

1917.
NEW ZEALAND.

CHRISTCHURCH MUNICIPAL ELECTIONS, 1917,

HELD UNDER THE LOCAL ELECTIONS (PROPORTIONAL REPRESENTATION)
ACT, 1914

(REPORT BY G. HOGBEN, Esq., C.M.G., ON THE).

Laid on the Table of the House of Representatives by Leave.

SIR,—

Department of Internal Affairs, Wellington, 18th August, 1917.

The last biennial general election of Councillors of the City of Christchurch being the first election held in New Zealand under a system of proportional representation, opportunity was taken to obtain from Mr. George Hogben, C.M.G., M.A., F.G.S., late Director of Education, who was specially engaged by the Christchurch City Council to act in the capacity of Assistant Returning Officer, a report on the working of the Local Elections (Proportional Representation) Act, 1914.

The report, which contains much valuable information and several suggestions for amendments of the Act, with a view to its working more smoothly, is attached hereto.

J. HISLOP, Under-Secretary.

The Hon. G. W. Russell, Minister of Internal Affairs.

CHRISTCHURCH MUNICIPAL ELECTIONS, APRIL, 1917.

SIR,—

Wellington, 4th July, 1917.

In reply to your request, I have the honour to report on the Christchurch municipal elections, 1917.

In accordance with the Local Elections (Proportional Representation) Act, 1914, and the Local Elections (Proportional Representation) Amendment Act, 1915, the Christchurch City Council and the other local authorities concerned adopted the provisions of the principal Act for the elections of 1917. Accordingly, the elections of sixteen City Councillors, of four members of the Lyttelton Harbour Board, and of seven members of the North Canterbury Hospital and Charitable Aid Board were held on the 25th April last on the principle of proportional representation. The election of the Mayor of the City of Christchurch was held on the same day, the poll being conducted for all four elections at the same places, and by the same staff; but, of course, the principle of proportional representation did not apply in the case of the mayoral election, and the method of marking the voting-papers was different.

The poll was, I believe, the heaviest on record for the City of Christchurch: 17,704 persons voted for the election of Mayor; 17,476 voting-papers were recorded for the election of City Councillors; 16,469 for the election of members of the Hospital Board; and 16,554 for the election of members of the Harbour Board.

The rough results of the mayoral election and of the counting of the first-preference votes in the other three elections were forwarded from the forty-six polling-booths by telephone or by special messenger, and were announced by the Returning Officer on the evening of the poll. On the following day the scrutiny of the rolls, as directed by sections 8 and 9 of the Local Elections and Polls Amendment Act, 1913, was conducted, and occupied nearly the whole day; so that the count of the votes (which could not be commenced until the completion of the scrutiny of the rolls) was practically not begun until the morning of Friday, the 27th April.

In order to acquaint the electors with the new method of voting a mock election for members of a supposed Imperial Cabinet had previously been held by two of the local newspapers, and by the courtesy of the proprietors and editors of the newspapers the voting-papers so obtained (over six thousand in number) were placed at our disposal for the purpose of holding a trial count, and thus giving the staff concerned a thorough acquaintance with their duties. This trial count achieved its purpose to a remarkable degree; indeed, it is probable that the few small mistakes that actually occurred were due to members of the staff who were not present right through this practice. Moreover, the trial count was useful to the Returning Officer and the Assistant Returning Officer, inasmuch as it revealed possible points of weakness, suggested means of avoiding them, and enabled these officers to make necessary rearrangements of the staff and furniture. I would suggest that in future elections two trial counts should be held (not necessarily *both* of long duration or with large numbers of papers), and that the attendance of every member of the staff should be insisted upon on both occasions.

The official counts were held in the Caledonian Hall, Worcester Street, that of the Council, and, afterwards, that of the Hospital Board, being taken in the main hall, and those for the Mayor and the Harbour Board in a smaller hall adjacent. The large hall has a spacious platform, which was used for the Returning Officer, Assistant Returning Officer, and two computers, the two former being at a large central table with boxes in front of them for the informal and doubtful papers, mis-sorts, and exhausted papers brought up by the supervisors. The computers were placed at a table near and to the left of the large table, and on the right was a large set of pigeonholes to take the bundles of voting-papers after they had been dealt with by the computers. Behind the Returning Officers' table were four blackboards, on two of which were written the names of all the candidates elected and excluded at any stage, the other two boards giving the number of the count in progress and the nature of it (*e.g.*, "Count 4—next available choice after Smith at count 2"). Down the middle of the hall were four large sorting-tables, and on them were placed the sets of pigeonholes for the use of the sorters. There were thirty candidates for the sixteen seats on the City Council; accordingly, each set of pigeonholes had thirty-two compartments, one for each candidate, one for doubtful and informal papers, and one for exhausted papers. The compartments measured 6 in. by 6 in. at the face, and were 14 in. deep. (The voting-papers were, by inadvertence, made somewhat wider than had been intended; the pigeonholes should be $\frac{3}{4}$ in. to 1 in. wider than the papers.) If the number of candidates be large (as, for instance, thirty in the case of the City Council), the papers and the boxes for holding them are long, and consequently the work of sorting the papers into thirty-two such boxes causes so much physical effort that the method becomes impracticable; whereas if pigeonholes are used a sorter can with the aid of a suitable office-stool adopt any one of three positions and yet reach all the pigeonholes without moving from his position, and can go on sorting briskly for nine hours a day for several days. At the sides of the sorting-tables were the counting-tables, one for each candidate, labelled with his or her name.

In elections held on this system in other parts of the world it appears to have been found that the sorters were able to go through papers more quickly than the counters. This may be so where the number of candidates is small, and the next available choices easy to find; but it is certainly not the case where the number of candidates is as many as thirty, and the latter choices are not so easily ascertained by inspection. It would have been better, for instance, in the election of Christchurch City Councillors, to have eight sorting-tables instead of four, and also, for the heavy counts at least, to have two sorters at each sorting-table. This was done, after the first count, at Christchurch, by putting four of the most skilful counters to assist the four sorters; the assistant sorter took up each voting-paper, found the next available choice, passed the paper to the sorter, who checked it and put it into the proper pigeonhole. This was found to be the most accurate and expeditious way of sorting.

The staff in the body of the hall consisted of two supervisors, one on each side of the hall, four sorters, and ten counters (eight of whom were women). The business of the supervisors was to take the sorted papers from the pigeonholes and put them on the several counting-tables; and, after they had been counted and made up into bundles, properly labelled, to take the bundles of papers for the several candidates up to the computers' table, and also to help the Assistant Returning Officer to see that all the arrangements were working smoothly. When a counter with a small number of papers to count had completed his first bundle he was sent to count the papers on another table. The first few counts (especially the first count) afforded a means of judging, within fairly narrow limits, the amount of work likely to be required at the several counting-tables, so that the work for any particular count might end almost simultaneously for all the counters. When the number of papers in any count was very small (as toward the end of the process) all the sorting was done at one sorting-table; if very small indeed, both sorting and counting could be done at the one sorting-table, and in such a case two or three counts (as of transfers from the same excluded candidate) could be going on at the same time: this requires slight additional care, of course, on the part of the supervisors, computers, and Assistant Returning Officer.

In general the sorting of the papers at the sorting-tables was done by one examination; but as it was highly important that all informal and doubtful papers should be separated and placed before the Returning Officer at the first count, each paper was examined twice by the sorters at this count. There is very little difficulty in doing this, especially if the method of sorting by two people is adopted, as described above, as for the purpose of sorting—properly so-called—it is necessary only to note the candidate opposite whose name the figure 1 appears. For all counts the sorting of the papers was checked by the counters before counting began. Each bundle of papers was counted twice, and card labels (of which samples are given below) were attached to the completed bundles. The use of these card labels was found to facilitate the work of the computers and the Assistant Returning Officer—in fact, they are almost essential.

[Except where otherwise indicated, the references in what follows are to the election of Councillors.]

The card labels in a candidate's pigeonhole at any time would show his total at that stage. For instance, after count 2 in Beanland's pigeonhole there were no voting-papers, but the card label A given below, which shows the votes left to him after the distribution of his surplus (viz., 982, or the quota). At the same stage there were in Climie's pigeonhole two labels, one (similar to A) showing his first choices, 357, and the other (B) showing 680 votes transferred to him from Beanland. After the eighth count, when Climie's surplus (55) was distributed, and the entries at the foot of B had been made, his labels showed him to have 357 and 625, or 982 votes. The voting-papers showing the first choices would be attached to the card label, but the 1,103 voting-papers would not be attached to card label B, having been distributed at the eighth count to the next available choices. The card labels for the first count were printed in red; those for all other counts in black.

CARD LABEL A.

Label of Bundles of all Papers in First Count.

FIRST COUNT.

(a) *Beanland* was the first choice on 2,563 papers.

SUBSEQUENT DISPOSAL (IF ANY) OF THE ABOVE VOTES.

Total number of these votes transferred from (a) to other candidates, exhausted, and lost by omission of fractions, at count 2	1,581
The number of above votes remaining for (a) ..	982

CARD LABEL B.

Label of Bundle of all Papers in Count named (any except First) on which Candidate named is the Next Available Choice.

COUNT 2.

On the papers of <i>Beanland</i> as at count 1 the next available choice after him is (a) <i>Climie</i> as shown on	(b) 1,103 papers.
The transfer value is	(c) $\frac{1}{2}$
The number of votes transferred to (a) is	(d) 680

SUBSEQUENT DISPOSAL (IF ANY) OF THE ABOVE VOTES.

Total number of these votes transferred from (a) to other candidates, exhausted, and lost by omission of fractions, at count 8	(e) 55
The number of above votes remaining for (a) ..	(f) 625

At the trial count full sets of directions were issued to computers, supervisors, sorters, and counters: it is much easier to guard against error if the same routine is followed throughout the scrutiny of the votes. Copies of these directions, revised in the light of the experience gained, are attached hereto (Appendix II); they may prove of service in future elections, and their reprint here makes it unnecessary to give any more details of the process adopted. Tables 1 and 2 are shown in Appendix I. Table 1 shows the counting of the choices, as indicated on the voting-papers; Table 2 shows the distribution of the votes in the manner prescribed in the Second Schedule to the Act. Table 2 is thus, in effect, the score-sheet for the election, while Table 1 gives the results of the several counts and forms the basis of Table 2. Herein the method adopted in the Tasmanian general election of 1909 was used. Tables 1 and 2 are given in full for the first eleven counts, and a summary of Table 2 alone is given for the remaining counts.

There were 174 effective counts—that is, counts in which votes were transferred from Table 1 to Table 2, but in thirty-two of these no transfers of votes were made to continuing candidates, the small number of votes being either exhausted or “lost by fractions”; other counts were also made of the papers on which no votes were transferred, to act as checks on previous sortings; but the process affords so many natural checks against error that these non-effective counts are quite unnecessary.

It might be a question for consideration as to whether it would not be expedient to quicken the process of counting by allowing the parcels of votes transferred from excluded candidates to be grouped for that purpose. For instance, the transfer of Butterfield's votes, which took thirty-seven counts, might have been done in three counts; the continuing candidates would have received three more votes, and three votes less would have been “lost by fractions.” The method of grouping transfers to which I refer is to transfer in three several lots, viz.: (a) All papers with transfer value 1; (b) papers with transfer values less than 1, but not less than $\frac{1}{2}$; (c) papers with transfer values less than $\frac{1}{2}$. [In the case of (b) and (c) it would be necessary to find a new transfer value by dividing the number of votes to be transferred by the number of papers included in the bundles thus grouped.] Clause 8, paragraph (d), of the Second Schedule prevents this from being done at present; but if it had been allowable the same candidates would have been elected in the same order, and the last count would have appeared thus in respect of the continuing candidates:—

Jenkin	745	} instead of {	Jenkin	720
Peek	957		Peek	944
Wells	786		Wells	770
Exhausted votes	298		Exhausted votes	291
Lost by fractions	143		Lost by fractions	204

The total number of counts would have been 51 instead of 174; and the total time of counting might have been reduced from thirty-three hours (time actually taken) probably to less than twenty hours.

It may be said with truth that the suggestion involves a departure from the strict principles of the Clark system; but the worst that could happen (provided that the voting was on party lines and that the amount of cross-voting was negligible) would be the substitution for the last candidate of another candidate of the same party.

But the following proposal would have no such effect as that last mentioned, nor would it involve any departure from principle, nor can I see any objection to it in practice. It is this: that all papers with the transfer value 1 should be dealt with as if they belonged to one bundle; similarly, all other papers with the same transfer value (less than 1) should be transferred at one step. This would shorten the counting, although of course not so much as the first suggestion. It would present in some cases an apparent anomaly—namely, that the total number of votes for the several transferees might be more than the number of votes given up by the candidate who was being excluded; the excess would be really a recovery of votes lost by fractions, the total for which could be reduced accordingly.

TIME TAKEN IN THE COUNTS.

	Seats.	Candidates.	Time taken.
Christchurch City Council	16	30	33 hours.
Harbour Board	4	9	8 „
Hospital Board	7	11	13 „

Number of papers counted in each case, about 17,000. The time taken in the count varies, of course, with the number of papers (or voters), number of seats, and number of candidates. The time required for the first count varies as the total number of voting-papers. The nearest indication of the time required for the remaining counts seems to be the excess of candidates over vacancies—in other words, the number of candidates to be excluded: to give a still better index, this number might be multiplied by the number of candidates elected before the first candidate was excluded.

TIME TAKEN IN THE SCRUTINY OF VOTES.

It may be of interest to note that the number of separate examinations of papers in the sorting and checking of the 174 effective counts of the City Council election was over 65,000 (besides about 1,000 examinations of papers in the non-effective counts referred to above). The following table affords a comparison of the work involved, and the time taken in doing it:—

TABLE A.

	Number of Seats.	Number of Candidates.	Number of Valid Votes.	Number of Examinations of Papers.	Number of Counts.	Number of Hours taken in Counts.
Christchurch City Council ..	16	30	16,677	Over 65,000	174	33
Harbour Board	4	9	15,488	57,000	29	8
Hospital Board	7	11	15,507	55,000	28	13
<i>Tasmanian Elections, 1909.</i>						
Darwin	6	9	9,405	?	16	11
Bass	6	13	9,070	?	54	15
Denison	6	16	11,337	Over 19,000	109	11

The expense of the election of course depends partly on the length of time taken over the counts, if the staff is the same. In Tasmania, apparently, a much larger staff was employed.

In elections conducted according to systems at present in vogue the public has been led to expect an early publication of the result of the poll; accordingly, a new system of voting stands in danger of being condemned if the counting of the votes takes longer than the older system to which we have grown accustomed; for the moment, the fact that the new system gives a fairer representation of the mind of the constituency is apt to be lost sight of. This prejudice will no doubt disappear upon mature consideration, for there can be very few elections in which delay for a few hours in announcing the results can be of material importance in comparison with the benefits gained—if these are conceded. This is not the place to give the arguments in favour of proportional representation; they may be found in any text-book upon the subject. As regards the expense of the election, inasmuch as the counting of the votes is only a part, and not the largest part, of the process, it is probable that the additional expense involved would not be great. The system does indeed appear to become more complicated when the number of seats and the number of candidates is large; this is not true as far as it concerns the counting, for the longer time taken in the count is due not to any new methods or processes required, but to the continued repetition of the comparatively simple processes involved in transferring surplus votes from elected candidates, and in transferring to the next preferences the votes of candidates excluded on the ground that they are the lowest and have therefore no chance of being elected. To the voter it is probably more difficult to express intelligently the order of his preferences when there are, say, thirty candidates than when there are, say, only ten or fifteen. On this ground, therefore, much may be said for constituencies electing not more than perhaps six or seven members. Even this contention may be modified by reference to tables C and D below, which show that the later preferences exercise very little influence upon the election; so that a voter who puts down the first six preferences and no more is omitting nothing or almost nothing that would really affect the result, unless indeed the last candidates elected were very near to the highest of the rejected candidates. On the ground of expense, it is almost certain that in Christchurch it would have cost more to hold the election in two constituencies electing eight members each than it did to hold one election for the whole city electing sixteen members.

The object of the system of proportional representation is to give each party (or each group of persons with definite aims or opinions, if there are no parties in the usual sense of the term) representation in proportion to its numbers. It is interesting to note how far the purpose of the system was attained in the election of the Christchurch City Councillors. The strength of the parties is assumed to be given by the aggregate of the first-preference votes recorded for the candidates on the respective party "tickets," the independent candidates (though probably of different shades of opinion) being grouped together for the purpose of this estimate. (See Table B).

TABLE B.—NUMBER OF VOTES AND NUMBER OF SEATS GAINED BY EACH PARTY.

	Number of Candidates.	Number of Votes.	Number of Seats gained.	Number of Seats in Proportion to Votes.
Citizens' Association	12	9,791	9	9.4
Labour	12	4,792	5	4.6
Independents (various)	6	2,094	2	2.0
Totals	30	16,677	16	16.0

In other words, each party or group of electors obtained the integral number of members nearest to the number to which it was entitled by its votes.

TABLE C.—THE WEIGHT OF THE VARIOUS PREFERENCES IN DETERMINING THE RESULT OF THE ELECTION.

By counting the votes of all the elected candidates it was found that of the total votes on which they were elected the several preferences were in the following proportions (for comparison the corresponding figures for the Tasmanian General Election, 1909, are given):—

	Christchurch City Council, 1917 (16 Members elected).	Christchurch Hospital Board, 1917 (7 Members elected).	Tasmanian General Election, 1909 (6 Members elected in each Constituency).
First preference	0.7649	0.8790	0.739
Second preference	0.0977	0.0458	0.140
Third preference	0.0517	0.0292	0.051
Fourth preference	0.0269	0.0127	0.029
Fifth preference	0.0195	0.0254	0.014
Sixth preference	0.0107	0.0055	0.008
Seventh preference	0.0073	0.0016	0.009
Eighth preference	0.0053	0.0002	0.008
Ninth preference	0.0036	0.0008	0.003
Tenth preference	0.0034	Nil	Nil
Eleventh preference	0.0032	"	"
Twelfth preference	0.0036	"	"
Thirteenth preference	0.0011	"	"
Fourteenth preference	0.0008	"	"
Fifteenth preference	0.0002	"	"
Sixteenth preference, &c... ..	Nil	"	"
	0.9999	1.0002	1.001

Or we may exhibit the facts thus:—

TABLE D.—WEIGHTS OF GROUPS OF PREFERENCES EXPRESSED AS PERCENTAGES OF SUCCESSFUL CANDIDATES' VOTES.

	City Council.	Hospital Board.	Tasmania.
First, second, and third preferences ..	91.44	95.39	93.0
Fourth, fifth, and sixth preferences ..	5.72	4.36	5.1
Seventh, eighth, and ninth preferences ..	1.62	0.25	2.0
Tenth, eleventh, and twelfth preferences	1.02	Nil	Nil
Thirteenth, fourteenth, and fifteenth preferences	0.21	"	"
	100.01	100.00	100.1

In other words, in the three elections the first six preferences accounted for 97.16 per cent., 99.75 per cent., and 98.1 per cent., respectively, of the total votes obtained by the successful candidates.

INFORMAL VOTES.

The number of informal votes was somewhat large: in the City Council election out of 17,476 voting-papers 799, or 4.57 per cent., were informal, and the proportion in the other two issues was even greater, the average percentage of informal votes in these three issues being 5.60. The choice of the electors in the mayoral election was marked by a cross opposite the name of the candidate preferred by the elector, and formerly the candidates for councillorship for whom an elector did not

wish to vote were indicated by marking out their names; accordingly, it is not surprising to find that 2·22 of the voting-papers in the Council election were marked in one or other of these two ways without any order of preference being shown for the candidates selected. 0·37 per cent. of the papers were not marked in any way. The remainder of the informal papers, 1·98 per cent. of the total number of papers, contained errors due to the electors' failure to understand the new method of voting—such as the omission to mark the minimum number of preferences, 1, 2, 3; placing the figure 1, 2, or 3 opposite the names of more than one candidate; putting all the figures 1, 2, 3 opposite the same candidate's name, and so on. It is clear that the three methods now in force of marking papers lead to confusion; some change should be made.

SUGGESTIONS FOR AMENDMENT.

The Returning Officer has, I understand, forwarded to the Minister of Internal Affairs the following suggestions for amendment in the law:—

- (a.) Extension of time between the election of Mayor and his assumption of office. The election takes place on the last Wednesday in April, and the Mayor assumes office on the first Wednesday in May. It may easily happen that the count for the election of Councillors is not completed by the first Wednesday in May—in which case the Mayor could not enter upon his office, being unable to make the declaration required by section 27 of the Municipal Corporations Act, 1908.
- (b.) Provision should be made for Councillors to retain office until the election of their successors.
- (c.) It should be made clear that in cases where two or more elections are being held simultaneously a voter may have two or more voting-papers handed to him by the Returning Officer at the same time; and that in order to simplify the machinery all elections held on the same may be treated as one.
- (d.) The method of marking voting-papers should be the same in all elections or polls. There are now three methods, which are apt to confuse electors.
- (e.) The second paragraph in the directions to voters in the First Schedule to the Local Elections (Proportional Representation) Act, 1914, should be amended to make it perfectly clear and unambiguous. At the recent elections it was evident that some electors read it as meaning that they had to put all the numbers 1, 2, 3, against the name of each candidate for whom they desired to vote.
- (f.) Section 19 (2) of the Municipal Corporations Act, 1908, should be amended to make it perfectly clear when a candidate forfeits his deposit.

With regard to these suggestions, while agreeing entirely with (a), (b), (e), and (f), I would remark that the expediency of (c) is doubtful, inasmuch as an elector given one voting-paper at a time is less likely to be confused than if he receives two, three, or four papers simultaneously; and that paragraph (d) is not easy to carry into effect: for instance, if the election of Councillors is conducted on the principle of proportional representation, and the election of, say, the members of the Hospital Board on the old system. If all the elections, as in the present case, were conducted on the new method, all papers (even those in the mayoral election) could have the voters' choices indicated by numbers.

For the reasons given below I add the following suggestions for the amendment of the Act:—

- (g.) The true transfer value should be substituted for that defined in the present Act.
- (h.) A rule should be made to avoid the useless transfer of votes to a candidate who is sure to be excluded afterwards.

I would explain these two points in the following manner: When votes are to be transferred from the surplus of an elected candidate to the other candidates the true transfer value should be used—this would be found, in general, by dividing the number of surplus votes by the number of unexhausted or transferable papers in the first choices or in the last transfer of the elected candidate, as the case may be. But it may happen that the number of unexhausted or transferable papers is less than the surplus; in that case the transferable votes should be transferred at their full value—that is, with the transfer value “1.” In any other case the transfer value should be found as stated above. The result would be that the number of exhausted papers would be entered in Table 1, and another line would be added showing the number of unexhausted papers; but in Table 2 no account would be taken of “exhausted votes,” consequently there would be little or no waste of votes, as now, under this heading.

Another amendment that might be suggested is the insertion of a rule similar to that in sub-clause (7) of clause 6 of the First Schedule to the English Municipal Representation Bill, 1910, and embodied in the Transvaal Municipal Act of 1909, namely: “A transfer of votes shall not be made (from the surplus of an elected candidate) unless the surplus votes of the elected candidate together with any other surplus votes not transferred exceed the difference between the totals of the two continuing candidates lowest in the poll”; this avoids the useless transfer of votes which may have to be transferred again from the lowest candidate almost immediately afterwards.

The suggestions made above for the amalgamation of the counts in transferring the votes of an excluded candidate require perhaps fuller consideration; although, as I have already stated, there appears to be no objection in principle to the second suggestion made in that behalf.

In conclusion, I have to thank the Town Clerk, Mr. H. R. Smith, and the Returning Officer, Mr. Walter Freeman, for the assistance given me in conducting the counts, and in furnishing much of the material for this report; and I have much pleasure also in testifying to the efficiency and zeal of the staff engaged, which contributed in no small degree to the successful carrying-out of an election presenting, as regards the number of seats and in other respects, a more formidable task than I believe has had to be undertaken in connection with this system of proportional representation in any part of the world.

The Under-Secretary, Department of Internal Affairs.

GEORGE HOGGEN,
Assistant Returning Officer.

APPENDIX I.

TABLE 1.—COUNTING OF THE CHOICES.

Ballot-papers, 17,476. Informal papers, 799. Valid papers, 16,677.

Number of Counts.	1	2	3	4	5	6	7	8	9	10	11
Description of Count.	First Choice.	Next available Choice after Beanland.	Next available Choice after Taylor.	Next available Choice after Sullivan.	Next available Choice after Flesher.	Next available Choice after Ell.	Next available Choice after Burgoyne.	Next available Choice after Climie.	Next available Choice after Hayward.	Next available Choice after Nicholls.	Next available Choice after Williams.
Beanland, J. W.	2,563	..	..	..	..	..	..	..	..	..	..
Burgoyne, F.	980	164	..	..	..	..	..	..	..	..	..
Butterfield, J.	250	145	9	8	12	48	70	9	1	1	6
Climie, P. R.	357	1,103	..	..	..	..	..	..	..	..	..
Derrett, C. C.	138	37	24	28	24	95	14	26	2	2	12
Ell, H. G.	1,029	..	..	..	..	..	..	..	..	..	..
Flesher, J. A.	1,042	..	..	..	..	..	..	..	..	..	..
Gaines, P.	151	13	4	63	7	21	10	8	0	1	2
Hayward, J. R.	897	192	..	..	..	..	..	..	..	..	..
Herbert, H. F.	210	8	15	215	18	47	19	12	7	1	4
Hoppy, R.	53	12	11	10	24	51	4	22	6	5	6
Howard, E. J.	739	5	6	206	6	28	11	3	2	3	3
Hunter, H.	714	13	10	295	9	48	8	9	4	0	5
Jenkin, W. J.	254	37	100	6	199	73	5	818	44	19	77
King, S. W.	27	0	1	5	1	5	1	1	0	0	1
Loasby, A. M.	492	135	133	12	306	181	7	105	55	77	102
Longton, J.	270	28	51	5	41	48	0	14	7	14	50
McKellar, A.	628	62	239	7	192	85	3	45	24	142	143
McKeon, E. L.	169	7	9	18	2	49	1	3	1	3	4
Manning, G.	99	0	1	41	3	8	0	0	1	2	1
Nicholls, W.	798	130	356	..	..	..	..	..	..	..	..
Peek, E.	455	30	30	19	19	124	5	5	2	9	15
Reynolds, J.	199	33	150	4	139	51	2	12	24	65	175
Robson, F. M.	43	1	5	20	1	2	0	0	0	0	1
Sullivan, D. G.	1,197	..	..	..	..	..	..	..	..	..	..
Taylor, A. S.	1,805	..	..	..	..	..	..	..	..	..	..
Webber, C. W.	216	5	3	165	4	10	0	1	0	1	1
Wells, A.	372	9	9	57	3	33	0	1	1	1	2
Williams, A.	486	381	628	..	..	..	..	..	..	..	..
Worrall, H.	44	2	2	12	2	2	0	0	1	0	0
Number of exhausted papers	..	11	9	1	30	20	4	9	10	10	18
Number of papers counted ..	16,677	2,563	1,805	1,197	1,042	1,029	164	1,103	192	356	628
Votes transferred to Table II	16,677	1,581	823	215	60	47	99	55	33	58	25
Transfer value .. .. .	..	1581 2583	823 1805	215 1197	60 1042	47 1029	99 164	55 1103	33 192	58 356	25 628

NOTE.—Table 1 is not given for counts 12–174.

TABLE 2.—DISTRIBUTION OF THE EFFECTIVE VOTES.
Valid-papers, 16,677. Number of Vacancies to be filled, 16. Quota = $\frac{16,677}{17} + 1 = 982$.

Description of Count.	Number of Counts.											
	1	2	3	4	5	6	7	8	9	10	11	
Beanland, J. W.	2,563	982	982	982	982	982	982	982	982	982	982	982
Burgoyne, F.	980	1,081	1,081	1,081	1,081	1,081	1,081	1,081	982	982	982	982
Butterfield, J.	250	339	343	344	344	346	346	346	388	388	388	388
Climie, P. R.	357	1,037	1,037	1,037	1,037	1,037	1,037	1,037	982	982	982	982
Derritt, C. C.	138	170	175	175	176	180	180	180	189	189	189	189
Ell, H. G.	1,029	1,029	1,029	1,029	1,029	1,029	1,029	1,029	982	982	982	982
Flesher, J. A.	1,042	1,042	1,042	1,042	1,042	1,042	1,042	1,042	982	982	982	982
Gaines, P.	151	159	160	171	171	171	171	171	177	177	177	177
Hayward, J. R.	897	1,015	1,015	1,015	1,015	1,015	1,015	1,015	982	982	982	982
Herbert, H. F.	210	214	220	258	259	261	261	261	272	272	272	272
Hoppy, R.	53	60	65	66	67	69	69	71	71	71	71	71
Howard, E. J.	739	742	744	781	781	782	782	782	788	788	788	788
Hunter, H.	714	722	726	778	778	780	780	784	784	784	784	784
Jenkin, W. J.	254	276	321	322	333	336	336	339	339	339	339	339
King, S. W.	27	27	27	27	27	27	27	27	27	27	27	27
Loasby, A. M.	492	83	60	635	637	662	662	666	680	680	680	680
Longton, J.	270	17	287	310	310	314	314	314	315	315	315	315
McKellar, A.	628	38	666	774	774	789	789	790	796	796	796	796
McKeon, E. L.	169	4	173	180	180	182	182	182	182	182	182	182
Manning, G.	99	0	99	106	106	106	106	106	106	106	106	106
Nicholls, W.	798	80	878	1,040	1,040	1,040	1,040	1,040	1,040	1,040	1,040	1,040
Peck, E.	455	18	473	486	486	495	495	498	498	498	498	498
Robson, F. M.	199	20	219	287	287	297	297	298	302	302	302	302
Reynolds, J.	43	0	43	45	45	48	48	48	48	48	48	48
Sullivan, D. G.	1,197	1,197	1,197	1,197	1,197	1,197	1,197	1,197	982	982	982	982
Taylor, A. S.	1,805	3	219	220	220	249	249	249	249	249	249	249
Webber, C. W.	372	5	381	371	371	392	392	392	392	392	392	392
Williams, A.	486	235	721	286	1,007	1,007	1,007	1,007	1,007	1,007	1,007	1,007
Worrall, H.	44	1	45	47	47	47	47	47	47	47	47	47
Number of exhausted votes	..	6	6	10	10	11	11	13	14	14	15	15
Votes lost by omitting fractions	..	9	9	20	20	29	35	49	60	66	72	72
Total number of votes at end of count	16,677	..	16,677	..	16,677	..	16,677	..	16,677	..	16,677	..
Result of count	..	..	..	..	..	..	..	..	..	..	..	..
	Beanland,	Burgoyne,	Nicholls,	Taylor,	Climie,	Williams,	Sullivan,	Hayward,	Flesher,	Ell,	selected.	selected.
	selected.	selected.	selected.	selected.	selected.	selected.	selected.	selected.	selected.	selected.	selected.	selected.

Result of count
 Beanland, Taylor, Flesher, Ell, elected.
 Burgoyne, Climie, Hayward, elected.
 Nicholls, Williams, elected.

APPENDIX II.

NOTICE TO COMPUTERS, A AND B.

A WILL give out the bundles for any count to the supervisors for distribution to the sorting-tables.

B will see that the notice-board is properly posted up before each count.

A will receive back the exhausted papers brought by the supervisors from the sorting-tables, will check their number, making them into a bundle properly labelled: "Count..... Exhausted Papers. No."

B will receive back from the supervisors all informal and doubtful papers and mis-sorts. The mis-sorts he will give to the supervisors to be taken back to sorting-table I. The informal and doubtful papers he will give to the R.O., or, in his absence, to the A.R.O.

A will receive from the supervisors, at the completion of any count, the new bundles, will send back to the counter concerned any bundle in any way informal, or any bundle the card label on which is not properly filled up and initialled.

A and B will then fill in, for the count in question, Table 1, from the card label on the bundles and the label on the bundle of exhausted papers. They will total the column for that count, and will initial it if correct. They will then take Table 1 (with the bundles) to the A.R.O., who will satisfy himself of the correctness of the entries, and will with them determine the transfer value.

A and B will multiply each of the numbers in line (b) of the card labels, and the number of papers in the bundle of exhausted papers, by the transfer value, checking one another. A will take these numbers from Table 1, and B will take them from the labels, and will fill up the card labels down to line (d), initialling them.

A and B will each make a card for each count showing (to two decimal places) the fractions lost; they will total the fractions.

B will then take the bundles and the fraction-cards to the A.R.O. for entry on Table 2.

As the votes are entered on Table 2, A will place the completed bundles in the pigeonholes near the R.O.'s table.

N.B.—The number of the count should be put on every label and every card used therein, and also at the top of the proper columns.

NOTICE TO SUPERVISORS.

1. The supervisors will receive from the computer the bundles to be sorted, and will distribute them, in four approximately equal lots, to the four sorting-tables.

2. They will take the sorted papers out of the pigeonholes at the sorting-tables to the proper counting-tables. But they will take (a) the exhausted papers, and (b) the informal and doubtful papers, from the pigeonholes, in two separate bundles properly labelled to the R.O.'s table.

3. They will take out the mis-sorts and doubtfuls out of the boxes on the left of the counters to the R.O.'s table. They will receive back the mis-sorts, and take them to sorting-table No. 1—to be re-sorted, and then taken to the proper counting-tables.

4. When all papers have thus reached the proper counting-tables (including the re-sorted mis-sorts), the supervisors will take the bundles from the counters to the R.O.'s table, seeing—(i) that each bundle is securely fastened with the strap; (ii) that the card label on it is filled up as far as line (b); (iii) that the card label is initialled.

5. The supervisors will supply the counters with all forms and material required for their work, and will report to the A.R.O. any shortage of forms or material.

6. They will perform any other duties that they may be called upon to do by the Returning Officer or his assistants, and in particular will see that no loose paper of any description is left on the floor, chairs, or tables.

NOTICE TO COUNTERS.

1. Before beginning any count, read the notice on the notice-board.

2. You are to count the papers showing as the next available choice the candidate at whose table you are stationed. Before you begin to count any papers check them for mis-sorts: look at the next available choice as indicated on the notice-board; look also at the lists of elected and excluded candidates. Then—

3. Count the papers into parcels of fifty. Count each parcel twice.

4. Round each parcel put one of the paper bands issued for the purpose, with the candidate's name and the number "50" thereon. Then place the parcel in the right-hand box. Put mis-sorts into the left-hand box.

5. Write on the final parcel the number of papers therein contained.

6. Tie all the parcels for each candidate together into one bundle, putting on the top of the bundle the card label (red for first count, black for all other counts). Do not attach the card label until the mis-sorts have been finally dealt with. Fill in the label as far as the number of papers on which the next available choice is shown, line (b). Write in large clear characters. Initial the card label opposite line (b). Hand the bundle to one of the supervisors for delivery to the Assistant Returning Officer or the computer A.

7. See that no papers are left in the boxes, on the table, or on the floor near you.

NOTICE TO SORTERS.

1. Before the sorting for any count begins, look at the notice on the notice-board and ascertain exactly what you have to do.

2. This will be in every case to sort the papers given to you, by the Assistant Returning Officer or one of his assistants, according to the *next available choice after the candidate named* in the notice. At the first count the sorting should be done twice by the same sorter, or by two different sorters, as the A.R.O. may direct. No informal paper should escape this count.

3. In ascertaining the next available choice disregard any candidates who have been declared elected or have been excluded.

A.	B.	C.	D.
Burns.	Burns.	3 Burns.	Burns.
Byron.	2 Byron.	7 Byron.	5 Byron.
Carlyle.	Carlyle.	8 Carlyle.	Carlyle.
2 Dickens.	5 Dickens.	5 Dickens.	3 Dickens.
Milton.	6 Milton.	2 Milton.	Milton.
Ruskin.	Ruskin.	Ruskin.	Ruskin.
4 Scott.	Scott.	Scott.	Scott.
1 Shakspeare.	1 Shakspeare.	1 Shakspeare.	1 Shakspeare.
3 Tennyson.	3 Tennyson.	4 Tennyson.	2 Tennyson.
5 Thackeray.	4 Thackeray.	6 Thackeray.	4 Thackeray.

For instance, if Shakspeare, Dickens, Thackeray, and Tennyson have been elected and Byron has been excluded, the next available choice after Tennyson is—on voting-paper A, Scott; on paper B, Milton; on paper C, Carlyle.

Put each paper into the pigeonhole for the candidate who is next available choice.

4. Put any informal or doubtful papers into the pigeonhole for informal papers. These are to be taken to the Returning Officer or his Assistant.

5. Put any "exhausted" papers into the proper pigeonhole for exhausted papers. These are to be taken to the Assistant Returning Officer. A voting-paper is "exhausted" when there is no candidate opposite whose name a number is placed, other than those already elected or excluded. For instance, paper "D" is exhausted (see paragraph 3) after Tennyson.

6. Give the papers of the several candidates who are the next available choices to one of the supervisors for delivery to the proper counters.

7. See that no papers are left in the pigeonholes, or on your table, or on the floor near your table.

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