OFFICIAL STATISTICS, COMMONWEALTH OF AUSTRALIA.

COMMONWEALTH BUREAU OF CENSUS AND S'IATTSTTCS, METBOURNE.

## POPULATION AND VITAL STATTSTICS.

bul.letin No. 1.

## DETERMINATION

OF TIIE

## POPULATION OF AUSTRALIA

FOR EACH QUARTEL FROM
\% 31ST DECEMBER, 1900, T0 31S' DECEMBER, 1906,

COMPRISING A REVIEW OF CENSUS METHODS, THE METHODS OT RSTIMATING POPUIATVON, AND
THE RESULTS OF EACH CENSUS OF THE SEVERAL STATES OF AUSTRALAA;
TOGETHER WITH A COMPLETE TABULAR STATEMENT OF THE RLCORDED FLUCTUATONS OF THE bOPURATLON OF THE SEVERAL STATES SINCE THE INAUGURATION OE THE CCOMMONVEALTH.
$\cdots$

PUBLTSHED UNDER THE AU'THORI'Y OF 'ITE MINTS'LER OF HOME AFPATRS,
iry

## G. H. KNIBBS

(fedion of the romal statistical. sodiety, ETG.), GOMMONWEATTH STATISTICIAN.

30, 8 uthority:
נ. Kemp, acting government phinter, melibourne.

## CONTENTS.



## THE DETERMINATION OF THE POPULATION OF AUSTRALIA.

## PREFACE

In all countries, however favourably situated as regards the opportunity for exactly enmerating the population, the actual count is invariably subject to error. In Australia-an extensive, and for the most part a very sparsely populated, country-accurate estimation is a matter of more than ordinary difficulty. Not only is the probable error even of a census itself comparatively large, but the estimation during intercensal periods is also subject to a wide range of uncertainty.

- Fom time to time the Statisticians of the various States have not only attacked the problem independently; they have also conferred on the general question, and the data for the present determination are derived wholly from their professional labours. Unfortunately the data are defective in certain respects, particularised herein.

In the attack on the problem by eachi Statistician, the review was necessarily more or less restricted, and its immediate purpose was the dscertainment of the population of the individual State rather than that of Australia. Until recently, moreover, there was no adequate centralizing and co-ordinating authority.

It will be scen in the review herein, that, when the not immigration for Australia as a whole is compared with the algebraic sum of the net immigration of the individual States, there is a discrepancy of sufficient magnitude to demand consideration by some central authority. The elimination of this defect in future is receiving special attention. The available data up to 31 st December, 1906, though imperfect, do not admit of satisfactory adjustment.

The State Statisticians have been fully a ware of the difficulties of the situation, and even after reaching an agreement with regard to a scheme of correcting the results directly furnished from records of migration and vital statistics, have not only fclt doubt about the legitimacy of applying this correction, they have in some instances clearly departed theicfrom. In one case the justness of the correction itself was formally challenged and the correction rejected.

The high degree of public importance of the whole question, and its uncertainty, demand that it should be impartially reviewed by the central authority now constituted, viz., the Bureau of Census and Statistics for the Commonwealth.

In the review outlined in the following pages it has been thought desirable to explicitly indicate the reasons why population estimates demand the most careful consideration.

As already said, the data are derived from the returns of the State Statisticians, and the attempt, from the stand-point of a central authority, to deduce the population of Australia may to some extent be regarded as supplementary to the work done by each Statistician for, and on behalf of, his particular State.

A method is indicated herein for determining the mean population for any year in such a manner as to represent the actual facts with somewhat greater precision than was attained by the methods previously employed in Australia, and the scheme proposed will serve for the compilation of such means in the immediate future, and until data are to land shewing more minutely the actual fluctuations of the population.

It remains to be added that without the assistance, both of the Statisticians and the RegistrarsGeneral of the States of the Commonwealth, which has been most cordially rendered, this general review of the whole question would have been difticult nor would it have been easy to supplement the individual efforts of the Statisticians by a special one on. lpehalf of the Commonwealth, an effort which it is hoped will not be without value to the States themselves. In any case this review will obviate further extended reference to the question of the detarmination of the population.
G. H. KNIBBS, F.S.S., etc.

Commonwealth Bureau of Census and Stat stics,
Melbourne, 26th March, 1907.
Commonwealth Statistician.

## IV.-Methods of Estimating Population-

(1) General Character of Problem.
(i) The census forms the basis.
(ii) Estimates dependent on assumpt on of uniform increase.
(iii) Estimates dependent on "Statist ics of Fluctuation."
(2) Estimates dependent on Assumption of Uniform Rate of Increase.
(i) Method employed in England and Wales.
(ii) Advantages and defects of the gnethod.
(3) Estimates dependent on assumption of uniform numerical increase. Advantages and defects of this method.
(4) Estimates based on "Statistics of Fluct ration."
(i) Method employed in Australasia
(ii) Registration of births and deathis.
(iii) Records of arrivals and departures.
(iv) Discrepancies between estimated and enumerated populations.
(v) Difficulty of correctly ascertaining cause of discrepancy.
(vi) Examination of question at Statis女rical Conferences.
(vii) Objection raised to allowance made for unrecorded departures.
(viii) Examination of objection raised by Government Statist of Victoria

## V.-Determination of Mean Population -

(1) The Essentials of the Problem.
(2) Detailed Consideration of the Problem
(i) The curve of fluctuation.
(ii) Practical simplification by certaiinn assumptions.
(iii) Deduced rule for adoption.
(iv) Comparison of methods.

## VI.--Review of Estimates of State Statisticians-

(1) Agreement as to a Scheme of Correction of Migration Returns--
(i) Nature of correction adopted.
(ii) Desirableness of dealing separately with males and females.
(iii) Central co-ordinating authority.
(2) Estimates Corrected Strictly According to Agreed Method-
(i) Authorities for information.
(ii) Various departures from agreement.
(iii) Estimates based on strict adherenve to agreement.
(3) Discrepancies between Estimates for Commonwcalth as a whole and those based on Returns for senal....te States-
(i) Nature and extent of discrepancies.
(ii) Remedy.

## VII.-The Desirableness of a Quinquennial Census-

(1) General Review.
(i) Statistical.
(ii) Administrative.
(2) Experiences in other Parts of the World.-New Zealand, France, and Germany.
(3) Advocacy of Quinquennial Enumeration. -United Kingdom, United States, and Australia.

## VIII--Official Estimate of the Population of the Commonwealth, and concluding remarks.

1.-The Importance of Population Statistics-
(1) Practical Importance-
(i) As furnishing data concerning various pllases of human life.
(ii) As supplying basis for review of other statistical facts.
(2) Theoretical Tmportance, from the stand-point of Statistical Technique.
(3) Practical Applications of Population Statistics.\}
(i) In electoral matters.
(ii) In general administration.
(iii) In financial matters.
(iv) As criteria of prosperity.
(v) In a review of public health.
;
(vi) For the determination of birth, death and marriage rates.
(vii) In investigations concerning paupesism, the distribution of wealth, old-age pensions, etc.

## II.-General Review of the Question of Determining Population-

(1) Census Enumeration-
(i) The general problem of the census.
(ii) Fundamental differences in methor of collection.
(2) Estimates for Intercensal Periods-
(i) Necessity for estimates.
(ii) Population estimates are not mere guesses.
(iii) Desirability of reducing the intercensal perivd.

## III.-Census taking in Australia-

(1) Inherent Difficulties of an Australian Census-
(i) Great extent of Australia.
(ii) Sparse distribution of the population.
(iii) Migratory character of the people.
(iv) Climatic obstacles.
(2) Enumerations from earliest times onwards-


## The Importance of Population Statistics.

## (1) Practical Importance-

(i) The primary object in view at the present day in any attempt at the detcmination of as furnishing population is very similar to that involved in a merchant's or a manufacturer's stock-taking, viz, that of data various ascertaining the position which the community occupies as regards its component factors, and thus phases of of furnishing a means for estimating the advance or regression which has characterized it since the last human life. or any preceding determination. In the elaborate investigation of the population question on thio occasion of a census, a wide range of detailed numerical results is usually obtained; these concern such matters as sex, age, birthplace, religion, conjugal condition, occupation, etc.
(ii) Important as such particulars are in themselves, their value is not fully disclosed until they as supplying are brought into relationship with and are used as a basis for reviewing other statistical facts. Trom its basis for of intrinsic nature, the unit of population is essentially the foundation element of all statistics of human other statisactivities, and it is only by a carcful consideration of the manner in which the results of such activities tical facts. are related to the population that a correct view of their relative extent and probable tendency can be ascertained. To have statistics of the biths, deaths, marriages, funance, trade, production, etc., of a community, without having at the same time reliable details concerning the population of the community from which they have been obtained, can evidently furnish no results of value for comparative purposes. To know, for instance, that 10,000 deaths have occurred in a given year in one community and 30,000 in another in the same period does not, in the absence of particulars concerning the respective populations in which these deaths have been experienced, furnish any useful information concerning the relative salubrity of the two lacalities, but on the contrary is very apt to mislead.

Similarly all other statistical facts require to be considered in the light of the population statistics, not only as regards the total number of persons in the community, but also with reference to the various phases of life of its members, thus involving the consideration of statistics of sex, age, race, occupation, education, sickness and infirmity, etc. For the purpose of many sociological and demological investigations the importance of a correct determination of all these particulars is evident, whether for use in connexion with current inquiries or as furnishing records to be subsequently employed in an historical review of the progress or otherwise of the community.

## (2) Theoretical Importance -

From what has been sfaid above it will readily be seen that, from the stand-point of statistical Importance technique, population statistacs are of fundamental importance. Practically all statistical questions, from stand of whether relating to the vital,, social, financial, commercial or industrial phases of human life, must for statistical their due interpretation be referred to the basis of population, and must have determined for them rates based on either the total popialation, or on such section of it as may be found appropriate to the particular question in hand. For the detailed investigation of such matters as birth, marriage, and death rates, duration of life, etc., as well as inquiries concerning fluctuations therein as marks of progress or decay, statistics of population are rqquired according to sex and are at least; and, for the complete investigation of such questions, should be fivailable in even greater dotail.

## (3) Practical Applications of Population Statistics-

(i) For the delimitation of districts for electoral purposes, statistics of population in Australasia In electoral are obviously important. Fhr the Commonwealth House of Representatives the number of members to matters. represent any State is, under the Representation Act, determined once in five years on the basis of the population statistics of the Commonwealth, whilst in New Zealand a similar provision is made for a redistribution of seats afteg the taking of each quinquennial census. Again, population statistics according to sex and age are required for each such district or State in order to estimate the extent to which the people avail the mselves of the opportunities provided for exercising the franchise. Such statistics furnish a basis on which such questions, for cxample, as "Compulsory Voting" may be considered. Furthermore, a comparison of the numbers on the electoral rolls with the population having otherwise of the compiling.
(ii) A proper estimat ef population plays an important part in all matters hearing on the general In Eeneral administration. of any local ity, whether by a centfal or a local governing body. In conncxion, for tion. instance, with any proposal fo establish a post-office in any given locality, one of the first considerations would be the extent of the population to be served thereby. Similas action would usually be taken in connexion with proposals for the construction of public works or the extension of municipal govermment.
(iii) The question of population occupies also a place of high importance in connexion with the In financial interclation of the financial affairs of the Commonwalth and the States of Australia, owing to the fact matters. that some of the more impor tant financial provisions contained in the Commonwealth Constitution Act
involve the use of population statistics. Thus, sections 89 and 93 provide for the distribution of the "Other" Expenditure of the Commonwealth on a population basis, while in section 105 reference is made to a taking over of debts in proportion to population. Further, many of the proposals that have been made for a readjustment of the method of distribution of surplus Commonwealth revenue have, to it greater or less degree, involved an extension of the use of a population basi; for the purpose.

As criteria of prosperity.

In a reviow of public
onc, or that the cannot, of course, be contended that a large population is necessarily a prosperous there are cogent its rate of increase, may be repuled that on the whole a decrease in the population, or even a decline in an increasing population, and particularly fo population exhibiting an accelerated rate of increase, may ordinarily be considered as one in which the material outlook is good. From this point of view accurate statistics of population are seen to be of considerable value.
(v) Probably no uses to which the statistics of population can be applied transcend in importance to the community those comnected with investigations concerning public health. For such purposes accurate determinations of the population at frequent intervals are necessary, particulars as to sex and age being required in all cases. For the correct determination of the comparative healthiness of any two localities it is clear that the most carefully compiled statistics of diseases and deaths will be insufficient, and will furnish no comparable result unless considered in comexion with the population from which the cases of diseases and deaths have been derived.

Birth, death
and marriage
(vi) The investigation of such matters as the birth, death, and marriage rates of a community would of course be impossible without a bnowledge of the population to which such rates must be referred, and in proportion as the population is badly determined so is the walue of the deduced rates
impaired.
(vii) Further, in many important inguiries concerning such matters as pauperism, the distribution of wealth, old-age pensions, etc., it is essential for their proper carrying out that complete information concerning the number and composition of the population should be available.

## II.

## General Review of the Question of Determining • Population.

## (1) Census Enumeration-

The general
(i) Whatever its defects, the most accurate scheme for determining the population of any country whichdeavour to actually count the number of its people. This is what is undertaken at a census, at which an effort is made to obtain a record of particulars concerning ever person in the community at
the date to which the census relates.

It is clear that the work of procuring this information at first hand, and of subsequently workiug it up into the statistical form in which it is required for general use, must involve a considerable expenditure, and consequently there is a tendency on the part of mariay Parliaments to view with disfavour any proposal for frequent enumeration. As a consequence of 4 his the census of by far the greater portion of the British Empire is taken only once in ten years, New Zealand, with a quinquennial census, being the only important exception. In France and Germany, on the other hand, the census has for many years past been taken quinquennially.

The initial difficulty which presents itself in connexion with any census is that of securing such a complete collecting organisation as to ensure that there shall be as little as possible either of omission or of duplication in the collection of the data. This difficulty is enhanced byy the fact that the work of collecting occupies necessarily a very short time, and consequently the empldyment which can be offered to the collectors is only of the most temporary nature. Under these cifrcumstances it is frequently difficult to obtain for the work such a class of men as is desirable. A somewhat similar difficulty, though one by no means so marked, occurs in connexion with the compilation staff, which has also to be selected in a short time for a temporary purpose. In this case, however, hs the length of employment may vary from six months to two or even three years, opportunities are afforded for improving the personnel of the staff as the work proceeds.
(ii) The method of collecting, which is at present in vogue in Engla nd and many of the British dependencies, is that of distributing schedules to the occupiers of all dyvellings, and requiring these householders to furnish the desired information thereon.

It is evident that such a method can he satisfactorily employed only amongst the population is comparatively small, and consequently although used to some extent in the censuses of India and Ceylon, and to a greater enumeration of the illiterate portion of the native population of any of these carried out by some other means.

Under the mothod of distribution and collection of householders' sch dules the onus of supplying the requisite writen particulars rests with the houptholder, who is required the desired information. An altemative method, afd one which is employed of the United States and of Canada, is that of requiring the collector
where the degree of illiteracy the householders' schedule is extent in South Africa, the countries must necessarily be to ascertain and enter all to obtain all the necessary
information from the people enumerated, and enter it himself in the census forms. One of the advantages of this latter method is the fact that the person filling in the particulars is one who is acquainted with the meaning and use of statistical forms, and is consequently more likely to carry out the work with a minimum of errors in the actually entering of the required particulars on the forms.

The method of collection by means of houscholders". schedules possesses, however, two distinct advantages over that of enumeration by collectors. The first is that by means of distribution of schedules the work of filling in the particulars is divided amongst the whole of the householders of the community, and the second is that by so distributing the wor's the possibility is afforded of procuring the desired information for the whole community at (practically) ia particular moment of time. This latter is a most important point, as any method which allows the enumeration to be spead over a considerable period enormously increases the likelihood of omissions and duplications arising from migrations of the population during the time the census is in progress. Th ensure a thoroughly reliable count it is necessary that the enumeration of every part of the commonity should be contemporaneous.

The method which has been provided in the Census $\}$ and Statistics Act of 1905 for the next Commonwealth Census of 1911 is that involving the distribution and collection of householders' schedules.

Arother division of the mothods of enumeration relates to the allocation of the popalation.
Under one known as the de fucto method cach member of the population is, in tabulation, allocated to the place in which he was enumerated, while under the other, viz., the de jure method, he is credited to the place in which he usually resides. With the cxxception of Canada the de fecto method is used throughout the British Empire, while in the United Statios and in Canadn a de jure enumeration is effected.

## (2) Estimates for Intercensal Periods--

(i) It has been seen that the censuses of any country fare taken at somewhat long intervals, the Necessity for period varying, but being rarcly less than five years, and frequently as much as ten. Under these estimates circumstances it becomes necessary to obtain, for dates internediate to those of any two consecutive censuses, some means of estimating the population.
(ii) These intercensal estimates are, it may be pointed out, not mere guesses, dependent for their population accuracy on the closeness with which the statistical officer? making the estimate can, from his local estimates are knowledge, appraise the population of his State or country, but are based on certain well-defined and guesses. clearly established principles. In the case of Australia, owing; to the extent to which actual statistics are used in the preparation of such estimates, they may be said to be closely allied to enumerations. This subject will be further considered later in Section IV., dealing with methods of estimating population.
(iii) In any case in which an estimate is used, instead of an actual enumeration, it is clear that the Desirableness best results will usually be obtained at short distances from the date of enumeration, since the errors of redenecing which are inseparable from any such estimates accumulate with the increase in the distance from the period. actual point at which an enumeration was effected. A further reference to this will be found later in Section VI., dealing with the desirableness of a Quinquennial Census.
(1) Inherent Difficulties of an Aystralian Census-
(i) Embracing, as it dnes an area of about $2,973,000$ :quare miles and extending from latitude Great extent $10^{\circ} 39^{\prime}$ S. to latitude $43^{\circ} 39^{\prime}$ S. end from longitude $113^{-} 5^{\prime} \mathrm{E}$. to longitude $153^{\circ} 16^{\prime} \mathrm{E}$., the Commonwealth of Austrania. of Australia, on the ground of extent alone, presents to the census enumerator very serious difficulties.
(ii) Of this vast area, however, little more than the cont t.ll fringe has as yet been peopled by white sparse distri inhabitants, who, to the number of some $4,120,000$, are nattered along a coast line measuring about 9,000 bution of por miles. The counting of such a population necessarily refpuires a collecting organization based on entirely tion. different principles to those which are sufficient in the case of densely populated communities, and as a consequence, involves a much higher outlay per head of pupulation.

The complete enumeration of the aboriginal wipulation of Australia, which is also very widely scattered throughout the States of Queensland, South Autralia and Western Australia, has never, strange to say, been seriously undertaken in connexion with any State census, the utmost attempted being a record of the numbers who werge in the employ of whires or living in contiguity to the settlements of whites.

In the Commonwealth Conistitution Act, provisimis in made for aboriginal natives to be excluded for all purposes for which statistipss of population an", m: do use of under the Act, but notwithstanding this, it certainly appears desirabld, from many points of wow, that some reliable means should be furnished for estimating the numbers and wistribution of this colnulogirally interesting and rapidly disappearing race. As far as New South Walds and Victoria are combred, the enumeration is an casy matter, as the few members of the race left in these States are mainly $\quad$ ? under conditions of civilization, while in

Tasmania the native aboriginal race became extinct in 1876. In Queensland, South Australia and Western Australia, on the other hand, there are considerable numbers of natives still in the wild state, numerical information concerning whom is of a most unceliable nature, and can be treated as little more than the result of more or less accurate gues, ;ing.

Climatic obstacles.

Musters.
(iii) A further difficulty experiencedif in obtaining reliable particulats of the distribution of the population of Australia arises from the miguatory habits of those living in many portions of this extensive territory. Thus a census taken in the pastoral districts during shearing time would furnish a view of the distribution of population very different from that which would be obtained at a census taken in some other portion of the year. Other dislocations of population occur in comexion with rushes to newly discovered gold-fields, or employment on larige public works.
(iv) The great range of latitude in, Australia and the consequent variation in climatic conditions furnish additional obstacles to a satisfactory count of the population of the Commonwealth. For a reliable census of Australia the fixing of an fidentical date of enumeration is essential, and the dates which have been adopted for the last three censusies of the several States have been those chosen by the Engrisli authorities for the census of the United Kiagdom. The date so selected has occasionally proved a most unsuitable one for Australia, particularly in the tropical and sub tropical portions of the Commonwealth, where the conditions experienced have varied between the extremes of drought and flood.

## $\stackrel{l}{\text { bards- }}$

## (2) Enumerations from Earliest Times Onwards-

(i) Unlike many countries which, orly at a somewhat advanced stage in their development, have undertaken the duty of numbering the people, Australia has, from its inauguration, subjected its civilized population to a more or less frequent counting. The earliest counts were known as " Musters," the first being made in 1788, the yeur in which settlement in Australia was established. The principal object of these musters was to obtain an estimate of the food and other requirements of the settlements, and the means by which the eniumeration was effected was that of requiring the people to attenl on a specified day at the various "muster stations." The results of these musters, however, appear to have been very unceliable, since reports dealing with them contain frequent references to the numbers estinated to have been unaccounted for at the muster, in fact it has been said of them that "they were as frequent as they were inaccurate."

From 1788 to 1825 "Musters" appear to have been carried out at least annually, and to have been discontinued in the latter ycar.
(ii) The first regular Census in Australia, that of New South Wales, was taken in 1828 under the provisions of an Act of the Governor and Council of New South Wales (9 Geo. IV. No. 4). The second Census of that State was taken in 1833, and the third in 1836. From the latter year onwards to 1861, a quinquennial Census of the State was taken, followed by a decennial Census from 1861 to 1901.

The numbers recorded at theso successive censuses of New South Wales, exclusive of aborigines, are as follows :-

New Socti Wales Census Resuits.

| Date of census. |  |  |  |  |  | Males. | Wemales. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Novembor, | 1828 | $\cdots$ | ... | $\cdots$ | $\ldots$ | 27,611 | 8,987 | 36,59) |
| 2nd September, | 1833 | ... | ... | ... |  | 44,644 | , 16,150 | 60,794 |
| 2nd September, | 1836 | $\ldots$ | ... | $\ldots$ |  | 55,539 | ? 21,557 | 77,096 |
| 2nd March, | 1841 | ... | $\cdots$ | $\cdots$ | ... | 87,298 | 1 43,558 | 130,856 |
| 2nd March, | 1846 | $\ldots$ | ... | $\ldots$ | ... | 114,769 | - 74,840 | 189,609) |
| 1.t March, | 1951 | $\ldots$ | ... | $\cdots$ | .- | 155845 | (112,499 | 268,344* |
| 1st March, | 1856 | $\cdots$ | $\cdots$ | ... | ... | 150,488 | 119,23.4 | 269,729 $\dagger$ |
| 7 th April, | 1861 | ... | ... | ... | ... | 198,488 | f 152,372 | 350,860 |
| 2nrl April, | 1871 | ... | ... | ... | ... | 274,842 | -228,156 | 502,908 |
| Bre April, | 1881 | ... | $\ldots$ | $\cdots$ | $\cdots$ | 410,211 | ) 339,614 | 749,825 |
| 5th April, | 1891 | ... | $\cdots$ | ... |  | 608,003 | (615,95 | 1,123,0n4 |
| $31 \mathrm{st} \mathrm{Match}$, | 1901 | ... | $\ldots$ | ... | ... | 710,005 | \} 644,841 | 1,354,846 |

* Port Phillip District, which on 1st July, 1851, became the Colony of Victoria, was at the dat of this census still a portion of New South Wales, and its population is consequently included here. + The population of the districts of Moreton, Daring Downs, Bumett, Wide Bay, Maranoa, Leichardt, Port Curtis, and Stanley is incinded with that of New South Wales for the last time in the census of 1856 , these districts having been formpd into the separate colony of gueensland on with that of New Sout
10th December, 1859.
(iii) The first Census of Victoria, taken after its separation from New South Waies, was that of 26 th April, 1854. This was followed by others in 1857 and 1861 , and by a decennial Census from the latter year onwards. The population nembers so ascertained, exclusive of aborigines, are as follows :-
(iv) Queensland, the earliest settlement in which took place in 1824 , remained a part of the Censuses of Colony of New South Wales until 10 th December, 1859 , when it became a separate colony. Its first Queensland Census aftar that date was taken in 1861 , and was succeeded by others in 1864,1868 , and 1871 , thence by a quinquennial Census to 1891, and a decennial Census thereafter.

The population statistics so obtained (exclusive of aborigines) are as follows :-
Queensland Census Results.

|  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

(v) In South Australia settlement was first effected in 1836, the earliest Census of the colony censuses of being taken on the 26 th February, 1844. This was succeeded by censuses in 1846, 1851, 1855, and South Austratia 1861, a quinquennial Census from 1861 to 1831 , and a deceanial Census thereafter.

The totals enumerated, including particulars for the Northern Territory, but exclusive of aborigines, are as follows : $-\frac{i}{i}$

(vi) In Western Australia permanent settlement dates from 1829, but the first regular Census censuses of was not taken until 10th Ochtober, 1848. Further censuses were taken in 1854, 1859, 1870, and 1881, Western Australia. followed by a decennial Cefnsus from the last mentioned year onwards. The populations ascertained, exclusive of aborigines, are follows:-

Western Australian Census Results.

(vii) The first settle ment in Tasmania took place in 1803 , but the first regular Census was not censuses of taken until 27 th September, 1841 , some sixteen years after Tasmania had severed its connexion with Tasmania. New South Wales, and had become a separate colony. Censuses were subsequently taken in 1847, 1851, 1857, 1861, 1870, and 188 , succeeded by a decennial Census from the last mentioned year onwards.

Censuses of Australia.
(viii) It will be seon from the foregoing referenees to tho several States that it was only on the occasion of the last three censuses, viz, those of 1881, 1891, and 1901 that a uniform date of enumeration was in force in all the states. Tt is consequently only for these three years that Census totals for the whole of Australia are available. The figures are as follows :-

Australia-S.aultaneous Cexsus Resulis.

| Date of Census. |  |  |  | Males. | Fetuales. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3 Brd April, 1881 |  |  |  |  |  |  |
| 5th April, 1891 | $\ldots$ | $\ldots$ |  |  |  |  |
| 31 st March, 1001 | $\cdots$ | $\ldots$ |  | $1,704,039$ $1,977,928$ | $1,450.353$ $1,795,573$ | 3,174,302 |

## (3) The Census of 1901-

that of 1891, preceded by a Conference of Australia, taken for 31st Marel, 1901, was, as in the case of the Colony of New Zealand were represented. The onns, at wich each Stato of the Commonwealth and responsible for the Census takines in the varios Sic object of this Conference was the discussion by those of uniformity in the collection and subsequent compilation eds which would lead to as great a degree circumstances of the case would admit. The Conference was held in Sydue, of the Census data, as the and the following days, and as the he Conference was held in Sydney on 26 th February, 1900, the object of sccuring uniformity throughout the Commonwealth in the agreement was arrived at with
(a) The date on which the Census should be taken.
(b) The nature, extent, and form, of the questions to be asked.
(c) The general principles to be observed in compiling the results.

The date selected by the Conference for the taking of the Census wois 28 th April, 1901, but this selection was subsequently over-ruled by a decision of the Premiers of the various States that the Census should bo taken on 31st March, 1901, the dite which had been adopted ford the Census of the United Kingdom on the recommendation of the Noyal Statistical Suciety. The jadvantage of a universal application of one date, if practicable, is obvious.

A draft of the householders' schedule setting forth the minimum \{amount of information to be collected in any State, and the form in which the inquiries connected therentith were to be made, was approved by the Conference, the heads of inquiry being as follows, viz: :- Name, Sex, Age, Conjugal Condition, Relation to Head of Household; Occupation, Sickness and Infirnity, Birthplace, Length of Residence in Colony, Religion, Education, Materials of Houses, and Number lof Rooms.

It was further agreed that States, so desiring, might include, in addition to the foregoing, inquiries as to :-
(a) Land, Live Stock and Crops.
(b) Sunday School Teachers and Scholars.
(c) Assessed annual value of dwellings and how occupied.
(d) Year of marriage and total number of children living and dead born to each couple.
(e) Name and place of college or school attended by each chil d receiving instruction.

Provision was made by the Conference for uniformity in the classificat data by means of a series of rules for dealing with cases in which it appearect and compilation of the opinion as to methods of treatment might exist. It will thus be seen that although conducted ben of different States, the Census of the Commonwealth, as taken in 1901, was carried out with a considerable amount of uniformity and consequently furnished data in many \}ways suitable for purposes of aggregation or comparison. A detailed examination of the results, hovever, furnishes numerous indications of divergences from a common line of action, divergences which in the absence of a central controlling Census authority, can hardly be avoided in an undertaking of this

> nature.

## (4) The Census of 1911-

To be taken

Under Section 51, sub-section (xi) of the Constitution Act, power is given to the Parliament of the Commonwealth to make laws with respect to "Census and Statistics." This power was brought into requisition in 1905 when the Cenzus and Statistics Act, 1905, became law, being assented to on 8th
Decomber, 1905 .

Under this Act provision is made for the uppointment of a Commonwealth Statistician, aud amongst other duties that officer is charged with the taking of a Census in the year 1911 and in every tenth year thereafter.

The particulars which the Act requires to be ncluded in the Census st hedule are almost identical with those which were contained in the 1901 scheduld, the principal alteration ${ }^{\text {s s }}$ being that "Length of Residence in Australia" "is to be asked instead of "I Hngth of Residence in Col Ony of Enumeration," that "Duration of Marriage" is to be asked in all cases, aqud that nationality is to be ascertained in addition to birthplace.

# Methods of estmatita poqulatron. 

## (1) General Character of Problem-

(i) Io the necessity which exists for estimating popukation during intercensal periods attention The census has already been drawn. Where, as in the case of the Comnhonwalth, so long a period as ten ycars forms the is allowed to elapse between two enumerations, it is clear that these estimates require to be made with considerable care, and to be based on principles which past experience has shewn to furnish satisfactory results, for marked fluctuations are apt to occur in the populations of the various portions of this extensive territory.

In all such cases the estimate is necessarily based on the results of the most recent censuses, but the manner in which this basis is employed varies in different parts of the world.
(ii) In some countries an assumption is made that the average rate at which the population increased during the last intercensal period, will be in operation luring the current period, and thus, on the basis of this rate, an estimate is obtained of the population for any specified point of time in the current period, founded upon the number enumerated at the lant Census. This evidently involves the very precarious assumption that during the current intercensed period the popalation is increasing in geometrical progression at the average rate per annum experienced in the preceding completed period.

Another method based on the assumption of a uniform nu'merical increase has also been occasionally employed. Under this method it is assumed that the annual nimerical increase which the latest Census shewed to have been in operation during the last completed, intercensal period would be experienced during the current period; that is to say, it is assumed that the population is increasing in arithmetical progression, the annual increment for the current intercensal perliod being equal to the average for the preceding completed period.
(iii) Another method, and one which differs fundamentalily from the two above-mentioned, consists Estimates in obtaining and applying statistics of the fluctuations of population.

It is evident that if, staiting with the results of a Census, the correct numbers of births and arivals be added, and the correct numbers of deaths and depactures be subtracted, we shall have at any given point of time as true a statement of the population as could be furnished by a Consus. The difficulty, however, which presents itself is that of obtaining absolutely reliable statistics of these events, thus necessitating the making of certain adjustments to allow for unrecorded particulars. This will be further considered in section (4) of this Chapter.

## (2) Estimates Dependent on Assimption of Uniform Rate of Increase-

(i) The method of assuming that the population is increasing in geometrical progression at the Method average rate experienced in the last intercensal period, is that which has been in use in connection with employed in the population estimates of England and Wales for many years, both as regards the total population and also the population of the various divisions and towns.
(ii) For communities in which the increase of population is mainly due to excess of births over Advantages deaths, and in which the birth and death rates fluctuate but slightly, such a method of estimation will and defects of furnish results approximately accurate with a small expenditure of labour; but where, as is frequently the case, the factor of migration cannot be ignored, and where the rates for births and deaths are themselves subject to considerable fluctuation, the estimates prepared on this basis require to be used with the utmost caution. For instance, such a method of estimating the population of the Commonwealth would evidently be very unreliable, ovying to the variations in the rates of increase which are actually experienced. For example, for the five decennial periods 1851-61, 1861-71, 1871-81, 1881-91, 1891-1901, the annual rates of increase per cent. were respectively $11.07,3.76,3.05,3.52$, and 1.71 , and to have applied, to any of these periods, the rate experienced in the preceding period would have involved very serious error. For the individual States or portions of them the results furnished by this method would be even wider of the truth than is shewn to have been the case with the Commonwealth as a whole.

## (3) Estimates Dependent on Uniform Numerical Increase-

The method of estimatin' g population on the basis of an assumed arithmetical progression, with an Advantages annual increment equal to the fuverage annual increase for the proceding intercensal period, while and defects of possessing the merit of simplicity, is unfortunately not sufficiently accurate for general use. In any community in which the increase is mainly due to the excess of arrivals over departures, and in which such excess varies but little from: year to year, the method is applicable, but such conditions are unusual. This method is mentioned by Mr. Cressy Wilbur as having been applied in certain cases for determining intercensal populations in the State of Michigan, U.S.A. It will readily be seen that such a method is quite unsuitable to Australia. I'nder it the assumption would be made that, since the population of the Commonwealth increased on the average during the intcrcensal period 1891-1901 by about 59,000 por annum, this numerical increase could be applied in estomating the population for the current period 1901-1911. For the intercensal period 1881-91, however, the average was 93,000, and it will be seen that to have used this increment. for the period 1891-1901 would have resulted at the date of the Census of 1901 in an over-estimate for the Commonwealth of about 340,000 . Under such circumstances it would evidently be unsafe to use the 1891-1901 figures in iconnection with the period 1901-1911.

Method employed in
Australasia.

Registrations of births an
deaths.

Records of
Records of departures.
(i) The method of estimating population which is employed in Australasia is that of obtaining what may be called the actual "statistics of fluctuation," or, in other words, obtaining as complete records as possible of births, deaths, arrivals and lepartures. With reasonable thoroughness in the collection of these statistics, it is clear that such estfimates should possess much greater weight than those which are based on the mere assumption that the cuprent increase coincides with that experienced in the preceding period.
(ii) Fortunately for Australian statistics, provisions for the civil registration of births and deaths have been made in all the States of the Commonwealth for many years past. In Tasmania such registration dates from 1839, in Western Australia from 1841, in South Australia from 1842, in Victoria from 1853 , and in New South Wales and Queensland (then portion of New South Wales) from 1856 . In South Australia information concerning a birth is required to be supplied within 42 days, but in all the other States of the Commonwealth a perich of 60 days is allowed. For the registration of death, however, the length of time allowed varies much mfore considerably, being seven days in Victoria, eight days in 'Tasmania, ten days in South Australia, foprteen days in Western Australia, and 30 days in New South Wales and Queensland. Such registration is in all cases compulsory, and is controlled by the several State Governments.

While there is every reason to belgeve that the registration work of the several States of the Commonwealth is very efficiently carried put, it is clear that, with such a large territory and so scattered a population, failures to register births and dleaths are almost certain to occur. The number of such failures, however, probably represents a very small proportion of the total occurrences.

It may be noted, in passing, that the time allowed for registration in many of the States appears excessively long, and must, in some instanges, be the cause of omission to register. Even making every allowance for the longer time required for: such purposes in a widely distributed than in a closely settled population, the 60 days of grace for the rearistration of a birth appears to be excessive, and it must at times lead to an omission to register, espec,ially in the case of change of residence, or of the death of the child at less than two months. The importance, also, whether from a legal or from a statistical stand-point, which attaches to a prompt registration of! death, would appear to render undesirable such an extended death regristration period as 30 days. Antallowance of 30 days for births and seven days for deaths, with due provision for special consideration under exceptional circumstances, would probably give ample time in all parts of Australia for due registration, and would materially assist in rendering more accurate both the legal and the statistical records of such occurrences, and would thus incidentally contribute to the more accurate determination of the intercensal population of the separate States and the Commonwealth as a whole. In any case, greater uniformity of method than at present exists is desirable.

Particulars of such registrations are rendered available at least quarterly in all the States, and in some instances are published monthly.
(iii) Next in importance to the correct record of births and deatbs comes that of migration, but here, unfortunately, the circumstances of the case will not admit of the stime degree of accuracy of record being attained as is the case with birrhs and deaths. In all the States of Australia it has been the practice for many years past to compile and publish statistics concernirg the number of arrivals and departures by sea, and, in some of the States, particulars of railway travellers have also been included for some considerable time. In no case, however, has an attempt been made, to record the number of arrivals and departures by road, nor indeed does it appear practicable to obtain reliable records of such migration.

In all cases, also, the figures given thave referred to the whole Statio, any reliable record of internal migration being evidently possible only in countries which, like Sweden, inaintain population registers for the systematic record of changes of residence.

As regards the records of arrivals and departures by sea, the practice followed is that of requiring the master of each incoming and outgoing vessel to furnish passenger lists showing the number of passengers brought or taken away by him, and if these lists could be obtained accurately prepared, there would be but little difficulty in the matter of estimating the population as far as the whole Commonwealth is concerned, since all migration thereto or therefrom is necessarily by seaf.

Lengthy experience has, however, shewn that the general unreliability of passenger lists is such as to invariably render necessary some method of adjusting the figures ordindrily furnished.

As already remarked, the only records of migration by land in Aus,tralia are those connected with railway travelling, and it is consequently on the basis of these and the statistics of inter-State migration by sea that the magniture of inter-State migration is determined.

Discrepancies Between estimated and populations.
(iv) In most cases in which estimates of population have been obtained by means of statistics of births, deaths, arrivals, and departures it is found that, if no special allowance of any kind has been made, the population which has been obtained on the basis of recorded fictuations greatly exceeds that actually enumerated at the Census, thus indicating the necessity which exists for making from time to time during the currency of the intercensal period some such adjustment; of the data as will bring the estimates more nearly into accord with the actual position of affairs. Eviddence of this will be found in Appendix B hereto, which contains the particulars made use of by the 1903 Conference of Statisticians in arriving at the allowance mentioned in section (vi) hereunder.
(v) It is clear that where, as in this case. the estimates are based: on records of several different kinds, viz., census returns, birth registrations, death registrations, recoids of arrivals, and records of departures, and where there exist no means of independently checking any of these records, it is a matter of considerable difficulty, if not indeed of impossibility, to allocate to the different sources the error which, according to the Census, must have been made in some or all of them.

As a matter of fact, it is practically certain that neither the initial nor the terminal Census of any period can lay claim to absolute accuracy. Like the records of births, deaths, arrivals and departures, they are subject to some degree of error, since omissions and duplications are incidental to every Census; to what extent there are no adequate means of ascertaining, though they are probably small.

Of the component factors of the estimate it is, however, very generally agreed that, as regards Australiz at all events, the bulk of the error is to be found in the record of departures by sea, owing to the fact that many persons take their departure without having previously booked their passages, and consequently are not included on the passenger lists left by the departing vessel.

Under these circumstances the convenient assumption has been made that, eliminating the consideration of migration by land other than by rail, the residual discrepancy which the Census taking has shewn to exist between the estimated population and that actually enumerated is due to unrecorded departures by sea, and on the result of a comparison of the amount of this discrepancy with the number of departures recorded for the period, a percentage allowance for unrecorded departures for the ensuing period is obtained.
(vi) The necessity for such an allowance has long been recognised in some of the States, and Examination provision for it had regularly been made in the States of New South Wales, Victoria, and Tasmania of of anestion by during the intercensal period 1891-1901, with the result that although the estimate for the date of the conferences Census of 1901 differed from the total enumerated, the discrepancy was not nearly as great as would have been the case had no such adjustment been made. In the States of Queensland, South Australia, and Western Australia such a procedure was not adopted. On1 22nd September, 1903, and the following days, a Conference of the Statisticians of the several States of the Commonwealth met in Melbourne to consider matters bearing upon uniformity in the methods of determining the populations of the federated States, and as a result of their investigations and deliberations a series of percentages was deduced for application to the recorded departures by sea to allow for the discrepancy referred to.

The whole question of population estimates wiss considered by this Conference, the recommendations of which were as follows :-
(a) That the Census of 1901 be taken as the starting point, and future estimates of population be published from that basis.
(b) That the Registrar-Generals' returns of births and deaths, and the Customs and Railway Departments' certificates of arrivals and departures, be accepted for the compilations.
(c) That 10 per cent be added to the railway returns of arrivals and departures by land for New South Wales, Victoria, Queensland, and South Australia to allow for unrecorded tratfic by rail and road.
(d) That the following percentages on recorded departures by sea be added thereto for the unrecorded departures:-

| New South Wales | $\cdots$ |  | 9 |
| :---: | :---: | :---: | :---: |
| Victoria | $\cdots$ |  | 9 |
| Queensland | $\ldots$ | $\ldots$ | 10 |
| South Australia proper | ... | $\ldots$ | 7 |
| Northern Territory | ... | . | 5 |
| Western Australia |  |  | 5 |
| Tasmania ... |  |  | 12.5 |

(e) That the elements of population be published quarterly on a uniform basis.
( $f$ ) That where the distribution of sexes of persons travelling overland is unknown, the proportion of males and females be fixed on the basis of the recorded sea traftic for the corresponding period.
(g) That full-blooded aborigines be excluded from the populations, but shown on a separate line in the estimates of population.
(h) That henceforth the mean population of each of the four quarters be taken, and the mean of these be accepted as the mean of the \{year.
(i) That seamen discharged or having deserted and all seamen signing on be taken into account as arrivals and departures respectively
( $j$ ) That the populations of the various States as at 30 th June last be fixed (for certain purposes) as follows :--

| as follows :-- |  |  |
| :---: | :---: | :---: |
| Victoria ... |  | 1,208,070 |
| Queensland |  | 1, 512,760 |
| South Australia* |  | 365,020 |
| Western Australia |  | 221,990 |
| Tasmania |  | 176,960 |
| New South Wales |  | 1,415,760 |

* Including population of Northern Territorry.

It is of interest to note that these recommendations formed the basis for the schedule to the Commonwealth Representation Act, 1905. It may be added, howwever, that the above estimates of population are not strictly in accordance with the agreed basis.

The question was again considered at the Conference of Cdmmonwealth and State Statisticians, held at the Commonwealth Bureau of Census and Statistics, in Mellbourne, in November and December, 1906, when the following resolutions on the subject were carried :-
(a) That until such time as the next Census shall have been taken it is desirable that the method of estimating the populations of the respective States of the Commonwealth be that defined in the Report of the 1903 Conferrence of Statisticians.
(b) That, for the purpose of investigating the question of unrecorded departures, it is desirable that in the case of every vessel leaving a State, arrangements be made for obtaining from the master of the vessel at the next port of call a complete passenger list for comparison with that left by him on his departure from the State.
(vii) During the year 1906 the matter of making an allowance for unrecorded departures by sea was investigated by the Government Statist of Victoria, who, as the result of his inquiries, came to the conclusion that, as far as his State is concerned, no such allowance is required. The principal points raised by him as furnishing grounds for the opinion which he holds, and upon which he has acted since 1st January, 1906, may be stated as follows:-
(a) The application of this allowance, at least so far as migration by sea was concerned, shewed a loss of population from that cause.
(b) Such loss seemed incompatible with the prosperous condition of the State.
(c) Victoria appeared to be losing (i.e., by emigration) more population in recent years than in the time of the great depression.
(d) The strong inducements earlier existing to leave for Western Australia, etc., do not now exist.
(e) Inquiry shewed that the method of recording arrivals and departures by shipping companies was defective
( $f$ ) Passengers booking in Melbourne and catching a boat at Adelaide are included as departures both by sea and rail, thus duplicating the loss by emigration.
(g) The statistics of arrivals and departures, on which the $9 \%$ allowance was computed, were collected in a different manner from that now obtaining.
(h) During 1891-1901 every arrival and departure by sea was recorded; now, however, all through passengers are discarded.
(i) In the earlier period statistics of migration by rail were based on return tickets as well as upon single tickets. Since 1901 only single tickets are taken into account.
(j) In consequence of the asterations mentioned, the percentage deduced by the 1903 Conference is not now applicable.
(k) Railway and tramway traffic has increased enormously in the last few years, the implication being that this increase is demanded by considerable increase of population.
(l) Moreover, new houses are being erected in country, city, and suburbs.
(m) And births and marriages are increasing.
(n) Municipal returns of inhabited dwellings indicate a higher population than the official estimate.
(o) Municipal estimates of population largely exceed the official estimate.

These considerations were revieved by the Conference, which then carried the following resolution :-
"That this Conference having carefully considered the grounds on which the Government Statist of Victoria suggests that the allowance agreed upon in the 1903 Conference should be abandoned, is unable to accept his view. It believes that the percentage of correction having been based upon a review of several intercensal periods, ought to be maintained, and that each State should adhere to the decision of the 1903 Conference until the next Census, which will supply further data on which a new estimate for correction can be made."*

In the report of the Statistical Comference it is specifically stated that great weight was attached to such considerations as led the Victorian Statist to abandon the basis agreed upon, but it was felt that no really satisfactory revision of the allowance agreed to was possible until after the next Census of the population. $\dagger$
(viii) It is resirable to examine briefly the objections which have been urged by the ictorian
Government Statist to the continuance of an allowance in estimates of the population of his State for unrecorded departures.

It may in the first place be well to state briefly the general grounds for the conclusion that a correction is necessary, and that any proposal to abandon such a correction requires to be weightily supported.

At the last three censuses of Víctoria, viz, those taken for 3rd April, 1881, 5th April, 1891, and 31st March, 1901, it was found in fach case that the actual count of the population at the date of the Census fell short of the estimate for that date prepared on the basis of returns of migration and vital. statistics during the intercensal period. Compared with the number of recorded departures for the several periods, these surplusages (arbitrarily assumed to be due to unrecorded departures by sea, but really due to an accumulation of errors), represent approximately $20!\%$ for $1871-1881,11 \%$ for 1881-91, and $9 \frac{1}{2} \%$ for 1891-1901. Similar discrepancies at the date of the Census have been exhibited also in the estimates of the ofther States, the surplus so ascertained for Tasmania being no less than $13 \frac{1}{2} \%$, and that for Queensland $1 \frac{\alpha}{-1} \%$, for the period last referred to.

Under these circumstances it its clear that there is practically incontrovertible evidence that a method of estimating which merely adds to the population at the date of the last Census the number of births and recorded arrivals, and ded ucts the number of deaths and recorded departures, will, in the majority of the States of Australia, ressult in considerable over-estimates, and this evidence has, as shewn above, been furnished by the State of Yictoria for the past 30 years. To warrant an assumption that a cause uniformly operating in the same direction during this period of 30 years came suddenly to an end with the termination of the intercensal) period $1891-1901$ would require evidence of the most convincing character.

- See Report of Conference of Statisticians fon the Unificntion of Australasian Statistical Methods, and co-ordination of the work of the Commonwealth and State Bureaux. November and D fecember, 1900, page 14.
$+\quad$ Ibid., page 4.

Paragraphs $(a),(b),(k),(l)$ and $(m)$ above, relate to various evidences of material prosperity and to the incompatibility of such prosperity being collateral with the loss of population through emigration by sea, as implied by the application of the method adopted at the 1903 Conference. While such apparent inconsistencies undoubtedly furnish legitimate ground for close inquiry concerning the reliability of the adopted method of estimating population in themselves, they can hardly be regarded as conclusively shewing that the method in use is really defective. That such arguments are to be accepted with caution is shewn by the fact that they would apply with similar force to the decennial period preceding the Census of 1891, when a large discrepancy was found to exist.

On the basis of the method agreed to by the Conferences of Statisticians, it will be found that, since the inauguration of Federation, the estimated population of Victoria and the excess of departures over arrivals have varied in the following manner :-


The smallness of the increase in 1902, and the actual the natural outcome of the drought, which at that time so Since 1903 there has been a continuous increase of pop progressive.

As regards the net results of migration, it will be sf that the figures given above exhibit a marked diminution in the excess of departures over arrivals to the improvement in the material prospects of the State. T diminishing excess of departures over arrivals, exhibited improvement of the general condition of things in the State justify the abandonment of the allowance agreed upon and hi numerical evidence of the inadequacy of these indication accepted as correctly representing the position of affairs.

The statement of paragraph (c), viz., that, under the Victoria appeared to be losing more in recent years than in borne out by the actual population statistics for the respective from 31st December, 1892, to 31st December, 1898, the popup and as the births for that period exceeded the deaths by 10 the arrivals by 86,607 . For the six years from 31st Dec population of Victoria, as estimated by the agreed method, 89,770 by excess of births over deaths, and a loss of 54,043 b

With reference to paragraph $(m)$ it may here be undoubtedly increased in recent years, the number of bir totalled only 181,752 , as compared with a total of 198 1893-8.

In paragraphs (e) and $\left(f^{\prime}\right)$ it is implied that the defect led to the duplication of cert -tin returns of emigration, is correction which the experience of at least three precedil necessary. Duplication of this nature operates, however, in duplicated departures referred to in paragraph $(f)$ are doubtle indeed, may even perhaps be exceeded, by cases of duplicated Melbourne break their journey at Adelaide and proceed or from the passenger lists.

In paragraphs $(g)(h)(j)$ the Victorian Government $S$, ${ }^{2}$ artist advances, as a reason for abandoning the agreed method of estimation, the fact that alterations hay ye taken place in the method of recording arrivals and departures by sea, and that the records of departures by sea for the intercensal period 1891-1901, on which the $9 \%$ allowance was based by the $19{ }^{\text {Q }}$ Conference, no longer corresponds to the departure-statistics now being collected, owing to the fact that in the earlier period every arrival and departure was recorded, whereas now all through passengers a re eliminated from the returns. Such an alteration as that referred to, instead of warranting the abandonment of adjustment, would appear to necessitate an increase in the percentage now to be applied, sin fe the figures being recorded at the present
time represent only a portion of what would have been collected under the method in vogue in time represent only a portion of what would have been follected under the method in vogue in 1891-1901, viz., the period for which the correction was deduced. In other words, had the present system been in force in 1891-1901, the total of recorded dep artures would have been smaller than that made use of by the 1903 Conference, and consequently the percentage necessary to allow for the ascertained discrepancy would have had to have been larger.

Although not distinctly affirmed, it may perhaps be tacitly implied that the greater care now taken in recording departures, has practically the same effect in increasing them as had the allowance under the former regime. Whatever weight be given to this consideration, it may very well be regarded as a set-ofio against the variation of the correction which the considerations referred to in the preceding paragraph indicated to be necessary.

Paragraph ( $n$ ) refers to the use of municipal returns. The force of considerations of this character largely depends upon the identity of the terms "house," "dwelling," etc., in the Census and in the
decrease shewn for 1903, were apparently seriously affected all the Eastern States. ation, which, although not large, has been since the year 1903, due in all probability the growing increase of population and the fy these figures, are consistent with that of Victoria which has been relied upon to therto made. In the absence of definite of material improvement, they may be agreed method of estimating population,
the time of the great depression, is not the time of the great depression, is not periods. For example, for the six years nation of Victoria increased by only 14,460, 1,067 , the departures must have exceeded. ember, 1900 , to 31st December, 1906, the increased by 35,727, made up of gain of $y$ excess of departures over arrivals.
pointed out that, whilst marriages have hs in Victoria for the six years 1901-6 176 for the period of depression, viz., itive character of migration returns, which such as warrants the abandonment of a pg intercensal periods. had shewn to be more than one direction, and the cases of ss to a large extent counterbalanced, and, arrivals, in which passengers booked to eland, without their names being removed
 The force of considerations of this character
dwelling," etc., in the Census and in the
municipal returns. In the former an "oc cupied dwelling" is merely one in which a person was residing on Census night, while in the municipal re curns it is probable that the corresponding expression covers many other buildings, including possibly, in some cases, stores, warehouses, and others of like character.

With reference to (o), it is very dofubtful whether the existing machinery for obtaining municipal estimates of population can furnish aggregate results approaching in accuraoy to those obtained by the estimates for the whole State. Certain tendencies in estimations of this character rarely operate in the direction of reducing the estimate to a alue below the correct one, and there are reasons for supposing that there is at least a danger of over-estim ation

Reviewing the matter in its entir gation, it has been felt that the reiteration by the Conference of 1906 of the conclusion reached by the Wonference of 1903 , as to the necessity for making the agreed allowances in all cases, justified their conti nued application for all States in the official estimate of the population of the Commonwealth.


## (1) The Essentials of the Problem-

To determine the mean population of any territory for a given period, with anything like precision, it is necessary to possess a comple te record at very short intervals of the facts of migration, and also of the numerical fluctuation throygh births and deaths at equally short intervals. These, unfortunately, cannot be conveniently obtaifned, and in their absence the results deduced must necessarily be only approximate. In view, however, of the outstanding uncertainties of the internal migration in Australia, the magnitude of the actual uncf rtainty, arising merely from the defective character of the data in the above respects, is probably, in ardinary circumstances, quite negligible.

## (2) Detailed Consideration of the Problem \&

(i) If we have the population at five epochs, viz, at the beginning of any year, and at the end

$$
\frac{P_{t}}{P_{0}}=1+a t+\beta t^{2}+\gamma t^{3}+\delta t^{4}
$$ of each quarter therein, and have no furt her information than is shewn by such figures as to its fluctuation, a sufficiently probable supposjition is that the population at those and at all intervening dates will be fairly accurately expressed by an ordinary algebraic curve of the fourth degree, the coefficients of the powers of the variable of which are really determined by the actual data.

In other words, we suppose the fluct liation of population to be a quartic function of the time, of the form say,

$$
y_{12}
$$ -

$$
\left.\begin{array}{rl}
P_{t} & =P_{o} \\
P_{t}
\end{array}\right\}+a t+b t^{2}+c t^{3}+d t^{4}
$$

which latter expression more clearly exhibi ts the efficiency of the formula to express changes in the rate of increase or diminution of the population

Thus, with a population determined quarterly, the most probable value of the mean population, as may easily be shewn by the calculus of finitfe differences, will be

$$
P_{m}=\frac{1}{90}\left(7 P_{0} \frac{1}{4} 3 P_{1}+12 P_{2}+32 P_{3}+7 P_{4}\right)
$$

$P$ denoting the population on 31 st December of the preceding year (January 0 of the current year) and $P_{1}, P_{2}, P_{3}$, and $P_{4}$ the population on 3 Ist March, 30 th June, 30 th September, and 31 st December respectively, of the current year.

This last formula, however, is somew hat tedious to use, and to include a term involving $t^{4}$ might very properly be regarded as an unnecessary refinement in view of the uncertainty in the actual data.
(ii) If, for the sake of simplicity, we, suppose the function to be approximately cubic, i.e., that a third degree curve would approximately bass through all five points corresponding to the population values, specified above, then an infinite serid of formulæ may be applied, each one being exact, provided only that a third degree curve passed exactly through all five points.

For example, any one of the following series of coefficients might be used in lieu of those in the preceding formula (see an article in Journall Royal Society, N.S.W., Vol. XXXIV., 1900, pp. 36-7.1, by G. H. Knibbs)-


The coefficients $0,0,1,0,0 ; 1,0,0,0,1 ; 1,1,1,1,1$; and $1,2,2,2,1$; have all been used in Australia for determining the mean. Close inquiry will disiclose the fact that none of the latter are quite satisfactory. It remains, however, to shew that one of the above series of coefficients, viz., $1,4,2$, 4, 1 , has quite a unique claim to adoption.

It will be noticed that the ratios of the two series of coefficients, and the ratio of the corresponding divisors, viz., $\frac{1}{7}, \frac{4}{3}, \frac{2}{12}, \frac{4}{3}, \frac{1}{7}, \frac{1}{9} \frac{2}{0}$ are approximately identical throughout.
Hence the formula

$$
P_{m}=\frac{1}{12}\left(P_{o}+4 P_{1}+2 P_{2}+4 P_{3}+P_{4}\right),
$$

which is practically far more convenient than the more exact one previously given, is very satisfactory, at least whenever the deviations of the values from the cuble relationship are small, as they must necessarily be in ordinary cases.

We might have assumed that the mean of the results 'given by cubic curves passing through the values January 0, March 31, June 30; and July 0, Septiamber 30, and December 31; would be sufficiently exact for practical purposes, in view of the merely approximate character of the data, when we should obtain the formula last above written, thus:-

$$
\frac{1}{2}\left\{\frac{P_{0}+4 P_{1}+P_{2}}{6}+\frac{P_{2}+4 P_{3}+P_{4}}{6}\right\}={\underset{1}{2}}_{1}\left(l_{o}^{\prime}+4 \dot{P}_{1}+2 P_{2}+4 I_{3}^{\prime}+I_{4}^{\prime}\right)
$$

which is that above given.
! and December 31 , the coefficients should clearly be 1, 4, 1, with the divisor 6, and for short periods sthe arithmetical mean of the initial and terminal populations would probably suttice in most instances.
(iii) This approved rule may be expressed as follows, vix.:-

To the population at the end of the preceding year, add four times the population on 31st March of the year under review, twice the population on 30 th June, four times the population on 30th September, and the population on 31st December, and divide the total by twelve.
(iv) That the difference between the means determined in different ways is by no means wholly negligible, the following example will shew :-


## practice.

Adopted on account of cioseness of results with those furnished by theoretical stand,rd, and of convenience of application in actual
$\dagger$ This difference is regarded as negligtble.
$\ddagger$ Theoretically unsatisfactory, though the difference is practically negligible

## VI.

Review of Estimates of State Statisticians,
(1) Agreement as to a Scheme of Correction of Migration Returns-
(i) At the Conference of Statisticians held in 1903, consideration appears to have been given only Nature of to the effect produced on the total population, and the various ipercentages deduced were based upon the correction total departures by sea in the several cases. Though not explicitly stated in either the resolutions or the proceedings of the Conference, the intention appears to have been that these percentages should be applied alike to males and females, that is to say, that the aggregate allowance for unrecorded departures by sea should be distributed as regards sex in the same ratio as the retcorded departures were. This conclusion appears to be warranted by the resolution of the Conference that overland migrants of unknown sex should be distributed in the same ratio as the recorded sea migration for the corresponding period, which it will be seen is consistent with the intention not to discriminate as regards percentage allowances between
males and females in the case of departures by sea. Evidence of the intention to treat males and females alike in this matter is also furnished by the fact that in the application of corrections to the male and female departures by sea the agreed percentages have, with some minor variations of quite an irregular character, been adopted by the several Státe Statisticians.

Desirability of dealing separately and females.
(ii) The validity of the application of an identical rate of correction in the case of males and females is open to question, but in view \&f the resolutions of the two Conferences of Statisticians, it appears undesirable at the present time tcf make any alteration in this matter. After the taking of the next Census, however, it is proposed to thyroughly review the whole question, and to suggest the adoption of separate rates of correction for males afnd females. The marked differences in the circumstances and conditions of the sexes in all matters petaining to migration, and indeed affecting population and vital statistics generally, renders it desirable that every inquiry in this field should proceed on the principle that males and females should be statistically distinguished, and that all rates and percentages, whether relating to population, migration, births, ç.leaths, or marriages, should as far as practicable be separately determined.

1
(iii) One of the drawbacks to uniformity in procedure in the estimates of Australian population has been the absence of a central co-ordinating authority. Although the purpose of such an authority has been to some extent met by means of Confferences of Statisticians, the inadequacy of such means to attain that complete uniformity desirable in mataters of this nature, has been evidenced by the departures from the agreement mutually entered upon. The divergences are conspicuous in some of the results, and in onc instance there has been a complete abaladonment of the agreed method. The establishment of a Commonwealth Bureau of Census and Statistics, and the harmonious relationship between it and the State Bureaux, furnish grounds for believing thaft this defect has been minimised, if not wholly removed.
(2) Estimates corrected strictly according , to agreed method-
(i) For the purpose of computing tife population of the several States and the Commonwealth as a whole, strictly on the lines laid down in the agreement of the 1903 Conference, the following data, for each quarter from 1901 to 1906 inclusive, fhave been obtained by the Commonwealth Bureau from the Statisticians of the several States, and havie been assumed to be correct :-

1. Birth ${ }_{5}^{5}$ registered.
2. Death!s registered.
3. Recorded arrivals by seiu.
4. Recoided arrivals by land.
5. Recorded departures by sea.
6. Recor;ded departures by lind.

Particulars concerning the population at the date of the Census of 1901 were also obtained in each case.
(ii) An examination of the data sulpplied, and a comparison with the population figures deduced a greater or less magnitude had taken place from the method of estimating laid down in the resolutions of the Conference of 1903 . The most seriousideparture is, of course, that already referred to as having been introduced by the Victorian Government Statist in declining to recognise the necessity for any allowance for "unrecorded departures by sea," but, in addition to this, divergences of varying extent have been noted in the returns of some of the other $S i t a t e s$. It has consequently been considered desirable to recast the whole of the population figures of thé several States from 31st December onward so as to conform strictly to the method laid down.
(iii) With this object in view, the fopulations of the several States have been computed quarter by quarter from the records supplied by thie State Statisticians, and the full details of these computations in each case are given hereinafter for purposses of reference. (See Appendix A). The agreement of the Conference related only to population statisjtics for periods subsequent to the date of the Census of 1901 ( 31 st March), and consequently made no provision for correcting the figures for the first quarter of that year. In the following computations, how ${ }^{\text {fiver, the particulars for the first quarter of the year } 1901 \text { have }}$ been obtained on the same principle as that involved in the preparation for dates subsequent to the Census, and the population for 31 st December, 1900 has in each case been found by working back from the Census results.
(3) Discrepancies between Estimates for the, Commonwealth as a whole and those based on returns for the separate States-
(i) As previously mentioned, the steveral States have for many years prepared returns of the numbers of arrivals in and departures from their respective territories, but it is evident that the totals of such returns for all the States will not give the immigration to, and emigration from, the whole Commonwealth, since the greater part of suth migration is merely from one State to another, and in such cases those who appear as emigrants from ohe State will appear as inmigrants to another. The excesses of immigration over emigration for the seveval States should, however, admit of being added together to give a total excess for the Commonwealth, stince in the process of determining the excess for the individual States, and then aggregating the results, the purely inter-State migration, being included both in the immigration and emigration figures, will be ;eliminated.

In addition to the migration statistics obtained by the several State authorities in the manner here indicated, the Commonwealth Customs Department has, for the 'past three years, collected statistics of arrivals in and departures from the Commonwealth, but the exces's of arrivals over departures so ascertained differs materially from that deduced from the separate returns of the State Statisticians. Thus, for the year 1906 Customs Department's returns indicated a total exceis of arrivals over departures of 2,865 , made up of a male excess of arrivals over departures of $2,224 \dot{4}$ nd a corresponding female excess of 641 , while the aggregate obtained from the individual State returns showed a total gain to the Commonwealth by excess of arrivals over departures of 3,494 , comprising a gain of 9,427 males and a loss of 5,933 females.
(ii) The existence of such a marked discrepancy betwe the results obtained by these methods remedy. renders evident the necessity for some means of checking and co-ordinating the returns of arrivals and departures, and so bringing about that agreement between the wo sets of results which, from the nature of the case, ought to be in evidence. The absence of the requisite data, however, rendered impossible the satisfactory adjustment of the migration statistics for 1900 to 1906 . To avoid the recurrence of such discrepancies in the future passenger lists are being prepared so drafted as to provide for the requirements of both State and Commonwealth estimates, and it is further proposed to endeavour to secure in the methods of recording railway migration a greater degree of uniformity than exists at present.

## VII.

## The Desirableness of a Quinquennial Census.

## (1) General Review.

(i) In view of what has already been said in Section I. concerning the importance of reliable statistical. Population Statistics, it is clear that from the statistical stand-point a quinquennial enumeration is not only desirable, but is essential to any accurate consideration of those human activities which admit of numerical treatment. Many of the statistical facts concerming such activities are obtained annually with a considerable degree of eccuracy, but in the matter of ! population--which has been shown to be really the most important of sich facts, both intrinsically andias indispensable for the interpretation of other facts-it is considered sufficient in many countries to ma an actual count only once in ten years, and to remain satisfied with estimates for the intervening perifd. That is to say, those general statistics which are more or less accurately determined annually are considered in relation to population figures which are in reality only estimates subject to a decennial correction.
(ii) From an administrative point of view the desirability of more frequent enumeration than is Administraat present carried out in Australia is almost as great as frlon the statistical stand-point. Population tive. figures, as shown in Section I., being required for such numerous, varied, and important purposes connected with the administrative affairs of Commonwealth State, and Local Government, it becomes necessary that the statistics provided for these purposes should be of such a character as to justify, on the part of those employing them, implicit confidence in their reliability, a result which can hardly be attained in any case where so long a time as ten years elapsest between successive enumerations.

## (2) Experience in Other Parts of the World.

1
The principal instance of a quinquennial Census in the British Empire is that furnished by New New Zoaland. Zealand, in which Colony an enumeration has been effected dery five years since 1881, and prior to that Germany. year had been taken at intervals ranging from three to seven years.

In France, a quinqueniial Census has been in operation since 1831, it being worthy of notice that the only variation since that date was compelled by the Fraflco-Prussian war of 1870, the Census, which in the ordinary course would have taken place in 1871, being through that cause deferred to 1872 .

In Germany also a quinquennial Census has been in f

## (3) Advocacy of Quinquennial Enumeration.

Amongst statistical authorities in most parts of the world there is unamimity of opinion in favour United of the making of an enumeration not less frequently than on e e in five years; and leading statisticians of Kingdom, the United Kingdom, the United States, and Australia, havd, amongst others, urged upon their respective and astralia. Governments, from time to time, the desirability of adoptinf such a course. In the United Kingdom, an official view in favour of a quinquennial count appears to be developing, and the English Statisticians had hopes, which, however, were eventually unrealised, of keing able to secure an intermediate Census in 1906.

In Australia, the desirability of a five-yearly count has been strongly urged by individual State Statisticians, and was especially referred to at the Confe Hobart in 1902 and in Melbourne in 1906, at both of enumeration were unanimously adopted.
ences of Australasian Statisticians held in which resolutions in favour of quinquennial
VIII.

## Official Estimate of the Fopulation of Australia, and Concluding Remarks.

For convenience of reference, stati stics of the population of the Commonwealth at the date of the iuauguration of Federation, and at the ena of each succeeding quarter, are here given, the particulars being those computed in Appendix A (vii).

The yearly means shewn have been , calculated according to the principles set forth in Section $V$.

## POPULATION AND MEAN POPULATION OF THE COMMONWEALTH

from 31st Dece ${ }_{\text {nbber, }}$ 1900, to 31st December, 1906.


Having carefully considered the quest,ion of the allowances to be applied as corrections to the data from which the population-estimates are deduced, as well as the reasons which have been advanced in dissent from the method agreed upon, and keeping in view the consensus of opinion and resolutions of the Statistical Conferences of 1903 and $190{ }^{\circ}$, in favour of the continued use of this agreed method, it has been felt that any departure therefrom bo this Bureau would not be justified. The figures now given for the six years-1901 to 1906-are ther fore based upon the continued application of the agreed method, and, so far as this Bureau is concernfod, will be regarded as final until the next Census.

When, howevor, the results of the Clnsus of 1911 become available, the requisite material will then be to hand for considering a system of corrections to be applied to the estimate of population for each State and for the Commonwealth for the past decennium. The whole question will then be reviewed in the light of the experience for the whole it itercensal period.

Results similar to those presented in? detail in Appendix A will for succeeding years be given annually, but will in each case be furnished poly for the year under review. It will not in future be necessary to refer to the general matter, opry to the general considerations which have been dealt with herein; it will be taken for granted that the fe are already before the reader.


DETAILS of the Gpowth of the Population (excluisive of Full-blooded Aborigines) of the several States, and of the whole Commonwealth, during each Quarter from 31st December, 1900, to 31st December, 1906.

## I.-NEW SOUTH $\left\{^{\prime}\right.$ WALES.





New Soutre Wales-continued.


Births during Quarter ended 30th June, 1903 Deaths

Excess of Births over deaths ...
Recorded arrivals by sea during Quarter ended 304 h June, 1903
Recorded arrivals by land đ̈uring Quarter ended 30 ... June, 1903
allowance for unrecorded arrivals by land
$\ldots$

Total Arrivals during Quarter
Recorded departures by sea during Quarter ended 30tla June, 1903
Allowance for unrecorded departures by sea $\quad . .$.
Recorded departures by land during Quarter ended 30tf June, 1903 ...
Allowance for unrecorded departures $\ldots$ by land
Total Departures during Quarter
Excess of Arrivals over Departures

## Estimated Population on 30th June, 1903

Births during Quarter ended 30th September, 1903 Deaths

Excess of Births over Deaths ...
Recorded arrivals by sea during Quarter ended 30th September, 1903
 September, 1903
Allowance for unrecorded arrivals by land
Total Arrivals during Quarter
Recorded departures by sea during Quarter ended 30th September, 1903
Allowance for unrecorded departures by sea ...
Recorded departures by land during Quarter ended 30 ̈h September, 1903
Allowance for unrecorded departures by land
Total Departures during Quarter
Excess of Arrivals over Departures ...

Estimated Population on 30th September, 1903

Births during Quarter ended 31st December, 1903 Deaths

Excess of Births over Deaths ..
Recorded arrivals by sea during Quarter ended 31st December, 1903
Recorded arrivals by land during Quarter ended 31st December, 1903
Allowance for unrecorded arrivals by land ... ...
Total Arrivals during Quarter
Recorded departures by sea during Quarter ended 31st December, 1903
Allowance for unrecorded departures by sea ...
Recorded departures by land during Quarter ended 31st December, 1903
Allowance for unrecorded departures by land
Total Departures during Quarter
Excess of Arrivals over Departures
Estimated Population on 31st December, 1903


New South Wales-continued.



New Sóvtit $W_{a l e s}-c$ centinued.


Recorded arrivals by sea during Quarter ended 31st December, 1905
Recorded arrivals by land during Quarter ended 3ist December, 1905
December, 1905 arrivhls by
Allowance for uncecorded arring
Total Arrivals during Quarter
Recorded departures by sea during Quarter ended 31st December, 1905
Allowance for unrecorded depaptures by sea ...
December, 1905 $\ldots$... $\ldots$....

$$
\begin{array}{l|l}
\ldots & 1 \\
\ldots &
\end{array}
$$

Allowance for unrecorded depaytures by
Total Departures during
Excess of Arrivals over $\begin{cases}\text { Departures } & \ldots \\ \text { Estimated Population on } 3.4 \text { st December, } 1905\end{cases}$
$\begin{array}{ll}\text { Births during Quarter ended 3tst March, } 1906 \\ \text { Deaths } & , ", ",\end{array}$
Excess of Births over Deaths ...
Recorded arrivals by sea dutring Quarter
Mareh, $1906 \ldots$
Recorded arrivals by land during Quarter
March, $1906 .$.
Allowance for unrecorded arry
Total Arrivals during duarter land
Recorded departures by sea during Quarter ended 31st March, 1906
Alowance for unrecorded dep deduring Quarter ended 31st

Total Departures during Quarter
Excess of Arrivals over Departures

$$
\begin{aligned}
& \cdots \\
& \cdots \\
& s t
\end{aligned}
$$

$$
\begin{array}{r|r}
\ldots & \ldots \\
31 \text { st } & \\
\ldots 1 \text { st } & 12,4 \\
\ldots & 15, \\
\ldots & 1,8
\end{array}
$$

... 2

$$
\vdots
$$

31 st

$$
\begin{array}{r|r}
\cdots & \\
31 \text { st } & \\
\hline
\end{array}
$$

31st


$$
\begin{aligned}
& \text { March, } 1906 \ldots \\
& \text { Allowince for unrecorded der artures by land }
\end{aligned}
$$



Births during Quarter ended 30th June, 1906 Deaths
lexcess of Births over Deaths
Recorded arrivals by sea during Quarter ended $30 \mathrm{f}_{\mathrm{h}} \mathrm{h}$
June, 1906 Recorded arrivals $\dddot{\text { by }}$ land during $\dddot{Q u a r t e r} \cdots$ ended 30 tih June, 1906 Allowance for unrecorded arrivals by land

Total Arrivals during Quarter...
Recorded departures by sea during Quarter ended 30 th June, 1906
Allowance for unrecorded departures by sea ...
Recorded departures by land during Quarter ended 30 th June, 1906
Allowance for unrecorded departures by land
Total Departures during Quarter
Excess of Arrivals over Departures

Estimated Population on 30th June, 1906

Births during Quarter ended 30th September, 1906 Deaths

Excess of Births over Deaths ...
Recorded arrivals by sea during Quarter ended 30th September, 1906
Recorded arrivals by land đuring Quarter ended 30th September, 1906
Allowance for unrecorded arrivals by land
Total Arrivals during Quarter
Recorded departures by sea during Quarter ended 30th September, 1906
Allowance for unrecorded departures by sea ...
Recorded departures by land during Quarter ended 30th September, 1906 ..
Allowance for unrecorrded departures by lani
Total Departures during Quarter
Excess of Arrivals over Departures

Estimated Population on 30th September, 1906
$\underset{\substack{\text { Births during Quarter ended 31st December, } 1906 \\ \text { Deaths }}}{ }$
Deaths
Excess of Births over Deaths
Recorded arrivals by sea during Quarter ended 31st December, 1906
 December, 1906
Allowance for unrecorded arrivals by land
Total Arrivals during Quarter
Recorded departures by sea during Quarter ended 31sc December, 1906
Allowance for unrecorded departures by sea....
Recorded departures by land during Quarter ended 31 ... December, 1906
Allowance for unrecorded departures by land
Total Departures during Quarter
Excess of Arrivals over Departures

Estimated Population on 31st December, 1906

## TT.--VICHORTA.

Note.-Details of Arrivals and Departures by land for the several Quarters of 1901 and 1902 have been estimated on the basis of the returns for subsequent years. The actual records available give totals only for the nine months ended 31st December, 1901, and the year ended 31st December, 1902.


VICTORIA-continued.


Estimated Population on 31st March, 1903

Births during Quarter ended 30th June, 1903 Deaths

Excess of Births over Deaths
Recorded arrivals by sea during Quarter ended 30th June, 1903
Recorded arrivals by land during Quarter ended 30 깩 $\}$ June, 1903
Allowance for unrecorded arrivals by land
Total Arrivals during Quarter
Recorded departures by sea during Quarter ended 30th June, 1903
Allowance for unrecorded departures by sea ...
Recorded departures by land during Quarter ended 30 th
June, $1903 \quad .$.
$\ldots$
Total Departures during Quarter
Excess of Arrivals over Departures

Estimated Population on 30th June, 1903
Births during Quarter ended 30th September, 1903 Deaths

Excess of Births over Deaths ...
Recorded arrivals by sea during Quarter ended 30th September, 1903
Recorded arrivals by land $\ddot{\text { during }}$ Quarter ended 30 th September, 1903
Allowance for unrecorded arrivals by land
Total Arrivals during Quarter
Recorded departures by sea during Quarter ended 30th September, 1903
Allowance for unrecorded departures by sca.
Recorded departures by land during Quarter ended $30 \ddot{t h}$ September, 1903
Allowance for unrecorded departures by land
Total Departures during Quarter
Excess of Arrivals over Departures

Estimated Population on 30th September, 1903
Births during Quarter ended 31st December, 1903 Deaths

Excess of Births orer Deaths ...
Recorded arrivals by sea during Quarter ended 31st December, 1903
Recorded arrivals by land during Quarter ended 31st December, 1903
Allowance for unrecorded arrivals by land

## Total Arrivals during Quarter

Recorded departures by sea during Quarter ended 31st December, 1903
Allowance for unrecorded departures by sea .
Recorded departures lyy land during Quarter ended 31 st December, 1903
Allowance for unrecorded departures by land
Total Departures during Quarter
Excess of Arrivals over Departures



Victoria-cointinued.


Victoria-continued.


Victoria-continued.


## III.—QUEENSLAND.

| Particulars. | Males | Females | Total. | Males. | Females. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Estimated Population on 31st December, 1900 ... | ... | ... | ... | 274,684 | 219,163 | 493,847 |
| Births during Quarter ended 31st March, 1901 | 1,735 | 1,687 | 3,422 |  |  |  |
| Deaths " | 1,076 | 587 | 1,663 |  |  |  |
| Excess of Births over Deaths ... | $\ldots$ | $\ldots$ | ... | 659 | 1,100 | 1,759 |
| Recorded arrivals by sea during Quarter ended 31st <br> March, 1901 | 4,530 | 1,841 | 6,371 |  |  |  |
| Recorded arrivals by land during Quarter ended 31st March, 1901 | 4,028 | 2,000 | 6,028 |  |  |  |
| Allowance for unrecorded arrivals by land ... ... | 403 | 200 | 603 |  |  |  |
| Total Arrivals during Quarter ... ... | 8,961 | 4,041 | 13,002 |  |  |  |
| Recorded departures by sea during Quarter ended 31st March, 1901 ... | 4,347 | 1,586 | 5,933 |  |  |  |
| Allowance for unrecorded departures by sea ... $\ldots$ | 435 | 158 | 593 |  |  |  |
| Recorded departures by land during Quarter ended 31 st March, 1901 | 2,290 | 1,304 | 3,594 |  |  |  |
| Allowance for unrecorded departures by land | 229 | 1:30 | 359 |  |  |  |
| Total Departures during Quarter ... | 7,301 | 3,178 | 10,479 |  |  |  |
| Excess of Arrivals over Departures ... ... | ... | $\ldots$ | ... | 1,660 | 863 | 2,523 |
| CENSUS POPULATION on 31st March, 1901. ... | $\cdots$ | $\ldots$ | $\ldots$ | 277,003 | 221,126 | 498,129 |
| Births during Quarter ended 30th June, 1901 | 1863 | 1,810 | 3,673 |  |  |  |
| Deaths ,", ", | 916 | 478 | 1,394 |  |  |  |
| Excess of Pirths over Deaths ... | $\ldots$ | ... | $\ldots$ | 947 | 1,332 | 2,279 |
| Recorded arrivals by sea during Quarter ended 30th June, 1901 | 4,182 | 1,681 | 5,863 |  |  |  |
| Recorded arrivals by land during Quarter ended 30th June, 1901 $\ldots$ | 4,068 | 1,604 | 5,672 |  |  |  |
| Allowance for unrecorded arrivals by land ... ... | 407 | 160 | 567 |  |  |  |
| Total Arrivals during Quarter ... ... | 8,657 | 3,445 | 12,102 |  |  |  |
| Recorded departures by sea during Quarter ended 30th June, 1901 | 3,151 | 1,410 | 4561 |  |  |  |
| Allowance for unrecorded departures by sea ... .... | 315 | 141 | 456 |  |  |  |
| Recorded departures by land during Quarter ended 30th June, 1901 <br> Allowance for unrecorded departures by land | 3,252 325 | 1,554 156 | 4,806 481 |  |  |  |
| Total Departures during Quarter ... ... | 7,043 | 3.261 | 10,304 |  |  |  |
| Excess of Arrivals over Departures ... ... | $\cdots$ | $\ldots$ | $\ldots$ | 1,61t | 184 | 1,798 |
| Estimated Population on 30th June, 1901 ... | ... | $\ldots$ | ... | 279,564 | 222,642 | 502,206 |
| Births during Quarter ended 30th September, 1901 ... | 1,915 | 1,788 | 3,703 |  |  |  |
| Deaths ", ", | 906 | 506 | 1,412 |  |  |  |
| Excess of Births over Deaths... | ... | $\ldots$ | $\ldots$ | 1,009 | 1,282 | 2,291 |
| Recorded arrivals by sea during Quarter ended 30th September, 1901 | 3,633 | 1,268 | 4,901 |  |  |  |
| Recorded arrivals by laud during Quarter ended 30th September, 1501 | 2,481 | 1,217 | 3,699 |  |  |  |
| Allowance for unrecorded arrivals by land ... ... | 248 | 122 | 370 |  |  |  |
| Total Arrivals during Quarter | 6,362 | 2,607 | 8,969 |  |  |  |
| Recorded departures by sea during Quarter ended 30 th September, 1901 | 2,907 | 1,188 | 4,095 |  |  |  |
| September, 1901 ... ... ... ... | 2,575 | 1,331 | 3,906 |  |  |  |
| Allowance for unrecorded departures by land ... | 258 | 133 | 391 |  |  |  |
| Total Departures during Quarter ... | 6,031 | 2,771 | 8,802 |  |  |  |
| Excess of Arrivals over Departures ... ... | ... | ... | $\ldots$ | 331 | -164 | 167 |
| Estimated Population on 30th September, 1901 ... | ... | ... | ... | 280,904 | 223,760 | 504,664 |

Queensland-continued.


Queensland-continued.

| Particulars. | Males. | Fenales. | Total. | Males. | - Females. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Estimated Population on 30th June, 1902 ... | $\ldots$ | ... | ... | 283,794 | 226,733 | 510,527 |
| Births during Quarter ended 30th September, 1902 ... <br> Deaths | $\begin{array}{r} 1,905 \\ 946 \end{array}$ | 1,846 $\mathbf{5 5 0}$ | 3,751 1,496 |  |  |  |
| Excess of Births over Deaths... | ... | $\ldots$ | $\cdots$ | 959 | 1,296 | 2,255 |
| Recorder arrivals by sea during Quarter ended 30th September, 1902 | 2,782 | 1,152 | 3,934 |  |  |  |
| Recorded arrivals by land during Quarter ended 30th September, 1902 | 2,560 | 1,059 | 3,619 |  |  |  |
| Allowance for unrecorded arrivals by land ... | 256 | 106 | 362 |  |  |  |
| Total Arrivals during Quarter ... ... | 5,598 | 2,317 | 7,915 |  |  |  |
| Recorded departures by sea during Quarter ended 30th September, 1902 | 3,215 | 1,322 | 4,537 |  |  |  |
| Allowance for unrecorded departures by sea ... .... | 322 | 132 | 454 |  |  |  |
| Recorded departures by land during Quarter ended 30th September, 1902 | 2,155 | 1,037 | 3,192 |  |  |  |
| Allowance for unrecorded departures by land... | 215 | 104 | 319 |  |  |  |
| Total Departures during Quarter ... | 5,907 | 2,595 | 8,502 |  |  |  |
| Excess of Arrivals over Departures ... ... | $\ldots$ | $\ldots$ | $\ldots$ | - 309 | - 278 | - 587 |
| Estimated Population on 30th September, 1902 ... | $\cdots$ | $\ldots$ | $\ldots$ | 284,444 | 227,751 | 512,195 |
| Births during Quarter ended 31 st Ilecember, $1902 \ldots$ Deaths $, ~ ., ~ ", ~$ | 1,773 1,147 | 1,667 696 | 3,440 1,843 |  |  |  |
| Excess of Births over Deaths | ... | $\ldots$ | ... | 626 | 971 | 1,597 |
| Recorded arrivals by sea during Quarter ended 31st December, 1902 | 2,694 | 1,150 | 3,844 |  |  |  |
| Recorded arrivals by land during Quarter ended 31st December, 1902 | 2,523 | 1,073 | 3,596 |  |  |  |
| Allowance for unrecorded arrivals by land ... ... | 253 | 107 | 360 |  |  |  |
| Total Arrivals during Quarter ... | 5,470 | 2,330 | 7,800 |  |  |  |
| Recorded departures by sea during Quarter ended 31st December, 1902 | 4,361 | 1,871 | 6,232 |  |  |  |
| Allowance for unrecorded departures by sea ... . $\ldots$ | 436 | 187 | 623 |  |  |  |
| Recorded departures by land during Quarter ended 31st December, 1902 | 2,316 | 1,213 | 3,529 |  |  |  |
| Allowance for unrecorded departures by land | 232 | 121 | 353 |  |  |  |
| Total Departures during Quarter ... | 7,345 | 3,392 | 10,737 |  |  |  |
| Excess of Arrivals over Departures ... | $\ldots$ | $\ldots$ | $\ldots$ | $-1,875$ | - 1,062 | - 2,937 |
| Estimated Population on 31st December, 1902 ... | $\ldots$ | $\ldots$ | $\ldots$ | 283,195 | 227,660 | 510,855 |
| Births during Quarter ended 31st March, 1903 | 1,708 | 1,586 | 3,294 |  |  |  |
| Deaths ," ," | 1,252 | 760 | 2,012 |  |  |  |
| Excess of Births over Deaths | $\ldots$ | ... | ... | 456 | 826 | 1,282 |
| Recorded arrivals by sea düring Quarter ended 31st March, 1903 | 3,050 | 1,412 | 4,462 |  |  |  |
| Recorded arrivals by land during Quarter ended 31st March, 1903 | 2,757 | 1,025 | 3,782 |  |  |  |
| Allowance for unrecorded arrivals by land ... | 276 | 102 | 378 |  |  |  |
| Total Arrivals during Quarter | 6,083 | 2,539 | 8,622 |  |  |  |
| Recorded clepartures by sea during Quarter ended 31st March, 1903 | 4,070 | 1,982 | 6,052 |  |  |  |
| Allowance for unrecorded departures by sea ... ... | 407 | 198 | 605 |  |  |  |
| Recorded departures by land during Quarter ended 31st March, 1903 <br> Allowance for unrecorded departures by land | $\begin{array}{r} 2,261 \\ 226 \end{array}$ | 895 90 | 3,156 316 |  |  |  |
| Total Departures during Quarter ... ... | 6,964 | 3,165 | 10,129 |  |  |  |
| Excess of Arrivals over Departures ... ... | ... | ... | $\ldots$ | -881 | -626 | -1,507 |
| Estimated Population on 31st March, 1903 ... | ... | ... | ... | 282,770 | 227,860 | 510,630 |

Queensland-continued.
Particulars.
Estimated Population on 31st March, 1903
Births during Quarter ender 30th June, 1903

Births during Quarter ended 30th June, 1903 Deaths

Excess of Births over Deaths
Recorded arrivals by sea during Quarter ended 30th June, 1903


| Males. | Females. | Total. | Males. | Females, | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ... | ... | ... | 282,770 | 227,860 | 510,630 |
| 1,654 | 1,641 | 3,295 |  |  |  |
| $\cdots$ | $\cdots$ | $\ldots$ | 638 | 1,038 | 1,676 |
| 2,900 | 1,399 | 4,305 |  |  |  |
| 2,802 | 992 99 | 3,794 |  |  |  |
| 5,988 | 2,490 | 8.478 |  |  |  |
| 2,850 | 1.327 133 | $\begin{array}{r} 4,177 \\ 418 \end{array}$ |  |  |  |
| 2.242 224 | $\begin{array}{r}872 \\ 87 \\ \hline\end{array}$ | 3114 311 |  |  |  |
| 5,601 | 2,419 | 8,020 |  |  |  |
| $\ldots$ | $\ldots$ | $\cdots$ | 387 | 71 | 458 |
| $\ldots$ | $\ldots$ | $\ldots$ | 283,795 | 228,969 | 512,764 |
| 1,523 | 1,551 505 | $3,074$ |  |  |  |
| $\cdots$ | $\cdots$ | $\ldots$ | 6.2 | 1,046 | 1,698 |
| 2,883 | 1,203 | 4,086 |  |  |  |
| 2,944 294 | 975 98 | 3,979 392 |  |  |  |
| 6,121 | 2,276 | 8,397 |  |  |  |
| 2,875 287 | 1,347 135 | $\begin{array}{r} 4,222 \\ 422 \end{array}$ |  |  |  |
| $\begin{array}{r} 2,666 \\ 266 \end{array}$ | 998 100 | $\begin{array}{r} 3,664 \\ 366 \end{array}$ |  |  |  |
| 6,094 | 2,580 | 8,674 |  |  |  |
| . | $\cdots$ | ... | 27 | - 304 | $-277$ |
| $\cdots$ | $\ldots$ | ... | 284,474 | 229,711 | 514,185 |
| $\begin{array}{r} 1,542 \\ 812 \end{array}$ | 1,416 527 | 2,958 1,339 |  |  |  |
| $\ldots$ | ... | ... | 730 | 889 | 1,619 |
| 2,498 | 1,081 | 3,579 |  | - |  |
| $\begin{array}{r} 4,449 \\ 445 \end{array}$ | $\begin{array}{r} 1,953 \\ 195 \end{array}$ | $\begin{array}{r} 6,402 \\ 640 \end{array}$ |  |  |  |
| 7,392 | 3,229 | 10,621 |  |  |  |
| 2,715 271 | 1,636 164 | 4,351 435 |  |  |  |
| $\begin{array}{r} 3,921 \\ 392 \end{array}$ | $\begin{array}{r} 1,629 \\ 163 \end{array}$ | $\begin{array}{r} 5,550 \\ 555 \\ \hline \end{array}$ |  |  |  |
| 7,299 | 3,592 | 10,891 |  |  |  |
| ... | ... | . | 93 | - 363 | - 270 |
| ... | .. | ... | 285,297 | 230,237 | 515,534 |



Queensland-continued.


Queensland-continued.

| Particulars. | Males. | Females. | Total. | Males. | Females. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Estimated Population on 30th June, 1905 ... | $\cdots$ | $\ldots$ | $\cdots$ | 289,785 | 236,575 | 526,360 |
| Births during Quarter ended 30th September, 1905 ... | 1,807 | 1,725 | 3,532 |  |  |  |
| Deaths " , ", | 838 | 469 | 1,307 |  |  |  |
| Excess of Births over Deaths ... | ... | $\ldots$ | $\ldots$ | 969 | 1,256 | 2,225 |
| Recorded arrivals by sea during Quarter ended 30th September, 1905 | 2,581 | 1,278 | 3,S59 |  |  |  |
| Recorded arrivals by land during Quarter ended 30th September, 1905 <br> Allowance for unrecorded arrivals by land ... | 4,070 407 | 1,723 172 | 5,793 $\mathbf{5 7 9}$ |  |  |  |
| Total Arrivals during Quarter ... ... | 7,058 | 3,173 | 10,231 |  |  |  |
| Recorded departures by sea during Quarter ended 30th September, 1905 | 2,440 | 1,070 | 3,510 |  |  |  |
| Allowance for unrecorded departures by sea... ... | 244 | 107 | 351 |  |  |  |
| Recorded departures by land during Quarter ended 30 th <br> September, 1905 <br> Allowance for unrecorded departures by land... | 4,086 409 | 1,809 181 | 5,895 590 |  |  |  |
| Total Departures during Quarter ... ... | 7,179 | 3,167 | 10,346 |  |  |  |
| Excess of Arrivals over Departures ... ... | ... | $\ldots$ | $\cdots$ | -121 | 6 | $-115$ |
| Estimated Population on 30th September, 1905 ... | ... | $\cdots$ | $\ldots$ | 290,633 | 237,837 | 528,470 |
|  | 1,687 843 | $\begin{array}{r}1,592 \\ \hline 528\end{array}$ | 3,279 1,371 |  |  |  |
| Excess of Births over Deaths ... | ... | $\ldots$ | $\ldots$ | 844 | 1,064 | 1,908 |
| Recorded arrivals by sea during Quarter ended 31st December, 1905 | 2,440 | 1,105 | 3,545 |  |  |  |
| Recorded arrivals by land during Quarter ended 31st December, 1905 | 4,546 | 1,940 | 6,486 |  |  |  |
| Allowance for unrecorded arrivals by land ... ... | 455 | 194 | 649 |  |  |  |
| Total Arrivals during Quarter ... | 7,441 | 3,239 | 10,680 |  |  |  |
| Recorded departures by sea during Quarter ended 31st December, 1905 | 3,004 | 1,528 | 4,532 |  |  |  |
| Allowance for unrecorded departures by sea ... ... | 300 | 153 | 453 |  |  |  |
| Recorded departures by land during Quarter ended 31st December, 1905 | 4,916 | 2,375 | 7,291 |  |  |  |
| Allowance for umrecorded departures by land | 492 | 237 | 729 |  |  |  |
| Total Departures during Quarter ... ... | 8,712 | 4,293 | 13,005 |  |  |  |
| Excess of Arrivals over Departures ... ... | $\ldots$ | $\cdots$ | ... | -1,271 | -1,054 | -2,325 |
| Estimated Population on 31st December, 1905 ... | $\ldots$ | $\ldots$ | $\ldots$ | 290,206 | 237,847 | 528,053 |
| Births during Quarter ended 31st Maroh, 1906 ... | 1,585 $\mathbf{9 0 5}$ | 1,437 505 | 3,022 |  |  |  |
| Deaths " " |  | 505 | 1,410 |  |  |  |
| Excess of Births over Deaths ... .. | ... | $\cdots$ | $\cdots$ | 680 | 932 | 1,612 |
| Recorded arrivals by sen during Quarter ended 31st March, 1906 | 2,853 | 1,430 | 4,283 |  |  |  |
| Recorded arrivals by land during Quarter ended 31st March, 1906 | 4,850 | 2,700 | 7,550 |  |  |  |
| Allowance for unrecorded arrivals by land ... | 485 | 270 | 755 |  |  |  |
| Total Arrivals during Quarter ... | 8,188 | 4,400 | 12,588 |  |  |  |
| Recorded departures by sea during Quarter ended 31st March, 1906 | 2,805 | 1,302 | 4,107 |  |  |  |
| Allowance for unrecorded departures by sea ... ... | 281 | 130 | 411 |  |  |  |
| Recorded departures by land during Quarter ended 31st <br> March, 1906 ... <br> Allowance for unrecorded departures by land | $\begin{array}{r} 4,973 \\ 497 \end{array}$ | $\begin{array}{r} 2,634 \\ 264 \end{array}$ | 7,607 761 |  |  |  |
| Total Departures during Quarter ... ... | 8,556 | 4,330 | 12,886 |  |  |  |
| Excess of Arrivals over Departures ... | $\ldots$ | $\cdots$ | $\ldots$ | -368 | -70 | -298 |
| Estimated Population on 31st March, 1906 ... | ... | ... | ... | 290,518 | 238,849 | 529,367 |

Queensland-continued.


| Particulars. | Males. | Females. | Total. | Males. | Females. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Estimated Population on 31st December, 1900 ... | ... | $\ldots$ | $\ldots$ | 184,637 | 177.470 | 362,107 |
| Births during Quarter ended 31st March, 1901 | 1,160 | 1,076 | 2,236 |  |  |  |
| Deaths | 587 | 478 | 1,065 |  |  |  |
| Excess of Births over Deaths ... | ... | .. | ... | 573 | 598 | 1,171 |
| Recorded arrivals by sea daring Quarter ended 31st March, 1901 | 6,157 | 3,454 | 9,611 |  |  |  |
| Recorded arrivals by land during Quarter ended 3ist March, 1901 | 8,170 | 5,541 | 13,711 |  |  |  |
| Allowance for umrecorded urrivals by land ... ... | 817 | -554 | 1,371 |  |  |  |
| Total Arrivals during Quarter ... | 15,144 | 9,549 | 24,693 |  |  |  |
| Recorded departures by sea during Quarter ended 31st March, 1901 | 6,932 | 3,679 | 10,611 |  |  |  |
| Allowance for unrecorded departures by sea ... ... | 484 | 258 | 742 |  |  |  |
| Recorded departures by land during Quarter ended 31st March, 1901 ... <br> Allowance for unrecorded departures by land | $\begin{array}{r}7,488 \\ \hline 749\end{array}$ | 4,749 475 | 12,237 1,224 |  |  |  |
| Total Departures during Quarter ... ... | 15,653 | 9,161 | 24,814 |  |  |  |
| Excess of Arrivals over Departures ... ... | $\ldots$ | $\cdots$ | $\ldots$ | - 509 | 388 | -121 |
| CENSUS POPULATION on 31st March, 1901 ... | $\ldots$ | $\ldots$ | ... | 184,701 | 178,456 | 363,157 |
| Births luring Quarter ended 30th : June, 1001 Deaths ", $\quad, \quad$, | 1,178 529 | 1,157 403 | 2,335 932 |  |  |  |
| Excess of Births over Deaths ... | $\ldots$ | $\ldots$ | $\ldots$ | 649 | 754 | 1,403 |
| Recorded arrivals by sea during Quarter ended 30 th June, 1901 | 5,702 | 3,149 | 8,551 |  |  |  |
| Recorded arrivals by land during Quarter ended 30th June, 1901 ... ... | 8,545 | 5,509 | 14,054 |  |  |  |
| Allowance for unrecorded arrivals by land ... $\quad .$. | 8,845 854 | 5,551 | 1,405 |  |  |  |
| Total Arrivals during Quarter ... ... | 15,101 | 9,209 | 24,310 |  |  |  |
| Recorded departures by sea during Quarter ended 30th June, 1901 | 6,159 | 3,360 | 9,519 |  |  |  |
| Allowance for unrecorded departures by sea ... Recorded departures by land during Quarter ended 30th | 430 | 235 | 665 |  |  |  |
| June, 1901 Allowance for unrecorded departures by land $\ldots$ | 9,323 932 | 6,354 636 | $\begin{array}{r} 15,677 \\ 1,568 \end{array}$ |  |  |  |
| Total Departures during Quarter | 16,844 | 10,585 | 27,429 |  |  |  |
| Excess of Arrivals over Departures ... ... | .. | $\ldots$ | $\ldots$ | -1,743 | -1,376 | $-3,119$ |
| Estimated Population on 30th June, 1901 ... | $\ldots$ | $\ldots$ | $\ldots$ | 183,607 | 177,834 | 361,441 |
| 3irths during Quarter ended 30th September, 1901 Deaths , , , | 1,249 605 | 1,128 | 2,377 1,057 |  |  |  |
| Excess of Births over Deaths ... | $\ldots$ | ... | $\ldots$ | 644 | 676 | 1,320 |
| Recorded arrivals by sea "during Quarter ended 30th September, 1901 | 4,388 | 2,259 | 6,647 |  |  |  |
| Recorded arrivals by land duwing Quarter ended 30th September, 1901 | 6,299. | 3,568 | 9,867 |  |  |  |
| Allowance for unrecorded arrivals by land ... ... | 6, 630 | -357 | ,987 |  |  |  |
| Total Arrivals during Quarter | 11,317 | 6,184 | 17,501 |  |  |  |
| Recorded departures by sea during Quarter ended 30th September, 1901 | 4,552 | 2,456 | 7,008 |  |  |  |
| Allowance for unrecorded departures by sea ... <br> Recorded departures by land during Quarter ented 30 th September, 1901 | 318 5,796 | 171 3,311 | 489 9,107 |  |  |  |
| Allowance for unrecorded departures by land ${ }^{\ldots}$..... | 5,796 580 | 3,311 331 | 9,107 911 |  |  |  |
| Total Departures during Quarter ... | 11,246 | 6,269 | 17,515 |  |  |  |
| Excess of Arrivals over Departures ... ... | ... | ... | ... | 71 | -85 | -14 |
| Estimated Population on 30th September, 1901 ... | ... | ... | ... | 184,322 | 178,425 | 362,747 |

South Australia (including Northern Territory)-continued.

| Particulars. | Males. | Females. | Total. | Males. | Females. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Estimated Population on 30th September, 1901 ... | ... | $\ldots$ | . | 184,322 | 178,425 | 362,747 |
| Births during Quarter ended 31st December, 1901 ... | 1,100 | 1,063 | 2,163 |  |  |  |
| Deaths " ", | 568 |  |  |  |  |  |
| Excess of Births over Deaths ... | $\ldots$ | $\ldots$ | $\ldots$ | 532 | 620 | 1,152 |
| Recorded arrivals by sea during Quarter ended 31st December, 1901 | 6,330 | 3,515 | 9,845 |  |  |  |
| Recorded arrivals by land during Quarter ended 3lst December, 1901 | 6,713 | 4,819 | 11,532 |  |  |  |
| Allowance for unrecorded arrivals by land ... | 671 | 482 | 1,153 |  |  |  |
| Total Arrivals during Quarter ... | 13,714 | 8,816 | 22,530 |  |  |  |
| Recorded departures by sea during Quarter ended 31st December, 1901 | 5,912 | 3,516 | 9.428 |  |  |  |
| Allowance for unrecorded departures by sea ... | 413 | 245 | 658 |  |  |  |
| Recorded departures by land during Quarter ended 31st December, 1901 | 5,669 | 3,978 | 9,647 |  |  |  |
| Allowance for unrecorded departures by land | 567 | 398 | 965 |  |  |  |
| Total Departures during Quarter ... ... | 12,561 | 8,137 | 20,698 |  |  |  |
| Excess of Arrivals over Departures ... ... | $\cdots$ | ... | ... | 1,153 | 679 | 1,832 |
| Estimated Population on 31st December, 1901 ... | ... | $\ldots$ | ... | 186,007 | 179,724 | 365,731 |
| Births during Quarter ended 31st March, 1902 | 1,083 | 1,058 484 | 2,141 1,010 |  |  |  |
| Deaths ", ". " |  |  | 1,010 |  |  |  |
| Excess of Births over Deaths ... | $\ldots$ | $\ldots$ | $\ldots$ | 557 | 574 | 1,131 |
| Recorded arrivals by sea during Quarter ended 3lst March, 1902 | 6,826 | 3,603 | 10,429 |  |  |  |
| Recorded arrivals by land during Quarter ended 31st March, 1902 ... | 6,049 | 4,162 | 10,211 |  |  |  |
| Allowance for unrecorded arrivals by land ... | 605 | 416 | 1,021 |  |  |  |
| Total Arrivals during Quarter ... | 13,480 | 8,181 | 21,661 |  |  |  |
| Recorded departures by sea during Quarter ended 31st March, 1902 | 8,044 | 3,974 | 12,018 |  |  |  |
| Allowance for unrecorded departures by sea ... $\ldots$ | 561 | 278 | 839 |  |  |  |
| March, 1902 ... <br> Allowance for unrecorded departures by land | $\begin{array}{r} 5,630 \\ 563 \end{array}$ | 3,914 391 | 9,544 954 |  |  |  |
| Total Departures during Quarter ... | 14,798 | 8,557 | 23,355 |  |  |  |
| Excess of Arrivals over Departures ... ... | $\ldots$ | $\ldots$ | $\ldots$ | -1,318 | -376 | -1,694 |
| Estimated Population on 31st March, 1902 ... | ... | $\ldots$ | ... | 185,246 | 179,922 | 365,168 |
| Births during Quarter ended 30th June, 1902 | 1,208 680 | 1,122 | $\begin{aligned} & 2,330 \\ & 1,207 \end{aligned}$ |  |  |  |
| Deaths ", " " | 680 |  |  |  |  |  |
| Excess of Births over Deaths ... ... | $\ldots$ | $\cdots$ | $\cdots$ | 528 | 595 | 1,123 |
| Recorded arrivals by sea during Quarter ended 30th June, 1902 | 6,187 | 3,197 | 9,384 |  |  |  |
| Recorded arrivals by land during Quarter ended 30th June, 1902 | 4,387 | 3,332 | 7,719 | * |  |  |
| Allowance for unrecorded arrivals by land ... ... | 439 | 333 | 772 |  |  |  |
| Total Arrivals during Quarter ... ... | 11,013 | 6,862 | 17,875 |  |  | - |
| Recorded departures by sea during Quarter ended 30th June, 1902 | 6,814 | 3,773 | 10,587 |  |  |  |
| Allowance for unrecorded departures by sea ... $\ldots \ldots$ | 475 | 264 | 739 |  |  |  |
| Recorded departures by land during Quarter ended 30th <br> June, 1902 <br> Allowance for unrecorded departures by land | 4,723 472 | 3,574 358 | $\begin{array}{r} 8,297 \\ 830 \end{array}$ |  |  |  |
| Total Departures during Quarter ... ... | 12,484 | 7,969 | 20,453 |  |  |  |
| Excess of Arrivals over Departures ... ... | $\ldots$ | ... | ... | -1,471 | -1,107 | $-2,578$ |
| Estimated Population on 30th June, 1902 ... | $\cdots$ | ... | $\cdots$ | 184,303 | 179,410 | 363,713 |

South Australia (inoluding Northern Territory)-continued.


South Australia (including Northern Territory)-continued.


South Australia (including Northern Territory)-continued.

| Particulars. | males. | Females. | Total. | Males. | Females. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Estimated Population on 31st December, 1903 ... | ... | $\ldots$ | ... | 187,151 | 181,670 | 368,821 |
| Births during Quarter ended 31st March, 1904 | 1,113 | 1,017 | 2,130 |  |  |  |
| Deaths ", ", ", | 525 | 422 | 947 |  |  |  |
| Excess of Births over Deaths... | ... | .. | .. | 588 | 595 | 1,183 |
| Recorded arrivals by sea during Quarter ended 31st March, 1904 | 2,629 | 1,370 | 3,999 |  |  |  |
| Recorded arrivals by land during Quarter ended 31st March, 1904 | 2,846 | 1,678 | 4,524 |  |  |  |
| Allowance for unrecorded arrivals by land ... ... | 284 | 168 | 452 |  |  |  |
| Total Arrivals during Quarter ... ... | 5,759 | 3,216 | ¢,975 |  |  |  |
| Recorded departures by sea during Quarter ended 31st March, 1904 $\qquad$ | 2,717 | 1,570 | 4,287 |  |  |  |
| Allowance for unrecorded departures by sea ... ... | 188 | 109 | 297 |  |  |  |
| Recorded departures by land during Quarter ended 31st March, 1904 | 3,148 | 1,969 | 5,117 |  |  |  |
| Allowance for unrecorded departures by land ... | 315 | 197 | 512 |  |  |  |
| Total Departures during Quarter ... | 6,368 | 3,845 | 10,213 |  |  |  |
| Excess of Arrivals over Departures ... ... | $\ldots$ | $\ldots$ | .. | - 609 | - 629 | - 1,238 |
| Estimated Population on 31st March, 1904 ... | $\cdots$ | $\ldots$ | ... | 187,130 | 181,636 | 368,766 |
| Births during Quarter ended 30th June, 1904... ... Deaths ,", | $\begin{array}{r} 1,254 \\ 546 \end{array}$ | 1,197 443 | 2,451 989 |  |  |  |
| Excess of Births over Deaths... | $\cdots$ | $\ldots$ | $\ldots$ | 708 | 754 | 1,462 |
| Recorded arrivals by sea during Quarter ended 30th June, 1904 | 2,157 | 1,060 | 3,217 |  |  |  |
| Recorded arrivals by land during Quarter ended 30:h June, 1904 | 4,624 | 2,337 | 6,961 |  |  |  |
| Allowance for unrecorded arrivals by land ... | 462 | 234 | 696 |  |  |  |
| Total Arrivals during Quarter ... | 7,243 | 3,631 | 10,874 |  |  |  |
| Recorded departures by sea during Quarter ended 30th <br> June, 1904 ... ... ... ... ... | 2,247 | 1,403 | 3,650 |  |  |  |
| Allowance for unrecorded departures by sea ... $\ldots$ | 156 | 98 | 254 |  |  |  |
| Recorded departures by land during Quarter ended 30 th June, 1904 | 4,447 | 2,847 | 7,294 |  |  |  |
| Allowance for umrecorded departures by land... ... | 444 | 285 | 729 |  |  |  |
| Total Departures during Quarter ... ... | 7,294 | 4,633 | 11,927 |  |  |  |
| Excess of Arrivals over Departures ... | $\ldots$ | ... | ... | - 51 | - 1,002 | - 1,053 |
| Estimated Population on 30th June, 1904 ... | .. | $\ldots$ | $\ldots$ | 187,787 | 181,388 | 369,175 |
| Births during Quarter ended 30th September, 1904 ... | 1,189 | 1,171 | 2,360 |  |  |  |
| Deaths " | 512 |  | 954 |  |  |  |
| Excess of Births over Deaths ... | $\ldots$ | ... | $\ldots$ | 677 | 729 | 1, 106 |
| Recorded arrivals by sea during Quarter ended 30th September, 1904 <br> Recorded arrivals by land during Quarter ended 30th <br> September, 1904 <br> Allowance for unrecorded arrivals by land $\ldots$...... | 2,144 5,193 519 | 929 2,386 239 | $\begin{array}{r}3,073 \\ 7,579 \\ 758 \\ \hline 10410\end{array}$ |  |  |  |
| Total Arrivals during Quarter ..: ... | 7,856 | 3,554 | 11,410 |  |  |  |
| Recorded departures by sea during Quarter ended 30th September, 1904 | 1,751 | 1,040 | 2,791 |  |  |  |
| Allowance for unrecorded departures by seal ... .... | 120 | 73 | 193 |  |  |  |
| Recorded departures by land during Quarter ended 30 th September, 1904 | 4,981 | 3,131 | 8,112 |  |  |  |
| Allowance for unrecorded departures by land ... | 498 | 313 | 811 |  |  |  |
| Total Departures during Quarter ... ... | 7,350 | 4,557 | 11,907 |  |  |  |
| Excess of Arrivals over Departures ... ... | ... | $\cdots$ | $\cdots$ | 506 | -1,003 | -497 |
| Estimated Population on 30th September, 1904 ... | ... | ... | $\ldots$ | 188,970 | 181,114 | 370,084 |

South Australia (including Northern Territory)-continued.


South Australia (including Northern Territory)-continued.

| Particulars, | Males. | Females. | Total. | Males, | Females. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Estimated Population on 30th June, 1905 ... | $\cdots$ | ... | ... | 193,442 | 180,834 | 374,276 |
| Births during Quarter ended 30th September, 1905 Deaths | 1,183 484 | $\begin{array}{r} 1,169 \\ 442 \end{array}$ | $\begin{array}{r} 2,352 \\ 926 \end{array}$ |  |  |  |
| Excess of Births over Deaths | $\cdots$ | ... | $\ldots$ | 699 | 727 | 1,426 |
| Recorded arrivals by sea during Quarter ended 30th September, 1905 | 1,937 | 891 | 2,828 |  |  |  |
| Recorded arrivals by land during Quarter ended 30th September, 1905 | 5,875 | 2,774 | 8,649 |  |  |  |
| Allowance for unrecorded arrivals by land ... | 588 | 277 | 865 |  |  |  |
| Total Arrivals during Quarter ... | 8,400 | 3,942 | 12,342 |  |  |  |
| Recorded departures by sea during Quarter ended 30th September, 1905 | 1,621 | 971 | 2,592 |  |  |  |
| Allowance for unrecorded departures by sea ... Recorded departures by land during Quarter ended 30th | 109 | 67 | 176 |  |  |  |
| September, 1905 <br> Allowance for unrecorded departures by land.... | $\begin{array}{r}5,439 \\ 544 \\ \hline\end{array}$ | 3,630 363 | 9,069 907 |  |  |  |
| Total Departures during Quarter | 7,713 | 5,031 | 12,744 |  |  |  |
| Excess of Arrivals over Departures ... | ... | $\ldots$ | $\ldots$ | 687 | -1,089 | -402 |
| Estimated Population on 30th September, 1905 ... | $\ldots$ | $\ldots$ | ... | 194,828 | 180.472 | 375,300 |
| Births during Quarter ended 31st December, 1905 .... Deaths | 1,093 481 | 977 428 | 2,070 909 |  |  |  |
| Excess of Births over Deaths | $\ldots$ | $\ldots$ | ... | 612 | 549 | 1,161 |
| Recorded arrivals by sea during Quarter ended 31st December, 1905 | 3,164 | 1,681 | 4,845 |  |  |  |
| Recorded arrivals by land during Quarter ended 31st December, 1905 ... ... ... | 8,009 | 4,399 | 12,408 |  |  |  |
| Allowance for unrecorded arrivals by land ... | 801 | 440 | 1,241 |  |  |  |
| Total Arrivals during Quarter | 11,974 | 6,520 | 18,494 |  |  | . |
| Recorded departures by sea during Quarter ended 31st December, 1905 | 1,853 | 1,214 | 3,067 |  |  |  |
| Allowance for unrecorded departures by sea ... Recorded departures by land during Quarter ended 31 st | 127 | 84 | 211 |  |  |  |
| December, 1905 ... ... ... ... | 7,227 | 5,019 | 12,246 |  |  |  |
| Allowance for unrecorded departures by land ... | 723 | 502 | 1,225 |  |  |  |
| Total Departures during Quarter ... ... | 9,930 | 6,819 | 16,749 |  |  |  |
| Excess of Arrivals over Departures .. | ... | $\ldots$ | $\cdots$ | 2,044 | -299 | 1,745 |
| Estimated Population on 31st December, 1905 ... | ... | ... | ... | 197,484 | 180,722 | 378,206 |
| Births during Quarter ended 31st March, 1906 | 1,102 | 1,021 | 2,123 |  |  |  |
| Deaths ", " | 569 | 536 | 1,105 |  |  |  |
| Excess of Births over Deaths ... | ... | ... | $\ldots$ | 533 | 485 | 1,018 |
| Recorded arrivals by sea during Quarter ended 31st March, 1906 | 2,685 | 1,534 | 4,219 |  | . |  |
| Recorded arrivals by land during Quarter ended 31st March, 1906 | 6,339 | 3,715 | 10,054 |  |  |  |
| Allowance for unrecorded arrivals by land ... | 634 | 371 | 1,005 |  |  |  |
| Total Arrivals during Quarter ... ... | 9,658 | 5,620 | 15,278 |  |  |  |
| Recorded departures by sea during Quarter ended 31st March, 1906 | 2,534 | 1,744 | 4,278 |  |  | - |
| Allowance for unrecorded departures by sea ... ... | 175 | 122 | 297 |  |  |  |
| Recorded departures by land during Quarter ended 31st <br> March, 1906 | 6,169 | 4,415 | 10,584 |  |  |  |
| Allowance for unrecorded departures by land | 617 | 441 | 1,058 |  |  |  |
| Total Departures during Quarter ... ... | 9,495 | 6,722 | 16,217 |  |  |  |
| Excess of Arrivals over Departures ... ... | $\ldots$ | ... | ... | 163 | -1,102 | -939 |
| Estimated Population on 31st March, 1906 ... | $\ldots$ | ... | ... | 198,180 | 180,105 | 378,285 |

South Australia (including Northern Territory)-continued.

| Estimated Population on 31st March, 1906 |
| :--- |
| Bars. |

Births during Quarter ended 30th June, 1906 Deaths

Excess of Births over Deaths ... ...
Recorded arrivals by sea during Quarter ended 30th June, 1906


June, 1906
Allowance for unrecorded arrivals by land $\cdots$...
Total Arrivals during Quarter
Recorded departures by sea during Quarter ended 30 th June, 1906
Allowance for unrecorded departures $\quad \cdots$ by sea...
Recorded departures by land during Quarter ended $30 \ldots \mathrm{th}$ June, 1906
Allowance for unrecorded departures by land
Total Departures during Quarter
Excess of Arrivals over Departures

## Estimated Population on 30th June, 1906

Births during Quarter ended 30th September, 1906 Deaths

> Excess of Births over Deaths

Recorded arrivals by sea during Quarter ended 30th
 Septeraber, 1906
Allowance for unrecorded arrivals by land $\ldots$

- Total Arrivals during Quarter

Recorded departures by sea during Quarter ended 30th September, 1906
Allowance for unrecorded departures by sea..
Recorded departures by land during Quarter ended 30 H h September, 1906
Allowance for unrecorded departures by land ${ }^{\cdots}$
Total Departures during Quarter
Excess of Arrivals over Departures

## Estimated Population on 30th September, 1906

Births during Quarter ended 31st December, 1906
Deaths
Excess of Births over Deaths ...
Recorded arrivals by sea during Quarter ended 31st December, 1906
Recorderl arrivals by land during $\dddot{Q u a r t e r}$ ended 31... December, 1906
Allowance for unrecorded arrivals by land
Total Arrivals during Quarter
Recorded departures by sea during Quarter ended 31st December, 1906
Allowance for unrecorded departures by sea ...
Recorded departures by land during Quarter ended 31st December, 1906
Allowance for unrecorded departures by land
Total Departures during Quarter
Excess of Arrivals over Departures

| Males. | Females. | Totai. | Males. | Females. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ... | $\ldots$ | . $\cdot$ | 198,180 | 180,105 | 378,285 |
| 1,216 502 | 1,117 | 2,333 $\mathbf{9 6 7}$ |  |  |  |
| $\cdots$ | $\ldots$ | $\ldots$ | 714 | 652 | 1,366 |
| 2,353 | 1,416 | 3,769 |  |  |  |
| 6,351 635 | 3,962 396 | $\begin{array}{r} 10,313 \\ 1,031 \end{array}$ |  |  |  |
| 0,339 | 5,774 | 15,113 |  |  |  |
| 1,900 130 | 1,381 96 | 3,281 226 |  |  |  |
| 5,862 $\mathbf{5 8 6}$ | 4,482 448 | $\begin{array}{r} 10,344 \\ 1,034 \end{array}$ |  |  |  |
| 8,478 | 6,407 | 14,885 |  |  |  |
| $\cdots$ | ... | ... | 861 | -633 | 228 |
| - ... | ... | ... | 199,755 | 180,124 | 379,879 |
| 1,255 540 | 1,180 406 | 2,435 $\mathbf{9 4 6}$ |  |  |  |
| ... | $\ldots$ | ... | 715 | 774 | 1,489 |
| 1,911 | 1,032 | 2,943 |  |  |  |
| 5,758 576 | 3,267 327 | 9,025 903 |  |  |  |
| 8,245 | 4,626 | 12,871 |  |  |  |
| 1,375 93 | 941 65 | 2,316 158 |  |  |  |
| 5,661 566 | 4,048 405 | 9,709 971 |  |  |  |
| 7,695 | 5,459 | 13,154 |  |  |  |
| $\ldots$ | $\cdots$ | $\cdots$ | 550 | -833 | - 283 |
| ... | $\cdots$ | $\ldots$ | 201,020 | 180,065 | 381,085 |
| 1,044 498 | 1,011 415 | 2,0.55 |  |  |  |
| $\ldots$ | $\ldots$ | $\ldots$ | 546 | 596 | 1,142 |
| 3,031 | 1,764 | 4,79.7 |  |  |  |
| 8,891 889 | 5,250 525 | $\begin{array}{r} 14,141 \\ 1,414 \end{array}$ |  |  |  |
| 12,811 | 7,539 | 20,3:0 |  |  |  |
| 1,751 119 | 1,197 83 | 2,948 202 |  |  |  |
| 8,189 819 | 5,991 599 | $\begin{array}{r} 14,180 \\ 1,418 \end{array}$ |  |  |  |
| 10,578 | 7,870 | 18,748 |  |  |  |
| $\ldots$ | $\ldots$ | $\ldots$ | 1,933 | -331 | 1,602 |
| $\cdots$ | $\ldots$ | $\ldots$ | 203,499 | 180,330 | 383,829 |

## V.-WESTERN AUSTRALIA.

| Particulars. | Males. | Females. | Total. | Males. | Females. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Estimated Population on 31st December, 1900 ... | ... | $\ldots$ | .. | 110,088 | 69,879 | 179,967 |
| Rirths during Quarter ended 31st March, 1901 | 696 | 675 | 1,371 |  |  |  |
| Deaths | 376 | 196 | 572 |  |  |  |
| Excess of Births over Deaths | ... | $\ldots$ | ... | 320 | 479 | 799 |
| Recorded arrivals by sea during Quarter onded 31st March, 1901 ... ... ... ... ... | 5,929 | 2,869 | 8,798 |  |  |  |
| Recorded departures by sea during Quarter ended 3]st March, 1901 | 3,297 | 1,884 | 5,181 |  |  |  |
| Total Departures during Quarter ... ... | 3,462 | 1,978 | 5,440 |  |  |  |
| Excess of Arrivals over Departures ... | $\ldots$ | $\ldots$ | $\ldots$ | 2,467 | 891 | 3,358 |
| CENSUS POPULATION on 31st March, 1901 ... | $\cdots$ | ... | $\ldots$ | 112,875 | 71,249 | 184,124 |
| Births during Quarter ended 30th June, 1901 | 752 | 703 | 1,455 |  |  |  |
| Deaths " | 455 | 258 | 713 |  |  |  |
| Excess of Births over Deaths | ... | $\ldots$ | $\ldots$ | 297 | 445 | 742 |
| Recorder arrivals by sea during Quarter ended 30th June, 1901 ... ... ... ... ... | 5,969 | 3,203 | 9,172 |  |  |  |
| Recorded departures by sea during Quarter ended 30th June, 1901 | 3,310 | 1,502 | 4,812 |  |  |  |
| Allowance for unrecorded departures by sea ... | 166 | 75 | 241 |  |  |  |
| Total Departures during Quarter | 3,476 | 1,577 | 5,053 |  |  |  |
| Excess of Arrivals over Departures ... ... | $\cdots$ | $\ldots$ | $\ldots$ | 2,493 | 1,626 | 4,119 |
| Estimated Population on 30th June, 1901 ... | $\ldots$ | ... | $\ldots$ | 115,665 | 73,320 | 188,985 |
| Births during Quarter ended 30th September, 1901 <br> Deaths ," ," " | 786 392 | 752 202 | 1,538 $\mathbf{5 9 4}$ |  |  |  |
| Excess of Births over Deaths | $\cdots$ | ... | $\ldots$ | 394 | 500 | 944 |
| Recorded arrivals by sea during Quarter ended 30th September, 1901 | 4,566 | 2,546 | 7,112 |  |  |  |
| Recorded departures by sea during Quarter ended $30 \mathrm{th}_{\mathrm{h}}$ September, 1901 <br> Allowance for unrecorded departures by sea | 2,419 121 | 1,205 60 | 3,624 181 |  |  |  |
| Total Departures during Quarter ... ... | 2,540 | 1,265 | 3,805 |  |  |  |
| Excess of Arrivals over Departures ... ... | $\cdots$ | $\ldots$ | $\cdots$ | 2,026 | 1,281 | 3,307 |
| Estimated Population on 30th September, 1901 ... | $\ldots$ | ... | $\ldots$ | 118,085 | 75,151 | 193,236 |
| Births during Quarter ended 31st December, 1901 ... Deaths ," | 712 430 | 642 210 | 1,354 640 |  |  |  |
| Excess of Births over Deaths | $\cdots$ | ... | $\ldots$ | 282 | 432 | 714 |
| Recorded arrivals by sea during Quarter ended 31st December, 1901 | 4,785 | 2,895 | 7,680 |  |  |  |
| Recorded departures by sea during Quarter ended 31st December, 1901 <br> Allowance for unrecorded departures by sea ... | $\begin{array}{r}4,677 \\ \hline 234 \\ \hline\end{array}$ | 2,486 124 | 7,163 358 |  |  |  |
| Total Departures during Quarter ... ... | 4,911 | 2,610 | 7,521 |  |  |  |
| Excess of Arrivals over Departures ... ... | $\cdots$ | ... | $\ldots$ | -126 | 285 | 159 |
| Estimated Population on 31st December, 1901 ... | ... | $\ldots$ | ... | 118,241 | 75,868 | 194,109 |

Western Australia-cortinued.

| Particulars. | Males. | Females. | Total. | Males. | Ferales. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Estimated Population on 31st December, 1901 ... | $\cdots$ | $\ldots$ | $\ldots$ | 118,241 | 75,868 | 194,109 |
| Births during Quarter ended 31st March, 1902 | 758 | 649 | I,407 |  |  |  |
| Deaths ", " " | 443 | 228 | 671 |  |  |  |
| Excess of Births over Deaths | ... | $\ldots$ | ... | 315 | 421 | 736 |
| Recorded arrivals by sea during Quarter ended 3Ist March, 1902 ... ... ... ... | 7,729 | 3,356 | 11,085 |  |  |  |
| Recorded departures by sea during Quarter ended 31st March, 1902 ... <br> Allowance for unrecorded departures by sea ... | 3,444 172 | 1,945 97 | 5,389 $\mathbf{2 6 9}$ |  |  |  |
| Total Departures during Quarter ... | 3,616 | 2,042 | 5,658 |  |  |  |
| Excess of Arrivals over Departures ... ... | $\ldots$ | ... | ... | 4,113 | 1,314 | 5,427 |
| Estimated Population on 31st March, 1902 ... | $\ldots$ | ... | $\ldots$ | 122,669 | 77,603 | 200,272 |
| Births during Quarter ended 30th June, 1902 <br> Deaths | 806 530 | 801 275 | 1,607 805 |  |  |  |
| Excess of Births over Deaths ... | ... | $\ldots$ | $\ldots$ | 276 | 526 | 802 |
| Recorded arrivals by sea during Quarter ended 30th June, 1902 | 7,015 | 3,873 | 10,888 |  |  |  |
| Recorded departures by sea during Quarter ended 30th June, 1902 ... <br> Allowance for unrecorded departures by sea ... | 3,313 165 | 1,373 69 | $\begin{array}{r}4,686 \\ \hline 234 \\ \hline\end{array}$ |  |  |  |
| Total Departures during Quarter | 3,478 | 1,442 | 4,920 |  |  |  |
| Excess of Arrivals over Departures ... ... | ... | $\ldots$ | $\ldots$ | 3,537 | 2,431 | 5,968 |
| Estimated Population on 30th June, 1902 ... | $\ldots$ | ... | $\cdots$ | 126,482 | 80,560 | 207,042 |
| Births during Quarter ended 30th September, 1902 ... Deaths ,", | $\begin{aligned} & 858 \\ & 411 \end{aligned}$ | 795 237 | 1,653 648 |  |  |  |
| Excess of Births over Deaths ... | $\ldots$ | $\ldots$ | ... | 447 | 558 | 1,005 |
| Recorded arrivals by sea during Quarter ended 30th September, 1902 | 5,369 | 2,813 | 8,182 |  |  |  |
| Recorded departures by sea during Quarter ended 30th September, 1902 <br> Allowance for unrecorded departures by sea ... | 2,891 145 | 1,147 57 | 4,038 202 |  |  |  |
| Total Departures during Quarter ... ... | 3,036 | 1,204 | 4,240 |  |  |  |
| Excess of Arrivals over Departures ... ... | ... | $\cdots$ | $\ldots$ | 2,333 | 1,609 | 3,942 |
| Estimated Population on 30th September, 1902 ... | ... | ... | $\ldots$ | 129,262 | 82,727 | 211,989 |
| Births during Quarter ended $31 s t$ December, 1902 ... Deaths ,", | $\begin{aligned} & 819 \\ & 448 \end{aligned}$ | $\begin{aligned} & 746 \\ & 251 \end{aligned}$ | $\begin{array}{r} 1,565 \\ 699 \end{array}$ |  |  |  |
| Excess of Births over Deaths ... | $\cdots$ | ... | $\ldots$ | 371 | 495 | 866 |
| Recorded arrivals by sea during Quarter ended 31st December, 1902 ... ... ... | 4,783 | 2,922 | 7,705 |  |  |  |
| Recorded departures by sea during Quarter ended 31st December, 1902 <br> Allowance for unrecorded departures by sea ... | $\begin{array}{r} 4,791 \\ \quad 239 \end{array}$ | $\begin{array}{r} 2,097 \\ 105 \end{array}$ | $\begin{array}{r} 6,888 \\ 344 \end{array}$ |  |  |  |
| 'Total Departures during Quarter ... ... | 5,030 | 2,202 | 7,232 |  |  |  |
| Excess of Arrivals over Departures ... ... | .. | $\ldots$ | ... | - 247 | 720 | 473 |
| Estimated Population on 31st December, 1902 ... | ... | $\ldots$ | ... | 129,386 | 83,942 | 213,328 |




Western Australia-continued.

| Particulars. | Males. | Females. | Total. | Nales. | Females. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Estimated Population on 31st December, 1904 ... | $\ldots$ | . | ... | 144,255 | 98,035 | 242,290 |
| Births during Quarter endrd 31st March, 1905 | $\begin{aligned} & 848 \\ & 450 \end{aligned}$ | $\begin{aligned} & 826 \\ & 251 \end{aligned}$ | $\begin{array}{r} 1,674 \\ 701 \end{array}$ |  |  |  |
| Excess of Births over Deaths ... ... | ... | ... | $\ldots$ | 398 | 575 | 973 |
| Recorded arrivals by sea during Quarter ended 31st March, 1905 ... ... ... ... ... | 5,752 | 3,300 | 9,052 |  |  |  |
| Recorded departures by sta during Quarter ended 31st March, 1905 <br> Allowance for unrecorded departures by sea ... | 3,176 $\mathbf{1 5 9}$ | 2,082 104 | $\begin{array}{r}5,258 \\ \hline 263\end{array}$ |  |  |  |
| Total Departures during Quarter ... ... | 3,335 | 2,186 | 5,521 |  |  |  |
| Excess of Arrivals over Departures ... ... | ... | .. | $\ldots$ | 2,417 | 1,114 | 3,531 |
| Estimated Population on 31st March, 1905 ... | ... | $\ldots$ | ... | 147,070 | 99,724 | 246,794 |
|  | 970 450 | $\begin{aligned} & 965 \\ & 280 \end{aligned}$ | 1,935 730 |  |  |  |
| Excess of Births over Deaths ... ... | $\ldots$ | ... | ... | 520 | 685 | 1,205 |
| Recorded arrivals by sea during Quarter ended 30th June, 1905 | 4,475 | 3,220 | 7,695 |  |  |  |
| Recorded departures by sea during Quarter ended 30 th June, 1905 | 2,761 138 | 1,493 75 | 4,254 213 |  |  |  |
| 'Jotal Departures during Quarter ... ... | 2,899 | 1,568 | 4,467 |  |  |  |
| Excess of Arrivals over Departures ... ... | $\ldots$ | $\ldots$ | $\ldots$ | 1,576 | 1,652 | 3,228 |
| Estimated Population on 30th June, 1905 ... | $\ldots$ | ... | . | 149,166 | 102,061 | 251,227 |
| Births during Quarter ended 30th September, 1905 ... Deaths, ,., | 1,079 358 | 1,040 225 | $\begin{array}{r} 2,119 \\ 583 \end{array}$ |  |  |  |
| Excess of Births over Deaths ... | $\cdots$ | $\cdots$ | $\ldots$ | 721 | 815 | 1,536 |
| Recorded arrivals by sea during Quarter ended 30th September, 1905 ... ... ... ... | 3,383 | 2,266 | 5,649 |  |  |  |
| Recorded departures by sea during Quarter ended 30th September, 1905 <br> Allowance for unrecorded departures by sea ... | 2,485 124 | 1,454 73 | 3,939 197 |  |  |  |
| Total Departures during Quarter ... | 2,609 | 1,527 | 4,136 |  |  |  |
| Excess of Arrivals over Departures ... ... | ... | $\ldots$ | $\cdots$ | 774 | 739 | 1,513 |
| Estimated Population on 30th September, 1905 ... | $\cdots$ | ... | ... | 150,661 | 103,615 | 254,276 |
| $\begin{array}{lll}\text { Births during Quarter ended 31st December, } 1905 & \ldots \\ \text { Deaths } & \text {.. }\end{array}$ | $\begin{aligned} & 965 \\ & 470 \end{aligned}$ | $\begin{aligned} & \mathrm{ss9} \\ & 225 \end{aligned}$ | 1,854 695 |  |  |  |
| Excess of Births over Deaths ... ... | ... | $\cdots$ | ... | 495 | 664 | 1,159 |
| Recorded arrivals by sea during Quarter ended 31st December, 1905 ... ... ... .. | 3,735 | 5 2,660 | 6,395 |  |  |  |
| Recorded departures by sea during Quarter ended 31st December, 1905 Allowance for unrecorded departures by sea ... | 4,188 209 | 2,527 <br> 127 | 6,715 $\mathbf{3 3 6}$ |  |  |  |
| Total Departures during Quarter ... ... | 4,397 | 7 2,654 | 7,051 |  |  |  |
| Excess of Arrivals over Departures ... ... | ... | ... | ... | - 662 | 6 | - 650 |
| Estimated Population on 31st December, 1905 |  |  |  | 150,494 | 104,285 | 254,779 |

Western Australia-continued.


Births during Quarter ended 31st March, 1906 Deaths

Excess of Births over Deaths ...
Recorded arrivals by sea during Quarter ended 31st March, 1906

Recorded departures by sea during Quarter ended 31st March, $1906 \ldots$$\ldots \quad \ldots \quad \ldots$

Total Departures during Quarter
Excess of Arrivals over Departures

Estimated Population on 31st March, 1906

Births during Quarter ended 30th .June, 1906 Deaths

Excess of Births over Deaths ...
Recorded arcivals by sea during Quarter ended 30th June, 1906

Recorded departures by sea during Quarter ended 30th June, 1906
Allowance for unrecorded departures by sea...
Total Departures during Quarter
Excess of Arrivals over Departures

## Estimated Population on 30th June, 1906

Births during Quarter ended 30th September, 1906
Deaths ", ", "
Excess of Births over Deaths ...
Recorded arrivals by sea during Quarter ended 30th September, 1906

Recorded departures by sea during Quarter ended 30th September, 1906
Allowance for unrecorded departures by sea ...
Total Departures during Quarter
Excess of Arrivals over Departures

Estimated Population on 30th September, 1906

Births during Quarter ended 31st December, 1906 Deaths

Excess of Births over Deaths ...
Recorded arrivals by sea during Quarter ended 31st December, 1906
Recorded departures by sea during Quarter ender 31st
December, 1906
Allowance for unrecorded departures by sea ...
Total Departures during Quarter
Excess of Arrivals over Departures
Estimated Population on 31st December. 1906

VI.-TASMANIA.

| Particulars. | Males. | Females. | Total. | Males. | Females. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Estimated Population on 31st December, 1900 ... | $\ldots$ | $\cdots$ | ... | 89,763 | 83,137 | 172,900 |
| Births during Quarter ended 31st March, 1901 Deaths | 641 261 | 585 205 | 1,226 466 |  |  |  |
| Excess of Births over Deaths ... ... | ... | $\ldots$ | $\ldots$ | 380 | 380 | 760 |
| Recorded arrivals by sea during Quarter ended 31st March, 1901 | 5,277 | 3,195 | 8,472 |  |  |  |
| Recorded departures by sea during Quarter ended 31st March, 1901 <br> Allowance for unrecorded departures by sea .. | 5,152 644 | 3,432 429 | $\begin{aligned} & 8,584 \\ & 1,073 \end{aligned}$ |  |  |  |
| Total Departures during Quarter ... ... | 5,796 | 3,861 | 9,657 |  |  |  |
| Excess of Arrivals over Departures ... ... | $\ldots$ | $\ldots$ | $\cdots$ | - 519 | - 666 | - 1,185 |
| CENSUS POPULATION on 31st March, 1901 ... | $\ldots$ | ... | $\therefore$ | 89,624 | 82,851 | 172,475 |
| Births during Quarter ended 30th June, 1901... <br> Deaths | 595 223 | $\begin{aligned} & 503 \\ & 202 \end{aligned}$ | $\begin{array}{r} 1,098 \\ 425 \end{array}$ |  |  |  |
| Excess of Births over Deaths | $\cdots$ | $\ldots$ | $\ldots$ | 372 | 301 | 673 |
| Recorded arrivals by sea during Quarter ended 30th June, 1901 | 3,483 | 1,970 | 5,453 |  |  |  |
| Recorded departures by sea during Quarter ended 30th June, 1901 <br> Allowance for unrecorded departures by sea ... | $\begin{array}{r} 3,713 \\ 464 \end{array}$ | 2,464 308 | 6,177 772 |  |  |  |
| Total Departures during Quarter ... ... | 4,177 | 2,772 | 6,949 |  |  |  |
| Excess of Arrivals over Departures ... ... | ... | $\ldots$ | $\ldots$ | - 694 | -802 | - 1,496 |
| Estimated Population on 30th June, 1901 ... | ... | $\ldots$ | $\ldots$ | 89,302 | 82,350 | 171,652 |
| Births during Quarter ended 30th September, 1901 ... Deaths | $\begin{aligned} & 691 \\ & 257 \end{aligned}$ | $\begin{aligned} & 614 \\ & 207 \end{aligned}$ | $\begin{array}{r} 1,305 \\ 464 \end{array}$ |  |  |  |
| Excess of Births over Deaths | ... | $\ldots$ | $\ldots$ | 434 | 407 | \$41 |
| Recorded arrivals by sea during Quarter ended 30th September, 1901 | 2,607 | 1,411 | 4,018 |  |  |  |
| Recorded departures by sea during Quarter ended 30 th September, 1901 <br> Allowance for unrecorded departures by sea ... | $\begin{array}{r} 2,594 \\ 324 \end{array}$ | 1,453 182 | $\begin{array}{r} 4,047 \\ 506 \end{array}$ |  |  |  |
| Total Departures during Quarter ... ... | 2,918 | 1,635 | 4,553 |  |  |  |
| Excess of Arrivals over Departures ... ... | ... | ... | $\ldots$ | - 311 | - 224 | - 535 |
| Estimated Population on 30th September, 1901 ... | ... | $\cdots$ | . | 89,425 | 82,533 | 171,958 |
| Births during Quarter ended 31st December, 1901 ... Deaths | $\begin{aligned} & 643 \\ & 260 \end{aligned}$ | $\begin{aligned} & 658 \\ & 199 \end{aligned}$ | $\begin{array}{r} 1,301 \\ 459 \end{array}$ |  |  |  |
| Excess of Births over Deaths ... | ... | $\cdots$ | $\cdots$ | 383 | 459 | 842 |
| Recorded arrivals by sea during Quarter ended 31st December, 1901 | 4,231 | 2,910 | 7,141 |  |  |  |
| Recorded Departures by sea during Quarter ended 31st December, 1901 <br> Allowance for unrecorded departures by sea .... | $\begin{array}{r} 3,333 \\ 417 \end{array}$ | $\begin{array}{r} 1,610 \\ 201 \end{array}$ | $\begin{array}{r} 4,943 \\ 618 \end{array}$ |  |  |  |
| Total Departures during Quarter ... ... | 3,750 | 1,811 | ¢,561 |  |  |  |
| Excess of Arrivals over Departures ... ... | ... | ... | ** | 481 | 1,099 | 1,580 |
| Estimated Population on 31st December, 1901 ... | ... | ... | ... | 90,289 | 84,091 | 174,380 |

Tasmania-continued.

| Particulars. | Males. | Females. | Total. | Mates. | Females. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Estimated Population on 31st December, 1901 ... | $\ldots$ | $\ldots$ | ... | 90,289 | 84,091 | 174,380 |
| Births during Quarter ended 31st March, 1902 ... | 599 | 590 | 1,189 |  |  |  |
| " , ", ". |  |  | 437 |  |  |  |
| Excess of Births over Deaths ... | $\ldots$ | $\ldots$ | $\ldots$ | 361 | 391 | 732 |
| Recorded arrivals by sea during Quarter ended 31st March, 1902 $\qquad$ ... | 5,664 | 3,662 | 9,326 |  |  |  |
| Recorded departures by sea during Quarter ended 31st March, 1902 ... <br> Allowance for unrecorded departures by sea ... | $\begin{array}{r} 5,838 \\ 730 \end{array}$ | 4,050 506 | 9,888 1,236 |  |  |  |
| Total Departures during Quarter ... | 6,568 | 4,556 | 11,124 |  |  |  |
| Excess of Arrivals over Departures ... ... | $\cdots$ | $\cdots$ | $\cdots$ | - 904 | - 894 | - 1,798 |
| Estimated Population on 31st March, 1902 ... | ... | $\cdots$ | $\cdots$ | 89,746 | 83,588 | 173,334 |
| Births during Quarter ended 30th June, 1902 Deaths $\quad$, $\quad$, , | 631 223 | 591 191 | 1,222 414 |  |  |  |
| Excess of Births over Deaths | $\ldots$ | $\ldots$ | $\ldots$ | 408 | 400 | 808 |
| Recorded arrivals by sea during Quarter ended 30th June, 1902 | 3,596 | 1,694 | 5,290 |  |  |  |
| Recorded departures by sea during Quarter ended 30th June, 1902 <br> Allowance for unrecorded departures by sea ... | $\begin{array}{r} 3,553 \\ 444 \end{array}$ | 2,293 287 | 5,846 731 |  |  |  |
| Total Departures during Quarter ... | 3,997 | 2,580 | 6,577 |  |  |  |
| Excess of Arrivals over Departures ... ... | $\ldots$ | $\ldots$ | $\cdots$ | - 401 | -886 | - 1,287 |
| Estimated Population on 30th\%*June, 1902 ... | ... | $\ldots$ | $\ldots$ | 89,753 | 83,102 | 172,855 |
| Births during Quarter ended 30th September, 1902 ... Deaths | 731 306 | 631 239 | 1,362 545 |  |  |  |
| Excess of Births over Deaths ... | ... | $\ldots$ | $\ldots$ | 425 | 392 | 817 |
| Recorded arrivals by sea during Quarter ended 30th September, 1902 | 3,458 | 1,543 | 5,001 |  |  |  |
| Recorded departures by sea during Quarter ended 30th September, 1902 <br> Allowance for unrecorded departures by sea ... | 2,667 333 | 1,369 171 | $\begin{array}{r}4,036 \\ 504 \\ \hline\end{array}$ |  |  |  |
| Total Departures during Quarter ... ... | 3,000 | 1,540 | 4,540 |  |  |  |
| Excess of Arrivals over Departures ... ... | ... | $\cdots$ | ... | 458 | 3 | 461 |
| Estimated Population on 30th September, 1902 ... | ... | $\ldots$ | $\ldots$ | 90,636 | 83,497 | 174,133 |
| $\begin{array}{lll}\text { Births during Quarter ended 31st December, } 1902 & \text {... } \\ \text { Deaths ,, }\end{array}$ | $\begin{aligned} & 643 \\ & 277 \end{aligned}$ | $\begin{aligned} & 669 \\ & 241 \end{aligned}$ | $\begin{array}{r} 1,312 \\ 518 \end{array}$ |  |  |  |
| Excess of Births over Deaths ... | $\ldots$ | $\ldots$ | $\ldots$ | 366 | 428 | 794 |
| Recorded arrivals by sea during Quarter encled 31st December, 1902 | 4,808 | 3,125 | 7,933 |  |  |  |
| Recorded departures by sea during Quarter ended 31st December, 1902 <br> Allowance for unrecorded departures by sea .... | $\begin{array}{r} 3,207 \\ 401 \end{array}$ | $\begin{array}{r} 1,595 \\ 199 \end{array}$ | $\begin{array}{r} 4,802 \\ 600 \end{array}$ |  |  |  |
| Total Departures during Quarter ... ... | 3,608 | 1,794 | 5,402 |  |  |  |
| Excess of Arrivals over Departures ... ... | $\ldots$ | . | $\ldots$ | 1,200 | 1,331 | 2,531 |
| Estimated Population on 31st December, 1902 ... | $\ldots$ | ... | $\ldots$ | 92,202 | 85,256 | 177,458 |

I'asmania-continued.

| Partuculars. | Maies. | Females. | Total. | Males. | Females. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Estimated Population on 31st December, 1902 ... | $\ldots$ | ... | ... | 92,202 | 85,256 | 177,458 |
| Births during Quarter ended 31st March, 1903 ... | 609 | 617 276 | 1,226 $\mathbf{5 6 8}$ |  |  |  |
| Deathṣ " " | 292 | 276 | 568 |  |  |  |
| Excess of Births over Deaths ... ... | $\ldots$ | $\cdots$ | $\cdots$ | 317 | 341 | 658 |
| Recorded arrivals by sea during Quarter ended 31st March, 1903 ... ... ... ... .. | 5,378 | 3,827 | 9,205 |  |  |  |
| Recorded departures by sea during Quarter ended 31st March, 1903 | 5,246 | 3,684 | 8,930 |  |  |  |
| Allowance for unrecorded departures by sea ... | 656 | 460 | 1,116 |  |  |  |
| Total Departures during Quarter | 5,902 | 4,144 | 10,046 |  |  |  |
| Excess of Arrivals over Departures ... ... | ... | ... | $\ldots$ | -524 | -317 | -841 |
| Estimated Population on 31st March, 1903 ... | $\ldots$ | $\cdots$ | ... | 91,995 | 85,280 | 177,275 |
| Births during Quarter ended 30th June, 1903 Deaths ... | $\begin{aligned} & 616 \\ & 274 \end{aligned}$ | 609 236 | 1,225 510 |  |  |  |
| Excess of Births over Deaths ... | ... | $\ldots$ | $\cdots$ | 342 | 373 | 715 |
| Recorded arrivals by sea during Quarter ended 30th June, 1903 | 4,102 | 2,191 | 6,293 |  |  |  |
| Recorled departures by sea during Quarter ended 30th June, 1903 <br> Allowance for unrecorded departures by sea ... | 3,923 490 | 2,592 324 | 6,515 814 |  |  |  |
| Total Departures during Quarter ... | 4,413 | 2,916 | 7,329 |  |  |  |
| Excess of Arrivals over Departures ... ... | ... | $\ldots$ | $\cdots$ | -311 | -725 | -1,086 |
| Estimated Population on 30th June, 1903 ... | $\ldots$ | $\cdots$ | $\cdots$ | 92,026 | 84,928 | 176,954 |
| Births during Quarter ended 30th September, 1903 ... Deaths ,", | $\begin{aligned} & 709 \\ & 297 \end{aligned}$ | $\begin{aligned} & 633 \\ & 236 \end{aligned}$ | $\begin{array}{r} 1,342 \\ 533 \end{array}$ |  |  |  |
| Excess of Births over Deaths ... | $\ldots$ | $\ldots$ | ... | 412 | 397 | 809 |
| Recorded arrivals by sea during Quarter ended 30th September, 1903 | 1,510 | 865 | 2,375 |  |  |  |
| Recorded departures by sea during Quarter ended 30 th September, 1903 <br> Allowance for unrecorded departures by sea ... | $\begin{array}{r} 1,483 \\ 185 \end{array}$ | $\begin{aligned} & 895 \\ & 112 \end{aligned}$ | $\begin{array}{r} 2,378 \\ 297 \end{array}$ |  |  |  |
| Total Departures during Quarter ... ... | 1,668 | 1,007. | 2,675 |  |  |  |
| Excess of Arrivals over Departures ... ... | $\cdots$ | $\ldots$ | $\cdots$ | -158 | -142 | -300 |
| Estimated Population on 30th September, 1903 ... | $\cdots$ | $\ldots$ | $\cdots$ | 92,280 | 85,183 | 177,463 |
| Births during Quarter ended 31st December, 1903 ... Deaths | $\begin{aligned} & 636 \\ & 273 \end{aligned}$ | $\begin{gathered} 651 \\ 232 \end{gathered}$ | $\begin{array}{r} 1,287 \\ \quad 505 \end{array}$ |  |  |  |
| Excess of Births over Deaths ... ... | $\ldots$ | $\cdots$ | $\cdots$ | 363 | 419 | 782 |
| Recorded arrivals by sea during Quarter ended 31st December, 1903 | 4,516 | 2,774 | 7,290 |  |  |  |
| Recorded departures by sea during Quarter ended 31st <br> December, 1903 <br> Allowance for unrecorded departures by sea ... | $\begin{array}{r} 3,657 \\ 457 \end{array}$ | $\begin{array}{r} 1,725 \\ 216 \end{array}$ | $\begin{array}{r} 5,382 \\ 673 \end{array}$ |  |  |  |
| Total Departures during Quarter ... ... | 4,114 | 1,941 | 6,055 |  |  |  |
| Excess of Arrivals over Departures ... ... | $\ldots$ | $\cdots$ | ... | 402 | 833 | 1,235 |
| Estimated Population on 31st December, 1903 ... | $\cdots$ | ... | ... | 93,045 | 86,435 | 179,480 |

Tasmania-continued,

| Particulars. | Males. | Femates. | Total. | Males. | Fenales. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Estimated Population on 31st December, 1903 <br> Births during Quarter ended 31st March, 1904 <br> Deaths | 603 320 | $\cdots$ 646 249 | 1,249 569 | 93,045 | 86,435 | 179,480 • |
| Excess of Births over Deaths ... ... ... | $\ldots$ | ... | ... | 283 | 397 | 680 |
| Recorded arrivals by sea during Quarter ended 31st March, 1904 | 5,538 | 3,531 | 9,069 |  |  |  |
| Recorded departures by sea during Quarter ended 31st March, 1904 ... <br> Allowance for unrecorded departures by sea ... | 5,078 635 | $\begin{array}{r} 3,746 \\ 468 \end{array}$ | $\begin{aligned} & 8,824 \\ & 1,103 \end{aligned}$ |  |  |  |
| Total Departures during Quarter ... ... | 5,713 | 4,214 | 9,927 |  |  |  |
| Excess of Arrivals over Departures ... ... | $\cdots$ | $\ldots$ | $\ldots$ | -175 | -683 | -858 |
| Estimated Population on 31st March, 1904 ... | ... | $\ldots$ | ... | 93,153 | 86,149 | 179,302 |
| Births during Quarter ended 30th June, 1904 <br> Deaths | 688 256 | 626 215 | 1,314 471 |  |  |  |
| Excess of Births over Deaths ... ... | ... | ... | $\ldots$ | 432 | 411 | 843 |
| Recorded arrivals by sea during Quarter ended 30th June, 1904 | 2,857 | 1,704 | 4,561 |  |  |  |
| Recorded departures by sea during Quarter ended 30th June, 1904 Allowance for unrecorded departures by sea ... | 3,507 439 | 2,514 314 | $\begin{array}{r} 6,021 \\ 753 \end{array}$ |  |  |  |
| Total Departures during Quarter ... ... | 3,946 | 2,828 | 6,774 |  |  |  |
| Excess of Arrivals over Departures ... ... | ... | $\cdots$ | ... | -1,089 | -1,124 | -2,213 |
| Estimated Population on 30th June, 1904 ... | ... | $\ldots$ | $\ldots$ | 92,496 | 85,436 | 177,932 |
| Births during Quarter ended 30th September, 1904 ... Deaths ", ", | 700 251 | $\begin{aligned} & 626 \\ & 237 \end{aligned}$ | 1,326 488 |  |  |  |
| Excess of Births over Deaths ... | $\ldots$ | ... | $\cdots$ | 449 | 389 | 838 |
| Recorded arrivals by sea during Quarter ended 30th September, 1904 | 2,735 | 1,534 | 4,269 |  |  |  |
| Recorded departures by sea during Quarter ended 30th September, 1904 <br> Allowance for unrecorded departures by sea ... | $\begin{array}{r} 2,795 \\ \quad 349 \end{array}$ | $\begin{array}{r} 1,503 \\ 188 \end{array}$ | $\begin{array}{r} 4,298 \\ \quad 537 \end{array}$ |  |  |  |
| Total Departures during Quarter ... ... | 3,144 | 1,691 | 4,835 |  |  |  |
| Excess of Arrivals over Departures ... ... | ... | $\cdots$ | ... | - -409 | -157 | -560 |
| Estimated Population on 30th September, 1904 ... | ... | $\ldots$ | ... | 92,536 | 85,668 | 178,204 |
| Births during Quarter ended 31st December, 1904 ... <br> Deaths | $\begin{aligned} & 71] \\ & 234 \end{aligned}$ | $\begin{aligned} & 692 \\ & 212 \end{aligned}$ | $\begin{array}{r} 1,403 \\ 446 \end{array}$ |  |  |  |
| Excess of Births over Deaths ... | ... | ... | $\ldots$ | 477 | 480 | 957 |
| Recorded arrivals by sea during Quarter ended 31st December, 1904 | 4,368 | 3,165 | 7,533 |  |  |  |
| Recorded departures by sea during Quarter ended 31st December, 1904 <br> Allowance for unrecorded departures by sea ... | $\begin{array}{r} 3,785 \\ 473 \end{array}$ | $\begin{array}{r} 1,994 \\ 249 \end{array}$ | $\begin{array}{r} 5,779 \\ \quad 722 \end{array}$ |  |  |  |
| Total Departures during Quarter ... ... | 4,258 | 2,243 | 6,501 |  |  |  |
| Excess of Arrivals over Departures ... ... | $\cdots$ | ... | ... | 110 | 922 | 1,032 |
| Estimated Population on 31st December, 1904 ... | $\ldots$ | $\ldots$ | $\ldots$ | 93,123 | 87,070 | 180,193 |

Tasmania-continued.

| Particulars. | Males. | Females. | Total. | Males. | Females. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Estimated Population on 31st December, 1904 ... | $\ldots$ | ... | ... | 93,123 | 87,070 | 180,193 |
| Births during Quarter ended 31st March, 1905 Deaths , , . | 677 234 | 584 191 | 1,261 425 |  |  |  |
| Excess of Births over Deaths | $\cdots$ | $\ldots$ | $\cdots$ | 443 | 393 | \$36 |
| Recorded arrivals by sea during Quarter ended 31st March, 1905 | 6,866 | 4,710 | 11,576 |  |  |  |
| Recorded departures by sea during Quarter ended 31st March, 1905 | 6,657 | 4,732 | 11,389 |  |  |  |
| Allowance for unrecorded departures by sea ... | 832 | 592 | 1,424 |  |  |  |
| Total Departures during Quarter ... | 7,489 | 5,324 | 12,813 |  |  |  |
| Excess of Arrivals over Departures | $\ldots$ | $\ldots$ | ... | - 623 | -614 | $-1,237$ |
| Estimated Population on 31st March, 1905 ... | ... | ... | $\ldots$ | 92,943 | 86,849 | 179,792 |
| Births during Quarter ended 30ch June, 1905 <br> Deaths | 666 277 | 575 176 | 1,241 453 |  |  |  |
| Excess of Births over Deaths ... | $\ldots$ | $\cdots$ | $\ldots$ | 389 | 399 | 788 |
| Recorded arrivals by sea during Quarter ended 30th June, 1905 | 3,509 | 2,049 | 5,558 |  |  |  |
| Recorded departures by sea during Quarter ended 30th June, 1905 | 4,118 | 3,154 | 7,272 |  |  |  |
| Allowance for unrecorded departures by sea ... | 515 | 394 | 909 |  |  |  |
| 'Total Departures during Quarter | 4,633 | 3,548 | 8,181 |  |  |  |
| Excess of Arrivals over Departures ... | $\ldots$ | ... | $\ldots$ | - 1,124 | - 1,499 | $-2,623$ |
| Estimated Population on 30th June, 1905 ... | $\ldots$ | ... | ... | 92,208 | 85,749 | 177,957 |
| Births during Quarter ended 30th September, 1905 ... <br> Deaths ,, , , , . .. | 755 271 | 617 213 | 1,372 484 |  |  |  |
| Excess of Births over Deaths ... | $\ldots$ | $\ldots$ | $\ldots$ | 484 | 404 | 888 |
| Kecorded arrivals by sea during Quarter ended 30th September, 1905 | 3,219 | 1,740 | 4,959 |  |  |  |
| Recorded departures by sea during Quarter ended 30th September, 1905 <br> Allowance for unrecorded departures by sea ... | 2,962 370 | 1,656 207 | 4,618 $\mathbf{5 7 7}$ |  |  |  |
| Total Departures during Quarter | 3,332 | 1,863 | 5,195 |  |  |  |
| Excess of Arrivals over Departures ... ... | ... | $\ldots$ | ... | - 113 | - 123 | - 236 |
| Estimated Population on 30th September, 1905 ... | $\ldots$ | $\ldots$ | ... | 92,579 | 86,030 | 178,609 |
| Births during Quarter ended 31st December, 1905 ... Deaths | $\begin{aligned} & 714 \\ & 279 \end{aligned}$ | $\begin{aligned} & 669 \\ & 203 \end{aligned}$ | $\begin{array}{r} 1,383 \\ 482 \end{array}$ |  |  |  |
| Excess of Births over Deaths ... ... | $\ldots$ | $\cdots$ | ... | 435 | 466 | 901 |
| Recorded arrivals by sea during Quarter ended 31st December, 1905 | 5,264 | 3,759 | 9,023 |  |  |  |
| Recorded departures by sea during Quarter ended 31st December, 1905 <br> Allowance for unrecorded departures by sea ... | $\begin{array}{r} 4,305 \\ 538 \end{array}$ | $\begin{array}{r} 2,303 \\ 288 \end{array}$ | $\begin{array}{r} 6,608 \\ 826 \end{array}$ |  |  |  |
| Total Departures during Quarter ... ... | 4,843 | 2,591 | 7,434 |  |  |  |
| Excess of Arrivals over Departures .. ... | .. | ... | $\ldots$ | 421 | 1,168 | 1,589 |
| Estimated Population on 31st December, 1905 ... | $\ldots$ | ... | $\ldots$ | 93,435 | 87,664 | 181,099 |

Tasmania-continued.

VII.-COMMONWEALTH OF AUSTRALIA.

| Particulars. | Males. | Females. | Total. | Males. | Females. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Estimated Population on 31st December, 1900 | ... | $\ldots$ | $\ldots$ | 1,976,992 | 1,788,347 | 3,765,339 |
| Births during Quarter ended 31st March, 1901 ... | 12,841 6,900 | 12,430 4,753 | $\begin{aligned} & 25,271 \\ & 11,653 \end{aligned}$ |  |  |  |
| Deaths " " " | 6,900 | 4,753 | $11,653$ |  |  |  |
| Excess of Births over Deaths | ... | $\ldots$ | $\ldots$ | 5,941 | 7,677 | 13,618 |
| Excess of Arrivals over Departures during Quarter ended 31st March, 1901 | ... | $\ldots$ | $\ldots$ | -5,005 | -151 | -5,156 |
| CENSUS POPULATION on 31st March, 1901 ... | ... | ... | ... | 1,977,928 | 1,795,873 | 3,773,801 |
| Births during Quarter ended 30th June, 1901 <br> Deaths | $\begin{array}{r} 13,101 \\ 6,545 \end{array}$ | 12,629 4,600 | $\begin{aligned} & 25,730 \\ & 11,145 \end{aligned}$ |  |  |  |
| Excess of Births over Deaths | ... | $\cdots$ | $\cdots$ | 6,556 | 8,029 | 14,585 |
| Excess of Arrivals over Departures during Quarter ended 30th June, 1901 ... | .. | $\ldots$ | ... | 2,328 | -467 | 1,861 |
| Estimated Population on 30th June, 1901 ... | $\cdots$ | ... | ... | 1,986,812 | 1,803,435 | 3,790,247 |
| Births during Quarter ended 30th September, 1901... | 13,767 | 13,111 | 26,878 |  |  |  |
| Deaths " ", ". | 7,078 | 4,907 | 11,985 |  |  |  |
| Excess of Births over Deaths | $\ldots$ | $\cdots$ | $\ldots$ | 6,689 | 8,204 | 14,893 |
| Excess of Arrivals over Departures during Quarter ended 30 th September, 1901 | ... | $\cdots$ | ... | 4,619 | 981 | 5,600 |
| Estimated Population on 30th September, 1901 | ... | ... | $\cdots$ | 1,998,120 | 1,812,620 | 3,810,740 |
| Births during Quarter ended 3 Lst December, 1901 ... <br> Deaths | 12,800 6,620 | 12,266 4,927 | 25,066 11,547 |  |  |  |
| Excess of Births over Deaths | $\ldots$ | ... | ... | 6,180 | 7,339 | 13,519 |
| Excess of Arrivals over Departures during Quarter ended 31st December, 1901 | $\ldots$ | ... | $\cdots$ | 2,484 | -457 | 2,027 |
| Estimated Population on 31st December, 1901... | ... | ... | $\cdots$ | 2,006,784 | 1,819,502 | 3,826,286 |
| Births during Quarter ended 31st March, 1902 ... | 12,442 | 11,569 | 24,011 |  |  |  |
| Deaths " ", " | 6,393 | 4,732 | 11,125 |  |  |  |
| Excess of Births over Deaths | $\ldots$ | ... | $\cdots$ | 6,049 | 6,837 | 12,886 |
| Excess of Arrivals over Departures during Quarter ended 31st March, 1902 | ... | ... | ... | 1,392 | -48 | 1,344 |
| Estimated Population on 31st March, 1902 ... | $\cdots$ | $\cdots$ | $\cdots$ | 2,014,225 | 1,826,291 | 3,840,516 |
| Births during Quarter ended 30th June, 1902 Deaths ,.. ,, , | 13,508 6,841 | 12,847 4,857 | $\begin{aligned} & 26,355 \\ & 11,698 \end{aligned}$ |  |  |  |
| Excess of Births over Deaths | $\ldots$ | $\cdots$ | $\cdots$ | 6,667 | 7,990 | 14,657 |
| Excess of Arrivals over Departures during Quarter ended 30th June, 1902 ... | $\ldots$ | $\ldots$ | ... | 1,399 | -1,205 | 194 |
| Estimated Population on 30th June, 1902 ... | $\ldots$ | $\ldots$ | ... | 2,022,291 | 1,833,076 | 3,855,367 |
| Births during Quarter ended 30th September, 1902... | 13,757 | 13,252 | 27,009 |  |  |  |
| Deaths ", ", ", | 7,193 | 5,214 | 12,407 |  |  |  |
| Excess of Births over Deaths | $\cdots$ | ... | ... | 6,564 | 8,038 | 14,602 |
| Excess of Arrivals over Departures during Quarter ended 30th September, 1902 ... | $\ldots$ | ... | ... | 2,961 | -1,357 | 1,604 |
| Estimated Population on 30th September, 1902 | $\ldots$ | ... | $\ldots$ | 2,031,816 | 1,839,757 | 3,871,573 |
| Births during Quarter ended 31st December, $1902 . .$. Deaths , , , , | 12,909 7,449 | 12,492 5,399 | $\begin{aligned} & 25,401 \\ & 12,818 \end{aligned}$ |  |  |  |
| Excess of Births over Deaths | $\ldots$ | $\ldots$ | $\cdots$ | 5,460 | 7,093 | 12,503 |
| Excess of Arrivals over Departures during Quarter ended 31st December, 1902 | ... | $\ldots$ |  | 434 | -1,481 | -1,047 |
| Estimated Population on 31st December, 1902 | $\ldots$ | $\ldots$ | $\cdots$ | 2,037,710 | 1,845,369 | 3,883,079 |

## Commonwealth of Australia-continued.



Commonwealiti of Austraba-momimued.

| Paticulars. | Males. | Females. | Total. | Mallis. | Femathes. | Totat. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Estimated Population on 31st December, 1904... | ... | $\ldots$ | $\ldots$ | 2,092,818 | 1,891,572 | 3,984,390 |
|  | 12,890 6,448 | $\begin{array}{r}12,56 \\ 4,674 \\ \hline 17\end{array}$ | $\begin{aligned} & 25,462 \\ & 11,129 \end{aligned}$ |  |  |  |
| Excess of Births over Deathis | $\ldots$ | ... | $\ldots$ | 6,44: | 7, s 0 M | 14,3410 |
| Excess of Arrivals over Departures during Quarter enled 31st March, 1905 ... | $\ldots$ | ... | $\ldots$ | 2,967 | $-1,742$ | 1,22: |
| Estimated Population on 31st March, 1905 ... | ... | $\cdots$ | $\ldots$ | 2,102,227 | 1,897,728 | 3,999,955 |
| Births during Quarter ended 30th June, 190\% ... | 13,360 | 12,683 | 21i,048 |  |  |  |
| Deaths ", ", ", | 6,379 | 4,440 | 10,st! |  |  |  |
| Lixcess of Births over Deaths | ... | $\ldots$ | $\cdots$ | 6,981 | 8, 24.3 | n, 员1 |
| Excess of Arrivals over Departures during Quarter ended :30th June, 1905 ... |  | .. | $\ldots$ | 2,424 | -2,811 | -387 |
| Estimated Population on 30th June. 1905 ... | $\ldots$ | $\ldots$ | $\ldots$ | 2,111,632 | . $1,903,160$ | 4,014,792 |
| Rirths during Quarter culed 30th September, 1905 Deathis | $\begin{array}{r} 14,4.44 \\ 6,3: 32 \end{array}$ | $\begin{array}{r} 1: 1,3: 7 \\ 1,575 \end{array}$ | $\begin{aligned} & \because 2,521 \\ & 10,!101 \end{aligned}$ |  |  |  |
| Excess of liathis over Deaths | ... | $\cdots$ | $\ldots$ | $8,11 s$ | 8,802 | 16,900 |
| Exeess of Arrivals over bepartures during Quarter ended 30th September, 1905 | ... | ... | $\cdots$ | 3,515 | $-1,103$ | $2.41:$ |
| Estimated Population on 30th September, 1905 | ... | $\ldots$ | $\ldots$ | 2,123,265 | 1,910,859 | 4,034,124 |
| Births during Quarter ended 31st Decemlier, 1945 ... <br> Deaths | $\begin{array}{r} 13,241 \\ 6,1: 5 \end{array}$ | $\begin{array}{r} 12,414 \\ 4,514 \end{array}$ | $\begin{aligned} & 25,(615 \\ & 10,672 \end{aligned}$ |  |  |  |
| Escess of Births over Deathis | $\ldots$ | $\ldots$ | $\cdots$ | -, 14.4 | -,904 | 14, 19.4 |
| Exeess of Arrivals over Departures ibuing Quarter ended 31st Desember, 1900 | $\ldots$ | $\ldots$ | $\ldots$ | 3,670 | $-307$ | 3,363 |
| Estimated Population on 31st December, 1905 | $\ldots$ | $\ldots$ | . | 2,133,978 | 1,918,452 | 4,052,430 |
| Rirths during Quarter ended 31st March, 1906 | 13,113 | 12,360 | $25,473$ |  |  |  |
| Deaths " " " | 6,508 | 4,971 |  |  |  |  |
| Excess of Births over Deaths | $\ldots$ | $\ldots$ | ... | 6,555 | 7,38! | 1:3,944 |
| Excess of Arrivals over bepartures during Quarter cuded 31st Marel, 1906 | $\ldots$ | $\ldots$ | $\ldots$ | $35: 3$ | -2,070 | $\cdots 1,717$ |
| Estimated Population on 31st March, 1906 ... | $\cdots$ | $\ldots$ | $\ldots$ | 2,140,886 | 1,923,771 | 4,064,657 |
| Births during Quarter ended 30th June, 1906 | 14,196 | 13,142 | 27,838 |  |  |  |
| Deaths " , " | 5,974 | 4, 514 | 10,52:3 |  |  |  |
| Excess of Births over Deaths | $\ldots$ | $\ldots$ | $\ldots$ | 8:222 | 8,59:3 | 16,815 |
| Facess of Arrivals over Departures during Quarter ended 30th June, 1900 | ... | $\ldots$ | $\ldots$ | 3,864 | -80 | 3,775 |
| Estimated Population on 30th June, 1906 ... | $\ldots$ | $\ldots$ | $\ldots$ | 2,152,972 | 1,932,275 | 4,085,247 |
| Births during Quarter ended 30th September, 1006 ... <br> Deaths | $\begin{array}{r} 14,6 \pi 6 \\ 6,489 \end{array}$ | $\begin{array}{r} 13,5,62 \\ 4,626 \end{array}$ | $\begin{aligned} & 2 \mathrm{~S}, 41 \mathrm{~s} \\ & 11,11 \overline{5} \end{aligned}$ |  |  |  |
| Excess of Births over Deaths | $\ldots$ | $\ldots$ | ... | 8,117 | 9,219 | 17,333 |
| Excess of Arrivals over Departures during Quarter ended 30th September, 1906 | $\ldots$ | $\ldots$ | $\ldots$ | 4,016 | - (i03 | 3,413 |
| Estimated Population on 30th September, 1906 | $\ldots$ | $\ldots$ | $\ldots$ | 2,165,105 | 1,940,888 | 4,105,993 |
| Births duriig Quarter ended 31st December, 1906... | 13,599 | 13,432 | 26,6331 |  |  |  |
| Deaths \% " " " | 1,353 | 4,513 | 11,166 |  |  |  |
| Excess of Births over Deaths | $\ldots$ | $\cdots$ | $\ldots$ | 7,24i | 8,219 | 15,4(is) |
| Excess of Arrivals over Departares during Quarter ended 31st December, 1906 | . | $\ldots$ | ... | 1,194 | - 3,171 | - 1,977 |
| Estimated Population on 3lst December, 1906 | ... | .. | $\ldots$ | 2,173,545 | 1,945,936 | 4,119,481 |

MATERIAL USED BY 1903 CONFERENCE OF STATTSTTCIANS IN DETERMINING ALLOWANCE FOR UNRECORDED DEPARTURES.


Sore, -. In order to allow for Overland traticic other than rail, the retordell railway traffic has been increased by 10 per cent.

