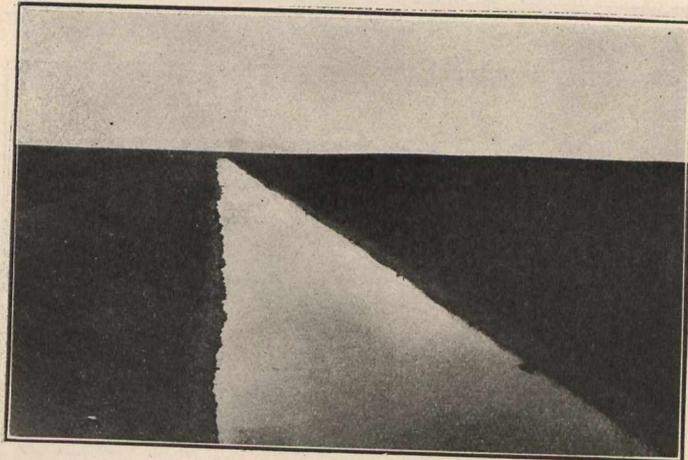


breeze, and the warm golden days of autumn, often lasting well into December, are the glory of the year.

The marked characteristic of the climate of Southern Alberta is the "Chinook" wind, which is a warm, dry wind, blowing across the plains from the Rocky Mountains which bound the Province on the West. This wind has the power of melting and drying up the snow in winter seasons with amazing celerity, and to its influence may be ascribed the fact that Southern Alberta has many times celebrated mid-

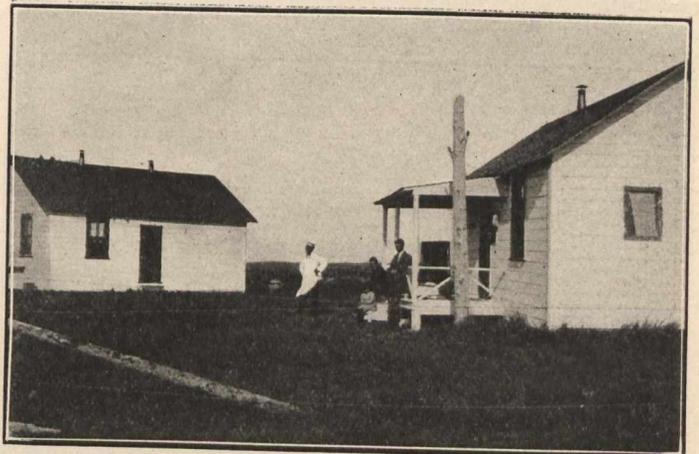


Fine Stretch on Secondary Canal.

Mean Annual Rainfall in Certain States of the United States:

| | Mean Annual Rainfall. |
|----------------------|-----------------------|
| California | 22.50 inches. |
| Montana | 12.61 " |
| Nevada | 10.64 " |
| Utah | 10.32 " |

The table of rainfall given above proves that Southern Alberta is only a semi-arid country and that during certain years there is sufficient moisture to mature crops without the aid of irrigation, but in every year the farmer who has water available to give his crop "a drink" when it needs it most, is



Maintenance Engineers' Headquarters.

winter holidays with cricket, baseball and other outdoor sports, and that winter is one of the most enjoyable seasons of the year.

Statistics and figures do not always convey to the average reader a clear idea of what is represented but the two short subjoined tables, compiled from Government Meteorological records, illustrate in a graphic form the character of Southern Alberta climate.

the farmer who in the long run is going to be most successful, and to provide that "insurance" on crop production 's why this irrigation undertaking has been put in hand to supply the insurance at a cost commensurate with existing climatic conditions.

Law.

The best proof of the fairness and stability of the Canadian law relating to irrigation is the statement that although

STATEMENT OF MEAN MONTHLY AND ANNUAL TEMPERATURE AT CALGARY, ALBERTA.

| Year. | Jan. | Feb. | Mar. | April. | May. | June. | July. | Aug. | Sept. | Oct. | Nov. | Dec. | Mean Annual. |
|----------|------|------|------|--------|------|-------|-------|------|-------|------|------|------|--------------|
| 1898.... | 40.1 | 14.8 | 19.3 | 37.8 | 51.4 | 55.6 | 62.9 | 62.7 | 51.2 | 36.0 | 21.7 | 44.9 | 41.5 |
| 1899.... | 19.6 | 1.9 | 7.6 | 33.6 | 43.7 | 52.8 | 60.0 | 53.0 | 53.5 | 36.4 | 36.8 | 19.5 | 35.0 |
| 1900.... | 21.9 | 10.5 | 27.5 | 43.5 | 51.4 | 57.0 | 58.0 | 54.5 | 46.7 | 38.2 | 20.7 | 27.0 | 38.1 |
| 1901.... | 15.8 | 15.4 | 30.0 | 38.3 | 52.0 | 49.3 | 58.7 | 59.0 | 44.2 | 47.8 | 28.5 | 26.0 | 38.8 |
| 1902.... | 19.6 | 15.2 | 25.3 | 39.8 | 47.8 | 49.1 | 59.0 | 57.2 | 48.8 | 44.4 | 27.8 | 11.9 | 36.7 |
| 1903.... | 20.5 | 21.5 | 14.0 | 37.5 | 45.5 | 57.1 | 56.7 | 55.4 | 46.0 | 45.2 | 22.8 | 25.9 | 37.3 |
| 1904.... | 18.1 | 1.8 | 13.3 | 42.8 | 47.1 | 53.7 | 60.5 | 55.7 | 50.5 | 43.4 | 35.2 | 20.5 | 33.3 |
| 1905.... | 9.6 | 15.1 | 35.2 | 39.1 | 47.5 | 52.5 | 60.8 | 59.4 | 50.7 | 37.3 | 33.2 | 22.2 | 38.6 |
| Mean... | 20.7 | 11.6 | 21.5 | 39.1 | 48.3 | 53.4 | 59.6 | 57.1 | 50.0 | 41.1 | 27.6 | 25.1 | 37.4 |

STATEMENT OF MEAN AND TOTAL MONTHLY AND ANNUAL RAINFALL AT CALGARY, ALBERTA.

| Year. | Jan. | Feb. | Mar. | April. | May. | June. | July. | Aug. | Sept. | Oct. | Nov. | Dec. | Total. |
|----------|------|------|------|--------|------|-------|-------|------|-------|------|------|------|--------|
| 1898.... | 0.00 | .90 | 1.57 | .45 | 2.02 | 3.77 | 3.83 | 2.40 | .74 | .16 | .30 | .65 | 16.79 |
| 1899.... | 0.00 | 0.00 | .97 | .10 | 5.46 | 3.22 | 2.08 | 9.40 | .99 | .44 | .26 | .17 | 23.01 |
| 1900.... | 0.00 | .02 | .30 | .47 | 1.32 | 3.56 | 2.00 | 1.29 | 4.50 | .39 | 1.60 | 0.00 | 15.45 |
| 1901.... | 0.40 | 1.15 | .95 | .90 | 1.55 | 7.04 | 3.94 | .51 | 3.15 | .12 | .40 | 1.20 | 21.31 |
| 1902.... | 0.40 | .60 | .62 | .60 | 8.90 | 9.82 | 5.06 | 6.23 | 1.22 | .61 | 1.00 | .60 | 15.66 |
| 1903.... | 0.00 | .50 | .88 | .29 | 3.97 | 2.07 | 4.09 | 7.62 | 1.80 | 0.00 | .60 | .16 | 21.98 |
| 1904.... | .16 | .10 | .80 | .14 | 1.56 | 1.86 | 1.74 | 2.75 | .38 | 1.35 | .12 | .20 | 11.16 |
| 1905.... | 1.04 | .30 | .65 | .60 | 1.68 | 8.51 | .91 | .56 | .35 | .31 | 1.20 | 0.00 | 16.11 |
| Mean... | .25 | .45 | .84 | .44 | 3.31 | 4.98 | 2.96 | 3.85 | 1.64 | .43 | .69 | .37 | 20.21 |

For the purpose of making a comparison with the climate of countries noted for their healthfulness and favorable conditions from an agricultural standpoint, the following tables, taken from United States Signal Service Reports, are given:

| | Mean Annual Temperature. |
|--------------------|--------------------------|
| Colorado | 44.80 |
| Montana | 42.40 |
| Nevada | 50.32 |
| Utah | 50.10 |

irrigation has been practiced for ten years, and to-day in Southern Alberta there are, including the Canadian Pacific Railway's project, eight hundred miles of canals and ditches carrying water for irrigation, there has not during that time been one lawsuit about water rights.

The canal constructed by the Canadian Pacific Railway Company has an absolute title under the Canadian law to two thousand cubic feet of water per second from the Bow River, and that river at the point of intake for the canal has