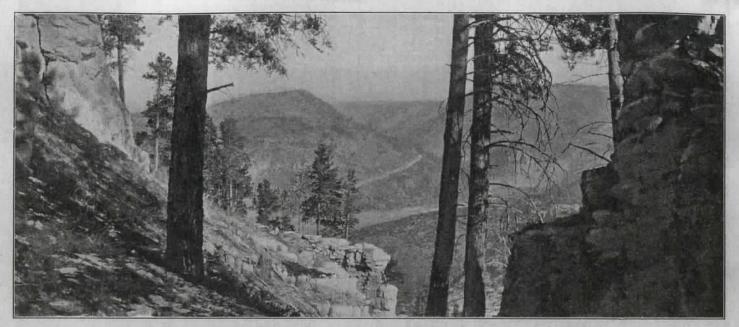
GEOGRAPHY OF SOUTH DAKOTA

By Doane Robinson, M.A., Secretary and Superintendent, Department of History, State of South Dakota



VIEW IN THE MOUNTAINOUS REGION OF SOUTH DAKOTA, THE BLACK HILLS.

PHYSICAL FEATURES

Situation, Extent, and Boundaries. In what part of the United States is South Dakota? Between what parallels of latitude is it? Between what meridians of longitude? In what physical division of North America is it situated?

By using the scale of miles, find the length of the state from east to west; find its width. The area of South Dakota is 77,615 square miles. It is about the size of Nebraska (77,520 square miles). It is larger than all the New England states taken together.

What lakes and river form parts of the eastern boundary of the state? The northern boundary is the seventi standard parallel established by the government land surveys, and is a few miles south of parallel 46° N.

The western boundary is the meridian of 104° 3′ W. What river and parallel of latitude form the southern boundary?

Geological Structure.

While nearly all geological formations are found in South Dakota, the greater part of the surface of the state is underlaid by the sandstones, shales, and clays of the Cretaceous period. These formations were deposited as strata when the ocean once covered this region. The lowest

of these layers is the Dakota sandstone, which appears at the surface in the Black Hills, underlies the greater part of the state, and again outcrops in the extreme southeast. The next deposit was the Benton shale, which was followed by strata of Niobrara and Pierre shales, and Fox Hill sandstone. As the waters of the sea receded, the last Cretaceous formation, the Laramie, was deposited, and in this the layers of lignite coal were formed.

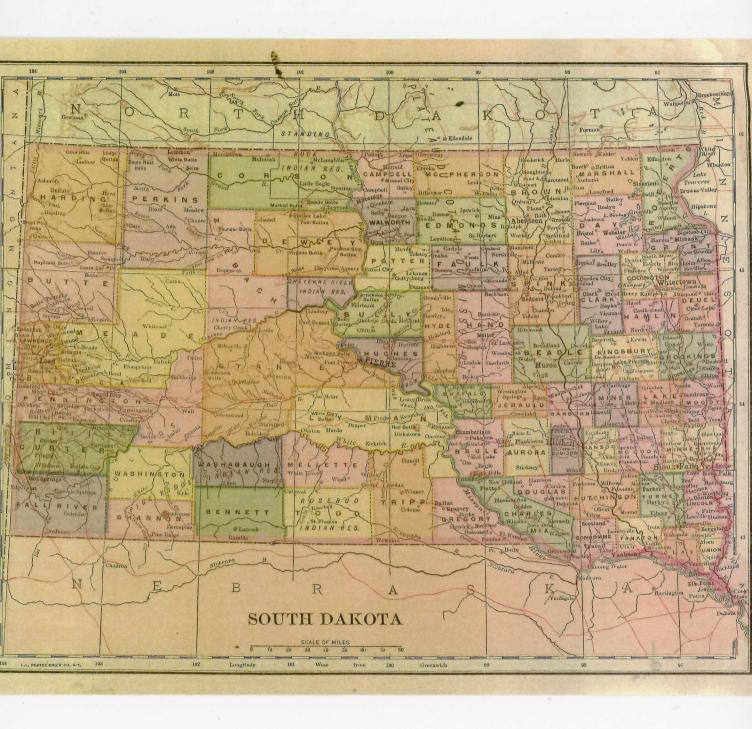
These Cretaceous deposits, which are supposed to have extended over nearly the entire state, were then elevated above sea level, and

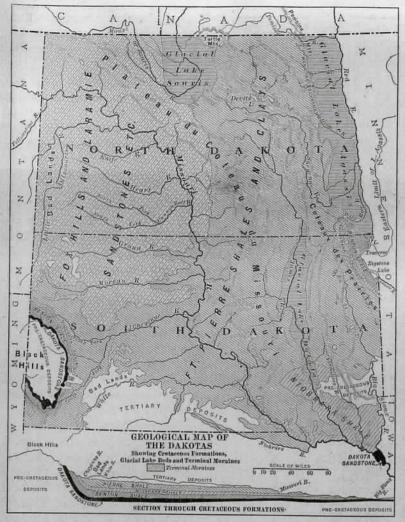
through the long Tertiary period, which followed the Cretaceous, the action of air and water wrought vast changes in the surface features, leaving the Pierre shales exposed throughout the greater part of the state, the Benton and Niobrara shales in the east and Black Hills, and the Laramie and Fox Hills formations in the northwest.

The greater part of the Black Hills region and about an equal area in the southeast, together with a smaller area at the lower end of Bigstone Lake, are composed of formations of earlier geological periods. There is also a large area of Tertiary deposits in the southern part of the state between the Missouri and



LANDSCAPE, EASTERN SOUTH DAKOTA.





the Black Hills. These Tertiary layers were probably formed from the gracel, sand, and mud carried by streams, and laid down in ancient marshes and lake beds. Here is the region of the Bad Lands, in which changes are taking place with more or less rapidity.

Glacial Period. Many thousands of years ago the South Dakota region was tropical. So much ice formed in the north polar regions that it could not bear its own weight, but spread out as a large lump of soft dough would spread out upon a kneading board. Following the Tertiary period this vast ice sheet or glacier advanced from the northeast, covering all of northeastern North America, and moved slowly southward until it reached the eastern banks of the Missouri in South Dakota. Here the ice ceased to advance because the warm air melted it before it could go farther. This enormous ice mass brought with it from the north great quantities of bowlders and finely ground rock. The character of the surface as well as the climate was greatly modified by glacial action; former elevations were planed down, valleys were carved out, and depressions were filled in.

When the ice began to retreat to the north, its immense rock load, called drift, was left in deposits known as moraines. Thus most of the

eastern part of the state was covered with till or bowlder clay which was formed from the finely pulverized glacial drift.

At times when the ice neither advanced nor receded, long ridges of rock material were deposited along the edge of the glacier as terminal moraines. The most marked morainic features are the Plateau du Coteau du Missouri and the Coteaux des Prairies, while nearly all of the ridges and lakes in this part of the state are of glacial formation. During this ice era the great glacial Lake Dakota occupied the valley of the James River, while the far more extensive glacial Lake Agassiz, which occupied the Red River valley and reached far into Canada, extended as far south as the northern end of Lake Traverse.

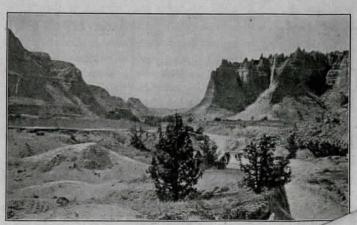
Surface. The surface of South Dakota, with the exception of the comparatively small area of the Black Hills region in the southwest, is chiefly rolling prairie. Harney Peak, 7244 feet high, in the Black Hills is the highest point, and the lowest, 967 feet, is at Bigstone Lake in the northeast. The general altitude is 1600 feet above the level of the sea.

Harney Peak is higher than any point in the United States east of the Missouri River. The altitudes in feet of some other important points are: Aberdeen, 1300; Brookings, 1636; Chamberlain, 1229; Custer, 5303; Deadwood, 4543; Elkpoint, 1127; Gettysburg, 2082; Highmore, 1890; Hot Springs, 3462; Huron, 1285; Madison, 1669; Mitchell, 1301; Pierre, 1441; Rapid City, 3196; Sioux Falls, 1400; Watertown, 1735; and Yankton, 1157.

East of the Missouri River the surface is generally level. Here the streams flow in broad valleys with gently sloping sides. A low range of hills enters the state from the east and extends northwesterly to the northern boundary.

Except in the southwest, where the Black Hills are really mountains, the surface west of the Missouri is a plain cut by ravines and steep slopes. The

Missouri and the streams entering it from the west run in narrow valleys, between bluffs that rise abruptly to the upland level. In this part of the state are many flat-topped buttes which rise from 100 to 300 feet above the surrounding prairie. These buttes are the remains of a formation that once covered this region, and which has been worn away by the action of air and water.



THE BAD LANDS.

The Black Hills cover an area of about 3000 square miles in South Dakota. They do not connect with other mountain ranges, but rise out of the prairies. In form they resemble a rough elongated dome. They are surrounded by a low ridge about half a mile distant from the main mountains. The valley between is fertile, and the Sioux Indians called it the race course.

The generally barren region between the upper portions of the Cheyenne and White rivers is known as the Bad Lands. Here the surface is very much cut by narrow ravines exhibiting many curious and picturesque forms, which resemble towers, castles, and immense buildings. Changes in these forms are continually taking place by the cutting of the clays and soft rocks by the

winds and rains, for like the buttes on the prairies, the Bad Lands are what is left of an old formation not yet entirely worn away. There are, however, valleys and tables in some parts of the Bad Lands which are valuable because of their fertility.

Drainage. South Dakota lies mainly within the Missouri River basin. There is a small portion near Lake Traverse which drains through the Red River to



MADISON LAKE, LAKE COUNTY.

Hudson Bay and also a small section about Bigstone Lake that drains into the Mississippi through the Minnesota River.

Before the ice age, the great river of the South Dakota region flowed in the valley of the present James River. As the ice sheet coming down from the northeast filled this valley, the waters of the great stream were dammed up toward its headwaters in the valleys of the mountains of Montana, but as the ice melted, the pent up waters of the river made their escape around the western edge of the ice at the present line of the Missouri and carved out the channel that it now occupies. In like manner, as the ice disappeared, the waters ran around the eastern side of the sheet and carved out the Big Sioux valley. The valley of the Big Sioux averages 350 feet higher than the James, and the valley of the Missouri is 150 feet higher than the James at the same relative points.

The Missouri River divides the state into two nearly equal parts and forms the southern boundary for more than 100 miles. The chief tributaries of the Missouri in



THE NEEDLES, HARNEY PEAK.

South Dakota are the Big Sioux. the Vermilion, and the James in the eastern portion, and from the west the Missouri receives the waters of the Little Missouri, the Grand. Moreau, Cheyenne, and White rivers. The James is the largest of these streams and is said to be the longest unnavigable stream in the world. The Chevenne is a beautiful, swift-flowing stream. which almost incloses the Black Hills between its north and south The western tributaries forks. carry very large floods at some sea-

sons, but for most of the year they are shallow and rapid. The White and Teton rivers are discolored by the clays over which they pass in their upper courses. The White River takes its name from the milky white color of its waters, which flow over beds of white fuller's earth. At Sioux Falls the Big Sioux River falls in a short distance, over granite ledges, a total of 90 feet, producing a very

fine water power.

There are numerous lakes in the eastern portion, some of them dependent upon surface waters, and therefore drying in periods of long drought; but the larger ones are fed by springs and are constant. The chief lakes are Andes, Madison, Kampeska, Poinsett, and Waubay. Lakes Bigstone and Traverse, upon the northeastern boundary, occupy the bed of a great river that existed before the ice age.

Climate. South Dakota being in the middle of the continent, its climate is not so directly affected

by ocean currents as is the climate of lands nearer the sea. It is subject to

extremes of heat and cold and has a medium rainfall.

The average rainfall each year is 22 inches, but this varies in different portions of the state. West from the Coteau du Missouri, the range of low hills dividing the waters of the Missouri and James rivers, the average is about



SPLIT ROCK.

RESOURCES

South Dakota is distinctively an

agricultural state, and its chief re-

source therefore lies in the prod-

ucts of its soil. These are chiefly

cereals and live stock; however,

it is not wholly dependent upon

Minerals. Thus far gold has

been the most valuable mineral

mined. Some sections of the Black

Hills are very rich in gold, es-

pecially the region known as the

17 inches, and in the more eastern portion of the state from 20 to 30 inches. Three quarters of the rainfall comes in April, May, June, July, and August, when it is most needed for the growth of vegetation.

The prevailing winds are from the northwest and the southeast. Occasionally the winter weather is extremely severe, the temperature falling to 30° F. below zero, but the average winter is open, pleasant, without excessive snowfall, and with warm, sunshiny weather. The average tempera-

ture for January is 13° F., and for July 72° F., above zero.

Soil. The soil of South Dakota except in the Black Hills and the Bad Lands is generally a subsoil of yellow clay covered with vegetable mold, and it is everywhere productive. There is more sand in the soil south of the

White River and north of the Cheyenne River, than elsewhere.

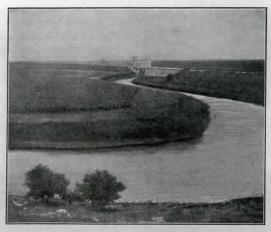
Throughout the Black Hills are scattered parks or openings of level and very fertile land, from which much grain, hay, and vegetables are produced for the mining camps.

While all of the prairie soil is very much alike in appearance and productiveness, it

came from quite different sources. The clay soil east of the Missouri is derived from the granite rocks that were ground up by the glacier ice, while that west of the great river was worn down from the mountains to the west and became shales, which later were broken up by the weather and made the foundation soil of that region. The clay which is derived from the shales is newer and stiffer than that from the ice-ground rocks.

Scenery. The variety presented by different formations of the surface presents much that is picturesque and attractive. The broad prairies, the curiously carved Bad Lands, the peaks and cañons of the Black Hills, the falls of the Big Sioux, the dales of the Split Rock, Lakes Bigstone, Kampeska, Poinsett, and Andes, as well as Sylvan Lake near Custer, the hot springs, the wind cave with its great chambers filled with stalactites and curious forms, Spearfish and Rapid cañons and very many other natural features are noteworthy and annually attract many visitors.

VALLEY OF THE JAMES RIVER.



Northern Hills surrounding Deadwood and Lead. Gold was first discovered by William McKay near Custer on August 2, 1874. Two years later the "diggings" in the Northern Hills were developed, and the annual production since has ranged from \$4,000,000 to \$9,000,000. The most notable and productive gold mine is the Homestake, located at Lead, which is one of

these products.

the most important mines in the world.

Other minerals found in the Black Hills are silver, lead, copper, tungsten, and tin. The deposits of tin ore are extensive. Mica of the finest quality is produced in large quantities at Custer, the annual product being valued at more than one million dollars.

At various points along the Missouri River and in the Black Hills there are valuable deposits of limestone, chalkstone, and gypsum. Large plants for the manufacture of Portland cement are located at Yankton, Chamberlain, and Rapid City.

In the region west of the Missouri and north of the Moreau there are beds of lignite, which have not yet been developed upon a commercial basis, but which supply the settlers with excellent fuel. In some places these beds have been explored to considerable depths, and it is known that there is a sufficient quantity to

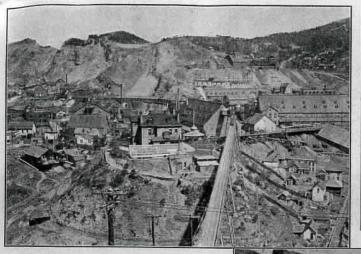


SYLVAN LAKE.



THE MISSOURI VALLEY, RANCH SCENE NEAR PIERRE.

INTERIOR OF MINE.



THE HOMESTAKE MINE, LEAD,

supply the fuel demands of the state for an indefinite period. When this lignite is briquetted, or compressed into blocks, it is found to be equal or superior to the best anthracite coal.

Building stone of fine quality abounds in the Black Hills, on the Big Sioux, Split Rock, and Vermilion rivers, and near Bigstone Lake. The chalk rock of the Missouri River cliffs makes substantial

buildings and is easily worked. The red quartzite of the Sioux Falls region is one of the handsomest and most durable building stones known to commerce.

Forests. The principal natural forests of the state cover the Black Hills and are chiefly of pine and spruce. Here is the Black Hills National Forest, the Ligest in the state. The Cave Hills, Short Pine, and Slim Buttes National Forests occupy much smaller areas in the northwest corner of the state.

There is some natural timber on the Missouri and tributary streams, which in places spreads into forests of considerable size. The cottonwood is the principal tree of these woods, but maple, elm, ash, oak, and box elder also abound. In every section of the eastern portion are extensive cultivated groves which yield much timber for domestic use.

Water Supply. The chief stream of the state is the Missouri River, navigable across the state for a distance of three hundred miles. Its waters, though muddy in the stream, when filtered are the purest melted snow from the mountains and are unsurpassed for domestic use. To some extent they are diverted for irrigating the adjacent river bottom lands. The streams running out from the Black Hills are also useful for irrigation.

At Belle Fourche the Federal government has constructed a very extensive irrigation project, which affords water to about 90,000 acres. There are many other smaller irrigation projects in the western portion of the state which are operated under private ownership.

From the eastern border of the James valley to the Black Hills, the state is underlaid, at a depth ranging from five hundred to three thousand feet, with a stratum of Dakota sandstone, which absorbs great quantities of water where it outcrops along the eastern side of the Black Hills and western mountains. In all of this region borings deep enough to penetrate this stratum of sandstone afford remarkable artesian wells, the waters of which are used for domestic purposes, power, and irrigation.

Surface wells of good water are everywhere secured

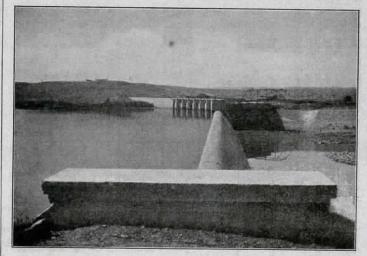
at depths ranging from 20 to 100 feet; besides these there are numerous springs of sweet water.

Water Powers. The region has a few developed water powers, as at Sioux Falls and in the Black Hills. These powers are employed for the generation of electricity, which is transmitted to industrial centers for lighting, and for driving machinery, street cars, and for similar uses. There are some very important undeveloped water powers. Notable ones are upon the Missouri River in the central portion of the state. At Big Bend the river passes around a distance of about 24 miles to gain 1½ miles. Across the gorge there is a fall of about 18 feet where many thousands of horse power can be de-

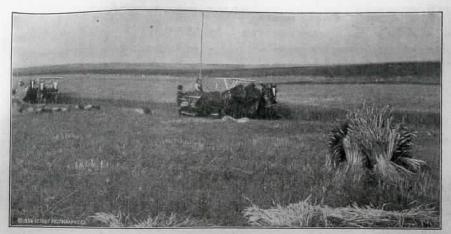
veloped with the aid of modern engineering. At Little Bend, fifty miles farther up the river, a similar detour is made where almost equal horse power may be developed. Upon all of the Black Hills streams there are undeveloped powers of greater or less proportions.

INDUSTRIES

Farming. Agriculture is the leading interest and gives employment to a very large number of persons. Live stock, wheat, corn, oats, hay, and barley are the chief



DAM AND GATES OF THE BELLE FOURCHE IRRIGATION PROJECT.



HARVESTING WHEAT.

products in the order of their annual value. Flaxseed is also a profitable crop. All grains, vegetables, and fruits adapted to the climate of the region are produced abundantly. Much attention is given to dairying, to which industry the region is well adapted. From 1897 to 1910 South Dakota produced more agricultural wealth per capita of its population, in each year, than any other state.

The farming industry is carried on in three principal ways: —

1. Mixed Farming, in which the farmer grows grain for the market, raises and fattens cattle and hogs, and conducts dairying. This class of farmers frequently keeps sheep for wool and mutton, and fowls for poultry and eggs. In the eastern portion of the state, first settled, mixed farming is general. Each farm produces some wheat, but much less than formerly, oats and barley sufficient for home use, and large amounts of corn and hay. Dairying is carried on, and live stock and poultry

are produced upon every

farm.

2. Dairying is the keeping of cows for the production of milk, cheese, and butter, as the chief business of the farm. Poultry and pork are additional products of dairy farms, where grain and hay are cultivated chiefly to provide food for the cows in the dairy. Formerly, most dairymen sold their milk to creameries in the vicinity of the farm, but in recent years, separators, to separate the cream from the milk, are owned by the farmers and they either make butter at home, or



AN ARTESIAN WELL.

else separate the cream from the milk and ship it to large central creameries.

3. Ranching is the raising of large numbers of cattle, horses, or sheep to be sold to feeders upon more eastern farms. The ranches are located chiefly in the newer regions, where land is very cheap.

Formerly, all of the region west of the Missouri and a large area along the east bank was devoted to ranching. Live stock was branded, so that each owner could know his own stock, and then turned loose upon the range, as the great public pasture was called. Annually the stock was "rounded up" and that which was ready for the market separated and shipped away. A record was kept of the brands shipped to market, and each owner was paid from the proceeds of the sales according to the number of head of stock bearing his brand in the ship-

ment. This was a picturesque and profitable business, but the land has now been taken by settlers, the free range broken up, and the ranchers compelled to confine their operations to their own lands,

Manufacturing. The leading manufactures of South Dakota are flour and gristmill products, butter, cheese, and condensed milk, printed matter, lumber and timber



THRESHING WHEAT.

products, malt liquors, cigars, and confectionery. Other manufactures include artificial stone, machinery, carriages and wagons, cement, lime, and brick and tile.

Under modern methods gold smelters and refineries are really manufacturing plants and there are many of these. There are also several large railroad car and repair shops which give employment to many people. Manufacturing is not greatly developed, but it is annually increasing in importance.

Commerce. The commerce of the state consists of trade in agricultural products, gold, mica, Portland cement, building stone, agricultural implements, and merchandise for domestic use.

The Missouri River was formerly an important highway for trade carried upon steamboats, but it is no longer navigated to any considerable extent. Railroads reach most sections of the state. One line to the Pacific coast crosses the northern part of the state and two others traverse the state from east to west, while other lines and numerous branches accommodate the intermediate sections. The state has about 4000 miles of railroad.



FARMING SCENE, CHEYENNE VALLEY.

HISTORY

When white men first had knowledge of South Dakota its chief inhabitants were the Arickara or Ree Indians, who lived in substantial houses in thickly settled communities

along the Missouri River. They cultivated corn and other vegetables, defended their settlements from strongly fortified posts, and lived in unusual comfort for a savage people. At that time the Omahas occupied the lower Sioux Valley, and a band of Kiowas were in the Black Hills region. About two centuries ago the Sioux, or Dakota Indians, from Minnesota, began the invasion of the Dakota country, and before the close of the eighteenth century had driven out the former occupants and wholly possessed the land.

White men of the party of Charles Pierre Le Seuer, an enterprising explorer of that time, visited the Sioux River at Sioux Falls in the winter of 1699–1700. Verendrye, the Canadian explorer, upon his return from the discovery of the Rocky Mountains in 1743, reached the Missouri River at some point near the center of the state and claimed the region for France.

All of South Dakota was included in the Louisiana Purchase and became the property of the United States in 1803. The next year Lewis and Clark, the American explorers, passed through the state upon their expedition to the Pacific and returned through it in 1806.

Trading posts had been established at the mouth of the James River, near Wheeler in Charles Mix county, on Cedar Island below Pierre, and at the mouth of the Cheyenne River prior to the Louisiana Purchase. The post on Cedar Island, established by Loisel in 1796, is supposed to have been the first permanent structure erected within the state. In 1817 Joseph LaFramboise built Fort Teton on the present site of the village of Fort Pierre, and there has been a continuous white settlement in that locality since. The first agricultural settlement was made at Sioux Falls in 1857, but it was destroyed by the Sioux in 1862. The settlement at Yankton, and other lower Missouri River points, dates from 1859, and has been continuous.

Dakota Territory was created in March, 1861, and continued until November, 1886, when South Dakota was admitted to statehood. Prior to the establishment of the territory, the section east of the Missouri had been successively a portion of Louisiana, Missouri, Michigan, Wisconsin, Iowa, and Minnesota. The section west of the Missouri was without organized government until the creation of Nebraska Territory in 1854.

The first steamboat entered South Dakota in 1831. From 1863 until 1880 the steamboat transportation upon the Missouri was very large, but with the advance of railroads the river traffic practically came to an end.

The first railroads came in 1872, and after 1880 the settlement of the state and building of new railroad lines was very rapid. The population was 583,888 in 1910.

Government. The government of South Dakota is

divided into three departments: the executive, the legislative, and the judicial.

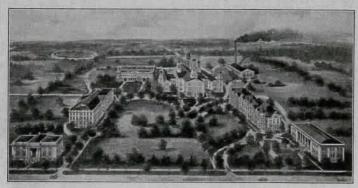
The executive officers are the governor, lieutenant governor, secretary of state, auditor, treasurer, attorney-general, land com-

missioner, superintendent of education, and railroad commissioners, who are elected by the people, and certain other officers appointed by the governor.

The legislature consists of a senate of 45 members and a house of representatives having 102 members; but the people reserve to themselves under the initiative and referendum the right to initiate laws, and to refer



SHEEP RAISING, WESTERN SOUTH DAKOTA.



THE UNIVERSITY OF SOUTH DAKOTA, VERMILION.

laws passed by the legislature to the people for approval. The initiative and referendum originated in America in South Dakota, and was made a part of our Constitution in 1898. Five per cent of the voters may initiate a law, and five per cent can, by petition, refer any law passed to a popular vote for approval.

The judicial powers of the state are vested in the supreme court of five members; twelve circuit courts,



THE CAPITOL, PIERRE.

county courts, justices of the peace, and police and municipal courts. The judges are elected by popular vote. The state has two senators and three representatives in the Federal Congress.

Education. Public education is provided in common schools under both the district and township system, as different sections of the state may prefer. There are graded and high schools, normal schools, an agricultural college, school of mines, and a state university.

All of these schools and institutions are supported by the income of funds derived from lands granted by Congress, to which are added such sums as are needed by public taxation. The school fund is very carefully guarded by the constitution and laws, and it is believed that it will be ultimately sufficient to defray all of the cost of public education.

The State University is located at Vermilion, and embraces colleges of arts and sciences, law, medicine, engineering, and music. The State College of Agriculture and Mechanic Arts is situated at Brookings. The School of Mines is located at Rapid City. The Northern Normal and Industrial School is located at Aberdeen, and there are state normal schools at Madison, Spearfish, and Springfield.

Among the many denominational schools and colleges are the following: Sioux Falls College, Baptist; Yankton and Redfield colleges, Congregational; the Dakota Wesleyan University, Methodist, is located at Mitchell; Huron College, Presbyterian; Freeman College, Mennonite; Augustana College, at Canton, Scandinavian Lutheran; Eureka College, German Lutheran;

Ward Academy, Congregational; Wessington Springs Seminary, Free Methodist; All Saints' School for girls, Sioux Falls, Episcopal; and the Lutheran Normal School, Sioux Falls. The Catholic Church supports academies at Aberdeen, Elkton, Marion, Sturgis, Vermilion, Jefferson,

Tabor, and Zell. The Seventh Day Adventists have academies at Elkpoint and Redfield.

Charitable and Penal Institutions. The State Hospital for the Insane is at Yankton; and schools for the feeble-minded, at Redfield; for the deaf, at Sioux Falls; and for the blind, at Gary; the State Training School is at Plankinton, and the Penitentiary, at Sioux Falls. Orphanages are conducted by private benevolence at Sioux Falls and Beresford.

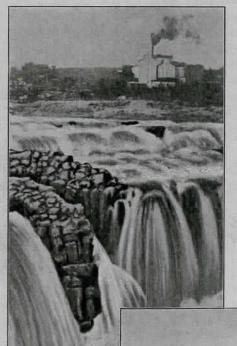
CITIES AND TOWNS

Pierre, the capital, is situated at the geographical center of the state and of the North American continent. It is located upon the Missouri River, midway between the Big Bend and the Little Bend, each about thirty miles distant, and where large water powers are available. It is the commercial distributing center for a large area, and is an important shipping point for live stock and agricultural products. It has a large wholesale business, and several small manufacturing plants. Sufficient natural gas is secured to provide for domestic use and for power in its manufactories. The public and private buildings of Pierre are notable. The state capitol is a very fine structure. The Federal court convenes here and there is a United States land office.

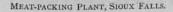
Sioux Falls, the largest city, is the most important trading and manufacturing point. It has large wholesale establishments, and manufactures flour, biscuits,

plows, wagons, and other articles. It has a large pork and beef packing establishment, employing 200 men. The state prison is located in Sioux Falls, and there is in it an establishment for the manufacture of binding twine, much used in the agriculture of the state. A fine quality of red quartzite is quarried near the city and is shipped very widely. Three important educational institutions are located here in addition to the State School for the Deaf and the Children's Home. Sioux Falls is the chief seat of the Federal court for South Dakota.

Aberdeen is the second city in size, and is an important trade center. It



SIOUX FALLS.



THE PROPERTY OF THE PARTY OF TH

STREET VIEW IN MITCHELL.



FLOUR MILLS, WATERTOWN.

has extensive wholesale houses which trade to a considerable distance on the many railroads centering in the city. A large business is carried on in the distribution of agricultural implements. Consid-

erable manufacturing is carried on by water power supplied by artesian wells. It is the seat of the Northern Normal and Industrial School, a state institution, and of the Federal district court. Aberdeen is on the main line of the Chicago, Milwaukee, and St. Paul Railway, which extends westward to the Pacific.

Lead, in the Black Hills, is third city in size and importance. The Homestake gold mine, the largest mine upon the continent, is located at Lead upon what appears to be an inexhaustible lode of low-grade gold ore. The yield is but three or four dollars to the ton, but it is

found in such large quantities, and is reduced so readily, that it has proved very profitable. The mine has been worked almost constantly for thirty-five years, and has produced many millions of dollars. Besides mining, the reduction of ores and trade in mining supplies are leading industries.

Watertown, located on the Big Sioux River, near Lake Kampeska, is the fourth city in population, and is renowned for the beauty of its location, as well as for the importance of its business interests. Eight railroads radiate from the city, making it the business center for an extensive area of fertile and prosperous country. It has wholesale establishments, farm machinery depots, and the most extensive flouring mills in the state, as well as many smaller

manufactories. The headquarters of the state militia are located here, and the summer camp is located upon Lake Kampeska, where the regiments meet for practice.

Mitchell, near the James River, is the seat of the Dakota Wesleyan University, and is an important railroad division point, doing an extensive business in distributing merchandise and farm machinery. Here are

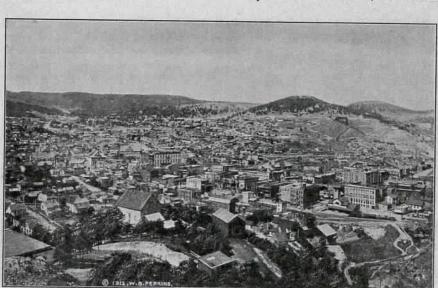
railroad repair shops, machine shops, grain elevators, and flour mills.

Huron is the seat of the state fair, for which the state has provided elaborate grounds and buildings, and the annual exposition there of the products of South Dakota is very popular. Huron College is located here in attractive and substantial buildings. Huron is the chief headquarters in the state of the Chicago and North Western Railway.

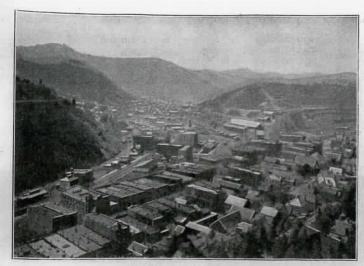
Large repair shops of this road are located here, besides flour mills, brick works, and other manufactories.

Rapid City, located at the eastern gate to the Black Hills, is an enterprising and attractive place, with important agricultural, stock raising, mining, and manufacturing interests. Here are located the State School of Mines, a United States Indian school, and a Federal land office. It has excellent water power on Rapid River, and does a general wholesale business.

Yankton, the mother city of South Dakota, is the seat



THE CITY OF LEAD.



THE CITY OF DEADWOOD.

of Yankton College, the oldest institution of higher learning in the state. It has an extensive Portland cement plant, and a large brewery, besides flouring mills, and other industries, and is located in a very rich and productive agricultural region. It is the county seat of Yankton county and was formerly the capital of Dakota Territory.

Deadwood, the commercial center of the northern Black Hills, is delightfully located in the cañon of Whitewood Creek with towering mountains close above it. It is the county seat of Lawrence county, and the chief offices of the Black Hills Forest service are located here. It has several important gold reduction plants.

Madison, the county seat of Lake county and the seat of the oldest state normal school, is beautifully located between two fine lakes in the center of a rich farming region. It has a large trade in flour, dairy products, and thoroughbred live stock.

Redfield has splendid railroad facilities and a growing trade. It is a shipping point for grain, live stock, dairy products, and flour. It has the State School for Feebleminded Children and Redfield College, and is county seat of Spink county.

Brookings, the county seat of Brookings county and seat of the State College of Agriculture and Mechanic

Arts, is located near the eastern bank of the Big Sioux River in a fine farming section. It has flouring mills and an important manufactory of automobile furnishings.

Vermilion, in Clay county, is the seat of the State University, and is one of the older places; Canton is the county seat of Lincoln county, and the home of Augustana College; and Spearfish, in Lawrence county, is the seat of the Spearfish State Normal School. These three places are important educational centers.

Other places of noteworthy importance are Milbank, county seat of Grant county; Sturgis, county seat of Meade county, the location of Fort Meade; Webster, county seat of Day county, in the center of the most important wheat growing section; Hot Springs, county seat of Fall River county, site of the State Soldiers' Home and of a National Sanitarium for disabled soldiers and sailors; Flandreau, county seat of Moody county, the location of Riggs Institute and an important government Indian school; Sisseton, county seat of Roberts county; Dell Rapids, Minnehaha county, the location of extensive quarries of jasper rock and the Odd Fellows Home; Belle Fourche, county seat of Butte county, the location of the great Federal irrigation project and a United States land office; Dallas, in Gregory county, a new town on the Rosebud lands; Chamberlain, county seat of Brule county, the location of Columbus College and of a large cement plant; Lemmon, Perkins county, the seat of a United States land office; Parker, county seat of Turner county; Clark, county seat of Clark county; Miller, county seat of Hand county; Elkpoint, county seat of Union county; Mo-



THE SCHOOL OF MINES, RAPID CITY.

bridge, in Walworth county, where the railroad to the Pacific coast spans the Missouri River; Gregory, in Gregory county, the seat of a United States land office; Beresford, Union county; Platte, Charles Mix county; Groton, second city of Brown county; Tyndall, county seat, and Scotland, Bonhomme county; Salem, county seat of McCook county; Wessington Springs, county seat of Jerauld county, the seat of the Free Methodist Seminary; Highmore, county seat of Hyde county; Howard, county seat of Miner county; Desmet, county seat, and Lake Preston, Kingsbury county; Woonsocket, county seat of Sanborn county; Centerville, Turner county; Parkston, Hutchinson county; Armour, county seat of Douglas county; Wagner, Charles Mix county; Eureka, McPherson county; and Alexandria, county seat of Hanson county.



THE STATE COLLEGE OF AGRICULTUR"

POPULATION OF INCORPORATED CITIES, TOWNS, VILLAGES IN SOUTH DAKOTA, 1910 10,753 | Colman 362 Harrold . . . Aberdeen . . 230 | Midland 210 Springfield 675 Colton Hartford . . . 114 Akaska 407 Milbank . . . 648 2,015 Stickney . . . 310 Albee . . . Columbia . . . Hazel . . . 131 235 229 Miller . . . 1,202 Sturgis . . . 1,739 Alcester . . Conde Hecla 400 592 462 Mitchell Summit . . . 6,515 545 Alexandria . . Corsica Henry . . . 286 Mobridge . . 955 Tabor 44T 1,200 273 Alpena 320 Cresbard .* Hermosa . . 417 Monroe . . . Tea 114 160 134 Herrick . . . Altamont 110 Custer . . 602 Montrose . . . 412 Tolstoy 442 142 Herried Andover 446 Dallas Morristown . 1,277 414 222 Toronto . . . 424 Hetland . . . Ardmore . . 146 Davis . . 164 Mount Vernon 223 614 Tripp 675 Arlington . De Smet . Highmore . . . 1,063 1,084 Murdo . . 791 Turton 372 Armour . . . Artesian . . 240 Hill City . . . 968 Deadwood . 3,653 Northville 271 392 Twin Brooks . . 190 583 Dell Rapids Hitchcock . . . Oacoma . . 1,367 Tyndall . . . 259 235 1,107 Ashton . . . Delmont . . . Doland Oelrichs . . . Hosmer . . . 369 430 217 Utica 103 150 Aurora . . . Avon . . . Oldham . . . 236 581 Hot Springs . . 2,140 Valley Springs . 355 331 Hoven Howard Draper . . 451 211 Olivet 200 Veblen 133 173 Baltic . . . East Sioux Falls . 268 Onida 278 1,026 Verdon 319 136 Belle Fourche . Ortley Edgemont . . . 816 Hudson . . . Vermilion . . . 1,352 404 192 2,187 Effington . . Parker Beresford . . 46 Hurley 1,117 506 Viborg 1,224 410 Parkston . . . Big Stone . Egan . . . Huron 551 516 5,791 Vienna 453 Blunt. . . Elk Point . Ipswich Philip . . . 566 Volga 1,200 810 578 568 Bonesteel . 563 Elkton . . Irene . . Pierpont . . Volin 742 263 286 314 Bowdle . . Bradley . . Emery . Erwin . Iroquois . . Pierre . . . 671 446 578 Wagner 3,656 964 Estelline Java . . . Plankinton Wakonda . . . 35 I 230 473 712 326 Brandt . . . Wall 158 509 Tefferson 407 Platte . . . Estelline . . . 1,115 167 Bridgewater Kadoka . . . Wallace 934 312 222 Pollock 304 207 Eureka . . . Bristol . . Kennebec . . Ward . . . 444 961 252 Presho . . . 635 72 Britton . . Fairfax . . Kimball . . Watertown . . 901 500 713 Pukwana . . 164 7,010 Fairview . Brookings . Lake Andes . Waubay 2,971 312 107 920 Ramona 803 Faulkton . . Bruce . . . Lake Norden . Rapid City . 802 Webster . . . 262 202 3,854 1,713 Bryant Flandreau . . Lake Preston . 645 1,484 Raymond . . 1.007 Wentworth . 241 329 Florence . . Buffalo Gap 280 Lane. . . . Redfield . 270 294 3,060 Wessington 576 Burke 311 Fort Pierre Langford . . . Revillo . . 792 463 332 Wessington Springs 1,093 Camp Crook . 120 Frankfort . . . 408 Le Beau . Rockham . White 210 286 468 Canistota . . . Frederick . . . Lead . . . 400 433 8,392 Roscoe 357 White Lake 507 Canova 311 Freeman . . . 615 Lemmon . Roswell White Rock 1,255 167 368 Canton Galena 2,103 Lennox . . TOO St. Lawrence . Whitewood. 745 305 300 Carthage . . . Garretson . . . Leola 668 554 Salem . . Willow Lake . 484 1,097 437 Castlewood . . Gary 594 Lesterville . . . Scotland . 477 Wilmot . . . 279 1,102 427 Cavour Gayville Letcher Winfred Selby . . . 257 402 558 243 Centerville . . . 971 Geddes Lily Seneca . . . 701 Wolsey 175 321 436 Central City . . Gettysburg . . . 206 936 Lowry Sherman . . Woonsocket . . 90 138 1,027 Chamberlain . . Glenham . . . 1,275 182 McIntosh . . . Sioux Falls 400 Worthing . . 14,094 179 Chancellor . . . Goodwin . Madison . 160 145 Sisseton . . Yankton . . . 3,137 1,397 3,787 Claremont . . Gregory 1,142 Marion South Shore 462 335 Clark . . . Groton . . 1,220 1,108 Mellette 472 Spearfish . . . 1,130 Clear Lake . . . 704 Harrisburg . . . 164 Menno 621 Spencer 506 POPULATION OF THE COUNTIES OF SOUTH DAKOTA, 1910 647 | Custer . Armstrong . . 4,458 | Hutchinson 12,319 | Pennington Pine Ridge Indian 12,453 Aurora . . . Davison . . . Perkins . . 6,143 Reservation, in-11,625 Hyde 3,307 11,348 Beadle . . 15,776 Day . . . 14,372 Jerauld . . Potter . . 4,466 cluding Shan-5,120 Bennett . . Deuel . . Roberts . 96 Kingsbury . 7,768 12,560 non, Washington 14.897 Bonhomme . 11,061 Dewey . . Lake . . Sanborn . 1,145 10,711 6,607 and parts of Brookings . . . 14,178 Douglas 6,400 Lawrence . Schnasse 19,694 292 Bennett and Edmunds . . . Brown 25,867 7,654 Lincoln . . Spink 15,981 12,712 Washabaugh Fall River . . Brule . . . 6,451 Stanley counties . . 7,763 Lyman . . 10,848 6,607 14,975 Buffalo . . . Faulk . . . 1,589 McCook . . 6,716 Sterling . . Rosebud Indian 9,589 252 Butte . . . Grant . . . 4,993 10,303 McPherson Sully Reservation, in-6,791 2,462 Campbell . . . Gregory . . Marshall . . 5,244 13,061 8,021 Todd cluding Mellette, 2,164 Hamlin . . . 14,899 Meade . . 7,475 12,640 Tripp . 8,323 Todd, and parts Hand 10,901 Mellette . . 7,870 Turner . . 1,700 13,840 of Bennett and 8,711 Hanson . . . Miner 6,237 Union . . 7,661 10,676 Washabaugh Harding . . . 4,228 Minnehaha . . 102 29,631 Walworth . 6,488 counties . . . 3,960

Moody . . .

8,695 Yankton .

13,135 The state . . .

583,888

Hughes . . .