(iii) Local Option Poll. Any number of ratepayers, not less than seven, resident in the neighbourhood of the house in respect of which a provisional certificate or an hotel license has been applied for, may require, by petition lodged with the Clerk of Petty Sessions, that a poll of the ratepayers resident in the neighbourhood be taken upon the question whether such provisional certificate be granted or not. If a majority of the votes taken be against the granting of the certificate the Licensing Bench must refuse to grant it.

Particulars as to operations under Part VI. of the Act are not available.

## § 6. Preferential Voting.

1. Introduction.-The methods of election adopted in the early stages of represen. tative institutions are now in many cases considered to fail to respond to the needs of the more complex political conditions of highly civilised communities, and it would appear that the movements which have taken place in favour of improved electoral methods are in keeping with the advances made in practically all other human institutions. The original system of exclusive majority representation has often resulted in an exaggeration of the majority, sometimes in the total suppression of the minority, and on other occasions in the return of a majority of representatives by a minority of the electors.* To remedy these evils various schemes of preferential voting have been devised, based upon the idea that one of the essentials of the realisation of self-government is that every responsible section of the community shall be able to give expression through its own representatives to its needs and desires in the assembly which is representative of the community, and which derives its authority from the fact that it is so representative. The systems of preferential voting which are in force in certain of the States of the Commonwealth are briefly described in this sub-section. $\dagger$
2. Systems in Force.-Systems of preferential voting are now in force in the States of Victoria, Queensland, Western Australia, and Tasmania.

Preferential voting is not, however, a part of the electoral system of the Commonwealth, nor is it in operation in New South Wales or South Australia. In the former State the Electoral Act 1910, however, provides that if, as the result of the first ballot for the election of members of the Legislative Assembly, it is found that no candidate has received an absolute majority of votes, a second ballot shall be taken between the candidate who has received the highest number of votes and the candidate who has received the next highest number of votes, and requires the Returaing Officer to decide the precedence of canoidates for the purposes of the second ballot where the voting is equal by giving such casting vote or votes as may be necessary for this purpose, and to give a casting vote, if, as the result of the second ballot, the candidates receive an equal number of votes.
3. Victoria.-A system of preferential voting was brought into operation for the first time in' this State under the provisions of the Preferential Voting Act 1911, on the occasion of the general elections for the Legislative Assembly. The law requires the elector to mark his vote by placing the numeral 1 on the ballot-paper opposite the name of the candidate for whom he votes as his first preference, and to then give contingent votes for all the remaining candidates (when there are more than two), by placing numerals 2 , 3,4 , and 'so on as the case requires, opposite their names, so as to indicate, by such numerical sequenoe, the order of his preference. At the scrutiny, the number of first

[^0]preference votes given at the election for each candidate is ascertained, and the candidate who has the greatest number of such first preference votes (if such number constitutes an absolute majority of votes) is declared elected.

If no candidate has an absolute majority of votes, the Returning Officer declares the candidate who has obtained the fewest first preference votes to be a defeated candidate, and, thereupon, opens all the parcels containing ballot-papers used at the election, and arranges such ballot-papers by placing, in separate parcels, all those on which a first preference is indicated for the same candidate and the full contingent votes are also given for all the remaining candidates, omitting ballot-papers which required to be rejected; and the ballot-papers counted to the defeated candidate are then distributed among the non-defeated candidates next in order of the voters's preference. After such distribution, the number of votes given to each non-defeated candidate is again ascertained. If no candidate then has an absolute majority of votes, the process of declaring the candidate who has the fewest votes to be defeated, and distributing his ballot-papers among the non-defeated candidates next in order of the voter's preference, is repeated, and the votes recounted after every such redistribution until one candidate has obtained an absolute majority of votes, and is declared elected.

A ballot-paper is treated as informal if it does not indicate the elector's first preference for one candidate, and, in the case of any election where there are more than two candidates, the contingent votes for all the remaining candidates.

If on any count, two or more candidates have an equal number of votes, and one of them bas to be declared defeated, the Returning Officer is required to decide which is to be declared defeated, and, if on the final count, each candidate has an equal number of votes, the Returning Officer is further required to give a casting vote, and so decide the election.
4. Queensland.-A modified system of optional preferential voting for the Legislative Assembly is in operation in Queensland, under the provisions of Section 78A to 78.J inclusive of "The State Elections Act 1885 to 1908."

The elector is required to strike out from his ballot-paper the names of the candidates for whom he does not intent to vote, and then may, if he thinks fit, indicate on his ballot-paper the name or names of any candidates for whom he does not vote in the first instance, but for whom he desires his vote or votes to be counted in the event of any candidate or candidates for whom he votes in the first instance not receiving an absolute majority of votes, and if he indicates more than one such candidate, may indicate the order in which he desires that his vote or votes shall be counted for any such candidate or candidates. Such indication must be made by writing the figures 2,3 or any subsequent number opposite to the name or names of the candidate or candidates for whom he does not vote in the first instance, but for whom he desires his vote or votes to be so counted, and the order indicated by such numbers is taken to be the order in; which he desires his vote or votes to be so counted.

When one member only is to be returned at the election, if there is no candidate who receives an absolute majority of votes, all the candidates except those two who receive the greatest number of votes are declared to be defeated candidates. The vote of every elector who has voted for a defeated candidate is counted for that one (if any) of the remaining two candidates for whom he has indicated that he desires his vote to be counted. The vote so counted for such remaining candidates is added to the votes originally given for them, and the candidate who receives the greatest number of votes, including the votes so counted (if any) is declared elected.

When two members are to be returned, and there are not more than four candidates, the two candidates who receive the greatest number of votes are declared elected. When two members are to be returned, and there are more than four candidates, if there is no candidate who receives an absolute majority of votes, all the candidates except those four who receive the greatest number of votes are deemed defeated candidates.

The vote or potes of every elector who has voted for a defeated candidate or defeated candidates must be counted for that one or those two of the remaining four candidates for whom the elector has not voted in the first instance, but for whom he has indicated in the required manner that he desires his vote or votes to be counted. The votes so counted for such remaining candidates are added to the votes originally given for them. and the candidates who receive the greatest number of votes, including the votes so counted (if any), are declared elected.

If only one candidate receives an absolute majority of votes, he is declared elected. and in that case all the other candidates except those two who receive the next greatest number of votes are deemed defeated candidates. The vote of every elector who has voted for a defeated candidate is counted for that one (if any) of the remaining two candidates for whom the elector has not voted in the first instance, but for whom he has indicated in the required manner that he desires his vote to be counted. The votes so counted for such remaining candidates are added to the votes originally given for them, and the candidate who receives the greatest number of votes, including the votes so counted (if any), is declared elected.

When two or more candidates, neither of whom is elected, receive an equal number of votes, the Returning Officer decides by his casting vote which of them have or has the greatest number of votes. If an elector writes a figure opposite to the name of a candidate for whom he votes in the first instance, the ballot-paper is not rejected for that. reason only.

The foregoing provisions for securing the absolute majority of votes do not apply to any election at which more than two members are to be elected for one Electoral District.
5. Western Australia.-Preferential voting was made compulsory in this State (where it had previously been optional) under the Amending Electoral Act of 1911.

The elector is required to mark his ballot-paper by placing the numeral 1 opposite the name of the candidate for whom he votes as his first preference, and if there are more than two candidates, to give contingent votes for all the remaining candidates by placing the numerals 2, 3 and so on (as the case requires) opposite their names, so as to indicate by such numerical sequence the order of his preference. At the scrutiny a ballot-paper is rejected as informal if, when there are more than two candidates, it is. not marked so as to indicate by numerical sequence the voter's preference as regards. all the candidates, subject to the proviso that if numerals in arithmetical sequence are: placed opposite the names of all the candidates but one, the next following numeral is. deemed to be placed opposite the name of the remaining candidate. A special provision also avoids the rejection of a ballot-paper by reason of the fact that the elector has. indicsted his vote or first preference by means of a cross instead of the numeral 1.

The candidate who receives the largest number of first preference votes is declared elected if such number constitutes an absolute majority of votes; but if no candidate has. an absolute majority of votes, the Returning Officer declares the candidate who. has obtained the fewest first preference votes to be a defeated candidate, and each ballot-paper counted to him is then (unless exhausted) distributed among the non-defoated candidates next in order of the elector's preference. When a candidate is declared defeated, any ballot-paper counted to him is deemed to beexhausted if there is not indicated upon it a consecutive preference for a candidate not declared defeated. After such distribution the number of votes given to each nondefeated candidate is again ascertained, and if no candidate then has an absolute majority of votes, the process of declaring the candidate who has the fewest votes to be defeated and distributing each of his ballot-papers (unless exhausted) amongst the non-defeated candidates next in order of the voter's preference is repeated, and the votes recounted after -
every such distribution, until one candidate has obtained an absolute majority of votes, when such candidate is declared duly elected. When only two candidates remain undefeated, and neither has obtained an absolute majority, the candidate who has obtained the largest number of votes is declared to be elected. Every ballot-paper not rejected as informal is counted in every count until it becomes exhausted, when it is rejected in all further counts.

If on any count two or more candidates have an equal number of votes, and one of them has to be declared defeated, the Returning Officer is required to decide which is to be declared defeated, and is required to give a casting vote in the event of an equality of votes on the final count; but otherwise he may not vote at the election.


#### Abstract

6. Tasmanla.-The State of Tasmania is distributed into five electorates for the purposes of House of Assembly Elections, and each electorate returns six members, who are elected under a system of proportional representation. In a general election the elector is required to mark his ballot-paper by placing within, or substantially within, the squares respectively opposite the names of three candidates the numbers 1,2, and 3, so as to indicate the order of his preference. He may, in addition, indicate the order of his preference for as many more candidates as he pleases, by placing within, or substantially within, the squares respectively opposite their names, other numbers next in


 numerical order after those already used by him.The rules under which the scrutiny of the ballot-papers is conducted require that-
(A) The number of first choices recorded for each candidate shall be counted, and all informal voting-papers shall be rejected.
(B) The aggregate number of such first choices shall be divided by one more than the number of candidates required to be elected, and the quotient increased by one, disregarding any remainder, shall be the quota, and (except as hereinafter provided in Rule J) no candidate shall be elected until he obtains a number of votes equal to or greater than the quota.
(C) Any candidate who has, upon the first choices being counted, a number of such votes equal to or greater than the quota shall be declared elected.
(D) Where the number of such votes obtained by any candidate is equal to the quota, the whole of the voting papers on which a first choice is recorded for such elected candidate shall be set aside as finally dealt with.
(E) Where the number of such votes obtained by any candidate is in excess of the quota, the proportion of votes in excess of the quota shall be transferred to the other candidates not yet declared elected, next in the order of the voter's respective preferences, in the following manner :-
(i.) All the voting papers on which a first choice is recorded for the elected candidate shall be re-examined, and the number of second choices, or (in the case provided for in Rule L) third or next consecutive choices, recorded for each unelected candidate thereon shall be counted.
(ii.) The surplus of the elected candidate shall be divided by the total number of votes obtained by him on the counting of the first choices, and the resulting fraction shall be the transfer value.
(iii.) The number of second or other choices, ascertained in paragraph (i.) to be recorded for each unelected candidate, shall be multiplied by the transfer value.
(iv.) The resulting number, disregarding any fractional remainder, shall be credited to each unelected candidate, and added to the number of votes obtained by him on the counting of the first choices.
(F)-(a) Where, on the counting of the first choices or on any transfer, more that one candidate has a surplus, the largest surplus shall be first dealt with. If then more than one candidate has a surplus, the then largest surplus next in order of magnitude shall be dealt with, and so on. Provided that, if one candidate has obtained a surplus at a count or transfer previous to that at which another candidate obtains a surplus, the surplus of the former shall be first dealt with.
(b) Where two or more surpluses are equal, the surplus of the candidate who has the highest on the poll at the count or transfer at which they last had an unequal number of votes shall be first dealt, with, and if they have had an equal number of votes at all preceding counts or transfers, the Returning Officer shall decide which candidate's surplus shall be first dealt with.
(G) - (a) Where the number of votes obtained by a candidate is raised up to or above the quota by a transfer as aforesaid, he shall thereupon be declared elected. And in such case, notwithstanding the fact that he may have reached the quota, such transfer shall be completed, and all the votes to which he is entitled therefrom shall be transferred to him, but no votes of any other candidate shall be transferred to him.
(b) Where the number of votes obtained by a candidate is raised up to, but not above the quota by a transfer as aforesaid, the whole of the voting-papers on which such votes are recorded shall be set aside as finally dealt with.
(c) Where the number of votes obtained by a candidate is raised above the quota by a transfer as aforesaid, his surplus shall be transferred to the candidates next in the order of the voter's respective preferences, in the following manner :-
(i.) The voting-papers on which are recorded the votes obtained by the elected candidate in the last transfer shall be re-examined, and the number of third, or (in the case provided for in Rule L) next consecutive choices recorded for each unelected candidate thereon counted.
(ii.) The surplus of the elected candidate shall be divided by the total number of voting-papers mentioned in paragraph (i.), and the resulting fraction shall be the transfer value.
(iii.) The number of second (or other) choices, ascertained in paragraph (i.) to be recorded for each unelected candidate, shall be multiplied by the lastmentioned transfer value.
(iv.) The resulting number, disregarding any fractional remainder, shall be credited to each unelected candidate, and added to the number of votes previously obtained by him.
(H)-(a) Where, after the first choices have been counted and all surpluses (if any) have been transferred as hereinbefore directed, no candidate, or less than the number of candidates required to be elected, has or have obtained the quota, the candidate who is lowest on the poll shall be excluded, and all the votes ootained by him shall be transferred to the candidates next in the order of the voter's respective preferences, in the same manner as is directed in Rule E.
(b) The votes obtained by such excluded candidate as first choices shall first be transferred, the transfer value of the vote in each case being 1.
(c) The other votes of such excluded candidate shall then be dealt with in the order of the transfers in which, and at the transfer value at which, he obtained them.
(d) Each of the transfers which takes place under the two previous clauses of this rule shall be deemed for all purposes to be a separate transfer.
(1)-(a) Where the number of votes obtained by a candidate is raised up to or above the quota by any such transfer as aforesaid, he shall thereupon be declared elected. And in such case, notwithstanding the fact that he may have reached the quota, such transfer shall be completed, and all the votes to which he is entitled therefrom shall be transferred to him, but no other votes shall be transferred to him.
(b) Where the number of votes obtained by a candidate is raised up to, but not above, the quota by any such transfer as aforesaid, the whole of the voting-papers on which such votes are recorded shall be set aside as finally dealt with.
(c) Where the number of votes obtained by a candidate is raised above the quota by any such transfer as aforesaid, his surplus shall be transferred to the candidates next in the order of the voter's respective preferences in the same manner as is directed in Rule a, Clause (c). Provided that such surplus shall not be dealt with until all the votes of the excluded candidate have been transferred.
(d) Where any surplus exists it shall be dealt with before any other candidate is excluded.
(J) The same process of excluding the candidate lowest on the poll, and transferring to other candidates his votes shall be repeated until all the candidates, except the number required to be elected, have been excluded, and the unexcluded candidates, who have not already been so declared, shall then be declared elected.
(k) Where at any time it becomes necessary to exclude a candidate, and two or more candidates have the same number of votes and are lowest on the poll, then whichever of such candidates was lowest on the poll at the last count or transfer at which they had an unequal number of votes shall be first excluded, and if such candidates have had an equal number of votes at all preceding counts or transfers, the Returning Officer shall decide which candidate shall be first excluded.
(L) In determining what candidate is next in the order of the voter's preference, any candidates who have been declared elected or who have been excluded shall not be considered, and the order of the voter's preference shall be determined as if the names of such candidates had not been on the voting-paper.
(M) Where on any transfer it is found that on any voting-paper there is no candidate opposite whose name a number is placed, other than those who have been already either declared elected or excluded, such voting-papers shall be set aside as exhausted.

Where in the case of a by-election one candidate only is to be elected and no candidate on the first count secures an absolute majority of the whole of the formal votes recorded at the election, the candidate who has the fewest votes is excluded (i.e., regarded as defeated), and each ballot-paper counted to him is (unless exhausted) counted to the unexcluded candidate next in the order of the voter's preference.

If no candidate then has an absolute majority of votes, the process of excluding the candidate who has the fewest votes and counting each of his ballot-papers (unless exhausted) to the unexcluded candidate next in the order of the voter's preference is repeated until one candidate has an absolute majority of votes.

Every ballot-paper not rejected as informal is to be counted in every count until it becomes exhausted, when it is rejected in all further counts. Where a candidate is exoluded, any ballot-paper counted to him is deemed to be exhausted if there is not indicated upon it a consecutive preference for one unexcluded candidate.

If on any count two or more candidates have an equal number of votes and any one of them has to be excluded, the Returning Officer decides which shall be excluded, and if in the final count two candidates have an equal number of votes, the Returning Officer decides by his vote which shall be elected, but otherwise the Returning Officer has no vote at the election.

A comprehensive report on the General Election for the House of Assembly held on the 30th April, 1909, furnished to the Government by Messrs. Douglas, Piesse, and Birchall (officers connected with the Administration), gives full details of the working of the proportional representation system in Tasmania, and may be studied with advantage by persons interested. The system just described in detail will be at once recognised as the "single transferable vote" system associated with the name of Thomas Hare.

## 7. Valuation of Commonwealth Production.

The want of uniformity in methods of compilation and presentation of Australian statistics renders it an extremely difficult task to make anything like a satisfactory valuation of the various elements of production. At present there is so little accuratestatistical knowledge regarding such industries as forestry, fisheries, poultry, and beefarming, that any valuation of the production therefrom can only be regarded as the roughest approximation. As a matter of fact complete information as to value of production in all States is available in regard to the mining industry alone, and even in this case adjustments have to be made before the returns are strictly comparable. Careful estimates have been made in connection with the value of production from the agricultural and pastoral industries, which, it is believed, in the main give fairly accurate results. In the case of manufactories, five of the States in 1908 collected statistics of the value of production, while for the sixth State, Tasmania, an estimate has been prepared which it is believed gives a fair approximation. While the difficulties in the way of obtaining adequate valuations for all classes of production are serious enough at the present time they are still more pronounced in seeking to obtain information as to values for earlier years, when the returns were far more incomplete. It must be clearly understood, therefore, that the values given in the succeeding table are, in general, approximations only. With the adoption of the forms and methods of tabulation agreed upon at the Statisticians' Conference of 1906 it is hoped, however, that at no distant date fairly complete valuations will be available for all industries, and the returns collected in 1909 and subsequent years certainly shew a considerable improvement over previous returns. In the meantime the figures quoted must be taken with all their limitations. The table hereunder shews the approximate value of the production from all industries during the years 1906 to 1911:-
estimated value of production erom industries, 1906 to 1911.

|  | Year. | Agricul. ture. | Pastoral. | Dairy, Poultry, \& Beefarming. | Forestry and Fisheries. | Mining. | Manufacturing. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1906 |  | $\begin{array}{r}  \pm 1000 . \\ 25,349 \end{array}$ | $\begin{gathered} \& 1000 . \\ 45,389 \end{gathered}$ | $\begin{array}{r} £ 1000 . \\ 13,611 \end{array}$ | $\begin{aligned} & £ 1000 . \\ & 4,879 \end{aligned}$ | $\begin{array}{r} £ 1000 . \\ 26,622 \end{array}$ | $\stackrel{81000}{+}$ | $\stackrel{41000 .}{\substack{\text { c }}}$ |
| 1907 |  | 30,500 | 50,660 | 15,584 | 4,826 | 28,301 | , |  |
| 1908 |  | 37,150 | 47,259 | 15,045 | 4,286 | 24,580 | 36,637 | 164,957 |
| 1909 |  | 41,056 | 50,864 | 15,064 | 4,462 | 23,039 | 40,018 | 174,503 |
| 1910 | .. | 39,752 | 56,993 | 17,387 | 4,789 | 23,215 | 45,598 | 187,734 |
| 1911 | $\ldots$ | 38,774 | 50,725 | 19,107 | 5,728 | 23,480 | 50,931 | 188,745 |

[^1]
[^0]:    * See. " Proportional Representation," by J. H. Humphreys. Methuen \& Co., London, 1911.
    + Information supplied by R. C. Oldham, Esq., Commonwealth Chief Electoral Officer.

[^1]:    * These amounts differ from those given in Section XIII., Manufacturing Industries, owing to certain products which are there included having been included in Dairy Farming and Forestry in this table. + Full particulars not available.

    The total production from all industries during 1911 was $£ 188,745,000$, equal to an average of $£ 42 \mathrm{Os} .8 \mathrm{~d}$. per inhabitant.

    In previous issues will be found the value of production in each State at decennial intervals since 1871, and for the year 1909. Details for individual States are not available for subsequent years owing to discontinuance by Customs Department of collection of statistics of inter-State trade.

