

The North-Western Tribes of Canada.—Twelfth and Final Report of the Committee, consisting of Professor E. B. TYLOR (Chairman), Sir CUTHBERT E. PEEK (Secretary), Dr. G. M. DAWSON, Mr. R. G. HALIBURTON, Mr. DAVID BOYLE, and Hon. G. W. ROSS, appointed to investigate the Physical Characters, Languages, and Industrial and Social Conditions of the North-Western Tribes of the Dominion of Canada.

| | PAGE |
|--|------|
| I. <i>Physical Characteristics of the Tribes of British Columbia, by FRANZ BOAS and LIVINGSTON FARRAND</i> | 628 |
| II. <i>The Chilcotin, by LIVINGSTON FARRAND</i> | 645 |
| III. <i>The Social Organisation of the Haida, by FRANZ BOAS</i> | 648 |
| IV. <i>Linguistics, by FRANZ BOAS</i> | 654 |
| V. <i>Summary of the Work of the Committee in British Columbia, by FRANZ BOAS</i> | 667 |
| APPENDIX.— <i>Index to Reports, IV.—XII.</i> | 684 |

THE following Report contains the results of field-work undertaken under the auspices of the Committee during the summer of 1897. The work was carried out by Messrs. Franz Boas and Livingston Farrand. A brief summary of the results of the work of the Committee has been drawn up by Dr. Boas, and forms part of this Report.

While the work of the Committee has materially advanced our knowledge of the tribes of British Columbia, the field of investigation is by no means exhausted. The languages are known only in outline. More detailed information on the physical types may clear up several points that have remained obscure, and a more detailed knowledge of the ethnology of the northern tribes seems desirable. Ethnological evidence has been collected bearing upon the history of development of the culture-area under consideration; but no archæological investigations have been carried on which would help materially in solving these problems.

For these reasons it is a matter of congratulation to know that the ethnological investigation in British Columbia will not cease with the operations inaugurated by the Committee. Ethnological and archæological work in the Province, in the adjoining States and Territories of the United States, and on the coast of Siberia is being carried on by expeditions the expense of which is borne by Mr. Morris K. Jesup, President of the American Museum of Natural History. It is hoped that these investigations may carry the work initiated by this Committee a step farther.

→ I. *Physical Characteristics of the Tribes of British Columbia.*
By FRANZ BOAS and LIVINGSTON FARRAND.

The anthropometric measurements made during the season of 1897 were carried out by both of us according to the system applied in the previous Reports of the Committee. Before entering into a discussion of the results, it is necessary to show that the measurements of the two observers are comparable. We have carried out this comparison for the head measurements in which the personal equation is liable to attain considerable value.

We give here the averages of the various measurements taken on I., Stlēmqō'-lëqumq men; II., Stlēmqō'-lëqumq women; III., Chilcotin men. When we call A the averages and E the mean errors, we find:—

| | Length of Head | | Breadth of Head | | Height of Face | |
|------|----------------|------------------|-----------------|------------------|----------------|------------------|
| | Boas A. E. | Farrand A. E. | Boas A. E. | Farrand A. E. | Boas A. E. | Farrand A. E. |
| I. | 186.0 ± 0.9 | 187.1 ± 0.9 | 158.5 ± 0.8 | 157.9 ± 1.2 | 119.9 ± 1.0 | 121.5 ± 1.5 |
| II. | 179.6 ± 1.4 | 177.9 ± 1.4 | 149.8 ± 0.9 | 151.9 ± 1.1 | 114.5 ± 1.4 | 114.5 ± 1.4 |
| III. | 187.0 ± 1.0 | 186.1 ± 1.0 | 159.6 ± 1.2 | 157.9 ± 0.9 | 124.3 ± 1.4 | 124.3 ± 1.3 |

| | Breadth of Face | | Height of Nose | | Breadth of Nose | |
|------|-----------------|------------------|----------------|------------------|-----------------|------------------|
| | Boas A. E. | Farrand A. E. | Boas A. E. | Farrand A. E. | Boas A. E. | Farrand A. E. |
| I. | 149.0 ± 0.8 | 148.8 ± 0.9 | 52.5 ± 0.6 | 50.9 ± 0.8 | 40.6 ± 0.5 | 39.4 ± 0.5 |
| II. | 138.0 ± 0.7 | 139.9 ± 1.2 | 49.1 ± 1.1 | 48.6 ± 0.9 | 35.5 ± 0.6 | 35.2 ± 0.6 |
| III. | 149.1 ± 0.7 | 147.2 ± 1.0 | 53.4 ± 0.6 | 52.9 ± 0.6 | 39.9 ± 0.5 | 38.7 ± 0.5 |

The differences between these averages are throughout slight. In order to show the comparability of the measurements still more clearly we give here the values of the differences and their errors, and the average difference and its error for each measurement which have been obtained by weighting the individual differences.

Differences between Measurements taken by Boas and Farrand and their Errors.

| | Length of Head | Breadth of Head | Height of Face | Breadth of Face | Height of Nose | Breadth of Nose |
|----------|----------------|-----------------|----------------|-----------------|----------------|-----------------|
| I. | +1.1 ± 1.3 | -0.6 ± 1.4 | +1.6 ± 1.8 | -0.2 ± 1.1 | -1.6 ± 1.0 | -1.2 ± 0.7 |
| II. | -1.7 ± 2.0 | +2.1 ± 1.4 | 0.0 ± 2.0 | +1.9 ± 1.4 | -0.5 ± 1.4 | -0.3 ± 0.8 |
| III. | -0.9 ± 1.4 | -1.7 ± 1.5 | 0.0 ± 1.9 | -1.9 ± 1.2 | -0.5 ± 0.8 | -1.2 ± 0.7 |
| Average. | +0.1 ± 0.8 | -0.1 ± 0.8 | +0.6 ± 1.1 | -0.3 ± 0.7 | -0.8 ± 0.5 | -0.9 ± 0.4 |

It appears from this table that the measurements are strictly comparable, and that the personal equation may be neglected.

The tribes which were principally studied are the Northern Shuswap, the Lillooet, the Chilcotin, and the northern tribes of the coast. The Shuswap are divided into divisions in a manner similar to the divisions of the Ntlakya'pamuq. We have collected measurements of the Stlēmqō'-lëqumq, the division of the tribe living on Fraser River, north of the town of Lillooet, of the Stl'atēmq of North Thompson River, of the Shuswap'ō'e of Kamloops, and a few of the group inhabiting Buonaparte River. We have treated the Lillooet of Fraser River, who are mixed with Shuswap, and Ntlakya'pamuq separately from the purer groups of Seton and Anderson Lakes. Following are the tables of measurements:—

Breadth of Nose of Men.

| Mm. | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | Average | Number of Cases |
|--------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---------|-----------------|
| <i>Tribe:</i> | | | | | | | | | | | | | | | | | | |
| Haida | — | — | — | — | — | 1 | 3 | 2 | 1 | — | 1 | — | — | — | 1 | — | 40.7 | 9 |
| Nass River Indians | — | — | 1 | 1 | 2 | 3 | 3 | 1 | 3 | 4 | 3 | — | — | 1 | — | — | 39.8 | 22 |
| Tsimshian | 1 | — | — | — | 1 | 3 | 2 | 1 | 4 | 1 | — | 1 | — | — | — | — | 39.4 | 14 |
| Bilqula | — | — | 3 | 4 | 2 | 5 | 1 | 5 | 2 | 3 | — | — | — | — | — | 1 | 38.8 | 26 |
| Hé'iltuk | — | — | — | — | — | — | — | — | 1 | 1 | 2 | 1 | — | — | — | — | 42.6 | 5 |
| Awí'ky'ênôq | — | — | — | 1 | 1 | — | — | 2 | 2 | — | 1 | — | — | — | — | — | 39.7 | 7 |
| Kwakiutl | — | — | 4 | 3 | 4 | 8 | 8 | 6 | 1 | 6 | 3 | 1 | — | 1 | — | — | 39.3 | 45 |
| Nkamteí'nëmuq | — | — | 2 | 4 | 1 | 4 | — | 2 | 3 | — | — | — | — | — | — | — | 37.8 | 16 |
| Lillooet (Anderson Lake) | — | — | 1 | — | — | 3 | 1 | 3 | 1 | 3 | — | — | — | — | — | — | 39.6 | 12 |
| Lillooet (Fraser River) | — | 1 | 1 | — | — | 4 | 2 | 1 | 1 | 1 | 1 | — | — | — | — | — | 38.8 | 12 |
| Kamloops | — | — | — | — | — | 2 | 1 | 3 | 5 | 1 | 2 | — | — | — | — | — | 40.6 | 14 |
| Stlëmqó'lëqumq | — | — | 2 | — | 4 | 3 | 6 | 6 | 3 | 9 | 3 | 3 | — | — | — | — | 40.2 | 39 |
| Chilcotin | — | 1 | — | 3 | 3 | 7 | 5 | 4 | 7 | 4 | 1 | 1 | — | — | — | — | 39.3 | 36 |

Breadth of Nose of Women.

| Mm. | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | Average | Number of Cases |
|--------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---------|-----------------|
| <i>Tribe:</i> | | | | | | | | | | | | | | | | |
| Haida | — | — | — | — | 1 | 1 | 1 | — | 1 | — | — | — | — | — | 35.7 | 4 |
| Tsimshian | — | — | — | — | 1 | — | — | — | — | 1 | — | — | 1 | — | 38.3 | 3 |
| Bilqula | — | — | — | 1 | 2 | — | 1 | 2 | — | 1 | — | — | — | — | 34.8 | 7 |
| Hé'iltuk | — | — | — | — | — | — | — | — | 1 | 1 | — | 1 | — | 1 | 39.5 | 4 |
| Awí'ky'ênôq | — | — | 1 | — | 1 | — | 6 | 1 | 1 | 1 | — | — | — | — | 35.0 | 11 |
| Ntlakyapamuq'ó'e | — | 3 | 3 | 5 | 5 | 6 | 5 | 4 | 2 | — | 1 | — | — | — | 34.8 | 33 |
| Lillooet (Anderson Lake) | — | 1 | 3 | — | 3 | — | 1 | 3 | 4 | 2 | — | 2 | — | — | 36.2 | 19 |
| Lillooet (Fraser River) | — | — | 1 | 2 | 3 | 1 | 5 | 2 | — | — | — | — | — | — | 34.9 | 14 |
| Stlëmqó'lëqumq | — | 1 | — | 2 | 3 | 4 | 6 | 2 | 4 | 3 | 3 | — | — | — | 35.4 | 28 |
| Chilcotin | — | 1 | — | 1 | — | 1 | 2 | 4 | 3 | 2 | — | 1 | 1 | — | 36.1 | 16 |

Length-breadth Index. Total Series.

| Per cent. | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | Average | Number of Cases | |
|-----------------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---------|-----------------|-----|
| <i>Tribe:</i> | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Haida | — | — | — | — | 2 | 1 | 3 | 1 | 2 | 2 | 2 | — | 1 | 1 | 1 | — | 1 | — | — | — | — | — | — | — | — | 82.7 | 17 |
| Nass River Indians | — | — | — | 3 | 2 | 4 | 5 | 14 | 8 | 4 | 11 | 9 | 5 | 8 | — | 2 | — | — | — | — | — | — | — | — | — | 82.9 | 75 |
| Tsimshian | 1 | — | — | 2 | — | — | 3 | 2 | 2 | 2 | 3 | 1 | 1 | — | — | 1 | — | — | — | — | — | — | — | — | — | 81.8 | 18 |
| Bilqula, undeformed | — | — | — | — | 1 | 2 | 2 | 3 | 3 | 3 | 1 | 2 | 6 | 3 | 5 | 1 | 2 | — | — | — | — | — | — | — | — | 84.5 | 34 |
| Awí'ky'ênôq, undeformed | — | — | — | — | — | — | — | 1 | — | 1 | 1 | 1 | — | — | — | 2 | — | — | — | — | — | — | — | — | — | 85.2 | 6 |
| Kwakiutl, undeformed | — | — | — | — | — | — | 2 | 2 | 4 | 4 | 1 | 2 | 1 | 4 | 1 | — | — | — | — | — | — | — | — | — | — | 83.7 | 21 |
| Delta of Fraser River, undeformed | — | — | — | — | — | — | 2 | 1 | — | 4 | 5 | 9 | 5 | 8 | 3 | 6 | 3 | 3 | 2 | 2 | 1 | — | — | — | — | 86.8 | 54 |
| Spuzzum | — | — | 1 | — | — | 1 | 1 | 1 | 1 | 3 | 4 | 1 | — | 2 | 1 | — | — | — | — | 2 | — | — | — | — | — | 84.2 | 18 |
| Utá'mk't | — | — | — | — | 1 | 1 | 1 | 4 | 1 | 8 | 6 | 8 | 9 | 8 | 1 | 5 | 2 | 5 | 1 | — | 1 | — | — | — | — | 85.8 | 62 |
| Ntlakyapamuq'ó'e | — | — | — | 3 | 6 | 4 | 8 | 5 | 8 | 10 | 14 | 11 | 4 | 6 | 3 | 4 | 2 | 1 | 1 | — | — | — | — | 1 | — | 83.5 | 91 |
| Nkamteí'nëmuq | — | — | 2 | 2 | — | 5 | 6 | 2 | 5 | 5 | 6 | 3 | 5 | 1 | — | 1 | — | — | — | 1 | — | — | — | — | — | 82.4 | 44 |
| Harrison Lake | — | — | — | — | — | — | — | — | 3 | 1 | 4 | 1 | 1 | 3 | 3 | 1 | 5 | 4 | 2 | 5 | — | — | — | 1 | 1 | 88.7 | 35 |
| Lillooet (Anderson Lake) | — | — | — | — | — | 2 | 1 | 3 | 2 | 4 | 3 | 2 | 10 | 5 | 4 | 3 | 2 | 4 | 2 | 2 | 1 | 1 | — | — | — | 86.6 | 51 |
| Lillooet (Fraser River) | — | — | — | 1 | — | 1 | 2 | 5 | 3 | 4 | 4 | 6 | 8 | 5 | 4 | — | 5 | 3 | — | 1 | — | — | — | — | — | 85.3 | 52 |
| Stlëmqó'lëqumq | — | — | — | — | — | 4 | 4 | 5 | 8 | 12 | 9 | 11 | 20 | 16 | 10 | 5 | 4 | 1 | 1 | 1 | 1 | — | — | — | — | 84.4 | 112 |
| Sti'atëmq | — | — | — | — | — | — | 1 | 1 | 1 | — | 2 | 3 | — | 2 | 3 | 2 | — | — | — | — | — | — | — | — | — | 85.5 | 15 |
| Buonaparte | — | — | — | — | — | — | — | — | — | 1 | 1 | 3 | 2 | — | 1 | 2 | 1 | — | — | — | — | — | — | — | — | 86.4 | 11 |
| Chilcotin | — | — | — | — | — | 2 | 2 | 4 | 3 | 3 | 9 | 14 | 8 | 9 | 8 | 4 | 4 | 2 | — | 1 | 2 | — | — | — | — | 85.8 | 75 |

Index of Length of Arm of Men.

| Per cent. | { from to | 40.5 | 41.0 | 41.5 | 42.0 | 42.5 | 43.0 | 43.5 | 44.0 | 44.5 | 45.0 | 45.5 | 46.0 | 46.5 | 47.0 | 47.5 | 48.0 | Average | Number of Cases |
|---------------------------|--------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------|-----------------|
| | | 40.9 | 41.4 | 41.9 | 42.4 | 42.9 | 43.4 | 43.9 | 44.4 | 44.9 | 45.4 | 45.9 | 46.4 | 46.9 | 47.4 | 47.9 | 48.4 | | |
| <i>Tribe:</i> | | | | | | | | | | | | | | | | | | | |
| Lillooet (Anderson L.) | | — | — | 1 | — | — | 1 | 2 | 1 | 1 | 2 | 2 | 2 | — | — | — | — | 44.7 | 12 |
| Lillooet (Fraser R.) | | — | — | — | — | 1 | — | 2 | 3 | 3 | 1 | — | 1 | — | — | — | 44.4 | 11 | |
| Shuswap (Stlēm-qō'lequmq) | | — | 1 | — | 1 | 4 | 3 | 5 | 8 | 5 | 5 | 3 | 2 | — | — | — | 44.1 | 37 | |
| Chilcotin | | 1 | — | 2 | — | 1 | 3 | 9 | 2 | 7 | 4 | 5 | — | 1 | — | 1 | 44.4 | 36 | |

Index of Length of Arm of Women.

| Per cent. | { from to | 39.0 | 39.5 | 40.0 | 40.5 | 41.0 | 41.5 | 42.0 | 42.5 | 43.0 | 43.5 | 44.0 | 44.5 | 45.0 | 45.5 | 46.0 | 46.5 | 47.0 | 47.5 | 48.0 | 48.5 | Average | Number of Cases |
|---------------------------|--------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------|-----------------|
| | | 39.4 | 39.9 | 40.4 | 40.9 | 41.4 | 41.9 | 42.4 | 42.9 | 43.4 | 43.9 | 44.4 | 44.9 | 45.4 | 45.9 | 46.4 | 46.9 | 47.4 | 47.9 | 48.4 | 48.9 | | |
| <i>Tribe:</i> | | | | | | | | | | | | | | | | | | | | | | | |
| Lillooet (Anderson L.) | | 1 | — | — | — | — | — | 1 | 2 | 3 | 3 | 3 | — | 1 | 3 | — | 1 | — | — | — | 1 | 44.1 | 19 |
| Lillooet (Fraser R.) | | — | — | — | — | — | 2 | 1 | — | 3 | 3 | 2 | — | 1 | 3 | — | 1 | — | — | — | — | 44.1 | 14 |
| Shuswap (Stlēm-qō'lequmq) | | — | — | — | — | 1 | — | — | 2 | 2 | 8 | 3 | — | 5 | 2 | 3 | — | — | 1 | — | 1 | 44.6 | 28 |
| Chilcotin | | — | — | — | — | — | — | 2 | — | 2 | 2 | 3 | 1 | 1 | 1 | 1 | — | 1 | — | — | — | 44.1 | 15 |

Index of Height sitting of Men.

| Per cent. | { from to | 48.0 | 48.5 | 49.0 | 49.5 | 50.0 | 50.5 | 51.0 | 51.5 | 52.0 | 52.5 | 53.0 | 53.5 | 54.0 | 54.5 | 55.0 | Average | Number of Cases |
|---------------------------|--------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------|-----------------|
| | | 48.4 | 48.9 | 49.4 | 49.9 | 50.4 | 50.9 | 51.4 | 51.9 | 52.4 | 52.9 | 53.4 | 53.9 | 54.4 | 54.9 | 55.4 | | |
| <i>Tribe:</i> | | | | | | | | | | | | | | | | | | |
| Lillooet (Anderson L.) | | 1 | — | — | 2 | — | 1 | 1 | 1 | — | 1 | 1 | 1 | 2 | — | 1 | 52.0 | 12 |
| Lillooet (Fraser R.) | | — | — | — | — | — | 1 | 1 | — | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 52.9 | 12 |
| Shuswap (Stlēm-qō'lequmq) | | — | — | 1 | 1 | 2 | 3 | 3 | 2 | 6 | 5 | 6 | 2 | 5 | — | 2 | 52.4 | 38 |
| Chilcotin | | — | — | 1 | 2 | — | 2 | 2 | 2 | 6 | 4 | 5 | 3 | 2 | 4 | — | 52.5 | 33 |

Index of Height sitting of Women.

| Per cent. | { from to | 49.0 | 49.5 | 50.0 | 50.5 | 51.0 | 51.5 | 52.0 | 52.5 | 53.0 | 53.5 | 54.0 | 54.5 | 55.0 | Average | Number of Cases |
|---------------------------|--------------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------|-----------------|
| | | 49.4 | 49.9 | 50.4 | 50.9 | 51.4 | 51.9 | 52.4 | 52.9 | 53.4 | 53.9 | 54.4 | 54.9 | 55.4 | | |
| <i>Tribe:</i> | | | | | | | | | | | | | | | | |
| Lillooet (Anderson Lake) | | 1 | 1 | — | 1 | 7 | 2 | — | 3 | 2 | — | 1 | — | 1 | 51.8 | 19 |
| Lillooet (Fraser River) | | — | — | 1 | 1 | 1 | 2 | 2 | 2 | 1 | 2 | 1 | — | 1 | 52.6 | 14 |
| Shuswap (Stlēm-qō'lequmq) | | — | — | — | 2 | 2 | 2 | 6 | 8 | 1 | 3 | 1 | 1 | 2 | 52.8 | 28 |
| Chilcotin | | — | — | 1 | 2 | 1 | 3 | — | 2 | 2 | — | — | 1 | 52.4 | 14 | |

Index of Finger-reach of Men.

| Per cent. | { from to | 98 | 99 | 100 | 101 | 102 | 103 | 104 | 105 | 106 | 107 | 108 | 109 | 110 | Average | Number of Cases |
|---------------------------|--------------|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------|-----------------|
| | | 98 | 99 | 100 | 101 | 102 | 103 | 104 | 105 | 106 | 107 | 108 | 109 | 110 | | |
| <i>Tribe:</i> | | | | | | | | | | | | | | | | |
| Lillooet (Anderson Lake) | | — | — | — | — | — | 2 | 2 | 2 | 3 | 1 | 1 | — | 1 | 105.6 | 12 |
| Lillooet (Fraser River) | | — | — | — | 1 | — | 3 | 3 | 2 | 2 | — | 1 | — | — | 104.3 | 12 |
| Shuswap (Stlēm-qō'lequmq) | | 2 | — | 2 | 1 | 3 | 6 | 9 | 3 | 5 | 3 | 1 | 1 | 1 | 104.1 | 37 |
| Chilcotin | | — | — | 3 | — | 3 | 3 | 10 | 5 | 8 | 1 | 1 | — | 1 | 104.4 | 35 |

Index of Finger-reach of Women.

| Per cent. | { from to | 99 | 100 | 101 | 102 | 103 | 104 | 105 | 106 | 107 | 108 | Average | Number of Cases |
|---------------------------|--------------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------|-----------------|
| | | 99 | 100 | 101 | 102 | 103 | 104 | 105 | 106 | 107 | 108 | | |
| <i>Tribe:</i> | | | | | | | | | | | | | |
| Lillooet (Anderson Lake) | | — | 2 | 4 | 1 | 4 | 3 | 2 | — | 1 | 2 | 103.3 | 19 |
| Lillooet (Fraser River) | | 1 | 1 | — | 2 | 1 | 4 | 3 | 2 | — | — | 103.5 | 14 |
| Shuswap (Stlēm-qō'lequmq) | | 1 | 3 | 3 | 2 | 8 | 1 | 6 | 1 | 2 | 1 | 103.3 | 28 |
| Chilcotin | | — | 2 | 3 | 2 | 2 | 2 | 1 | 2 | 1 | — | 103.0 | 15 |

1898.

T T

A short analysis of the material contained in the preceding tables and in previous Reports of the Committee allows us to distinguish with certainty three distinct types of man among the natives of British Columbia. These are the northern type, embracing the Haida, Nass River Indians, and Tsimshian; the Kwakiutl type, embracing the Bilqula, Hā'iltuk, Aw'iky'enōq, and the tribes of the Kwakiutl; and the Thompson River type, embracing the Lillooet and Thompson River Indians. These types may be characterised by the following measurements:—

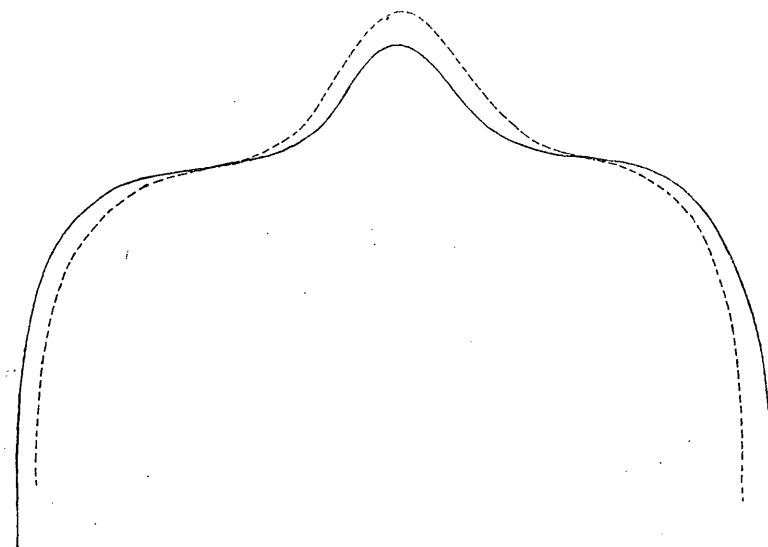
| | Northern Type | | Kwakiutl Type | | Thompson River Type | |
|---------------------------|---------------|------------|---------------|------------|---------------------|------------|
| | Average | Mean Error | Average | Mean Error | Average | Mean Error |
| I. Men. | | | | | | |
| | mm. | | mm. | | mm. | |
| Stature | 1675 | ± 7.40 | 1645 | ± 5.90 | 1634 | ± 7.90 |
| Length of Head | 194.6 | ± 0.80 | 188.7 | ± 1.19 | 186.5 | ± 0.55 |
| Breadth of Head | 160.6 | ± 0.67 | 159.0 | ± 1.00 | 155.9 | ± 0.52 |
| Breadth of Face | 153.7 | ± 0.85 | 151.4 | ± 0.54 | 147.4 | ± 0.41 |
| Height of Face | 121.6 | ± 0.87 | 128.0 | ± 0.67 | 120.3 | ± 0.71 |
| II. Women. | | | | | | |
| Stature | 1542 | ± 5.70 | 1537 | ± 5.90 | 1540 | ± 5.00 |
| Length of Head | 185.6 | ± 0.88 | 186.9 | ± 1.64 | 179.5 | ± 0.53 |
| Breadth of Head | 153.2 | ± 0.90 | 154.3 | ± 1.44 | 150.0 | ± 0.41 |
| Breadth of Face | 143.9 | ± 0.80 | 144.3 | ± 0.64 | 138.8 | ± 0.40 |
| Height of Face | 114.3 | ± 0.93 | 119.3 | ± 0.82 | 112.5 | ± 0.54 |

There are good indications of the existence of other types, but they cannot be distinguished with absolute certainty from the types enumerated here. It seems very probable that an examination of the Lillooet of Pemberton Meadows will establish beyond a doubt the existence of the peculiar type which in the Seventh and Tenth Reports of the Committee was named the Harrison Lake type, which is characterised by a very broad and very short head, small stature, large nose, and small face. Our measurements of the Lillooet were undertaken with a view of determining the existence of this type, but they did not extend far enough south. The characteristics of the Coast Salish of Washington and Southern British Columbia are doubtful, because the prevalent practice of deforming the head does not permit us to compare their head measurements with those of other tribes. Their faces show the same breadth as those of the other coast tribes, but their noses are much lower and flatter than those of the Kwakiutl. The Kamloops and other Shuswap tribes are closely allied to the Thompson River type, but it seems that the dimensions of their heads are a little larger, their statures a little higher. The Chilcotin resemble the Shuswap much, but their faces are flatter, their noses not so highly elevated over the face.

A study of the profiles of these types shows several important phenomena that are not elucidated in the tables of measurements. The northern type shows, on the whole, a rounded forehead; a nose which tends rather to be concave than convex, with the exception

of a few individuals; short point of the nose, slight elevation of nose, long upper lip, and rather thick mouth. The Kwakiutl type shows a flat forehead, which is largely due to artificial deformation; a decidedly convex nose with short point, highly elevated over the face, and a less protruding mouth. It is very remarkable that the characteristic features of this type are so strongly marked in the female that the differences between the northern type and this type are more strongly noticed in women than in men. The Thompson River type has a very prominent, convex nose, with long point. The nose has a great elevation over the face.

We give the cross-sections of the face, laid through the tragus and lower rim of orbits for the various types. In order to make the differences clearer we have drawn a middle or composite outline for each type, which show clearly the considerable breadth of face prevailing on the coast and the flatness of the nose of the northern type.



Cross-sections of Face laid through the Tragus and the Lower Rim of the Orbit.
 — Average cross-section of the Kwakiutl, Haida, and Tsimshian.
 ---- Average cross-section of the Ntlakyapamq and Kamloops.

The following table contains a number of repeated measurements, the first measurement having been taken in September 1894, the second in June 1897, the interval being two years and nine months. It will be seen that on the whole the measurements show a close agreement; but it appears that the error of observation for the measurements of the body, except for stature and finger-reach, is very considerable. The nasal index is also very unsatisfactory on account of the smallness of the measurements that are contained in it:—

Growth of Shuswap Children, September 1894 to June 1897.

| Names | I. Full-blood girls | | | | II. Full-blood boys | | | | III. Half-blood girls | | | | IV. Half-blood boys | | | |
|-----------------------------|---------------------|------|------|------|---------------------|------|------|------|-----------------------|------|--------|------|---------------------|------|------|------|
| | Age 1894 | 11 | 10 | 12 | 14 | 13 | 16 | 10 | 11 | 12 | 8 or 9 | 13 | 10 | 9 | 12 | 13 |
| Marianne | 9 | 1172 | 1376 | 1340 | 1481 | 1437 | 1449 | 1267 | 1301 | 1350 | 1213 | 1468 | 1341 | 1218 | 1390 | 1427 |
| Stature | | +160 | +108 | +115 | +57 | +113 | +17 | +108 | +135 | +76 | +115 | +54 | +151 | +142 | +54 | +140 |
| Height of shoulder | | 933 | 1112 | 1092 | 1212 | 1158 | 1174 | 1003 | 1045 | 1077 | 963 | 1183 | 1064 | 930 | 1105 | 1137 |
| Length of arm | | +132 | +102 | +65 | +43 | +86 | +10 | +97 | +57 | +73 | +86 | +72 | +144 | +163 | +57 | +133 |
| Finger-reach | | 509 | 628 | 684 | 677 | 615 | 641 | 539 | 557 | 593 | 522 | 655 | 591 | 490 | 590 | 607 |
| Height sitting | | +100 | +66 | +60 | +45 | +54 | +12 | +48 | +77 | +51 | +49 | +27 | +91 | +117 | +79 | +71 |
| Width of shoulders | | 1166 | 1466 | 1362 | 1409 | 1484 | 1512 | 1293 | 1296 | 1358 | 1233 | 1547 | 1408 | 1273 | 1448 | 1428 |
| Length of head | | +185 | +94 | +116 | +82 | +70 | +17 | +110 | +147 | +94 | +129 | +56 | +165 | +143 | +97 | +175 |
| Breadth of head | | 630 | 732 | 747 | 831 | 822 | 798 | 702 | 716 | 750 | 664 | 773 | 727 | 656 | 736 | 738 |
| Height of face | | +70 | +48 | +73 | +65 | +53 | +12 | +9 | +39 | +36 | +40 | +33 | +70 | +25 | +14 | +47 |
| Breadth of face | | 255 | 315 | 305 | 341 | 296 | 325 | 284 | 283 | 286 | 269 | 316 | 307 | 266 | 307 | 305 |
| Height of nose | | +29 | +36 | +42 | +33 | +27 | +5 | +19 | +28 | +8 | +23 | +15 | +51 | +33 | +4 | +42 |
| Breadth of nose | | 177 | 179 | 176 | 175 | 179 | 184 | 173 | 176 | 183 | 175 | 179 | 175 | 176 | 173 | 184 |
| Length-breadth index | | +4 | +1 | +3 | +3 | +4 | +1 | +3 | +4 | +2 | +2 | +2 | +2 | +2 | +2 | +5 |
| Facial index | | 143 | 148 | 142 | 160 | 151 | 156 | 161 | 147 | 153 | 147 | 156 | 150 | 147 | 160 | 149 |
| Nasal index | | +3 | +0 | +4 | +1 | +2 | +0 | +2 | +0 | +2 | +1 | +3 | +3 | +3 | +2 | +1 |
| Index of length of arm | | 99 | 109 | 106 | 107 | 118 | 110 | 105 | 104 | 109 | 97 | 103 | 98 | 98 | 106 | 107 |
| Index of finger-reach | | +6 | +3 | +7 | +0 | +4 | +4 | +7 | +13 | +5 | +1 | +5 | +9 | +7 | +2 | +8 |
| Index of height sitting | | 121 | 128 | 129 | 134 | 134 | 143 | 127 | 124 | 128 | 124 | 137 | 132 | 125 | 123 | 132 |
| Index of width of shoulders | | +5 | +7 | +7 | +3 | +4 | +0 | +4 | +4 | +4 | +3 | +3 | +3 | +3 | +3 | +4 |
| Length-breadth index | | 41 | 46 | 45 | 46 | 41 | 43 | 45 | 48 | 48 | 41 | 46 | 39 | 44 | 45 | 44 |
| Facial index | | +3 | +1 | +2 | +1 | +7 | +1 | +6 | +1 | +0 | +1 | +5 | +6 | +1 | +4 | +4 |
| Nasal index | | 31 | 34 | 32 | 33 | 34 | 31 | 31 | 28 | 34 | 34 | 34 | 32 | 33 | 33 | 32 |
| Index of length of arm | | +1 | +1 | +2 | +4 | +1 | +2 | +2 | +4 | +1 | +0 | +2 | +5 | +1 | +1 | +3 |
| Index of finger-reach | | 808 | 827 | 807 | 857 | 844 | 848 | 873 | 835 | 836 | 840 | 871 | 857 | 847 | 867 | 810 |
| Index of height sitting | | -0.6 | -0.5 | +0.8 | -0.9 | -0.8 | -0.5 | -0.4 | -1.9 | +0.2 | -0.4 | +0.3 | -1.2 | -0.3 | +0.1 | -1.6 |
| Index of width of shoulders | | 818 | 852 | 841 | 822 | 79.9 | 76.9 | 82.7 | 89.9 | 85.2 | 78.2 | 75.2 | 74.2 | 78.4 | 86.2 | 81.1 |
| | | +2.3 | -2.2 | +0.9 | -1.8 | +0.3 | +2.7 | +2.8 | +6.8 | -1.9 | +0.5 | +1.9 | +1.7 | +3.6 | -0.5 | +3.4 |
| | | 756 | 739 | 711 | 717 | 777 | 721 | 68.9 | 68.9 | 70.8 | 82.9 | 73.9 | 82.0 | 75.0 | 73.3 | 72.7 |
| | | -1.2 | +3.9 | +1.3 | +7.0 | -8.7 | +2.9 | -4.2 | +7.0 | +2.1 | -2.0 | -3.3 | +0.2 | +0.5 | +9.6 | +0.2 |
| Index of length of arm | | 435 | 455 | 457 | 457 | 427 | 442 | 428 | 429 | 439 | 431 | 443 | 441 | 402 | 424 | 424 |
| Index of finger-reach | | +26 | +1.4 | +0.3 | +1.2 | +0.5 | +0.2 | +0.0 | +1.1 | +1.1 | 0.3 | +0.3 | +1.9 | +4.4 | +4.1 | +0.8 |
| Index of height sitting | | 997 | 1062 | 1051 | 1068 | 1081 | 1043 | 1026 | 997 | 1013 | 1019 | 1062 | 1051 | 1043 | 1042 | 1000 |
| Index of width of shoulders | | +17 | -1.1 | +0.9 | -0.7 | -2.5 | +0.0 | +0.2 | +0.5 | +1.2 | +0.6 | +0.1 | +0.3 | -0.2 | +2.6 | +2.3 |
| | | 566 | 54.5 | 567 | 54.8 | 57.1 | 56.9 | 56.3 | 56.1 | 56.6 | 54.9 | 57.6 | 54.3 | 56.8 | 56.0 | 56.1 |
| | | -0.4 | -2.8 | -0.8 | -2.0 | -0.8 | -0.2 | -0.3 | -0.3 | -0.3 | -0.6 | -0.6 | -0.6 | -0.6 | -0.9 | -1.9 |
| | | 218 | +0.9 | +1.0 | +1.3 | +0.2 | +0.0 | -0.4 | -0.2 | -0.6 | -0.2 | -0.3 | -1.1 | +0.2 | -0.5 | +0.3 |

II. The Chilcotin. By LIVINGSTON FARRAND.

The Chilcotin tribe occupies a territory lying chiefly in the valley of the Chilcotin River. They are somewhat isolated in situation, though on the east they are only separated from the Shuswap by the Fraser River. Between these two tribes, however, there is little intercourse. Toward the north their nearest neighbours are the related Tinneh tribe of Carriers or Porteurs; and while distance prevents frequent communication, they regard each other as more or less akin, and the relations are cordial. On the west a pass leads over the coast range to Bella Coola; and, as many Chilcotin make annual expeditions to the coast, they are fairly familiar with the people of that region. Toward the south the only tribe at present with whom they come in contact is the Lillooet, and with them but seldom.

Intercourse with the coast Indians, and particularly with the Bella Coola, was formerly much more frequent than now, for the reason that the early seat of the Chilcotin was considerably farther west than at present, while the Bella Coola extended higher up the river of that name into the interior. The results of this early intercourse is seen very clearly in certain of their customs, and particularly in details of their traditions. In former times and down to within about thirty years the centre of territory and population of the Chilcotin was Anahem Lake, and from here they covered a considerable extent of country, the principal points of gathering beside the one mentioned being Tatlah, Puntze, and Chizaikut Lakes. They extended as far south as Chilco Lake, and at the time of the salmon fishing were accustomed to move in large numbers down to the Chilcotin River to a point near the present Anahem Reservation, always returning to their homes as soon as the fishing was over. More recently they have been brought to the eastward, and to-day the chief centres of the tribe are four reservations—Anahem, Stone, Risky Creek, and Alexandria—the first three in the valley of the Chilcotin, and the last named, consisting of but a few families, somewhat removed from the others, on the Fraser. Besides these there are a considerable number of families leading a semi-nomadic life on the old tribal territory in the woods and mountains to the westward. These latter, considerably less influenced by civilisation than their reservation relatives, are known by the whites as Stone Chilcotin or Stonies.

Although subjected to more or less intimate intercourse with the whites for a comparatively short period, the Chilcotin have assimilated the customs and ideas of their civilised neighbours so completely that their own have largely disappeared except possibly among the families still living in the mountains, whom it was not practicable to reach.

The following notes were obtained with considerable difficulty, but the information was for the most part confirmed by the independent testimony of different individuals.

As regards the social organisation, persistent inquiry failed to disclose any traces of a clan system. The family unit was the family in the contracted sense, viz., the parents and unmarried children. Marriage was ordinarily monogamous, but many men had two wives. Recognised blood relationship was and is always an absolute bar to marriage, and at present this recognition seems to extend no further than first cousins. There seem to have been no local preferences in contracting marriages. Marriage