An Ethnological Survey of Canada.—First Report of the Committee, consisting of Dr. GEORGE DAWSON (*Chairman and Secretary*), Mr. E. W. BRABROOK, Professor A. C. HADDON, Mr. E. S. HARTLAND, Dr. J. G. BOURINOT, ABBÉ CUOQ, Mr. B. SULTE, ABBÉ TANGUAY, Mr. C. HILL-TOUT, Mr. DAVID BOYLE, Rev. Dr. SCADDING, Rev. Dr. J. MACLEAN, Dr. NERÉE BEAUCHEMIN, Rev. Dr. G. PATTERSON, Professor D. P. PENHALLOW, *and* Mr. C. N. BELL.

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THIS Committee was nominated at the Liverpool meeting last year, with the object of initiating an ethnological survey of Canada on lines corresponding with those already followed by the Committee for the Ethnographical Survey of the United Kingdom, as well as to continue, so far as may be possible, work of the kind carried on since the Montreal meeting (1884) by the Committee on the North-Western Tribes of Canada. It comprises three members of the Committee for the Ethnographical Survey of the United Kingdom, including the Chairman and Secretary of that committee. Fourteen members resident in Canada were also nominated, but one of these, Mr. Horatio Hale, has since died.

In nominating the Canadian members some regard was given to geographical position, so that the principal regions of the Dominion would be represented. This, while necessary under the circumstances, has to some extent prevented an interchange of ideas as complete as might be desired. Some correspondence and discussion on the general scope of the work and the plans to be followed have, however, taken place. Messrs. E. W. Brabrook and E. S. Hartland have contributed valuable information and suggestions respecting the work of the similar committee for the United Kingdom, and several Canadian members have evinced a strong interest in the survey now to be undertaken.

It has not yet, however, been found practicable actually to initiate any systematic observations, to print and distribute the necessary schedules, or to provide sets of instruments for physical measurements, no funds being available for these purposes. It is believed that a number of observers may be enlisted in several of the numerous lines of inquiry which appear to be open to the Committee, embracing both the immigrant European population of Canada and its aborigines.

Of suggestions received from members of the Committee the following general considerations presented by Professor D. P. Penhallow, of McGill University, may be quoted :—

'The very unstable character of our population and the extensive mixture of races to be met with in a given community require that we should adopt somewhat different lines of procedure from those employed by the Committee for the United Kingdom. Therefore, while we might wisely adopt the main lines of investigation employed by the Committee for Great Britain, as embodied in their report for 1893 ("B.A. Report," 1893, p. 621), and while these lines of investigation might be applied to

both Indians and Europeans, they should be conducted with reference to—

'(*a*) Indian communities.

'(1) Displacement of tribes from their original locations through the intervention of Europeans.

'(2) The absorption of tribal remnants into existing tribes.

'(3) The infusion of French or other European blood.

'(*b*) European communities or families.

'(1) The precise European locality whence they originated.

'(2) The American locality of most continuous residence and of first settlement.

'(3) The environment at date of investigation.

'For the treatment of folklore as ethnological data, I do not think we can do better than adopt methods suggested by Mr. Gomme in his very valuable paper as embodied in the Report on Ethnographical Survey, Great Britain ("B.A. Report," 1896, Section H, p. 626, &c.).

'The great extent of country to be dealt with and the great length of time required to reach anything of the nature of complete results would seem to make it desirable that we proceed in the most systematic manner. The results might therefore be collated by—

'(1) Families or tribes.

'(2) Parishes.

'(3) Towns or villages.

'(4) Provinces and, as far as possible, a given locality should be studied exhaustively before another is undertaken.'

After some consultation with the members of the Committee who could most easily be communicated with, the following letter was addressed to the Committee generally :—

'Sir,—You have doubtless received some time ago from Mr. G. Griffith, Assistant General Secretary of the British Association for the Advancement of Science, a notification of your nomination as a member of the committee to organise an ethnological survey of Canada. It is hoped that you will be willing to take an active part in this important work, and, although it may not be possible to do much more than establish some plan of operations before the date of the forthcoming meeting of the Association in Toronto in August next, that you will now assist and advise in the perfecting of such plan.

'The project is based upon that being carried out by another committee of the Association nominated some years ago to "organise an ethnographical survey of the United Kingdom." This committee has already made several valuable and interesting reports, and has enlisted various local scientific societies and a number of individuals in the work.

'The chief objects of investigation in the United Kingdom are set out as follows :—

'(1) Physical type of the inhabitants.

'(2) Current traditions and beliefs ;

'(3) Peculiarities of dialect ;

'(4) Monuments and other remains of ancient culture ; and

'(5) Historical evidences as to continuity of race.

'It has been sought to discover, in the first place, the most suitable

localities for investigations; *i.e.*, those which are in large measure secluded from the change and mingling of population incident to large cities, and to select those villages and places where the people have remained for some generations, at least, comparatively undisturbed and homogeneous in character. In this way it is believed that the ethnographic elements going to make up the population of the United Kingdom may be traced, and the changes induced by the mingling of the various elements under different local conditions may be advantageously studied.

'As applied to Canada, it is obvious that an inquiry of the kind cannot be conducted on exactly the same lines. It resolves itself, in the first instance, into two distinct branches :—

'(1) That dealing with the white races, and

'(2) That dealing with the aborigines or Indians. Both are important and likely to yield results of great interest; but, while the second has already been recognised and pursued to some considerable extent, the first has remained almost untouched.

'In regard to the first, it is obvious that it includes two specially fruitful fields, one relating to the older centres of French colonisation in Quebec and Acadia, and the other to the half-breed population of Manitoba and the North-West, where French and Scottish immigrants have mingled with the native races.

'In Quebec and in the Acadian Provinces the researches of Abbé Tanguay have already placed on record the origin and descent of most of the old French families, and the basis thus established is an excellent one on which to build up a knowledge of any changes, whether physical or in language, customs and beliefs, due to the new environment in which the original French colonists have lived and increased. With that object it is desired to make, in the first place, a list of those localities in which development of the kind has been most uninterrupted and continuous, and in these to obtain the co-operation of some local observers who may be willing to devote time to special inquiries along fixed lines, of which the details may be subsequently elaborated.

'There are also, it is believed, many places in the older provinces of Canada in which English, Scottish, Irish, and other settlers have been so long established as to give rise to special peculiarities worthy of note.

'Respecting the aborigines or Indians of the eastern part of Canada, it may be stated that their language is now fairly well understood, while their customs, folklore and traditions, where these have not already been recorded, have largely passed away. But much remains as a profitable subject of investigation, particularly in respect to the location of ancient settlements and places of resort, burial places, routes of travel, &c. There are also many events connected with their early intercourse with the whites of which traditional accounts might yet be gathered with advantage.

'In the western part of Canada the investigation of all matters relating to the Indian tribes constitutes the most important branch of the work proposed; and although in most places great changes have occurred in recent years a vast amount of valuable material yet remains to be recorded, connected not only with their language, but also with their traditions, art, customs, mode of life, and physical characteristics. The time is rapidly passing away in which investigations of the kind may be made to advantage, and no effort should therefore be spared to collect

everything connected with these people. It may confidently be stated that no actually observed fact respecting them is without some definite value.

'With slight verbal changes the same main heads of investigation as have been already cited appear to be applicable to the native races; but, in addition, many other special lines of inquiry might be followed, such as the displacement of native tribes by the whites, the coalescence of diminished tribal communities in later years, and the absorption of the weaker of these by the stronger. Photographic records of all kinds will in connection with the native races possess great importance.

'The above suggestions of a general and preliminary kind are offered to the members of the Committee with the object of eliciting an expression of opinion, and further and more detailed plans such as may appear to be best for the objects in view. As no money grant is at the disposal of the Committee, the work must in the meantime, at least, be carried on entirely by the efforts of volunteers; but some means may, it is hoped, be found of obtaining a small fund applicable to the purposes of the Committee.

'In the meantime it is hoped that every member of the Committee will assist with advice in regard to the best organisation, not only for the collection, but also in respect to the collation and eventual publication of the facts.

'Yours faithfully,
(Signed) 'GEORGE M. DAWSON.'

The Committee have been so fortunate as to obtain from Dr. Franz Boas and Mr. B. Sulte respectively the subjoined valuable contributions in the line of its investigations. 'The Growth of Toronto Children,' by Franz Boas; 'Origin of the French Canadians,' by B. Sulte. The first constitutes an interesting example of the importance attaching to accurate physical measurements. The second explains the nature of the foundations upon which further study of the French element of the Canadian population must rest.

APPENDIX I.

The Growth of Toronto Children. By FRANZ BOAS.

In 1891, when active preparations for the World's Columbian Exposition were being made, Professor F. W. Putnam, director of the Peabody Museum of American Archæology and Ethnography, and then chief of the Department of Anthropology of the Exposition, placed me in charge of the Section of Physical Anthropology. At an early time during the preparation of the exhibits we agreed upon a plan to represent as fully as possible the growth and the development of American children. Valuable material was available, but it seemed desirable to extend the investigations over regions in which heretofore no observations had been collected. I submitted our plans to Mr. James Hughes, superintendent of public schools in Toronto, Ont., and to Professor Earl Barnes, of Leland Stanford, Jr., University. Through the interest taken by these gentlemen I have been enabled to obtain series of measurements of the school children of Toronto and of Oakland, Cal. The former series was taken under the supervision of Dr. Alexander F. Chamberlain; the

latter, under the direction of Professor Earl Barnes. In both of these series the same plan, excepting details, was followed.

The measurements embrace the following data : Stature without shoes, finger-reach, height sitting, weight. A series of special measurements of the head were taken, which, however, include only a few hundred individuals. The following statistical data were collected : Age, in years and months ; place of birth ; nationality of grandparents ; place of birth of parents ; occupation of parents ; number and ages of brothers and sisters ; order of birth of the child measured ; and the mental ability as judged by the teacher.

In treating this material I have endeavoured to exclude a certain series of errors. The number of children of various ages which have been measured is not equal. The series begins with comparatively few children. The number increases from year to year, until, beginning with the ninth year, it decreases again. It follows from this fact that among the six-year-old children, for instance, there are more of the age six years and eleven months than of six years and no months ; and that, on the other hand, among the fifteen-year-old children there are more of the age fifteen years and no months than of fifteen years and eleven months. In treating the various series of observations all children between six and seven, seven and eight, &c., have been grouped together, and usually the series is assumed to represent sizes for the average ages ; that is, for six and a half, seven and a half, &c. On account of the varying frequency for the several months, this is not quite correct. Among the younger children the average will be a little more than six and a half, seven and a half, &c., while among those near the upper limit I judge it will be a little less than fourteen and a half, fifteen and a half, &c. By tabulating the various frequencies of various months for the children of Toronto the following results were obtained :—

Average Ages.

	YRS. M.	YRS. M.	YRS. M.	YRS. M.	YRS. M.	YRS. M.	YRS. M.	YRS. M.	YRS. M.	YRS. M.	YRS. M.
Boys . .	5 6·7	6 6·2	7 5·6	8 5·7	9 5·7	10 5·8	11 5·5	12 5·8	13 5·7	14 5·1	15 4·9
Girls . .	6 6·1	7 6·1	8 5·7	9 5·1	10 5·8	11 5·7	12 5·5	13 5·5	13 5·3	15 5·2	16 4·3

The error resulting from this series may be very easily corrected by adding to the average a correction proportional to the deviation of period.

While the average may be corrected in this manner without much difficulty, the variability of the series for the whole year is affected in a much more complex manner. (I call the variability the square root of the mean of the squares of the individual deviations.) We will suppose that the variability did not change much in the course of one year, which, at certain periods of life is, however, not the case. Since the values of the average increase from month to month, it is clear that the range of variation for the early periods must begin at a lower point than for the later periods, so that the variation for the total year covers a wider series than the variations at a given moment do. It is possible to make the necessary reduction by a consideration of the number of individuals measured for all the different periods, and of the varying amount of variation. The amount of reduction due to this cause is shown in the following table, which refers to the measurements of American children, the series including measurements taken in Boston, Milwaukee, Toronto, Worcester (Mass.), St. Louis (Mo.), and Oakland (Cal.).

Variability of American Boys.

Age . .	5·5	6·5	7·5	8·5	9·5	10·5	11·5	12·5	13·5	14·5	15·5	16·5	17·5	18·5
Variability	±4·80	±4·92	±5·22	±5·53	±5·66	±5·90	±6·32	±6·80	±7·71	±8·66	±8·87	±7·75	±7·23	±6·74
Corrected variability	±4·40	±4·62	±4·93	±5·34	±5·49	±5·75	±6·19	±6·66	±7·54	±8·49	±8·78	±7·73	±7·22	—

I have preferred to calculate in the Toronto series the reduced amounts of variabilities in a different manner. I have grouped the obsertions according to quarterly periods, and calculated the variabilities for each of these periods. A comparison of the variabilities of these periods and of the full year periods are shown in the following tables :—

Boys.

Variability for —	Ages 5·5	6·5	7·5	8·5	9·5	10·5	11·5	12·5	13·5	14·5	15·5	
1. The whole year	±5·12	±4·82	±5·08	±5·58	±5·59	±6·15	±6·15	±6·80	±7·79	±8·55	±9·00	
2. Quarterly periods	±4·70	±4·65	±4·77	±5·38	±5·35	±6·02	±6·08	±6·61	±7·63	±8·22	±8·91*	

* Six-monthly periods.

Girls.

Variability for —	Ages 5·5	6·5	7·5	8·5	9·5	10·5	11·5	12·5	13·5	14·5	15·5	16·5
1. The whole year .	±4·80	±4·80	±5·30	±5·53	±5·32	±6·20	±6·52	±6·96	±7·17	±6·35	±5·86	±5·35
2. Quarterly periods	±4·62	±4·73	±5·21	±5·34	±5 18	±5·89	±6·38	±6·90	±6·85	±6·13	±5·73	±5·63

In the following tables I give the averages of our series, with the corrections due to the considerations outlined in the preceding remarks. In interpreting these averages it must be understood that the *average* sizes do not represent the *typical* values of the measurement, because during childhood the distribution of the measurements is asymmetrical. Owing to the fact that children do not all grow at the same rate, but that some are retarded in development, while others are advanced beyond their age, the rate of growth differs in such a manner that the general distribution of the measurements does not follow the law of probabilities. I will explain this by considering the growth of sixteen-year-old girls. A great many of these girls will have reached the adult stage, and will have ceased growing, while others are not developed according to their age, and continue to grow. If we consider for a moment only those girls who as adults will have a certain stature, we recognise that many will have this stature, while others will still be shorter ; that is to say, the distribution of their statures will be asymmetrical. The same is true of all the other statures, and it will be seen for this reason that the whole distribution will be asymmetrical. On account of this peculiarity of the distribution of statures during the years of growth, the average values of the measurements must not be considered as the types of development for the various ages,

but as the nearest indices which can be obtained of the typical values. The following table shows the statures of Toronto children as compared to those of American children :—

Statures of Boys.

Ages . . .	5·5	6·5	7·5	8·5	9·5	10·5	11·5	12·5	13·5	14·5	15·5	16·5
Toronto . . .	106·2	111·1	116·8	121·8	126·7	131·5	135·9	140·1	145·4	151·5	157·6	
American . .	105·9	111·6	116·8	122·0	126·9	131·8	136·2	140·7	146·0	152·4	159·7	

Statures of Girls.

Ages . . .	5·5	6·5	7·5	8·5	9·5	10·5	11·5	12·5	13·5	14·5	15·5	16·5
Toronto . . .	105·2	110·4	116·0	120·7	125·3	130·9	136·1	141·9	148·0	153·3	156·0	156·7
American . .	104·9	110·1	116·1	121·2	126·1	131·3	136·6	142·5	148·7	153·5	156·5	158·0

Variability of Boys' Statures.

Ages . . .	5·5	6·5	7·5	8·5	9·5	10·5	11·5	12·5	13·5	14·5	15·5	16·5
Toronto . . .	±5·12	±4·82	±5·08	±5·58	±5·59	±6·15	±6·15	±6·80	±7·79	±8·55	±9·00	—
American . .	±4·80	±4·92	±5·22	±5·53	±5·66	±5·90	±6·32	±6·80	±7·71	±8·66	±8·87	±7·75

Variability of Girls' Statures.

Ages . . .	5·5	6·5	7·5	8·5	9·5	10·5	11·5	12·5	13·5	14·5	15·5	16·5
Toronto . . .	±4·80	±4·80	±5·30	±5·53	±5·32	±6·20	±6·52	±6·96	±7·17	±6·35	±5·86	±5·35
American . .	±4·64	±5·07	±5·25	±5·58	±5·73	±6·18	±6·83	±7·57	±7·37	±6·69	±5·96	±5·79

I have classed the material collected in the Toronto schools according to the order of birth of the children, in order to investigate if there is any difference between the first-born children and later-born children. An investigation of this subject, based upon material collected in Oakland, Cal., showed that a difference of this character exists, the first-born children, beginning with the sixth year, being taller and heavier than later-born children. The following table contains the results of this investigation, based on the Toronto material :—

Differences between Average Statures of Boys and Statures of Children of Various Orders of Birth, and their Mean Errors (mm.).

Age Years	First-born	Second-born	Third-born	Fourth-born	Fifth-born	Sixth-born	Seventh-born	Eighth-born	Ninth-born
5·5	+6±7·2	±0±6·1	−3±6·6	+6±7·8	−2±9·0	−16±11·8	−14±12·7	−13±14·0	—
6·5	+7±4·7	−3±4·4	−4±5·0	+2±5·6	+1±6·2	−4±8·3	−13±8·9	−16±10·2	−4±11·5
7·5	+3±4·0	+2±4·4	±0±5·0	±0±5·5	−5±6·6	+2±6·9	+1±8·5	−6±9·8	−13±12·4
8·5	+2±4·2	+4±4·5	−2±4·8	±0±5·6	−10±6·6	±0±7·2	−8±7·2	−6±9·6	−19±12·3
9·5	+4±4·1	−7±4·6	±0±5·1	±0±5·6	−13±6·3	−11±6·9	−10±8·3	+3±9·5	−13±11·3
10·5	−3±4·7	+5±5·5	−1±5·6	−6±6·2	−8±7·1	+6±7·4	−5±9·5	−15±10·8	+6±14·3
11·5	−1±5·0	+3±5·4	−2±5·9	−8±6·3	−2±6·9	−8±7·6	+6±10·1	−5±11·8	−15±15·5
12·5	−2±5·7	+1±6·3	+2±6·5	−6±7·9	+3±10·1	−4±8·1	−11±9·6	−16±12·2	−2±15·8
13·5	+7±6·3	+11±7·8	−13±9·1	−1±9·3	+2±12·1	−14±11·6	−31±15·9	+18±16·6	+9±22·6
14·5	+5±10·2	+1±10·8	+5±11·1	+2±13·6	−14±12·7	−12±16·8	−15±20·6	−5±24·1	—
15·5	−1±14·2	−1±20·0	−32±20·6	−8±18·4	+2±21·3	—	—	—	—
—	+2·3±1·6	+0·8±1·7	—	—	—	—	—	—	—

It appears, therefore, that the result is not quite certain, since the error is great as compared to the average difference. Since for later-born children the errors of the average are very great, I have not carried out the calculation. I have calculated the same differences, and their mean errors, for the statures of girls :—

Differences between the Average Statures of Girls and the Statures of First-born Girls, and their Mean Errors.

Ages		Ages	
6·5	+ 3 ± 4·7	13·5	+ 9 ± 6·7
7·5	+ 3 ± 4·5	14·5	+ 4 ± 7·2
8·5	+ 14 ± 4·6	15·5	− 8 ± 8·3
9·5	+ 7 ± 4·6	16·5	+ 4 ± 10·3
10·5	+ 1 ± 5·1		
11·5	+ 6 ± 5·1	Average	+ 5·3 ± 1·9
12·5	+ 6 ± 6·1		

This result is much more certain than that obtained by means of the measurements of boys. When we combine both we find that the difference of stature between the average of all the children and the average of the first-born children is in favour of the latter. The amount is 3·6 mm., with a mean error of 1·2 mm. It is therefore certain that first-born children are somewhat taller than later-born children, but the amount of the difference is not definitely known.

It is of interest to investigate the constitution of families. I have done so by recording for each year the number of children according to the order of their birth.

Total Number of Children examined according to the Order of Birth.

Order	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th	15th	16th	17th	18th	19th	Total
	3,392	2,880	2,385	1,858	1,368	1,021	790	511	360	226	116	60	29	14	5	1	2	—	1	15,019
Per cent.	22·6	19·2	15·9	12·4	9·1	6·8	5·3	3·4	2·4	1·5	0·8	0·4	0·2	0·1	—	—	—	—	—	
Mean error	±0·3	±0·3	±0·3	±0·3	±0·2	±0·2	±0·2	±0·1	±0·1	±0·1	±0·1	—	—	—						

From these data we can obtain an insight into the constitution of families in Toronto. The difference between the number of first- and second-born children shows the numbers of mothers having one child only ; the difference between the second- and third-born children gives the number of mothers who have two children, &c. In this manner the following table has been obtained :—

Number of Children		Number of Children	
1	15·1 ± 0·6	9	3·9 ± 0·3
2	14·6 ± 0·6	10	3·2 ± 0·3
3	15·5 ± 0·6	11	1·7 ± 0·2
4	14·5 ± 0·6	12	0·9 ± 0·2
5	10·2 ± 0·5	13	0·4 ± 0·1
6	6·8 ± 0·5	14	0·3
7	8·2 ± 0·5	15	0·1
8	4·5 ± 0·4	16	0·1

It is of interest to compare the number of children according to the order of their birth in various cities. I have tabulated for this purpose

the number of children in Oakland, Cal., according to the order of their birth, and found the following result :—

	Toronto	Oakland, Cal.
	per cent.	per cent.
Number of first-born children	22·6	26·4
„ second-born children	19·2	22·3
„ third-born „	15·9	17·0
„ fourth-born „	12·4	12·3
„ fifth-born and later	30·0	22·0

It appears from this table that families in Toronto are much larger than those in Oakland, Cal. There are 26·4 per cent. of first-born children in Oakland as compared to 22·6 per cent. of first-born children in Toronto, while fifth- and later-born children form only 22 per cent. of the total population in Oakland, and in Toronto they form 30 per cent. This indicates that the size of the families is considerably smaller in Oakland as compared to those in Toronto. It is difficult to judge what the social causes of this phenomenon may be. The general conditions of life and the nationalities composing the population certainly have a great influence upon the size of the families. In order to investigate this question I have tabulated the Toronto girls according to their order of birth and the nationalities to which they belong. The results of this tabulation are given in the following table :—

Nationalities of Grandparents of Toronto Girls.

Order of Birth	English	Scotch	Irish	Canadian	American	German	French	Miscellaneous	Cases
1st	39·0	16·5	23·9	12·4	3·5	2·0	0·4	2·3	6,753
2nd	41·0	15·1	23·8	11·4	3·3	2·4	0·6	2·4	5,878
3rd	40·8	16·7	23·5	10·5	3·0	2·8	0·9	2·5	4,883
4th and 5th	44·4	17·1	23·6	7·3	2·7	2·0	0·4	2·4	6,728
6th and later	47·3	16·4	23·0	5·1	3·0	2·1	0·3	2·7	6,388
Total	42·5	16·4	23·6	9·3	3·1	2·3	0·5	2·5	30,630

That is to say, the percentage of Scotch, Irish, American, German, French, and miscellaneous grandparents remains the same for all the children, no matter what the order of their birth may be. There is, however, a fundamental difference in the distribution of English and Canadian children. Among the first-born children 39 per cent. of the grandparents are of English birth. Among the later-born children 47 per cent. are of English birth. This indicates that in families whose grandparents are of English birth we find a greater number of children than among the other nationalities. The reverse is the case among the Canadians. There is a decided decrease in the number of grandparents of Canadian birth among the later-born children. This indicates that the families of Canadian descent are small. It is very peculiar that these differences are found only among the English and Canadians, and that there are no differences in distribution among all the other nationalities.

This table is of importance also as showing that the difference in stature of first-born children and of later-born children cannot be ascribed to the influence of differences in nationalities. The change of proportion of English and Canadian blood in the grand total is so slight that we cannot possibly assume that it will materially modify the average stature of the people We may therefore safely say that the difference in stature of first-born and later-born children is not influenced by complications resulting from the influence of nationalities.

APPENDIX II.

Origin of the French Canadians. *By* B. SULTE.

We intend to explain the formation of a certain number of French people into settlers on the St. Lawrence during the seventeenth century, and from which has sprung the present French Canadian population.

(1) Acadia was peopled without any kind of organisation between 1636 and 1670, or thereabouts. No one has yet satisfactorily demonstrated where the French of that colony came from, though their dialect would indicate their place of origin to be in the neighbourhood of the mouth of the river Loire. They are distinct from the French Canadians in some particulars, and not allied by marriages with the settlers of the St. Lawrence.

Brittany never traded with Canada, except that, from 1535 to 1600, some of the St. Malo navigators used to visit the Lower St. Lawrence and barter with the Indians, but there were no European settlers in the whole of that pretended New France. Afterwards the *régime* of the fur companies, which extended from 1608 to 1632, was rather adverse to colonisation, and we know by Champlain's writings that no resident, no 'habitant,' tilled the soil during that quarter of a century. The men who were employed at Quebec and elsewhere by the companies all belonged to Normandy, and, after 1632, twelve or fifteen of them married the daughters of the other Normans recently arrived to settle for good. Brittany remained in the background after, as well as before, 1632. This is confirmed by an examination of the parish registers, where seven or eight Bretons only can be found during the seventeenth century.

(2) The trade of Canada remained in the hands of the Dieppe and Rouen merchants from 1633 to 1663. It consisted solely in fish and fur, especially the latter. Therefore any man of these localities who wished to go to Canada to settle there was admitted on the strength of the charter of the Hundred Partners, who were bound to send in people brought up to farming in order to cultivate the soil of the colony, but who did nothing of the kind, except transporting the self-sacrificing emigrants. There is even indication that the transport was not free. The other seaports of France having no connection with Canada before 1662, five or six families only came from these ports.

(3) When the business of the Hundred Partners collapsed about 1660, Paris and Rochelle came in for a certain share of interest, as they were the creditors of the expiring company, and soon we notice immigrants arriving from the neighbouring country places of those two cities.

The settlers (1633-1663) came, as a rule, individually, or in little

groups of three or four families related to each other, as many immigrants from various countries do at the present day.

From an examination of family and other archives, extending now over thirty years of labour, we make the following deductions :—

Perche, Normandy, Beauce, Picardy, and Anjou (they are here in their order of merit) contributed about two hundred families from 1633 to 1663, the period of the Hundred Partners' *régime*. By natural growth these reached the figure of 2,200 souls in 1663.

In 1662-63 there came about one hundred men from Perche and 150 from Poitou, Rochelle, and Gascony, with a small number of women. This opens a new phase in the history of our immigration by introducing Poitou and Rochelle amongst the people of the northern and western Province of France, already counting two generations in the three districts of Quebec, Three Rivers, and Montreal.

(4) After 1665 the city of Paris, or rather the small territory encircling it, contributed a good share. The whole of the south and east of France had no connection with Canada at any time. Normandy, Perche, Maine, Anjou, Touraine, Poitou, Saintonge, Angoumois, Guienne, and Gascony—on a straight line from north to south—furnished the whole of the families now composing the French Canadian people.

(5) From 1667 till 1672 a committee was active in Paris, Rouen, Rochelle, and Quebec to recruit men, women, and young girls for Canada. This committee succeeded in effecting the immigration into Canada of about four thousand souls. Half of the girls were from country places in Normandy, and the other half were well-educated persons, who did not go into the rural districts, but married in Quebec, Three Rivers, and Montreal.

Since these people were brought to Canada by the organised efforts of a committee, we might expect to find some detailed record of their arrival and origin, but as yet no such information is known to exist. We are merely told by contemporary writers of that period how many arrived at such and such a date, and the port of embarkation—that is all. Happily, the church registers, notarial deeds, papers of the courts of justice, and several classes of public documents show abundantly the places of origin of those who actually established their families here.

(6) In 1673 the King stopped all immigration, and this was the end of French attempts to colonise Canada. The settlers, of course, remained as they were, and in 1680 the whole population amounted only to 9,700 souls. Double this figure every thirty years, and we have the present French population of the Province of Quebec, Ontario, and that of the groups established now in the United States.

(7) The bulk of the men who came during 1633-1673 were from rural districts, and took land immediately on their arrival here. It is noticeable that a large number of them had besides a trade of their own, such as that of carpenter, cooper, blacksmith, so that a small community of twenty families possessed among themselves all the requirements of that kind that could be useful.

No land was given to those who did not show qualification for agricultural pursuits, and they were placed for three years in the hands of an old farmer before the title of any property was signed in their favour.

(8) In regard to troops disbanded in Canada at various dates much misunderstanding exists. The real facts are as follows :—Before 1665 no soldiers, therefore no disbandment; from 1665 to 1673 a few isolated

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cases; the regiment of Carignan came to Canada in 1665 and left in 1669, with the exception of one company, which eventually was disbanded here; from 1673 to 1753 the garrisons of Canada consisted, as a rule, of about three hundred men in all, under an infantry captain, sometimes called the Major when no longer young.

Besides that 'detachment,' as it was called, an addition of six or seven companies was sent in the colony during the years 1684–1713, on account of the war. From 1753 to 1760 the regiments sent under Dieskau and Montcalm (seven-year war) do not seem to have left any number of men in the country. Therefore the 'military element' had very little to do in the formation of our French population.

(9) The date of the arrival of most of the heads of families will never be ascertained accurately. In order to face that difficulty with chances of success I have resorted to the following plan:—Prepare an alphabetical list of all the heads of families, and afterwards, when consulting the old archives and various sources of information, be careful in comparing your list with any date or other indication you may find. In this manner it turns out that a man was married in 1664 in Quebec, was a witness before the court in 1658, made a deed in 1672, in which he states that 'before leaving Alençon in 1652 to come to Canada.' . . . The date of '1652' and 'Alençon' are the very things I want; therefore I erase '1664' and '1658,' previously entered, and keep the oldest date, with the name of the locality. This process is slow but not the surest, but still it is the best yet found to reach a fair approximate estimate. Finally, I hope to publish that tabular statement in a couple of years from now.

(10) On the subject of uniformity of language, which is so remarkable amongst the French Canadians, we may observe that it is the best language spoken from Rochelle to Paris and Tours, and thence to Rouen. Writers of the seventeenth century have expressed the opinion that French Canadians could understand a dramatic play as well as the *élite* of Paris; no wonder to us, since we know that theatricals were common occurrences in Canada, and that the 'Cid' of Corneille was played in Quebec in 1645, the 'Tartuffe' of Molière in 1677, and so on. The taste for music and love for songs are characteristics of the French Canadian race. The facility with which they learn foreign languages is well known in America, where they speak Indian, Spanish, and English as well as their own tongue.

Anthropometric Measurements in Schools.—Report of the Committee, consisting of Professor A. MACALISTER (*Chairman*), Professor B. WINDLE (*Secretary*), Mr. E. W. BRABROOK, Professor J. CLELAND, *and* Dr. J. G. GARSON.

THE work done by this Committee during the past year has consisted solely in the distribution to applicants of the Rules for Measurement drawn up by the Committee, and in advising those responsible for physical measurements in schools as to points respecting which they had written for advice. A further supply of printed directions has been procured, the first set having become exhausted.

The Committee ask for their reappointment and for a further grant for printing and postage of 5*l.*, the grant for that sum received several years ago having been exhausted.