10-25-1889

Report of the Governor of Dakota, 1889

REPORT

OF

THE GOVERNOR OF DAKOTA.

EXECUTIVE OFFICE,
Bismarck, Dak., October 25, 1889.

SIR: In answer to your communication dated July 19, 1889, requesting me to forward to your Department a report on the condition and of the progress and development of the Territory of Dakota for the year ending June 30, 1889, I have the honor to submit the following report:

DAKOTA CLIMATE.

It is specially worthy of note that Dakota has been totally free from the ravages of disease usually prevalent in the settlement of a new country, and the past year has fully sustained her character in this respect.

The healthful, invigorating properties of the atmosphere, consequent upon its richness of ozone, its dryness, purity, and above all its favorable electrical conditions, perform cures in pulmonary, malarial, and general chronic debilities that are a constant and joyful surprise to the afflicted and a mystery to the medical profession.

It is believed that no error is so prevalent and universal throughout the country as the general misconception concerning the climate of Dakota.

The very low temperature and violent storms occasionally prevailing for a few hours during the winter are accepted abroad as the normal climatic condition throughout that season, while in truth there is not perhaps an area in the United States that can boast so many perfect, sunshiny, pleasant days during the winter season as Dakota.

The climate of Dakota is not to be judged, as we persist in doing, by corresponding latitudes east and west. No one can realize the matchless, invigorating, and enjoyable attributes of the Dakota winter, taken together as a whole, except by experience. Even the extreme low temperature which occasionally occurs, owing to the dry and rare atmosphere, is not accompanied with the effects naturally attributed to it from an eastern stand-point.

There is no rain in winter, no mud, or slush. Under foot the snow lies crisp and hard. The storms are not as frequent as in Ohio or New York, and blizzards like that of 1888 are of short duration and occur

only once in about twenty years. It is owing to the climate that cattle can rove at large and thrive in winter with little or no shelter. It is a scientific fact that the temperature and sunlight during the growing season have much to do with the quality of the wheat, corn, and other grain, whose superior properties are attested by the Government chemist and by the milling trade.

We cite the following tables to give the exact conditions as to the temperature, rain-fall, etc. Under the authority of General A. W. Greely, Chief Signal Officer, U. S. A., monthly reports are regularly forwarded to the office of commissioner of immigration from the following stations of the United States Signal Service:

Locality.	Latitude.	Longitude.
	m. s.	*m. s.*
Missouri Valley:		
Yankton	42 45	97 3
Huron	44 21	98 00
Fort Sully	44 30	101 44
Extreme northwest:		
Moorhead (Fargo)	46 51	96 50
St. Vincent (Pembina)	49 00	97 00
Bismarck	46 48	103 58
Fort Buford	48 30	100 38
Northern slope:		
Rapid City	44 4	103 12

In two of the following tables the records are also furnished from twenty other points in the Territory where meteorological observations were taken for the periods named in the tables.

The mean temperature shows an average climate for any given period. The following tables show the mean monthly and annual temperature in Dakota, and the mean annual temperature of each locality named, the average monthly and annual precipitation, and the mean annual precipitation at each point of observation:

Mean monthly and annual temperature in Dakota for the periods and localities named below.

Stations.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Mean annual temperature for each locality.	Period covered by reports (dates inclusive).
	°	°	°	°	°	°	°	°	°	°	°	°	°	
Fort Abercrombie	1.0	5.1	13.5	40.5	60.3	67.1	73.3	69.8	60.0	42.5	19.3	12.1	37.2	July, 1874, to October, 1877. Record of post surgeon. (Incomplete.)
Fort Abraham Lincoln	3.8	9.9	21.7	40.4	57.2	66.3	72.2	69.5	58.1	44.9	25.9	12.7	40.1	July, 1874, to date. Record of post surgeon.
Alexandria	3.9	7.6	25.8	42.9	51.6	65.6	79.6	69.4	58.8	45.0	32.1	15.4	40.0	April, 1882, to February, 1884. Record of voluntary observer.
Fort Bennett	9.3	15.1	29.2	43.8	56.5	67.6	71.4	70.6	60.1	46.1	30.9	18.3	43.6	October, 1880, to November, 1885. Record of Signal Service.
Bismarck	4.5	11.1	22.2	40.6	55.2	63.8	68.8	67.5	55.8	43 6	25.5	13.4	39.4	October, 1874, to date. Record of Signal Service.
Fort Buford	5.2	11.5	23.0	41.2	54.2	63.2	69.5	67.5	54.9	43.0	25.6	13.1	38.7	July, 1874, to date. Record of post surgeon prior to January, 1879. Signal Service since.
Deadwood	21.0	24.5	31.6	39.9	49.8	59.7	65.3	65.0	53.1	43.6	32.8	23.2	42.1	January, 1878, to date. Record of Signal Service.*
Fort Hale	12.1	16.3	28.6	45.6	59.4	69.8	73.8	73.6	61.2	48.6	29.5	14.8	44.7	January, 1879, to May, 1884. Record of post surgeon.
Huron	6.7	13.8	28.0	44.5	54.6	66.0	69.7	68.1	56.6	46.8	29.8	17.2	41.8	July, 1881, to date. Record of Signal Service.
Lower Brulé Agency	15.9	26.7	28.9	48.1	58.7	66.8	77.2	74.0	62.0	46.6	30.5	20.8	46.2	September, 1875, to December, 1878. Record of post surgeon.
Fort Meade	16.7	20.5	31.1	42.5	55.2	50.5	72.0	71.2	59.1	46.5	32.6	22.2	41.5	July, 1879, to date. Record of post surgeon.
Morriston	17.8	14.4	26.5	45.5	66.5	72.0	.....	80.0	69.0	54.0	35.5	23.2	.....	December, 1878, to April, 1882. Record of voluntary observer. (Incomplete.)
Olivet	17.4	21.8	31.7	46.1	59.8	68.6	73.2	72.9	61.1	48.3	30.0	18.2	44.9	June, 1877, to November, 1882. Record of voluntary observer.
Pembina	—5.1	1.3	13.6	35.4	52.7	62.1	67.3	64.2	52.2	38.9	19.1	4.5	34.3	March, 1873, to date. Record of post surgeon and Signal Service.
Fort Randall	14.7	21.2	31.3	48.0	60.9	69.4	75.0	73.6	63.3	50.5	32.9	21.1	46.8	July, 1874, to date. Record of post surgeon.
Fort Rice	8.5	13.8	24.3	44.1	58.2	66.5	76.0	72.0	61.2	44.6	25.0	20.8	41.9	July, 1874, to October, 1878. Record of post surgeon.
Richardton	0.4	9.5	23.7	40.3	51.4	66.3	69.8	65.3	55.8	46.7	29.0	11.5	39.0	March, 1884, to date. Record of voluntary observer.
Fort Seward	1.8	6.0	12.8	37.6	56.7	59.7	70.7	67.6	55.7	41.7	17.1	11.3	35.1	July, 1874, to August, 1877. Record of post surgeon.
Fort Sisseton	3.3	9.5	21.8	41.2	54.7	64.8	69.3	67.3	56.0	44.8	24.8	8.0	38.8	September, 1876, to date. Record of post surgeon.
Fort Stevenson	3.8	9.6	19.7	38.8	53.5	63.0	69.0	66.2	54.3	41.6	23.3	9.9	36.8	July, 1874, to May, 1883. Record of post surgeon to February, 1879, Signal Service to 1883.
Fort Sully	11.2	18.2	28.9	46.4	59.1	68.8	74.6	73.1	61.6	48.9	30.3	17.8	45.0	May, 1872, to date. Record of Signal Service and post surgeon.
Fort Totten	—1.7	5.2	16.5	37.8	54.1	63.1	68.5	66.6	55.5	42.0	21.4	7.8	36.4	July, 1874, to date. Record of post surgeon to January, 1884. Signal Service since.
Vermillion	4.5	24.1	29.0	49.7	63.2	.....	.....	.....	62.5	48.3	37.0	27.0	.....	April, 1884, to May, 1886. Record of voluntary observer. (Incomplete.)
Fort Wadsworth	—0.6	—1.4	14.2	37.4	57.1	61.0	71.4	67.4	58.4	44.1	19.3	17.3	35.1	July, 1874, to August, 1876. Record of post surgeon.

* Observations taken at Lead City from June to October, inclusive, 1878.

Mean monthly and annual temperature in Dakota for the periods and localities named below—Continued.

Stations.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Mean annual temperature for each locality.	Period covered by reports (dates inclusively).
	°	°	°	°	°	°	°	°	°	°	°	°	°	
Webster	1.3	9.0	25.1	42.6	57.3	70.5	74.8	72.3	63.1	50.1	31.1	12.6	42.6	June, 1882, to date. Record of voluntary observer.
Yankton	14.1	19.9	29.9	45.4	59.5	68.5	73.5	71.8	61.3	49.4	32.2	20.4	45.5	April, 1873, to date. Record of Signal Service.
Fort Yates	3.8	11.5	25.3	44.1	57.5	68.7	72.7	70.0	59.2	44.9	28.6	12.8	41.6	January, 1882, to date. Record of Signal Service and post surgeon.
Fargo (Moorhead)	−4.0	4.5	19.3	39.8	54.6	64.7	67.5	63.8	55.8	43.8	24.6	9.0	37.0	
Mean monthly and annual temperature for Territory	6.8	12.9	24.2	42.5	56.7	65.8	71.8	69.6	58.8	45.7	27.7	15.6	41.5	

NOTE.—The latest observations included in the above calculations are those of December, 1886.

Average monthly and annual precipitation (rain-fall and melted snow) in Dakota for the periods and localities named below.

Stations.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Mean annual precipitation for each locality.	Period covered by reports (dates inclusive).
	In.	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*	
Fort Abercrombie	0.50	0.09	0.63	1.70	1.80	1.73	1.79	2.18	1.85	0.37	0.60	0.52	13.76	July, 1874, to October, 1877. Record of post surgeon. (Incomplete.)
Fort Abraham Lincoln	0.44	0.64	0.84	2.30	2.45	2.96	1.75	2.14	0.80	1.04	0.49	0.79	16.95	July, 1874, to date. Record of post surgeon.
Alexandria	0.28	1.07	1.12	3.86	3.47	4.20	5.26	3.20	1.18	2.41	0.40	0.82	30.54	March, 1882, to February, 1884. Record of voluntary observer.
Fort Bennett	0.73	0.64	1.01	2.20	2.58	3.97	2.17	2.21	1.24	0.69	0.29	0.45	17.85	Oct., 1880, to Nov., 1885. Record of Signal Service.
Bismarck	0.54	0.64	1.05	2.78	2.91	3.40	2.28	2.60	1.24	1.19	0.75	0.77	20.10	October, 1874, to date. Record of Signal Service.
Fort Buford	0.55	0.45	0.50	1.28	2.32	2.79	1.75	1.62	0.72	0.96	0.49	0.65	13.91	July, 1874, to date. Record of post surgeon prior to January, 1879. Signal Service since.
Deadwood	1.04	1.26	1.99	5.02	4.70	3.69	2.33	2.12	1.38	1.84	1.35	1.50	28.23	January, 1878, to date. Record of Signal Service.*
Firesteel	0.55	0.28	5.18	2.12	3.87	2.92	4.38	2.92	3.10	1.00	0.78	0.32	27.60	Feb., 1875, to June, 1877. Record of voluntary observer.
Fort Hale	0.39	1.09	0.97	1.43	3.00	3.71	2.39	2.52	0.70	2.32	0.25	0.49	19.62	January, 1879, to May, 1884. Record of post surgeon.
Huron	0 21	0.34	0.70	2.72	3.73	4.14	4.32	3.37	1.85	1.86	0.66	0.39	23.65	July, 1881, to date. Record of Signal Service.
Lower Brulé Agency	0.20	0.18	0.82	1.86	1.81	1.80	3.27	2.91	2.01	0.44	0.34	0.79	15.13	Sept., 1875, to Dec., 1878. Record of post surgeon.
Fort Meade	0.71	0.56	1.18	2.80	4.43	2.73	1.98	1.82	0.49	0.73	0.51	0.49	19.22	July, 1879 to date. Record of post surgeon.
Morriston	0.58	1.28	1.36	2.77	4.26	4.69	4.51	3.44	2.17	1.97	0.52	1.04	31.03	July, 1877, to July, 1884. Record of voluntary observer.
Olivet	0.84	1.14	0.94	2.51	4.86	4.57	2.93	3.02	2.14	2.30	0.34	1.26	26.56	June, 1877, to Nov., 1882. Record of voluntary observer.
Pembina	0.46	0.76	1.00	1.59	2.91	3.78	2.53	2.34	1.52	1.67	1.42	0.99	21.91	July, 1874, to date. Record of post surgeon and Signal Service.
Fort Randall	0.44	0.87	1.58	2.74	4.36	5.18	3.67	3.02	2.39	1.83	0.55	1.35	28.93	July, 1874, to date. Record of post surgeon.
Fort Rice	0.24	1.23	1.04	3.60	4.15	2.64	1.51	1.10	1.39	1.24	0.90	0.73	15.01	July, 1874, to October, 1878. Record of post surgeon. (Incomplete.)
Richardton	1.50	0.87	1.00	3.41	2.65	4.20	6.98	3.53	1.30	0.83	0.93	0.97	28.17	February, 1884, to date. Record of voluntary observer.
Fort Seward	0.05	0.11	0.89	1.15	3.23	3.37	1.87	1.78	1.57	0.65	0.08	0.10	15.08	July, 1874, to August, 1877. Record of post surgeon.
Fort Sisseton	0.37	0.40	1.05	2.14	2.63	3.58	3.46	2.37	1.37	1.99	0.61	0.62	17.23	September, 1876, to date. Record of post surgeon.
Fort Stevenson	0.37	0.44	1.09	1.34	2.33	4.13	1.70	2.91	1.40	0.96	0.49	0.43	19.11	July, 1874, to May, 1883. Record of post surgeon to February, 1879, Signal Service to 1883.
Fort Sully	0.42	0.38	0.72	1.95	2.77	3.42	3.06	2.13	0.94	0.63	0.48	0.59	17.39	July, 1874, to date. Record of Signal Service and post surgeon.
Vermillion	0.96	0.40	1.30	2.97	1.69	2.88	2.35	3.87	2.18	1.58	1.35	0.52	19.19	January, 1884, to date. Record of voluntary observer. (Incomplete.)
Fort Wadsworth	1.86	0.58	2.65	2.35	2.26	1.87	1.95	4.12	1.33	1.63	1.45	2.19	25.73	July, 1874, to August, 1876. Record of post surgeon.
Webster	1.58	2.89	2.46	4.87	6.18	7.24	6.30	2.53	3.18	4.34	1.86	2.11	44.61	June, 1882, to date. Record of voluntary observer.
Yankton	0.56	0.82	1.29	3.39	4.45	4.81	3.74	3.05	2.93	1.66	0.67	0.72	28.43	April, 1873, to date. Record of Signal Service.
Fort Yates	0.34	0.23	0.46	1.84	1.51	3.34	2.57	1.87	0.75	0.50	0.32	0.57	14.27	January, 1882, to date. Record of Signal Service and post surgeon.

*Observations taken at Lead City from June to October, inclusive, 1878.

Average monthly and annual precipitation (rain-fall and melted snow) in Dakota for the periods and localities named below—Continued.

Stations.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Mean annual precipitation for each locality.	Period covered by reports (dates inclusive).
	In.	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*	*In.*	
Fargo (Moorhead)	0.73	0.92	0.80	2.39	2.97	4.37	4.85	3.42	1.95	2.77	1.22	0.78	27.17	January, 1881, to date. Record of Signal Service.
Fort Totten	0.36	0.57	0.90	1.59	2.70	3.40	2.40	2.87	1.03	1.39	0.68	0.62	18.34	July, 1874, to date. Record of post surgeon to January, 1884. Signal Service since.
Mean monthly and annual precipitation for Territory	0.70	0.72	1.26	2.50	3.20	3.64	3.10	2.65	1.59	1.47	0.71	0.81	22.35	

Number of clear, fair, and cloudy days separately at each of the U. S. Signal Stations, and the averages for the Territory, for each month of the year 1888, *as shown by observations at the United States Signal Service Stations in the Territory.*

Stations.	January.			February.			March.			April.			May.			June.			July.			August.			September.			October.			November.			December.		
	Clear.	Fair.	Cloudy.	Clear.	Fair.	Cloudy.	Clear.	Fair.	Cloudy.	Clear.	Fair.	Cloudy.	Clear.	Fair.	Cloudy.	Clear.	Fair.	Cloudy.	Clear.	Fair.	Cloudy.	Clear.	Fair.	Cloudy.	Clear.	Fair.	Cloudy.	Clear.	Fair.	Cloudy.	Clear.	Fair.	Cloudy.	Clear.	Fair.	Cloudy.
Yankton.....	13	12	6	8	6	15	9	12	10	11	13	6	3	11	17	6	19	5	....	....	....	15	6	10	16	7	7	14	10	7	14	9	7	16	5	10
Huron.....	10	17	4	10	13	6	8	15	8	12	13	5	4	16	11	8	14	8	8	16	7	15	5	11	15	13	2	13	10	8	21	3	6	17	7	7
Fort Sully....	15	10	6	7	16	6	9	16	6	12	15	3	6	17	8	12	11	7	16	12	3	14	8	9	22	7	1	13	14	4	19	3	8	19	6	6
Moorhead, (Fargo).....	11	13	7	7	13	9	6	12	13	4	18	8	6	13	12	....	....	....	13	11	7	16	4	11	17	2	11	10	1	20	18	4	8	17	3	11
St. Vincent, (Pembina)..	17	13	1	8	16	5	12	14	5	9	15	6	12	13	6	11	9	10	13	8	10	15	10	6	8	9	13	8	7	16	9	8	13	11	11	9
Fort Totten...	14	12	5	10	11	8	12	10	9	8	17	5	10	17	4	6	13	11	17	6	8	19	5	7	17	8	5	10	8	13	18	3	9	14	11	6
Bismarck....	13	13	5	9	12	8	7	19	6	7	21	2	10	15	6	9	10	11	11	14	6	11	11	9	14	14	2	14	4	13	18	5	7	19	2	10
Fort Buford..	8	19	4	4	12	13	5	19	7	4	17	9	4	15	12	2	15	3	6	16	9	9	9	13	10	14	6	3	14	14	13	10	7	8	15	8
Deadwood....	14	15	2	6	18	5	9	10	12	12	12	6	5	10	16	4	13	13	9	14	8	11	10	10	20	7	3	11	14	6	20	8	2	14	12	5
Averages.	13	14	4	8	14	7	9	14	8	9	16	5	7	14	10	7	13	10	12	12	7	14	7	10	15	9	6	11	9	11	17	6	7	15	8	8

Number of clear and fair days during year, 273.

It is thus shown that Dakota is pre-eminently the land of sunshine. Out of the three hundred and sixty-six days in 1888, the sun shone pretty constantly on two hundred and seventy-three days. The average number of clear and fair days for every month of the twelve was a fraction less than twenty-three. In January twenty-seven days of sunshine are highly-appreciated, leaving but four cloudy days, during which the precipitation consisted entirely of snow-fall.

AREA.

The area of Dakota Territory entire is 150,932 square miles. Division will give two States, each larger than the great State of Missouri. South Dakota will contain 76,620 square miles, and North Dakota 74,312 square miles. South Dakota will be the eighth State in size in the Union, standing between Kansas and Nebraska, and North Dakota tenth on the list of forty-two, as the list is made for 1889.

SOIL AND SURFACE.

The soil of all Dakota is of unquestioned fertility. It is about the same everywhere—a rich black loam, with just enough sand to cause it to be easily worked and to prevent it from getting muddy, and resting on a clay subsoil retentive of moisture. The soil is highly productive, and will make the most of a given amount of rain-fall.

The surface of Dakota is for the most part a vast undulating plain. The Plateau du Coteau du Missouri is a chain of hills traversing the Territory from northwest to southeast. A smaller range of coteaus forms a dividing ridge for a considerable distance between the Big Sioux and James River Valleys. The Black Hills, in the extreme southwestern corner, constitute the only mountainous region of any extent, the Turtle Mountains, in the extreme north, covering an area of only 800 square miles.

The entire surface of Dakota is well watered. The Missouri River extends diagonally across the great plain from extreme northwest to extreme southeast. It is navigable as far north and west as Fort Benton, Mont. The James or Dakota River rises in the central part of Dakota (North) and takes a meandering course southward, its actual length being 600 miles in a valley 300 miles long. It is the longest unnavigable river in the world. The Big Sioux River rises near Lake Kampeska, near Watertown, South Dakota, and flowing south empties into the Missouri on the eastern border of the Territory, about 50 miles below the mouth of the James. The Black Hills are inclosed between the two forks of the Cheyenne River, into which numerous clear streams, fed by springs and descending from the mountains, empty their unfailing supplies. The Red River of the North forms the boundary between North Dakota and Minnesota, and is navigable a distance of 250 miles, from Fargo to Winnipeg. The Cheyenne River, which takes its rise some distance west, over the headwaters of the James River, is the principal tributary of Red River, and a number of other streams also empty into the latter, traversing the Red River Valley at frequent intervals. The Mouse River is a Canadian stream which makes a deep bend southward in the form of a loop, passing through several counties of North Dakota. A number of small rivers and creeks empty into the Missouri and the James.

The Sioux Reservation is watered by the Cannon Ball, Grand Moreau, Cheyenne, Bad, and White Rivers. The west Missouri country

has the Knife and Heart Rivers. There are innumerable lakes in both North and South Dakota, many of which are very beautiful; the largest in North Dakota is Devil's Lake, and in South Dakota, Lake Kampeska. Their natural beauty and romantic Indian legends render them specially attractive as summer resorts.

POPULATION.

The growth of population in the Territory of Dakota has been singularly rapid and stable. The record for the past twenty-nine years is as follows:

Census of	
1860	5,000
1870	14,181
1880	135,177
1885	415,610

A careful estimate up to the 30th of June, 1889, gave the Territory a population of 650,000. This estimate is based upon the census of 1885 with estimates of the increase since that time made from the total land entries and corrected by comparison with the total vote of the Territory at the last elections.

This estimate was obtained by multiplying the total number of land entries both upon Government and railway lands, by three, and adding to the result the estimated natural increase; these figures, together with the population given by the census of 1885, made the total above mentioned, which is doubtless a conservative and reasonably accurate estimate.

The returns at the next succeeding election furnish a practical method of verification. As an illustration of this fact it may be stated that while the estimate of population for the year ending June 30, 1888, was placed at 640,823, the returns of the election of November last indicated that the estimate was excessive, and the best opinion placed the population at the opening of the present year at 600,000 souls. As above stated, the increase during the first six months approximates 50,000. Of this total population there were probably 379,000 people within the limits of the future State of South Dakota, and 271,000 in the State of North Dakota on the 30th of June, 1889.

The statehood elections held October 1, 1889, more than verify the above figures, there having been 79,059 votes cast in South Dakota and 38,146 votes cast in North Dakota.

The Federal census of 1885 showed an American-born population of 65 per cent., the proportion in North Dakota being 58 per cent., and in South Dakota 72 per cent. The native Dakota-born population of the whole Territory amounted to 58,501 at that time, or 14 per cent. of the total population, and this rate doubtless remains practically unchanged.

Of the foreign-born population the Scandinavians predominate, and next in order come Germans, Canadians, Irish, and Russians. Nearly all the civilized races are represented in Dakota; there are colonies of Jews from Poland, Mennonites from Russia, Turks from Roumalia, and hardy northmen from Iceland.

The population of foreign citizens in proportion to the entire population as given by the census of 1885 is about one in three, and this ratio doubtless remains unchanged.

One of the important incidents of immigration during the past season was the large influx of German Russians to the western central counties of the Territory. Hundreds have taken up Government land

in these localities, and promise to become a most desirable and prosperous class of citizens.

Number of filings, etc., at the ten United States land offices in Dakota, during each month, for the year ending June 30, 1889.

Months.	Pre-emption filings.	Homestead filings.	Timber-culture filings.	Pre-emption proofs, cash entries.	Commuted homesteads, cash entries.	Final homestead proofs.	Timber-culture proofs.	Newly filed on.	Acquired by final proof and cash entry.	Purchased by land scrip.
1888.								*Acres.*	*Acres.*	*Acres.*
July	441	328	457	231	41	667	12	208,774	146,717	160
August	297	172	300	179	49	387	12	118,442	86,128	320
September	208	142	230	143	51	386	14	88,584	92,412	160
October	231	307	352	281	92	559	10	136,603	137,651	320
November	459	420	426	378	80	525	16	202,593	153,331	520
December	297	328	271	262	77	480	6	135,362	130,327	640
1889.										
January	217	286	258	185	72	477	9	105,541	107,812	640
February	225	243	244	216	64	233	4	99,466	88,743	800
March	690	441	437	156	32	250	5	235,030	66,941	320
April	848	411	589	219	45	520	5	278,553	120,067	320
May	893	386	525	191	40	656	11	273,194	128,398	.....
June*	643	323	439	196	26	540	8	213,798	116,954	80
Total	5,449	3,787	4,528	2,637	669	5,680	112	2,096,030	1,375,481	4,280

*No report from Yankton.

Number of filings, etc., in each United States land district in Dakota for the year ending June 30, 1889.

Districts.	Pre-emption filings.	Homestead filings.	Timber-culture filings.	Pre-emption proofs, cash entries.	Commuted homesteads, cash entries.	Final homestead proofs.	Timber-culture proofs.	Newly filed on.	Acquired by final proof and cash entry.	Purchased by land scrip.
								Acres.	*Acres.*	*Acres.*
Yankton*	86	71	97	97	28	409	56	32,392	83,036	.....
Mitchell	180	192	390	134	57	932	48	116,306	167,219	80
Watertown	507	316	430	343	111	807	7	181,319	200,395	1120
Huron	357	348	680	195	82	951	.....	161,418	184,774	.....
Aberdeen	826	606	658	296	86	487	.....	332,039	136,920	480
Rapid City	752	371	396	333	32	98	.....	228,629	66,390	2,400
Fargo	330	420	478	170	50	948	1	190,752	175,154	.....
Grand Forks	647	464	392	299	140	486	.....	254,247	144,967	.....
Devil's Lake	1,298	578	670	570	69	80	.....	405,103	114,427	200
Bismarck	466	421	337	200	14	482	.....	193,825	101,599	.....
Total	5,449	3,787	4,528	2,637	669	5,680	112	2,096,030	1,375,481	4,280

* No report for June, 1889.

There were 13,764 new filings under the general land laws during the year ending June 30, 1889, distributed as follows:

The total area filed upon during the year was 2,096,030 acres as against 1,838,142 during the year preceding. There were in all 9,098 final proofs, of which 3,306 were cash entries, 5,680 final homestead proofs,

and 112 timber-culture proofs. The increased homestead proofs were due to the maturing of residence in the large number of claims taken up in 1882 and 1883.

Of the cash entries there were 2,637 pre-emption proofs and 669 commuted homesteads. The area acquired by final proofs and cash entry during the year was 1,375,481 acres, and that purchased by scrip was 4,280 acres.

The area of new settlements was nearly equal north and south of the seventh standard parallel, the line of division between the proposed States of North and South Dakota. The area entered at the six land offices in South Dakota, viz, Yankton, Mitchell, Watertown, Aberdeen, Huron, and Rapid City was 1,052,103 acres, while the area entered at the four land offices of North Dakota, viz, Fargo, Grand Forks, Devil's Lake, and Bismark was 1,043,927.

The area acquired by final proof in the southern half of the Territory during the period mentioned amounted to 839,334 acres, that similarly acquired in the northern half amounted to 536,147 acres. The large excess of final proofs in South Dakota is explained by the fact that most portions of this region have been settled longer than the northern districts. The bulk of the present vacant land area, 19,877,273 acres, lies in the Bismarck and Devil's Lake districts, North Dakota, and the Rapid City, South Dakota, the amount still open for settlement in the Bismarck district being 13,922,029 acres.

Up to June 1, the settlement of lands has shown a marked increase over the first quarter of the year. The area newly filed on in 1889 amounted to nearly 1,000,000 acres, or more than half the total area filed on during 1888. The area of unsurveyed land taken up or "squatted" upon is estimated as being equivalent to one-third of the area filed on in the Bismarck and Devil's Lake offices, or about 160,000 acres.

The area of land sold by the Northern Pacific Railway from its grant, and by private owners, is estimated to equal about 25 per cent. of the lands entered during the year, or about 525,000 acres. The total acreage of lands entered or purchased by settlers therefore approximates 2,600,000 acres, or 4,060 square miles, an area nearly four times as large as that of Rhode Island, twice as large as that of Delaware, and within a few hundred square miles of the area of Connecticut. The vacant public lands of the Territory still open to settlement approximated, on the 30th of June last, about 19,877,275 acres.

The requisite number of signatures having been obtained from the Sioux Indians by the commission appointed under the act of the last Congress, providing for the opening of a part of the great Sioux Indian Reservation, the available area of Government lands in Dakota will, upon the proclamation of the President, be increased by about 11,000,000 of acres, making the total area of vacant lands in the Territory over 30,000,000 of acres. Judging from the recent experience on the opening of the Oklahoma country a great tide of immigration will at once set Dakotaward upon the opening of the reservation, and the prediction is justified that the area settled during the next year will exceed that of any preceding year.

COMMERCE AND PROGRESS OF RAILWAY ENTERPRISES.

During the past year there has been practically no railway building. The year 1887 was one of unusual activity in railway circles, and some 700 miles of new road were constructed by the several systems in the Territory. This remarkable activity has been followed by a period

of inactivity, though several new lines have been projected and a considerable amount of grading done during the last year.

The total mileage of each system in the Territory on the 31st of December, 1888, is shown by the following table; the totals remain unchanged to date:

	Miles.
Black Hills and Fort Pierre Railway	15
Burlington, Cedar Rapids and Northern Railway	83
Chicago, Milwaukee and St. Paul Railway	1,215
Chicago and Northwestern Railway	758
Chicago, St. Paul, Minneapolis and Omaha Railway	87
Fremont, Elkhorn and Missouri Valley Railway	123
Minneapolis, St. Paul and Sault Ste. Marie Railway	99
St. Paul, Minneapolis and Manitoba Railway	1,191
Northern Pacific Railway	837
Minneapolis and St. Louis Railway	40
Illinois Central Railway	15
Total miles of railroad in 1888	4,463

The total mileage graded in 1887 and 1888 and not completed is shown by the following table:

	Miles.
Aberdeen, Bismarck and Northwestern Railway, from Aberdeen, Brown County, to Bismarck, Burleigh County (Minneapolis, St. Paul and Sault Ste. Marie).	160
Forest City and Watertown Railway, from Forest City to Hoven, Potter County	30
Deadwood and Central City Railway, from Deadwood to Lead City	5
Total miles of road graded but not ironed	195

A number of important railway projects which may be counted among the certainties of the near future are but awaiting a favorable condition of the Eastern money market for their inauguration. Dakota demands and can profitably support a large number of railways, and the various companies appreciating this fact have hastened to extend their lines into the territory unoccupied by other roads.

The opening of the great Sioux Indian Reservation will doubtless stimulate railway building to a marked degree during the coming year. The Chicago and Northwestern Railway has two lines now at the eastern border of the reservation, one with its terminal at Pierre, and the other at Gettysburgh. The Chicago and Milwaukee system also have a through line with its terminal at Chamberlain, on the Missouri River. It is more than probable that one or more of these lines will be extended through the reservation to the Black Hills during the coming year.

Commercially Dakota is making rapid progress. In nearly all her towns of importance jobbing houses are located, and they are doing a large and successful business. The Territory has a number of cities which are becoming important distributing centers, and the commercial interests are keeping full pace with the development of other industries.

AGRICULTURAL DEVELOPMENT.

Dakota is pre-eminently an agricultural region. Almost its entire area is susceptible of cultivation, and those portions not adapted to the plow are available for grazing. In no other country of the world are there larger areas of fertile land, level as a floor, easily worked, and as fruitful as the valley of the Nile.

As in all new agricultural regions the production of wheat has been the leading industry. With fertile lands upon which wheat can be raised at a cost of from 24 to 36 cents per bushel, varying with the extent of the farming, the results of agriculture in favorable years have been almost certain.

In 1860, when the development of the Territory began, less than 1,000 bushels of wheat were raised. In 1870 the crop aggregated 170,662 bushels; in 1880, 2,830,289; in 1885, 38,166,413 bushels, while in 1887 the wheat crop reached, according to estimate of the National Department of Agriculture, 52,406,000 bushels, and according to the estimate of the Territorial statistician, 62,553,499 bushels.

The yield of corn in 1885 was 7,800,593 bushels; two years later, in 1887, the yield had increased more than 300 per cent., and, as reported to the Territorial statistician, amounted to 24,511,726 bushels, a crop larger than that of Minnesota, Michigan, or any one of more than a dozen States. The wheat crop of 1888, according to the estimate of the commissioner of immigration, was 37,763,847 bushels against 38,036,000 as estimated by the statistician of the Department of Agriculture, Washington. The corn crop, according to the authorities above mentioned, was 19,068,680 and 18,816,000, respectively.

The following table shows the acreage and estimated yield of the various crops for 1889 for the Territory at large, and for North Dakota and South Dakota separately:

Counties.	Wheat.		Oats.		Corn.		Barley.	
NORTH DAKOTA.	*Acres.*	*Bushels.*	*Acres.*	*Bushels.*	*Acres.*	*Bushels.*	*Acres.*	*Bushels.*
Barnes	120,452	915,435	25,922	399,198	229	3,549	11,672	147,066
Benson	28,927	216,952	4,678	111,103	1,514	52,990	1,285	21,416
Billings	.....	.....	70	2,100	20	700	.....	.....
Bottineau	34,066	272,528	5,936	169,222	.....	.....	308	4,434
Burleigh	83,991	739,120	7,681	184,344	8,099	380,653	434	5,534
Cass	376,032	3,008,256	59,130	1,350,135	1,112	50,040	13,082	261,640
Cavalier	61,697	848,333	12,440	311,000	.....	.....	5,175	129,375
Dickey	91,002	693,890	17,513	284,586	2,185	49,163	7,866	91,442
Eddy	28,367	217,480	5,492	146,452	12	420	1,392	24,592
Emmons	8,356	122,554	2,930	83,993	2,417	52,368	1,036	24,864
Foster	29,705	274,771	5,456	105,028	1	45	1,228	13,211
Grand Forks	251,420	4,117,002	39,792	1,362,876	134	5,527	18,387	766,125
Griggs	40,287	372,655	8,150	179,300	4	180	3,584	89,600
Kidder	29,499	127,829	4,873	40,608	128	640	988	10,209
La Moure	51,249	256,245	10,678	208,221	426	6,390	2,702	43,232
Logan	2,340	32,760	711	21,330	142	2,840	156	4,056
McHenry	4,688	35,941	2,573	72,901	83	2,698	541	8,476
McIntosh	19,236	250,068	5,502	171,937	680	14,960	1,597	21,958
McLean	5,062	43,533	2,299	50,578	585	21,060	214	4,337
Mercer	1,150	10,062	603	11,055	702	9,360	139	926
Morton	10,314	76,324	3,733	55,254	3,162	104,346	240	1,800
Nelson	66,135	286,585	11,269	157,766	7	175	2,889	41,409
Oliver*	969	4,845	995	4,975	1,200	33,000	25	188
Pembina	223,046	2,631,943	31,181	586,202	21	840	17,436	362,668
Pierce	8,760	85,410	2,050	40,487	.....	.....	300	6,000
Ramsey	106,762	516,017	13,215	167,390	.....	.....	3,528	31,752
Ransom	116,176	774,507	18,002	162,018	944	.....	1,928	12,854
Richland	127,831	2,460,746	25,814	645,350	2,125	70,833	2,946	92,062
Rolette	8,359	93,143	4,105	95,002	8	200	663	11,556
Sargent	77,235	762,696	14,384	282,286	1,219	29,459	2,867	45,511
Stark*	7,806	89,769	4,100	71,750	2,100	84,000	325	6,500
Steele	86,410	777,690	14,748	265,464	81	2,430	2,315	37,503
Stutsman	48,880	374,747	10,290	205,800	68	1,700	3,667	79,452
Towner*	42,745	299,215	5,374	56,427	.....	.....	654	6,213
Traill	205,892	1,990,289	29,208	559,820	327	11,445	6,434	110,664
Walsh	222,840	2,896,920	33,268	1,097,844	10	500	9,902	233,687
Ward	3,875	23,250	1,708	15,941	277	7,664	116	928
Wells	24,430	122,150	4,690	70,350	.....	.....	609	7,612
North Dakota	2,655,991	26,721,660	450,563	9,746,093	30,022	1,000,175	128,631	2,760,902
SOUTH DAKOTA.								
Aurora	27,520	174,293	9,068	108,816	21,207	452,416	1,174	14,088
Beadle	76,956	740,701	15,656	260,281	37,947	777,913	3,670	51,991
Bon Homme	16,372	122,790	17,505	218,812	36,148	991,070	1,716	23,166
Brookings	59,889	407,234	22,460	211,124	7,510	193,382	1,438	17,256
Brown	256,380	1,384,452	48,797	595,323	7,095	180,922	20,619	222,686
Brule	37,124	250,868	14,616	149,814	29,641	634,317	3,057	41,439
Buffalo	5,884	45,110	2,597	30,297	3,264	52,224	399	4,256

*Acreage estimated.

Counties.	Wheat.		Oats.		Corn.		Barley.	
SOUTH DAKOTA—continued.	*Acres.*	*Bushels.*	*Acres.*	*Bushels.*	*Acres.*	*Bushels.*	*Acres.*	*Bushels.*
Butte	1,837	23,145	1,122	34,782	2,510	62,750	136	2,958
Campbell	19,247	205,300	4,421	112,735	2,523	84,100	1,195	21,910
Charles Mix	19,011	217,269	8,606	78,683	24,916	780,701	542	8,929
Clark	66,829	854,022	16,099	370,277	8,059	241,770	3,682	67,503
Clay	7,091	101,046	12,481	390,031	35,918	2,027,387	466	6,990
Codington	67,249	829,404	15,613	507,422	2,141	83,856	3,345	89,200
Custer	2,119	51,704	2,664	101,232	5,319	172,335	74	2,497
Davison	23,198	189,450	11,246	168,690	22,409	373,480	1,230	18,143
Day	96,168	1,500,219	18,542	730,554	3,073	96,030	3,930	116,328
Deuel	34,066	366,209	11,309	262,934	3,070	126,637	1,310	31,112
Douglas	19,745	167,832	11,410	114,100	22,063	661,890	2,921	37,973
Edmunds	54,305	289,627	11,073	140,256	3,780	73,000	5,492	46,376
Fall River	1,126	18,016	900	24,900	6,552	181,270	21	735
Faulk	54,730	250,192	9,706	80,424	13,559	92,202	3,553	23,687
Grant	42,710	651,327	13,540	473,900	7,067	196,110	575	16,292
Hamlin	45,034	360,272	13,759	292,378	3,781	189,050	2,177	40,818
Hand	60,525	462,189	10,570	109,223	34,030	640,380	1,549	15,180
Hanson	32,809	180,449	13,588	118,895	21,175	449,969	2,868	24,438
Hughes	4,348	38,404	1,216	21,280	8,281	171,141	276	4,305
Hutchinson	58,452	514,372	29,895	375,635	44,451	1,449,102	3,461	33,918
Hyde	11,510	108,467	2,836	49,630	6,989	131,044	608	15,200
Jerauld	21,543	168,751	8,599	44,428	14,211	184,743	1,902	14,899
Kingsbury	90,436	777,749	26,274	325,797	13,791	267,545	3,324	43,212
Lake	46,053	564,150	19,081	395,930	8,286	244,437	3,000	78,750
Lawrence	11,024	205,780	8,312	246,588	5,122	166,465	174	3,828
Lincoln	21,847	323,334	30,876	827,480	44,434	1,884,002	2,860	51,480
McCook	42,147	252,882	18,298	192,129	26,307	328,837	2,341	16,972
McPherson	30,674	177,910	7,042	77,462	1,059	35,300	3,624	32,616
Marshall	86,510	504,640	15,642	80,817	1,198	17,970	7,888	56,530
Meade	6,509	104,000	6,135	204,500	7,228	185,519	179	3,132
Miner*	43,663	87,326	15,720	15,720	15,000	23,572	3,368	12,028
Minnehaha	37,593	460,514	33,228	743,476	31,176	1,024,350	6,189	106,981
Moody	36,245	260,964	23,082	166,190	10,478	220,038	3,869	59,583
Pennington	2,194	59,338	2,697	126,759	3,104	93,896	96	4,800
Potter	24,500	235,810	5,100	86,062	6,000	132,000	.....	.....
Roberts	17,154	314,490	4,150	152,161	2,177	61,681	409	13,633
Sanborn	39,596	382,760	16,564	256,742	13,060	300,380	1,928	26,510
Spink	176,637	1,091,938	20,381	201,546	35,108	365,122	10,315	103,150
Sully	19,149	185,107	2,949	44,235	12,882	201,818	971	11,166
Turner	18,789	281,835	21,185	439,588	33,651	1,346,040	1,053	14,391
Union	11,326	241,557	16,576	469,653	42,423	1,909,935	677	20,310
Walworth	12,091	126,955	2,786	83,580	1,474	36,850	740	9,620
Yankton	15,824	167,280	15,857	310,344	31,458	1,235,850	947	16,910
Sonth Dakota	2,013,726	17,287,332	671,829	11,623,615	784,655	21,821,898	127,338	1,694,875
The Territory	4,669,717	44,008,992	1,122,392	21,369,708	814,677	22,832,073	255,969	4,455,777

Counties.	Rye.		Buckwheat.		Potatoes.		Flax.	
NORTH DAKOTA.	*Acres.*	*Bushels.*	*Acres.*	*Bushels.*	*Acres.*	*Bushels.*	*Acres.*	*Bushels.*
Barnes	262	4,585	22	220	836	38,456	877	6,358
Benson	2	37	.....	.....	105	9,844	662	7,282
Billings	.....	.....	.....	.....	12	1,800	.....	.....
Bottineau	11	198	.....	.....	258	37,087	22	176
Burleigh	389	5,446	8	120	741	80,028	689	7,002
Cass	18	360	.....	.....	1,549	119,531	512	3,925
Cavalier	24	480	.....	.....	358	56,683	981	10,791
Dickey	123	1,845	9	90	1,020	46,410	15,493	82,276
Eddy	.....	.....	8	80	149	17,383	559	7,546
Emmons	13	182	.....	.....	246	22,960	950	8,550
Foster	6	90	.....	.....	195	9,506	1,263	15,998
Grand Forks	125	2,500	.....	.....	838	12,894	372	7,440
Griggs	232	2,088	1	15	203	39,332	341	2,614
Kidder	91	2,730	4	60	126	3,990	156	1,248
La Moure	716	9,308	4	28	370	17,100	3,589	22,431
Logan	.....	.....	.....	.....	41	5,330	508	5,080
McHenry	18	270	3	45	133	12,857	90	900
McIntosh	31	180	.....	.....	288	37,080	12,359	135,948
McLean	19	380	.....	.....	114	9,006	6	60
Mercer	.....	.....	.....	.....	41	1,640	571	4,996
Morton	13	130	3	18	600	58,800	601	9,216
Nelson	71	1,136	11	110	256	29,867	304	3,496
Oliver*	.....	.....	.....	.....	125	7,188	150	750
Pembina	232	3,480	10	100	626	66,512	61	488
Pierce	.....	.....	.....	.....	75	10,000	100	800

*Acreage estimated.

Counties.	Rye.		Buckwheat.		Potatoes.		Flax.	
NORTH DAKOTA—continued.	*Acres.*	*Bushels.*	*Acres.*	*Bushels.*	*Acres.*	*Bushels.*	*Acres.*	*Bushels.*
Ramsey	5	75	.....	.....	302	27,935	76	494
Ransom	204	2,448	16	240	563	17,828	58	580
Richland	54	990	23	345	705	94,587	1,225	16,078
Rolette	18	270	14	466	218	27,095	63	735
Sargent	160	2,240	15	150	690	38,812	3,815	28,612
Stark*	100	1,000	.....	.....	475	45,125	150	2,250
Steele	146	1,460	1	15	387	42,957	424	2,968
Stutsman	41	820	52	780	583	79,676	429	4,576
Towner*	.....	.....	.....	.....	621	49,680	70	665
Traill	43	753	1	15	716	97,853	1	10
Walsh	.....	.....	.....	.....	1,055	98,748	5,512	56,957
Ward	.....	.....	.....	.....	171	19,950	10	150
Wells	.....	.....	.....	.....	128	9,600	4,462	35,696
North Dakota	3,167	45,481	205	2,897	16,119	1,401,130	57,511	495,202
SOUTH DAKOTA.								
Aurora	938	12,506	27	71	493	28,758	2,600	18,200
Beadle	315	2,205	169	507	1,131	36,757	6,631	4,393
Bon Homme	319	3,190	128	1,024	607	45,525	8,186	65,488
Brookings	211	3,692	176	1,350	709	31,196	25,012	215,103
Brown	101	1,475	4	12	1,846	126,635	20,855	137,643
Brule	729	1,010	21	84	852	53,250	2,684	21,770
Buffalo	40	8,201	3	24	161	5,635	3,160	16,853
Butte	8	360	3	15	149	19,556	5	50
Campbell	47	186	.....	.....	176	18,040	8,873	91,688
Charles Mix	1,161	455	201	2,814	471	44,274	4,469	45,328
Clark	59	13,158	182	1,456	808	70,700	9,645	81,018
Clay	47	658	38	570	646	106,590	3,255	34,720
Codington	11	275	36	.....	719	54,520	2,599	28,156
Custer	8	213	34	935	419	65,783	9	90
Davison	501	5,511	29	393	468	45,630	2,091	14,282
Day	23	230	8	80	822	139,740	6,913	70,516
Deuel	41	717	17	170	480	33,000	7,553	76,530
Douglas	812	12,789	79	711	488	39,040	7,170	55,568
Edmunds	39	214	15	75	602	46,153	10,437	66,101
Fall River	14	350	4	80	291	36,666	2	18
Faulk	46	460	15	75	645	18,889	9,762	52,064
Grant	37	555	22	330	650	54,322	448	5,760
Hamlin	120	2,400	9	162	574	33,005	2,646	21,829
Hand	811	7,705	35	508	738	41,931	15,265	86,041
Hanson	493	6,162	57	855	436	40,330	2,288	12,964
Hughes	83	1,203	10	200	276	32,430	596	5,562
Hutchinson	944	8,118	126	1,197	992	54,560	6,037	47,089
Hyde	81	1,417	4	32	374	34,128	4,403	36,325
Jerauld	282	1,786	24	168	322	13,470	5,818	36,071
Kingsbury	307	2,149	24	384	1,002	98,196	12,200	100,040
Lake	204	3,400	55	440	566	66,033	11,770	120,642
Lawrence	72	1,872	3	30	882	192,717	18	180
Lincoln	178	2,047	48	792	829	92,848	14,382	178,336
McCook	224	1,008	91	773	615	24,087	5,585	40,025
McPherson	82	656	39	195	479	23,950	9,042	48,826
Marshall	7	56	.....	.....	398	17,910	6,361	57,249
Meade	29	1,450	6	120	359	45,473	.....	.....
Miner*	525	1,400	65	115	235	5,707	7,035	33,768
Minnehaha	468	10,296	87	2,175	978	87,408	17,918	185,899
Moody	138	552	58	290	620	33,480	24,538	176,683
Pennington	8	120	18	360	359	44,875	2	20
Potter	.....	.....	.....	.....	.....	.....	9,560	88,430
Roberts	7	105	32	640	177	16,225	489	5,868
Sanborn	4,492	112,300	18	144	382	21,646	9,334	76,228
Spink	417	5,004	365	3,168	1,190	52,360	17,474	91,252
Sully	621	7,762	216	1,728	643	39,651	2,248	12,739
Turner	158	2,133	42	420	721	108,150	8,377	90,053
Union	103	2,884	103	1,545	841	154,183	1,705	17,903
Walworth	33	330	.....	.....	159	21,862	4,754	47,540
Yankton	193	2,895	82	2,460	757	119,858	3,599	35,475
South Dakota	16,587	255,620	2,828	29,667	29,537	2,637,132	345,803	2,754,376
The Territory	19,754	301,101	3,033	32,564	45,656	4,038,262	403,314	3,249,578

* Acreage estimated.

The farm acreage in 1885 was, according to the census of that year, 16,842,412 acres, of which 6,560,758 acres were under cultivation. The cultivated area in 1887 was about 9,000,000 acres, and is over 10,000,000 of acres this year.

In addition to wheat and corn, large crops of barley, oats, flax, and potatoes are raised. In 1888 the total crop of oats was 30,963,247 bushels, of barley 3,811,882 bushels, and of flax 2,963,247 bushels, as estimated by the commissioner of immigration.

In the older sections of Dakota mixed farming is yearly becoming more general. Stock raising, for which Dakota possesses peculiar adaptation, is a rapidly growing industry. The number of stock and farm animals has increased remarkably since 1880. In that year there were 41,670 horses, 2,703 mules, 40,572 milch cows, 100,243 head of cattle, 30,244 sheep, and 63,394 hogs, of a total value of $6,463,274, in the Territory. In 1889, according to the figures in the national Department of Agriculture, there were in Dakota 264,781 horses, valued at $20,659,590; 16,850 mules, valued at $1,596,324; 239,057 milch cows, valued at $6,693,596; 813,878 oxen and other cattle, valued at $16,619,318; 242,117 sheep, valued at $609,747; 453,875 hogs, valued at $3,248,386, the total value being $49,426,961.

The increase in the value of live stock during the past nine years is 663 per cent. Dairying is becoming an important industry, and during the past two years a large number of creameries have been established and have generally proven profitable investments.

During the past few months the subject of irrigation has attracted a great amount of attention. At the last session of the Territorial legislature an act was passed authorizing the sinking of artesian wells upon the petition of a certain number of residents of a township. Numerous petitions under the act have been filed, and the work of sinking wells is now in progress in a number of counties. Mass-meetings have been held in many towns for the purpose of discussing the question of irrigation, and the interest of the people has approached enthusiasm. The visit of the Senatorial Committee on Irrigation, in August last, still further aroused popular interest, and the expressions of members of the committee left little doubt as to their opinion of the feasibility of a general system of irrigation.

The success in sinking artesian wells in Dakota has been so general, and the flow obtained so strong and unvarying, that it seems certain that beneath the prairies of the region lies an unfailing source of water supply. The whole number of wells in the Territory at the present time is about one hundred and thirty-five. The flow is struck at depths varying from 500 to 3,000 feet, the average depth being about 1,000 feet. The average pressure is about 56 pounds to the square inch, some wells reaching a pressure of 175 pounds. The discharge per minute ranges from 1,800 to 3,000 gallons.

That an appropriation sufficient to survey the artesian field, ascertain its limits, and conduct experiments in irrigation would be of great practical benefit, can not be denied. The only element of uncertainty in Dakota agriculture arises from the irregularity in the rain-fall in some seasons, although the total precipitation compares favorably with other States and Territories of the Union. That the value of land and agricultural products would be increased fourfold is apparent, and it is to be hoped that speedy steps will be taken to realize possibilities, nowhere greater than in the new States of North and South Dakota.

LABOR SUPPLY.

There is a large demand in Dakota for both skilled and unskilled labor. The chief demand for common laborers comes from the farming communities, though at times a considerable demand for labor exists in the towns. During the wheat harvest and thrashing seasons the demand is quite large. In towns and cities of the Territory there is a large demand for skilled mechanics, especially masons and carpenters, who are employed in building. The establishment of manufactories of various kinds, the development of mines and quarries is constantly increasing the demand.

In ordinary employments the scale of wages is about as shown in the following table:

		Wages.
Farm laborers, regular season hands	per month..	$15.00 to $25.00
Day laborers	per day..	1.50 to 1.75
Carpenters	do....	2.00 to 3.00
Stone-masons	do....	3.00 to 4.50
Bricklayers	do....	3.00 to 4.00
Painters	do....	2.00 to 2.50
Blacksmiths	do....	1.75 to 3.00
Tinners	do....	2.00 to 2.50
Harness-makers	do....	1.75 to 2.50
Servant girls	per week..	2.00 to 4.00
Printers	do....	11.00 to 20.00

The industrious laborer is assured of continuous labor, and by frugality may hope to amass a competence.

BONANZA FARMING.

There are located in North Dakota a number of large, or what are known as "bonanza wheat farms."

Prominent among these are the Dalrymple farm, containing from 8,000 to 10,000 acres; the Grandin farm, of from 15,000 to 17,000 acres; the farm of the Dwight Farm and Land Company, containing 12,000 acres in cultivation; the Elk Valley farm of 5,000 acres, all located in the Red River Valley. In addition to these are a large number of farms ranging from 1,000 to 5,000 acres.

The character of the soil, its ease of cultivation, and great fertility, together with the level character of its surface and the favorableness of the climate during the harvest and thrashing season, make these extensive farming operations practicable.

These farms are operated with the most thorough system, and by the aid of the latest and most improved farm machinery.

The largest of these farms are divided into what are known as "divisions;" each division containing from 2,000 to 3,000 acres, which is in charge of a division foreman or superintendent.

Each division is supplied with boarding-house for men, stables, machinery, buildings, granaries, blacksmith shops, etc.

The field hands are organized into crews of from fifteen to twenty men each, which are placed under the charge of a competent field foreman, whose duty it is to see that the work is done well and faithfully. The supplies of all kinds are purchased in large quantities and largely at wholesale, and are issued to the several divisions upon requisition from the several cooks, and countersigned by the division foreman.

The general direction of the farm is intrusted to a general manager or superintendent, to whom all the various divisions must report, and who is held responsible for general results.

By this system and organization, and the thoroughness and efficiency obtained by the care and supervision of the work in all its details, the production of a bushel of wheat is reduced to its lowest possible cost; in favorable years the cost of the production of a bushel of wheat being as low as 30 or 35 cents. It requires, to operate a farm of 10,000 acres successfully, 300 horses, 60 gang-plows, 60 seeders or drills, 150 wagons, from 50 to 60 self-binding harvesters, 10 steam-thrashing outfits, and during harvest and thrashing, 250 men.

Many of these farms have, during the last four years, also given their attention to the breeding of horses and cattle. Great care has been exercised in the selection of the best strains of imported breeds, and the results thus far have been most satisfactory. This has done much to stimulate diversified farming among the smaller farmers, and enable them to obtain the use of well-bred sires, which is to result in the production in a few years of a large number of highly-bred horses and cattle, which is to be an important source of wealth, and give greater prosperity and stability to the agricultural growth of the country.

It may be mentioned that Hon. John Miller, manager of the Dwight Farm, is the governor-elect of the new State of North Dakota, and the State is fortunate in bringing to her aid his excellent executive ability in this crisis. He raised 8,500 acres of crops during the present season.

WOOL GROWING.

The wool-growing industry is beginning to develop, and will be one of the sources of wealth. This is the natural home of the sheep. No climate is more healthful for this animal, which is here remarkably free from diseases to which it is subject, and the wool of the finest imported sheep improves rather than loses in texture.

A large mill has been recently put in operation at Sioux Falls, which is now running entirely on Dakota wool.

It may be mentioned that the State officers for the State of South Dakota were each attired in an elegant suit, the fabric of these mills, upon the occasion of their public inauguration on the 15th instant.

VEGETABLES AND FRUITS.

Dakota produces the finest vegetables of every description. Her potatoes have acquired a national reputation second only to her wheat and take the first prizes wherever offered throughout the States. They are raised almost without effort, a fine crop being obtained from seed turned under the sod in May or June on wild breaking of the prairie.

All the bulbous roots yield luxuriantly and abundantly, such as beets, carrots, turnips, onions, radishes, etc. The manufacture of sugar from beets and of starch from potatoes will be among the important enterprises of the near future for the new States.

Fruits come last always among the farm and garden products of a new country. It is remarkable, however, what Dakota has accomplished thus far in this direction. In the older section of the Territory large quantities of small fruits are shipped to other parts of Dakota and to points in Nebraska and elsewhere. Apples and grapes are among the fruits exported, which consists mostly of strawberries, raspberries, etc. Plums and pears are cultivated successfully, and no larger or finer eating apples can be produced anywhere than in this older Dakota.

Fruit raising will be extended throughout the two Dakotas with the solid growth of the country, and new-comers should have no fear of being unable to have their own orchards and strawberry patches.

The wild fruits native to Dakota make a good showing. Prof. G. E. Bailey has gathered some interesting information about the fruits found growing wild in the Black Hills, from which the following is taken:

Plums are found in the drains and canyons, which have a delicious flavor and appear in three distinct species. They make an excellent stock for grafting purposes. Red raspberries, gooseberries, strawberries, choke cherries, June berries, frost grapes, and buffalo berries are all common, being found either in the timber, on the side-hills, or near the peaks, in the foot-hills, or along the streams. These wild fruits are all finely flavored and very agreeable to the taste. Some of the berries make very fine jelly.

CROPS OF 1889.

The climatic season of the summer of 1889 has been remarkable. While the general average of production will fall but little short of the previous year, it is still a fact that there are quite extensive localities where there has been a total failure of crops for want of rain-fall in the months of May and June. It is true particularly of portions of Minor, Sanborn, Beadle, Kingsbury, Spink, Faulk, and Brown Counties, in the south, and Ramsey, Benson, Nelson, Cavalier, Turner, Rolette, and Barnes Counties in the north. The abundance which prevails in other sections, notably the southeastern and Red River counties, will enable the people of the unfortunate districts to obtain such aid as they may need to overcome this temporary adversity.

PROGRESS OF MINING IN THE BLACK HILLS.

Mining in the Black Hills is confined almost exclusively to the three counties, Lawrence, Pennington, and Custer. With the exception of the stone quarries which are found in Fall River County and the coal of Butte, the great mineral bodies of the Hills lie within the three counties just named. Of these Lawrence County ranks first in importance. The first gold mines of any importance were discovered here and those which furnish the output of bullion from Dakota are nearly all located within the boundaries of Lawrence County. The entire area embraced within the mineral-bearing district of the Black Hills is not more than 4,000 square miles. This statement seems incredible when we think of the great area covered by the mining operations of Montana, Colorado, or even Idaho.

During the past year considerable progress has been made in our mining interests. This branch of industry has fully kept pace with the others and at no former time was the outlook for a rapid development of the mineral resources of the Hills brighter than it is at present. Much good may be looked for from the great attention which has been given to Dakota during the past year. The discussion growing out of the demand for statehood, and the renewed effort to secure the opening of a portion of the great Sioux Indian Reservation to settlement, have served to call attention to this portion of the Territory. The amount of information thus diffused among the people in regard to the Black Hills has been greatly increased and interest has been vastly stimulated. Not only are many looking thither with a view to locating and making homes there, but men of capital also who desire to increase their wealth are seeking it with a view to investing their money.

TIN.

Our tin interests are attracting much attention also. For some time past doubt has existed in the minds of many whether this metal could be found in a quantity sufficient to pay the expense of mining it. This

problem is happily being solved with great rapidity. Within the past year a company of foreign capitalists has been organized with heavy capital behind them to take hold of and develop what are known as the Harney Peak properties, located in Pennington and Custer Counties. A large number of claims have been purchased and others bonded. The work done thus far appears to be very satisfactory not only to the company itself but also as to showing the extent and value of the tin deposits of the Black Hills. I quote from a letter of a prominent gentleman of New York City to the New York Sun. This gentleman visited the Black Hills and made an examination of the tin district. He says:

Most of the claims of these districts have been located within the last twenty months. The assays in each case have been made by Professor Bailey, of the School of Mines, from 10-pound samples of three grades of ore. He says that he is convinced that these groups contain the largest and most valuable aggregation of tin veins ever brought to the attention of the world. He estimates that the main lodes of the Martha Washington, Evergreen, California, and Samelias groups, if cut to a depth of 300 feet and a length of 500 feet, would yield 6,085 tons of metallic tin. These are only five of the 700 lodes near Harney's Peak. Such cuts would be only a fair development of each lode, and the aggregate would be 29,418 tons of tin, worth, at 20 cents a pound, $400 a net ton, or $11,767,200 in all. Deduct even 75 per cent. from Professor Bailey's figures, and there is not a shadow of a doubt that the Harney Peak region can be made to supply the whole world with tin. The total production of the world in 1888 was less than 60,000 tons. The United States in the same year paid over $30,000,000 for tin from abroad.

It is said that the average of the tin ores in the Black Hills is about double the average of the Cornwall mines. This may be so, but it is certain that the ore is far more easily treated. Most of the Cornwall ores, I am told, are roasted. There will be no roasting in the Black Hills. Professor Vincent says that the ores here are of almost typical purity. The eighty-three assays, and seven analyses, which he personally conducted, averaged 74.31 per cent. of white metal. The Harney Peak ores, he adds, are equally free from lead, arsenic, zinc, and other deleterious elements. Such immunities are of an importance not easy of exaggeration.

Such are the Harney Peak properties. They do not include more than a third of the lodes discovered. They comprise about two hundred lodes. The company is developing its mines preparatory to building a railroad and erecting a mill. It has over 100,000 tons of tin ore upon its dumps. It employs 350 men under the direction of experienced mining captains from Cornwall. Three million dollars are set aside for the development of the property. The company owns most of the water-power, much of the timber, and many of the ranches in the ribbon of tin-bearing slate.

This is certainly a very gratifying report. It ought to set at rest whatever doubts may exist in regard to the extent and value of our tin deposits. It would be much more a matter for congratulation if this work were being done by American capital, but it is gratifying nevertheless in that it is proving that we have here a source of wealth surpassing in magnitude the brightest dreams of its discoverers.

Nor must it be supposed that the tin deposits are limited to the locality covered by the operations of this one company. Other portions of the Hills, particularly the Nigger Hill district, contain deposits of the same metal, equal in richness to that of the Harney Peak property. Hence there remains yet a vast field to be developed, where capital may find ample return, and where speculators may reap golden harvests.

GOLD AND SILVER.

Turning now to the subject of gold and silver, we find a steady, if not marked, progress in the production of these metals. The well-established mines show a steady output of bullion, not less than last year, and other unmistakable evidences of prosperity, such as the addition of new property and an increase of facilities for the reduction of ore. Gold and silver mining in the Black Hills has been confined almost exclusively to Lawrence County, and the output of bullion is credited to

our leading mines. The following table will show the estimated output for the successive years since 1877:

1877	$2,000,000	1884	$3,450,000
1878–'79	6,000,000	1885	3,300,000
1880	5,000,000	1886	3,125,000
1881	4,070,000	1887	3,150,000
1882	3,475,000	1888	3,150,000
1883	3,350,000		

The search for the precious metals is now taking a wider range, and recent discoveries and developments in the Southern and Central Hills indicate that a number of producing mines will soon be added in that neighborhood. There seems to be no good reason why the gold and silver ore should be confined to the one county, hence we may look with confidence for the development of new fields. But of vastly more importance to the mineral world is the progress which has been made in the treatment of the refractory gold ores which are found in the Black Hills. When once the secret of the proper method of treating these ores has been fully discovered a vast storehouse of wealth will be unlocked. I am glad to say that some real progress has been made in this direction within the past year. A plant costing in the neighborhood of $100,000 and calculated to treat 100 tons of ore per day was erected in Deadwood, in the fall of 1888, for the purpose of treating these ores by a process hitherto untried in this country. High hopes were entertained of this plant. It was believed that the solution had at length been discovered and that the vast regions underlain with the stubborn ores would be made to yield their wealth. Unfortunately, however, before the process had been thoroughly tested, the entire plant was destroyed by fire. The loss has been a severe tax upon the resources of the community and upon the energy of those who undertook the enterprise, but it can not delay materially the solution of the problem. The experience derived therefrom will be valuable in future undertakings, and already plans are on foot to build new works wherein experiments by at least two different processes will be made. Before another year has rolled around we may confidently hope to see the efforts now being put forth crowned with success. In the mean time thousands of tons of ore from small mines whereon assessment work only is being done have been shipped to points on the outside, to Denver, Kansas City, Omaha, and elsewhere to be reduced. Returns from these shipments show a high grade of ore in nearly all cases, and in some particulars ores of a remarkably high grade. Such evidences as these of the value of mining property here serve to increase the faith of those who own property and must surely attract more and more the attention of those who are looking for a field of speculation.

COAL AND OTHER MINERALS.

Another problem that confronts the people of this section is that of cheap fuel. The supply of timber in the Black Hills is, it is true, well-nigh inexhaustible and would of itself furnish fuel for years to come, but our people are beginning to see that with 11,000,000 acres soon to be added to the land available for settlement on this side of the Missouri River, and the tremendous increase in population which must result therefrom within the next few years, the question of cheap fuel will have to be considered. Aside from this, coal is needed for mining and manufacturing purposes. Manufactories will be springing up in many cities and towns throughout western Dakota, and there will be need of coal to turn the wheels of industry.

A good deal of prospecting for this mineral has been done during the past year. Outcroppings indicating deposits of coal were discovered in the Southern Hills near the Red Canyon last summer, and a shaft sunk in the vicinity of Rapid City to a depth of several hundred feet passed through coal formations. North of the Hills extensive coal fields are known to exist. In the vicinity of Hoy Creek in Butte County some valuable mines have been opened up near the Wyoming line, but as yet the lack of railroad facilities has operated against the development of the coal industry in that neighborhood. Should the coming spring usher in an era of railroad building toward the Hills, the coal fields of Hoy Creek will doubtless be the scene of much activity.

Any account of the mineral resources of the Black Hills would be incomplete without a reference to the excellent quality of building-stone found in many parts. At Buffalo Gap large quantities of an excellent quality of sandstone have been opened, and this industry has increased marvelously during the past year, giving employment at present to a large number of men. Shipments have been made of ornamental sandstone for building purposes from this point to many of the large cities of the East. Our Territory is already supplying many of the cities of Nebraska, Iowa, and other neighboring States with stone for their public buildings. Without doubt this is destined at no distant day to become one of the chief industries of western Dakota.

CHURCHES AND TEMPERANCE.

The citizens of Dakota are a God-fearing people, and have not been backward in making provision for the moral and religious welfare of their families. There are more than 1,000 church societies in the Territory, representing the various denominations. The number of ministers is about 800, and the number of church buildings 650. The total value of church property is estimated at $3,000,000.

Religion takes deep root in this free soil, and the large church attendance bespeaks the interest manifested by the people and shows their spirit in the work. There are Sunday-schools everywhere, with a total attendance reaching up into the thousands. Dakota is always well represented in the national religious and Sunday-school conventions of the country.

The educational work of the church in Dakota is shown by the several universities and academies which are elsewhere referred to, and by the Indian schools maintained by different denominations.

As an evidence of the aggressive moral spirit of her people, the proposed States of South Dakota and North Dakota have each incorporated by popular ballot a clause in its constitution, forever prohibiting the manufacture and sale as a beverage of intoxicating liquors within its borders.

BANKING.

The condition of the banking business of any State or Territory furnishes a safe basis from which to estimate the general financial health therein existing. It is therefore a just cause for congratulation that the banks of Dakota, almost without exception, have been pre-eminently successful, and that they have, by a careful, conservative course, banished to a great extent from the mind of Eastern capital that prejudice which has too often existed in the past, superinduced by overcaution and lack of reliable information as to the wealth and resources of our Territory. Dakota has yet much to hope for from Eastern capital, and presents a field unequaled in promise of security and profit.

There are in Dakota 346 banks, with an aggregate paid-up capital of $9,130,600, and having a surplus of $1,321,790. Among these are 59 national banks, with a capital of $3,800,000 and surplus of $923,700, and 207 private and State banks, with a capital of $5,330,600 and surplus of $398,090. Of these, 24 national banks, with a capital of $1,540,000 and surplus of $379,000, and 48 private and State banks, with a capital of $1,151,500 and surplus of $55,100, are situated in that portion of Dakota which will become the State of North Dakota; and 35 national banks, with a capital of $2,260,000 and surplus of $544,700, and 159 private and State banks, with a capital of $4,179,100 and surplus of $342,990, are situated in that portion of Dakota which will become the State of South Dakota.

One feature of the banking business in this Territory is both encouraging and worthy of notice. Local deposits have been steadily increasing, showing the growth and general wealth of the country, and giving promise of the ultimate repayment of all advances made by the East, and reasonable cause to hope that some time in the future the money of Dakota will be sufficient to conduct its enterprises.

Reports from the banks show that discounts are being well taken care of and that the prospects for the coming year are very encouraging.

Dakota has a greater number of banks than the six States of Arkansas, Louisiana, Mississippi, North Carolina, South Carolina, and Tennessee combined. Her banking capital is greater than that of Alabama, Arkansas, Colorado, Delaware, Florida, Mississippi, Nevada, North Carolina, Oregon, South Carolina, or West Virginia.

South Dakota has, in all, 235 banks, a greater number than Georgia, California, Louisiana, or any one of nineteen other States, and as many banks as Texas.

North Dakota has 100 banks, a greater number than Louisiana, either Carolina, West Virginia, Vermont, or any one of eight other States.

NEWSPAPERS.

A good way to judge of the character of a new country and its people is to read its newspapers.

The press of Dakota will stand inspection in this regard, and invites comparison with the newspapers of any State in the Union. Dakota owes much to her papers, which have ably seconded the railroads in pushing the settlement of the country and performing great service at all times in aid of its development.

Dakota has, in round numbers, 400 publications of every class. This is more than Minnesota, her neighbor on the east, can boast of, and more than any of twenty-four States out of thirty-eight, on the list for 1888.

Dakota has more than twice the number of newspapers published in Alabama, Mississippi, Maryland, Arkansas, Maine, Connecticut, West Virginia, New Hampshire, Florida, Colorado, or Louisiana.

Dakota has three times as many newspapers as the State of South Carolina, five times as many as Vermont, and ten times the number of Delaware.

The 400 publications of Dakota include 25 issued daily, 358 weekly, 12 monthly, 4 semi-monthly, and 1 quarterly. There are 392 papers printed in English, 4 in the Scandinavian languages, 3 in German, and 1 in Dutch or Hollandish. There are 382 newspapers of general information, 8 educational, 5 agricultural, 3 religious, and 1 medical journal.

South Dakota has 275 papers, or more than South Carolina, Delaware, Vermont, and Nevada combined, and as many as Minnesota.

North Dakota has 125 papers, or more than Vermont and Delaware combined; more than Montana and Washington combined, and as many as South Carolina.

POST-OFFICES.

Dakota had 1,050 post-offices on May 1, 1889, contributing a gross revenue to the Government of over $500,000. Dakota has more post-offices than either of the following fourteen States, viz: Colorado, Connecticut, Delaware, Florida, Louisiana, Maryland, Massachusetts, Nevada, New Hampshire, New Jersey, Oregon, Rhode Island, South Carolina, or Vermont.

South Dakota has 607 post-offices, or more than Colorado, Connecticut, Delaware, New Hampshire, Oregon, Rhode Island, or Vermont.

North Dakota has 443 post-offices, or more than any one of several of the States named.

Dakota has 50 Presidential post-offices, which is more than either of twenty of the other States named.

Dakota has 9 post-offices of the second class, which is more than the States of Georgia and Tennessee have combined; more than Virginia; as many as Minnesota, and only exceeded by thirteen of the larger States of the Union.

South Dakota has 33 Presidential post-offices; 6 of the second class, and 27 of the third class.

North Dakota has 17 Presidential post-offices; 3 of the second class, and 14 of the third class.

ARTESIAN WELLS OF DAKOTA.

The artesian wells of Dakota are among the wonders of the world. Noted wells in various parts of the globe appear insignificant when compared with them. The great well in the Place Herbert, at Paris, discharges 1,000 gallons per minute, but there are a number of wells in the James River Valley of Dakota which throw out 3,000 gallons per minute. The artesian-well district lies within the valley of the James or Dakota River, flowing wells being found all the way along from Yankton, in the extreme south, to Jamestown, North Dakota.

At Mitchell, Huron, Redfield, Aberdeen, Ellendale, and many smaller places, the artesian well is a deservedly prominent institution. These wells are of inestimable value to the country. Supplying an inexhaustible source of power, sufficient for all purposes, they are worth untold millions to the people of the two Dakotas so fortunate as to possess them.

At Yankton two 6-inch wells, 600 feet deep, with a pressure of 56 pounds to the square inch, furnish power for water-works and fire protection, run an electric-light plant, tow-mill, feed-mill, furniture manufactory, and several printing establishments. One well at Huron, with a pressure of over 200 pounds to the square inch, depth 863 feet, and 6-inch pipe, runs the water-works and a number of motors for printing houses and other establishments.

Two wells at Aberdeen, 900 feet deep, with a pressure of 200 pounds to the square inch, furnish the power for water-works and a pumping sewerage system. The Jamestown well is 1,576 feet deep, with a pressure of 100 pounds to the square inch. A system of water-works is maintained as at other places, without expense of fuel or engineer.

The water, which is very hard at Yankton, while excellent for drinking purposes, the temperature being 62 degrees, becomes quite soft 40 miles north of Huron, and is very clear and soft at Ellendale, temperature 67 degrees, and at Jamestown, with a temperature of 75 degrees.

It gives a person some idea of the power of these wells to see one operated for fire purposes. Four streams at the same time can be thrown over the highest buildings from any one of the high-pressure wells. No steam-engine is needed to help out, and the cost of the fire department is very slight.

There are some notable wells also in the Red River Valley, the well at Grafton, which is 528 feet deep, having a flow of 1,000 gallons a minute.

TIMBER.

To the traveler and to the settler who sees only the newer portions of central and northern Dakota the absence of trees has the effect sometimes of causing a feeling of homesickness. This is especially so with the wives and daughters of new-comers in such parts. But they take heart on learning that there is considerable timber elsewhere in Dakota, both north and south, and that it will grow and can be easily cultivated in every section of the Territory. Learning this, if they are wise and provident they will at once set about tree-planting in earnest.

Dakota is not all a treeless plain by any means, and the settlers on her open prairies have no reason whatever to feel discouraged about the future of their own section. All they have to do is to apply themselves industriously to the task of planting, and replanting when necessary, the timber that can and does grow in this fruitful soil.

The timber area of Dakota may be classified as native and cultivated. The extent of the native timber belts alone will surprise most people. There are more acres of timber in the Black Hills than the area of the State of Delaware.

The Red River Valley is in part a well-wooded country. A number of forest varieties are thrifty natives of the bottom-lands adjacent to the Red River of the North and its tributary streams, the Cheyenne, Wild Rice, Maple, Goose, Turtle, Forest, Park, Tongue, and Pembina Rivers.

There is considerable oak and other timber bordering on Devil's Lake, and a heavy growth of poplar, balm of Gilead, ash, and oak in the Turtle Mountains.

The timber along the Missouri River is mostly cottonwood, which in places grows to an immense size. There is not much timber on the James River, what is found there being confined to a number of straggling patches and a few larger groves. There is some timber along the streams emptying into the Missouri, in the Sioux Reservation. The Indians pitch their tepees near the timber on the Cheyenne, Moreau, Grand, and Cannon Ball Rivers. The amount of timber on the streams of eastern Dakota and elsewhere than here described is very small.

The cultivated timber area is larger than would be expected in a country so newly settled for the most part. From 1882 to 1887 inclusive there were 1,091 timber-culture proofs completed in Dakota, and during 1888 there were 150 proofs added to the number.

The timber culture act might better be amended, in the further interest of tree planting on the western prairies, than repealed; and if repealed, liberal bounties should and probably will be provided. In Dakota at the present time there are a few moderate tax exemptions on account of planting timber, and a small bounty for a term of years after

the successful cultivation for three years of the stated tract or number of rods along the highway.

The tree claims are growing and doing well, and will one day cut a very large figure, croakers to the contrary notwithstanding. But at the present time they constitute only a small part of the cultivated timbered area we speak of.

The visitor to the older Dakota will remark upon the one unexpected point of comparative resemblance between localities in that section and the villages and farms of the East.

At Yankton nearly every door-yard in the city has its own shade; in Elk Point the trees are thinned out on arbor days and the ones removed planted along the highways leading out of town; and at Sioux Falls the timber grown for shade and ornament is hardly less conspicuous.

In the country in this older Dakota groves of trees dot the landscape in all directions, and the farmer of the thrifty class esteems his 10 to 40 acres in timber as the most valuable area, acre for acre, on his farm.

Trees of every kind adapted to a temperate latitude do well in Dakota. Returns made to the immigration office in 1886 from thirty-seven counties included the following varieties as having been chiefly planted, viz: Ash, balm of Gilead, bass-wood, beech, black ash, box-elder, butternut, catalpa, chestnut, cottonwood, elm, hard maple, hickory, locust, mulberry, oak, poplar, soft maple, walnut, and willow—twenty varieties planted and doing well in Dakota. This is an excellent showing for any Western State, and one of which Dakota has reason to be proud.

DEPARTMENT OF EDUCATION.

FARGO, DAK., *October* 26, 1889.

SIR: We desire to hereby submit to you something of the educational status of Dakota at this time, when she is ready to throw off Territorial condition and enter upon statehood. We feel great satisfaction in announcing the fact that in educational affairs Dakota has never been as prosperous as she now is. The reports for the current year show a gratifying increase in the number of schools, their equipment, and the quality of work done in them. In the interest that the people take in their schools and the cheerfulness with which they provide the means for carrying them on Dakota is second to no State in the Union. The great school system of Dakota has thus far been carried on without any other means than that of direct taxation in the raising of money for its support. Not only has all this been done, but the people have not been at all backward in providing means for the founding and maintaining of a large number of private schools, most of which are schools for higher education. Ohio is said to be "the State of small colleges," and to this is attributed the very general intelligence of her people. The people of Dakota will rival even Ohio in the number of private schools that they are establishing and maintaining when her population and the rapidity of her development are considered. This is all due to the fact that Dakota has drawn the best blood from the older States to infuse into her own vigorous growth, and is another evidence of the truth of the statement of the general intelligence, enterprise, and thrift of the people of this Territory.

It is believed by all that there will be a marked improvement in our schools consequent upon the coming of statehood to the two Dakotas. The fact that the school lands will be made available for the purposes for which they were intended as soon as statehood is secured and the passage by the respective State legislatures of uniform school laws makes certain the prediction that the next two years will witness wonderful advancement in the schools of the respective States.

One of the great needs of Dakota schools has been thoroughly well-equipped teachers to conduct her schools. That this need has been recognized is evidenced by the establishment and liberal provision for normal schools, both public and private, in the Territory. Two State normal schools are now in successful operation, one located at Madison, in the southeastern, and the other at Spearfish, in the western, part of Dakota. In addition to these, there are nine private institutions, that have been appointed to do normal work under the authority of the Territorial board of education. There is provided for these a full normal course of instruction, and a principal is appointed in each school, with the approval of the board of education, who is to have charge of the normal department. The work done by these private institutions in

this way is quite satisfactory, and already a number of graduates have been sent out by them. By these means the standard of teachers is rapidly being improved in the Territory. Teachers from the old normal schools of the East are also coming to Dakota, and by this means also better-equipped teachers are taking the place of those whom force of circumstances enrolled as teachers in the early history of this Territory.

STATISTICS OF EDUCATION.

Common schools.

Number of graded schools in the Territory	160
Number of ungraded schools in the Territory	3,977
Number of schools built in the year	266
Total value of school houses, sites, and furniture	$3,022,361
Total seating capacity of school-houses	154,512
Number of teachers employed:	
Male	1,802
Female	3,965
Total	5,767
Average monthly wages:	
Male	$36.25
Female	32.84
Whole amount paid teachers:	
Male	243,959.98
Female	199,290.85
Number of persons in the Territory between the ages of seven and twenty, June 30, 1889:	
Male	61,284
Female	60,034
Total	121,318
Whole number of pupils enrolled	93,826
Average daily attendance	59,124
Percentage of children of school age attending school	81
Average cost per month of each pupil enrolled	$2.70
Per cent. of attendance	74
Number of certificates issued during the year ended June 30, 1889:	
First grade	270
Second grade	1,586
Third grade	2,368
Total	4,224
Average cost of tuition for each pupil enumerated by the census	$2.15
Average number of days school was taught	106
Total amount of bonded indebtedness	$2,662,952
Total amount of outstanding warrants	352,324
Total indebtedness	3,015,276
Average rate of interest on bonds, per cent	7.5
Average number of mills of tax-levy in school townships	13.7
Number acres of school lands in the Territory	1,715,009
Average value per acre of school lands	$5 to $10
Number of districts having six months or more of school	2,497
Number of districts having four months or less	1,367
Number of schools having libraries	240
Number of volumes in school libraries	5,486
Amount paid for school-houses during the past year	$173,355.27
Amount paid for furniture during the past year	$61,683.45
Amount paid for apparatus during the past year	$51,482.12
Amount paid for interest on bonds during the past year	$213,246

NORMAL INSTRUCTION.

There are two normal schools in the State, one located at Madison, in Lake County, and the other at Spearfish, in Lawrence County. These normal schools are in charge

of able corps of instructors, are well equipped, and are doing as good work as could be expected of such institutions in a new State. Besides these normal schools there is a normal department in the University of Dakota, at Vermillion, in Clay County, and another in the University of North Dakota, at Grand Forks, in Grand Forks County, doing the same good work as the regular normal schools. Nine private schools and colleges have normal classes instructed by skilled normal-school workers under the supervision of the board of education.

SCHOOL LANDS.

Dakota has been the recipient of generous donations of lands by the National Government for educational purposes, receiving two sections in every section of 36 sections for common school purposes, and large grants for higher and special institutions of learning.

There are in this Territory 1,715,009 acres of school land, the average value per acre of which is $5.79. The total value of school lands in the Territory is, therefore, $9,929,902.11. In some of the older and richer counties considerable of this land has been cultivated by private individuals without rendering any compensation therefor to the Territory, thus in a measure exhausting the richness of the soil. There have been thus cultivated 89,775 acres of school land.

During the Territorial state these lands were not available for school purposes, but now, at the dawn of statehood, the provisions of each of the constitutions of North Dakota and South Dakota become matters of intense public interest. Under statehood the above-mentioned trespasses on school lands will cease, and the respective States will receive returns for the use of said lands in the form of rents.

The provisions of the constitution of North Dakota are epitomized as follows:

(1) All moneys derived from the sale of school lands shall be deemed a trust fund and shall remain a perpetual fund for the maintenance of the schools of the State, the principal of which shall forever remain inviolate, and the State shall make good all losses that may occur in this fund.

(2) The interest and income of this fund, together with all money derived from fines for the violation of State laws, shall be used for the benefit of the common schools, the unused interest at the end of any year to become a part of the principal. No part of the school fund can ever be used for other than school purposes.

(3) After one year from the assembling of the first State legislature these lands may be sold upon the following conditions: One-fourth may be sold within five years after they become salable, and not more than one-half within ten years after they become salable. Coal lands shall not be sold. The legislature has the right to lease the school lands, under certain restrictions, but they can not be leased for other than meadow and pasture purposes, and for no longer period than ten years.

(4) The superintendent of public instruction, the governor, attorney-general, secretary of State, and State auditor constitute a board of commissioners for the care of the school lands, and have entire charge of their appraisement, sale, rental, or disposal in any way. They also have control of the school funds, and make all investments thereof.

(5) The county superintendent, the chairman of the county board, and the county auditor constitute a board of appraisal for the lands in each of the counties.

(6) No lands shall be sold for less than $10 per acre, and on the following conditions: One-fifth of the price down, one-fifth in five years, one-fifth in ten years, one-fifth in fifteen years, and one-fifth in twenty years, with interest at not less than 6 per cent. per annum, payable in advance.

(7) The moneys of the permanent school fund and other educational funds shall be invested only in bonds of school corporations within the State, bonds of the United States, bonds of the State, or first mortgages on farm lands within the State.

The provisions of the constitution of South Dakota respecting its school lands are, in brief, as follows:

(1) All proceeds of the sale of public lands, all such per centum as may be granted by the United States for the sale of public lands, all gifts or grants, and any funds that may in any way be acquired for the use of the public schools shall forever remain inviolate and can not be decreased, and all losses shall be made good by the State.

(2) The interest and income from this fund and proceeds from all fines for the violation of State laws shall be used for the maintenance of the public schools, and no part of these funds shall ever be diverted for other uses.

(3) After one year from the assembling of the first State legislature the lands can be sold upon the following conditions: Not more than one-third may be sold within the first five years, and not more than two-thirds within the first fifteen years after the title to these lands is vested in the State. The most valuable lands shall be sold first and all such lands as are of especial value for other than agricultural purposes. The commissioner of school and public lands, the State auditor, and the county superintendent in each of the counties shall constitute a board for the appraisement of the school lands of each county.

(4) No lands shall be sold for less than $10 per acre unless after the year 1900 two consecutive legislatures concur in directing otherwise.

(5) The school lands shall be sold only upon the following conditions: The purchaser shall pay one-fourth of the price in cash, one-fourth in five years, one-fourth in ten years, and one-fourth in fifteen years, with interest thereon at not less than 6 per cent. per annum, payable in advance. All sales must be conducted through the office of commissioner of school and public lands.

(6) All sales of school lands shall be at public auction and to the highest bidder. After four years all lands that have been appraised shall be re-appraised.

(7) School lands may be leased but only for meadow and pasture purposes and only with the rents paid in advance and no longer than for a term of five years.

(8) The moneys of the permanent school fund and other school funds shall be invested only in first mortgages upon good and improved farm lands, in bonds of school corporations within the State, or in bonds of the United States or of the State of South Dakota.

(9) All moneys designated for investment in farm mortgages or in bonds of school corporations shall be divided among the counties in proportion as nearly as possible to the population. The respective counties shall have the control of such money as a trust fund and be responsible to the State for all losses that may occur in handling it. Not more than $500 shall be loaned to any one person upon farm mortgage and only to the extent of one-half valuation. The counties using this money shall make semi-annual statements as to the condition of the funds and also make semi-annual payments of the interest to the State treasurer.

(10) The legislature may add to the money for school purposes thus derived as they may deem necessary in order to provide for a good and efficient system of public schools.

The following counties deserve special mention on account of the annexed estimated values of their school lands per acre, to wit:

Yankton	$14.03
Cass	11.05
Clay	11.00
Logan	10.00
Pembina	10.00

In the remaining counties the school lands vary in estimated value from $1.25 in Custer County to $9.85 in Brown County, those in most of the other counties being estimated at $4, $5, and $6 per acre.

SCHOOL SYSTEM.

One of the great disadvantages in the operation of our system of schools is the presence of two distinct plans therefor, viz: There is the township system, under which there are now seventy-two counties operating, and the district system, under which there are sixteen counties operating. The presence of these two systems is a source of constant annoyance and irritation as well as of expense additional to what would be otherwise. There is no doubt but that the respective legislatures of North and South Dakota will at once proceed to unify their systems of school organization. Sentiment in both the South and North is divided on the question of what is the best system to be adopted. The township system has these points to commend it to the people of the Dakotas: It has the fewest possible school officers and no "fifth wheels" in its machinery; the idea of unity of interest is carried entirely through the system, from the State department to the subdistrict of each township; it centralizes responsibility, and thereby secures better service from its officers, for where twenty-five men have the care of the school interests of a township they do not feel their individual responsibility to the people and to the schools as would three men, or one man intrusted with the same duty. It gives more complete and freer communication between the subordinate officers and the heads of the county and State departments of education; the school work being performed by fewer officers there is an opportunity for better talent to be secured in filling the offices; greater facility and accuracy in the gathering of educational statistics; the securing of uniform standard of education in the schools and the use of uniform text books, whereby their price can be reduced. These are the chief merits of the township system, which is now in successful operation in the majority of the counties of Dakota. The probability is that both North and South Dakota will, in the near future, adopt the township system of organization.

The organization of the present system of schools in seventy-two counties of Dakota is as follows: At the head of the State department is the superintendent of public instruction and the board of education, of which the superintendent is *ex-officio* member. The board of education consists of three members, two of which are appointed

by the governor. The present personnel of the board of education is as follows: Superintendent Leonard A. Rose, of Fargo, president; C. M. Young, of Tyndall, secretary, and A. T. Free, of Yankton, vice-president. The general supervision and control of public instruction is vested in this board. At the head of education in each county there is a county superintendent, who has the general supervision of the schools in the county under the instruction and authority of the Territorial board of education. Each township has a board of education composed of one member from each subdistrict of the township. This board has control of the schools of the township, under the supervision of the county superintendent. The employment of teachers becomes the duty of the subdirector, acting by and with the advice and consent of the people of his subdistrict. It is urged against this system that there are too many officers, and that the system is too expensive in its operation. While being a township system this charge is undoubtedly true, and a change needs to be made by reducing the number of officers, and thus at once reduce the expense of operating the schools and secure more promptness and greater efficiency in the school work of the township.

QUALIFICATIONS AND LICENSURE OF TEACHERS.

There are three grades of certificates, viz, first, second, and third, valid respectively for periods of two years, eighteen months, and one year. For second and third grades, teachers are required to pass a satisfactory examination in the following branches: Reading, writing, orthography, geography, grammar, arithmetic, history, algebra, physiology, and hygiene. For the first grade, in addition to the foregoing, teachers are required to pass examinations in geometry, physical geography, bookkeeping, civil government, natural philosophy, and theory and practice of teaching. Superintendents of the counties conduct the examinations in each of the counties and license the teachers who pass a satisfactory examination. The questions for these examinations are supplied by the Territorial board of education. In addition to these licenses there are two grades of certificates granted by the Territorial board of education, viz, a professional certificate and a normal certificate. The former is granted only to those persons who pass a satisfactory examination before the board. This certificate is valid for the term of ten years. The normal certificate is granted to all graduates of the Territorial normal schools and graduates of normal schools in other States of the Union that have an established reputation for complete and thorough work. The law has never yet authorized the issuing of life certificates. The aim has been in the Territory to require high qualifications in the teachers, and expect a correspondingly high grade of work in the schools. In this there has been an attainment of the ends sought.

STATE INSTITUTIONS.

University of South Dakota.—This institution is located at Vermillion, in Clay County, on the Missouri River, in the extreme south of the Territory. It has a fine building of Sioux Falls granite, the main part of which is 104 by 72 feet, with two wings 48 by 62 feet each. It has five departments, viz, collegiate, normal, preparatory, musical, and commercial. Edward Olson, M. A., Ph. D., is president of the institution, and his management has been marked by a striking increase in the attendance upon the school, an advance in the standard of its work, and a thorough systematizing of the work in all departments of the institution. The students sustain two excellent periodicals, one weekly and one monthly. They also have four flourishing literary societies, two religious associations, and several athletic organizations. The enrollment in 1887 was 197, in 1888 it was 307, in 1889 it has reached the figure of 476. Seventy-five per cent. of its students are the sons and daughters of Dakota farmers, coming from thirty counties in Dakota and nine States. The average age of the pupils is 19. The total appropriation for last year was $35,000, which was expended as follows:

Salaries of professors and instructors	$25,000
Engineers and janitors	1,250
Librarian	500
Apparatus and cabinets	750
Furniture	750
Fuel and lights	3,500
Contingent fund	500
Repairs	250
Improvement of ground	500
Water supply and drainage	1,250

University of North Dakota —This university is located in the northern part of the Territory at Grand Forks, in Grand Forks County, in the valley of the famous Red

River of the North, the region of No. 1 hard wheat. It has a fine brick building, stone trimmed, 55 by 150 feet, four stories high. Homer B. Sprague, A. M., Ph. D., is the efficient president of this institution and has with him a faculty of six members. In 1887 the enrollment was 75, in 1888 it was 98, in 1889 it was 199. Of these 199, 106 were in the preparatory department, 60 in the normal department, and 20 in the college proper. The institution has three literary societies, one athletic association, and one Young Men's Christian Association organization. There is what is known as "field day," when prizes are bestowed for excellence in the athletic sports. The institution is arranging for the elimination of the preparatory work from its curriculum in order that the entire force of its faculty may be devoted to the strictly collegiate work. The institution is in a very flourishing condition.

The Agricultural College of Dakota.—This institution is located at Brookings, in Brookings County, in the east central portion of the Territory, in one of the best sections of Dakota. The buildings of this institution are the college hall proper, a gentlemen's dormitory, a ladies' dormitory, botanical laboratory and green-house, and a building for the mechanical department. There is a farm of 240 acres that belongs to this institution and is operated by it, upon which there are all the needful buildings for the carrying on of experimental farm work, housing the large amount of stock owned by the institution, the necessary machinery, etc. The institution offers two courses; one for young men and one for young women. The one for young men is made up of those literary and scientific studies usually found in colleges of the best grade, to which is added some kind of industrial study, as agriculture, horticulture, or some line of mechanical work. For the young women there is provided study and work in domestic economy. The courses are four years long. The aim is to give such a liberal training in the literary, scientific, and industrial departments of this school as will best fit the young men and women for actual business life. The faculty consists of 16 able instructors. Louis McLouth, A. M., Ph. D., is at the head of this institution as its president and is eminently well fitted for the responsible position. The enrollment for the past year is 250, 22 more than for the previous year. Of this number, 126 are pursuing college studies. There were 17 graduates from this institution last year. The appropriation to this institution by the last legislature was $55,000. There is granted to this institution by the conditions of the omnibus bill 160,000 acres of land as a perpetual endowment.

The Territorial Normal School at Madison.—This school is located in Lake County, in a most healthful locality, a rich agricultural region where the surface of the prairie is diversified by beautiful lakes. The school has fine buildings which have been erected to take the place of the former ones that were burned a year or two ago. The school was opened December 5, 1883. Its enrollment for this year was 246 in the normal department and 141 in the model school. These students came from thirty-five counties in Dakota and from four States. Five North Dakota counties and thirty South Dakota counties were represented in the school. The States represented were Iowa, Minnesota, Pennsylvania, and Wisconsin. The school has four courses of study, viz, the elementary, requiring three years; the advanced course, requiring four years; the classical, which includes Latin, and a professional course for those who have completed the three years' course elsewhere. The school is manned by a corps of seven instructors, at the head of which is Hon. W. H. H. Beadles, ex-Territorial superintendent of public instruction.

The Territorial Normal School at Spearfish.—This school is located in what is known as "The Black Hills Country," one of the richest regions of Dakota, which is blessed not only with a fine agricultural soil but has untold mineral wealth beneath its surface. This school has a faculty of seven instructors, at whose head is Fayette L. Cook, A. M., under whose guidance the school is progressing finely.

The School of Mines.—This school is located at Rapid City, near the famous mineral region of the Black Hills, where it has every opportunity for the pursuit of geological studies and the acquiring of ample specimens for its cabinets. There are three courses provided by the school, viz, mining engineering, civil engineering, and the scientific. These courses are all four-year courses, and aim to fit young men in the special lines of work enumerated above. The school has commodious buildings and an able corps of instructors, at the head of which is Franklin R. Carpenter, A. M., dean and president of the faculty.

The Dakota Deaf-Mute School.—This school is located at Sioux Falls, and is under the charge of Professor Simpson, who has held the position for some years. Its location is convenient and healthful. The attendance is between 50 and 60, and very efficient work is done. The school has a fine equipment of buildings, and is well supplied with every requirement for the successful prosecution of its much-needed work.

The Dakota Reform School.—This school for erring boys and girls is located at Plankinton, in Aurora County, and was only opened formally in November, 1888, when it received its first pupil. Its enrollment is now 33—24 boys and 9 girls. The pupils are instructed in the common branches, music, and general information,

besides instruction in some kind of manual labor. Various industries will ere long be represented in the school, in order that the pupils may be trained in various useful occupations. The present efficient superintendent is Prof. C. A. Ainsworth. He has a full corps to assist him in his work. The buildings occupied by the school were erected at a cost of $30,000.

PRIVATE INSTITUTIONS FOR HIGHER EDUCATION.

Pierre College.—This college is located at Pierre, in Hughes County, on the Missouri River. At the recent election in South Dakota, Pierre has been made the capital of the State, which materially brightens the prospects of the college of Pierre, as the city will soon increase much in population. The buildings of the institution were erected at a cost of $43,000. The school is under Presbyterian auspices. William Blackburn, D. D., is the president of the institution and has a corps of six teachers to assist him. The school has a normal department in which there is an enrollment of 27.

Yankton College.—This college is located at Yankton, in Yankton County, on the Missouri River, and is under the auspices of the Congregational denomination. There is an able corps of teachers, and the institution is presided over by the Rev. Joseph Ward, D. D. The buildings of the school are valued at $40,000. The school also has a normal department, the work of which is under the general supervision of the Territorial board of education.

Dakota University.—This school was established in 1885, and is under the auspices of the Methodist Church. A. W. Adkinson, vice-president, is the acting president of the institution. Besides the regular literary department there is a commercial department and a normal department, operated under the supervision of the Territorial board of education. Two students were graduated this year with the degree of B. S. The faculty consists of ten members and the enrollment is over 100.

Sioux Falls University.—This school is located at Sioux Falls and is under the auspices of the Baptist denomination. Rev. E. B. Merideth, A. M., is the president of the institution, with a corps of seven instructors and an enrollment of over 100. The property is valued at $30,000.

All Saints School.—This school is located at Sioux Falls, by the Episcopal Church, and the president is Rev. W. H. Hare, D. D. It has a faculty of about twelve members and an enrollment of nearly 100. It has property valued at $37,000.

Jamestown College.—This college was located at Jamestown by the Presbyterian Church. The president is H. G. Mendenhall, A. M. The school has a normal department under the authority of the Territorial board of education. The property of the school is valued at $35,000.

Tower College.—It is located at Tower City, by the Baptist Church. Its president is L. C. Dame, A. M. It has an enrollment of about 50.

Groton College.—It was established by the Presbyterian Church. Rev. James Marshall is president of the institution, with a faculty of six. It has an enrollment of about 75. The value of the property of this school is $25,000.

Redfield College.—This institution is under the auspices of the Congregational Church. Rev. David Beaton, A. M., is the president of the institution. There is a faculty of eight teachers. The property of the institution is valued at $20,000. The institution has a normal department under the supervision of the Territorial board of education.

Augustana College.—This institution is located at Canton, and is under the fostering care of the Lutheran Church. The president of the college is M. D. Miller. It has three teachers and an enrollment of 75. Its property is valued at $8,000. Recent changes in the faculty are reported, by one of which Rev. C. S. Salverson supersedes the former-mentioned president.

Scotland Academy.—This is another institution that was founded by the Presbyterian Church, and is located at Scotland, in the southeast of the Territory. The principal of this academy is Prof. A. A. Love. The institution has a corps of five instructors. It has an enrollment of about 25. Its school property is valued at $10,000. The school is appointed to do normal work by the board.

Arvilla Academy.—This school is located at Arvilla, in Grand Forks County. Prof. J. A. Brown is principal of the academy. Four teachers are employed, and there is an attendance of about 40. It has buildings which are valued at $3,500. This school also does normal work in the preparation of teachers.

Fargo College.—This institution has recently been organized, and is located at Fargo, under the auspices of the Congregational Church. The president is Rev. George Barnes. Fine buildings are being erected in South Fargo, the estimated cost of which is $40,000. The school is already in actual successful operation. It will soon have a full corps of able instructors.

Catholic schools.—The following schools have been established in the Territory by the Catholic Church; no report of them has reached this office, and we are not able

to give a detailed report of them in consequence. The Academy of the Sacred Heart is located at Yankton. The Academy of St. Joseph is located at Fargo; St. Mary's Academy at Bismarck. There are also Catholic schools located at Grand Forks and Aberdeen.

INDIAN SCHOOLS.

There are a number of schools designed for the education of the Indians, which are situated upon the reservations or upon the borders thereof. These schools are under the control of the various religious denominations, and are assisted by the General Government in their laudable work. The aggregate property owned by these institutions is, at the least, $100,000. They are manned by efficient and devoted teachers. The verdict of these, after many years of experience in this work, is that the Indian is teachable, tractable, industrious, and capable of receiving higher education. In one of these institutions there is a newspaper that is printed in the Indian tongue, the mechanical work on which is done entirely by Indians, and the literary is also largely done by the red men. In these institutions the Indian is taught the English branches and instructed in the industrial arts. The Indian boys and girls are taught the culinary art in all its lines, and are able to acquit themselves creditably in all the details of the art. It is a fact now generally admitted that these schools are doing more for the uplifting of the Indian and his transformation into a civilized American citizen than all other means that are now being employed for that purpose. These schools deserve every encouragement.

GRADED SCHOOLS OF THE CITIES.

This report would not be complete without the following report of the graded schools of the cities of Dakota. These schools form prominent features in the educational work of this Territory; they are graded upon the best models presented by the older Eastern States from the primary department to the high school. Their courses of study will compare not unfavorably with the courses of schools in the East in towns many times the size of ours. In the following table the large percentage of the pupils enumerated that are enrolled in the schools is a significant feature and one that speaks well for our communities.

City.	Superintendent.	Teachers.	Pupils in the enumeration.	Pupils enrolled.
Fargo	E. H. Smith	22	1,156	1,147
Sioux Falls	L. McCarthy	21		1,306
Grand Forks	C. H. Clemmen	14	1,301	827
Yankton	J. D. Stay	12	1,046	669
Aberdeen	B. F. Hood	12	421	692
Mitchell	H. E. Kratz	9	500	495
Huron	A. M. Rowe	12	809	680
Watertown		13	1,175	667
Bismarck	J. Goodykoontz	8	421	394
Jamestown		11	594	510
Brookings	M. A. Robinson	6	341	351
Pierre	E. C. Patterson	9	287	289
Vermillion	E. E. Collins	4	435	288
Deadwood	A. T. Free	5	426	275
Scotland	R. C. Enos	3	350	250
Lisbon	W. E. Goodrich	5	206	247
Canton	L. R. Rowell	5	329	244
Wahpeton	W. C. Crocker	4	410	320

These schools are all supplied with elegant and commodious buildings, the cost of which ranges from $6,000 to $80,000. As a general thing these schools have a good supply of apparatus with which to carry on their work. The best trained teachers that can be found are employed to teach in these schools and good salaries are paid. These schools are now ready to take rank with the best of their kind in any of the States.

EDUCATIONAL DEVELOPMENT OF DAKOTA.

In the following table we give some statistics to show the educational development of the schools of Dakota. We believe that no State of the Union has ever made a better record than the one here exhibited by Dakota. It is a striking commentary as to the interest that the people here take in their schools:

Year.	Youth of school age.	Enrolled in public schools.	Average daily attendance.	Ungraded schools.	Average days taught.	Teachers.	Average monthly pay of men.	Average monthly pay of women.	Value of school property.	Expenditures for school purposes.
1875.....	8,343	4,428	.....	.....	.....	208	$35.00	$25.00	$24,926	$32,603
1879.....	18,535	9,822	4,681	315	97	464	36.00	25.00	133,952	75,959
1883.....	56,476	33,988	20,560	1,356	93	1,517	39.70	30.70	937,764	529,837
1887.....	108,240	87,131	58,379	3,856	112	4,924	34.81	30.36	3,265,590	1,553,573
1888.....	104,886	83,079	46,060	3,977	106	5,744	35.25	31.84	2,844,511	1,621,012
1889.....	105,685	98,683	.....	4,461	114	6,158	35.36	31.40	3,022,361	1,959,879

In 1875 the enrollment in the schools of Dakota was only about 50 per cent. of the number of youth enumerated by the census. In 1888 there was about 79 per cent. of the youth of school age enrolled in the schools, while in the year 1889 there was 93 per cent. enrolled. This is a fine showing for any community, and one that the Territory of Dakota has especial reason to be proud of. The enrollment of 1889 is over twenty times that of 1875, and is an increase of 20 per cent. on that of the preceding year, viz, 1888. In fourteen years her teachers have increased from 208 to 6,958, the number that Dakota now employs. There has been an increase of about 7 per cent. in the number of teachers compared with last year. These statistics are sufficient to justify the statement that the people of Dakota consider their school interests the most important and the first to demand their attention.

COMPARISON WITH OTHER STATES.

Dakota will not suffer by comparison with other States of the Union. The valuation of the school property of Dakota is greater than that of the States of Arkansas, Delaware, Florida, Kentucky, Maine, Maryland, New Hampshire, North Carolina, Oregon, Rhode Island, Tennessee, Virginia, or West Virginia.

The number of teachers employed in Dakota exceeds the number in any of the following States; Alabama, Arkansas, California, Delaware, Florida, Kentucky, Louisiana, Maryland, Nevada, New Hampshire, New Jersey, North Carolina, Oregon, Rhode Island, South Carolina, Vermont, and West Virginia.

Dakota pays her teachers better wages than Kentucky, Louisiana, Maine, Mississippi, North Carolina, South Carolina, Tennessee, Vermont, Virginia, or West Virginia pay theirs.

Although a Territory, she has more days of school than Alabama, Florida, Kentucky, Louisiana, New Hampshire, North Carolina, Oregon, South Carolina, Tennessee, Texas, or West Virginia.

She enrolls more pupils than any of the following States: Delaware, Florida, Louisiana, Nevada, New Hampshire, Oregon, Rhode Island, and Vermont.

Another feature that is important as showing the status of the schools, is the percentage of children that are enrolled in the schools of the State. Dakota has a larger per cent. of her children of school age enrolled in her schools than is true of any of the following States: Alabama, Arkansas, California, Colorado, Delaware, Georgia, Iowa, Kansas, Kentucky, Maine, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, Nevada, New Jersey, New York, North Carolina, Ohio, Oregon, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Vermont, Virginia, West Virginia, Wisconsin.

There are only two or three States in the Union that show a higher percentage of pupils in regular attendance upon the schools than Dakota. Considering the fact that Dakota is a country that is recently settled, comparatively, and also her thin settlement and the consequent long distances that pupils reside from school, the above record is especially significant.

EDUCATIONAL PAPERS.

There are two papers in Dakota that are especially devoted to educational subjects, The Dakota Educator, in South Dakota, in which a large number of the leading edu-

cators of the Territory are interested, and The Common School of North Dakota. Besides these the teachers of the Territory subscribe liberally for the leading educational papers of the East.

TEACHERS' INSTITUTES.

The teachers' institute is a means that is now very largely employed in Dakota for the training of teachers, the arousing of interest and the stirring up of renewed zeal in the work, keeping the teachers abreast of the best thought in the field of education and the latest methods advanced. The aim is to hold two institutes in each county each year, and for this purpose the Territory has appropriated out of its general fund the sum of $50 per year for each county that will hold two institutes during the year. Able and qualified instructors are appointed by the board of education to conduct these institutes. In some of the counties there is a demand for longer sessions than is provided for in the law or than there are funds from the Territory to pay for. In these cases some of the counties have made the practice to hold three or four weeks session of a normal institute, paying the expenses thereof by a small tuition from the teachers themselves. The fees collected by county superintendents for examinations of teachers are devoted to the same purpose. There has been a marked growth and development in the line of institute work in the past two years. The effect has been manifest in a higher grade of work that the teachers are already doing and the increased interest that is taken in the work by teachers and patrons alike.

TEACHERS' ASSOCIATIONS.

There are three Territorial associations of teachers, viz, the South Dakota Teachers' Association, the North Dakota Teachers' Association, and the Sioux Valley Teachers' Association. Prof. H. E. Kratz, of Vermillion, is the president of the one in South Dakota, and Prof. O. T. Denny, of Jamestown, is the president of the one in North Dakota. Besides these organizations there are numerous ones in the various counties, and in some of the counties there are organizations of teachers in the townships of the county. All of these organizations are most useful and tend to the development of the teacher.

OTHER AIDS FOR TEACHERS.

A reading circle has been established by the teachers of South Dakota, and has been in successful operation for three years. Its membership at present numbers 276 teachers and is rapidly increasing. The fees received from all Territorial certificates granted is appropriated by law to the reading circle for its support. It is probable that at the first meeting of the legislature of South Dakota its support will be amply provided for by other means. W. H. Dempster is the president of the circle and H. E. Kratz is its efficient secretary.

Respectfully submitted.

LEONARD A. ROSE,
Superintendent Public Instruction, Territory of Dakota.
CLARK M. YOUNG,
Secretary Territorial Board of Education.
ALBERT T. FREE,
Vice-President Territorial Board of Education.

Hon. A. C. MELLETTE,
Governor of the Territory of Dakota.

ASSESSMENT AND TAXATION.

Below is given in tabulated form a comparative statement of the valuation of the different forms of property as returned by the various assessors in the years 1888 and 1889. It will be seen by this statement that the increase in valuation the past year has not been large, being less than 2 per cent. This apparent slight increase is accounted for by the fact that several millions of acres of railroad lands which were assessed in 1888 were withdrawn from assessment the present year because of an act of the last legislature providing for a tax on gross earnings in lieu of all other taxes upon railroad property. It will also be observed that a lower valuation was placed upon most classes of

property under a mistaken idea on the part of local assessors that a low valuation would relieve their communities of an undue proportion of Territorial taxes. From these explanations it will be understood that there has been a healthy and satisfactory increase in valuation in the Territory. There has been an increase in the number of each class of live stock, which is a strong and sure indication of increased prosperity among the agricultural classes of Dakota. The table here appended is believed to contain information that will be of value:

Comparative table.

Items.	1888.	1889.	Items.	1888.	1889.
Total assessment	$161,420,974.32	$164,199,876.90	Number of cattle	597,808	623,734
Acres of land	23,832,816.85	23,284,397.50	Value of cattle	$7,634,548.94	$7,292,571.75
Value of land	$91,875,729.84	$91,536,734.15	Average value	$12.77	$11.69
Average value per acre	$3.85	$3.93	Number of sheep	152,396	178,467
Value of town lots	$26,125,555.80	$28,530,279.00	Value of sheep	$207,799.98	$242,934.85
Value of merchandise	$6,571,007.00	$6,239,113.00	Average value	$1.36	$1.36
Capital in manufactures	$893,850.00	$786,276.00	Number of swine	174,028	255,622
Number of horses	268,410	296,825	Value of swine	$446,811.30	$606,571.80
Value of horses	$12,120,346.58	$12,855,105.00	Average value	2.57	2.37
Average value	$45.16	$43.31	Value of vehicles	2,250,964.25	2,153,866.60
Number of mules	16,057	16,305	Moneys and credits	2,227,115.00	2,494,617.75
Value of mules	$822,772.09	$764,085.00	Household furniture	368,636.60	285,501.00
Average value	$51.24	$46.86	Stocks and shares	2,837,930.93	2,688,254.60
			All other property	7,037,915.01	7,723,967.00

The rate of tax levy for Territorial purposes has been fixed at 3 mills on the dollar of valuation, which will yield a revenue of $492,599.63, which, together with the tax on the gross earnings of certain corporations, must supply the revenue for Territorial expenses. Below is given up the entire estimated receipts of the Territory for the ensuing year from different methods of taxation and the different sources of revenue:

RECEIPTS.

From direct tax on assessed valuation	$492,599.63
Gross earnings of railroads	82,059.30
Gross earnings of insurance companies	21,165.60
Gross earnings of telegraph companies	1,025.00
Total	596,849.53

DISBURSEMENTS.

Following is given the definitely appropriated and estimated expenses of the Territory for the present Territorial fiscal year, exclusive of legislative expenses:

Support of public institutions	$355,807.11
Other expenses of Territory	179,813.19
Interest on bonds	61,104.99
Total	596,725.29

PUBLIC INSTITUTIONS.

There is also hereto appended a statement of the cost and appropriations for maintenance of each of the public institutions of the Territory:

	Total cost of buildings and permanent improvements.	Appropriated for maintenance.	Pay and expenses of trustees, Nov. 30, 1888, to Sept. 30, 1889.
Agricultural College, Brookings	$100,140	$53,375	$602.33
University of North Dakota, Grand Forks	110,941	57,000	700.10
University of Dakota, Vermillion	88,500	70,000	706.45
Normal School:			
Madison	35,800	31,700	303.88
Spearfish	30,000	31,100	141.45
School of Mines, Rapid City	35,820	33,500	362.50
School for Deaf Mutes, Sioux Falls	53,512	33,800	584.50
Capitol and grounds, Bismarck	200,000	10,000	.....
Dakota Penitentiary, Sioux Falls	101,475	72,300	462.95
Bismarck Penitentiary, Bismarck	95,281	57,600	2,146.08
North Dakota Hospital for the Insane, Jamestown	276,200	114,500	1,398.76
Dakota Hospital for the Insane at Yankton	239,960	111,075	725.40
Dakota Reform School, Plankinton	30,000	11,000	1,310.07
Soldiers' Home, Hot Springs	45,000	.....	1,126.91
Total	1,442,629	686,950	10,571.38

FINANCES OF THE TERRITORY.

OFFICE OF AUDITOR, *Bismarck, October* 20, 1889.

SIR: In compliance with your request, asking for a statement of the bonded indebtedness of the Territory, I have the honor to submit the following:

Total bonded indebtedness to date, $1,250,007.46, expended in building and furnishing the following public institution:

Date of issue.	Purpose of issue.	Rate.	Maturity.	Amount.
		Per cent.		
May 1, 1883	Insane Hospital, Yankton	5	5–20	$77,500.00
May 1, 1887	....do	4½	5	92,500.00
May 1, 1883	Deaf-Mute School, Sioux Falls	6	10–20	12,000.00
July 1, 1885	.....do	6	10–20	16,000.00
May 1, 1887	.....do	5	10–20	23,000.00
May 1, 1883	University of Grand Forks	6	10–20	30,000.00
July 1, 1885	.....do	6	10–20	24,000.00
May 1, 1887	.....do	4	10	20,000.00
May 1, 1883	University of Vermillion	6	10–20	30,000.00
May 1, 1885	.....do	6	5–20	57,000.00
May 1, 1887	.....do	4½	20	30,000.00
May 1, 1883	Penitentiary, Sioux Falls	6	5–20	30,000.00
May 1, 1887	.....do	4½	10–20	14,300.00
May 1, 1883	Penitentiary, Bismarck	6	5–20	50,000.00
July 1, 1885	.....do	6	10–20	14,600.00
May 1, 1887	.....do	4½	10–20	29,000.00
1883	Agricultural College, Brookings	5	10–20	23,000.00
July 1, 1885	.....do	6	10–20	20,000.00
May 1, 1887	.....do	4½	20	54,500.00
May 1, 1884	Insane Hospital, Jamestown	6	10–20	50,000.00
May 1, 1885	.....do	6	5–20	63,000.00
May 1, 1887	.....do	4½	15	153,000.00
July 1, 1885	Normal School, Madison	6	10–20	13,000.00
May 1, 1887	.....do	4½	15	35,806.00
July 1, 1885	School of Mines, Rapid City	6	10–20	10,000.00
May 1, 1887	.....do	5	10–20	23,000.00
May 1, 1887	Reform School, Plankington	5	10–20	30,000.00
May 1, 1887	Normal School, Spearfish	5	10–20	25,000.00
May 1, 1887	Refunding bonds to refund 6 per cent. 5–20 year bonds issued May 1, 1881	4½	10–20	90,000.00
May 1, 1889	University of North Dakota, Grand Forks	4	10–20	22,700.00
May 1, 1889	Soldiers' Home, Hot Springs, South Dakota	4	20	45,000.00
Apr 1, 1889	Capital refunding warrants to refund $52,758.58 auditors' warrants at 10 per cent	5	5	75,211.24
Apr. 1, 1889	Capital refunding warrants to refund a claim account of capitol building	5	2–5	8,296.22
	Total	.....	.....	1,250,007.46

The bonds issued by the last legislature were issued at 4 per cent. rate and sold for par, and 3½ and 5¼ per cent. premium for University of North Dakota and Soldiers' Home bonds, respectively.

The fact that so small an issue at so low a rate of interest sold for so high a premium is a very gratifying exhibit of our credit. Such an event is unparalleled in the history of this Territory or any other, and shows her high financial standing.

The proceeds of the University of North Dakota bonds went to re-imburse the citizens of Grand Forks for rebuilding and repairs of damages caused by a storm in 1887. Proceeds of Soldiers' Home bonds are for erecting and furnishing a building at Hot Springs, in the Black Hills. The refunding of the auditor's warrants outstanding for construction, etc., of the capitol building was authorized by the legislature, and reduces the rate of interest from 10 per cent. to 5 per cent. after computing the interest at 10 per cent. up to the time of refunding. The $77,500 5 per cent. bonds, May 1, 1883, for hospital for insane at Yankton, and $30,000 6 per cent. bonds, May 1, 1883, for penitentiary, Sioux Falls, on which the Territory has had the option since May 1, 1888, will be refunded at 4 per cent. rate, and I expect them to sell at fully as good premium as the last.

Very respectfully,

J. M. BAILEY, JR.,
Treasurer.

GOV. A. C. MELLETTE.

VALUATION AND ASSESSMENT.

BISMARCK, DAK., *August* 20, 1889.

SIR: At your request, the following tables of assessment and valuation statistics have been prepared. While the total assessment for 1889 is but about three millions more than in 1888, the fact that the large bodies of railroad lands of North Dakota were assessed last year but owing to the law of the legislature were not assessed this year would make a difference of several millions. It will be seen that there has been a slight increase in average value of land and swine, while there is a decrease in average value of horses, mules, and cattle, and sheep average the same. The total value of town lots has increased nearly two and one-half millions. Of the entire valuation 56 per cent. is land, 13 per cent. live-stock, and 31 per cent. unenumerated, such as town lots and personal property of various kinds, aside from live-stock. The direct tax to the Territory on the assessed valuation will yield a revenue of $492,599.63. This, of course, does not represent the entire revenue, as railroad, telegraph, express, and insurance companies pay a tax on their gross earnings. The assessment here given is divided as to the two divisions of the Territory, as represented by what will soon be the States of North Dakota and South Dakota, embracing the principal articles, the totals embracing all the property listed in each county.

The following tables are submitted.

Assessment returns.

NORTH DAKOTA COUNTIES.

Counties.	Acres of land.		Horses.		Mules and asses.	
	Number.	Value.	Number.	Value.	Number.	Value.
Barnes	669,011	$2,353,219.00	4,368	$199,857.00	308	$13,812.00
Benson	71,814.22	303,205.00	1,072	75,272.00	100	7,405.00
Billings	4,252	5,180.00	3,320	83,000.00	.....	.....
Bottineau	42,833	148,110.00	1,113	74,123.00	29	2,250.00
Burleigh	262,757	903,747.00	2,163	78,624.00	213	7,130.00
Cass	957,932	5,333,179.00	12,963	569,298.00	1,825	76,828.00
Cavalier	141,347	298,179.00	1,418	90,316.00	109	4,255.00
Dickey	390,625	1,428,342.00	3,535	164,298.00	270	11,854.00
Eddy	101,827	455,070.00	1,051	80,235.00	61	5,600.00
Emmons	102,635	391,449.00	1,479	67,411.00	40	2,220.00
Foster	264,120	812,820.00	973	59,715.00	135	8,205.00
Grand Forks	721,274	2,846,867.00	8,539	539,792.00	768	44,857.00
Griggs	294,703	1,111,576.00	1,666	98,601.00	160	10,173.00
Kidder	458,478.50	1,173,157.00	1,028	43,745.00	113	6,250.00
La Moure	479,017	1,734,931.00	1,724	59,841.00	235	7,614.00
Logan	39,380	158,700.00	107	6,070.00	3	155.00
McHenry	32,540	84,645.00	1,219	31,903.00	57	3,640.00
McIntosh	173,155	353,860.00	1,307	60,610.00	18	1,045.00
McLean	225,532	675,894.00	576	21,688.00	87	4,230.00

Assessment returns—Continued.

NORTH DAKOTA COUNTIES—Continued.

Counties.	Acres of land.		Horses.		Mules and asses.	
	Number.	Value.	Number.	Value.	Number.	Value.
Mercer	17,125	$29,050.00	221	$4,485.00		
Morton	187,823	569,535.00	2,746	96,354.00	81	$3,093.00
Nelson	302,124	1,068,000.00	2,286	124,589.00	266	15,043.00
Oliver	15,592	38,980.00	258	11,652.00	9	525.00
Pembina	539,429	1,594,168.00	8,510	464,649.00	262	12,650.00
Pierce	22,896.44	71,895.00	288	20,873.00		
Ramsey	240,139	1,010,072.00	2,861	169,438.00	244	11,155.00
Ransom	344,337	1,661,800.00	3,993	131,190.00	164	7,830.00
Richland	655,626.49	2,777,879.00	6,291	318,582.00	675	36,991.00
Rolette	51,617	174,524.00	1,007	61,574.00	33	3,150.00
Sargent	299,398	1,152,633.00	2,881	156,259.00	187	9,410.00
Stark	81,349	229,597.00	1,045	38,756.00	24	1,144.00
Steele	328,360	1,438,921.00	2,754	118,040.00	280	11,945.00
Stutsman	880,872.15	1,839,820.00	1,939	71,410.00	268	10,435.00
Towner	71,699.86	362,670.65	854	61,560.00	264	22,050.00
Traill	478,490.28	2,190,875.00	7,025	300,492.00	1,058	50,465.00
Walsh	559,711	2,510,783.00	9,442	608,369.00	341	22,170.00
Ward	20,904	42,593.00	457	20,111.00	21	1,195.00
Wells	203,621.66	665,250.00	789	41,095.00	108	7,670.00
Total	10,674,347.60	40,061,175.65	105,268	5,223,877.00	8,816	444,474.00

Counties.	Cattle.		Sheep.		Swine.		Total.
	Number.	Value.	Number.	Value.	Number.	Value.	
Barnes	6,748	$87,353.00	1,314	$2,616.00	1,937	$4,682.00	$3,182,450.00
Benson	2,340	56,620.00	97	196.00	323	1,597.00	577,033.00
Billings	8,360	133,760.00	25	75.00	14	42.00	245,934.00
Bottineau	2,435	66,342.00	129	370.00	435	1,591.00	432,298.00
Burleigh	3,899	58,288.00	1,740	2,679.00	906	3,465.00	2,547,756.00
Cass	13,856	155,968.00	1,743	3,372.00	6,127	16,624.00	10,134,880.00
Cavalier	3,949	69,645.00	415	613.00	1,260	2,886.00	708,871.00
Dickey	5,476	81,513.00	1,359	1,444.00	886	2,576.00	2,079,310.00
Eddy	2,416	40,025.00	30	80.00	357	1,735.00	689,031.00
Emmons	3,373	64,102.00	4,491	8,121.00	535	1,948.00	568,300.50
Foster	1,559	28,310.00	600	1,155.00	243	1,190.00	1,039,125.00
Grand Forks	9,589	155,934.00	1,581	2,850.00	4,329	13,145.00	6,209,547.00
Griggs	4,557	76,245.00	451	1,308.00	845	2,898.00	1,576,592.00
Kidder	1,527	25,343.00	3,903	5,776.50	225	888.95	1,423,971.55
La Moure	3,878	19,113.00	672	646.00	628	946.00	2,116,105.00
Logan	318	6,894.00	21	42.00	49	130.00	208,859.00
McHenry	6,470	98,940.00	1,141	2,283.00	295	1,002.00	300,770.00
McIntosh	3,265	68,205.00	382	650.00	900	1,731.00	552,446.00
McLean	1,191	16,179.00	104	218.00	406	1,004.00	768,029.00
Mercer	795	12,104.25	335	585.35	221	270.25	67,461.10
Morton	7,977	119,680.00	3,647	8,148.00	1,104	3,327.00	1,561,418.00
Nelson	5,468	82,587.00	928	1,815.00	1,137	3,578.00	1,538,246.00
Oliver	896	13,628.00	1,678	3,044.50	137	505.00	77,693.50
Pembina	9,419	122,137.00	2,719	5,391.00	4,064	8,156.00	2,902,199.00
Pierce	1,257	25,140.00	25	51.00	68	353.00	171,834.00
Ramsey	4,652	78,108.00	250	567.00	815	3,775.00	1,974,371.00
Ransom	5,153	64,206.00	1,137	2,057.00	919	1,417.00	2,325,200.00
Richland	11,464	127,072.00	2,270	6,918.00	3,747	11,315.00	4,142,865.00
Rolette	2,227	57,856.00	214	608.00	439	1,697.00	476,677.00
Sargent	5,217	87,358.00	558	902.00	1,647	3,205.00	1,739,359.00
Stark	3,314	54,313.00	997	1,495.00	403	1,910.00	573,938.00
Steele	4,198	57,360.00	666	1,479.00	1,338	2,758.00	1,800,813.00
Stutsman	4,540	43,980.00	3,095	3,673.00	388	1,032.00	2,765,346.00
Towne	1,114	32,131.00	21	42.00	417	1,014.00	588,274.65
Traill	8,380	74,798.00	1,652	1,747.00	3,311	5,868.00	3,428,549.00
Walsh	10,799	135,397.00	1,199	2,403.00	4,994	10,058.00	4,315,247.00
Ward	1,906	32,779.00	1,852	2,579.00	282	1,025.00	221,727.00
Wells	1,518	28,540.00	703	760.00	297	1,110.00	824,910.00
Total	175,500	2,557,953.25	43,644	78,759.35	46,428	122,454.20	66,857,436.30

Assessment returns—Continued.

SOUTH DAKOTA COUNTIES.

Counties.	Acres of land.		Horses.		Mules and asses.	
	Number.	Value.	Number.	Value.	Number.	Value.
Aurora	293,323	$971,748.00	3,595	$100,186.00	193	$7,023.00
Beadle	535,438	2,738,262.00	5,758	263,037.00	393	19,805.00
Bon Homme	314,789	1,478,843.00	5,018	181,640.00	110	4,710.00
Brookings	368,139	1,428,559.00	5,944	223,545.60	214	7,977.00
Brown	750,201	3,898,043.00	12,101	695,104.00	.....	.....
Brulé	255,273	723,014.00	4,451	128,529.00	185	5,488.00
Buffalo	54,369.71	154,065.00	595	20,657.00	46	2,020.00
Butte	49,424	126,757.00	2,571	77,130.00	44	1,805.00
Campbell	94,200	221,309.50	498	83,089.00	27	1,945.00
Charles Mix	160,743	403,273.00	3,006	115,508.00	179	7,465.00
Clark	323,968	1,108,192.00	4,371	188,559.00	97	3,925.00
Clay	226,040	1,513,525.00	4,690	163,882.00	198	8,080.00
Codington	266,947	1,305,000.00	3,741	161,868.00	123	5,125.00
Custer	41,977	106,799.00	4,068	162,104.00	129	6,610.00
Davison	183,958	754,332.00	3,013	94,459.00	84	2,830.00
Day	266,054	756,114.00	4,761	196,590.00	170	6,835.00
Deuel	290,323	845,196.00	2,537	80,466.00	62	2,065.00
Douglas	174,246	718,980.00	2,542	102,846.00	168	7,777.00
Edmunds	307,236	938,373.00	2,598	113,285.00	143	5,895.00
Fall River	21,509	110,102.00	2,364	90,638.00	479	27,434.00
Faulk	279,645	1,145,037.00	2,558	74,316.00	160	4,591.00
Grant	260,655	753,995.00	3,443	108,023.00	57	1,800.00
Hamlin	201,975	682,761.00	2,762	81,524.00	87	2,450.00
Hand	507,263	1,228,470.00	3,269	97,064.00	392	10,686.00
Hanson	184,823	818,171.00	3,126	89,559.00	113	3,422.00
Hughes	212,060	736,029.00	1,885	37,446.00	49	1,164.00
Hutchinson	404,674	1,811,792.00	6,711	242,002.00	84	3,463.00
Hyde	205,603	689,191.00	1,088	26,494.00	86	2,221.00
Jerauld	196,967	501,918.00	2,642	84,343.00	160	5,895.00
Kingsbury	334,259	1,373,145.00	5,835	252,667.00	201	8,731.00
Lake	228,907	1,215,021.00	3,942	236,353.00	135	6,596.00
Lawrence	100,130.70	310,665.00	3,113	136,948.00	270	14,090.00
Lincoln	315,633	2,070,218.00	5,503	226,441.00	141	6,910.00
Meade	140,526.47	386,010.00	4,828	160,460.00	196	8,520.00
McCook	250,524	982,730.00	4,038	101,400.00	137	3,746.00
McPherson	171,961.88	515,812.00	2,187	118,269.00	46	2,280.00
Marshall	175,789	519,064.00	2,970	120,184.00	196	8,365.00
Miner	211,634	817,583.00	3,641	133,521.00	123	4,655.00
Minnehaha	413,791	2,945,421.00	7,665	381,299.00	311	15,250.00
Moody	247,544	1,375,720.00	4,192	207,869.00	78	2,865.00
Pennington	99,049	619,756.00	3,749	140,351.00	131	5,820.00
Potter	195,620	544,998.00	1,580	66,707.00	121	5,675.00
Roberts	116,474	344,945.00	1,167	32,203.00	21	662.00
Sanborn	230,267	785,834.00	3,165	101,831.00	135	4,720.00
Spink	671,960	2,345,870.00	8,606	394,250.00	406	18,453.00
Sully	312,840	974,890.00	1,805	56,870.00	156	5,420.00
Turner	311,819	1,279,460.00	5,180	160,355.00	103	4,000.00
Union	245,590	1,510,037.00	6,354	240,880.00	192	8,575.00
Walworth	112,512	340,325.00	957	63,895.00	57	3,447.00
Yankton	291,396.14	1,520,254.00	5,284	214,522.00	101	5,375.00
Total	12,610,049.90	51,475,558.50	191,557	7,631,228.00	7,480	319,611.00
Total, Dakota	23,284,397.50	91,536,734.15	296,825	12,855,105.00	16,305	764,085.00

Assessment returns—Continued.

SOUTH DAKOTA COUNTIES—Continued.

Counties.	Cattle.		Sheep.		Swine.		Total.
	Number.	Value.	Number.	Value.	Number.	Value.	
Aurora	7,066	$60,377.00	1,420	$1,432.00	6,355	$14,657.00	$1,424,753.00
Beadle	10,850	131,528.00	5,141	7,934.00	5,035	15,358.00	5,000,062.00
Bon Homme	10,514	122,948.00	4,285	3,454.00	10,617	27,387.00	2,356,258.00
Brookings	12,729	123,948.00	4,581	5,075.00	2,422	4,185.00	2,428,872.00
Brown	11,593	188,550.00	2,020	2,433.00	4,355	15,640.00	7,899,356.00
Brulé	9,886	93,580.00	1,098	1,187.00	5,150	11,549.00	1,345,310.00
Buffalo	1,602	17,424.50	169	169.00	720	2,490.50	214,817.00
Butte	8,300	116,200.00	2,370	2,370.00	293	1,360.00	375,759.00
Campbell	3,114	62,405.00	637	1,643.00	714	2,387.00	449,127.50
Charles Mix	6,808	74,835.00	914	1,266.00	6,956	16,666.00	718,176.00
Clark	7,699	106,237.00	5,436	9,176.00	1,926	5,299.00	1,805,879.00
Clay	18,208	91,883.00	840	840.00	12,722	27,383.00	2,061,703.00
Codington	5,656	58,103.00	1,473	1,534.00	1,454	3,160.00	2,759,058.00
Custer	10,243	152,776.00	2,884	4,379.00	942	4,508.00	684,328.00
Davison	5,649	52,920.00	794	793.00	4,646	8,192.00	1,703,133.00
Day	10,479	109,746.00	2,693	3,258.60	1,882	3,439.00	1,301,072.00
Deuel	6,943	57,350.00	6,562	6,788.00	822	1,503.00	1,126,617.00
Douglas	5,189	63,078.00	818	847.00	5,673	13,285.00	1,086,354.00
Edmunds	4,384	61,401.00	1,173	1,302.00	998	3,006.00	1,430,413.00
Fall River	14,252	216,936.00	1,829	2,253.00	598	3,292.00	621,153.00
Faulk	4,243	44,433.00	2,656	2,588.00	1,545	3,991.50	1,522,776.50
Grant	7,165	64,295.00	1,536	1,708.00	1,353	2,533.00	1,354,325.00
Hamlin	6,063	48,883.00	921	1,081.00	1,231	2,657.00	998,418.00
Hand	9,730	76,804.00	5,028	4,794.00	5,775	6,239.00	1,868,023.00
Hanson	6,324	54,222.00	5,088	3,671.00	5,109	6,323.00	1,217,871.00
Hughes	5,572	52,139.00	1,958	1,506.00	752	1,808.00	1,946,256.00
Hutchinson	18,374	177,131.00	11,742	16,206.00	16,870	38,896.50	2,660,434.00
Hyde	1,946	25,216.00	317	157.00	728	1,189.00	848,120.00
Jerauld	6,009	60,345.00	2,041	2,232.00	3,440	8,479.00	757,512.00
Kingsbury	10,549	101,645.00	1,380	1,388.00	2,573	5,011.00	2,298,895.00
Lake	9,780	98,581.00	2,214	3,565.00	2,115	5,366.00	2,390,002.00
Lawrence	4,854	79,187.00	1,786	2,828.00	447	1,838.00	3,499,038.00
Lincoln	18,192	136,061.00	2,453	2,463.00	13,217	27,599.00	2,898,527.00
Meade	12,289	193,810.00	5,445	7,486.00	1,016	5,017.00	1,087,595.00
McCook	9,385	68,412.00	1,004	913.00	6,469	7,799.00	1,556,689.00
McPherson	5,287	87,536.00	617	1,019.50	1,274	2,655.10	925,327.60
Marshall	3,750	45,992.00	148	131.00	778	2,280.00	1,000,708.00
Miner	7,705	85,503.00	1,342	1,484.00	2,774	6,395.00	1,813,237.00
Minnehaha	21,953	212,085.00	5,664	8,857.00	11,174	30,642.00	10,308,606.00
Moody	9,978	100,677.00	2,875	4,164.00	2,175	6,791.60	2,101,115.00
Pennington	9,338	161,694.00	4,402	8,761.00	765	3,453.00	2,349,447.00
Potter	2,623	54,879.00	1,497	1,507.00	619	1,647.00	835,950.00
Roberts	2,355	23,513.00	922	922.00	324	729.00	458,668.00
Sanborn	7,679	50,446.00	1,896	1,534.00	4,230	8,162.00	1,265,553.00
Spink	12,687	145,007.00	9,634	12,340.00	4,856	11,917.00	3,808,408.00
Sully	4,417	44,778.00	2,839	1,997.00	414	1,073.00	1,135,997.00
Turner	17,733	126,470.00	5,128	4,805.00	12,763	29,565.00	2,033,280.00
Union	19,653	177,790.00	440	440.00	12,772	32,147.00	2,217,404.00
Walworth	2,715	56,803.00	990	1,742.00	3,888	2,084.00	543,803.00
Yankton	18,712	117,996.00	3,723	3,753.00	13,468	35,085.00	3,453,255.00
Total	448,234	4,734,618.50	134,823	164,175.50	209,194	484,117.60	97,342,440.60
Total, Dakota	623,734	7,292,571.75	178,467	242,934.85	255,622	606,571.80	164,199,876.90

Comparative table.

Items.	1888.	1889.	Items.	1888.	1889.
Total assessment	$161,420,974.32	$164,199,876.90	Value of cattle ..	$7,634,548.94	$7,292,571.75
Acres of land	23,832,816.85	23,284,397.50	Average value ..	$12.77	$11.69
Value of land....	$91,875,729.84	$91,536,734.15	Number of sheep.	152,396.00	178,467.00
Average value per acre.....	$3.85	$3.93	Value of sheep..	$207,790.98	$242,934.85
			Average value ..	$1.36	$1.36
Value of town lots	$26,125,555.80	$28,530,279.00	Number of swine	174,028.00	255,622.00
			Value of swine..	$446,811.30	$606,571.80
Value of merchandise	$6,571,007.00	$6,239,113.00	Average value ..	$2.57	$2.37
Capital in manufactures.....	$893,850.00	$786,276.00	Value of vehicles	$2,256,964.25	$2,153,866.60
Number of horses	268,410.00	296,825.00	Moneys and credits	$2,227,115.00	$2,494,617.75
Value of horses ..	$12,120,346.58	$12,855,105.00	Household furniture.....	$368,636.60	$285,501.00
Average value ...	$45.16	$43.31	Stocks and shares.....	$2,837,930.93	$2,688,254.00
Number of mules.	16,057.00	16,305.00			
Value of mules...	$822,772.09	$764,085.00	All other property.....	$7,037,915.01	$7,723,967.00
Average value ...	$51.24	$46.86			
Number of cattle.	597,808.00	623,734.00			

An analysis of the foregoing tables would seem to indicate that the land bears the great burden of taxation, and that personal property, other than live stock, does not bear its just proportion. Assessors usually find their greatest difficulty in arriving at the value and of getting personal property properly listed, hence the inequality of the burden. This is wrong, but at present there seems no sure remedy. The history of one year ought to be a lesson for succeeding years, but unfortunately it is not. There can be no doubt that more money is invested in merchandise this year than last, and yet we find that the assessment has fallen off nearly $350,000. There is a failing also in the assessment of household furniture, vehicles, and stocks and shares, and yet there must have been an increase in all these items. It is evident that there has been a lack of vigilance on the part of some assessors. It is hoped that hereafter a better system will be adopted and more care taken in the details.

On the whole, the showing made by the assessment of 1889 is a favorable one, and shows beyond doubt that Dakota has made progress. It shows that the number of each class of live stock has increased, which is one of the very best evidences of growth and prosperity in an agricultural State.

Trusting that the information contained in this circular may be beneficial as well as interesting, I have the honor to subscribe myself,

J. C. McMANIMA,
Territorial Auditor.

Gov. A. C. MELLETTE.

MILITIA.

The Territory of Dakota has a well organized and equipped militia supported by salutary laws. The following report of the adjutant general, furnishes a correct idea of its efficiency:

ADJUTANT-GENERAL'S OFFICE,
Redfield, Dak., October 23, 1889.

SIR: I have the honor to submit the following report of the militia of the Territory:

At the commencement of the present fiscal year the organization of the militia was practically the same as at the date of the last report of the adjutant-general, on September 30, 1888, consisting of—

The commander-in-chief and staff	27
Two colonels and staff-officers	25
One major and staff	7
Two regiments of infantry, 9 companies each	789
One battalion of cavalry	87
One battery of artillery	51
Total	986

In consideration of the purposed division of the Territory, a reorganization of the guard has placed all the companies belonging to the southern part of the Territory

in the Second Regiment, and those of the northern part in the First Regiment, to which was attached Battery A and the battalion of cavalry.

On the 16th of May a company of infantry was mustered into the service at Casselton and assigned to the first regiment.

The present organization of the guard consists of the commander-in-chief and staff		19
First regiment:		
Col. William A. Bentley and staff	12	
Seven companies of infantry	280	
Battery A	40	
Troops A and B	88	
Regimental band	20	
Total		440
Second regiment:		
Col. Mark W. Sheafe and staff	13	
Twelve companies of infantry	480	
Regimental band	20	
Total		513
Grand total		972

ORDNANCE.

The guard is armed with 950 Springfield rifles, .45 caliber, model 1884, and two 3-inch muzzle-loading rifles, model 1861, distributed amongst the troops as follows:

First Regiment:		
Seven companies infantry, 40 guns each		280
Two troops cavalry		100
Battery A, two 3-inch guns and 10 Springfield rifles		10
		390
Stored at Bismarck		80
		470
Second Regiment:		
Twelve companies infantry, 40 guns each		480
Total		950

There are also 50 cadet rifles in the possession of the agricultural college at Brookings.

Tactics and uniform are in accordance with the United States regulations, and, in addition to the annual muster and inspection, the guard is required to perform at least eleven drills and musters during the year.

The members of the guard are enlisted for three years; provided, however, after having served one term, they may re-enlist for one or more years.

ENCAMPMENT.

No encampment was held in 1888, the appropriation of $18,000 being inadequate to the discharge of necessary expenses.

From June 25 to July 2 of the present year an encampment was held at "Camp Ben. Harrison," near Watertown, at which all the organizations of the guard were present except the battalion of cavalry, which was excused on account of the great distance to be traveled and consequent heavy expense for transportation.

At the encampment there were present for duty 75 commissioned officers and 578 enlisted men.

The troops were especially instructed in guard mounting and guard duty, and company and battalion drills were had on every day, Sunday excepted.

On the 27th the troops were drilled in brigade movements by Col. E. F. Townsend, of the Twelfth U. S. Infantry, who had been detailed to inspect the D. N. G., which duty was performed on the 29th in a very thorough manner.

COST OF ENCAMPMENT.

The amount of subsistence for camp was	$1,167.81
Commutation of rations on the way	620.86
Amount paid for horse hire	284.25
Per diem of guard	5,607,62
Transportation and freight	2,645.98
Sundry other expenses	591.75
Total cost of encampment	10,918.27
One half year's armory rent paid	3,472.50
Sundry other expenses to date	147.50
Total amount drawn on the military fund	14,538.27

which, deducted from $18,000, appropriated, will leave a balance of $3,461.73 to meet the expenses of inspecting fourteen of the organizations, and to be applied on the clothing allowance for the present year, about one-half of which can probably be paid.

A division of ordnance and ordnance stores has been effected in accordance with the provisions made by the military committee appointed for that purpose, and requisitions have been sent in to the General Government for amount of the appropriation to the Territory for 1889, the requisitions specifying the ordnance and stores required by the militia in each of the two divisions of the Territory to which they are ordered shipped, the apportionment having been made by the Secretary of War.

I am, sir, very respectfully, yours,

J. S. HUSTON,
Adjutant-General.

Hon. A. C. MELLETTE,
Governor and Commander-in-Chief.

DAKOTA PENITENTIARY.

SIOUX FALLS, *October* 23, 1889.

SIR: The transactions of this penitentiary for the year ending June 30, 1889, are as follows:

Number of inmates June 30, 1888		92
Number received since and up to June 30, 1889		36
		128
Released by expiration of sentence	36	
Released by commutation of sentence	3	
Released by pardon	1	
Removed to insane asylum	1	
Died	2	
	—	43
Number confined June 30, 1889		85
Total number received since the opening of the penitentiary		361
Total number released since the opening of the penitentiary		276
Total amount expended for maintenance for year ending June 30, 1889		$10,070.30
Amount expended in improvements		8,679.87

Improvements consist of water tower in process of erection, steam fitting, and general repairs.

The health of the inmates for the year covered by this report was exceptionally good. No serious sickness among the prisoners existed except in the cases where death ensued, both being consumptive at the time of their reception.

My term of office as warden began June 1, 1889, which precludes further report than as above given.

Very respectfully, your obedient servant,

THEO. D. KANOUSE,
Warden.

Hon. ARTHUR C. MELLETTE,
Bismarck, Dakota.

DAKOTA REFORM SCHOOL.

This institution is located at Plankinton, Aurora County, upon a tract of 80 acres of land, donated. It consists of a three-story building made of Sioux Falls stone, and necessary out-buildings to equip a farm.

Boys and girls are received on equal terms and treated alike. The government of the school partakes more of the nature of a well-regulated home than that of a penal institution. The first child was received on the 3d day of November, 1888, and now it has 33—24 boys and 9 girls. All children are committed to the care of the institution during minority or until sooner reformed and released by the board of control. Pupils attend school about three hours each week day and are quite thoroughly drilled in the common branches, music, and general information.

A Sunday school has been organized and is regularly maintained. Religious services are held at the institution each Sabbath afternoon, the clergy of the surrounding country conducting the same. The manual labor for the boys consists of farm and garden work, care of stock, and such mechanical industries as its needs demand. The girls are instructed in house-work, such as cooking, dining-room and chamber work, sewing, knitting, and fine needle-work.

The greatest care is given to the correction of the habits of the youthful inmates, and the management of the institution, under Mr. C. W. Ainsworth and his excellent wife, both of much experience in the reform work, is very satisfactory.

DAKOTA HOSPITAL FOR THE INSANE.

YANKTON, SOUTH DAK., *October* 28, 1889.

SIR: In accordance with your request of the 20th instant, I have the honor to make the following report:

Dakota Hospital for the Insane was established by act of legislature, approved February 15, 1879, and is located on section 36, township 94 north, of range 56 west, in Yankton County, 2¼ miles from the city of Yankton. The land belonging to said institution embraces all of said section 36. Two hundred acres are under cultivation; the remainder is used for pasture, lawn, park, and flower-garden.

During the year an artesian well has been completed, at a cost of $2,800. This well supplies an abundance of water for the building and for irrigating purposes; also supplies water for an artificial lake, 80 by 100 feet, with a depth of 7 feet.

The hospital building is a brick structure, three stories high, consisting of a center building 54 by 70 feet; two wings, 36 by 126 feet, facing north and south; two additional wings, 37 by 121 feet, facing east and west, with corridor, dining-room, and hall, 26 by 72 feet; kitchen, laundry, and chapel, 32 by 64 feet, 20 feet above basement; boiler-house, 22 by 46 feet; corridor, 10 by 48 feet, 20 feet high. The building will, with recent additions, accommodate 360 patients.

Outbuildings, consisting of a barn 40 by 60 feet, 18 feet above basement; also frame carpenter-shop, tool-house, sheds, etc.

The above buildings have been erected and furnished at a cost of $168,800.

The number of patients on hand July 1, 1888 (98 male and 66 female)	164
Patients received in year ending June 30, 1889 (72 male and 44 female)	116
Patients discharged (30 male, 14 female)	44
Patients home on trial (9 male, 8 female)	17
Patients died (8 male, 2 female)	10
Number of patients in building June 30, 1889	209

Respectfully,

H. F. LIVINGSTONE, M. D.,
Superintendent.

Hon. A. C. MELLETTE,
Governor, Bismarck, North Dakota.

NORTH DAKOTA HOSPITAL FOR INSANE.

NORTH DAKOTA HOSPITAL FOR INSANE,
Jamestown, North Dak., October 29, 1889.

SIR: In reply to your request of recent date, I take pleasure in presenting to you the following facts and suggestions relative to the workings of the North Dakota Hospital for Insane for the current year:

In this connection I am constrained to suggest that the people of our proud young State, as it is about to enter into full statehood, owe to the legislatures of the Territory of the past, and to Territorial governors, as well as to the intelligent forethought of a number of painstaking citizens, a debt of gratitude for successful efforts in establishing for the Territory a public and very necessary institution that will surely prove a credit to the hopeful and energetic State, now born into the great union of States and now a member in full and good standing of a grand Government so justly celebrated for its magnanimity in providing for the care of its unfortunates, and its benefactors.

In reference to the condition of our hospital for the year 1889 up to the present time, and in reference to its present needs as well as recent improvements, I take pleasure in presenting to your excellency the following:

Since my last report we have opened and are now occupying two new ward buildings, viz, wards Nos. 2 east and west, being for male and female patients, respectively. These needed additions, together with an addition to the office building, give ample room for present requirements. We are also now occupying the amusement hall, which has already proven a great benefit to patients in giving them an opportunity to witness and participate in healthful recreation and amusement, thus aiding and cheering them and stimulating their minds.

The building formerly occupied as boiler-house has been remodeled and is now used as a kitchen, store-room, laundry, mending room, together with a dining-room for employés, and is for these uses complete, convenient, and comfortable.

The institution throughout is now connected by a system of corridors or partly underground hall-ways. This completed system I find most useful and convenient as well as pleasant and desirable for patients, and while it does not detract from the original idea of the cottage plan, this corridor communication with all buildings I believe most beneficial and desirable. Especially in cold or disagreeable weather are its benefits discernible in permitting patients and attendants to pass from building to building under cover and protection as well as in perfect safety and security.

While the Territory and its legislature have been in the past generous and prompt in complying with former requests, and while our system is now very near complete, we do not find any more room than is needed, and while it may not be found necessary to ask for additional room for some time to come, it would seem desirable to have a fund to use in placing all our present buildings in such condition that "every nook and corner" may be put to practical use. Taking this view of the matter, and believing that your excellency and the people of the State prefer to see everything in and about the institution comfortably arranged, and in complete accordance with, and in harmony with the original design and ideas of the governor and legislature in securing the additional buildings and adjuncts, I would respectfully but earnestly suggest the need of a small appropriation for fully completing our present plans and securing all the benefits intended to be derived from the additions and improvements. A small appropriation will insure additional quarters for employés who now occupy portions of ward buildings that should be devoted to the use of patients.

It is with a feeling of thankfulness and gratification that I am permitted to report that the physical health of patients is at a high standard, and as nearly perfect as could be expected.

I attribute this desirable condition to the perfection of our system of sewerage, to the excellent ventilation of all rooms and departments, as well as to the opportunities now afforded of giving patients exercise, amusement, and recreative employment for mind and body; as in all diseases good ventilation, exercise, and various means of deviation from morbid thoughts forced upon the patient when left alone to "commune with his own thoughts," these essentials are still more to be desired and of even more importance where the mind is diseased and the mental faculties clouded, uncertain, and morose.

In carrying on this important, painstaking, and humanitarian work, I am fully convinced that it is better and safer to err upon the side of over-doing rather than on that of under-doing in preparing for the care and attention of our unfortunates, and I therefore feel no hesitancy in expressing the belief that the last legislature seriously erred in withholding the necessary appropriation for the sufficient payment of employés, as well as failing to make it possible to retain a sufficient number of competent attendants. As a result of this apparent oversight on the part of the legislature, the trustees and management found it necessary to dismiss employés badly needed, and

prevented them in many instances from securing the services of those fully competent for the arduous duties and labors of an attendant to the insane. The positions are very trying, as well as most responsible ones, and the ends sought and desired in a hospital of this character certainly suggest and justify a most careful consideration by our legislators when the question of proper funds to properly maintain the work is brought to their attention and for their consideration.

It is a grave mistake to believe that those possessing suitable qualifications to render them valuable as attendants can be secured for inferior compensation. The result in consequence is that we find it very difficult to secure the needed talent in this direction or in retaining it even when secured.

These things I believe to be serious and worthy of the most thoughtful consideration by all who have the success of our institution fully at heart.

The last legislature even saw fit to cut off a desired small appropriation we asked to be used in needed repairs, made necessary from time to time, which I consider most unfortunate, as must be readily realized by all who stop to consider that the best and most substantial buildings, public or private, stand in need of occasional repair, and to fail to arrange for this is false economy that time will make painfully apparent. It will prove an expensive piece of economy if not remedied. By the failure to secure this appropriation we have also been compelled to do without furniture and furnishings badly needed, and in other ways has it hampered the work in our institution.

In a hospital where patients of all degrees of mental derangement are cared for, many being so violent as to at times require the constant attention of one or more attendants, it becomes a serious detriment and drawback to be left with a deficient amount of help.

I believe it is the duty, as it should be the pleasure, of the State to do all in its power to make these unfortunate citizens, bereft of reason and the power of taking care of themselves, comfortable by providing for them a sufficient number of attendants and all needful comforts. The public naturally expects the best results in the hospital, and to that end should employ the means necessary to accomplish the best results possible.

The great need of more and still better attendants in this institution is constantly made apparent.

There were in this institution at our last annual report to the governor 178. Since then 91 have been received, 19 have died, and 64 discharged, leaving 186 in the hospital at this date.

Owing to the fact that our institution is young, the expense per capita of caring for the patients is of course larger than were we older and had 1,000 patients or more, instead of less than 200, as preparations, etc., must ofttimes be as painstaking and exacting for a small number as a large number.

The hospital farm operations on our section of land have been carried on the past year in a manner similar to that of a year ago

Some 300 acres have been used for pasturage for the cows and cattle used on the farm, and about 250 acres have been used in raising oats and hay for our stock and for vegetables for household use. The garden is under the care of an experienced foreman, who is ably assisted by patients who are allowed to work when they prefer to do so, and a sufficient quantity of vegetables have been stored away for all hospital use. Taking into consideration the small expense incurred in growing our crops, I regard our farming feature a most profitable enterprise and a most desirable means of employing the hands and minds of patients who prefer to work, and who are constantly benefited by being given this opportunity.

The electric-light plant used in lighting the entire institution is now complete and in perfect working order, and works without the least interruption. For safety, economy, and convenience electricity is certainly superior to any other means of illuminating an institution of this kind.

The system of steam-heating and plumbing is now as complete as could be desired, and secures at once safety and comfort throughout the institution, notwithstanding the cutting down of the number of the employés by the failure of the legislature to pass the needed appropriation. I congratulate the trustees and the State generally on the fact that I have been able to retain and secure some most faithful and deserving employés, who have performed extra service most willingly, although knowing they would receive no extra compensation. This faithfulness would seem to suggest the highest appreciation by the management and State, and the fact that the laborer is at all times worthy of his hire. I heartily commend the faithfulness of such employés, and urge the importance of recognizing their effort.

All of which is most respectfully submitted.

O. W. ARCHIBALD,
Superintendent.

Hon. A. MELLETTE,
Governor Dakota Territory, Bismarck, Dak.

VETERINARY SURGEON'S OFFICE,
Mitchell, Dak., October 25, 1889.

SIR: In answer to your request for summary of business of this office for year ending June 30, 1889, will say that I can only report since assuming duties of office on June 3 last.

I find the demands of the office keep me constantly employed, and occasionaly the assistance of my deputies, Dr. W. C. Langdon, of Fargo; D. A. McCommack, of Watertown; J. A. Shorb, of Sioux Falls, is required.

The principal part of the work consists in investigations of reported cases of glanders, a great majority of which prove to be some trifling ailment. This disease is being stamped out, though there is yet a lingering trace of it throughout the Territory. Since June 6 last I have caused to be destroyed ninety-six horses. All diseases are less virulent in the high and bracing atmosphere of Dakota than in a warm, close, and moist atmosphere.

I have found the disease "crotalim" in the Black Hills creating consternation among stock-men. It is caused by eating the plant "Crotalaria sagittalis," or "rattle box." Animals become ravenously fond of the plant, and the only safety is to remove them from its vicinity.

There has existed among cattle in a few localities a mild form of "epizootic catarrhal fever," which under poor sanitary conditions has caused some loss.

We have had very few outbreaks of disease among our herds of cattle. Early in the summer Texas fever was reported to exist in the States south of us. Nebraska issued quarantine, Iowa was already protected by standing law, Montana felt safe, and at your request I investigated as to the danger of our Territory being invaded by cattle having this disease. I became convinced that we stood in no danger, and deemed it unnecessary to go to the expense of quarantining against it. I so advised you at the time and I am pleased to state that my opinion was correct, as it is now past the time of year when we can be considered to be in any danger from exposure to these Southern cattle, as "Jack Frost" proves destructive to the germ of this disease.

The variety of anthrax called "black leg" made its appearance in several localities, but no serious loss was sustained. I have thoroughly discussed the subject with a number of our most intelligent farmers and stock-men, and it seems to be the established fact among them that very little, if any, loss ever occurs when the "rowel" or "seaton" is freely used.

The most serious outbreak among our cattle occurred in the vicinity of Yankton, and was called the "Yankton-Cattle Disease." I was notified of the losses that were occurring and I immediately repaired to the neighborhood affected. I found that something like one hundred cattle had died of the disease. Inquiry developed many different opinions as to the cause of the disease. It was thought by some to be due to the eating of some plant, others attributed it to the eating of dead grass, and still others ventured the opinion that it resulted from the abundance of "pollen" existing on plants where the cattle were pastured. I found, on looking over the feeding grounds, no reason to believe that any of the above-suspected causes to be the true one. I did find, however, a solution of the question in the most filthy and foul condition of a creek, called the "Rhine," which flows through the city when the water is high, but which at that time was nearly dry and devoid of current. This creek proved to be the receptacle of the drainage from several barn-yards,

At the request of the mayor of the city of Yankton I met the council and board of health that night, and advised them as to the proper preventive measures. I considered the disease to be directly due to such filth as I have previously described. I gave necessary directions; heard no further complaints.

There is also one more disease which I will briefly mention, viz, "actinomykosis" or "big jaw." At the market all cattle are now refused that are so affected. The disease is one that can be transmitted by breeding, and I believe also by close association. The quicker the breeders realize this fact the sooner will they destroy an animal so affected and send it to the rendering-tank for grease.

The total expense of this department, as per accompanying statement, since June 1 last, is $2,512.45.

Very respectfully submitted,

D. E. COLLINS,
Veterinary Surgeon.

Hon. A. C. MELLETTE,
Governor Dakota Territory.

TERRITORIAL BOARD OF HEALTH.

SUPERINTENDENT'S OFFICE,
Frankfort, Dak., October 24, 1889.

SIR: I have the honor to submit the following report, according to your request, to wi :

During the past year in a few localities diphtheria has prevailed, extending over small districts. Through active measures, and maintaining strict quarantine, the use of disinfectants and germicides and improvement of local sanitary conditions the disdisease was prevented from spreading.

In a few localities modified small-pox or varioloid occurred, but by proper means it was in every case prevented from spreading. Our population is peculiarly liable to contagious diseases, which are migratory to some extent and constantly re-enforced from the population of the Old World, being borne directly from the ship of passage to our State. In a few cases I have known small-pox to be brought in the clothing or bedding from which infection followed. Means should be taken to enforce vaccination in order to guard against this dread disease, and I shall use the authority of my office to its full extent to this end. At a meeting held May 9, 1889, Dr. D. G. Mead, of Union County, and Dr. A. P. Roundswell, of La Moure County, were appointed to assist the superintendent as an examining board.

Ninety-one licenses were issued by my predecessor during the official year ending June 30, 1889.

I shall insist upon applicants for license who do not hold diplomas from some reputable medical college undergoing a strict examination in every case. Neither will I knowingly grant a license to any man or woman to practice medicine without evidence of good moral character. The health laws should be so amended as to make it practically possible to suppress all irregular, incompetent, or immoral persons now in the practice of medicine and drive them from the State.

Very respectfully,

WILLIAM M. KAULL, M. D.,
Superintendent.

HON. A. C. MELLETTE,
Governor of Dakota Territory.

PUBLIC EXAMINER'S OFFICE.

MITCHELL, DAK., *October*, 28, 1889.

DEAR SIR: I have the honor to submit a brief report of the workings of the public examiner's law in my district from the 18th day of April, 1889 up to the present time. The law creating this office authorized and empowered the public examiner to exercise constant supervision over the books and financial accounts of the several educational, charitable, penal, and reformatory institutions of Dakota; to order anden force a correct and, as far as practicable, uniform system of book-keeping by county treasurers and auditors; to examine their accounts, and to instruct Territorial and county officers in the proper mode of keeping their accounts, as well as to examine the official bonds of both Territorial and county officers in their districts; also, to visit and inspect each of the banking, insurance, saving, annuity, safe deposit, loan, or trust companies, and other moneyed corporations created under the laws of this Territory.

It will be readily seen that to comply with this law and make it effective a vast amount of work must be done.

In starting out to discharge the duties of this office it was my purpose to visit personally every institution, county, and corporation mentioned in said law, and I hope to be able to do so before the end of the year and to report upon their condition so far as the public is interested in the same.

The law has already been of great benefit, particularly in its application to county work, and may be made of greater value by judicious revision of the revenue laws so that more simple methods may be adopted by the county officers. In this department, however, there is a marked improvement over last year. The law with regard to banks and banking was not carried into effect prior to this year. Its practical application is received with hearty approval by all bankers of good standing, and they have, without exception, submitted to an examination without protest. I believe this feature of the law, if properly followed up, will prove of great benefit to the public. With regard to the public institutions of the Territory, I find that there has not existed heretofore in all cases a close adherence to strict business principles in financial affairs, but there has been a change for the better under the present management.

I have endeavored, so far as possible, to adopt and enforce a uniform system of book-keeping and accounting, and have met with reasonable success, considering the

unsatisfactory condition of the existing laws. The law requiring the public examiner to investigate county officers' bonds has resulted in much good. I have found more carelessness with regard to this important matter than in any other branch of county business.

Very respectfully submitted.

T. E. BLANCHARD,
Public Examiner, First District, Dakota.

Hon. A. C. MELLETTE,
Governor, Dakota.

INDIAN STATISTICS.

There is nothing to fear from the Indian population of Dakota. A few are farmers, and the rest are more or less accustomed to white man's labor, for which a large majority, however, have as yet a sovereign contempt. They are peaceably disposed toward their white neighbors, and as but little is seen of them anyway their presence in the Territory on the Government reservations is hardly observed, and of no concern to the people of Dakota generally.

The total Indian reservation area is 26,751,105 acres, or 41,799 square miles, the Sioux Reservation alone containing 21,593,129 acres, or 33,793 square miles.

The total population in 1886 was 32,500, of which number over 16,000 wear citizens' dress wholly, and 9,000 have partially adopted the white man's attire, leaving about 7,000 who retain their native dress.

The number of males engaged in manual labor is 7,000; of families at work on farms, 4,800, and in other civilized pursuits, 1,000. The Indians own about 20,000 horses, 17,000 head of cattle, 1,200 swine, and 200 mules.

There were 20,000 acres under cultivation in 1886 by Indians, who raised 70,000 bushels of corn and 50,000 bushels of wheat.

The number of Indians who can read was reported at 2,750, and of those who can speak English 8,600. Out of a school population of about 7,000 the greatest attendance was 2,129, and the average attendance 1,293.

There are 24 schools in operation and 34 buildings used. The cost of maintaining these schools for one year was $101,402, of which amount $18,639 was contributed by religious societies, and $82,763 came from the Government. The average annual cost of maintenance for the average school attendance was $76 per capita; for the greatest school attendance, $47 per capita; for the entire population, $15 per capita, and for each school in operation, $4,225. It can not be disputed that the Indians of Dakota are gradually being brought within the influences which, it is trusted, will eventually prevail with the entire Indian race in this country.

UNITED STATES INDIAN SERVICE,
Cheyenne River Agency, October 25, 1889.

SIR: In reply to your letter of recent date, I have the honor to state that I have under my charge at this agency about 2,900 Sioux Indians. They are peaceably inclined towards the whites and seldom quarrel among themselves.

They are making rapid progress in agricultural pursuits.

There are two good boarding and eight day schools, so all can avail themselves of the advantage for an education; most of them are sending their children to school.

I am repairing their houses as fast as I can with the agency mechanics.

The efforts put forth by the churches and schools have greatly improved this people in their habits and morals.

I am, sir, very respectfully, your obedient servant,

CHAS. E. MCCHESNEY,
U. S. Indian Agent.

A. C. MELLETTE,
Bismarck, Dak.

UNITED STATES INDIAN SERVICE,
Pine Ridge Agency, October 25, 1889.

SIR: In reply to your letter of the 21st instant asking information relative to the condition of the Indians at this agency, I have the honor to submit the following:—

There are now at this agency 4,549 Sioux, 557 Cheyennes, and 503 mixed bloods, making a total of 5,609.

These Indians are peaceably inclined and generally adopting the habits of civilization. The present year will not show such increase in agricultural products as was hoped for. This resulted in part from the enforced absence of the Indians from their farms at a season when they needed attention, during the visit of the Sioux Commission, but more largely from the destructive hot south winds which visited this locality in the latter part of June.

The agency schools, which form the most important factor in the civilization of the Indian, are doing good work, with a full attendance of pupils. It is a source of satisfaction to note the increasing interest manifested in them by the Indians.

The field of missionary work has been enlarged, and much good may be expected to result from the earnest labors of those engaged in this laudable work.

Very respectfully,

H. D. GALLAGHER,
U. S. Indian Agent.

Hon. A. C. MELLETTE,
Governor of Dakota.

UNITED STATES INDIAN SERVICE,
Sisseton Agency, Dak., October 26, 1889.

SIR: In obedience to your request I hasten to give such information of the Lake Traverse Reservation, Dak., and of the Sisseton and Wahpeton Indians living thereon and owning the same, as I believe will be interesting and important.

The Indians of this reservation have taken their allotments, with but few exceptions. Out of 1,407 there can not be more than ten or twelve who have neglected or refused to take their allotments.

The late census shows a population of 1,407 of this tribe, and their patents are being delivered from this agency as fast as called for. The whole number of patents issued and ready for issue is 1,339, and these patents cover about 127,000 acres of the reservation, leaving of surplus lands about 730,000 acres.

No rations have been issued to this tribe for the last four years, and consequently they have been obliged to cultivate the land and engage in the work of the white man. Many of them have already learned to take care of themselves, and have accumulated some property; but the majority of them are very poor, and have made but little headway, either in farming or other industries.

It is true that this section of country has suffered with drought for several years past, and this has discouraged these people so much that many of them have let their lands lie idle.

I made a careful examination of the condition of the poor and destitute of late, and laid before the Indian Department the poverty and destitution of these people; and in accordance with my recommendation a fund of $2,000 was promptly placed at my disposal for the purchase of provisions for the relief of destitute and suffering. The census shows 334 children of school age, and all reasonable efforts are being made to place as many of them at school as possible. There are two schools in operation; one is a contract school, with accommodations for 160 scholars, and the other school is a Government industrial boarding school, with accommodations for 130 scholars. These two schools are lively competitors in obtaining and retaining pupils, and all proper efforts and inducements are made and offered to place scholars in their respective schools.

The success of the schools guaranties a complete success in this work of civilization.

'T is education forms the common mind:
Just as the twig is bent the tree 's inclined.

I am, sir, with regards, your obedient servant,

WILLIAM MCKUSICK,
U. S. Indian Agent.

Gov. A. C. MELLETTE,
Bismarck, Dak.

UNITED STATES INDIAN SERVICE,
Crow Creek and Lower Brulé Agency, S. Dak., October 24, 1889.

SIR: Your letter of inquiry as to the condition of the Indians at this agency reached me by last mail. In reply I have to say that the Indians at this agency are all Sioux and number about 2,200.

From consumption and scrofula—if that be a disease—they seem rather on the decrease.

Their moral condition is excellent, and I am pleased to report that, while it may be slowly, they are surely advancing to a state of self-support and civilization. They are realizing more and more each year the advantage of farming, stock raising, and, in fact, are beginning to learn that labor well applied yields good returns in the shape of comforts and luxuries. They promise to become creditable and law-abiding citizens of the new State of South Dakota.

Very respectfully,

W. W. ANDERSON,
U. S. Indian Agent.

A. C. MELLETTE,
Governor, Bismarck, Dak.

UNDEVELOPED RESOURCES.

Rapid as has been the development of the Territory during the past ten years, but a fraction of her immense resources have as yet been brought into the wealth-producing area.

Of the 96,596,480 acres of land in Dakota but 39,872,102 acres had been entered up to the 30th of June, 1889. Of this area but 10,000,000 of acres were in cultivation the present year; in other words, less than one-ninth of the total area has been brought into cultivation. When the yield of various crops is taken into consideration some idea of agricultural Dakota may be gained.

About 27,000,000 acres of the total area of the Territory is now included in the Indian reservations. Of these lands about 11,000,000 acres are about to be opened for settlement, thus greatly enlarging the present available area of 19,877,273 acres.

But Dakota has other great resources. In the southeastern and eastern portions of the Territory are located some of the largest quarries in the country, from which are taken large quantities of beautiful jasper and superior granite. In the Black Hills, that Golconda of Dakota, rich bearing ores of gold, silver, tin, and copper are found. Although but a small portion of the mineral wealth has been developed, the product of gold and silver for the ten years from 1877 to 1887, inclusive, was $36,920,000, of which amount $2,000,000 was silver. The tin deposits promise to be an even greater source of wealth than finer metals. The United States imports annually $30,000,000 of tin and tin-plate. It is safe to predict that within a few years this large sum will be saved to the country, and the tin used will be produced and manufactured at home. The Black Hills contain greater deposits of tin ore than the mines of Wales, Bohemia, Saxony, and Portugal combined.

It requires but development and a fostering policy on the part of the Government to make the Black Hills the first tin-producing region of the world.

During the past two or three years discoveries of coal, oil, and natural gas have been made in various portions of the Territory. A superior quality of lignite is found in the Missouri Valley north of Bismarck, and at other points cropping out from the bluffs along the streams. Vast deposits of lignite and soft coal are found in the whole region west of the Missouri River, and also in the northern portion of the Territory, while veins ranging from 5 to 20 feet in thickness are found in the Black Hills. It is reported, and apparently upon good authority, that

anthracite coal equal to that of Pennsylvania is found along the Moreau River in the Sioux Indian Reservation.

Oil, it is said, is found in the Turtle Mountain region in North Dakota, and gas-bearing strata have been found in a number of counties, notably at Ashton, Spink County, and in Sully County, by parties engaged in digging wells. Practicaly, nothing has been done to develop these deposits of fuel. Experiments are expensive and the practical knowledge of experts wanting. It would seem that some provision should be made by the Government for the investigation of these sources of wealth. The field would prove a rich one for the Geological Survey, and certainly the labor of this corps could not be turned to a more practical end. With its resources, agricultural and mineral, Dakota may with justice be pronounced one of the richest regions in the United States.

STONE QUARRIES.

The deposit of stone in southeastern Dakota, more particularly in the counties of Minnehaha, McCook, Hanson, and Moody, which is variously styled Sioux Falls granite, quartzite, and jasperite—the last of which was given to it by Senator Stewart, of Nevada, some years ago, and by which it is chiefly recognized now—is an important source of wealth to South Dakota. This stone is of various qualities as regards the closeness of its texture and color. It is very largely a silicate, is of very close texture, varying in color from a pinkish gray to a dark chocolate. It rates about fifty on the scale of the diamond, and the pure quality is absolutely free from any foreign substance, such as mica, hornblende, and other ingredients usual to a conglomerate stone. It is a sedimentary rock, and owing to the fact that there is no such deposit elsewhere in the world there is much speculation as to its probable depth.

Mr. J. H. Drake, of St. Paul, who has been largely identified with stone industries, was the first to to discover the valuable uses to which this supposed worthless mass of flint could be put. He first, by the use of the lapidary art, found that it took an exquisite mirror polish, and later he discovered that with properly tempered steel tools the material could be broken into shape with surprising ease and astonishing accuracy, enabling workmen to break into shape what would otherwise require to be chiseled or drilled. Paving blocks can be manufactured from it, and despite the long haul and increased freight to Chicago, as compared with the Wisconsin granite quarries, an enormous business has resulted with the large cities, including Kansas City, Omaha, and others, variously estimated at three to five thousand car-loads since the discovery of these cleavage properties. Likewise a large building trade is constantly on the increase. It is estimated that about seven hundred men are engaged and the work grows yearly.

Quite recently it has been discovered that the stone found at a considerable depth is practically fire-proof, and the Haxtun Steam Heater Company, of Kewaunee, Ill., having made a test of it at white heat in their petroleum furnace, have found it to be almost indestructible and far superior and more economical than fire-brick. This promises to be a great industry not heretofore thought of. Aside from the commercial importance to the immediate locality in which this stone is found, with the development of South Dakota the demand for it must increase for all buildings of beauty and permanence for foundation stone, and in time an immense demand will obtain.

A diamond drill excavating corps has been working to the depth of 575 feet at Sioux Falls, with no symptoms of an exhaustion of the deposit.

CEMENT.

During the past twelve months it has been found possible to utilize the stone taken from the inexhaustible chalk-stone cliffs on the Missouri River. This stone is practically useless for building purposes and is too soft for pavements and walks, but it has been found to possess the ingredients necessary for a very fine quality of cement.

Repeated experiments have demonstrated the fact that this cement is far superior to any cement now being manufactured, surpassing the Portland cement, the best the world has known up to this time. The Portland cement yields to a pull of 600 pounds to the square inch, while the Yankton cement, thoroughly tested, endured a strain of 800 pounds, thus proving that the tensile strength of the Yankton cement is 25 per cent. greater than that of the best cement now on the market.

A syndicate of eastern capitalists is erecting extensive works at Yankton in order to utilize this very valuable discovery. The capacity of the works already commenced will be from 150 to 250 barrels per day, and will employ in the neighborhood of 100 men. This plant will be enlarged from time to time as the demands of the business require.

RAILROADS.

The aggregate mileage of railroads in the Territory of Dakota has increased very materially during the past four years, and the gross earnings derived from such railroads have shown a marked advance. It has not been the policy of railroads during the past four years to extend their lines in Dakota without an immediate prospect of returns in the way of earnings. The increase in the mileage, therefore, proves conclusively that the business of the country has been growing in volume, rendering increased facilities for commerce imperatively necessary. The table given below shows the number of miles of rail-road in operation in the Territory of Dakota for the past four years respectively, and the corresponding gross earnings for such years. This table includes the pro rata of interstate earnings as well as of such earnings upon business which originated and eventuated within the Territory of Dakota.

Year.	Mileage.	Earnings.
1885	2, 829. 25	$6, 471, 733. 02
1886	3, 419. 89	7, 077, 050. 97
1887	4, 299. 30	7, 846, 714. 66
1888	4, 463. 97	8, 756, 189. 31

A close examination of more detailed statistics develops the fact that the increase in the local business of the Territory of Dakota has been more rapid than has been the increase in interstate business. The reason for this is that local distributing points are being built up, to which merchandise is shipped from the East and from which the same is distributed throughout the Territory.

A very cordial business feeling exists between the various parts of the Territory, and the interchange of local business is constantly increasing. It is a just cause for regret, however, that the railroads, acting, as it would seem, in conjunction with the wholesalers and jobbers of distributing points outside of the Territory, have been endeavoring

to put a stop to the growth of wholesale business in Dakota. A number of instances of discrimination against distributing points in Dakota on the part of the railroads have been brought to light, and a case of this sort is now pending before the Interstate Commerce Commission. Railroads have much to gain by a fair and impartial treatment of their patrons in Dakota, and actions of the sort above mentioned will tend to engender a hostile feeling which is very likely to culminate in adverse and arbitrary legislation.

TELEGRAPHS.

The number of miles of telegraph operated in the Territory of Dakota during the past three years have been as follows:

	1886.	1887.	1888.
	Miles.	*Miles.*	*Miles.*
1-wire	2,094	2,394	2,230
2-wire	77	394	1,408
3-wire	4	1	398
4-wire	227	227	8
5-wire	.....	3	.....
6-wire	18	18	18

MANUFACTURES AND WATER-POWER.

Manufactures of various kinds are springing up on every side in each Dakota, and continue to present many excellent opportunities for investment.

Partial statistics obtained in 1887 make the following showing for the whole Territory during that year: 29 brick yards, 16 breweries, 7 blank-book manufactories, 6 bottling works, 4 boiler-shops, 5 broom factories, 26 creameries, 33 cigar factories, 6 cheese factories, 1 cornice works, 1 cracker factory, 3 coal mines, 114 flour mills, 33 feed mills, 8 flax and tow mills, 7 foundries, 1 grain-separator establishment, 3 gas works, 4 marble works, 17 ore-reducing works, 5 packing houses, 3 plow works, 5 planing mills, 2 pop factories, 1 plaster of Paris works, 1 paint works, 1 stone-polishing works, 4 sash and door factories, 1 spark-arrester manufactory, 1 shingle mill, 1 soap works, 12 saw mills, 1 shirt factory, 104 wagon works, 5 wood-working establishments, 1 vinegar factory, and 1 woolen mill.

The industries above enumerated represent a capital of over $11,000,000. There has been a large increase in all these enterprises since the above table was compiled, and the manufacturing interests of Dakota, while yet in their infancy, are destined in the near future to assume gigantic proportions.

The immense artesian basin of the James River Valley lies at an average depth of less than 1,000 feet below the surface, and is believed to be supplied from the great lakes of the North.

The water is reached through a deposit readily pierced, and the flow at the surface has an average pressure of more than 100 pounds to the square inch, the supply being inexhaustible if, as is believed to be the case, it is connected with the lakes, it will furnish the cheapest power known upon the earth, sufficient to run all the machinery in the world, while the waste water will make Dakota, which is now productive, the granary of the nations.

DIVISION AND STATEHOOD.

It has been a prevailing belief among the people of Dakota from its earliest settlement that it should be divided and enter the Union as two States. This sentiment was solely the result of the conviction, grown from experience, that the area of Dakota was too great for healthful, economic municipal government, and not because of any incongruity or jealousy between sections. The sentiment in favor of division seems to have been universal, and a common effort of all sections had been uniformly devoted to this end, except as distracted occasionally by local environments. This fact is evidenced by the successive declarations of political conventions of both parties, Territorial legislatures, the repeated utterances of her religious and benevolent conventions, the voice of the press, and the steady efforts of her people for the past fifteen years.

Frequent delegations were sent to importune Congress for the division of the Territory as early as the year 1881. All these efforts failing, by a spontaneous movement in the year 1883 the people of South Dakota, with practical unanimity, regardless of party affiliations, proceeded to elect delegates to a constitutional convention, which met in Sioux Falls in September and enacted a constitution, which was submitted to popular ballot in the month following and ratified by a large majority.

The committee appointed for that purpose failed to secure for this movement the favor of Congress, and to emphasize the popular demand the legislature, in 1885, passed, by unanimous vote, a bill authorizing South Dakota to proceed, under due protection of Territorial law, to elect delegates to a second convention, which met at Sioux Falls and enacted a second constitution, and this was ratified by popular ballot in the fall. This constitution provided for the election of a full complement of State, district, and county officials, as well as representatives to the national Congress; all of which was done, and upon proclamation of the governor-elect the legislature of the proposed State met at Huron, which had been designated by popular ballot as the temporary seat of government, and elected two representatives in the United States Senate. The constitution had provided that no functions should be exercised by any officers of the proposed State, except such as were necessary, preliminary, and incidental to admission into the Union until after the State should be so admitted by Congress. The State, as defined by each of the conventions, had been bounded on the north by the forty-seventh parallel of latitude and was called Dakota. The choice of the name Dakota by the south State had developed something of an opposition to the movement in the north, while the division on the parallel of latitude had developed local opposition on account of dividing counties and thus disarranging county seats and boundaries; and this, added to the influence of an administration to whom it was believed the new States would be opposed politically, resulted in the defeat of the strenuous efforts to secure the recognition of this government. In fact, it is worthy of note, that President Cleveland, throughout his term, persistently ignored the movement, never so much as alluding to it in his voluminous messages to Congress.

The population of Dakota meantime had increased to nearly three-quarters of a million of people, who were fully equipped by material development and equipped with all the necessary qualifications for local government, as the accompanying report abundantly shows. They made their cause an issue in the late Presidential campaign, and the people decided in their favor. Immediately all opposition to the will of her

people disappeared, and with the change of boundary a few miles from the forty-seventh parallel to the seventh standard parallel, so as to preserve the autonomy of counties, and the change of name to South Dakota, the Fiftieth Congress, on the 22d day of February, 1889, approved an act admitting South Dakota into the Union under the constitution enacted in 1885, requiring that it should first be approved by popular ballot on two additional elections, all of which has been accomplished, the majority in favor of its adoption having increased at each of the three elections.

By the same act Congress, yielding to the inevitable, provided for the admission on equal terms of the State of North Dakota, embracing all their part of the Territory being north of the seventh standard parallel; and accordingly, on the 1st day of October, 1889, the people formally ratified a constitution which had been enacted at Bismarck on the 4th day of July, and elected a full complement of executive, legislative, and judicial officers thereunder.

South Dakota provided in the same manner and on the same date for her State government, and on the 15th day of October her legislature assembled at Pierre, which was chosen as the temporary seat of government, elected United States Senators, according to a provision in the ordinance and schedule of her constitution.

A complete and satisfactory adjustment relative to territorial indebtedness and property has been arrived at and incorporated in the constitutions of the two States.

The following is the vote upon the adoption of the constitution and the propositions submitted separately by the people of South Dakota: For the constitution, 70,131 votes; against the constitution, 3,267 votes; for prohibition, 40,234 votes; against prohibition, 34,510 votes; for minority representation, 24,161 votes; against minority representation, 46,200 votes. Upon the location of temporary seat of government the vote stood as follows:

	Votes.		Votes.
Pierre	29,256	Sioux Falls	11,888
Huron	15,647	Mitchell	7,793
Watertown	12,012	Chamberlain	2,421

The vote in North Dakota upon the adoption of the constitution, and the article submitted separately relative to prohibition, was as follows:

	Votes.		Votes.
For the constitution	27,441	For prohibition	18,552
Against the constitution	8,107	Against prohibition	17,393

Bismarck is designated as the permanent capital of North Dakota.

It will thus be seen that the two States are ready to assume their governmental functions the moment the President so authorizes by proclamation, the constitutions having been duly certified to him by the executive of this Territory.

CONCLUSION.

The foregoing statement of what Dakota has accomplished in Territorial condition, in which she has long been held by arbitrary political influences, is believed to fairly and truthfully represent her development as she merges from her proud, historic, Territorial condition and enters upon her higher duties and responsibilities as the States of South Dakota and North Dakota.

The sacred ties of the past, as well as a common interest in the future,

will ever specially unite the two States together, while there is no other instinct or purpose or possible conduct on the part of her people than devout loyalty to the American Union, to whose perpetuity they pledge themselves and their descendants forever.

While her material development, which is chiefly the work of a decade, has been phenomenal, she is proud chiefly of the fact it has been accomplished without the crime and bloodshed usual upon the establishment of civilization in the wilderness. Her people have been a law unto themselves in the absence of courts and peace officers, and never has the militia of the Territory or of the nation been compelled to the exercise of force in her behalf. She has safely and triumphantly passed through the excitement consequent upon the adjustment of title of lands, location of county and State seats of government and their attendant dangers, and now furnishes two States, fully equipped and grounded upon the broad intelligence and fervent patriotism which must ever constitute the hope of the Republic.

I desire to gratefully acknowledge the services of the several Territorial officers in the preparation of this report, notably of Hon. F. H. Hagerty, commissioner of immigration, in addition to those whose names appear, and to say in behalf of one and all that I appreciate the zeal, efficiency, and integrity with which they have discharged their embarrassing duties during the few months we have worked together in administering the final affairs of our Territory.

All of which is submitted.

Most respectfully,

ARTHUR C. MELLETTE,
Governor Dakota Territory.

Hon. JOHN W. NOBLE,
Secretary of Interior, Washington, D. C.