I do not know whether the oil was a right good thing it into the concrete. I do not think that the oil from the machines would be deleterious to a concrete floor if the concrete is thoroughly set. I have made careful inquiries as to the possibility of obtaining an existing building suitable for this purpose in Sydney. I went first to the State Public Works Department and to the Council, to the other State officials. The position and the cost, as far as they are concerned. Their belief is that so many of their Departments are in need of buildings about the city, and they are not willing to accommodate for the Government officials rather than to be asked to spare any. I am in exactly our own position in the Commonwealth Departments. Our buildings, such as the General Post Office, the Customs House, and the Parole Post, are as full as they can be. There is absolutely no hope, unless you turn other Departments out of getting any accommodation there at present.



"at present," because I have a proposition to put before the Council, and the Post Office building at the Central Railway Station. That should be an excellent proposition, but the great disadvantage is that you cannot distance and the proposed alterations at the General Post Office are completed. I understand that the intention is that when we have completed the alterations to the General Post Office, the Parcels Post building shall be given up and perhaps handed back to the Railways Commissioners.

It has really more accommodation than you are asking for. It is fireproof and self-contained, and there is no great fire risk adjacent. There is about 67,000 square feet of space available in the whole building, as against 51,000 in the building shown on your plan. It is very hard to say when it would be available.

It depends upon how long the Treasury will be before giving instructions to proceed with the work at the General Post Office, and it is very difficult to say that how long that work will take to complete because it must be carried on while the postal activities are going on. It will probably take about two years, so that it means probably three years before you can get into the Parcels Post Office. I submit plans of the building. It contains seven floors, all of which are built, except the top floor, which has a big light one, that takes the floor space for about 800 feet. The building is not situated on a very high elevation, but it is excellently built, with good foundations. The nearest gasworks would be about a mile away, in a direct line. Certain winds might possibly bring the fumes across to this site. The gasworks near Hornsby old site were demolished some time ago. The building is a short distance from the railway sidings, but I think dust and dirt would come more from the streets than from the railway. I have not noticed the dissemination of the smoke from the railway, but I should think that would be more from the engine fumes. The building is almost adjacent to the arrival platform of the Melbourne express, so that it is very close to the station. Another proposition I have to put to you is the utilization of Warwick Chambers. We need there to accommodate the Customs people when the Customs House was being altered. The Taxation Department is, at present, occupying the 1st, 5th, 6th, 7th, and 8th floors. The ground floor and half the 4th floor are in private use, and the Herald and Sydney Mail Printing Office is using the 2nd, 3rd, half of the 4th, and the 6th and 10th floors, while the 11th floor is being used by the Red Cross. I do not anticipate that you will even consider that building for several reasons. The first is that the adjacent fire risk is very considerable. It is in what I consider one of the danger spots in Sydney, with tall inflammable houses all around; secondly, it would be very difficult and costly to obtain the exclusive use of the whole building. If, as you say, you must have a building absolutely self-contained, you would have to turn out the Taxation people, and other accommodation would have to be found for them, to the great disadvantage of their business. Then the private tenants would have to be compensated, and I do not suppose the Herald would give up the accommodation for the Sydney Mail, because they have to other place to print the issue. The advantages of the building are that it is fireproof and well provided with lifts. I am afraid that it could not be made self-contained for your purposes. The two places I have mentioned are the only two official or semi-official buildings that there is any chance of using. The Parcels Post building is also built, self-contained, could be easily have a guard around it and be all eyes on it, and I think it would be a good idea to have a guard station for taking mails, but that can be guarded or closed up. I have not been able to find out any other suitable buildings,

official or private. The conditions you ask for are very exacting. You will get the good atmosphere you require by going out into the suburbs, but there such an extensive building is never built. In the city you get fire risks and fumes, or a building that has been built for some other purpose, and, therefore, not suitable in some or all respects. You could get evidence about private property from other witnesses. It would take longer to erect the proposed building at Canberra. If it was put in the heart of the capital, near the terminus of the railway, it would be easier to get the material on to the spot, and I should think it could be put up in a year or fifteen months. The shingle in the river bed there is a splendid matrix for making concrete. Suitable sand, stone, and shingle are available. You would have to bring cement to the place. The water is good and easily obtained.

93. *To Senator Macdonald.*—I do not care to express an opinion on the suitability of the climate of Sydney for letter printing. The State Government Printer used to print postage stamps here, and prints the duty stamps here now. With the wind in a certain direction, there would be a good deal of smoke and soot from the locomotives blown into the Parcels Post building. It would be rather a dirty place with a southerly wind, but I am afraid you would get soot and dust there. I expect that would interfere considerably with delicate machinery. The building is quite substantial enough to carry heavy machinery. It was designed to carry very heavy mail bags. They are sometimes weighted very roughly in one spot, and sometimes dumped about very roughly. I am sure the floors are strong enough for any machinery. I guarantee that any part of the floors would carry a load weighing up to a couple of tons. The floors are of reinforced concrete, but not of the mushroom type. There will be absolutely no trouble from vibration or movement. The only possible fire risk adjacent is an engine-shed on the southern side, about 30 feet away; but I should look upon the building as an absolutely negligible fire risk. It will require no alterations to make it fireproof. It is already fire-resisting now. Nothing is really fireproof, but it is as fireproof as it can possibly be. It might require alterations to suit the accommodation that the work will need, but I do not know what that accommodation is. I am not absolutely certain that there will be head room for such shafting. In certain factories they require considerable head room for the belting and shafting to go along. From memory, the height of some of the beams in this building is only about 11 ft. 6 in., and of the ceilings about 13 feet. It would be necessary to find out what belting and shafting are required, and then the engineer would have to tell us what height he wanted for the pulley shafts.

94. *To Mr. Laird Smith.*—The total cost of the Parcels Post building, exclusive of fittings, furniture, &c., but including lifts, was £282,708. On a basis of 8 per cent, the rentable value would thus be £26,616 per annum. It is our property. We have the ground on a 99 years' lease from the Railways Commissioners. We paid for the building out of Commonwealth funds, and it is our property for 99 years. I can find out for you the total rental value of Warwick Chambers. I do not think the Parcels Post building will be subject to vibration from the train traffic. It is too substantially built, and on too good foundations. It has a strong-room on the ground floor, built for Parcels Post purposes. I know several localities on high hills, and clear of smoke and dust, within a reasonable distance of Sydney, but no suitable buildings. Up the North Shore line, for instance, the districts are nearly all residential, with hardly any factories or big buildings.

95. *To Mr. Simpson.*—The district around Hornsby, which is about 14 miles from Sydney, is high country. The same applies to Wahroonga and Epping. From a cursory glance at the plans, it seems to me that the height of the Parcels Post building will suit very well, but the accommodation is plotted out in a different way. In re-adjusting it I should have to consult the Treasury authorities to see whether my ideas would suit their activities. I can give you an idea of whether the Parcels Post building would suit by measuring the superficial area of its floor, and the superficial area of the proposed building per floor. Very little alteration appears to be required, because the Parcels Post building is excellently lighted on all four sides, and, except on the top floor, has no subdivisions other than certain postal sorting fittings. I should think, without consulting the authorities in Melbourne, that the building, when vacated, would be ready for the engineers to bring their machines straight there. I have that belief on the plans generally. The plan of the new building shows a floor space of 10,400 square feet per floor, and the Parcels Post building has 9,734 square feet per floor, so that the superficial area on each floor is almost identical. If they have planned certain activities for one floor of the new building, it would be very simple to carry them on one floor of this building.

96. *To Mr. Sinclair.*—There is a little less floor space on each floor. The columns in the Parcels Post buildings are about 21 feet from centre to centre. Those on the new plans are shown at exactly the same distance. The wall and floor construction is simply strong to carry brackets for pulley shafting, and can easily be drilled for bolts. The particulars of the lift accommodation at the Parcels Post buildings are as follows:—Outside—4 goods' lifts, each 3 tons capacity, car 12 ft. by 10 ft. Inside—1 passenger elevator, 2,000 lbs. capacity at 300 feet min.; 1 service elevator, goods, 3,500 lbs. capacity, at 150 ft. min., car 6 ft. by 5 ft. 6 in. machine in basement; 2 dumbwaiters, capacity about 14 cwt., at 240 ft. min., cage 3 ft. by 2 ft. 6 in. Of the latter, one runs from fifth floor to third floor, and the other from fourth floor to third floor. There is no fire risk in them at all. The inside lifts would be only a local fire risk, because all the floors are fireproof. The lift shaft would not form a flue, because it is only wired in with wire netting. There is a fireproof staircase on the west front, and another on the south front, both inside the building. There is ample lavatory and sanitary accommodation on each floor, and a lunch-room is provided already for the postal officials who work there, with all the necessary cooking apparatus.

97. *To Mr. Mathews.*—The building was constructed by the State Government Architect. I have never heard that dust and smoke are a nuisance there, but the Parcels Post officials would be so particular as the note printing people would be if sulphur fumes or soot were blown in. I do not think they are blown in there much. It is not a dirty situation, but no doubt there are fumes with the wind in the right direction and the railway so close. The engines give out carbonic acid gas, and I should think, sulphurous fumes. It is not a very dusty situation, but every town site is fairly dusty, particularly with a strong southerly, although the conditions have become better since the outlying roads have been widened.

98. *To the Chairman.*—The estimated cost of constructing a steel or concrete building per cubic foot of space depends largely, of course, on the height from floor to floor, but I suppose a building of the description projected on the plan would cost at the present time in Sydney about 1s. 6d. per cubic foot to construct. I am

dread it would cost all that. The price of everything, including wages, has risen. I could not like to do it under that price, but estimating per cubic foot is very hazardous. As a matter of fact, estimating along this is not reliable. We have careful specifications drawn, and quantities taken, and yet, when tenders are called, the lowest is sometimes only half the highest. That happens even where every detail is given to tenders. I do not disapprove of Randell's. In Sydney, estimating per cubic foot is only resorted to in cases where we have nothing else to go by, and the contract drawings are not prepared. I have never practiced estimating per square foot. I think 1s. 4d. per cubic foot is rather low. I should not think there would be much difference in the cost of construction of a steel building and a building of the mushroom concrete pattern on present quotations. I should say the mushroom type would be a little cheaper, if anything. If Mr. Mathews' estimate is 1s. 4d. per cubic foot, he would know Melbourne is better than I do. It is a very fair estimate, although a little on the low side from the Sydney point of view, but, doubtless, if we had local competition, we might get a little better for 1s. 4d.

The strong-room at the Parcels Post building is burglar proof, and would be amply strong for the note issue branch, but I am quite sure the area would not be sufficient, being only 122 superficial feet. If the plan for the new building provides for two strong-rooms, 40 x 40 and 20 x 20, one inside the other, we have not that accommodation in this building.

99. *To Mr. Mathews.* All private buildings in the city, although they seem all right at first, have some thing against them when you inquire into them, and outside the city, where the site is pure, there are no buildings of the size required. It should not be difficult to get suitable labour in a district like Hornsby. I suppose the girls would live near the factory. There is no difficulty in getting labour for settled factory work.

100. *To Mr. Lord Smith.*—Owners of buildings do not object to internal structural alterations generally, so long as they get compensation.

Witness withdrawn.

David John Marry, State Meteorologist, Sydney, sworn and examined.

101. *To the Chairman.*—I can give definite evidence as to the relative amount of humidity in the atmosphere in Sydney and Melbourne, but I have not the data with me for Canberra. On a year's figures, the mean day temperature at Sydney is 63.2, and the mean night temperature is 56.2. In Melbourne the mean day temperature is 67.3, and the mean night temperature is 49.5. These figures give a mean average temperature of 63.1 for Sydney and 58.1 for Melbourne. Unfortunately, I can give the humidity figures only for 9 a.m. for Melbourne, so that for purposes of comparison at present, until I can get the 3 p.m. and 9 p.m. figures for Melbourne, I had better give only the 9 a.m. humidity figures for Sydney also. At Sydney the mean 9 a.m. humidity is 72 per cent. That means relative humidity, showing the percentage of moisture in a cubic foot of air. That is arrived at in this way: A cubic foot of air at a certain temperature, and containing a certain amount of humidity, is cooled. As its temperature gradually diminishes, it will at length reach a point when its moisture content is sufficient to saturate it. That is what we term 100 per cent. humidity. That saturation means the maximum amount of moisture content which the cubic foot of air will hold at that temperature. Thus, 20 per cent. of humidity is half as much as is capable of saturating that cubic foot



The mean relative humidity at Sydney at 9 a.m. for the year, is 72 per cent., and at Melbourne 68 per cent. The highest temperature ever recorded at Sydney is 109.5 degrees, and for Melbourne 111.2 degrees. The lowest temperature recorded at Sydney is 45.9 degrees, and at Melbourne 27 degrees. The highest average relative humidity ever recorded at Sydney was 90 per cent., the average for May. The mean relative humidity for Sydney is as follows:—January, 78 per cent.; February, 81 per cent.; March, 85 per cent.; April, 87 per cent.; May, 90 per cent.; June, 82 per cent.; July, 88 per cent.; August, 84 per cent.; September, 79 per cent.; October, 77 per cent.; November, 79 per cent.; and December, 77 per cent. These are all 9 a.m. figures, and it should be pointed out that at that hour of the morning there is often a good deal of fog in the air. For Melbourne the highest mean relative humidity at 9 a.m. was 88 per cent., in June and July. The lowest mean monthly figures for Sydney are 42 per cent. in November, and for Melbourne 49 per cent. in December. These are 9 a.m. figures in each case. The 3 p.m. figures for Melbourne have not been published so far as I am aware. The following article contributed by me to the *Australian Monthly Weather Report*, issued by the Commonwealth Bureau of Meteorology, shows the temperature and humidity of the various winds at Sydney:—

The source of the moisture, which may subsequently appear in the form of cloud, is shown in a general way by the relative humidities of the various winds. The accompanying table of the relative amounts of moisture contained in the different winds experienced throughout a year at Sydney will be found interesting from several points of view.

In the table are given the mean spring, summer, autumn, and winter temperatures and relative and absolute humidities for the hours 9 a.m., 3 p.m., and 9 p.m. peculiar to the various winds.

Taking the results in order, it will be seen, firstly, that in summer the familiar north-east wind is quite warm, with a relative humidity ranging from 64 per cent. at 9 a.m. to 78 per cent. at 9 p.m., the actual moisture in each cubic foot of air amounting to 0.0 grains at 9 a.m. and 0.5 grains at 9 p.m.

In autumn, the temperature with the north-easterly wind is about 11 degrees lower than in summer at 9 a.m., 7 degrees lower at 3 p.m., and 5 degrees lower at 9 p.m. The relative humidity varies between 65 per cent. at 9 a.m. to 80 per cent. at 9 p.m. The actual amount of moisture in each cubic foot of air is only 4.4 grains at 9 a.m., 5.5 grains at 3 p.m., and 5.0 grains at 9 p.m.

In winter the temperature at 9 a.m. with the same wind is 18 degrees lower than in summer, at 3 p.m. 20 degrees lower, but at 9 p.m. only 10 degrees lower. The relative humidity at 9 a.m. is 83 per cent., at 3 p.m. 67 per cent., and 9 p.m. 79 per cent., while the actual amount of vapour present at these hours is 4.2, 3.5, and 4.8 grains respectively.

In the spring this wind is generally about 60 degrees during the morning and afternoon, but cools to about 55 degrees by 9 p.m. The relative humidity is 69 per cent. at 9 a.m., 61 per cent. at 3 p.m., and 73 per cent. at 9 p.m., and the actual amount of water vapour present in the atmosphere is 5.2, 4.7, and 4.8 grains respectively per cubic foot.

Particulars on the same lines are given in the table for each of the winds, but to prevent the results in a less technical manner, the following comparisons are made between the north-easterly and westerly winds.

Consider a room, say, of dimensions 15 x 15 x 10 feet, then with the summer "north-easter," this space of 2,250 cubic feet would contain at 9 a.m. 2.0 lbs. of water in suspension, at 3 p.m. 2.0 lbs., and at 9 p.m. 2.1 lbs.

Such humidities are responsible for the enervation felt by human beings during hot summer days, especially when these average values are exceeded.

The results showing the varying amounts of water in a room of the above dimensions are:—

| Wind       | Summer |        |        | Autumn |        |        | Winter |        |        | Spring |        |        |
|------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|            | 9 a.m. | 3 p.m. | 9 p.m. | 9 a.m. | 3 p.m. | 9 p.m. | 9 a.m. | 3 p.m. | 9 p.m. | 9 a.m. | 3 p.m. | 9 p.m. |
| N.E. (lb.) | 2.0    | 2.0    | 2.1    | 2.1    | 2.0    | 1.9    | 1.5    | 1.3    | 1.7    | 1.9    | 1.8    | 1.8    |
| W. (lb.)   | 1.7    | 1.4    | 1.3    | 1.0    | 1.1    | 1.0    | 1.0    | 1.0    | 1.0    | 1.0    | 1.1    | 1.1    |

Here it is seen that the "westerly" of winter is only half as moist as the "north-easter" of summer.

The relative humidity is added to the table because it represents an important factor in modifying our perception of air temperatures. Not only is our sensibility to extremes of temperature greatly influenced by the amount of moisture present, but a change of temperature is also felt more readily when the relative humidity is high than when it is low.

It should be noted that, although the values given in the table are the averages of ten years' records, there is necessarily a wide variation in the number of observations from which the means for each particular wind and hour are derived. This may partly account for some departures from the ordinary daily temperature range. Again, the wind direction given is that actually recorded at the hour; in some cases this would not be the direction which had previously influenced the temperature, while in other occasions the cumulative effect of progressive heating or cooling, due to a particular wind, would be shown by the thermometer. Similarly, the wet wind of autumn and winter, although it is the dry fog dispersing wind, is frequently credited with high humidities; this is due to the wind having commenced before 9 a.m. without having effected the clearing of the fog by that hour.

Cooling by agencies other than the wind has not been taken into account, as the observations include both wet and dry days. The normal diurnal range of temperature at Sydney, however, is less than in any other Australian capital, the mean seasonal amounts being—Spring, 15.0 degrees; summer, 13.4 degrees; autumn, 12.7 degrees; and winter, 13.4 degrees.

#### HOURS OF SUNSHINE.

| Station.               | Total Sunshine for April. | Mean Daily Amount. | Greatest Daily Amount. | Total for April in Years. | Number of Years. |
|------------------------|---------------------------|--------------------|------------------------|---------------------------|------------------|
| Parramatta (W.A.)      | 227.7                     | 7.1                | 10.0                   | 214.2                     | 14               |
| Albionville (S.A.)     | 112.7                     | 4.8                | 10.1                   | 170.1                     | 30               |
| Albionville (S.E.)     | 281.7                     | 9.0                | 10.0                   | —                         | —                |
| Brinsford (Queensland) | 273.0                     | 9.0                | 10.0                   | 207.7                     | —                |
| St. Albans (V.)        | 116.0                     | 4.0                | 8.0                    | 173.9                     | 1                |
| St. Albans (Victoria)  | 227.8                     | 7.0                | 10.1                   | —                         | —                |
| Capital (Vic.)         | 108.3                     | 3.6                | 8.0                    | 137.4                     | 21               |
| Melbourne (V.)         | 132.2                     | 4.4                | 9.0                    | 132.0                     | 30               |
| Robart (T.)            | —                         | —                  | —                      | —                         | —                |

I have not seen similar figures published in regard to Melbourne. I have made the following memorandum for the information of the Committee:—

Weather Bureau, Sydney,  
30th August, 1919.

#### TEMPERATURE.

At Sydney the mean annual temperature is 63 degrees, and the mean 9 a.m. humidity 72 per cent.

Of course, a statement of the average annual values of the respective elements at any locality does not in itself actually reveal some of the important extremes which happen in the course of a year.

The absolute extreme maximum temperature for all years at Sydney was 109.5 degrees on the 13th January, 1896, and the extreme minimum reading was 35.9 degrees on the 12th July, 1930.

The accompanying statistics provide practically all possible climatological information of this city in such a form that for each of the chief winds (N., N.E., E., S.E., S., S.W., W., and N.W.) one is able to see the average 9 a.m., 3 p.m., and 9 p.m. temperature and humidity in each of the seasons, as also the duration and rate (in miles) from the various points.

It may be stated that extremes of both heat and cold are rare at Sydney, due to its proximity to the ocean, which exercises a modifying influence on temperature by arresting, in many instances, heat-wave tendencies in summer by means of the N.E. breeze. In winter, the same influence (the ocean) retards the development of cold waves in various ways.

The following is a comparison of the chief features in the respective elements of Sydney and Melbourne:—

|           | Mean Max. | Mean Min. | Extrema Max. | Extrema Min. | 9 a.m. Humidity | Average Annual Rainfall | Prevailing Wind. |
|-----------|-----------|-----------|--------------|--------------|-----------------|-------------------------|------------------|
| Sydney    | 60.9      | 56.1      | 109.5        | 35.9         | 72%             | 46.01                   | N.E., N.W., S.W. |
| Melbourne | 47.8      | 49.0      | 111.2        | 27.0         | 66%             | 23.6                    | S.W., N.W.       |

#### WINDS.

The prevalence or otherwise of dust in quantities sufficient to render it a feature of more than passing importance, depends upon the weather conditions which, if dry over a protracted period, are responsible for the accumulation of particles of earth and other substances of a light and mobile character which are transported by fresh winds from any direction.

Dusty weather is not a frequent experience at Sydney, for, although, as in most cities, there is, under favorable circumstances, often enough loose material to constitute a duststorm, yet the normal conditions do not usually satisfy the requirements of such a phenomenon.

It is only occasionally that the dust in the air in the city becomes appreciable, but this is chiefly during a dry spell.

The average rainfall of Sydney, however, is 48 inches as the result of 158.7 wet days, a circumstance that is opposed to dust element becoming of much moment in our atmosphere.

Westerly winds prevail in the winter months, June, July, and August, and N.E. winds are most often in evidence in summer, December, January, and February. The westerly is rather dry, there being only about 3 grains of water vapour on the average in a cubic foot of air, but the N.E., though not in most instances a damp wind, contains about 6 grains of water vapour on the average. Thus, in considering the two chief winds in a year at Sydney, it is seen that the westerly contains just half the moisture of the north-easter.

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During a north-easter in the summer, with a temperature somewhere about 75 degrees, saturated point would mean 9.4 grains of moisture in a cubic foot of air in a room in Sydney. Consequently, at a temperature of 75 degrees, even with only 50 per cent. of the possible maximum amount of moisture in a room 15 x 15 x 10 feet, there would be as much as 4.7 lbs. of water in suspension. I can supply you with a comparative statement of the amount of moisture in suspension in a building with, say, 10,000 cubic feet of space at the maximum humidity for both Sydney and Melbourne. I shall endeavour to get the figures for 9 a.m., 3 p.m., and 9 p.m. for both cities. I have not the information to show the humidity conditions at Canberra. I doubt if I could get Canberra, but I can get them for Queensland, which would be representative enough. I should think that the humidity conditions there would be something below those of Sydney and Melbourne. The temperature, due to the altitude, would be lower, and the capacity of the air for holding moisture would be, therefore, lower. If the temperature there is 5 degrees lower than the Sydney average, it would be about 35 degrees, and the air would hold considerably less moisture in suspension than in Sydney, and, I should think, perhaps less than in Melbourne. I doubt if there would be any danger in establishing a factory for work of this sort at Canberra, from the point of view of humidity. In any case, the moisture is relative and not absolute. Sometimes at 9 a.m. in Sydney we approach 100 per cent., which is actual fog saturation. In the colder climates the 9 a.m. humidity would be higher still, but later in the day, as the sun comes out, the moisture in the air would be quickly dispersed, and a rather low percentage of humidity reached.

102. To Mr. Sinclair.—It is hard to draw the difference in the humidity at the 100-ft. level and the 1,000 ft. level. The temperature drops 1.2 degrees for every 300 feet of ascent, so that the temperature at 1,000 feet is practically 30 degrees below the temperature at the base. If Canberra is 2,000 feet elevation, the difference in temperature would be slightly over 6 degrees. I cannot make a comparison of the relative humidities. Local conditions make a great difference in the amount of dew deposited at sunset in different localities. A rapid drop in temperature at sunset, where the air contains a fair amount of humidity, will result in dew. In more southern latitudes, where the temperature is lower, the air is not capable of holding so much moisture in suspension. Two grains of moisture will saturate a cubic foot of air at a temperature of 30 degrees, whereas 70 degrees a cubic foot of air is capable of containing 8 grains of moisture in suspension. Our readings are taken at the Observatory, at Dargles Station. There would be a relative difference between the humidity at Circular Quay and the Central Railway Station, due to the distance of the latter from the water, which is the source of moisture, but we do not usually calculate differences over a small distance of that kind. On a calm summer evening, after a north-easterly, the air would be more oppressive near the quay than at the railway station. In some circumstances a rise of 300 feet in elevation makes a considerable difference. Sydney's climate is widely diverse, according to the prevailing winds. I have mentioned the effect of the N.E. winds. The N.W. winds, which blow mostly in the spring and summer months, reach us very dry after coming over the mainland and the mountains. I have known the relative humidity in Sydney to be down as low as 10 per cent. I cannot say if the Melbourne climate would be a better drying climate than Sydney. Any heat we get in Sydney would be somewhat more prolonged than in Melbourne.



103. *To Mr. Mathews.*—The greater the moisture in the atmosphere the greater the oppressiveness felt by the human body. The paper on which the notes are printed would dry much quicker in a dry heat than in a moist heat, because in a dry heat the evaporation is not hindered. Judging by the temperature and humidity figures, there is actually very little difference between Sydney and Melbourne for paper-drying purposes. It is a matter of three-quarters of a grain difference between Sydney and Melbourne, but that, again, is based only on the figures for 9 a.m.

104. *To Senator Newland.*—Artificial heating would dry the atmosphere, and the percentage of humidity in the room would be considerably lessened. A damp atmosphere could be counteracted by artificial heating. In a room, I should think that a gas fire or electric heater would be more effective in drying the air than hot-water pipes would be.

105. *To Mr. Sampson.*—The highest temperature ever recorded in Adelaide was 116.3 degrees in 1878. The lowest recorded there is 32 degrees. The highest mean monthly relative humidity there is 87 per cent, and the lowest 29 per cent. In most cases, when the temperature is over 100 degrees, the humidity is only between 10 and 15 per cent. The highest mean monthly day-time temperature of Adelaide is 72.8 degrees. I can supply you with comparisons between a number of inland towns, like Bourke, and Sydney, with regard to moisture. Professor Pollock, of the University, and Mr. Guthrie, the State Government Chemist, could possibly give the Committee information regarding the composition of the atmosphere in the principal cities.

106. *To the Chairman.*—I should think that dust and smoke nuisance would be an important factor in considering the suitability of the parcels post building for this work. I should not think you would get more dust there than in other parts of the city. Whatever smoke and fumes would be likely to enter the building and settle on a foggy morning would depend on the aspect of the doors. Provision against the polluted air blowing in would be an important consideration. I should think that there would be a danger in putting delicate machinery, which would be affected by smoke and fumes, so close to the railway station, which is the source of the smoke, especially in view of Mr. Harrison's statement that all high-class printing establishments have now been removed some distance out of London in order to avoid the smoke nuisance. I have not noticed any particular deterioration of the stone buildings close to the railway station, but there would be a element of danger in going so close to the source of smoke. The engines are responsible for a percentage of the impurities in the atmosphere which, during a calm, are likely to settle in the immediate neighbourhood. The New South Wales Government Printer might give you valuable information from his experience. The precipitation of dust, smoke, and fumes from the atmosphere depends on the prevailing winds. A breeze from almost any direction would bring fumes from outlying gasworks. I cannot state the exact distance at which these fumes are appreciable, but I have noticed them about a quarter of a mile from their source. The principal thing to be taken into consideration in the Railway-square would be the dust and smoke nuisance. That occurs mostly in the dry season, although it may not be noticed during one or two good seasons.

(Witness withdrew.)

John Gale, Retired Journalist, Queanbeyan, sworn and examined.

107. *To the Chairman.*—I have been in the district since 1854, and have come to give evidence as the accredited representative of the municipality. The

average rainfall is between 24 and 25 inches. The atmosphere is dry. We have railway communication by means of a daily service by the Cooma line to Goulburn, and thence to Sydney. We have no direct railway communication with Yass, but we have daily communication by coach and motor. So far as building material for putting up a note printing office is concerned, there are stored at Canberra millions of bricks and millions of feet of timber of all sizes and dimensions. I might almost say untold millions. They have been stored there for years. The timber is mostly hardwood from the northern districts, and a great deal of it is ironbark. Inexhaustible quarries of limestone and bluestone are there on the spot. Granite can be obtained 10 miles away. Queanbeyan has about 2,900 inhabitants, Yass 2,400, Cooma about 2,900, and Goulburn 12,000. All of these are within easy access of Canberra, so that there should be no difficulty in getting the number of girls necessary for the work of the factory. As to accommodation, there is already up there a Concentration Camp midway between Queanbeyan and the Capital. It is an empty city, capable of accommodating a population of 20,000. It was built for the internment of enemy subjects, and is now no longer used for that purpose. It offers every accommodation necessary for modern life. It would suit members of Parliament if Parliament was taken there. If the factory was established at Canberra, the employees could get accommodation at Queanbeyan, where there is hotel and private accommodation available. Rooms could be found for 200 employees. If the local police could not furnish sufficient guard for the factory, the Government could provide a military or police guard. I do not think there would be any danger of bushrangers gangs starting in the mountains. There are several reasons why the Committee should recommend Canberra as the site for the building. In the first place, the expenditure there would be incurred once for all, whereas in Sydney or Melbourne any building acquired or erected for this purpose would be only temporary. The land belongs to the Commonwealth, and the erection of new buildings will increase its value.

108. *To Mr. Laird Smith.*—The timber I mentioned was brought to Canberra before the war, in the hope and with the expectation of work going on there to put up 100 buildings or more. It will run into millions of feet. The bricks are also there on the spot ready made. These materials are stored about 8 miles from Queanbeyan. The Concentration Camp has footpaths and streets made, water and electric light laid on, and house accommodation for 20,000 people.

109. *To Mr. Sampson.*—It has the best water supply in the world, drawn from the Cotter. There is a fire brigade at Queanbeyan.

110. *To Senator Henderson.*—The timber lying at Canberra is of all dimensions. There are two or three timber mills around Queanbeyan, but the Government, in wisdom, which I question, thought it more economical to bring the timber already sawn from the northern districts and elsewhere. Very little of the local timber has been bought, although there is a vast supply, which has not been tapped, of the finest timber within 10 miles of Canberra. If from 200 to 250 girls were working at the factory, they could live at Queanbeyan, and could be taken into Canberra by the railway already running.

111. *To Mr. Sampson.*—If there are a number of young girls in their teens employed, it would be better to board them in and around Queanbeyan with private people. No doubt the large cities offer accommodation which is not to be found in any country town. I admit the objection to taking young girls away from their homes.

112. *To Mr. Sinclair.*—The houses at the Concentration Camp were built for the British Government with

their money, but they are within the Federal Capital Territory. They are wooden structures, but very comfortable. If no use is found for them they will probably be sold for what they will fetch, which seems a pity.

113. *To Mr. Mathews.*—Provision was made there for the internment of 20,000 people. I would not object to live in any of the houses there; they are good enough for any one. Those meant for the internees were not so spacious and full of comforts as those built for the officers. There is any amount of privacy in them. If any one spoke loudly he could be heard through the partition. They are so constructed as to afford ordinary privacy for people living in them.

114. *To the Chairman.*—I do not see why the construction of a building of this sort should be delayed until the Parliament is transferred to Canberra. The only drawback is that there is no home life for the girls. They will have to board with some one. I do not think there would be much danger through the notes having to be sent down long distances from Canberra to the big cities. There is railway communication, and the notes can be efficiently guarded. The police escorts were able to protect the gold in the old days when it was sent by road. As the representative of the Queanbeyan people, I think the building should be erected at the Capital immediately. Once it is put up it will always be there. Labour, skilled and unskilled, is available for the erection of the building, and there is accommodation for the employees.

#### (Taken in Sydney.)

TUESDAY, 2ND SEPTEMBER, 1910.

Present:

Mr. GUNSON, Chairman;

|                   |                  |
|-------------------|------------------|
| Senator Henderson | Mr. Sampson      |
| Senator Newland   | Mr. Sinclair     |
| Mr. Mahony        | Mr. Laird Smith. |
| Mr. Mathews       |                  |

Charles Henry Crammond, Managing Director of Richardson and French Limited, Estate Agents, sworn and examined.

115. *To the Chairman.*—Buildings of the kind you require for the Note Printing Branch are difficult to get in Sydney. I have had my letting men out scouting, and our experience is that very few buildings of that description have been erected in the last four years in the city. There is one property, not close to a gasworks, but certainly near the gasometer at the Hay market, although I do not think the gasometer is extensively used now. The building is known as "Henderson's Sweets" building. A large sign, "Henderson's Sweets," appears on the wall opposite Behneke Park. The building, which is of excellent and substantial construction, is in Barlow-street, just off Pitt-street. It has a ground and four upper floors, and a floor space of about 44,000 superficial feet. It is on a corner, and only one remove from another corner. It was formerly one of Anthony Hordern's warehouses, and was exceptionally well built by Bond, the architect. It is of brick and cement, with a concrete ground floor, and upper floors of timber heavily built for warehouse purposes to carry big weights. The rental is £4,000 per annum. We think this a big rent, as it works out at £2 a thousand. It is above what we expect to give for a warehouse building of that description, but that is the price the owners are quoting to us, and we have no alternative but to quote it to you. There is also a building of 30,000 superficial feet in Kent-street, between

Park and Bathurst streets. That is more of the warehouse type of store, and may be rather small for the requirements. If the end of the year is not too far ahead to look for a building, there is another property which is to be erected, but will not be finished till about March, 1920. It is in a very good position in Harrington-street, through to Gloucester-street, near the Observatory, high, and away from the adverse influences of which Mr. Harrison speaks. It runs through from street to street, with 110 feet frontage to Cumberland-street by 123 feet deep. It will have five floors, and a floor space of 55,000 square feet. The rental will be £15,000 per annum. That is a property which might be worth while keeping in mind. It will be of up-to-date construction, made of brick front, and reinforced concrete walls and interior. State Clothing Factory is on southern side; G. E. Crane and Sons' warehouse on northern boundary. The building will have an electric goods lift. The estimated cost of the building is £15,000. The land would be worth about £10,000. It is an part of the old Sydney that was resumed by the City Council, and the buildings in that quarter are mostly de Pinge. The 15-foot street building has an electric lift and a goods lift, and the rental is £105 per month and taxes. It is on the west side of Kent-street. Both that and the Barlow-street building are available. In each case there is an electric lift and the ordinary lift or accommodation. I can not say if there are strong reasons in either.

116. *To Mr. Sampson.* I can ascertain and supply you with particulars showing the capital cost, including the cost of the ground regarding the building in Barlow-street. Generally, we would average the cost of a building of that description at nearer 30s. than £2 a thousand. In Sydney, I say, investors will not buy city property under a return of about 7 per cent. Money on safe-securities is returning 6½ per cent, with a margin of 10-20 per cent. The Perpetual Trustee Company is lending on high-class securities at 8 per cent on from 50 to 75 per cent of the value. The rating has gone up considerably. It is £4½ on the unimproved value, which comes very expensive where land is worth £600 per foot, unless the owner has on it a building which gives a good return. Rating on the unimproved value hits up the man who has a small building on expensive land. In some instances it is an advantage to the owner with a property such as Colville Chambers, with a very narrow frontage. There is a paya better to be rated at the unimproved value, but from a building such as the one in George-street, opposite the Equitable, with a 72 ft. frontage, rated at approximately £600 per foot, where we asked to get a return of 6 per cent, it is now down to a little over 3 per cent. Because the building is old and only three stories high. It should be pulled down, and a building of eight or ten stories put up. Except in the case of the Kent-street building the rates of the places I have submitted to you would be paid, and the quotation would be net. I consider, however, that the Kent-street building is unsuitable for your requirements.

117. *To Senator Newland.* The House room, Sweets building is two minutes from the railway station. The price asked is £10,000, which we consider high. I do not think it would be affected by the smoke from the engines. The station buildings would not act as a big break, and as the property is so much lower than the station, I should think the smoke would go right over. The neighbouring gasometer is always dirty. The Gas Company are removing the gasometer. Mr. Bond had the reputation of being a sound, old-fashioned builder, and put in very thick walls. Hordern's fire, at the Haymarket, took place about twenty years ago, and I think this building was erected there afterwards. The Kent-street building is in a low situation.



127. To the *Chairman*.—As a rule, bank notes are distributed to all centres in the Commonwealth from the Treasury, at Melbourne, under personal escort. It takes two Treasury officers, accompanied by a policeman, on every trip from Melbourne to any of the centres. The consignment of notes is then taken through by the Commonwealth Bank, whose agents apply for them and count them. Then, as they return from the Commonwealth, the notes are sent to them from the Commonwealth Treasury. The Bank act as agents for the Commonwealth Treasury. The centres I refer to do not necessarily mean the Capitals. There are centres at Perth, Adelaide, Hobart, Sydney, Brisbane, Townsville, Rockhampton, Mackay, Cairns, and Cairns. Notes are sent under escort to each of those places from Melbourne. At each of these places the Queensland National Bank acts as the agent for the Commonwealth Bank. Notes are not returned in the same way. In that case we act as agents, and cancel the notes in the different centres, and then send them to the Treasury at Melbourne by registered post. I do not favour the present escort system. I have been



connected with the business for twenty-five years, both in this bank and the Bank of New South Wales, where I was assistant cashier. In that bank we got our notes out from London by steamer. They were already printed, and were only waiting for the signatures. We received a remittance from London probably every month. Most of the other banks received theirs from London also. They were nearly all printed by Skipper and East, and came out in sealed boxes. There was never any fear of loss. Certainly the Bank of New South Wales never lost any in transit. If the notes were printed in Sydney we could distribute them from Sydney by steamer. We could put them in the strong-room of the vessel. We could do this much more advantageously than Melbourne could, as we could supply the northern places more easily. We could also send them to the West. They would not need to be touched after being put in the strong-room until they reached the other centre. It is not necessary for the Note Printing Department to be in close touch with the Commonwealth Treasury. The Treasury can have a sub-department here to look after the issue of the notes. I would not like to pass disparaging remarks on the Treasury, but I should think it would be an advantage to put the management of the note issue into professional hands. The Treasury officials are not bankers. The whole thing could be handled much more advantageously by the Commonwealth Bank, and I make that suggestion. The advantage is that the issue would be handled by bankers. Of course, it would alter the whole aspect of the case if the bank did control the issue, inasmuch as Sydney would become the distributing centre, and the notes would be printed in Sydney. The shipping conveniences in Sydney are much more handy than they are in Melbourne. Better facilities would exist for shipping notes to the various centres from Sydney. I have had no experience in note printing. I should think that any difficulties caused by a moist or polluted atmosphere could be reduced to a minimum in an up-to-date note printing establishment. The placing of the works at Canberra forthwith is a debatable question. There would be disadvantages in having to bring everything to a distributing centre, or in distributing from Canberra. The notes would have to be brought to Sydney to be placed on the steamer, or they would have to be taken under escort by train to the various centres as they now are. If the notes were printed at Canberra all precautions would be taken to guard against any possibility of theft. That has always to be done, no matter where the notes are printed. I do not think any more precautions would have to be taken in a remote country district than in Sydney or Melbourne. Under present conditions it would not be as convenient to print them in Canberra as in Sydney or Melbourne.

128. *To Mr. Sinclair.*—Sending the notes out by steamer would considerably reduce the cost of escort. I have not gone into the figures. I know that at present the Treasury has to provide for six berths on each train for every escort, no matter how far away the centre is. The escort is paid so much per trip at a flat rate, which covers ordinary expenses, with a little margin. The notes are brought over in the boxes. The escort has to keep them under constant watch. If going to Brisbane they break their journey for a day. They do not sleep on their way over from Melbourne. When they reach here they put the boxes in our strong-room and go on the next night. We received consignments twice a month; in fact, I have had three escorts over in the last month. The escorts go right up north even as far as Darwin. The Treasury cannot supply notes in sufficient quantity to distribute to the northern towns from Brisbane. The trip to Darwin from Melbourne may be done only about four times a year. I think I am well within the mark in saying that an escort goes

to Brisbane once a month. I know they go through here pretty frequently. One went through to Brisbane the other day, and probably another will be wanted immediately. The fares would probably come to £150 per escort to Brisbane.

129. *To Mr. Mathews.*—Speaking professionally, I do not think that the note issue is best controlled from Melbourne under the immediate supervision of the Treasury. At present all the banks in Sydney are thrifling for £5-notes, and we cannot get them. The escort that day-day brought only £10,000 worth of £5-notes, and I could almost use them myself. We cannot get "fives" or "tens" for love or money. That is the general thing. The present output must be increased considerably to supply the demand. I dare say that with the bank-note issue, run as it is now, the shortage would be just as great if the printing establishment was in Sydney, but that brings me back to my previous suggestion, that it should be in the hands of bankers. We have known the requirements for twenty years. We know every pitfall and everything else connected with the output of notes, and if we had had the printing and distribution of them we would have made provision accordingly, and not gone on with any other printing. We have constantly put our requirements before the Treasury, and you see the result. We are short not only of "fives" and "tens" but also of "ones." The same thing applies to every centre. I am not in a position to say whether the banks in Melbourne are supplied with more of those denominations than we are. With the present facilities for output, and with control by the Treasury, I dare say they could do the distribution as well from Melbourne as they could from Sydney. It is all a question whether they can put the notes out fast enough. They could use the same distributing process, and produce a larger number of notes, so as to keep the places supplied. I admit that with the present system of control they do it just as freely from Melbourne as from Sydney. We inform the Treasury of our shortage of different denominations. We are worrying the Treasury for them, as we want them to provide for the racing season, for Christmas-time, and for Easter-time. Our requirements for notes seem to be beyond the comprehension of the Treasury in Melbourne. Of course, if they cannot produce the notes any faster that settles it, but facilities should be provided to enable them to produce enough for Australian requirements. With the present method of production, I admit that the same difficulties would obtain if the notes were printed here. Merely changing the city would not remove the difficulties. I favour sending the notes away from the producing centre in sealed boxes under strong-room protection by mail steamers or Inter-State steamers. That could be done equally as well from Melbourne as from Sydney but for the fact that the shipping facilities are not as good there as here. The Inter-State boats that travel to the north of Queensland certainly call at Melbourne, but the P. and O. boats do not go to Brisbane from Melbourne. I prefer the P. and O. or Orient boats for this purpose. They seem to guard the consignments more, or to regard them more seriously than the coastal steamers do. I do not mean that the coastal steamers are careless, but the two bigger companies seem to give one a greater assurance that they are looking after the notes. I believe that the consignments of sovereigns that were reported on two occasions to have been stolen from the P. and O. boats were taken before they went on board. I am convinced they never got on to the boats. It would not cost more to distribute the notes from Sydney than from Melbourne, with the Treasury in Melbourne still in control of the issue. It is only a question of freight. On balloon the freight from Sydney to Perth is exactly the same as from Melbourne to

Perth. I would not be inclined to believe without investigation the statement that it would cost more to make Sydney the producing and distributing centre. If the distributing was done by steamer, Sydney would be the best centre. If the Commonwealth Bank controlled the note issue, the whole aspect of the question would be altered. The Bank, with its head office in Sydney, would control it from Sydney. The question of the profits from the issue would have to be settled as a matter of policy.

130. *To Mr. Mahony.*—In the volume of business done by the Commonwealth Bank, I think Sydney can beat Melbourne out of sight. The reason is that Sydney is the centre of commerce. The fact that the note printing is done in Melbourne considerably inconveniences us here. If, as I believe, we are the greatest distributors and do far more business here than in Melbourne, it would not take as much to send Melbourne requirements from Sydney as it does to send Sydney requirements from Melbourne. It would be a great convenience to have the notes printed in Sydney. We are always at loggerheads with the other banks through not being able to supply their demands for notes. We ourselves are always trying to beg, borrow, or steal a few notes from the other banks to carry on with. This is through the Treasury not supplying us with our demands.

131. *To Senator Newland.*—The Commonwealth Bank in Sydney is not responsible for any shortage of notes in any other centre. Our returns to our own branches are controlled from the head office, and our centres advise us if their note supply is below a certain standard. Then the reply will come back that the Treasury is unable to supply. Our branches at Townsville, Rockhampton, or agent at Darwin will notify us that they want notes, and at the same time they will notify the Treasury and ask for supplies. The head office in each State is the distributing centre for that State. We distribute to all parts of New South Wales except Broken Hill, which is supplied by Adelaide. We are responsible, as the agent of the Treasury, for the distribution of notes in New South Wales.

132. *To Mr. Laird Smith.*—You could ascertain from the Treasury books the amount of notes in circulation in the Commonwealth to carry on the commercial currency. Each bank holds its own proportion of notes, but they are still in issue so far as the Treasury are concerned. A £1,000-note is an I.O.U. An issue of £10,000,000 would by no means suffice for the currency of Australia. A £10,000,000 issue would only about satisfy the demand for £1-notes. The circulation of 10s-notes is almost as large, so that it would require twice the number of notes for that denomination alone. The notes held by each bank against the gold they have handed over to the Treasury are principally in big denominations. There are no £1-notes stored away for that purpose. They are too bulky to store. The cause of the whole shortage is that not enough notes are printed. If greater facilities are given for printing the supply should meet all demands. If our demand was supplied I do not think it would increase the currency of the notes to any great extent. The circulation varies with different periods. During the racing season, both here and in Melbourne, we have to increase our demand almost double in the case of the small denominations. They have to be provided by the Treasury, although they are not actually in circulation. We invariably have to keep the Treasury right up to the mark to provide for the busy season six months ahead. The same has to be applied to the Christmas and Easter seasons, when the demand both in Sydney and Melbourne is far and away beyond that of normal times. At these exceptional periods there is a great influx of

people into the big cities. Practically every one is carrying some notes. If each man goes about with two or three notes on him, the aggregate amount is very large, and must be provided from some source. It is impossible to determine the average life of a note. It depends on the handling. Some notes may not go into circulation at once, and may last twice as long as others. We have a special staff to determine whether notes shall be withdrawn from circulation. Nowadays the note is regarded as a germ carrier. I have handled them for many years, and do not think I am any the worse for it. If the Brisbane branch wants notes, it makes direct application to the Treasury, and invariably advises us at the same time, asking us to hurry the Treasury up. The Treasury is represented in this building by a sub-Treasury branch, which has been established only within the last month. Any payments we make to the Treasury go through the sub-branch here. It has ten or twelve officers. If the note printing was done in Sydney, we would still be in touch with the Treasury. We would not object to the notes being sent over in greater numbers at longer intervals, say, in six monthly supplies, if the Treasury was able to supply us with enough, but the smaller centres would find it inconvenient owing to the shortages of safe accommodation. There is also the question of the danger of holding very big stocks in the smaller centres. We could safely store larger quantities in the capitals. It would not be necessary to put a guard over the bank in Brisbane to look after a six months' supply. We hold millions in Brisbane in gold, and have no more guard over it than over millions of pounds' worth of notes. There is no need to have a strong-room at the Note Printing Office to store millions of notes. The Printing Office, if it has an over-supply, can immediately deliver them to the Treasury. The Bank of New South Wales here and in Brisbane carries a supply of millions in gold. Our own bank carries a big supply of gold in most of the centres, but in Perth we also use the Mint. Although we have no actual military guard in the same sense as the Commonwealth Treasury, we have armed night watchmen at all large centres. At this office six of these watchmen are constantly on duty.

134. *To Mr. Sampson.*—Before the Commonwealth undertook the printing of notes, each bank distributed its own notes in packets by registered post. That was our system for all the years that I was connected with the Bank of New South Wales, which still follows the same practice. All the banks send their notes to their branches by that method from each capital centre. It is not regarded as a risky method. In the early days the notes were sent out unsigned, and were signed by the local branch officers. Each branch would have a certain amount of numbers to issue. That system was regarded as a safeguard. To the general public the signature on a note does not signify anything. In the early days the signing of the notes at the country branches was a safeguard to a certain extent. The distribution of the notes unsigned is no safeguard under present conditions. All the signatures are printed on the Commonwealth notes, and any one can get hold of a rubber stamp with a tracing of them. Under present conditions, I would have a different system of distribution in place of the escort system. The only other way would be to send the notes by steamer under strong-room protection. My opinion and experience is that the notes could be sent by steamer to all the main centres with reasonable safety. Under the old system, centres like Sydney, Melbourne, and Suva, received their notes unsigned from England, signed them and issued them themselves. I signed notes in the Bank of New South Wales for a number of years. When we make gold shipments between the different centres, we put the gold in sealed boxes, take it down to the P.



and O. steamer, and our officers call for it at its destination. No extra safeguard is taken, so why should extra precautions be taken in the sending out of notes? The consignment would be in the strong-room of the ship. The gold, when shipped, is in the charge of the ship's officers. The captain signs the bill of lading, and the shipping company takes the responsibility. No doubt they make a special charge for it.

(Taken at Sydney.)

THURSDAY, 4th SEPTEMBER, 1910.

Present:

Mr. GUNN, Chairman;

|                   |                  |
|-------------------|------------------|
| Senator Henderson | Mr. Sampson      |
| Senator Newland   | Mr. Sinclair     |
| Mr. Mahony        | Mr. Laird Smith. |
| Mr. Mathews       |                  |

Hon. William Brooks, M.L.C., Printer and Publisher, Treasurer of the Australian Federal Capital League, sworn and examined.

134a. *To the Chairman.* The league has been formed in New South Wales, and its executive considers, firstly, that the expenditure on the proposed new building should not be incurred at all if it can possibly be avoided; and, secondly, that on no account should it be incurred in Melbourne. We feel very strongly, as advocates of the early transference of the Federal Capital to Canberra, that any additional expenditure on Federal buildings, administrative or industrial, in the city of Melbourne forms another sheet-anchor to keep the Federal Administration at Melbourne instead of at the Federal Capital, on the site chosen by the Federal Parliament, the transference of the Government to which would, although late in the day, carry out the compact made with the State of New South Wales in the Federal Constitution. That is the principle underlying my representations I make this morning. I accept fully and freely the statement that it is absolutely necessary to remove the note printing offices from their present situation. At this stage, unless a new building is going to be put up in a position which would conform to the spirit of the Federal Capital compact, a temporary building must be provided in the vicinity of Sydney. This would curtail greatly the expenditure proposed under the building scheme put before your Committee in Melbourne. There are large areas within easy access of Sydney on which a temporary building of one floor could be placed. That would give all the space necessary in the meantime to carry on the work, and, at the same time, give the employees healthy surroundings. If the Committee decide that the transfer of the Seat of Government to Canberra is in the distant future, and that a permanent building ought to be erected somewhere now, and that it is impracticable or undesirable to erect it at Canberra, I would strongly urge that the only place that has a claim to that building is the city of Sydney, or, at any rate, somewhere in New South Wales. It would be rather difficult to transfer an activity of this sort to Canberra immediately, but it would not be at all impossible. It would make a very good start with the building of the Federal Capital. The industry is carried on entirely on its own, and if I were in charge of the production of Commonwealth notes, I would certainly say it was possible to carry on the work at Canberra, which would be a most delightful situation to work in. I see nothing in the surroundings of the work that would prevent it being carried out completely at Canberra. Anything done now in connexion with the expenditure of money on works for Federal administration and activities should be done with the idea and the acknowledgment that the Capital is to be

established at Canberra. If the present Government and Parliament accept the principle that the Capital should be established quickly and early at Canberra, then there is nothing to prevent the erection of this establishment on the Federal Capital site. If the Government and Parliament are not prepared to take that responsibility, I suggest one of two alternatives—either the erection of a temporary building on suburban land at Sydney, or, if the Committee think a permanent building absolutely essential, the erection of that building in or near Sydney, or, at any rate, in New South Wales. If the work was established at Canberra forthwith, some of the existing staff would have to be taken there, and provision made for their upkeep, but that is not an insuperable obstacle. It is a little added work and difficulty, but not a real difficulty. Looking at the matter from a practical standpoint, I would make my recommendations in this order:—1, Temporary building in the vicinity of Sydney; 2, permanent building at Canberra; 3, permanent building in or near Sydney. I should not think that the fact that the control of this activity is vested in the Treasury, which has its headquarters in Melbourne, would make any difference to my suggestions. In the present position of the Federal Capital question, the claim of Sydney for the establishment of this work here rather than in Melbourne is so obvious that it does not need argument. I find that Melbourne men profess to be quite as willing and ready as we are that the Capital should be transferred to Canberra at the earliest possible moment, but there always seems to be a reservation conveying the impression that "we can have it if we can get it." Melbourne people profess not to want to keep the Capital in Melbourne. If that is correct, there should be no desire on their part to see anything done that, on the face of it, would convey the impression that the establishment of the Capital in New South Wales is still far off. The erection of this expensive building in Melbourne would be a direct slap in the face to the Federal Capital movement, and would seem to indicate to the people of New South Wales that there is no intention on the part of the Federal Parliament, or the Federal Government, or the people of Victoria, or the majority of the people of the Commonwealth, to carry out the solemn compact made with New South Wales in the Federal Constitution. I should not think that any part of New South Wales would be unsuitable, through climatic conditions, for the carrying on of high-class note printing. I should not anticipate any difficulty in that regard, either at Canberra or near Sydney. Of course, there are places near Sydney, as there are near Melbourne, which are unsuitable through their surroundings. I would not advocate the establishment of the factory on the edge of Circular Quay, but 200 or 300 yards away it would be just as safe to carry out that work as in any other spot I know of.

135. *To Mr. Sampson.*—The crux of the whole position is that the Seat of Government, and all the activities of the Federal Administration, belong under the Constitution to New South Wales by inalienable right. The expenditure of a large sum of Federal money on a permanent building, which would still further tend both practically and by sentiment to chain the Federal Capital to Melbourne, is a wrong policy from the point of view of the claim of the whole State of New South Wales to the transference of the Capital activities to a place within our own borders. As no disadvantage would accrue to the Department by the transference of this particular activity to Sydney pending its removal to Canberra, Sydney has a claim which, to my mind, is so obvious as to be beyond dispute. I admit that the Federal Capital area has been surrendered by New South Wales to the Commonwealth, and is now Commonwealth property; at the same time, New South Wales has undoubtedly a greater claim than any other

State to anything that will ultimately belong to the Federal Capital. The name of New South Wales as a State is more intimately associated with the Federal Capital than that of any other State, and it has been so from the very beginning of Federation. When the Federal Parliament settled on the area in New South Wales which was to be taken as the Federal Capital site, it is not correct to assume that it settled the whole question that New South Wales was interested in. The Constitution provides that the Federal Capital shall be established within the borders of New South Wales, and not in any other State. The spirit, as well as the letter, of the compact entered into with New South Wales was not merely that a site should be chosen for the Capital in New South Wales, but that, presumably at an early date, the Capital should be established on that site, after the Federal Parliament had chosen it within the borders of New South Wales. The compact with New South Wales has not yet been carried out by the Federation, and, therefore, New South Wales stands in a different position from any other State in relation to the question of the Federal Capital and Federal activities. To the question, "The building of the Capital being a Federal, and not a State, matter, should any State put forward any preferential claim for the establishment of Commonwealth works over any other State?" I say, "Yes, most undoubtedly." Until the Federal compact is carried out New South Wales has an interest in the fulfilment of the bargain, and nothing should be done to create further obstacles to its fulfilment. The erection of this expensive building in Victoria would make the transfer of the Capital to the site chosen in New South Wales all the more difficult. It would mean the possible retention in Victoria of many Federal activities, owing to the expense of removal even after the establishment of the Capital in the Federal Capital Territory. The matter interests New South Wales much more than any other State, because New South Wales has the prior claim. The building of the Capital is not wholly a Federal matter, but a matter in which the State of New South Wales has a greater interest than any other State, because there is a compact with New South Wales which has not yet been carried out. The State has a claim for the early transference of the Capital to the Federal Capital site. I should not think there would be any difficulty in carrying the number of women employees required for this industry if the building was put in the Federal Capital Territory at once. It would not increase the cost of production to any appreciable extent. There would be some extra cost, but it would be slight, involved in establishing this building by itself and making all the necessary arrangements incidental to the industry in the Territory. There should not be any difficulty in making provision for female employees, even if they are young girls in their teens. They are only too pleased to go away from their homes to any good job in good surroundings. Whether it would be advisable or practicable to transfer a number of young girls to Canberra would depend on the surroundings and the facilities with which they could be kept in touch with civilization. Whatever the difficulties are in that regard, or in regard to labour generally, police and fire brigade protection, and the housing of employees, they are not great. The moment you begin to establish the Federal Capital on that site, you will have services which will be expensive in relation to the growth of the Capital. Whether the Note Printing establishment, or some other establishment, is put there first, you must of necessity meet some undue expenditure in administration. Admitting that that is a difficulty, I put as my first proposition the erection or acquisition of temporary premises in or around Sydney, but I do not think anything you have mentioned is an insuperable obstacle. I put the immediate establishment of a

factory at Canberra second, but I would prefer it to the erection of the building in Melbourne. The first and best proposition would be the erection of a temporary building of one floor somewhere around Sydney. If that is turned down, and there must be a permanent building, costing a large sum, that money should be spent either in or around Sydney, or at Canberra, in preference to Victoria. A temporary building of one floor should not cost a large amount. I would suggest a brick building with a gable and a low pitched roof and a good solid floor, put concrete to make the machinery, and the other part timber. This, with the necessary offices, should not involve a very considerable expenditure. I recommend this if a suitable temporary building, or a building that could be made suitable for the purpose, cannot be found in or around Sydney. As a business matter, if I had to face this problem myself, and if the solution of the Federal Capital question was available in the near future, say, within five years, the proposition to put up a temporary structure could be carried largely, if not wholly, by cost. It should be possible to put up a building which would be suitable for manufacturing purposes afterwards, because the factory area is extending now outside Sydney to a certain extent. It should be distinctly understood that when I refer to a temporary building, I mean a temporary building, not a permanent building or a factory. It could be a permanent building so far as manufacturing purposes are concerned, and could be used, or let, or sold for manufacturing purposes after the note printing activity had been transferred to Canberra. I have a factory three miles outside the city of Sydney. We are on a two-story only. I would not put a building of that sort up in the city of Sydney, where I had to pay a lot for land, and was, therefore, compelled to put up a number of floors. I would prefer to go outside Sydney, where fewer floors would be necessary, and all the light and airiness which make life most pleasant would be available. Looking at the matter from the economical, as well as from the practical, point of view, you should not erect a permanent building for this purpose anywhere except on the Federal Capital site. A building of one floor somewhere outside Sydney for the temporary housing of this activity on inexpensive land would be in great request in a few years' time. Probably £10,000 would amply cover all that was required. The Commonwealth Government would make a great investment, and certainly would not lose anything by it.

136. *To Mr. Sinclair.*—For the distribution of the notes when printed, Sydney has the advantage of containing the head office of the Commonwealth Bank, although not the head office of the Treasury at present. There should be no disadvantage in distributing from Sydney as compared with Melbourne. I would not consider distribution a very serious problem even at Canberra. No doubt it is necessary to convey the notes. That would, perhaps, cost a little more from Canberra. It should not cost any more from Sydney than from Melbourne. I see no material difficulty on that point.

137. *To Mr. Mathews.*—Our League desires to make the Federal Capital Territory an absolute success and a paying concern, if possible, with a railway to the coast, and all the facilities which the Federal Parliament, no doubt, had in its mind when it acquired the territory from Canberra right to the coast, including a very fine harbor. We consider that the time has arrived when the Federal Parliament should show some determination to proceed on those lines. That is the object of the establishment of our League. I did not say that New South Wales was bribed to enter the Federation. I would rather put it that the State made sacrifices to enter the Federation. We say that whatever advantages would naturally accrue from the establishment of the Capital in the Federal Territory, the State of



New South Wales is entitled to. We put our advocacy in the higher ground of the fulfilment of a solemn compact, which ought to be honoured at once. I speak, not as one seeking material benefit for my State, but as a philosopher and a philanthropist. The erection of this building at Canberra would be the formal beginning of a comprehensive scheme for the establishment of the Capital and the development of the Federal Territory. I have urged that temporary quarters should be found in the vicinity of Sydney, with a view to the ultimate establishment of a permanent building at Canberra, but, even taking all the surrounding conditions into consideration, I would rather see the building erected at Canberra than in Victoria. My definite claim is that it must be built in either Sydney or Canberra, in order to keep the compact. No doubt there is a desire on the part of some members to use the erection of this building as a lever to force on the construction of the Capital in the Territory. There is not the slightest truth, to my knowledge, in the press suggestion that the Federal Capital movement lately in New South Wales is being pushed on by persons who have large landed interests in the districts surrounding the Territory and for speculative purposes. The movement, as it originated and exists in New South Wales, is absolutely free in its organizing work, its executive, and the whole of its personnel from any influence of that sort. I know there has been land speculation, and plans have been shown to me extolling the advantages of blocks with water frontages outside the Territory. Wherever it was, there would be speculative activity surrounding the Territory. There is no comprehensive scheme that I know of for land speculative purposes, nor has any one come to the League to offer a contribution of £10,000 to its fund if the league can carry the movement through successfully. We have nothing to do with that aspect of the question.

138. To Mr. Matheson. The erection of the building in Melbourne would anchor the Federal Administration and Capital to Melbourne, delay the establishment of the Federal Capital at Canberra, and place another obstacle in the way. It would be a good thing to erect houses at Canberra to accommodate employees who would ultimately be transferred from Melbourne with their families. The sooner we get going on the erection of houses, the better it will be for the Federal Capital site. We are engaged in New South Wales in big housing schemes, but up to the present I have not heard any very whole-hearted admiration of concrete houses. They are being tried, but I cannot express any expert opinion on them. We are finding that good comfortable houses can be built for a moderate figure, and quite a moderate interest rental. They can be erected at Canberra relatively as cheaply. If the Commonwealth owns land adjacent to Sydney, it would depend entirely on the situation whether it was a good proposition to put up a temporary building for this purpose there. At Balmain, which is a crowded area, everything will depend on the locality chosen. I was thinking more of land in the direction of Kensington and Zetland. Factories are extending that way, and the land is not costly. A few years ago we put up a factory on 14 acres of land, which cost us £1,500 per acre. That area would give the Commonwealth all the floor space required. A one-story building in that locality would be valuable at any time in the next few years for many kinds of businesses, such as iron and steel works or boiler works. If the Commonwealth owns a piece of suitable ground, naturally that should be used first, but it depends entirely on the location, so far as this utility is concerned. In proportion to population, Sydney is quite equal to any other city in trading and commercial activities and in volume of business. I remember statistics displayed at an exhibition in the Royal Exchange, Sydney, a few years ago, showing that the in-

crease in the value of the trade and commerce of New South Wales for the previous year was equal to the whole trade of Victoria. If we have maintained that position, trade and commerce, and the circulation of money and notes must be very much greater in this State than in any other, and whatever advantages would accrue to the commercial community from the printing of notes locally would be greater in New South Wales than in any other State.

139. To Senator Newland.—Expense and delicate machinery must be properly housed, but it can be housed just as well on a concrete floor with a galvanized iron roof, so long as it is protected from the weather and from outside conditions, as in a building costing £250,000. The safety of the machinery can be just as easily provided for by a sound wall and roof in a one-story building on cheap land outside Sydney as in the most expensive building that could be put up in the city. You could erect, for £10,000 at the outside, a one-story factory which could be divided up and made suitable for the printing of Commonwealth notes, and afterwards be most valuable for other manufacturing purposes. My experience is that one-story buildings are cheaper in construction than higher buildings. I would not build a warehouse so much as a factory. I would prefer a sufficient area to put everything on the one floor, which gives greater facilities for handling and intercommunication. I would have a good roof, well protected and lined. If I had the land available I would prefer to put everything on the one floor. That could not be done on city land. If any expense is to be incurred in transferring the Note Printing establishment from the present site to some other site, we say that the transfer should be either to Sydney or to the Federal Capital Territory, and not to another site in Melbourne. It is quite possible that you would lose some of your trained employees, but I attach as much importance to the sentimental aspect of the question although it is a very practical aspect from our point of view—that I consider that the Commonwealth should put up with any inconvenience, or any moderate financial sacrifice, involved in the transfer. The matter should not be dealt with merely on commercial lines. We do not advocate any extravagant waste of money, but we say that the question of the establishment of Federal activities at the Federal Capital, and the necessity for doing nothing that would further anchor Federal activities in Victoria, should be kept always in the foreground. I place that consideration above any little inconveniences or any little extra expense in the distribution of the notes. Although I have called it a sentimental question, it is a very practical one. It may be based on sentiment, but the sentiment is based on a solemn compact. Our feeling is that Parliament should, without any further delay, give effect to the compact made with New South Wales. If the Note Printing establishment was temporarily housed in New South Wales, and the Treasury at Melbourne still controlled the issue, the only extra cost involved would be in the sending of the notes to Melbourne after printing. At present they have to be sent from the factory to the Treasury, and distributed from there to other Australian centres. The extra cost of sending them from Sydney to Melbourne before they are distributed would be infinitesimal in comparison with the turnover of the notes. Even if it meant sending to Melbourne all the war bonds, Treasury notes, and stock certificates after printing here, I should not consider that a material commercial or financial obstacle. If it already costs £50,000 per year to distribute the notes from Melbourne, and the extra cost is going to be much more, it would be cheaper to bring the Treasury to Sydney. The natural corollary of the position would be to make the sub-Treasury in Sydney large enough to deal with the

question. Some such arrangement would obviate the necessity of sending all the notes to Melbourne.

140. To Mr. Lord Smith.—There is nothing in the situation caused by the war, or in the situation caused by the national debt, or by the interest that we have to pay, that should prevent the carrying out of the compact in the Constitution for the immediate establishment of the Capital at Canberra. No doubt organization and production should be the key-notes of the future. I do not think the expenditure on establishing note printing offices in Sydney could be called out immediately productive. The expenditure at Canberra would come only partly into that category. Any extra expenditure there would be due to the surroundings and the extra cost of administration. If you put either a temporary or a permanent factory in Sydney you will be no more engaged in unproductive labour there than you would be in Melbourne or any other part of Victoria. The only place where that question can arise at all is at Canberra, where the expenditure of administration must necessarily be proportionately greater before you get the whole Capital going. Looking at it as the start, I do not think that would be an unfair charge on this particular enterprise. The extra cost must inevitably occur whenever you start the Capital. There is always a tendency for those temporary buildings to become permanent. What I have suggested about using a building in Sydney temporarily, and letting it for other purposes afterwards, would apply equally to a building in Melbourne. There need not necessarily be a great variation in temperature under an iron roof. We do not notice it in our factory, but we have two stories. I seriously think that the erection of a building for note printing in Melbourne, as first proposed, would tend to retain the Capital in Melbourne, and influence members of the Federal Parliament against voting money for establishing the Capital at Canberra. After all, votes given in Parliament are merely a reflex of public opinion, and until public opinion is agreed on this matter, Parliament will not be agreed on it either. We claim that the erection of another expensive building in Melbourne is a direct intimation to New South Wales that the Federal Capital is not to be established for many years to come. I realize that, no matter where the Capital is located, the Commonwealth will have to have staffs in the big cities. No doubt the building proposed to be erected in Melbourne could afterwards be occupied, and I say nothing against its ultimate value. If we were shifting a factory, and our skilled staff could not follow us, we would have to train other hands. When we moved 5 miles outside the city we were told that we would not get employees. We took the risk, and we lost some, but we got others. I can assure you, from my own business experience, that that is not a vitally important matter. I assume that any beginning that is made with the establishment of Federal activities at Canberra will immediately become the beginning of a movement of other Federal activities towards the Capital site. Even if the establishment of one activity there did not draw a lot of labour from the other States, it would draw all the labour which there were facilities for employing on the spot. I should not think there would be any great additional difficulty in finding labour for building. One advantage would be that once you get your labour there it would not be subject to the influences that, in the big cities, pull it in all directions. For example, the Government Printer attracts employees from us by offering better conditions. If you give employees attractive surroundings, it is wonderful how they jump at them. I would give good wages and good conditions of living and healthy surroundings. Where there were families, I should say that it would be best for the Government to build homes for them at Canberra. The Government should also provide a hostel for the single girls and mother for the

single men, or I would give some one an opportunity of doing it under Government supervision. It is a commercial advantage to provide a good home at the factory. If you give the employees pleasant surroundings they are much happier. I do not know of any high land to the north of the city suitable for a factory of this sort. It is a residential area.

141. To Mr. Matheson. It should not be very much more difficult to move the present machinery from Melbourne to Sydney than from one site to another in Melbourne. It is only a matter of the extra cost. It should not mean a difference of more than 48 hours, with the things properly packed and handled. I should think a temporary building, properly protected against fire, would not cost more than £10,000. A one-story building would be much freer from the risk out in the suburbs than a high building in the crowded area of the city. The factory area where we are is not affected by smoke dust, and so on. Out to the south-east the establishments are all well separated. Probably it will be an improvement to put more buildings there, because the dust will be lessened on dry, windy days. Nothing deleterious is created in the air by the factories themselves.

[Witness withdrew.]

William Applegate Gullick, Government Printer for the State of New South Wales, sworn and examined.

142. To the Chairman.—I have had experience in note printing from as far back as 1861, or earlier, in Australia. The notes were printed for trading purposes, and for Government currency purposes in connexion with New Caledonia and Queensland. Later on during the bank crisis I was in a very active position in the production of notes here. I have done no note printing since 1897. I have had experience in the special type of machinery required in an up-to-date note-printing establishment. I installed in the present printing office the same class of newer-date printing process that Mr. Harrison brought into notice here as long as ten years afterwards. I introduced it especially for the printing of postage stamps. I brought it under the notice of my Government about the year 1898. The machinery requires a very firm foundation on account of its weight. The primary stages, such as the production of the engraved plates, also require very good housing conditions. I have had a scheme somewhat similar to the geometric ruling machine that Mr. Harrison has in the Melbourne office, but not exactly the same. All revenue producing plant should be kept separate as far as possible. I would have my building self-contained, so that no other firms or businesses should be on the same premises. The value of the plant makes it necessary to have a good fire risk. The material used has no great intrinsic value. The risk of the dislocation of business through the destruction of the note-printing offices would be an ordinary business risk. I would not look on it as an extraordinary risk. A good brick building is as far a risk as anything. There are a lot of peculiarities about a business such as note and stamp printing. There is a great objection to ammonia or sulphur fumes, which are very deleterious. Rapid variations of temperature are also most objectionable from the printer's point of view. He has to put several colours one after the other, and he wants them to register properly. If the paper cannot be maintained naturally in a proper state of moisture, he must have some means of doing it artificially. That would be an important point in fixing on a locality for a work of this sort. I would scarcely say that the present conditions, of which Mr. Harrison complains, produce any great difficulty in detecting forgeries, but his evidence as to the difficulty caused in this work by the moisture of the paper is absolutely correct. Those conditions could be met by artificially establishing an atmosphere



condition in the room, which would maintain the paper in the state required. That has to be done when doing colour work. Fumes from gas works would have a most deleterious effect on colours, especially on shades of yellow. If selecting a temporary site, I should consider that it was a matter of primary importance to get a situation free of smoke, dust, and fumes. I am subject in my present situation to the greasy smuts from the chimneys of kitchens, particularly of the Metropolitan Hotel. The smuts settle on the paper. The same thing would be likely to occur at the Parcels Post building near the railway station. It would be preferable to get away from there if possible, although I do not suppose you will find a site which is wholly ideal. We get the smuts continuously in our Phillips-street establishment. They fall in Macquarie-street itself. For the work Mr. Harrison is doing he would naturally want to get into a clear atmosphere if possible, just as he says has been done in London. I would prefer to get out a mile or two from the city, and, as a rule, I would try to get on high ground. If you get into a position about 100 feet above water level you will get out of the heavy, moist atmosphere which is the average condition at water level, except when a hot wind is blowing. If you are permanently raised to the extent I mention, you are perfectly free of moisture trouble. I know the Canberra district well, and would say the climate was distinctly dry. The climate of Sydney within the city area is, on the whole, moist. I would not consider it so moist at any season of the year as to interfere to any extent with note production so long as you picked your site anywhere 100 feet above the water level. I would not select the Parcels Post office as a site for this work, because you would be liable to get smuts from the railway, and have smears on the paper. I would recommend a one-story building, such as Mr. Brooks suggested, but within limits. I would have one main floor with gallery accommodation round, but not interfering with the light. I agree with Mr. Brooks on the general theory if you can afford the land to do it. A one-story building gives a fine natural light area, and up in the gallery you can see the whole place in one lay-out. If the machinery had to be transferred to Sydney any interruption in the output of notes, war bonds, and stamps would occur only the once. I should say it would take three months to complete the transfer, but I would make it a gradual and continuous operation. Any necessary increase of plant can be indicated direct to the spot. One would not think of pulling up the industry from where it is and transferring it in one operation. There is a sub-treasury in Sydney, and as Sydney is the centre of everything, the distribution of the notes could be well carried out from here. I should not say it was necessary to bring the major portion of the note-printing staff from Melbourne. You would pick your leaders, and bring them in the form of a skeleton staff. The junior labour required is easily trained and easily obtainable. I would not think it essential to take the major portion of the staff to Canberra. I should take a skeleton staff. I have a staff here with practically only one-third permanent and two-thirds temporary. The temporary hands could follow if they liked. Another temporary staff could easily be picked up. If you find the work you will find the operatives ready. There would be a difficulty in finding houses and accommodation if all the operatives were brought here. There is a shortage of houses in Sydney. I might not choose the same locality as Mr. Brooks, but I would go outside the city area. Housing accommodation would be required in any case for your employees under existing conditions, and it would be advisable to provide it. This is a self-contained industry, and can make its own conditions. That circumstance could be made good use of to apply modernities in conditions so as to attract the staff to the place. I supplied Mr. Harrison with one note-printing press, but not any of the higher-grade ma-

chines. We do lithographic work of the very highest class at the Sydney printing office.

143. *To Mr. Mathews.*—I do not see how the transfer of the establishment from Melbourne to Sydney would upset the note-production work to any extent if you went about it properly. I have had to make two removals, and in neither case did it limit my production.

144. *To Mr. Laird Smith.*—There is a danger of spontaneous combustion in a printing office if there is any carelessness in leaving the ink-laden wiping cloths about. They contain linseed oil, and are liable at any time to spontaneous combustion. We have a strict regulation that all waste must be removed. I would unhesitatingly recommend the provision of sprinklers. There is no danger of their breaking down. They are most valuable. On the plan of the proposed building there is ample fire escape provision for ordinary safety.

(Witness withdrew.)

Frederick George Kerr, Manufacturer, Vice-President of the New South Wales Chamber of Manufacturers, sworn and examined.

145. *To the Chairman.*—I represent the Chamber of Manufacturers, the council of which has passed the following resolution:—"That the permanent premises for the Australian note printer should be erected in Canberra, or as an alternative, that as the head office of the Commonwealth Bank is in Sydney, premises should be rented in this city until permanent offices are built in Canberra." We are of opinion that the works should be erected at Canberra at once, recognizing that a commencement must be made some time. It will be an incentive for other Commonwealth Government Departments to be eventually established there. I know the note-printing establishment is under the control of the Treasury, and prints Treasury bonds and half-war bonds, stock certificates, and stamps, as well as bank notes. As a practical man, I consider it wise that the building where that work is carried on should be adjacent to the Treasury. When the Government is transferred to Canberra it could be near the Treasury. I have not been to Canberra, but I have a general knowledge of the conditions there. I would recommend the erection of this building there even under present conditions, not necessarily to stand alone, but as an incentive to the Government to put other offices there, realizing that we must make a beginning with the Capital some time. I advocated it rather as a demonstration that we would like to see something started at Canberra than on any definite principle affecting the Note-issue Department itself. It seems from the particulars you have given me about the number of hands so much space that the building will be costly, whether it is erected in Sydney or Melbourne, and once a Department is permanently situated in either city, it will take a lot of consideration to go later on to Canberra. Specialized labour would need to be taken to Canberra also, and homes would have to be provided for them. More efficient police protection of the building at Canberra would be needed than would be necessary in a position to take the industry there straight away, but I would advocate that we should make a start there straight away with the one scheme. If it is not wise to go to Canberra at once, the work should be established temporarily in Sydney, in order that Sydney may have some of the Commonwealth offices. Instead of all their facilities for employment in this State only, they should be distributed. I have been prepared to suggest whereabouts in Sydney the building should be put. I cannot give any cogent reasons why the work should be established in Sydney except to give an opportunity of creating employment on this side, and the fact that it would be near the head office of the Commonwealth

Bank. I could not give evidence about the business of the Sydney atmosphere.

146. *To Mr. Mathews.*—The portion of the Constitution placing the capital in New South Wales should be carried out. If the building is erected in Melbourne it will be another obstacle in the way of transferring the Capital to Canberra. There would be no difficulty in erecting houses quickly and cheaply at Canberra to accommodate employees. There is a shortage of houses in New South Wales, and we all recognize that new buildings should go up. Why should they not be erected at Canberra in Sydney in conjunction with the Commonwealth Bank if that is practicable, but I recognize that this Department is allied to the Treasury. Perhaps at Canberra you might lose the services of some of your skilled hands. You might be able to retain them at Canberra if they were given proper housing accommodation and full employment there. It is our office of the Commonwealth Bank in Sydney until the Department can be established at Canberra. The great bulk of the commercial and financial operations of Australia are carried on in Sydney. That necessitates the circulation of a large number of notes here.

147. *To Senator Newland.*—The resolution was carried at a meeting of our council on Monday last. We were quite aware of the fact that all the notes when printed are handled by the Commonwealth Treasury, and that in connexion with the issue of the notes the Commonwealth Bank plays a secondary part, but we were anxious to see some start made with Canberra. I do not wish to stress a point that the provision of temporary premises in Sydney would help in that direction. We would not object to the establishment of so many Commonwealth utilities in Sydney that he could hardly work practically have the Commonwealth Government in Sydney, but we want to see the Capital established at Canberra. We desire to see the first instalment of Commonwealth utilities transferred from Melbourne, not to Sydney, but to Canberra. If young girls would have to be transferred to Canberra, proper home facilities and movements would have to be provided for them. At the initiation of the movement, it would be a serious problem to provide for these girls properly, and it would also be a serious inconvenience to any business to lose portion of its skilled labour.

148. *To Senator Henderson.*—It may be an inconvenience so far as the Treasury is concerned to have the note printing establishment removed from Melbourne to Sydney. I am not stressing that point. We have no definite scheme to put before you for the removal of the establishment from Melbourne to Sydney. I could not say whether it would mean making any progress towards the building of the Federal Capital.

149. *To Mr. Laird Smith.*—There is no shortage of building material here now. There is plenty of timber. In my business we supply sheet-metal and iron for building. It has never been as cheap for the last four years as it is to-day. There is a great opportunity now to go ahead with building. Judging by the advertisements, timber has gone up in price. Probably in twelve months there will be a fall in the prices of building material, but it will take from eighteen months to two years to get back to anywhere near normal. The standard of wages abroad is rising to the level in Australia. Men who met on the Western Front exchanged ideas. Those who worked at the rolling-mills in England will never go back to the wages they received prior to the war, and prices generally will not be as low as they were then. The cost of coal and of materials used in the production of manufactures has also risen. In metals I suppose we are down almost to bedrock prices for the next two years. A suitable building

would not be much more costly to erect in Canberra than in Melbourne or Sydney. A 10 per cent. increase ought to meet the case. I think it would be a feasible, even under present conditions, to incur the expenditure incidentally in erecting the building at Canberra. One of the difficulties now confronting us is the employment of returning men, many of whom are skilled artisans, and this work would absorb some of them. There are not too many buildings of any size available for general purposes in or around Sydney. The fire-escape provision on the plan of the proposed new building is quite sufficient. Even where the fire brigade is close at hand and a watchman and guard employed, sprinklers in the building would be a safeguard. The sprinklers in the guard may be in any part of the building. If the sprinklers are set to work the alarm is given straight away. If it was my business, I would put in sprinklers. The machinery could be shifted just as easily to Sydney as from one part of Melbourne to another. The main difficulty has been with the shipping. It is only a matter of being prepared to make the necessary arrangements. I do not look on that as a serious difficulty.

150. *To Mr. Sinclair.*—I have no practical knowledge of printing, but high-class commercial printing is turned out in Sydney. I have not heard that the climatic conditions are detrimental. Factory extensions are taking place towards some of the suburbs, where there is plenty of ground available for new buildings. Industries are going out on the North Strathfield line. I would not recommend a temporary building for work of the nature you are inquiring into. The State Government have bridges, and other material for building is available. The fact that the Government has its own brick kiln at Canberra, and a quantity of stone, gravel, and sand on the Capital site, would be a fair set-off against the extra cost of building there as compared with Sydney or Melbourne. If you were building a reinforced concrete structure, you could make your material there. It would depend on the specifications and the amount of timber required whether a 10 per cent. margin would be enough or not. My experience is that the atmospheric changes in Melbourne are worse than in Sydney. I have not noticed a great deal of fog here.

151. *To Mr. Mathews.*—The general opinion in Sydney is that it would be advantageous to have a few of the Federal utilities placed in New South Wales. We are not attracted simply by the desire to have more money spent in New South Wales. If the supply of notes is not equal to the demand, you must either extend your factory or devise a better method of distribution. You will have to ascertain whether you can get the specialists required for note-printing work in Sydney. I do not say that it would be a good proposition from a business point of view to transfer the note-printing factory from Melbourne to Sydney merely in order to give Sydney a share of the Commonwealth buildings. I would have to see that it was a good proposition before I advocated it.

(Witness withdrew.)

James Mitchell, Inspector-General of Police for the State of New South Wales, sworn and examined.

152. *To the Chairman.*—Judging by the circumstances prevailing at the Sydney Mint—and the risk would be largely on the same lines at note-printing offices at Canberra—an adequate force of police or watchmen would undoubtedly be required. I do not think its isolation would justify elaborate precautions. As a rule, criminal developments are known in a big city before they strike at outposts. No criminal capable of injuring Commonwealth property at Canberra could make their arrangements without something of



it coming to our ears in the big cities. A guard considered efficient in Melbourne or Sydney would also be efficient at Canberra, coupled with a loyal staff of officers connected with the building. A staff of 100 men would be a complete safeguard in themselves. The danger, therefore, of the nonexistence of the Kelly gang business would hardly exist sufficiently to justify the upkeep of an extensive police guard. Before the war, the police staff at Queanbeyan consisted of a sergeant and three constables, two mounted and two foot. The risk with our forces is that anything affecting public property, Commonwealth or State—must be first attended to, and the cost straightened out afterwards. There are mutual arrangements between the Commonwealth and State Governments by which the Commonwealth derives the full advantage of our police system. We have always worked in the greatest harmony in respect to Commonwealth property throughout New South Wales.

153. *To Mr. Sinclair.*—I do not think the old system of sending men out in the strongrooms of ships without escort is safe. The small risk involved in furnishing an escort is amply justified. It was pointed out that the notes under the old system were not quite complete, nevertheless in criminals' hands they affected the public interests if they got adrift. It may be costly to send notes to Port Douglas or Perth from Melbourne for use at, but the expense is unavoidable. Prevention is the better policy every time. I admit that the strongrooms of steamers furnish a certain amount of protection.

154. *To Mr. Mathews.*—There have been no instances in New South Wales where criminals have specially selected for their activities the stealing of bank notes in process of manufacture. I can speak for 35 years when I say that that phase of crime has never affected the police in a general sense, although there may have been an isolated instance of a criminal selecting that avenue in the hope of bringing off a successful coup. The striking up of banks in the country has almost gone right out. We have had smart work on the part of thieves in obtaining a roll of notes in a flash when put down on a bank counter, and substituting another roll. That is more in the nature of a sneak theft, but we have had nothing beyond that. If a gang left Sydney for the country for the purpose of robbing the note-printing establishment at Canberra, their intentions would probably be lost, especially if they took women into their confidence.

155. *To Mr. Lind Smith.*—When we do Commonwealth work we discourage anything in the shape of a pervasiveness of the Commonwealth to our men. The payment, if approved by the Commonwealth Government, goes into the State Treasury. The officer or constable engaged gets his full allowance, as set out in the police regulations.

156. *To Mr. Simpson.*—The risk run in the note-printing establishment at Canberra would be no greater than that run by banks in country districts, except that the amount involved would be much greater. I do not consider the risk of an organized attempt to stick up the note-printing establishment very great, because I presume that immediately the notes were completed they would be stored at Canberra. There might be a large quantity which had not reached the final stage, and therefore, would not be negotiable. I presume they would not be fully signed. Even if the signature is put on as part of the process of printing, one would expect that when the notes were approaching completion great care would be taken in the handling of them. There would be an element of risk of an organized gang attempting to rob the place if a large number of notes were in store there, but it would not be regarded by the criminal world as a safe under-

taking. The population of Queanbeyan is a respectable community of high character, and we can safely withdraw the whole of our men from that town for from 48 hours to seven days. The fact of the existence of a law-abiding community like the people of Queanbeyan, who have no resident criminals among them, strengthens our police staff there. Generally speaking, a larger force would be required to guard the note-printing establishment at Canberra than to guard the banks at Queanbeyan, in view of the absence of population at the former place, but the very isolation of the establishment would be a measure of safety in itself. No one could approach you except through some railway station. In addition, every one connected with the establishment would be a tried and trusted man of good character. That is a tremendous measure of safety in itself, apart altogether from the police guard or watchman specially employed. The main staff of the building is a most important reserve force to assist the police.

157. *To Mr. Mathews.*—It takes some little time for criminals to break into safe deposits or strongrooms, but not very long with the electrical appliances now available. Once criminals get the gear arranged, they can put sufficient current to do a lot of damage in half-an-hour. Any criminals visiting a country town are soon noticed.

158. *To Mr. Sinclair.*—It is easier to spot a criminal in an isolated country place than in a big city. Immediately he travels, his actions are noted, and capture is almost certain.

(Taken at Sydney.)

FRIDAY, 5TH SEPTEMBER, 1910.

Present:

Mr. GREGORY, Chairman;

|                    |                  |
|--------------------|------------------|
| Senator Henderson, | Mr. Sampson,     |
| Senator Newland,   | Mr. Sinclair,    |
| Mr. Mahony,        | Mr. Laird Smith, |
| Mr. Mathews,       |                  |

George Fitzpatrick, Secretary of the Millions Club Sydney, and Joint Secretary of the Australian Federal Capital League, sworn and examined.

159. *To the Chairman.*—I heard the evidence given yesterday by Mr. Brooks, the treasurer of the League. I want to substantiate what he said regarding the protest the League is making against the proposed erection of a building at Melbourne for note-printing purposes. It was suggested yesterday in certain questions that the League was really an interested party in the proposal to move the Capital from Melbourne to Canberra in order to aid certain vested interests. I wish, on oath, to give that suggestion an emphatic denial. The League is composed of reputable men in Sydney, such as the Lord Mayor of Sydney, the President of the Chamber of Manufacturers, the President of the Chamber of Commerce, the President of the Master Retailers' Association, and representatives of kindred organizations which are not interested in any personal or pecuniary way in the removal of the capital to Canberra. They are interested only as good citizens endeavouring to secure the fulfilment of the compact which, rightly or wrongly, was made with the State nearly twenty years ago. If the Committee think it desirable to recommend that the note-printing should continue to be done in Melbourne, and that an expensive building be erected there for that purpose, the League respectfully contend that such action will seriously hinder and materially prejudice the removal of the Capital from Melbourne for many years. We submit that there is no countervailing difficulties in: (1) obtaining temporary

accommodation in Sydney for a building suitable for the printing and issuing of notes, or (2) erecting a building at once at Canberra for the purpose of printing and issuing notes as required. Yesterday a member of the Committee asked if it was possible to provide accommodation at or near Canberra for the employees. The old German concentration camp, erected at a cost of thousands of pounds, is eminently suitable for a community settlement, such as would be formed if the employees were removed en masse to a place such as Canberra. We shall be glad to supply you with particulars of places in and about the metropolitan area of Sydney that might be suitable for the erection of a building, or of buildings already erected which can be utilized for note printing work. We do not presume to suggest anything on the technical side. We are simply giving reasons by and large for having the note printing carried out in this State rather than in Melbourne. We submit that the bargain was definitely made that the Capital should be in New South Wales. If the Committee recommend that this work should still be done in Melbourne, the fulfilment of that bargain will be seriously prejudiced. We understand from Ministerial speeches on this question that the objection to the erection of a complete establishment in this State is a financial one. We have, therefore, submitted a formal offer to the Government to arrange for a syndicate to finance the whole of the necessary buildings in accordance with Mr. Griffin's original plan, if they will give the syndicate the same rights as the Government have, that is, the lease of land adjoining. Personally, we do not want that, because, obviously, if it is good for a syndicate to do it, it is better for the Government to do it for the benefit of the whole of the people of the Commonwealth. The men of this State, however, are so keen on getting the seat of Government transferred to Canberra, that they recognize that this is a good proposition. They say that if the Government cannot finance it, it is a good thing for them to be given the task. We recognize that the erection of this establishment would be a good start with the Federal Capital. If the Capital is to be started there, we recommend that this building should go on there. When I refer to the raising of money by a syndicate, I mean money sufficient for the building of the whole of the Federal Capital. It has been suggested that the cost of building at Canberra would be fairly heavy, but we say that, if necessary this specific building can be financed in common with the others. We put forward as our first suggestion the securing of a temporary building at Sydney, in view of the imperative urgency of the work. In view of all these circumstances, and the practical difficulties, I do not recommend that this building should be erected immediately at Canberra. The immediate need is a building in or around Sydney, and that an immediate start be made in erecting a permanent building at Canberra. I support Mr. Brooks on that point. We protest against a permanent building being erected anywhere except at Canberra, on the ground that the Constitutional compact ought to be carried out. We are not anti-Victorian, and we do not protest against the erection of a permanent building in Victoria any more than we would against its erection at Alice Springs. The note issue is an integral part of the machinery of Federation. When the Federal Constitution was agreed to, it was promised that the Capital should be in the State of New South Wales. We say, therefore, as a matter of equity, that the seat of Government should be established in this State. I have recently been to the German Concentration Camp, and am satisfied that it would provide efficient quarters for the staff and also for the workmen. The accommodation there is miles better than that provided in either Sydney or Melbourne for the majority of the staff working people. I have seen the existing conditions both in Melbourne and in Sydney. The conditions at the

camp are healthy although not artistic, the accommodation is well set out, and people could live there under quite good conditions. I am aware that the estimated cost of the work at Fitzroy, Victoria, as referred to your Committee, is between £45,000 and £50,000. I have also seen statements that the complete building, which will ultimately be erected on that land, will probably cost about £50,000. I submit that if a commencement is made with an expenditure of £34,000, it is only a question of time before the whole of the complete building costing a quarter of a million, is put up and utilized for Federal Governmental functions. The land has been bought by the Federal Government, and they can easily say, "We have the land and will put up a big building on it." That is why we have put up such a strong opposition to the commencement of the expenditure on a building of this nature in Melbourne. We take this stand simply as a matter of equity, and not from any anti-Victorian attitude. We do not recommend the immediate transfer of the work to Canberra, in view of the urgent necessity for immediate relief being given to the Government note printer and his staff from their present unsuitable situation. We desire to impress the Committee with the necessity for finding temporary quarters in or around Sydney, and the desirability of making a start with some building work at Canberra. If the question was not so definitely urgent, we would press you to establish the work at Canberra at once, even if you had to wait six or twelve months for the building to be ready for occupation, but, as things are, we say frankly, "Get a temporary building somewhere else." I quite understand that all Treasury Bonds, Imperial Stock Certificates, and other valuable Treasury documents are printed at these works. As a layman, I think that if the Federal Parliament said honestly that they proposed to go to Canberra, you would get buildings there sufficient to cover a work such as the within twelve months, that is, temporary buildings. I understand that Mr. Griffin has provided for the kernel of administrative staff, but no provision for the accommodation for the members of the Parliament, and then to extend it year by year. I do not say that it would be possible to make provision in twelve months for the whole of the administrative staff now located in Melbourne, and which must go where Parliament goes; but I do say that provision could be made in that period for such an activity as this. All the necessary provision for Parliament and administrative staffs could be made at Canberra within three years if the work was done by contract, and not by a go-slow policy or a Government-stroke policy. I draw attention to the tremendous administrative work and building operations done during the war by ourselves and our Allies. In America, for a big lumber camp or a new factory site, thousands of buildings are erected very rapidly, erected, and what America can do I submit that we can do. I am afraid that if we are to get on with the building of the Capital we shall have to sacrifice ornaments. Failing the establishment of this activity immediately at Canberra, I suggest its establishment in Sydney, but only temporarily. I have the same objection to its establishment in Sydney as in Melbourne. The site of the Federal Capital is Canberra, and there is no more reason for its permanent location in Sydney than in Melbourne or Adelaide. Melbourne offers no advantages as a temporary home for the note-printing works which are not available either at Sydney or Canberra, although there will be some additional cost for guarding the place at Canberra, and some extra cost of transportation and, perhaps, a little extra cost of production. Melbourne has no advantages over Sydney so far as administration or distribution is concerned. I admit that the Treasury in Melbourne, and that this branch is controlled by the Treasury, but the headquarters of the Commonwealth Bank are in Sydney.



As the Bank is a very important branch of the Treasury, and principally responsible for the issue of Commonwealth Notes, it is of course of the utmost importance that the printing establishment was in Sydney, or in New South Wales, no greater difficulties would occur in departmental relations with the Treasury than exist at the present time. I would not hand the control of the branch over to the Commonwealth Bank. In my opinion, the administration should still be in the hands of the Treasury. I do not think any loss would be caused through the transfer of the work from Melbourne to Sydney, and the loss of the services of skilled artisans. There are a number of skilled artisans here. Skilled artisans will go where the working conditions are best, and we can make them so attractive in Sydney that the men would come here, or they would go to Canberra if the conditions were made sufficiently attractive there. Mr. Brooks, as President of the Employers' Federation, knows the views of the employees fairly thoroughly, and I support his evidence in that regard. If the work was transferred to Sydney, the manager would probably find it advisable to bring most of his staff with him. That would mean the transfer of the majority of the staff to Sydney, but that is only what should happen when the Head Office of the Postal and other Departments were transferred to Melbourne. Many brilliant men readily went to Melbourne from New South Wales. Wherever the job is, the men will go. We have overcrowding here, but I do not think it is any worse than in Melbourne, except that in Melbourne you have those wonderful roads, which enable people to get out of the city. We have not got them so far. Your electric tram system also gives you quicker transit, and tends to take the people out of the city. Houses are not plentiful in Sydney, but, on the whole, our housing conditions are not bad. If a staff of 200 employees were brought here it would be necessary and desirable for the Government to provide accommodation for them. The Government should follow the example of the Colonial Trust, by providing houses for their employees near the scene of operations. Canberra is very suitable from that point of view, because the land already belongs to the Commonwealth. Each home, including the land, would cost nearer £750 than £500. At that rate, houses for from 150 to 200 workers would mean an expenditure of £150,000 or more, but that cost would not necessarily fall on the Federal Government. The State Government have said that they will provide houses for the people. If the staff was brought to Sydney, houses would have to be provided for them. I think the State Government would make good provision for them. They enabled me, as a Federal servant, to build a home by lending me money through the State Savings Bank. These workers would come in, not as Federal workers, but as citizens of the State.

160. To Mr. Senator Newland.—I say, unhesitatingly, that it would be suitable to erect the note printing establishment at Canberra before any other public buildings are erected there, because, as soon as one building is put there, others must follow. That applies not only to houses for the employees, but to other administrative and departmental buildings, which I think would follow quickly. It cannot happen that this building would be left to stand like a lonely sentinel in the desert. The work must go on, and the Capital must be built there ultimately. If the other buildings did not follow in our time, houses for all these employees could be provided, and would bring in a certain amount of revenue. At any rate, they would turn into revenue producing land into revenue producing land at once. You would have the land free at Canberra, instead of having to purchase sites in another city. The German Concentration Camp is suitable for the temporary housing of employees. There is no more objection to transferring young boys and girls to Canberra away from parental control than there is to transferring boys to the Naval College at

Jervis Bay. I should not put them there without their being under some discipline. If they were put under some control, they would be better off than in their own homes. The Concentration Camp is built on community lines. The houses are not very private. They are wooden buildings, and the kitchens and outbuildings are shared by several families. I do not say that the privacy is ideal, but we cannot have everything we want. At present, in Melbourne and Sydney a lack of privacy exists, even where men pay heavy rents. Within a quarter of a mile of where we are sitting now there are places where four or five families use the same premises. In parts of Melbourne four or five families live in one house. I honestly and sincerely believe, with Mr. Brooks, that the erection of this building in Melbourne would seriously retard the transfer of the Capital to Canberra. The more employees you have in Melbourne, the more Federal staff anchors you let down there; and the more Federal buildings you put there, the less likely are those employees to want to go to another State. Ultimately, it will be the Ministers who will move the Capital or allow it to say where it is. If Mr. Hughes said to-morrow that the Capital was to go to Canberra, it would go there. If he decided that the Capital was to stay in Melbourne, it would stay there. Ministers, in turn, are influenced to a very great degree by the permanent heads of their Departments. The Minister in charge of this matter in the House of Representatives did not deny that ultimately a large expenditure would be incurred in erecting the complete building on the site in Victoria-street, Fitzroy.

161. To Mr. Laird Smith.—The cost of labour for building purposes would be higher in Canberra than in Melbourne or Sydney; but if the work was done by contract, and tenders called for, the competition would be so keen that it would reduce the price to a great deal below what the work would cost if carried out under departmental control. Speaking from memory, the houses in the Concentration Camp contain three rooms and a kitchen. Some are detached; some are semi-detached. I did not test them to see if voices could be heard from one building to another. We realize the shortage of houses in Sydney, and are trying to cope with it. There is nobody in Sydney without a home to-day, and when we say that there are 60,000 people not properly provided for, we mean that our paternal Government is making better accommodation for 60,000 people than they have at present. You do not hear the same complaints from other cities, because the other State Governments are not so keen in looking after the welfare of their people. Even while that state of things exists in Sydney, I think it advisable to bring more Victorians here. In view of the financial position, I do not suggest putting up a temporary building in Sydney for this work unless we have a reasonable prospect of selling it afterwards to advantage, but we could rent a building in Sydney if one was available, and the onus is on the Sydney people to point out where that building is. I urge that at Canberra we should spend whatever money is necessary. The league will ascertain at once what suitable buildings are available in Sydney for the Commonwealth to rent for this purpose. I understand that the building must be disproof and sufficiently solid to accommodate heavy printing machinery. In referring to a temporary building, I mean either one of temporary construction or one of temporary occupation, or both. If it is possible to get one for temporary occupation, I would have it; otherwise, I would suggest putting up a temporary construction at some place like Campsie, Concord, or Kensington, or any other place within 10 miles of the General Post Office where land is relatively cheaper than in Sydney. Power is available locally for lighting purposes at 34d. per unit. I would not say there is an unlimited amount

available. It has recently been made available by the City Council. Balmalm and Parramatta have their own power supplies. There would be no insurmountable difficulty in getting electric current. I think it could be got at about 3d. per unit. I realize that, even when the Capital is moved to Canberra, the Commonwealth will still require to keep thousands of employees in the big cities. I am aware that the Commonwealth is running a considerable number of buildings in the big cities now. The Committee would, therefore, be justified in regarding the proposed new building at Fitzroy as purely a temporary building for note printing purposes to be available afterwards for general Commonwealth purposes. In spite of that, I would not agree to its being put up there. I oppose the note printing being conducted in Melbourne at all. A temporary building in Sydney sufficient for note printing work could be quite easily put up in twelve months.

162. To Mr. Sampson.—Sydney is short of a good deal more than 15,000 houses, but if 200 men came into Sydney to-day they could be accommodated, although not without difficulty. It would not be absolutely essential for the Commonwealth or State to make special housing provision for these employees from Melbourne, but to house them under ideal conditions it would be necessary. I differentiate between necessary and essential. I do not think it would be advisable to bring them from Melbourne and let them struggle to get homes here. We should get the Jones here for them. At the same time, thousands of soldiers are coming back and bringing wives with them, and they are all finding homes. Two hundred more families will not make any difference. The housing conditions are no worse here than elsewhere. These employees come here, they could be allowed to take their chance of getting homes, but only under skilled organization. If a temporary building had to be found for note printing purposes, I would recommend Sydney, with the object of trying to lessen the hold that Melbourne has on the official life of the Federal administration. The notes can be produced as economically and efficiently in Sydney as in Melbourne, although I do not speak as an expert; but if a permanent building should be decided on, it should be neither in Melbourne nor in Sydney. One would have to be guided by the probable course of events before agreeing to the provision of temporary quarters in Melbourne. If it was to be a temporary building in the true sense, I would say, as a good Australian, let it be in Melbourne and save the expense of shifting the whole of the machinery and staff; but, if "temporary" is to mean another twenty years, as it has meant so far, I should say it ought to be put in this State. If there is likely to be a delay of another twenty years, the work should be brought to Sydney. If we are going to Canberra within a reasonable time, let it stay in Melbourne in the meanwhile.

163. To Mr. Sinclair.—The newspaper offices use electric power in Sydney. The supply is permanent and reliable, as far as electricity is ever reliable. We have never found it necessary to seriously reduce our power output, because our coal supply is so near. A general strike, or a railway strike in conjunction with a strike of seamen, would cause a dislocation of the power supply of Sydney. I will ascertain the cost per unit. It should vary with the price of coal.

164. To Mr. Mallock.—The league is just as much opposed to Sydney domination as to Melbourne domination with regard to the Capital. We do not want the note issue in Sydney. We say it should go to Canberra. If it was placed temporarily in Sydney, I do not believe that Sydney interests would try to keep it here. The Sydney people are just as much opposed to Sydney being the Capital as they are to Melbourne being the Capital. When we started our league there was some

talk about having the Capital in Sydney, but men like Mr. Brooks and others with large interests in Sydney said, "No; honour the compact." Our people would not hear of Mr. Bruce Smith's idea that the Capital should go in rotation to the various State capitals. I do not believe that the Sydney people are aiming at any material benefit to themselves in this matter, but we know that the Federal Capital being in New South Wales will benefit New South Wales, and give it a certain amount of prestige. American people think that the Capital of Australia is Melbourne, and do not know where New South Wales is. We have in our league men of all shades of political opinion, and representatives of both employers and employees. We have no decentralization league in Sydney, but there is one at Nowra. Its members strongly support our league. There has undoubtedly been a tendency in railway and port construction to keep things centralized in Sydney, but that will not be perpetuated, because the Sydney people have sufficiently broad vision to see that it is a suicidal policy. Decentralization benefits, not only the State, but the city, and is going on. Sydney people are helping the Nowra people with their decentralization work. The whole of the people of New South Wales believe that Federation has been of more benefit to Victoria than to this State. I do not know if they have investigated the relative Federal expenditure in the various States, but they have had figures put before them showing the rents paid in Melbourne and Sydney, and the amount of money spent in Victoria for Federal purposes that would otherwise be spent in New South Wales. We try to look at the question from the broad point of view, and to avoid parochialism. A positive statement was made with New South Wales that things should be done. Comments made with all the other States have been honoured to the letter. Ours has not been. A witness was asked yesterday whether the people of New South Wales were "bribed" to enter the Federation. I say frankly that we were bribed into it. That comment was made with us, and, to the discredit of the Commonwealth Government, has not been honoured. If more Commonwealth money has been spent on Federal works in New South Wales than in any other State, it has been because we happen to have the facilities. I am not aware that much more than our share of expenditure per capita has taken place in this State. The general opinion in Sydney is that the proposal to erect a note printing building in Melbourne is made only for the purpose of keeping it there permanently. I quite believe that the building could be sold at any time, and that it would be a good business proposition; but, if you bought land at Campsie, Concord, or Zetland, you could readily sell it to a manufacturing concern ten years hence at an enhanced price. It is a wonder that the Government allow the practice to continue of renting buildings for Government offices in Melbourne at an enormous annual cost. Even though the note printing office is running at full capacity at Melbourne with a specialized staff, and not yet producing enough notes to supply the demand, and even if the erection of a new building there does not necessarily mean keeping the business there permanently, we think it wise to make it the test question regarding the starting of the building of the Federal Capital at Canberra, because if we allow this proposal to pass, other things will be regarded as equally urgent, things will go on from decade to decade and the Seat of Government will never be established at Canberra. We fear that if we do not make a protest now, and impress you with the urgency of the case, the thing will go on year after year. We think a fight should be made on this question to show that we are in earnest. We would do the same if the proposal concerned a clothing factory. Broadly, we are opposed to any further



permanent improvements for Federal purposes in Melbourne. If the Government had any difficulty in financing the building of the Capital at Canberra, our league is prepared to find men who will put up the money. One man connected with the league offered to finance the railway, building project. Our members comprise the keenest brains in the community.

165. *To Mr. Mahony.*—The proposed building in Melbourne is undoubtedly substantial and ornate, and conveys the impression that it is to be a permanent structure. The cost of removing the machinery to Sydney or Canberra would not be very great, although the cost of removing the employees would be considerable. You can carry machinery 200 miles practically as easily as 2 miles. Seeing that the head office of the Commonwealth Bank is in Sydney, and that most of the Commonwealth notes are put into circulation here, it would be a good thing to have the note printing office as near as possible to the head office of the Bank. A temporary building, and housing for the employees, could with advantage be put up on Commonwealth land at Liverpool. Very big buildings have been erected at Holdsworth. Ample housing accommodation could be made available at Lithgow. It would be a sound business proposition to erect a temporary building on land owned by the Commonwealth at Balmain. Ample electric power could be obtained there. The Balmain Company is next in size to the City Council as regards electric operations. The objection to the removal of the staff from Melbourne will apply whenever the Capital is permanently established at Canberra. It must come sooner or later, and at the same time would occur. There is a branch of the Treasury at Sydney. It would be no more inconvenient to the Treasury to issue bonds or notes in Sydney than it is now, nor would the efficiency of the Department be impaired.

166. *To the Chairman.*—I could not suggest a site for the establishment at Canberra. I could not express an opinion on the suitability of the site just south of the artificial lakes, suggested by Mr. Griffin. I would like to think over the question whether the building should be put in the industrial portion of the city, to the north of the lakes, or to the south among the administrative buildings. I would hesitate to put forward my opinion against that of an expert like Mr. Griffin. If the building was placed in the southern portion of the city, it would be more than 2 miles away from the Concentration Camp. I would provide chairs-a-bane to give the employees cheap and economical transport, and charge them as they are charged on the Government trams in Sydney now. Once the machinery was dismantled and packed, it would be just as easy to transfer it to Sydney as to another site in Melbourne. The work would have to go on continuously, no matter where the transfer was made to. If the business was efficiently organized, the machinery could be transported 200 miles relatively almost as quickly as 2 miles, and the works could still be kept going.

167. *To Mr. Mahony.*—I have had experience in the erection of houses for soldiers. I am convinced, from practical knowledge, that houses could be cheaply and rapidly built at Canberra.

168. *To Mr. Laird Smith.*—There is not nearly as much timber available at Canberra as there should be. It is relatively hard to procure in Sydney, although, if you pay for it, you can get it. I have had no experience in the removal of machinery. I could take the Committee to places near Sydney where people are living under worse conditions than would exist at the Concentration Camp at Canberra. In Surry Hills there are four families living in a house of three rooms and a kitchen.

(Witness withdrew.)

William Taylor Marpherson, Merchant, President of the Chamber of Commerce, Sydney, sworn and examined.

169. *To the Chairman.*—We do not consider that any permanent building or enterprise for Federal purposes should be undertaken in any of the State capitals. If it is necessary to erect a building for the note printing works, we say that Canberra, the constitutional Capital, is the place where a permanent structure of such value should be put up. I have been to Canberra. If it is essential to have an entirely new structure, I see no reason, after having been to Canberra, why it should not be erected there. I realize that a specialized staff is employed in a work of this sort, and that the greater proportion of those employees would have to be removed to whatever place was chosen for the location of the work. The documents printed at the establishment could be distributed to other parts of Australia almost as cheaply and as readily from Canberra as from Sydney or Melbourne. I would look upon the permanent establishment of these works at Canberra as a fair business proposition, considering what is to follow, and that Canberra is to be the National Capital. I could not express an opinion as to the time it would take to erect the necessary buildings and houses to enable the Capital to be transferred to Canberra. If it takes as long as it has taken to do the work already done there, it will take a very long time. If this building is erected there it will be necessary also to make arrangements to house the employees. I have not seen the Concentration Camp. I have not been nearer than Duntroon, but I understand that there are a large number of buildings there. I should not think that the camp was altogether a fit abode for the officials who would be wanted in a note printing building. No doubt many of the employees would want to take their families there, so that you would have to provide for more than the actual number of employees. I do not think the work would be carried out as cheaply at Canberra as in Melbourne or Sydney. Still, I look upon Canberra as the ultimate site. I look upon Canberra as the ultimate site for such a building, and the probabilities are that you will build there as cheaply to-day as you will a few years hence. I do not think there is going to be any great drop in the cost of building in the next few years. I should have thought that, with the end of the war, there would be less demand for notes than there has been during the war, but if it is essential that temporary premises should be at once secured because their present location is unsuitable, no one could have any objection to your getting temporary premises either in Melbourne or here. My opinion is that Melbourne gets too much of the Federal activities. After twenty years in Melbourne it is true that some change took place. My Chamber objects to the expenditure of a large sum of money in putting up a permanent building in Melbourne, Sydney, or any other capital for a work which should be established as early as possible at Canberra. Once the Federal Government is installed there, this work should certainly be established there. Speaking broadly and without any prejudice, if new quarters are not to be established at Canberra at once, I do not favour Sydney more than Melbourne for temporary quarters. To me, as an Australian, one would do just as well as the other. I cannot see that Sydney has any special claim to be the temporary home of the note printing establishment, except possibly that Melbourne has been getting all the services when perhaps they ought to have come to Sydney. The difficulty of having the note printing works separated from the Commonwealth Treasury, in Melbourne, could be got over. If we can believe the papers, Sydney has a very great shortage of housing accommodation. If it is a fact, naturally the transfer of a large staff of employees from Melbourne to Sydney would accentuate the difficulty.

170. *To Mr. Laird Smith.*—If a building is to be erected at Canberra, I should say that a suitable, permanent, dignified structure, in keeping with the importance of the Capital of the Commonwealth, should be put up; but if it is to be put in some other place, the cheaper you can do it the better. If it would cost 20 per cent. more to erect in Canberra than in Sydney or Melbourne, I should still say that it should be put up at Canberra if it is to be a permanent building for the Government note printing work. I do not believe that there is a shortage of housing in Sydney for 50,000 people. It is not within my knowledge that four families are living in one small house, but such conditions may exist, and if any one gives evidence to that effect, I must believe him. If the employees were brought to Sydney, any shortage of accommodation would be soon overcome for desirable tenants. Building is going on all the time. Mr. Hall is going to put up a great number of houses. I know, and feel, that there is a shortage of houses in Sydney, but nothing like what is said to exist. Many circumstances have caused the shortage. No doubt, there is a great deal in the belief that the Fair Rents Court has stopped investors putting up houses suitable for artisans and labourers. Building material has also been very high in price, and there has been an influx of people from other places. There is no shortage of building material or labour. The high price of timber is accounted for by the high over-sea cost and the cost of getting it here. Galvanized iron is somewhat cheaper to-day than it was, but in no case to-day is a man getting any more profit on this item than he was before the war. I would not recommend you to delay building until material comes down in price. I do not think it will come down for years. If it does, it will be only slightly. I do not think bricks or labour will come down, or timber to any great extent. Builders' ironmongery has gone up at the factories in England and America since the Armistice by 15 or 20 per cent. I favour the erection of a permanent building at Canberra; but, if that is impossible or impracticable, then have a temporary building to carry on business either at Melbourne or Sydney. I thought when you spoke of a temporary building you meant simply something which would meet your needs for the time. If you mean a building that could be temporarily occupied for this purpose, the structure at Darling Harbor, at present occupied by the Postal Department as a workshop, might suit you. It has three streets round it, and four concrete floors, but I do not think it is quite the size you want. The lease expires on the 1st of this month, and the Postal Department, although they have been given notice, have not renewed it. In spite of the return of large numbers of men from the war, I should still think that with the end of the war the demand for notes would fall, but on that point the evidence of the experts of the Commonwealth Bank would be much more valuable than my individual opinion. If I have a business in Melbourne and found it more profitable to transfer it to Sydney, I would shift my essential employees to Sydney. In my own building I have a fire escape outside as well as inside. I have sprinklers in my building in addition to a watchman. I would absolutely advise you to put in sprinklers, no matter what other safeguard you have against fire.

171. *To Mr. Sampson.*—As a business man, I say that, if you cannot erect a permanent building at Canberra at once, you should put up a permanent building costing, say, £50,000, which could be used subsequently for other purposes, in Sydney or Melbourne, rather than a flimsy temporary building of galvanized iron or fibrocement, which would simply be pulled down afterwards. A temporary structure of that nature should be your last resort. I do not look for cheaper building

material, or even cheaper money, in the near future. It would, therefore, be economical to put up a permanent structure if you can get it, and if you can use it profitably for other purposes when it is no longer wanted for this work. A flimsy temporary building would be false economy.

172. *To Mr. Mathews.*—The feeling in Sydney is that the more Federal buildings are put up in Melbourne, the more it will tend to keep the Capital in Melbourne. We regard the proposed new building as another link in the chain. Unless we make a start, the Seat of Government will stay in Melbourne indefinitely. This business gives you a definite opportunity to make a start at Canberra, and at all hazards you ought to begin to put your public buildings up there. I do not admit that there is a fight on over this proposition. I see no reason as a business man why you should not build just as quickly in Canberra, and provide the necessary accommodation for the employees there, simultaneously with the building, as you can in Melbourne or Sydney. Go on with the building of the Capital at Canberra for the sake of the future welfare and happiness of Melbourne and Sydney. We are cautious. I do not know we must fulfil our obligations. I do not know of the existence of a syndicate in Sydney which is willing to undertake the building of the Capital if allowed territory surrounding it. I am not in the syndicate. I am not aware that the land surrounding the territory is of "plein value." The building of the Capital would enhance the value of the surrounding country. I do not say that this permanent building should be put up at Canberra even if a great financial loss was involved. You say that the building is an absolute necessity; if so, we must erect it. It is a good business proposition to take this activity to the Capital.

173. *To Mr. Mahony.*—The plans of the building before the Committee show a permanent structure. We think that, if such premises were put up in Melbourne for the printing of notes, it would mean the permanent establishment of the industry in Melbourne. I see no difficulty in erecting houses cheaply and promptly at Canberra if you have the money. They could be completed by the time the building was completed. The general opinion in New South Wales, and mine, too, is that if a building such as is proposed is put up in Melbourne, it will make it more difficult for us to get the Federal Capital established at Canberra. It would be more convenient to the Commonwealth Bank to have this establishment closer to them than it is now. I understand that these premises must be self-contained and free from fire risk. I should think that you would be adding to the fire risk if the Commonwealth acquired the whole of the business block in Sydney bounded by Pitt-street, King-street, Castlereagh-street, and Moore-street, and put up the note printing building on it, and used the rest of the block for other Commonwealth offices and activities. It does not look to me to be an economical proposition, and the tendency is to take printing work away from the city into the cheaper areas. It might be a good business proposition for the Commonwealth Government if the object was to have all the Commonwealth activities in Sydney together. It would be a good proposition to put up a building on Commonwealth land adjacent to Sydney with plenty of electric power obtainable.

174. *To Senator Newland.*—Even if the building stood by itself at Canberra for another fifteen or twenty years, and even if young boys and girls employed at the work had to be taken there away from their homes, and live there without parental control for many years, I would still recommend the Committee to erect it there. I take it that the employees who would be transferred



would be responsible officers. Wherever you go you could replace the young element you speak of. Even if there were not enough locally, there would still be sufficient young people who would be enterprising enough to go there. I do not think the Sydney people would object, later on, to the transfer of the Capital to Canberra if these works were transferred temporarily from Melbourne to Sydney. Melbourne people have had the Seat of Government so long that they look on it as part and parcel of their own property. I do not think the Sydney people would get the same microbes into their blood.

176. *To Mr. Laird Smith.*—We experience no trouble in getting electric power to carry on our business. The previous difficulty has been overcome. We have not been hampered in our business through being unable to get notes of low denominations. The volume of business is much greater in New South Wales than in any other State, and, therefore, we require more notes. The removal of the machinery from Melbourne to Sydney should not cause great delay and inconvenience. It should require only a little packing and a couple of days' transport. It would be less difficult to shift from one site to another in Melbourne than from Melbourne to Sydney, but the difference should not be material.

(Taken at Sydney.)

SATURDAY, 6TH SEPTEMBER, 1910.

Present:

Mr. GILKINSON, Chairman;

|                   |                  |
|-------------------|------------------|
| Senator Henderson | Mr. Sampson      |
| Senator Newland   | Mr. Sinclair     |
| Mr. Mahony        | Mr. Laird Smith. |
| Mr. Mathews       |                  |

John Grant, Senator for the State of New South Wales, sworn and examined.

170. *To the Chairman.*—I wish to give reasons why the Note Printing establishment should be located at Canberra. The Commonwealth already owns an area there of approximately nearly 1,000 square miles of country. A plan for the city, including the administrative buildings, has already been prepared, and the erection of any building for Commonwealth purposes should take place on land belonging to the Commonwealth. There is nothing in the Constitution to say that the Federal Capital shall be built in New South Wales or at Canberra within a certain number of years, but it was undoubtedly understood by the people of this State that the Capital would be built in New South Wales within a reasonable time. During the debates that took place on that matter, it was currently reported, although quite incorrectly, that ten years would be the limit, and many people have been surprised to find that such an arrangement has not been given effect to. The fact that the Constitution does say that the Capital shall be built in New South Wales seems to be a very good reason why a start should be made. If private owners possessed land similar to that at Canberra, they would not consider the erection of any of their own premises elsewhere than on their own land, unless some special reasons existed which do not appear to me to exist in connection with this building. At present there is direct railway communication from Canberra to Sydney, and in a less direct way to Melbourne. It has also been recently agreed by the State Government that a railway should be constructed from Yass Junction to the borders of the Canberra Territory. I mention these facts in order to make it quite clear that the position is not

isolated, and that Canberra is in easy communication with the rest of Australia. I have not seen the recent addition made to the railway from Queanbeyan into the Territory, but I understand that it has been stretched a little towards the line from Yass Junction, which will ultimately connect up with Canberra. When that line is completed—and it is only a short distance in any case—it will make any position inside the Canberra Territory easily accessible to the rest of Australia. There is already provided at Canberra a good water supply, with the necessary machinery, and with reservoirs built at a considerable height. I believe the pressure of water available from Red Hill to almost any part of Canberra would be sufficient to avoid the necessity of the employment of fire engines. That point should be noted, because it is important in a building of this kind to have facilities for coping with an outbreak of fire. The water supply is completed there, and it would be merely a question of extending the reticulation from the Red Hill reservoir to wherever the proposed building is to be erected. I understand that even at the present time a small staff is kept at the pumping station, and the provision of a staff to keep the pumping station going would be a very small matter. If the building is to be made of brick, up-to-date brickworks, capable of meeting at once whatever demand there is, have been already established at Canberra. A sewerage scheme has been laid out, and a commencement made with the construction of the main sewer, which will serve the proposed building. There is an up-to-date power-house, capable of supplying all the current that will be required, not only for this building, but for many others. In the meantime, the power-house is not being used to its full productive capacity. I do not know whether it supplies direct or alternating current. I should think it would be an easy matter to supply either. Perhaps the supply of direct current would mean a small extra expense. It may be urged that people would object to live at Canberra, but people will live wherever the conditions are good. Men will go anywhere if they think they can make more money. If the conditions are made good at Canberra, there will be no trouble in getting a sufficient supply of labour. I understand that there is a large number of buildings there which it was proposed to use for interim purposes during the war, but it might be more economical and more satisfactory if buildings were specially erected for the accommodation of the employees. Even if that were not done, I am sure the people of Queanbeyan would welcome them, and make provision for them. Probably you could not get accommodation in Queanbeyan for 200 employees for a start, but I have no doubt that provision would be made for them very quickly even there. I do not suggest that the Government should ask their employees to live in Queanbeyan. It would be much more economical and more satisfactory if the Government took in hand the necessary accommodation for the employees at the same time as the erection of the building was going on. A competent architect assures me that housing accommodation sufficient to meet the requirements of these people in an up-to-date manner could be completed in three months. I have not made inquiries as to the cost. Probably it would be a fair thing to estimate that 150 houses would be required. The cost would depend on the method of construction, but I think that £500 each is an outrageous estimate, particularly if you contemplate that the employees should ultimately purchase their houses. It ought to be quite possible to construct the houses of concrete for very much less than £500 each, particularly if concrete were let for the construction of large numbers at the one time, or if the Government undertook the construction of one job. The Commonwealth Bank recently erected a home

for a returned soldier at Belmore for £500. A fence was necessary there at 2s. per foot. That cost would be almost entirely obliterated at a place like Canberra.

The erection of a single house involves a great many expenses to the contractor. If the houses erected at the Flinders Naval Base cost £1,200 each, it is an outrageous price, and the man who undertakes to buy a house of that description ties a mill-stone round his neck that he never shakes off. If the Government contemplate renting these homes to the employees, perhaps the position will be somewhat different. I am not prepared to submit a direct estimate of the cost of putting up 150 houses at Canberra. Around Sydney prior to the war about 9,000 houses went up every year, and many of them did not cost anything like £500. Six hundred pounds, or even £600, is an outrageous price for a man to have to pay for a home. The Commonwealth paid only about £4 per acre for land at Canberra. That ought to be a very important factor in the construction of homes. At Lithgow it has been necessary to pay about £50 per acre. On that basis the rent of a home at Canberra should be much less. I will accept your estimate of a total cost of £75,000 for the erection of 150 houses. Once the houses are provided there will not be the slightest difficulty in getting labour to follow. For recreation, people could go up Observatory Hill, and get a view unsurpassed in Australia, or to Queanbeyan, or Cooma, whence they could see Mount Kosciusko, or, at a pinch, to Goulburn. As the population increased, amusements could be provided on the spot. There should be no difficulty in regard to climatic conditions in carrying on this work there. The same objection may be raised as was raised when the Woollen Mills were placed at Guelong, but I do not attach much weight to those contentions. They are all make-believe. If there had been a sufficient number of members in both Houses in favour of it, the mills would have been established at Canberra, and not at Guelong. In this case, also, it is merely a question of getting a sufficient number of members in favour of Canberra. I know nothing wrong with the climatic conditions. The atmosphere is not muggy. It is bracing at certain times of the year. If it is contended that a humid, muggy, moist, misty, and murky atmosphere, such as very frequently prevails in Melbourne, is required, it is quite an easy matter, with modern appliances, to make the conditions inside the building either moist or dry as desired. The climate is better in every way than that of Melbourne. There should be no difficulty in sending the notes to the various capitals. I anticipate that there will be railway communication from Canberra to Yass. There is direct communication now to Queanbeyan, and if the notes can be sent now from Melbourne to Sydney or Adelaide, there should be no difficulty whatever in sending them from Canberra. I do not think the cost of the transfer of the notes is a serious matter. In any case, I do not think any extra cost would be involved. It would be much better to send them by rail than to send them to Sydney, and from Sydney by steamer. I do not think any large economy would be effected by using the strong-room of the steamers. Without speaking from absolute knowledge, I believe the water pressure for the largest portion of the proposed building sites at Canberra will render it unnecessary to employ fire engines to throw the water over a structure to the height of the one or two stories. I am certain that if the requirements of this industry, in the way of current, are put before a competent electrical engineer, he can quickly meet them. At Michelago, about 7 miles from Canberra, there are excellent outcrops of at least three different kinds of marble. An expert, who went there specially to examine them, says they are equal to anything that may be required, so that if it is intended to embellish

the interior of the proposed building, excellent marble can be obtained almost on the spot.

177. *To Mr. Mathews.*—I look upon the establishment at Canberra of the note printing building as an instalment of the carrying out of the compact made with New South Wales when Federation was accomplished. Our complaint is that the construction of the Capital is, for some reason or other, being retarded. The war has, to some extent, caused delay, but the influence of some of the other States are mainly responsible. It has been impossible, so far, to get a majority of the members of the Federal Parliament, so far as I know, to pledge themselves definitely to place on the Estimate the sum of money necessary to proceed vigorously with the work of constructing the Capital at Canberra. There was some evidence of an intention to go on when the war started, and there is a very great likelihood of more work being done at Canberra during the next four or five years than has been done during the past four or five years. One reason why this building should be put up at Canberra is to show that there is a desire to go on with the Capital; but, in addition, the erection of the building on land belonging to the Commonwealth itself is a factor not to be ignored. It is a good financial proposal to go on with its construction there. Now that a new building is proposed for note printing purposes, I look upon it as a test question, and the fight is taking place on it to give all who desire to see the Federal Capital established at Canberra an opportunity to have a start made. Although a highly skilled staff is required, and the output, even now, is not as large as the demand for notes, I would still insist that the work be taken to Canberra as an evidence that the Government intend to go on with the building of the Capital. I favour its removal to Canberra straightaway. I would not give way on that point, no matter what the peculiar position of the industry was. I would not expend another pound in Melbourne in providing facilities, either for this or any other Federal work, but would devote the whole of my attention, and all the spare cash in the possession of the Commonwealth, to proceed with works at Canberra. Even though the proposed building in Melbourne would not be a losing concern, and the Commonwealth needs housing accommodation there for its employees, I would not let this building go, and fight the Canberra question on general principles. I would not let anything go. I would fight all along the line. I do not admit that to put the building at Canberra at once would involve extraordinary expenditure or the ineffective production of notes. I should require very strong evidence that it was so before I believed it. If it could be shown that the work could not be carried on at Canberra, the position would be entirely different, but, so far as I know, there is nothing to prevent that work going on efficiently and economically at Canberra, except, of course, Melbourne influence, which is the trouble.

178. *To Mr. Mahony.*—There are, at present, at Canberra, the same obstacles in the way of houses being erected there as are elsewhere. The cost of building is daily advancing. The cost of timber went up another 1s. per 100 superficial feet on the 1st of this month, and I understand it is to go up another 4s. between now and the end of the year. The price of many other portions of buildings is also advancing, and, at present, there seems no prospect of relief. The difficulties which confront the builders in the metropolitan areas will not be accentuated at Canberra. When we begin to build the Capital, the difficulties in the way of housing the workers will have to be faced, just as they would have to be faced to-day.

179. *To Senator Newland.*—I have not seen the buildings at the Concentration Camp. I understand



they are constructed in a fairly elaborate and up-to-date manner. I would not care to express an opinion as to whether they would be suitable to house the employees of the Note Printing Branch, but would be inclined to think that houses should be specially erected for that purpose. I would erect nothing of a temporary character in connexion with this work. If it is imperative that the note printing work should be moved from its present location in Melbourne, I can see no advantage in moving it to temporary premises in Sydney. I would not advocate that. If we transferred the Capital from Melbourne to Sydney, there would, in all probability in time be a considerable volume of public opinion here to delay its ultimate transfer to Canberra. It would create here a large amount of vested interests, which would act in a thousand and one way—the same as the Melbourne people are doing now—to throw all kinds of obstacles in the way of the transfer of the Capital to Canberra. I do not agree with any proposal to move any of the buildings which ought to be at Canberra to Sydney, or to any other place but Canberra. I would not entertain the idea that if temporary premises have to be found at once, they should be in Sydney in preference to Melbourne. If it is indispensable that the plant and employees should be removed from their present location, I would, with some degree of reluctance, put them into temporary premises at Canberra, but at the same time, if the Government desired to erect the proposed building at Canberra, it could be done very quickly. There are plenty of men, material, and money available. Transferring the machinery to Sydney and making provision for the employees, etc., in Sydney, would cost a considerable sum of money, which would be largely wasted when the new premises were erected at Canberra. Another fact that should not be overlooked is that, at present, it is quite impossible to secure housing accommodation of a satisfactory character in Sydney, even for the local residents. In the circumstances, it would be cruel and foolish to bring for that purpose a lot of other people here who would find even greater difficulty in securing homes for themselves. I am against the plant or employees being shifted to temporary premises, even in Melbourne, because I want to see the building put up at Canberra. I would rather they stayed where they are in Melbourne until that building went up; but if they must be shifted from their present location, I advise putting them up in temporary premises at Canberra without delay. I anticipate no difficulty in accommodating the young girl and boy employees there. Premises could be erected for them. It does not take long to do this and to put up housing accommodation if you are determined to do it. The house put up by the Commonwealth Bank at Belmont by a returned soldier was completed, and the owner is now in possession, within two months. If the Bank could do that in a detached instance, there is no reason why 250 houses of a similar type should not be erected in Canberra within two months. To find accommodation for young people who would be taken away from the control of their parents, might present some difficulty, but it would not amount to very much, because these young people get older every day, and find ways and means of suiting themselves to surrounding circumstances. Some would certainly go to Queanbeyan to live; some would find accommodation with the married people who go there; and accommodation could easily be made for them where more than one of them would live under the same roof. I do not anticipate the slightest trouble through the girls leaving by their employment rather than go to Canberra, although, no doubt, some would. If they would not go, there are girls available at Goulburn, Queanbeyan, and Cooma, who would no doubt be prepared to offer their services. There would not be

such danger of the industry being interrupted for want of trained and skilled hands. If necessary, the Government could slightly increase the wages if the girls objected to going to Canberra; but I do not imagine they would object. They are not absolutely attached to any particular part of the Commonwealth, and if the conditions at Canberra were made good, as they easily could be, they would go, and remain there quite willingly.

150. *To Mr. Sinclair.*—I understand that a fair amount of timber is stacked at Canberra. I inspected a fairly extensive stack there some years ago, but when I was last there it had all vanished. That would be about twelve months ago, although there may have been stacks there of which I had no knowledge. So far as I know the quantity of timber there now is negligible. I understand that part of the timber that was there was used at Lithgow in the making of butts for rifles. I do not think a great quantity could have been used for that purpose. Timber would require to be brought to Canberra from Sydney via Queanbeyan for building purposes. I am not aware of the existence of a belt of timber at Namatjira. Paddy's River is not a very accessible spot. In Sydney, at present, Oregon is 42s. 6d. per 100 super feet, and hardwood is about 30s.; that is for rough scantlings; dressed timbers come a little higher. I understand that the cost of timber is much the same, no matter where it is supplied. That is due to the organization of the timber trade. I am informed that at Macksville, where the hardwood grows almost on the spot, supplies from the mill cost the same as they do in Sydney. Canberra is very favorably situated in regard to brick supply, because of the Commonwealth brick works. The evidence as to the quality of the shale or clay there is conflicting. Some say that the presence of lime in the shale is detrimental, and that the shale has to be picked over at considerable cost before it is put into the crushers. I do not know the cost of manufacture or the selling price of the bricks there. The Commonwealth brick yards should be able to supply them there very much cheaper than if they were brought from outside. Probably they could be supplied there at £2 10s. per 1,000 at the very outside. I have no direct information regarding the local supply of stone and sand for concrete. I have no knowledge of the cost of generating current at the power-house, but as the machinery there is up to date, it ought to be as cheaply produced as anywhere else, with the possible exception that the coal used might be a little more costly. The cost of current would not be a serious item. I would expect it to be nearly as cheap as in Sydney, because, in the first place, the land on which the power-house is built cost nothing. In Sydney the land cost a fabulous sum, interest on which has to be charged up against the consumers of current. On the other hand, coal in Sydney is much cheaper. As time goes on, probably coal will be supplied at Canberra at a cheaper rate than at present. There is a coal mine near Exeter, which might be acquired by the Commonwealth and used to supply Canberra. There are other coal deposits towards the coast which can be used later if necessary. The possible dislocation of the staff of the note-printing branch is a difficulty which will have to be faced whenever we transfer Federal activities to Canberra.

181. *To the Chairman.*—If the plans for Parliament House were available and some determination was exhibited in transferring the Capital to Canberra, it would not be long before we were there. If the salaries of the whole of the members of Parliament demoted on getting to Canberra, we would get there tomorrow, and if the salaries of the whole of the civil servants of the Commonwealth depended on getting to

Canberra, we would get there in very quick time. But if it is intended to erect permanent Houses of Parliament at Canberra, considerable time will be required to accept designs for them, and for other buildings and houses of a very elaborate character, as I suppose they will be. That is one instance where I think temporary buildings should be erected. I am informed, on reliable authority, that temporary premises sufficient to meet the requirements of Parliament and the Governor-General, and the necessary staffs in connexion with Parliament, could all be fixed up inside nine months at a probable total cost of less than £200,000. These buildings would last perhaps 20 or 30 years. If the Government gave instructions at once that the Parliament should be located at Canberra, I should say it could go there inside of two years. I believe that arrangements could be made for housing the Parliament, the members, and the staff, and such administrative staffs as would necessarily follow Parliament, within two years. It is merely a question of the erection of the buildings for a start. That is the first essential, and in these times buildings can be erected with remarkable rapidity. For instance, the site at Glebe Island has reached a height of 100 ft. inside of six weeks. It is very substantial, and if you can build concrete walls of that magnitude and type in such a short space of time, it is only a question of putting on the necessary men and machinery to erect Parliament House and the necessary administrative offices. If a sufficient number of men were put on, the main sewer should be easily completed within six months. I do not think it would be an extraordinary piece of work if done at that time. Many shafts have already been sunk. It is only a question of sinking sufficient shafts and excavating the tunnel through the rock and shale both ways from each shaft. That would not take long. The construction of the barrel in concrete or brick would be done very quickly if sufficient men were put on. During the war the British Government constructed postboxes, capable of taking whole trains across to France, in very quick time, and not a word was said about it. It is proposed to construct the Channel tunnel inside of five years.

182. *To Mr. Laird Smith.*—The electric current should be supplied cheaply, even if the total required there amounted to only 237 horse-power. We have paid only a nominal sum for the land on which the power-house stands. At Macksville one of the local publicans has installed machinery sufficient to generate the current required for his own premises, so that the supply of current at Canberra cannot be a very costly operation which the Commonwealth could not afford to undertake. It is quite true that generating large quantities of current is proportionately cheaper than generating small quantities, but the cost of transmitting current is only fractional. I would not entertain the idea that current will cost 1s. per unit at Canberra. If it costs that now it is altogether excessive. The Sydney Municipal Council generates and supplies current at 4½d. per unit for lighting and 1½d. for power, and makes a huge profit every year, which it hands over to the Sydney landlords to enable them to escape paying as much in rates as they otherwise would. I am not prepared to say that current is not costing 1s. per unit at Canberra. We should be able to produce current there at 5d. or 6d. at the outside for lighting purposes, and correspondingly less for power. I would object to any unreasonable cost, but there is no evidence that it would be unreasonable. The only thing more costly there at present is the supply of coal. Even if a long main-current line is required from the power house to the site of the new building, the cost should not be high, as witness the main-current line of

Hobart, Tasmania. Even though hundreds of Commonwealth employees will still have to be retained at Melbourne after the Capital is shifted, and the present building in Melbourne could be profitably utilized by the Commonwealth, or sold, when the note printing was no longer done there, I would still go to the expense of shifting the industry to Canberra. I do not admit that it would cost 50 per cent. more. The only difference is that and the other Federal activities would cease to give to Melbourne land-owners the advantages they are now reaping. I do not think a special wage was paid to the workmen to go to Canberra to build the Concentration Camp. The Commonwealth dealt very shabbily with the Bricklayers' Union. Their award provided for a free railway pass and payment for travelling time, just the same as the permanent civil servants of the Commonwealth get, but the officer in charge here absolutely refused to pay the fares of the bricklayers from Sydney to Canberra. The Commonwealth took advantage of the fact that trade was bad at the time, and paid no more for bricklayers than the men could get elsewhere in the State. The Commonwealth tried to sneak out of the provision in the award for the payment of additional rates for work in the country. The Commonwealth regards Canberra as a centre.

183. *To Mr. Mahony.*—I do not know that the Commonwealth Government refused to be bound by the awards of State Arbitration Courts.

184. *To Mr. Sampson.*—In my estimate of £200,000 for the necessary accommodation for Parliament and staff at Canberra I referred to temporary buildings. The estimate was supplied to me by Mr. Kirkpatrick, the architect of the Commonwealth Bank. He is unfortunately away ill, but his junior will be only too pleased to substantiate the statement. When I gave that estimate to the Committee, I referred only to the staff in connexion with Parliament House itself. I did not mean the central staffs of all the Commonwealth Departments. I took into consideration the cost of making the streets, the sewerage of the place, the water supply reticulation, and the housing of the Parliamentary staff.

185. *To the Chairman.*—I did not include the officials of the Department of Home and Territories, the Defence Department, or the Department of the Postmaster-General.

(Taken at Sydney.)

MONDAY, 27th SEPTEMBER, 1919.

Present:

Mr. GIBSON, Chairman;

Senator Henderson

Mr. Mathews

Senator Newland

Mr. Laird Smith.

Mr. Mahony

Orlando William Brain, Chief Electrical Engineer to the Railways Commissioners, New South Wales, sworn and examined.

186. *To the Chairman.*—If the note-printing establishment is removed to Sydney, there will be no difficulty in obtaining electric power, both direct and alternate current. I do not know the frequency or the potential of the alternate or direct current that the establishment would require, but the energy is obtainable, and the transformation of it is always possible by obtaining the requisite machinery. The available current in Sydney may be suitable for the plant, without using transformers. The public supply, which comes from the City Council, and not from the Railways Commissioners, is direct



current in the city and alternate current outside. The Railways Commissioners supply for traction purposes a 600-volt direct current on the trolley wire, but with a system of generation and distribution by alternate current. We do not supply to the public. We supply a considerable amount of power to the City Council, some alternate, and some direct current, but that is to assist the Council. The question of whether the two services should assist one another has been very much debated, and has become one somewhat of politics. While it has been thought that the combining of the power supply would be in the best interests of the State, as it is generally conceded to be elsewhere, that view does not find favour everywhere. We supply to the City Council, and the City Council supply to the consumers, but our supply is only part of what the Council have. They generate power themselves. We also supply the city of Newcastle. The policy of the city of Newcastle up to the present, and I think it is likely to continue, is to get the whole of their power generated by the Railways Commissioners, who certainly have much larger power-houses than the municipality is likely to have. Our policy is to let the Sydney City Council do the retelling. I will let you have our contract price to the Council. That is a figure which we allow a cost for capital charges and a charge for that current. I think the Council's retail price is from 5d. to 5d. on the maximum demand system for lighting, and 11d. for power, but it would be better to get those figures from the Council authorities, because I believe they have some special contract conditions for heavy users of power. Their charge may vary with the load factor. The policy of the Railways Commissioners in supplying for public purposes has been to charge practically at cost price, but safely; that is, they want to guard against loss. We find our cost as nearly as we can, and that has been the basis on which charges have been made, both to the City and Newcastle Councils. The question has been regarded from the stand-point of State policy and State interests, with a view to promoting industries, rather than as a matter of the Commissioners entering into the industry of the public supply of power. I had to prepare the figures, and know that that is the basis on which the Commissioners have charged—that is, just sufficient to cover a safe margin above a reasonable estimate of cost. Any charge that has to be made has had relation to the price of coal, because that must also be included. I should not think that it would entail a very large cost, or loss of power, to equip the existing plant at Cambera, which supplies alternating current, so as to enable it to provide both direct and alternate current to the Note-printing Offices; but I have no idea of the magnitude of the power you are dealing with there, or whether the plant is very large.

187. To Mr. Laird Smith.—On reading Mr. Hill's evidence, I gather that the amount of current required for the establishment is not a very big matter.

188. To the Chairman.—A very small quantity would be required, and I take it that the plant you have at Cambera is a steam plant. If it is the same frequency, it is only a matter of using transformers to supply direct current. That is a small matter. For some classes of work, such as traction, a direct-current motor is desirable. The cost of a converter or motor generator to get an alternate current supply would be very small compared with the other questions at issue in transferring the note-printing establishment and staff to Cambera. No doubt the cost of the generation of power at Cambera is relatively higher at present than in Sydney or Melbourne, but the conversion factor would not materially affect it. The cost in a small country place varies according to the system used. It runs to three or

five times as much for their actual power, according to the size of the place. I have never heard of the cost being as high as 1s. per unit in a country town. Sevenpence and 5d. as a selling price per unit is high.

189. To Mr. Laird Smith.—I could not give an estimate of the probable cost per unit of supplying the note-printing building a mile away from the powerhouse, and the houses of the employees another 3 miles away, unless I knew more of the general conditions. So much depends upon their load factor, and the gross amount. I questionably the nearer you are to the source of your current the less the cost of transmission. There is not only the actual loss of energy on the line, but there is always the cost of the line, and interest and depreciation. That becomes quite an important matter when you go some distance. If you have a number of establishments supplied from the one main line, the cost per unit supplied is reduced. The cost of current at the powerhouse to the New South Wales Railways Commissioners during 1918-19 was 300s. of a penny per kilowatt hour. Allowance for interest and depreciation at 375 of a penny, we get a total cost of 344 of a penny per kilowatt hour at the powerhouse. We shall certainly generate at less than that in the future, because that includes capital charges for all the old plant, and, furthermore, there is a lot of old plant which generates at a considerably more costly rate than the more modern plant. The White Bay powerhouse gives us a kilowatt hour at under 2 lbs. of coal, and that brings the price of coal out at less than one-thousandth of the cost of a ton, so that the price of coal becomes quite small. The figure I have given you of our cost takes into consideration our load factor, which is approximately something over 40 per cent. If we had a 100 per cent. load, our capital charges would be reduced in the proportion of 2 to 5. It does not follow that we can supply to any particular person at that rate. If we supplied to a person with a 10 per cent. load factor, we should be losing money if we charged the same rate as we do with a 40 per cent. load. On the other hand, it might pay us to supply at even less, to a customer whose load factor was more than our own. We do no distribution to private customers. We have offered to supply the City Council with up to 10,000 kilowatts. We are supplying them now with some 4,000 or 5,000 kilowatts. Alternate current motors are unquestionably a success, although there are certain services for which direct current is advantageous. For traction work, direct current is an advantage, although there is alternate current traction. There are isolated services in factories, such as cranes and overhead travellers, for which direct current is more suitable, but for ordinary purposes alternate current offers many advantages, more particularly where the distances to be traversed, as at Cambera, are liable to be greater. For long-distance transmission alternate current is a necessity. It is a fact that in Sydney recently the City Council was short of current. Their reported proposal to spend £1,000,000 in machinery is not for the purpose of dealing with the current that the Railways Commissioners supply to them. There are two entirely different systems, and two different lots of power-houses. The Railways Commissioners have their first powerhouse at Ultimo. It has a capacity of 30,000 kilowatts. They have since built a new powerhouse at White Bay, with a present capacity of about 20,000 kilowatts, which is now in service. The City Council have their own powerhouse at Pyrmont, and the great bulk of their current is generated and supplied from there. During the war the demand overtook the capacity of their plant. They, therefore, approached the Commissioners, who have supplied them with some thousands

of kilowatts to assist them. We do that daily. The advantageous position in which the Commissioners now find themselves in regard to an ample supply of power is due to the fact that on my recommendation they anticipated the requirements of the electrification of the railways. There was a great deal of talk of the work being done within certain periods; but I saw it would be impossible to get the powerhouse built, and, therefore, I asked the Commissioners, at the time Mr. Johnson was Chief Commissioner, to put down a large powerhouse on lines that would deal with railway electrification. They approved, and the first half of that powerhouse has been built, and we have some units in it. Consequently, our power has been a long way ahead of the needs of our tramways, as the war put a stop to electrification. The fact that we have a good deal of power is not inconsistent with the fact that the City Council were, and still are, short of power. We propose to supply them with some thousands of kilowatts more than we at present supply. Practically the whole of the Railways Commissioners' high-tension system is laid in bitumen in wooden boxes or troughs. I questionably that is the most reliable way of laying a cable. A good bitumen, free from corrosive chemicals, must be selected. If that is done, it is the most permanent and reliable of all systems of protecting the cable. There are two or three ways of laying the bitumen. Sometimes it is laid in iron, sometimes in concrete, and sometimes in wooden boxes. We are quite satisfied with the wood now, but the wood that we laid down first in certain districts was attacked by white ants. For miles they went through the wood, then through the bitumen, and through seven thirty seconds of an inch of lead, and through the paper wrapping of the cable, right to the copper. We then powellised the timber, first treating the molasses with arsenic. We have put down many miles of that timber in place of the other. We also put a certain amount of arsenic in the bitumen. We have not yet had an instance of wood treated in that way being even marked by the white ants. In all cases where breakdowns occur, the first question we ask is whether it is the powellised wood that has been attacked, because we have had to spend thousands of pounds to get over the white-ant difficulty. We have put down the powellised wood in districts even where some of the other wood, which has been absolutely honeycombed, has not been taken up, but we have never yet, under microscopic examination, found a mark of the white ants on the powellised wood. That is our experience over a period of about twelve years, so that in our case the powellising of the wood has meant salvation of the system. The use of bitumen in powellised timber boxes is a practical scheme, or otherwise we would have to give it up. I am not speaking of the preservative properties of powellising, but simply of its protective qualities against white ants. I am not speaking of isolated cases, but of many miles of timber, so that our experience has been quite conclusive as to the merits of the system. The cable is laid on bridges in the wood troughing after the wood has been treated by the powellising process and tested. We have put an auger right into the centre of the wood, and found that the arsenic goes right through. Then the bitumen is also treated with arsenic. No matter how carefully you lay the bitumen, you cannot avoid having a certain recess between the top of it and the hardwood cover of the boxes or troughs. It was in that little recess or chamber, just underneath the lid, that the white ants used to live and propagate their species for miles. I have come to the conclusion that what attracts the ants is the heat, because our cables give out all the time a certain amount of heat. The ants must have thought that they were on the way to sunlight when they bored

through the wood, bitumen, lead, and paper until they reached the copper.

(Witness withdrew.)

George John Oakshot, Commonwealth Works Director of the State of New South Wales, recalled and further examined.

190. To the Chairman. I have inspected the Exhibition Building at Prince Albert Park. I consider it quite unsuitable for the purpose. The floor space is, roughly, 200 feet by 120 feet, outside measurement, which works out at 24,000 super feet. The outside walls are made of brick, and the roof is of iron, but it is leaking badly in many places. One of the first things you would have to do would be to re-cover the whole roof. The inside construction is of wood, and the roof is supported by timber. It is a one-story building only, not at all adaptable for conversion into a two-story building so as to double the accommodation. You would have to rebuild the whole place to do so, with, perhaps, the exception of the outside walls. The annexes are simply for cloak-room and entrance purposes. The lighting is fairly good, and the inside space is well accommodated with many posts. The building is used at present as a skating-rink, and the lease has a long period still to run. Another building which I inspected is that occupied by Waugh and Josephson, at the corner of Goulburn and Brisbane-streets. It is a brick building, three stories high. Each floor contains about 8,200 super feet, making a total of about 24,600 super feet gross. All passages and closets are included in that floor space, which is just half the accommodation you require. The place is well built, but not fireproof. It has wood story posts, joists, and flooring. The external walls are of brick, and look strong enough to carry one or two more stories, but not enough, in my opinion, to give the accommodation required for note-printing purposes. Up Brisbane-street there is a row of two-story dwellings which are a distinct fire risk. They are old buildings, with a good deal of fencing about them. On the other side, in Goulburn-street, there is a well-built structure, but it is not fireproof, and, being much taller, would be a very considerable fire risk. On the other side, in Goulburn-street, is Anthony Morritt's branch store, used chiefly for galvanized iron piping and similar goods. It has brick walls and an iron roof, and cannot be considered a fire risk. Sanitary conveniences for male and female employees would have to be provided, and I saw no strong rooms. I understand that the purchase money outright is £19,000, and the place is leased at an annual rental of £1,500. It is situated in the Commonwealth-avenue that runs from Oxford-street down to the railway station. It is in a slum locality. The land used to be one of the worst slums in Sydney, but it has been cleared. I was asked to inspect a block of land in Balmain, between Elliott, Beattie, and Evans-streets, which it was thought was bought for a drill hall, but I can find no record of it ever having been touched by the Commonwealth Government. It was bought by the New South Wales Education Department for the kindergarten purposes. The drill hall built by the Commonwealth is quite close. It would be difficult to get that block of land from the State. I inspected the premises in Pier-street, Darling Harbour, now used as a telephone workshop by the Postal Department. It is near the Postal Department's store. The accommodation is not sufficient. The area of each floor is 5,254 super feet gross, including the lift and the stairs. It has five stories and a basement, the basement being divided by a carter's workshop on one side and a delivery store on the other. You would want that space, so that the building was regarded as one of six stories, giving a total floor space of about 31,200 super feet. The building is not fireproof. It has wood story



posts, joists, and floors. There is an iron fire escape outside, and a staircase of which the treads and risers are of fireproof material, but the hand-rail is not, so that if the hand-rail caught the staircase would be an extremely dangerous trap. I ascertained from the Deputy Postmaster-General that the Department is recommending two years' further rental from the 13th October, at £1,850 per annum, or an increase of £150 per annum on what the Department is paying now. They had an offer of purchasing the building for £25,000, but that is not to be recommended, because the enlargement of the postal store at Darling Harbour is contemplated. The place would be by no means suitable for note-printing purposes. It is not suitable for machinery, and is not fireproof. From where I was standing outside the door I saw three factory chimneys, so that the conditions are almost certain to be bad. It is almost exactly a mile from the gasworks, which, I believe, however, are to be removed shortly. I do not think the gas fumes would affect the place at that distance. I inspected the Parcel Post building close to the Central Railway Station. It is pretty high, commodious, and well-built. I am not chemist enough to give an analysis of the coal smoke from the railway engines as to deleterious fumes. I do not think it would contain much sulphur fumes, but I should think it would contain ammonia gas. There would be a certain amount of dirt. My private opinion is that the fumes would not affect the work, but undoubtedly, with the wind in the right direction, a certain amount of carbon would be deposited in the building. That has been proved by experience. The dust is the same all over Sydney. It would not be any greater there on account of the proximity of the railways. Being at the junction of so many roads, the building would suffer from dust the same as the rest of Sydney.

191. To Senator Newland. There would undoubtedly be a considerable amount of snouts. The Parcel Post people have already complained of them.

192. To the Chairman.—Damage by snouts and carbon could be easily avoided by means of wire-gauze screens, which could be put up at the windows whenever the wind was coming from that direction. That system would supply all the necessary ventilation. No doubt the nearness of the railway station is against the building as a site for note-printing purposes.

(Taken at Melbourne.)

WEDNESDAY, 10TH SEPTEMBER, 1910.

Present:

Mr. GUNZBURG, Chairman;

|                   |                  |
|-------------------|------------------|
| Sensor Henderson, | Mr. Mathews.     |
| Sensor Needham,   | Mr. Sampson.     |
| Sensor Newland,   | Mr. Laird Smith. |
| Mr. Mathews,      |                  |

Arthur William Smale, Auctioneer and Estate Agent, representing Messrs. C. J. and T. Ham, Estate Agents, Melbourne, sworn and examined.

193. To the Chairman.—I have been advised by the Secretary as to the possible requirements in the Note and Stamp Printing Office for the Commonwealth, and I understand that the space desired is about 50,000 square feet on two, three, or more floors. I know the building—the Turf Vecein—which has been suggested as suitable for this purpose. I understand from you that an establishment of this sort for the printing of bank notes, Treasury-bills, stamps, and so forth, must be self-contained, with no other tenants, and absolutely clear of noxious fumes and risk of fire. This, I understand, is necessary in view of the delicate and expensive machinery which will be employed. I have

thought over what the Secretary told me yesterday, and so far as I can judge from inquiries that I have made, I do not think it would be possible for the Commonwealth to rent any building of the kind in the city of Melbourne at the present moment. There is no space of the kind to let in Melbourne, with the exception of one little building; there are no offices, no factories, no workrooms, or anything of the kind available. I do not think we have had the same experience before; certainly, not in my time; there has always been something to let, but there is nothing now. As to getting one entire self-contained building, as described, it is quite out of the question. It is a peculiar building that is required, and that makes the position all the more difficult. I understand from you that the manager of the Note and Stamp Printing Factory, whose family has had experience of the kind in connexion with the Bank of England, does not like his present quarters on account of the humidity, the noxious fumes from the gasworks, and so forth. At the present time we have inquiries every day for office and other accommodation, and we have nothing to give in the way of offices, factories, workrooms, and show-rooms. If we had three or four big buildings at our disposal in Melbourne now, I believe we could let them from the office point of view alone. Assuming that in five to seven years the Federal Capital were built, and it was decided to remove this printing establishment there, it is hard to say whether, if the Government erected a building on the proposed site sufficiently strong for the installation of the necessary machinery, it would be easy to sell or let it at the end of that period; we do not know what the future holds for us. There would be no question about selling such a property to an investor at the present time if it could show a fair return; we could let every scrap of it quite easily to-day. There is one idea that has occurred to me. The Commonwealth Government have been renting a lot of space in various parts of Melbourne, and if the Seat of Government were moved a lot of accommodation would be thrown on the market. If that were to occur all at once, it might cause a glut, and the premises would not be so easily lettable as under ordinary circumstances. It looks as if there was likely to be a fall in values, with a recovery. If that were to come, it is likely to occur before the expiration of seven or ten years, and values are more likely to go higher after that period. This is the lesson that is taught us by the history of land values. I certainly would encourage a client of ours to spend £10,000 or £10,000 on factory accommodation at the present time; we would encourage any sort of city building for almost any purpose you could mention. I think the site proposed for this printing office is very suitable; at any rate, it would let very readily to-day. From inquiries that we got, I think we should easily fill such a building at the present time.

194. To Mr. Mathews.—I do not think that the cost of building is likely to fall for some considerable time. I could not say, but I think it will be rather on the upper run. The cost of material may drop to some extent, but, on the other hand, the cost of labour may rise. If I had a client who desired to build, I would not recommend him to defer it for twelve months in the hope of the cost of building going down.

195. To Senator Newland.—I have only a rough idea of the number of buildings at the present time occupied by the Commonwealth authorities. I do not think that in the event of the Seat of Government being transferred to Canberra in the near future the value of property would be greatly reduced. I might say that there are other buildings likely to be put up in the near future, because there are one or

two syndicates working now. At the present time, however, I do not think that such a removal would make any great difference in values, because we have so many inquiries for property. I do not think that if half-a-dozen large buildings were to become vacant between now and Christmas there would be any great difference made in rents and values if things go on as they are going at the present time. Unless we had one or two droughts, or something of the sort, I do not think that rental values would be seriously affected.

(Taken at Melbourne.)

TUESDAY, 10TH SEPTEMBER, 1910.

Present:

Mr. GUNZBURG, Chairman;

|                   |                  |
|-------------------|------------------|
| Sensor Henderson, | Mr. Sampson.     |
| Sensor Needham,   | Mr. Sinclair.    |
| Sensor Newland,   | Mr. Laird Smith. |
| Mr. Mathews,      |                  |

Thomas Samuel Harrison, Australian Note and Stamp Printer, recalled and further examined.

196. To the Chairman.—In view of the fire risk of my present quarters, the erection of a new building is a matter of absolute urgency. The present building is terribly dangerous. When Mr. Lee, of the Melbourne Fire Brigade, was down there, he said, "I must declare this a dangerous area at once, and get you out of it." He pointed out the danger that a lot of my girls are in. That danger still exists. I have had no complaints from the Board of Health about the conditions under which the employees are working. It is absolutely necessary that the Note Printing Offices should be in close touch with the Commonwealth Treasury. As manager of the branch, I am in touch with the Treasury daily. I am daily speaking to various officers on the direct telephone line, and am often personally in touch with Mr. Collins and Mr. Curitt as to ways and means, and discussing general issues, complaints, and all sorts of things that I have to ask them about. These conversations have reference to the requirements of the Treasury in notes, inscribed stock, Treasury-bills, &c. They also cover the passing of proofs, and schemes of various sorts, and the purchase of requirements. The Department has grown considerably since the war broke out. We started with five Iloa machines; now we have 23. I do not like to take everything on my shoulders, although Mr. Collins and the Assistant Secretary give me all the latitude I want. Still, a man likes somebody to show things to sometimes, especially in Treasury matters. It is possible to print the notes away from the Treasury, but it would be a great disadvantage. I have had the opportunity of perusing the evidence given in Sydney by Mr. Neill, the cashier of the Commonwealth Bank. I do not agree with quite a deal of it, and I desire the opportunity to controvert several of his statements. He suggests that the Commonwealth Bank should take over the control of the note issue. It is an axiom at Home, since the City of Glasgow Bank smash and the failure of another bank with which Mr. Whitaker Wright was connected, that it is a very bad thing for a bank to be allowed to print paper and call it money. That right ought to be held only by the Government. That is the opinion of the British Government at the present time, and it is acted on, with a few exceptions, over which the Government have absolute control. I know Mr. Denison Miller; but I cannot see any advantage in handing over the printing of the notes to the Com-

monwealth Bank. Mr. Neill states that he does not favour the present system of escort, and that the notes could be distributed from Sydney by steamer at less cost. I would point out that, when they are distributed by train under escort, we have no premium to pay for insurance. Mr. Neill has lost sight of that fact. Some time ago, we sent an escort to the North by steamer. I will not swear to the exact figure, but the steamer freight and insurance cost us something like £100. You can ascertain the exact amount from the Treasury. On rare occasions, the Treasury has sent notes by steamer, but the cost of freight and insurance was so high as to be prohibitive. The present escort system has proved to be expeditious, absolutely safe, and much cheaper than by steamer. The heaviest item—railway fares—in any case goes to the State revenue, and not to a private steamship company. Mr. Neill talks about safety, but some time ago one of the highest officials in the Commonwealth Treasury told me that two labourers breached some notes belonging to one of the banks up North. The men were imprisoned, and served their term, but, up to the day that the said officer told me about it, those notes were periodically being presented to the bank. The men had hidden them away, and they were gradually being put into circulation. So much for steamer safety. The plates for the present Australian note issue were primarily engraved in England by my firm. They were not finished when I left London. After I came here, they were sent out on one of the mail boats. We got the bill of lading, but we could not find those original dies, which cost quite a lot of money and toll and skilled labour to make. My officer, Mr. Robson, at present of the Treasury, who knew more about shipping here than I did, could find no trace of them, although they had been put in the strongroom of the ship, and were under the captain's charge. Knowing what sort of a case they would be put into, I tramped about the Victorian railway yards for two days—I remember that it was very wet weather at the time—and I finally found those valuable original dies for the Australian Treasury notes under an old piano-case on the wharf! So much for shipping companies looking after things. The opinion was expressed by Mr. Neill that it would be an advantage to put the management of the note issue into professional bankers' hands. He also states that the Treasury officials are not bankers. I would point out that the desirability of placing the note issue in the hands of a bank is largely a matter of policy, but note issuing is not banking business in the true sense. The bank hitherto have certainly issued notes, but the tendency is to prevent their doing so. The issue of notes at Home is now limited to only a few banks in England, Scotland, and Ireland, and then only for a limited amount, and under strict conditions. When the war broke out, the British Treasury issued its own currency notes. The banks in Australia have been prevented from issuing notes by means of a prohibitive tax. I consider that currency notes should, like coin, be issued by the central Government, and not by a banking company, or even by such a bank as the Commonwealth Bank, which, though established under a special Act, is little different from any other bank in the character of its business. It seems clear that, if it were right for the Commonwealth Bank to issue currency notes, there is no reason why it should not mint and issue coin. Mr. Neill mentions that Australian notes are not issued in sufficient quantities, and that the Sydney requirements for notes seen to be beyond the comprehension of the Treasury in Melbourne. When I came out here, we could print the required issue easily; as a matter of fact, in those days the banks would not use the 10s. notes, so we left off printing them. I got figures in London from Sir



George Reid. He told me what he wanted, and it did not reach 4,000,000 pieces of paper. Now we are printing 60,000,000. When the war broke out we had to work very hard. We got the machinery out as fast as we could, and trained a staff. I took men from the plough and from the mines. I could not get on with the orthodox letterpress printer. He did not understand my methods. The only actual printers who have been bred and born in the trade are my letterpress mechanists, but my plate printers are absolutely new men. They are working very well, and learning their business thoroughly, but it has been a difficulty in supplying the Commonwealth Bank with notes in the great quantities they want. I cannot see how it could have been otherwise. Whether the Commonwealth Bank controlled the issue or not, the conditions would be the same owing to the war. Mr. Neill's statement is one that certainly should be replied to. The Treasury knows perfectly well what the requirements are. Mr. Neill apparently fails to recognize that we are still working under war conditions, which have necessitated the printing of large quantities of bonds and war-savings certificates, as well as about eight times the number of Australian notes which the Note Printing Office was expected to turn out in 1914. Strenuous efforts have been necessary to meet all the calls on the Note Printing Office in face of the shortage of machinery and cramped conditions. I am certain that the Commonwealth Bank could not have done as well, quality being considered. Hitherto, the notes printed have almost always been ample for requirements, but, for the reasons which I have mentioned, there has recently been a very slight shortage of notes. I am glad to say that that shortage is being rapidly overtaken. This morning, 50,000 £5-notes were sent to Sydney. I cannot do more than I am doing on the present site. The Australian note is, for safety reasons, very elaborate. I suppose one of the most elaborate in the world. It is plate-printed back and front, and the paper has to be wetted and dried twice. Mr. Neill further says that there is no need to have a strong-room in the Note Printing Office in which to store millions of notes. I do not agree with that at all. The strong-room is necessary for only a quantity of finished notes. It is essential to have a perfectly secure strong-room in which to keep the very valuable plates used for printing. Those plates, if stolen, would, of course, supply an easy means for forgery. Mr. Neill mentions that the system of the Bank of New South Wales was to send out unsigned notes to their branches by post. As the Committee is aware, all Australian notes are issued with printed signatures, and considerable quantities were at one time sent by post, but that method, except on rare occasions for small quantities, has been discontinued, because it was not considered safe. For large quantities, posting is more expensive than escorting. Extensive robberies of notes in the post have occurred in the last few years, showing that the risk incurred in forwarding notes by post is one which should be avoided if possible. It is more expensive to send notes by steamer on account of the heavy insurance which the shipping companies insist on. If we send them under escort by Treasury officials, there is no insurance. I am sure the escort method is the safest and best in the long run. If we send notes by steamer to Perth, we send an escort with them, but the Treasury can give all the details on that matter. The Treasury officials, who come to me of a morning, have told me that they prefer going by steamer, as it is the more pleasant journey. As regards the proposal to shift the work to Canberra, I could not start right away anywhere. The move has to be made gradually. The two jobs would have to be run concurrently, unless

we put up another plant there at great expense while this one is running. I do not advocate that. It is hard work to establish a big department. I would have to start printing in Canberra as soon as I got two or three machines running. A gradual removal is the only way to keep the job going without stoppage. So far as management and responsibility are concerned, I could manage it, because my son is quite capable of looking after things when I am away. I refer to the technical part of the business. I can give you no idea of the expense that would be incurred in transferring the work to Canberra. I do not know what the carriage and carriage would be. The trouble would be in getting my staff there. I do not know who would go or who would not. There are no other printers in Australia like the plate printers I have got. They are the men who must be first considered. They do the steel-plate printing on the machine, and they are only just beginning to be efficient after five or six years. They are only beginning to know what a proof is and what a plate should be, and what should be got out of it. I do not think I could start teaching men again. If these men would go with me, and take their families with them, a lot of the trouble would be overcome, but I do not think I would take on the task of picking up new men in Sydney and taking them there and teaching them. I am getting too old for that. Everything depends on whether my men would leave Melbourne. Nearly every one of them is married. I suppose they would go, as they are better off financially now. I suppose, then, they are very. I took them from tin-smithing, iron smelting, blacksmithing, and farming. In fact, two of them were miners. They are as good men as ever I had in London at their work, and their output is splendid. The Australian man, if he puts his mind to it, can do anything. There is no great degree of high skill in floor printing, given good ink and paper nicely damped, although it is strenuous work. The beauty is in the quality of the steel plates that the notes are printed from. Once the capital was established at Canberra, and the Treasury was transferred there, there would not be the same difficulty in getting my staff to go there. Once you begin to get a population there, shops will be opened, and people will soon go and live there. If a building for note printing is put there now, it will be absolutely necessary to erect homes for the workmen as well. I should say my staff would require 100 homes at the least. There are not only the printers to be considered in transferring the staff. We have what we call loco assistants. They are young men who become highly skilled in handling the wet paper and placing it in proper juxtaposition on registered lines on the hot moving steel plate, which weighs 2 cwt. That sort of work wants practice. Those young men would have to be considered. It is very doubtful whether the other practical skilled workers that I have could be got at Canberra. I am sure that it will give me a lot of trouble to get a staff in Canberra, or to induce my present staff to go there, and be able to keep them there. I certainly prefer that the great majority of my staff should go with me. I could not do it in any other way. I have had to find the picked men in Melbourne for my letterpress work. I suppose, if I had been established in Sydney instead of Melbourne when I came here first, I would not find the same difficulty in moving to Canberra, because the distance from Sydney is not so great as it is from Melbourne. The same difficulties would not arise if Canberra was an established city, but, of course, I would not have such a big population to draw from. Still there would not be so many insurmountable difficulties as I see now. If a building was established at Canberra, and housing accommodation for the staff, I should say it would take six months to move us. I have been in Sydney recently. I inspected the Parcel

Post Building, near the Central Railway Station. I noticed an engine shed just behind it, but I do not think there were any conditions there sufficiently serious to affect our printing. It would be not nearly so bad as working next to a gas-works all day long. I noticed this morning that the fumes from the gas-works had during the night discoloured the tar on our asphalt paths, and stained the freshly-cleaned windows. The Parcel Post Building in Sydney is no ideal building for a printing department. In my opinion, it is too big a building. I saw the size of the lifts and of the various floors, and came to the conclusion that I would want about a dozen men to keep it clean, but I have no objection to that if the Treasury will stand the cost of its proper upkeep. I could not work in a dirty, untidy place. I do not think you could put me up a better building. The site, for a city site, is all right, but it is not as good as the proposed site at Fitzroy. I do not think that there are any atmospheric conditions there that would hurt the printing work. Still, if that building was available, I would have a great objection to going there on account of the humid heat of Sydney, which I cannot see how to overcome. The witnesses you examined in Sydney on that point have all entirely mistaken my meaning, although Mr. Sands made a very fine and honest statement. I was not talking about the quality of the printing that is done in Melbourne or Sydney. They are both equally good. I was talking about the fact that the men cannot work with such energy in Sydney as in Melbourne. The humidity of the city is most apparent. In Sydney there is a lack of oxygen, which prevents strenuous work. The output of our work with our steel floor plate-presses would drop off considerably in Sydney. They tell me that it is very hot there for three months in the year. I have been in Sydney several times, and I note that my collar is wet before I have been away from the hotel for ten minutes. It is not a city for hard work, such as our note printing is. Ours is not ordinary printing. I am of the opinion that neither Mr. Sands nor Mr. Gullick realizes that. When I said that one could not print in Sydney, I did not mean to infer that the quality of the work done there was not perfect. We would have 23 floor presses running, each of them weighing 11,500 lbs; and, as things go on, we shall want more of them. Each of them has eight gas burners, and sometimes the plates get so hot that the men can hardly touch them, and they have to slow down. If we put all those machines into a building in a hot humid climate like Sydney, the men would drop out. On a hot morning in Melbourne I give my men ten minutes off, and let them change with other men to wipe the plates. If I was a private printer, and these note-printing works belonged to me, I would never dream of taking the work to Sydney. It would cost the Treasury nearly 50 per cent. more to run the plant there. In saying that, I am speaking as a practical steel-plate printer. The gentlemen from whom you took evidence in Sydney are letterpress and lithographic men. I am printing on wet paper twice. I still maintain that the climatic conditions of Sydney are not suitable to get the best results from the steel-plate printers. If the work is taken to Sydney, it will cost us a good deal more money. I am speaking from practical experience as against theory. I have no reason to be actuated by the slightest trace of Inter-State jealousy. I presume that the climate of Canberra is not so humid as that of Sydney. I would favour a one-story building at Canberra. It would give better light. Where you can get the ground, the modern idea is to put up a one-story building, or what we call a flat building, with a saw-tooth roof, that throws the light down on to the machinery. It is safer from a fire point of view, and

not nearly so costly. If we went to Canberra I should say, "Build on modern lines, instead of building up." It is better, because there is no climbing about necessary, or moving of goods up and down lifts. You could easily put up that class of building at Canberra, because you have the land. I do not suppose you would get the same security against robbery, but the risk of robbery is reduced to a minimum. We have a complete checking system. For instance, if you brought me the first 100,000 I printed, I could look up a working sheet and a reward, and tell you the name of every person whose hands it went through. With a flat building, supervision would be considerably more efficient than with a building of floors. If we were located at Canberra, I would be satisfied with a large one-story building with ample strongrooms, but if the Treasury was not there, I should want extra strongrooms. If I have any choice in the matter, I say, "Do not transfer the work to Sydney if you can take me to Canberra." For a city, you cannot do better than the Turn Verein site on the hill at Fitzroy, with plenty of fresh cool air and a clean situation. You will never better the proposed site as far as a city is concerned. You may go further and fare a long way worse for many reasons. A good many internal structural alterations would be needed in the Sydney Parcel Post Building, although I do not say they would be expensive. It is strongly built, and the light and air and general cleanliness of the place are all right. At present, I should say it was too big for my requirements, but I do not know what we may want. Already the floor space of the building that you propose to give me on the Turn Verein site is not big enough. You will have to go further back to give me room for the machinery that is coming from London now, and the work that I see in front of me. I want to improve the office in all sorts of ways. I would be very tightly packed in the new building as now planned, and that is not a good thing. Mr. Murdoch and I have talked the place over. He thought he could pack us tight, and I thought so too; but I would now suggest that the building be made a bit bigger, and that you go a little further back. If the kitchen and dining places were put on the roof, so as to give me another floor, that would be ample. I really want about half another floor to do the job properly. The roof, in my opinion, is the proper place for the kitchen and other accommodation. I think the roof is the very best place for the luncheon rooms. That is better than having them in the main building, with all the smell and necessary refuse. It would be a good move to shift the kitchens, &c., up there. A good deal of oil drops on our floors, and, although we have zinc trays, the oil gets through the seams. I should think that, if a fire took place, the composition floor which I inspected recently, composed of jarral sawdust, sand, and cement, would be as inflammable as jarral blocks. The composition would hold oil. I suppose both kinds of floor would blaze on the top, but it would require a big fire to make a piece of jarral burn. The wood blocks are laid on 7½ inches of concrete. I do not think the composition floor that I inspected has had enough wear and tear yet to show how it will stand us, but it cannot be as good as the jarral blocks. There is nothing like the jarral block for wearing. Hundreds of square miles in London are paved with jarral, and it wears the best of anything we have ever had. The oil, I think, would get quicker into the cement through the sawdust composition than through the jarral blocks. It struck me that the composition became something like linoleum when it got a lot of oil into it. It is only the matter of cleanliness that can recommend it. My own opinion is that there is nothing like the proper wood block. A substitute, after all, is only a substitute. It looked very well in the factory that I saw, but I could not



pass a fair opinion on it. If the proposed building is put up on the Turn Vercin site, and in six or seven years the Government decide to remove the note printing to Canberra, I am emphatically of opinion that the building would lease or sell readily. It is the finest site in Melbourne for any one in want of a good factory. It is in a neighbourhood where labour should be easily available. If it is an ideal site for a note printer, it should be an ideal site for another manufacturer.

197 To Senator Verdhum—I send notes from the printing office to the Treasury every week day except Saturday, and sometimes a special escort at midday. The Treasury officials can give you figures as to the cost of escort. I have been told that it is much safer and less costly to send by train. I have heard that it costs £70 to send an escort to Perth by train, but I cannot swear that this is the actual sum. I do not know what the cost would be by sea. I would prefer the gradual transfer of the work from the present site to Canberra rather than an intermediate transfer from here to Sydney, and then a move from Sydney to Canberra. Sydney is out of the question as a practical proposition for turning the notes out expeditiously and profitably. Canberra is a different proposition altogether. I am dead against the humidity of Sydney. I asked two or three printers about it when last there, and they said, "Harrison, you could not work at your job for three months in the year." My men get knocked out now on hot days. It has been suggested that the machines should be heated by electricity instead of gas burners. That would get rid of the fumes, and so might be a little better, but it would not get rid of the heat. My note-printing staff are all experts so far as their training with me is concerned. If my men were called upon to go to Canberra, some special inducement might be held out to them. My opinion is that the Note Printing Branch should be paid better than any printers in Australia, but the Treasury will not entertain the idea. They will not give a farthing more to my Hloc printers, who work so strenuously, than they do to the letterpress printers under the award. My men, although they are printing bank notes, are paid at the same rate as a little printer in the city, who is simply running off some black and white handbills. The job ought to have a dignity and status that it has not got. I have been fighting against this ever since I have been here. It is one of the things that has dissatisfied me, and I am still dissatisfied. A man has a little pride in his job, and the Treasury ought to see its way to let my men be paid a little better than the other printers. Some special inducement in the way of salary or wages would help me to bring the whole staff along. It would go a long way to get over the difficulty. I do not see my way to start to train new men. It would be cheaper in the long run to give the present staff a bonus to induce them to stick with me. You do not know whom you are going to pick up. I have had before now to get rid of men who were not quite capable. I do not want to change. The composite floor referred to struck me as being very soft and elastic, and comfortable for the employees. I liked it, but, as it has been down only for four or five years, I could not give an opinion as to its durability. I saw several places where holes had been chipped out by the dropping of litho stones or the ends of printers' rollers. The man who took me round said those places could be easily mended with a little composition. The floor struck me as being better than a flat wood floor. It was not so slippery. I am still of opinion that it would not be as durable in the long run as proper jarrah blocks. It would be nice and quiet, and perhaps more pleasant for the employees. I am certain that the output of the works would be largely reduced if they were shifted to Syd-

ney. I presume that Canberra would be much the

same as Melbourne as regards clearness of atmosphere and the amount of oxygen in the air.

198. To Mr. Laird Smith.—The Parcels Post Building in Sydney is not an ideal place with the railway engines so close. I was there for only ten minutes, and saw one engine there. I do not know if they would be emitting smoke all day long, or which way the wind generally drives in Sydney. If the wind was coming always from that direction, I should say the conditions would not be advantageous. From the point of view of the coal smoke, the site is certainly not ideal. If you talk about ideal sites, you must go to Canberra and give me a flat building there. We employ a number of young girls. All the female employees are single. As a rule, they stay with me quite a long while. It is the exception for a girl to leave me unless she gets married. On the average, about two years leave me for that reason. I have some young ladies now who have been with me six years. You could not get better girls at their work. The majority of my responsible girls have been with me for that time. There should not be any difficulty in getting them to move to Canberra while they are single, as I believe they are very satisfied with their working conditions. I am almost sure they would not want to leave me, but it is quite another point whether they would like to leave their parents. I think with Canberra, as it is now, with the juvenile element wanting, and no single girls or men available, it would be an impossibility to carry on there, unless I could take my staff from here. I do not think an important industry like this should be used as a pioneer industry for the establishment of the Federal Capital. We want the best of labour and the best of everything. It is a very expensive Department, and it will be a terrible handicap to take it out into the wilderness. I think it is a wrong move altogether. It is more or less an experiment as to whether I could do the work there if you took me away. It would take a very clever lawyer man to say whether I could carry on there or not. There is always the human element to consider. I presume the married men will go if they are satisfied and contented. None of the senior men are very young. Perhaps one or two of the old men, who are good men at their work, would not go, but I should say the main portion of the married men would go. I have not yet mentioned the girls, who do the work of checking and examining the notes. We print 100,000 notes a day, with eight printings on each. Every one of those notes is examined by the girls, who are very expert. From the time I started, they have never seen a wrong number or a wrong count to the Treasury. That speaks for the girls who do the examining and checking. A good staff of that kind takes a lot of worry off my mind. Some of the finest girls a man could get are looking after that work. I would not need to take a hand myself now in the re-creation of the machinery. I have trained engineers to do it. In the first instance, I supervised the whole of the creation of the machinery myself, and taught the men. I should, of course, have to satisfy myself that valuable machines, when re-created at Canberra, were running, tuning, and sounding right before I let the work go on. Of course, I should have to supervise personally the installing of the engraving machinery and the lathe. Nobody in this country can assemble that but myself. I agree that the machinery could be as easily moved from here to Canberra as from one site to another in this city, because the whole staff has in the careful packing at the start. It has to be fortified and blocked, and screwed into place. In fact, it has to be beautifully packed. After we pack it, you could tumble the box about without hurting it. If part of that machinery was broken it could not be easily replaced. The only man making it is Chapman, a Yorkshireman, in New Jersey, United States of

America. We could, perhaps, get a rough bit of stuff cut. When I wanted one particular machine built in England, the men were no longer in England who could do it. They had gone to America for higher wages. Chapman is doing a little job for us now. Still, I do not think a small breakage would trouble us much, because, as we have certain dies and patterns cut by that lathe, we could afford to wait while Chapman was making a new pair. I do not think one could turn out more notes than we are doing now, even if we had better housing conditions for the machinery. Our machines are giving better returns on the Hloc presses than any others in the world—that is, a better output per machine. The Australian is a good, hard-working, honest chap if you treat him the right way. As to the question of improving the output by changing the control from the Treasury to the Commonwealth Bank, I have to repeat the old truism, "Every man to his trade." I would not presume to count up a row of figures after Mr. Denison Miller—he has the reputation of being good at finance—but he must not talk about printing machines. I cannot see any advantage in giving the control to the Bank. They could not do it. Some of my letterpress men have gone to other firms, but my Hloc printing men have not. There is no other Hloc printing done here. I run the job as if it was my own. It is not a good business proposition to take it to Sydney, with its humid atmosphere. That is all the objection I have to Sydney.

199. To Mr. Sampson.—I have glanced at Mr. Sands' evidence. I note his statement that—

"A building can be put up so that you can be independent of climatic conditions, even for these delicate processes. After all, the humidity on a north-easterly day is mostly outside. With a proper system of ventilation and proper heating apparatus, an architect can get over all these difficulties. I would not hesitate to put the finest colour work in my factory?"

Mr. Sands is talking about dry baryum and lead-covered surface paper and registered colouring. I admit that he can do the finest work of that kind in Sydney, the same as it can be done in Melbourne, but what I am considering is the knocking out of the life of a man by the humidity and dampness of the atmosphere. That is a thing that Mr. Sands does not understand. I am looking at the possibility of my men operating the Hloc machines as effectively as in Melbourne, and I am convinced that the output would drop 83 per cent. I know of no method by which a building could be put up in Sydney to make me independent of the climatic conditions in that regard. I am afraid Mr. Sands has not been in a room where there are 23 Hloc presses working, all hot steel. I do not believe that difficulty can be got rid of. The place sometimes is like the engine-room of a battleship. I do not think a building could be erected in such a way as to be independent of the climatic conditions that obtain outside. I am open to conviction, but I do not believe it. You cannot alter the streets of Sydney on a hot day.

200. To Mr. Mathews.—When the machinery is once on the move and packed, it is as easy to take it a long distance as a short distance. The trouble is pulling it to pieces and putting it up. If I had to move it merely to Eastern Hill, it would not have to be packed in packing cases so carefully, but it would all have to be muffled and pulled to pieces. The ordinary printing press is always taken to pieces. If you tried to shift it out of the level, you might strain and break it. A printing machine ought to be laid with the most absolute and complete accuracy. A deviation of even the thickness of a sheet of paper will in a few months wear away the rack and the machine

will be out of register. Wherever I move to, there will have to be a certain stoppage of some machinery. There must be a little dead motion, but that cannot be helped. If I had to get new hands, my output would be considerably reduced. It is quite a new point to me whether I can carry out the job at Canberra. I do not know who would go and who would not.

201. To Senator Newland.—The note printing Mr. Sands did in Sydney many years ago was not done with the same machinery and processes as I use. It was lithographic work, done on a cold stone. Lithographic work is now also printed from zinc or aluminium and rubber. There is no heat, and nothing to affect the operatives like there is in steel plate Hloc machine printing. The machines we use are presses specially made for this work. They print wet paper on a hot plate. The steel plates are made hot primarily for the men to get the stiff ink off the plates and so that the ink shall enter the intaglio line to give the work a better impression and value. The men are standing all day long with hot gas and plates, taking off the superfluous ink and polishing the plates. The work is strenuous, apart from the heat. When I first came to Australia, Sydney struck me as an ordinary observant man, as a bad place to do plate printing in, and that impression is still with me. Mr. Sands' evidence is absolutely correct, so far as his experience of note printing was concerned. All those witnesses were correct, so far as their light and knowledge went, but my work is entirely different. Foggy or misty weather would not interfere with my work so long as it was not a humid heat. We have printed with Hloc presses in London where there are plenty of fogs. If necessary, we could overcome, by artificial means, any undue moisture in the atmosphere. In London, on damp days, we had to dry the paper artificially, although that is not advisable, because the paper dries unevenly. Linen paper does not go back into its normal condition for weeks after. Like a piece of flannel, it is always shrinking and pulling. Dampening or creasing will always shrink up the linen paper which we use for note printing. I do not think the oppressive heat of Sydney could be counteracted by artificial means. We have fans all over our present building to keep the air cool. We also have the windows open. When we keep the windows open on the north side, the Hloc plates on that side, where the dust from the north blows in, have only half the life of the plates on the other side of the building. The dust, with the automatic wipers, grinds the surface of the plates. There is not a more villainous place in Australia than the King's Bond, where this work is now carried on. One of the plates should run off about a million impressions, with proper usage. These we use on the north side will run for only a month or two, and the letterpress men grumble also about the dust nuisance. Sometimes looking over the railway yards to the north you can see nothing but a grey misty fog in front of you, driving against the windows. That is the dust. I have seen it almost as bad on the north shore in Sydney. I have one or two girls at the work whose fathers are also employed there. I have found that it is not advisable to employ boys whose fathers are working there. Those few girls would not make good hands. They are in primary positions only, and are not so necessary for the good working of the Department as the older and more experienced girls who do the checking and examining. The latter are highly skilled, and naturally are not very young. There is a danger of losing them as they get married, but we are bringing the young ones on in their places. The younger girls do not require a very lengthy period of training. They can get into all they have to do in two or three weeks. The senior girls instruct the



junior. The whole staff are gradually working up. If a vacancy occurs, and there is no one there capable of filling it, I get a girl from the Treasury as a last resource. If I were called on to transfer the work to Canberra, I would not be greatly handicapped if I could get a large proportion of the senior employees to go with me, and could get juniors at Canberra. I do not know whether children would come to the work from farms, and if they did I do not suppose they would be sharp enough. There is nothing like a town bred boy or girl for smartness. The smoke and smut from the locomotives at the Sydney Railway Station would affect the colours in some degree, but not so badly as the sulphur and ammonia fumes from the gas works do now. You will not get an ideal site unless you build one. It would be a great mistake to transfer the work first to Sydney and then to Canberra. If you are going to Canberra, make one job of it. It would be a terrible job to move it twice. The suggested site in Fitzroy is absolutely the best I know of. It is the only site and atmosphere that I can recommend. If the job and the machinery and plant were mine, I would take them anywhere but Sydney. I am looking at the question from the practical point of getting a fair amount of work for a fair day's pay, and the extraordinary physical conditions which my plate printers have to undergo. The Works and Railways Department is experimenting now with electric heating for the Hoe machines. I am nervous about the men getting electric shocks. I cannot yet tell whether electric heating will be suitable. When you heat iron by electricity, it gets very hot, dry, and uncomfortable. My own opinion is that we shall not become the gas. You can regulate electric heating by means of a rheostat, but you are really only putting the heat somewhere else.

202. To Mr. Sinclair.—Examining the figures as to temperature and humidity at Sydney, Melbourne, and Canberra, as supplied by Mr. Mares, I should say that Canberra is as healthy a place as a man will find. The figures are all in favour of Canberra, even as against Melbourne. Sydney is a beautiful city, but I am convinced that men do not work there like they do in Melbourne, whether in shops or offices. If the plant was shifted to Sydney temporarily, and afterwards moved to Canberra, there would be two losses by double motion, and double expense. It would be far better to spend a thousand or two on the present building, if by that means you could make it safe, and let us stay there for a few months, and then take us to Canberra. We can put up with the bad printing and the wear and tear, and the crowding of the machines, but we cannot afford to risk the loss of our plant by fire, and we certainly cannot run the risk of the loss of life of our employees. If you are going to build a new establishment, I should put Melbourne first and Canberra second. I do not think it would be advantageous to put in a tube from the proposed building to the Treasury for the transfer of the notes. It would cost a lot of money. I do not see how I could have the same check or safety as I have with the present system.

(Taken at Melbourne.)

WEDNESDAY, 17th SEPTEMBER, 1910.

Present:

|                       |                  |
|-----------------------|------------------|
| Mr. Guesow, Chairman; | Mr. Sampson      |
| Senator Henderson     | Mr. Sinclair     |
| Senator Needham       | Mr. Laird Smith. |
| Senator Newland       |                  |
| Mr. Mathews           |                  |

John Thomas Will Go down, Commonwealth Surveyor General, recalled and further examined.

203. To the Chairman.—Since I last appeared before the Committee I have made further inquiries in Mel-

bourne with a view to ascertaining whether premises suitable for a Commonwealth Notes and Stamp Printing office could be obtained here without the Commonwealth being forced to erect them. I found that no such premises can be rented, and that no building suitable for the purpose indicated is available. If the proposed notes printing office were erected by the Commonwealth, and in five or seven years it was decided to remove the seat of Government to Canberra, I am confident that the site which has been acquired could be either sold or leased satisfactorily. I regard the building which it is proposed to erect upon it as one which would be suitable for factory purposes generally. The site, too, would be suitable for factory purposes situated as it is close to a large working centre. Taking the view that it is absolutely essential that new quarters shall be found for a notes printing office, I think that the erection of the proposed building would constitute a fair investment. The Commonwealth would certainly be in no worse position than private individuals who are now building. There would be very little risk incurred in the erection of such a structure, although, personally, I would not invest money in building at the present time. I am unable to suggest any alternative to the erection of the building proposed. If the Federal Capital be removed to Canberra within the next five or seven years, the Commonwealth Government will still need to occupy a certain area of floor space in every State capital. Although quite a number of officers will be obliged to leave Melbourne if the seat of Government be transferred to Canberra, the district Administration will still remain in each State, and in that connexion, office accommodation will be required. In Sydney at the present time the Commonwealth is renting 65,000 square feet of floor space. A good deal of its office accommodation there is located in the Commonwealth Bank. In that building the Commonwealth Government occupies the fifth, sixth, seventh, and eighth floors, each of which contains an average space of 4,200 square feet. The total area occupied by Commonwealth Departments in that building is 17,521 square feet. Of course, I am speaking purely of office accommodation. The figures which I have given do not include office accommodation for the Defence Department or the Postal Department, but do include accommodation for the Customs Department. The total area occupied by Commonwealth Departments in Sydney is 51,000 feet, exclusive of postal accommodation and premises which are being rented. In other words, we occupy 117,500 square feet of floor space in Sydney, not including office accommodation for the Defence Department at Victoria Barracks, Paddington. In Melbourne we have no office premises the property of the Commonwealth apart from the Commonwealth offices, Gipps-street, Customs and General Post Office buildings. A record is kept of the floor space associated with every office that we rent, but that information is not kept in schedule form. In Melbourne we rent 174,300 square feet of floor space. That does not include any Defence accommodation which is rented. In Adelaide, exclusive of postal accommodation, we occupy 5,500 square feet of Commonwealth buildings and we rent 24,000 square feet of floor space. In Brisbane we have 27,100 square feet in the form of rented buildings, and 5,000 square feet occupied in Government buildings, exclusive of General Post Office, Customs, and Military District Headquarters. In Perth we rent 10,000 square feet. There are no Commonwealth Government buildings in Perth, excepting Military District Headquarters buildings, Customs, and General Post Office buildings. Until recent years no record was kept of the number of square feet occupied by Commonwealth Departments. But plans are now kept showing the space occupied for Commonwealth purposes in order

SATURDAY, 20th SEPTEMBER, 1910.

Present:

|                       |                  |
|-----------------------|------------------|
| Mr. Guesow, Chairman; | Mr. Sinclair.    |
| Senator Needham,      | Mr. Laird Smith. |
| Senator Newland,      |                  |
| Mr. Mathews.          |                  |

Percy Thomas Owen, Director-General of Works, Department of Works and Railways, recalled and further examined.

204. To the Chairman.—I understand that when the question of erecting a new Note Printing Office was referred to the Committee by the House of Representatives, it was suggested that the building should be erected either at Canberra or in Sydney, and that, necessarily, the extent of the inquiry has been opened up considerably. I have been asked that, in the event of the note printing establishment being erected at Canberra, whether it would be necessary to make provision for housing the employees there, and, in my opinion, it would be. At present the only buildings at Canberra that could in any way be utilized for the housing of the employees is a large group of buildings used for housing the Internecia at Canberra. They are unadorned and are of a temporary nature. They are designed in blocks, each block capable of housing fifteen families. The blocks are provided with communal closets and laundries. Under these circumstances, I do not think that they are either planned or built to permanently house workers of the type that would be sent there to undertake note printing work. I understand the men who would take their wives and families there would have to be comfortably accommodated for some time, and I do not think there would be a desire on the part of the men to occupy the accommodation provided for the Internecia. I understand a number of the employees are first class artisans, and if they were to take their families there they would not be satisfied with a communal system. Combined living rooms and kitchens are provided in the buildings I have mentioned, and they are very small. I have been informed that it is possible for persons living in one part of the buildings to hear what is being said in an adjoining part, and although that may be permissible in a building to accommodate Internecia, it certainly is not desirable for first class workmen. If the note printing works were established at Canberra, I understand that 100 cottages would have to be erected, and also establishments for single male and female workers. I have been asked for an estimate of the cost of 100 houses, and in compiling my figures have assumed that either concrete or brick cottages, or a combination of concrete and brick, would be used. Suitable structures could be erected of timber, but the price is exceptionally high at present. If a larger number were required, the price could be reduced by obtaining local timber in connexion with my investigation regarding the accommodation of employees if an areenal were constructed at Tuggeranong. It was intended to open up a forest to enable timber to be obtained at a cheaper rate than it could be procured on the market. The opening up of the forest, however, would be unprofitable for supplying timber for only 100 houses, and we are, therefore, thrown back on to brick or concrete. We could build very well with good timber, and it would be cheaper if we could secure it at a fair price. We could make bricks at very much the same price as they could be obtained in Melbourne or Sydney. I had, therefore, based my estimate on what has been accomplished at Lithgow. I understand that when tenders were recently called for the construction of a four-roomed wooden house in Victoria, the lowest tender was £203, which disclosed the abnormal cost of constructing with timber

204. To Mr. Sinclair.—The proposed notes and stamp printing office could easily be sold or let when the seat of Government is transferred to the Federal Capital. In Melbourne to-day we own and occupy 180,000 square feet of floor space, exclusive of the Postal and Repatriation Departments, but including Victoria Barracks, which contains approximately 108,500 square feet of office space, and we are renting an additional 174,300 square feet.

205. To Mr. Mathews.—I have not taken into consideration store accommodation.

206. To Mr. Sampson.—The floor space in the Commonwealth offices near the Treasury Gardens is 44,500 square feet. The other buildings owned by the Commonwealth in this city are the General Post Office, Spencer-street, the Money Order Office in Little Bourke-street, old General Post Office Buildings, Elizabeth and Bourke streets, the Defence Barracks, and the Customs House.

207. To Mr. Mathews.—Commonwealth activities appear to be increasing daily, and the idea in having so much accommodation in the different State capitals is to avoid over-centralization. Most of the Departments have State offices as well as offices for the central Administration. Particularly does this remark apply to the Department of Works and Railways.

208. To the Chairman.—I know that a proposal has been made to effect very considerable alterations to the General Post Office, Sydney, but no definite scheme has yet been approved by the Minister. It would take about two years to complete the work under that scheme, assuming that operations were started to-morrow. The report which I made some time ago in regard to the number of officers who would be removed to Canberra when the seat of Government was established there was based upon information supplied by the permanent heads of the various Departments. When the seat of Government is first established there, probably only a skeleton Department will be moved to that centre. The figures contained in my report relate to the permanent establishment when everything is in full swing at the capital.

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at the present time. We could erect 100 houses similar to those at Lithgow, but the cost at Canberra would be increased by 15 per cent. The cost of erecting the houses at Lithgow is estimated at £31,752, and if we increase that by 15 per cent, it brings the figure to about £36,500, or, approximately, £30,000 for 100 houses. The figures I have given are for construction, to which must be added sewer and water services, and so on. Provision would also have to be made for the supply of water tanks, outside sewers, and electric light connections. I have allowed £60,000 for houses, and the sewage treatment would cost, roughly, £5 per head, or £3,000 for 600 people. For house connexion with the sewers I have allowed £2,140, including similar provision for two hostels, a store, a recreation hall, and a school. I have allowed £2,140 for sewers, and £1,260 for water connections. I am not assuming that the residences would be close to the factory. I have not allowed for fencing, which would amount to, approximately, £15 per house, to provide side and back fences and, say, a cyclone fence in the front. In connexion with the hostel accommodation, I have allowed for two buildings—one for males and one for females—each to accommodate fifty employees. I have estimated on separate cubicles, 8 feet by 10 feet, being provided for each employee, and a certain space for passages, which will allow 100 super feet per employee. On that basis I have assumed that each hostel, including dining and recreation rooms, kitchens, and the ordinary office would cost £5,000. In my estimates I have endeavoured to be as conservative as possible. I have allowed £1,600 for a school to accommodate 100 pupils at a cost of £10 per head, and £40 for fencing school building. The school estimate includes playground, but it does not include a schoolmaster's residence, as I have assumed that that would be selected from one of the 100 houses that would be erected. I allowed £1,800 for a recreation hall to meet the requirements of 300 people, and also for a co-operative store building. I believe that the only way to cater for the requirements of the people would be by establishing a co-operative store, and I have provided £1,000 for the purpose, which includes fittings and necessary accessories. I presume the Government would have to provide the necessary plant, such as carts, &c., for carrying on the work of the store. The estimate does not include a dwelling-house for a storekeeper or manager, as I have assumed that the work would be done by the wife or daughter of one of the employees. I have allowed £4,000 for a couple of miles of water mains, and £1,070 for storm-water connections. For roads, paths, and kerbs I have provided £4,280. I have been asked where I would locate the factory, and from inquiries I made from the secretary of the Committee, I understand that it would probably be desirable to place them somewhere at the end of the governmental ground, and it is on that understanding that I have given the figures I have quoted. The present water supply would be ample for the factory and for the residents. I have allowed £3,000 for the treatment of sewage. I have assumed that the system would be of a temporary nature for treating the sewage by a biological or sedimental process, and I think the £3,000 provided would be ample. That process has been successful at Dunstons, and if a larger scheme were undertaken, the treatment works would be all that would have to be scrapped. I have not allowed anything for laying out a recreation ground, as I do not know whether that expense would be incurred by the Government or whether the work would be done by groups of employees in the form of working bees. Perhaps the Government would incur a little expense in the way of providing tennis courts. I have been informed that a one-story building has been suggested by Mr. Griffin, Mr. Sands, and Mr. Harrison. If we are

to study economy, and do not desire a building of special architectural design, a one-story structure should be suitable. I have been asked what would be the difference in the price of a one-story factory in Melbourne as compared with one at Canberra, but I cannot give a reliable estimate without going into the matter more fully. The difference in the cost of a building at Canberra such as we have designed for Melbourne, if erected at Canberra, would cost at least 25 per cent. more, that would bring the price up to £25,000. I believe my original estimate was somewhat lower, but I hope the Committee will understand that at that time we were working only on the sketch plan, and had not fully designed the place, and my later estimate is a more reliable one. I could not say definitely whether the size of the building has been increased since I gave my original price. If the building were to be a one-story one the price would be increased to some extent.

210. To Senator Needham.—The price would be higher owing to the increased roof and foundation area. It has to be fire-resisting in either case. Unless the Committee wish me to express an opinion straight away, I would rather have an opportunity of working it out in definite form.

211. To the Chairman.—In connexion with supplying a factory at Canberra with electric current, I am aware that direct and alternating current is at present being used at the factory. The power at present being supplied at Canberra is three-phase alternating current. To use the existing alternating current it would be necessary to install a motor generator to generate direct current. The approximate cost of making these alterations in connexion with the alternating current would be, mains and transformer £750, and for direct current, including the motor generator, £2,600. That estimate includes the capital cost, but not the net work required for the dwellings, which would be another £2,000. I have not included in the estimate the cost of telephone connections with the cottages, as I presume that would not be necessary, with the exception, perhaps, of a connexion with the foreman's residence. I have not made any special estimate for providing accommodation for the manager or other officers. I do not think the quarters used for the accommodation of internees would be suitable for the officers. A cottage erected for the Camp Commandant would doubtless be suitable for one of the employees, but I do not think it would be for the manager. An allowance of at least £1,000, or, perhaps, £1,500, should be made for erecting a manager's residence. The location and general lay-out of the accommodation I have mentioned would be a matter for the Director of Federal Capital to design, but I consider that it might be a mile or a mile and a half away from the factory. I have also provided £1,500 for a good road between the factory and the residential area, because I presume it will be necessary to provide conveyances for carrying the employees to and from their work. It would be necessary to supply motor vehicles, and I presume that out of 200 employees approximately 80 would use bicycles, buggies, or some other type of conveyance to go to and from their work. I have not included buggies' share in my estimate, although I presume a number of employees would possess conveyances of their own. In connexion with the conveyance of employees, I have assumed that a motor service, consisting of three char-a-bancs, each carrying thirty persons, would be necessary, and that two would always be in commission, whilst the third was held in reserve. These vehicles would cost £3,600 to purchase, and a garage and necessary accessories probably £800. I could not say whether they would be self-supporting, because it depends upon whether fares

would be charged or whether the workmen would be carried to their employment free of cost. I can give the cost of running, but I do not know whether it would be covered by fares. The cost of maintaining the suggested service, and allowing for the payment of two drivers, would be £600 per annum, to which must be added interest and depreciation on vehicles £140, which works out roughly at 10d. per head per day. The figures include petrol, lubricating oil, tires, &c., but do not include repairs, which I assume would be effected by the mechanical staff at the power house. The railway is at present being worked as far as the power house, and I believe it is being used solely for the carriage of coal. If the note-printing works were established at Canberra, I do not think it would pay to run a passenger service. It would be better to utilize the motor vehicles. The stores for the factory could be conveyed by rail to the platform near the power house. The conveyance of employees and the carriage of stores could, I think, be handled more economically by motor vehicle than by rail. I do not think a regular train service would pay. I should think that notes could safely be carried to Queanbeyan by char-a-banc. It is very difficult to say whether, under present industrial conditions, the employees at Canberra would want more than they are receiving in Melbourne or Sydney. They may want a little more. I believe that for skilled labour it would be necessary to pay 20 per cent. more, than is paid for similar services in our principal capital cities.

212. To Mr. Mathews.—I do not say that such would be the case when the Federal Capital is permanently established. So soon as you make a town of a few thousand people the labour conditions are likely to become normal.

213. To the Chairman.—I can give a rough idea of the cost of transferring machinery, stores, &c., from Melbourne to Canberra. For taking down, packing, transferring by steamer or by rail, delivering unpacking and erecting would cost approximately £9,000 for the existing equipment and stores. That would cover the transfer of about 2,000 tons, and, taking it roughly, there would be 1,250 tons of stores, &c., 350 tons of furniture, and 400 tons of machinery for the note printing plant, exclusive of the workmen's furniture. If the employees were transferred, I think the cost would have to be borne by the Commonwealth Government. If we remove the service we would have to pay for removing, say, 100 families, and I do not think it could be done for less than £50 per family. In some instances it has cost as much as £50 to transfer officials. The officers who have been moved often complain of the breakages that occur. It would cost about £8,000 to transfer the employees.

214. To Mr. Sinclair.—If the employees' furniture had to be transferred by pantechnicon it would have to be packed, loaded, sent by rail, unloaded from the train to a pantechnicon, and then unloaded, so there is much more work involved than in transferring from one part of the city to another. For removing the plant, &c., from Flinders-street Extension to the Victoria-parade site, it would cost approximately £2,000. I have not made any allowance for the payments to, or accommodation required by, the employees during the period they were in transit, nor have I made allowance for their fares. I estimate that it would take ten days to a fortnight to remove the whole staff. If there was no immediate hurry in transferring the employees, I would suggest that they be sent by steamer. I have been asked if the establishment were transferred from Canberra whether the manager would need a gas plant. That matter has been under consideration in my office, and we have been going into the question of whether it would be better to install electricity for the heating process, which

accounts for a large consumption of gas. The alternative would be to erect a Mond gas plant at the power house, and deliver gas by pipes to the works. The advantage of having a gas plant at the power house would be that the coal is delivered there, and it would also have the added advantage of being away from the factory, thus dispensing with the danger caused by fumes and combustion. A Mond gas plant would cost approximately £4,500 and the necessary pipes £1,500. An alternative electric heating installation would cost £3,000. I believe the cost of running would be about the same. The estimates have not been worked out in detail, but the drawings have been prepared, and we are now working on the actual current consumption.

215. To the Chairman.—The cost of gas in Melbourne would be about the same, although in the larger installation the expense in recirculation is greater. So far as I can say at the present time, the only difference in price would be in the capital outlay, which for gas would be £3,000 and for electric power £3,000. The advantages of electricity are apparent, because with such a system of heating all risk of combustion is kept outside the factory.

216. To Mr. Mathews.—I have been informed that Mr. Harrison is of the opinion that gas heating is more satisfactory, but we shall not venture to show him which is the more effective.

217. To the Chairman.—The large river at Canberra has been completed, and temporary mains have been laid to the military college. It would not be necessary to install large mains to provide protection from fire. The size of the mains would be a part of the general reticulation of the city, but with the present pressure a comparatively small main of 6 inches or 8 inches would be sufficient. I have not provided for a water supply for the factory, as I consider that a part of the general scheme of development. I have allowed for only £1,000 for mains for a branch system. It is not necessary to keep a staff on duty at the pumping station, and if the note-printing works were established at Canberra, I do not think it would be essential then, because pumping could be done periodically. We can hold 6,000,000 gallons in reserve. During the time which must elapse before the Federal Capital is properly established, I do not think extra cost would be incurred in supplying the factory with water. We could pump for the small number of persons there at the figure we originally stated, 2 1/2 p. for 1,000 gallons, though it was based on a false evidence that it would cost 5d. per 1,000 gallons. We are at present pumping at 2 1/2 d., and can continue to do so.

218. To Senator Needham.—There are two storage reservoirs at Canberra, each with a capacity of 3,000,000 gallons.

219. To Mr. Laird Smith.—The larger water pipes should be cast-iron. I consider concrete pipes safer. The type of pipe used depends largely on the size.

220. To Mr. Mathews.—The probable cost of railway fares, wages, and the cost of keeping the employees in transit I estimate at £2,045.

221. To Senator Needham.—I have been asked whether I consider the Government would be prepared to erect timber houses at Canberra. Such dwellings are good enough in most Australian towns, and I do not know why they would not be suitable there. If I could obtain timber at a reasonable price I would recommend its use. I have provided for two stories in the hostels, which include bedrooms above and below, with dining and recreation rooms, and, generally, very much of the type provided at Flinders House. In framing an estimate of the houses, I have assumed that they would be similar to those at Lithgow. A gas plant could be installed at the factory, but I think it would be advantageous to have it at the power house, because it could



294. To the Chairman.—I am informed that Mr. Harrison said there was hardly sufficient room in the proposed Melbourne building for the machinery that is coming to hand, and I am asked whether the luncheon room could not be erected on the roof. From an architectural point of view, I do not think it desirable to put anything on the roof, as it is desirable to keep the building to the height shown on the drawings. From a practical point of view it would be possible to do as suggested. It is possible to temporarily use the room in the old building on Victoria-street for providing accommodation for girls and workmen. At present the employees have their meals in the room in which they work, or in a room adjoining. In America, at present, the development in this direction is remarkably every provision being made for the comfort and convenience of the employees in the way of recreation rooms and even swimming baths. I believe it good policy to make the most of the space available for the employees. If more room is required for the workmen, I would suggest the erection of a further section of the proposed building by increasing one bay in length and three bays in width.

220. *The Senator Newland.*—If the additional bay were erected, I suggest carrying it to the full height, with the exception of the basement. The additional accommodation suggested would provide, approximately, 6,300 superficial feet.

The following information has been prepared by the Commonwealth Surveyor-General at the request of the Committee:—

(1) FLOOR SPACE OCCUPIED FOR COMMONWEALTH PURPOSES IN THE CITY OF MELBOURNE, IN PREMISES THE PROPERTY OF THE COMMONWEALTH.

| Branch of Department.                           | Situation of Building.                       | Purposes for which Occupied.     | Floor Space Occupied.                                |  | Total Floor Space. |
|---|--|----------------------------------|--|--|--------------------|
|   |  |                                  | Admini-<br>strative.                                 | Non-administrative   |                    |
|   |  |                                  | Sq. ft.  | Sq. ft.  | Sq. ft.            |
| <b>PRIME MINISTER'S DEPARTMENT.</b>             |  |                                  |  |  |                    |
| Central Office .. .. .                          | Treasury Gardens ..                          | Administrative ..                | 4,000  |  |                    |
| Public Service Commissioner ..                  | Customs House ..                             | " .. ..                          | 7,000  |  |                    |
| Audit (Stores) .. .. .                          | Money Order Office ..                        | Non-administrative ..            |  | 2,300  | 13,300             |
| <b>HOME AND TERRITORIES DEPARTMENT.</b>         |  |                                  |  |  |                    |
| <b>LANDS AND SURVEY .. .. .</b>                 |  |                                  |  |  |                    |
| Money Order Office, Post Office-place .. .. .   | Administrative ..                            |                                  | 5,000  |  |                    |
| Electoral (Stores) .. .. .                      | " .. ..                                      | Non-administrative ..            |  | 200  | 5,200              |
| <b>ATTORNEY-GENERAL'S DEPARTMENT</b>            |  |                                  |  |  |                    |
| Central Office .. .. .                          | Treasury Gardens ..                          | Administrative ..                | 3,500  |  | 3,500              |
| <b>WORKS AND RAILWAYS DEPARTMENT.</b>           |  |                                  |  |  |                    |
| Central Office .. .. .                          | Treasury Gardens ..                          | " .. ..                          | 15,000   |  |                    |
| Federal Capital Design and Construction .. .. . | Post Office-place ..                         | " .. ..                          | 2,000  |  | 17,000             |
| <b>TREASURY DEPARTMENT.</b>                     |  |                                  |  |  |                    |
| Central Office .. .. .                          | Treasury Gardens ..                          | " .. ..                          | 10,000   |  |                    |
| Taxation Branch (Central) .. ..                 | P.O., Elizabeth-street ..                    | " .. ..                          | 14,000   |  |                    |
| Notes Branch .. .. .                            | Money Order Office ..                        | " .. ..                          | 2,500  |  |                    |
| Notes Printing Branch .. .. .                   | Victoria-parade ..                           | Non-administrative ..            |  | 13,500   | 10,000             |
| <b>DEPARTMENT OF TRADE AND CUSTOMS.</b>         |  |                                  |  |  |                    |
| Victorian Branch of Department ..               | Customs House ..                             | Administrative ..                | 13,000   | 3,580  | 16,580             |
| <b>POSTMASTER-GENERAL'S DEPARTMENT.</b>         |  |                                  |  |  |                    |
| Central Office .. .. .                          | Treasury Gardens ..                          | " .. ..                          | 12,000   |  |                    |
| Victorian Branch of Department ..               | G.P.O., Spencer-street ..                    | " .. ..                          | 104,000  |  |                    |
| Postal Stores .. .. .                           | Spencer and Little Bourke streets ..         | Non-administrative ..            |  | 55,000   |                    |
| Telegraph and Post Office Branch ..             | P.O., Elizabeth-street ..                    | " .. ..                          |  | 24,000   |                    |
| " .. .. .                                       | Money Order Office, Post Office-place ..     | " .. ..                          |  | 4,500  |                    |
| Stores .. .. .                                  | Willis-street Old Telephone Exchange ..      | " .. ..                          |  | 1,000  | 200,500            |
| Workshops and Stables .. .. .                   | Sturt-street, South Melbourne ..             | " .. ..                          |  | 2s. 2r. 29 6-10p. (Information regarding floor space not available in Lands and Survey Department) | 2s. 2r. 29 6-10p.  |
| <b>DEPARTMENT OF DEFENCE.</b>                   |  |                                  |  |  |                    |
| Central Office .. .. .                          | St. Kilda-road ..                            | Administrative ..                | 60,000<br>40,000                                     | (Permanent)<br>(Temporary)   |                    |
|   |  |                                  | 100,000  |  |                    |
| *Convair's Branch (Clothing Factory) .. .. .    | P.O., Elizabeth-street<br>Coventry-street .. | " .. ..<br>Non-administrative .. | 1,000  | 84,500   |                    |
| Military Transport Section .. ..                | " .. ..                                      | " .. ..                          |  | 38,000   | 230,000            |
| Riding School .. .. .                           | Sturt-street ..                              | " .. ..                          |  | 6s. 2r. 29 1-10p.  |                    |
| Machine Room .. .. .                            | Sturt-street and Sturt-streets ..            | " .. ..                          |  | 0s. 2r. 29 0-10p.  | 2s. 6r. 28 p.      |
| Orderly Rooms and Drill Hall ..                 | Sturt-street ..                              | " .. ..                          |  | 2s. 3r. 12p.   |                    |
| <b>NAVY DEPARTMENT.</b>                         |  |                                  |  |  |                    |
| Stores .. .. .                                  | Willis-street Old Telephone Exchange ..      | " .. ..                          |  | 10,900   | 10,000             |
|   |  |                                  | Total Floor Space .. ..                              |  | 330,180            |
|   |  |                                  | Total { Four blocks containing a total area of .. .. |  | 7s. 3r. 10 6-10p.  |

- War activities



## APPENDIX—continued.

## (2) FLOOR SPACE OCCUPIED FOR COMMONWEALTH PURPOSES IN THE CITY OF MELBOURNE IN PREMISES THE PROPERTY OF THE COMMONWEALTH.

By Departments which will be moved to Canberra when the Seat of Government is transferred there.

| Branch of Department                    | Situation of Building                    | Purpose for which Occupied | Floor Space Occupied |                    | Total Floor Space |
|---|--|----------------------------|----------------------|--------------------|-------------------|
|   |  |                            | Administrative       | Non-administrative |                   |
| <b>PRIME MINISTER'S DEPARTMENT.</b>     |  |                            | Sq. ft.              | Sq. ft.            | Sq. ft.           |
| Central Office .. .. .                  | Treasury Gardens .. ..                   | Administrative .. ..       | 4,000                | ..                 | ..                |
| Public Service Commissioner ..          | Customs House .. ..                      | .. ..                      | 7,000                | ..                 | 11,000            |
| <b>HOME AND TERRITORIES DEPARTMENT.</b> |  |                            |                      |                    |                   |
| Lands and Survey .. .. .                | Money Order Office, Post Office-place .. | .. ..                      | 5,000                | ..                 | 5,000             |
| <b>ATTORNEY-GENERAL'S DEPARTMENT.</b>   |  |                            |                      |                    |                   |
| Central Office .. .. .                  | Treasury Gardens .. ..                   | .. ..                      | 3,500                | ..                 | 3,500             |
| <b>WORKS AND RAILWAYS DEPARTMENT.</b>   |  |                            |                      |                    |                   |
| Central Office .. .. .                  | Treasury Gardens .. ..                   | .. ..                      | 15,000               | ..                 | ..                |
| Federal Capital Design and Construction | Post Office-place .. ..                  | .. ..                      | 2,500                | ..                 | 17,500            |
| <b>TREASURY DEPARTMENT.</b>             |  |                            |                      |                    |                   |
| Central Office .. .. .                  | Treasury Gardens .. ..                   | .. ..                      | 10,000               | ..                 | ..                |
| Notes Branch .. .. .                    | Money Order Office .. ..                 | .. ..                      | 2,500                | ..                 | ..                |
| Notes Printing Branch .. .. .           | Victoria-parade .. ..                    | Non-administrative ..      | ..                   | 13,500             | ..                |
| Taxation Branch (Central) .. ..         | P.O., Elizabeth-street ..                | Administrative .. ..       | 14,000               | ..                 | 40,000            |
| <b>POSTMASTER-GENERAL'S DEPARTMENT.</b> |  |                            |                      |                    |                   |
| Central Office .. .. .                  | Treasury Gardens .. ..                   | .. ..                      | 12,000               | ..                 | 12,000            |
| <b>DEFENCE DEPARTMENT.</b>              |  |                            |                      |                    |                   |
| Central Office .. .. .                  | St. Kilda-road .. ..                     | .. ..                      | 65,000               | ..                 | 65,000            |
| Total of all Departments .. ..          |  |                            | ..                   | ..                 | 155,000           |

## (3) FLOOR SPACE OCCUPIED FOR COMMONWEALTH PURPOSES IN THE CITY OF MELBOURNE IN PREMISES THE PROPERTY OF THE COMMONWEALTH.

By Departments which will be permanently located in Melbourne when the Seat of Government is transferred to Canberra.

| Branch of Department   | Situation of Building                  | Purpose for which Occupied | Floor Space Occupied |                    | Total Floor Space  |
|--|--|----------------------------|----------------------|--------------------|--|
|  |  |                            | Administrative       | Non-administrative |  |
| <b>PRIME MINISTER'S DEPARTMENT.</b>                                |  |                            | Sq. ft.              | Sq. ft.            | Sq. ft.  |
| Audit Branch .. .. .   | Post Office-place .. ..                | Non-administrative ..      | ..                   | 2,500              | 2,500  |
| <b>HOME AND TERRITORIES DEPARTMENT.</b>                            |  |                            |                      |                    |  |
| Electoral (Stores) .. .. .   | Post Office-place .. ..                | .. ..                      | ..                   | 200                | 200  |
| <b>DEPARTMENT OF TRADE AND CUSTOMS.</b>                            |  |                            |                      |                    |  |
| Victorian Branch of Department ..                                  | Customs House .. ..                    | Administrative .. ..       | 13,000               | 3,580              | 16,580   |
| <b>POSTMASTER-GENERAL'S DEPARTMENT.</b>                            |  |                            |                      |                    |  |
| Victorian Branch of Department ..                                  | G.P.O., Spencer-street ..              | Non-administrative ..      | 104,000              | ..                 | ..   |
| Postal Stores .. .. .  | Spencer and Little Bourke streets ..   | .. ..                      | ..                   | 55,000             | ..   |
| Telegraph and P.O. .. .. .   | P.O., Elizabeth-street ..              | .. ..                      | ..                   | 24,000             | ..   |
| .. .. .  | Old Money Order Office ..              | .. ..                      | ..                   | 4,000              | ..   |
| Stores .. .. .   | Post Office-place .. ..                | .. ..                      | ..                   | ..                 | ..   |
| Workshops and Stables .. .. .                                      | Old Telephone Exchange, Will-street .. | .. ..                      | ..                   | 1,000              | 188,500  |
|  | Sturt-street .. ..                     | .. ..                      | ..                   | ..                 | ..   |
|  |  |                            | 2a, 2r, 29 0-10p.    | 2a, 2r, 29 6-10p.  | (Information regarding floor space not available in Lands and Survey Department) |
| <b>DEPARTMENT OF DEFENCE.</b>                                      |  |                            |                      |                    |  |
| Clothing Factory .. .. .   | Coventry-street .. ..                  | .. ..                      | ..                   | 84,000             | ..   |
| Military Transport Section .. ..                                   | .. ..                                  | .. ..                      | ..                   | 38,500             | 123,000  |
| Riding School .. .. .  | Sturt-street .. ..                     | .. ..                      | ..                   | 0a, 2r, 29 1-10p.  | ..   |
| Machine Shops .. .. .  | Moore and Sturt streets ..             | .. ..                      | ..                   | 0a, 2r, 29 6-10p.  | ..   |
| Orderly Room and Drill Hall ..                                     | Sturt-street .. ..                     | .. ..                      | ..                   | 3a, 3r, 12p.       | ..   |
| <b>NAVY DEPARTMENT.</b>  |  |                            |                      |                    |  |
| Stores .. .. .   | Old Telephone Exchange, Will-street .. | .. ..                      | ..                   | 10,000             | 10,000   |
| Totals { Floor Space totals and Four blocks having a total area of |  |                            | 340,480              |                    | 7a, 3r, 17 6-10p.  |

## APPENDIX—continued.

## (4) DISTRIBUTION OF FLOOR SPACE AT PRESENT OCCUPIED FOR COMMONWEALTH PURPOSES IN THE CITY OF MELBOURNE IN PREMISES THE PROPERTY OF THE COMMONWEALTH, SHOULD THE SEAT OF GOVERNMENT BE TRANSFERRED TO CANBERRA.

| Department                                       | To be moved to Canberra |         | War Activity | Total   |
|--|-------------------------|---------|--------------|---------|
|  | Sq. ft.                 | Sq. ft. | Sq. ft.      | Sq. ft. |
| Prime Minister .. .. .                           | 11,000                  | 2,200   | ..           | 13,200  |
| Home and Territories .. .. .                     | 5,000                   | 200     | ..           | 5,200   |
| Attorney-General .. .. .                         | 3,500                   | ..      | ..           | 3,500   |
| Works and Railways .. .. .                       | 17,500                  | ..      | ..           | 17,500  |
| Treasury .. .. .                                 | 40,000                  | ..      | ..           | 40,000  |
| Trade and Customs .. .. .                        | ..                      | 16,580  | ..           | 16,580  |
| Defence .. .. .                                  | 65,000                  | 123,000 | 11,000       | 239,000 |
| Postmaster-General .. .. .                       | 12,000                  | 188,500 | ..           | 200,500 |
| Navy .. .. .                                     | ..                      | 10,000  | ..           | 10,000  |
| Reparation .. .. .                               | ..                      | ..      | ..           | ..      |
| War Trophies .. .. .                             | ..                      | ..      | ..           | ..      |
| Parliamentary Standing Committee on Public Works | ..                      | ..      | ..           | ..      |
|  | 155,000                 | 340,480 | 11,000       | 530,480 |

## (5) FLOOR SPACE OCCUPIED FOR COMMONWEALTH PURPOSES IN THE CITY OF MELBOURNE IN RENTED PREMISES

| Branch of Department   | Situation of Building                                | Purpose for which Occupied | Floor Space Occupied |                    | Total Floor Space | Rental Paid Per Annum |
|--|--|----------------------------|----------------------|--------------------|-------------------|-----------------------|
|  |  |                            | Administrative       | Non-administrative |                   |                       |
| <b>PRIME MINISTER'S DEPARTMENT.</b>  |  |                            | Sq. ft.              | Sq. ft.            | Sq. ft.           | £                     |
| Audit Branch .. .. .   | Colonial Mutual Chambers, Market-street .. ..        | Administrative .. ..       | 6,051                | ..                 | ..                | 710                   |
| Public Service Inspector .. .. .   | Clouster House, Market-street ..                     | .. ..                      | 1,500                | ..                 | ..                | 220                   |
| *War Savings Council .. .. .   | National Trusts Buildings, Queen-street .. ..        | .. ..                      | 971                  | ..                 | ..                | 115                   |
| *Shipping Control Board .. .. .  | Liverpool Buildings, William-street .. ..            | .. ..                      | 5,210                | ..                 | ..                | 120                   |
| Ship Construction Branch .. .. .   | 31 King-street .. ..                                 | .. ..                      | 2,823                | ..                 | ..                | 30                    |
| Government Line of Steamers ..   | 417-431 Collins-street .. ..                         | .. ..                      | 6,600                | ..                 | 22,648            | 650                   |
| <b>HOME AND TERRITORIES DEPARTMENT.</b>  |  |                            |                      |                    |                   |                       |
| Statistical .. .. .  | "Rialto," Collins-street .. ..                       | .. ..                      | 10,100               | ..                 | ..                | 1,190                 |
| Electoral Branch .. .. .   | Masonic Hall, Collins-street .. ..                   | .. ..                      | 4,566                | ..                 | ..                | 700                   |
| Metronomical .. .. .   | Victoria and Drummond streets ..                     | .. ..                      | 5,000                | ..                 | ..                | 300                   |
| Central Office .. .. .   | Spring-street .. ..                                  | .. ..                      | 8,290                | ..                 | ..                | 730                   |
| *War Census (Store) .. .. .  | "Rialto," Collins-street .. ..                       | Non-administrative ..      | ..                   | 946                | 24,812            | 72                    |
| <b>ATTORNEY-GENERAL'S DEPARTMENT.</b>  |  |                            |                      |                    |                   |                       |
| Copyright Office .. .. .   | Queen's House, Queen-street ..                       | Administrative .. ..       | 663                  | ..                 | ..                | 110                   |
| Crown Solicitor .. .. .  | Queen's House, Queen-street ..                       | .. ..                      | 3,160                | ..                 | ..                | 520                   |
| Patents Office .. .. .   | Railway Buildings, Flinders-street ..                | .. ..                      | 11,145               | ..                 | 14,077            | 1,560                 |
| <b>WORKS AND RAILWAYS DEPARTMENT.</b>  |  |                            |                      |                    |                   |                       |
| Works Director for Victoria ..   | 151 Collins-street .. ..                             | .. ..                      | 3,300                | ..                 | ..                | 750                   |
| Commonwealth Railways .. .. .  | Chelford House .. ..                                 | .. ..                      | 12,875               | ..                 | 16,175            | 1,525                 |
| <b>TREASURY DEPARTMENT.</b>  |  |                            |                      |                    |                   |                       |
| Federal Taxation .. .. .   | Elizabeth House, Elizabeth-street ..                 | .. ..                      | 13,034               | ..                 | ..                | 2,261                 |
| Pensions and Maternity Bonus ..  | Brooks Building, Elizabeth-street ..                 | .. ..                      | 6,000                | ..                 | ..                | 900                   |
| Notes Branch .. .. .   | No. 9 Queen-street .. ..                             | .. ..                      | 2,841                | ..                 | 23,375            | 310                   |
| <b>DEPARTMENT OF TRADE AND CUSTOMS.</b>  |  |                            |                      |                    |                   |                       |
| *Wheat Storage .. .. .   | "Rialto," Collins-street .. ..                       | .. ..                      | 1,512                | ..                 | ..                | 100                   |
| Commonwealth Dairy Export ..   | .. ..  | .. ..                      | 944                  | ..                 | ..                | 100                   |
| Inter-State Commission .. .. .   | "Albion," East Melbourne .. ..                       | .. ..                      | 6,200                | ..                 | ..                | 450                   |
| Central Office .. .. .   | Spring-street .. ..                                  | .. ..                      | 6,650                | ..                 | ..                | 820                   |
| Navigation and Quarantine .. ..  | "Rekoby," Spring-street .. ..                        | .. ..                      | 3,600                | ..                 | ..                | 492                   |
| *Chief Prices Commissioner ..  | Dudley Buildings, Collins-street ..                  | .. ..                      | 2,820                | ..                 | ..                | 294                   |
| Lighthouse Branch .. .. .  | National Mutual Buildings, Collins-street ..         | .. ..                      | 3,510                | ..                 | ..                | 317                   |
| <b>Bureau of Commerce and Industry, and Institute of Science and Industry.</b> |  |                            |                      |                    |                   |                       |
|  | Danks Building, Bourke-street ..                     | .. ..                      | 3,780                | ..                 | 20,052            | 575                   |
| <b>DEFENCE DEPARTMENT.</b>   |  |                            |                      |                    |                   |                       |
| Ordnance Stores .. .. .  | Cz. Welland Little Banks streets, South Melbourne .. | Non-administrative ..      | ..                   | 8,316              | ..                | 350                   |
| Arsenal Staff .. .. .  | Municipal Buildings, North Melbourne ..              | Administrative .. ..       | 9,360                | ..                 | 17,616            | 600                   |
| <b>POSTMASTER-GENERAL'S DEPARTMENT.</b>  |  |                            |                      |                    |                   |                       |
| Postal Stores .. .. .  | Miles and Sturt streets .. ..                        | Non-administrative ..      | ..                   | 39,200             | ..                | 150                   |
| Post Yard .. .. .  | Moore, Macgowan and Power streets .. ..              | .. ..                      | ..                   | 80,300             | 110,500           | 275                   |

\* War activity.



## APPENDIX—continued.

## (b) FLOOR SPACE OCCUPIED FOR COMMONWEALTH PURPOSES IN THE CITY OF MELBOURNE IN RENTED PREMISES—continued.

| Branch of Department                              | Situation of Building.            | Purpose for which Occupied | Floor Space Occupied. |                     | Total Floor Space. | Rental Paid for same |
|---|-----------------------------------|----------------------------|-----------------------|---------------------|--------------------|----------------------|
|   |                                   |                            | Administrative.       | Non-administrative. |                    |                      |
| NAVY DEPARTMENT.                                  |                                   |                            |                       |                     |                    |                      |
| Director of Naval Works                           | Chelford House, Flinders-lane     | Administrative             | Sq. ft. 6,150         | Sq. ft. ..          | sq. ft. 610        | £ 575                |
| Central Office                                    | " " " " " " " "                   | " " " " " " " "            | 6,580                 | " " " "             | 575                | 610                  |
| Naval Construction                                | No. 450 Lonsdale-street           | " " " " " " " "            | 850                   | " " " "             | 160                | 400                  |
| Director of Naval Stores and Auxiliary Services   | 29-31 William-street              | " " " " " " " "            | 3,410                 | " " " "             | 400                | 407                  |
| Radio-Telegraph Branch                            | Collins House, Collins-street     | " " " " " " " "            | 3,360                 | " " " "             | 29,630             | 531                  |
| REPARATION DEPARTMENT.                            |                                   |                            |                       |                     |                    |                      |
| Central Office                                    | L.O.A. Chambers, 51 Market-street | " " " " " " " "            | 11,100                | " " " "             | 1,850              | 428                  |
| War Service Homes                                 | 304-316 Flinders-street           | " " " " " " " "            | 1,000                 | " " " "             | 45,120             | 414                  |
| Victorian Branch                                  | St. Kilda-road                    | " " " " " " " "            | 30,900                | " " " "             | (Ground rent)      | 645                  |
| WAR TROPHIES MUSEUM.                              |                                   |                            |                       |                     |                    |                      |
| Director's Staff                                  | Wool Exchange                     | " " " " " " " "            | 3,150                 | " " " "             | 3,150              | 200                  |
| PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS. |                                   |                            |                       |                     |                    |                      |
| Secretary's Office                                | 31 Queen-street                   | " " " " " " " "            | 900                   | " " " "             | 900                | 200                  |

## (b) FLOOR SPACE OCCUPIED FOR COMMONWEALTH PURPOSES IN THE CITY OF MELBOURNE IN RENTED PREMISES, By Departments which will be moved to Canberra when the Seat of Government is transferred there.

| Branch of Department  | Situation of Building                       | Purpose for which Occupied | Floor Space Occupied. |                     | Total Floor Space. | Rental Paid per Annum. |
|---|---|----------------------------|-----------------------|---------------------|--------------------|------------------------|
|   |   |                            | Administrative        | Non-administrative. |                    |                        |
| <b>PRIME MINISTER'S DEPARTMENT.</b>                                   |   |                            |                       |                     |                    |                        |
| Audit Branch  | Colonial Mutual Chambers, Market street     | Administrative             | Sq. ft. 6,054         | Sq. ft. ..          | Sq. ft. 6,054      | £ 740                  |
| <b>HOME AND TERRITORIES DEPARTMENT.</b>                               |   |                            |                       |                     |                    |                        |
| Stationery  | " " " " " " " "                             | " " " " " " " "            | 10,100                | " " " "             | 1,100              | 700                    |
| Electoral   | " " " " " " " "                             | " " " " " " " "            | 4,500                 | " " " "             | 300                | 730                    |
| Metropolitan  | " " " " " " " "                             | " " " " " " " "            | 5,000                 | " " " "             | 27,800             | 1,560                  |
| Central Office  | " " " " " " " "                             | " " " " " " " "            | 8,230                 | " " " "             | 110                | 350                    |
| <b>ATTORNEYS-GENERAL'S DEPARTMENT.</b>                                |   |                            |                       |                     |                    |                        |
| Copyright Branch  | Queen's House, Queen-street                 | " " " " " " " "            | 603                   | " " " "             | 14,077             | 1,560                  |
| Crown Solicitor   | Queen's House, Queen-street                 | " " " " " " " "            | 3,100                 | " " " "             | 110                | 350                    |
| Patents   | Railway Buildings, Flinders street          | " " " " " " " "            | 11,145                | " " " "             | 14,077             | 1,560                  |
| <b>WORKS AND RAILWAYS DEPARTMENT.</b>                                 |   |                            |                       |                     |                    |                        |
| Commonwealth Railways   | Chelford House, Flinders-lane               | " " " " " " " "            | 12,875                | " " " "             | 12,875             | 1,325                  |
| <b>TREASURY DEPARTMENT.</b>   |   |                            |                       |                     |                    |                        |
| Notes Branch  | No. 9 Queen-street                          | " " " " " " " "            | 2,841                 | " " " "             | 2,841              | 340                    |
| <b>DEPARTMENT OF TRADE AND CUSTOMS.</b>                               |   |                            |                       |                     |                    |                        |
| Dairy Export  | " " " " " " " "                             | " " " " " " " "            | 944                   | " " " "             | 100                | 450                    |
| Inter-State Commission  | " " " " " " " "                             | " " " " " " " "            | 6,200                 | " " " "             | 820                | 402                    |
| Central Office  | " " " " " " " "                             | " " " " " " " "            | 6,050                 | " " " "             | 317                | 575                    |
| Navigation and Quarantine   | " " " " " " " "                             | " " " " " " " "            | 2,900                 | " " " "             | 21,081             | 375                    |
| Lighthouse Branch   | National Mutual Buildings, Col. lins-street | " " " " " " " "            | 3,510                 | " " " "             | 375                | 600                    |
| Bureau of Commerce and Industry and Institute of Science and Industry | Danks Building, Bourke street               | " " " " " " " "            | 3,780                 | " " " "             | 575                | 600                    |
| <b>DEFENCE DEPARTMENT.</b>  |   |                            |                       |                     |                    |                        |
| Arms Staff  | Municipal Buildings, North Melbourne        | " " " " " " " "            | 9,300                 | " " " "             | 9,300              | 600                    |
| <b>NAVY DEPARTMENT.</b>   |   |                            |                       |                     |                    |                        |
| Director of Naval Works   | Chelford House, Flinders-lane               | " " " " " " " "            | 5,150                 | " " " "             | 1,325              | 400                    |
| Central Office  | " " " " " " " "                             | " " " " " " " "            | 16,730                | " " " "             | 407                | 531                    |
| Naval Construction  | " " " " " " " "                             | " " " " " " " "            | 3,410                 | " " " "             | 29,030             | 531                    |
| Director of Naval Stores and Auxiliary Services                       | Normanby Chambers, Little Collins-street    | " " " " " " " "            | 2,280                 | " " " "             | 1,100              | 1,950                  |
| Radio-Telegraph Branch  | Collins House, Collins-street               | " " " " " " " "            | 3,360                 | " " " "             | 11,100             | 1,950                  |
| <b>REPARATIONS DEPARTMENT.</b>  |   |                            |                       |                     |                    |                        |
| Central Office  | 51 Market-street                            | " " " " " " " "            | 11,100                | " " " "             | 3,150              | 615                    |
| <b>WAR TROPHIES MUSEUM.</b>   |   |                            |                       |                     |                    |                        |
| Director's Staff  | King-street                                 | " " " " " " " "            | 3,150                 | " " " "             | 3,150              | 200                    |
| <b>PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS.</b>              |   |                            |                       |                     |                    |                        |
| Secretary's Office  | 31 Queen-street                             | " " " " " " " "            | 900                   | " " " "             | 900                | 200                    |

## APPENDIX—continued.

## (7) FLOOR SPACE OCCUPIED FOR COMMONWEALTH PURPOSES IN THE CITY OF MELBOURNE IN RENTED PREMISES, By Departments which will be permanently located in Melbourne when the Seat of Government is transferred to Canberra.

| Branch of Department.               | Situation of Building                               | Purpose for which Occupied | Floor Space Occupied |                    | Total Floor Space | Rental Paid per Annum |
|-------------------------------------|---|----------------------------|----------------------|--------------------|-------------------|-----------------------|
|                                     |   |                            | Administrative       | Non-administrative |                   |                       |
|                                     |   |                            | Sq. ft.              | Sq. ft.            | Sq. ft.           | £                     |
| PRIME MINISTER'S DEPARTMENT.        |   |                            |                      |                    |                   |                       |
| Public Service Inspector ..         | Market-street ..                                    | Administrative ..          | 1,500                | ..                 | ..                | 220                   |
| Ship Construction ..                | 31 King-street ..                                   | " ..                       | 2,923                | ..                 | ..                | 208                   |
| Government Line of Steamers ..      | 447-451 Collins-street ..                           | " ..                       | 6,900                | ..                 | 10,423            | 650                   |
| WORKS AND RAILWAYS DEPARTMENT.      |   |                            |                      |                    |                   |                       |
| Works Director for Victoria ..      | 161 Collins-street ..                               | " ..                       | 3,300                | ..                 | 3,300             | 750                   |
| TREASURY DEPARTMENT.                |   |                            |                      |                    |                   |                       |
| Federal Taxation, Victorian Branch  | Elizabeth House, Elizabeth-street                   | " ..                       | 13,534               | ..                 | 20,534            | 2,264                 |
| Pensions and Maternity ..           | Brooke Building, Elizabeth-street                   | " ..                       | 6,900                | ..                 | ..                | 900                   |
| DEFENCE DEPARTMENT.                 |   |                            |                      |                    |                   |                       |
| Ordnance Stores ..                  | Wells and Little Bank streets, South Melbourne      | Non-administrative ..      | ..                   | 8,316              | 8,316             | 350                   |
| POSTMASTER-GENERAL'S DEPARTMENT.    |   |                            |                      |                    |                   |                       |
| Stores ..                           | Mike and Sturt streets, South Melbourne             | Non-administrative ..      | ..                   | 32,200             | ..                | 150                   |
| Pole Yard ..                        | Moore, Macgowan, and Power streets, South Melbourne | " ..                       | ..                   | 80,200             | 110,500           | 275                   |
| REPARATION DEPARTMENT.              |   |                            |                      |                    |                   |                       |
| Victorian Branch ..                 | St. Kilda-road ..                                   | Administrative ..          | ..                   | 30,900             | ..                | 414                   |
| War Service Homes, Victorian Branch | 304-316 Flinders-street ..                          | " ..                       | ..                   | 1,000              | 31,900            | (Ground Rent) 428     |

## (8) DISTRIBUTION OF FLOOR SPACE OCCUPIED FOR COMMONWEALTH PURPOSES IN THE CITY OF MELBOURNE IN RENTED PREMISES.

Should the Seat of Government be transferred to Canberra.

| Department.                                      | To be moved to Canberra. |                        | To remain in Melbourne. |                        | War Activities. |                        | Totals.      |                        |
|--|--------------------------|------------------------|-------------------------|------------------------|-----------------|------------------------|--------------|------------------------|
|  | Floor Space.             | Rental Paid per Annum. | Floor Space.            | Rental Paid per Annum. | Floor Space.    | Rental Paid per Annum. | Floor Space. | Rental Paid per Annum. |
|  | Sq. ft.                  | £                      | Sq. ft.                 | £                      | Sq. ft.         | £                      | Sq. ft.      | £                      |
| Prime Minister's                                 | 6,054                    | 740                    | 10,423                  | 1,078                  | 6,211           | 535                    | 22,688       | 2,350                  |
| Home and Territories                             | 27,800                   | 2,800                  | "                       | "                      | 916             | 72                     | 28,716       | 2,872                  |
| Attorney-General's                               | 14,077                   | 2,220                  | "                       | "                      | "               | "                      | 14,077       | 2,220                  |
| Works and Railways                               | 12,875                   | 1,525                  | 3,300                   | 750                    | "               | "                      | 16,175       | 2,275                  |
| Treasury   | 2,841                    | 340                    | 20,534                  | 3,164                  | "               | "                      | 23,375       | 3,504                  |
| Trade and Customs                                | 24,084                   | 2,034                  | "                       | "                      | 4,308           | 394                    | 28,052       | 3,448                  |
| Defence  | 9,300                    | 600                    | 6,316                   | 350                    | "               | "                      | 15,616       | 950                    |
| Postmaster-General's                             | "                        | "                      | 119,500                 | 425                    | "               | "                      | 119,500      | 425                    |
| Navy   | 22,530                   | 3,273                  | "                       | "                      | "               | "                      | 22,530       | 3,273                  |
| Reparation                                       | 11,100                   | 1,950                  | 31,900                  | 842                    | "               | "                      | 43,000       | 2,792                  |
| War Trophies                                     | 3,150                    | 445                    | "                       | "                      | "               | "                      | 3,150        | 445                    |
| Parliamentary Standing Committee on Public Works | 900                      | 200                    | "                       | "                      | "               | "                      | 900          | 200                    |
| Totals   | 143,707                  | 17,362                 | 104,033                 | 6,609                  | 11,523          | 1,001                  | 349,323      | 24,962                 |