ABSTRACTS

FROM

REPORTS ON TOWNSHIPS WEST OF THE FOURTH MERIDIAN

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RECEIVED FROM SURVEYORS

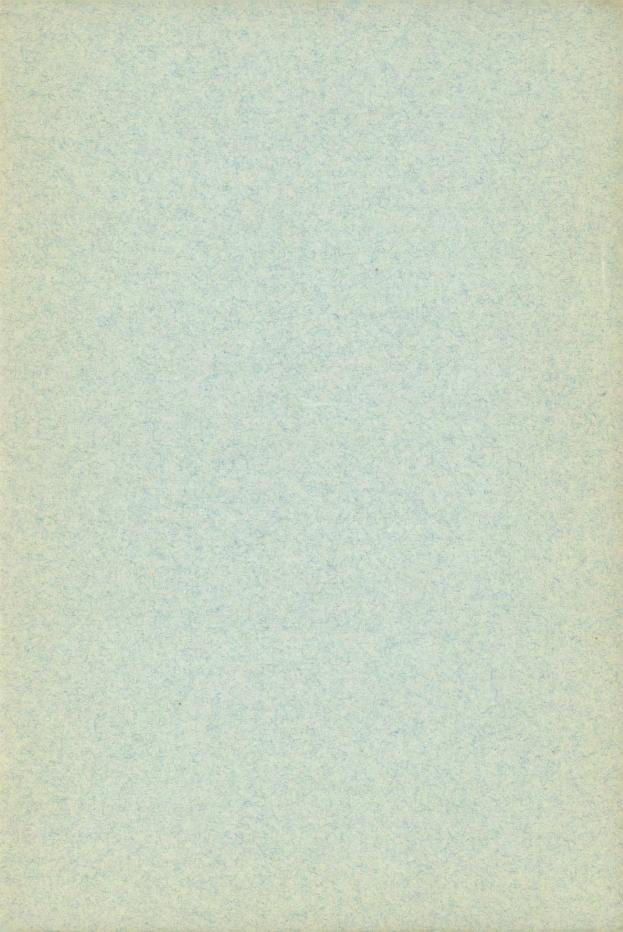
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BETWEEN JULY 1, 1911, AND JULY 1, 1912

Published by authority of the Honourable Robert Rogers, Minister of the Interior.

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TERMINATE OF LUMBER PRESENTED AND

NOTICE.

The following descriptions of townships recently surveyed have been prepared from the field notes and reports of the surveyors.

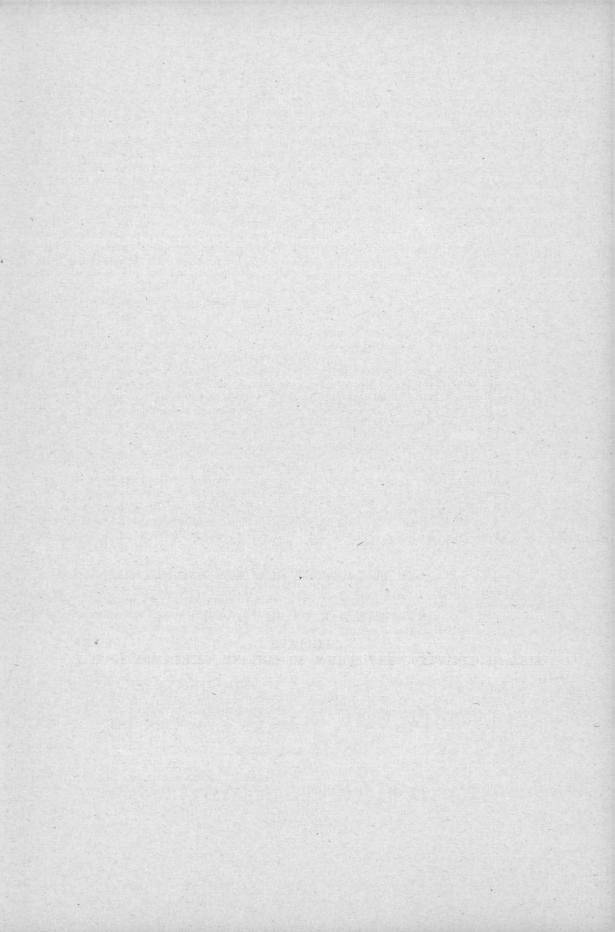
The townships in this pamphlet are placed in ranges, the number of the range being at the top of the page, and the number of the township in heavy figures on the left side.

E. DEVILLE,
Surveyor General.

LIST OF TOWNSHIPS, REPORTS OF WHICH ARE CONTAINED IN THIS PAMPHLET.

WEST OF THE FOURTH MERIDIAN.

Township.		Range.
21, 43, 72, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 1	105	1
45, 72		2
7, 15, 72		3
7, 11, 65, 72		4
7, 10, 11, 44, 72		5
7, 8, 10		6
8		7
41		9
10, 14, 15, 66, 67, 68		10
48, 66, 67, 68		11
2, 66, 67, 68		12
2, 50		13
2, 50, 69		14
2, 44, 45		15
26, 64, 65, 66		16
65, 66		17
49, 52		20
8, 14, 19		21
36		24
18		26
7		30



RANGE 1.

- This township is very much broken by the South Saskatchewan river valley 21. and numerous coulees. The soil varies from clay loam to sand, and some parts are well adapted to farming. At present this township is not settled, the best of the land being held under grazing lease.—G. A. Bennett, D.L.S., 1911.
- Chauvin, a small village on the Grand Trunk Pacific main line from Winni-43. peg to Edmonton, is in section 7 of this twonship. The land is very rolling, and in places quite hilly. The soil is slightly sandy. There are quite a number of small alkaline ponds and the country is covered here and there with poplar groves, which are the source of fuel. The soil, though rather light, produces good crops of wheat and oats, where it is not too hilly to be worked. Drinking water is obtained from wells. The water in the smaller ponds and sloughs is quite alkaline, even for stock use, but that in the larger lakes is used for that purpose. No waterpowers were noticed. There are no stone-quarries nor minerals. Ducks, partridges, snipes, &c., were seen in large numbers. The two lakes, lying approximately in the northwest quarter of section 9, have well-defined banks, in some places 20 feet high or more, are deep and have none of the characteristics of marshes. They are situated in a hilly region and for about half the shore line are fringed with poplar and willow. The larger of these lakes was no doubt at one time connected with Cipher lake, but is now cut off from it by the Grand Trunk Pacific railway grade. - R. C. Purser, D.L.S., 1911.
- (Ranges 1 to 5, North Outlines.)—This section of country is situated practi72. cally on the watershed of streams flowing easterly, southerly and northerly, and in consequence there are no streams of large size. Small muskeg lakes are quite numerous, and muskeg is encountered everywhere. The timber consists of small spruce, tamarack and pitchpine, only an occasional poplar being seen. Fires have no doubt swept the country periodically, and as a result, the timber is small and scrubby, and quite unfit for commercial purposes. Where there is any soil, it is poor and unsuitable for agriculture. Moose and caribou are quite plentiful, as are also timber wolves. The weather was extremely cold in December and January, and snow fell to a depth of 3 feet.—B. J. Saunders, D.L.S. 1910.
- (East Outlines.)—The land along the meridian in these townships is close 95 to 99. to a watershed and is composed of rolling sand hills. A number of creeks, all taking their rise within a few miles east of the meridian, flow westerly or northwesterly across the line. The creeks in general take their rise in muskegs and the small ones have generally muskeg land along their course and often lose their channels and form again where they have more fall. Creeks of medium size are, in general, dammed by beavers and consequently have a growth of willow and grass along their banks. This grass in the beaver ponds and old beaver meadows is the only hay in the district. The larger streams, such as Firebag river which crosses the north-east corner of section 25, township 96, have apparently enough water for the beavers without dams. Along these streams the entire river flats consist of wet muskeg from the water's edge to the rising ground forming the banks of the valley. The water in all the streams is fresh, and fish are plentiful in all the creeks and lakes. The country from township 95 to township 105 has very little protection from fire.

RANGE 1 .- Continued.

land is about nine-tenths sand with a growth of jackpine, and the small muskegs, lakes and creeks, wide enough to stop a fire, are comparatively insignificant. There is, therefore, very little of this area that does not get burnt over on an average once in ten years, and consequently there is no timber of value. Nearly all trees 6 inches in diameter have been scorched several times; their growth is stunted and they are dead on one side. There is a great deal of thick second growth jackpine and in many places thick windfall. There is no open country as about three years after a fire, the young jackpine is up thick enough to kill what grass has started in the fresh brule. The soil is destroyed as well as the timber, and the usual covering on the sand is 1 or 2 inches of moss and needles. The only timber of value noticed was a few small patches of 14-inch spruce and the 10-inch birch, poplar, balsam and jackpine in sections 1 and 2, township 101, on the slope of the north side of the valley of Richardson river. On account of the predominant sandy soil this country is not suitable for agriculture. The muskegs, which can be drained, might form good soil, but these form a small proportion of the surface. Summer frosts were prevalent and the summer season short. Rain was plentiful, but generally in small or drizzly showers. There is enough fall to all the creeks so that no land is flooded, but the water in the muskegs rises or falls according to the amount of rain. The country is in general roughly rolling to hilly, and the depth and width of the valleys, the sides of which are generally steep, increase with the size of the stream in them. Wood fuel is everywhere plentiful, but no minerals were noticed. Game is fairly plentiful throughout this country, and fine specimens of moose, caribou, bears, wolves, foxes, beavers, minks, martens and ermines were seen. Prairie-chickens and ducks are also numerous. All this country is an old Indian hunting ground, and the whole country is traversed by hunting trails mostly running in an easterly direction and consequently of no use for survey trails.—J. B. McFarlane, D.I.S., 1911.

(East Outlines.)—The northeast corner of section 36, township 100, is 100 to 102. crossed by Richardson river, which is about 300 feet wide, 3 feet deep, and has a current of about 2 miles per hour; it is called Jackfish river by the Indians, and it empties into a small lake at the southwest end of Lake Athabaska. The valley of this river is deep, being about 550 feet lower than the hills in the southern part of township 100, and about a mile wide, except where joined by creek valleys; its sides are rough broken hills. The river flows northwest and a rough range of hills crosses the line in township 101, running from the river northeasterly. The north side of these hills is rough and broken with deep ravines. here the altitude drops rapidly to the north as far as the meridian was run, indicating that the slope from here is towards Lake Athabaska. Throughout township 102, the country is much the same formation, rough sand hills averaging about 200 feet above the valleys and ravines. On many of the hill tops throughout this country, the sand is fine enough to blow, but there is too much gravel and stones mixed with it to have shifting sand hills even where the timber is thin enough for the wind to strike the hills. For further information on these townships, see report on townships 95 to 99, range 1, west of fourth meridian.—J. B. McFarlane, D.L.S., 1911.

(East Outlines.)—The country in these townships is different from that 103 to 105. in the townships to the south, as it is much more level, and townships 103 and 104 especially are very stony and dotted with small lakes. On some of the small ridges in these townships no soil can be seen among the stones forming the ridges. South of township 104 very little limestone was seen, but from the southern part of this township north, about one-third of the loose rock is limestone. No solid rock projections were seen, but boulders up to 10 feet in diameter were

RANGE 1 .- Continued.

encountered. In township 103, Old Fort river takes its rise a few miles east of the meridian and crosses the line in section 13. It flows through many small lakes generally with several rapids between, and at some of these, considerable power might be developed. Another small river takes its rise in the southern part of township 104, and flows northerly from a small lake in sections 12 and 13. The stream crosses the line in the east boundaries of sections 13 and 36 in township 105, and continues in a northerly direction. There are also some rapids on this stream, but they are not so valuable as on Old Fort river. For further information see report on townships 95 to 99, range 1, west of the fourth meridian.—J. B. McFarlane, D.L.S., 1911.

RANGE 2.

- This township is not at present traversed by a railroad, the village of Edgerton, in section 1, of township 44, range 4, on the main line of the Grand Trunk Pacific railway from Winnipeg to Edmonton, being about the nearest railway point. The country is nearly level, and covered here and there with poplar groves. The soil is light and a little sandy, but produces good crops of wheat and oats. Drinking water is obtained from wells. Battle river cuts through this township flowing easterly across the northern half of it. There are no large lakes and a few sloughs were noticed. No stone-quarries nor minerals were seen. Partridges and ducks, particularly the former, are very plentiful. The lake traversed here is alkaline as is evidenced by the fringe of alkali deposit around its edge. It has no inlet or outlet, has well-defined banks, but shows evidence of having at one time occupied an area somewhat larger than it does at present.—R. C. Purser, D.L.S., 1911.
 - (North Outline.)—(See report for township 72, range 1, west of the fourth 72. meridian.)—B. J. Saunders, D.L.S., 1910.

RANGE 3.

To reach this township the mail stage route running south from Medicine Hat is followed to Eagle Butte post-office in township 8, range 4, from which place a surveyed road leads down Medicine Lodge coulée into this township. These roads run through partially settled country and, being used continually, are generally in good condition. The soil, in general, is from 6 to 9 inches of loam underlaid by a clay subsoil, although in some parts the subsoil is stony or gravelly. In the northern and eastern portion the land is well adapted to mixed farming. The southwestern portion is rough and hilly, but suitable for ranching. The greater part of the township is open prairie, but in the northern portion the deep coulées are for the most part wooded with scrubby willow and small poplar with small spruce and jackpine interspersed. The Cypress hills forest reserve adjoins the township on the north and a portion of the northern range of sections is covered with small poplar, jackpine and a few spruce. The scrubby or wooded portion is confined to sections 32, 33, 34, 35, 27, 28 and a small part of section 21. About half the area of these sections is wooded. There is no timber of commercial value in this-township. There are no hay meadows but ordinary prairie grass is cut for hay on the bench to the east of Medicine Lodge coulée. Water, though fresh, is not abundant and is obtained mostly from the very small spring creeks-Lodge creek, Willow creek and a small creek in the southwest. At the time of survey the flow in these streams was very small. There are no waterpowers and the land is not liable to be flooded. From general indications the climate is hot and dry in the summer and summer frosts are very unusual. Wood is the most

RANGE 3 .- Continued.

readily available fuel and may be obtained in the northern portion of the township. Indications of lignite were observed in some of the ravines in the southern portion. Soft coal can be procured from the coal mine near Eagle Butte in township 8, range 4. There are no stone-quarries nor economic minerals. A few antelope comprise the only game.—E. S. Martindale, D.L.S., 1911.

- At one time Red Deer lake covered part of this township, but it has entirely dried up and the bottom is grown up with grass, which has been used for several years by the neighbouring ranchers for hay and pasture. As the main trail of this country and a ranch fence pass through the centre of the old lake, the bottom must have been dry for years.—G. A. Bennett, D.L.S., 1911.
 - (North Outline.)—(See report for township 72, range 1, west of the fourth 72. meridian.)—B. J. Saunders, D.L.S., 1910.

RANGE 4.

- The mail stage road leads south of Medicine Hat to Eagle Butte post-office in township 8, range 4, from which place the old Fort Macleod trail runs into this township. These roads run through partially settled country, are well travelled and usually in good condition. The soil is mostly a sandy loam varying from 4 to 8 inches in depth, with a clay subsoil, although in some parts there is a sandy bottom; it is inclined to be light and consequently does not hold moisture well. The surface is hilly, which renders it to a great extent unsuitable for farming purposes; it is best suited to ranching. The township is practically all open hilly prairie, a few ravines in sections 24, 25 and 35 being wooded with scrubby willow and small poplar and jackpine. No timber occurs. The water supply is not abundant and is of poor quality, being alkaline. However, a few small springs of fresh water were noticed. Peigan creek commences in section 27 and flows westerly; at the time of survey (June) it was practically dry. There are no hay meadows, land liable to flooding nor water-powers. General indications point to a dry climate, hot in summer. Summer frosts are very unusual. Soft coal is the most readily available fuel and may be procured from the small mine near Eagle Butte in the adjoining township to the north. At present a small quantity of wood may be obtained in the ravines on the northeastern part of the township, also in the northern portion of township 7, range 3. No indications of coal or lignite were noticed. There are no stone-quarries nor minerals of economic value. No game was seen.—E. S. Martindale, D.L.S., 1911.
- A small lake, formerly in section 4 of this township, was found to be completely dry and part of the bottom grown up with a fine crop of wheat. This lake bottom has become valuable agricultural land, and none of its area is worthless.—G. A. Bennett, D.L.S., 1911.
- This township is best reached from Cold lake, but in summer time the road 65. is obstructed by numerous spruce and tamarack swamps. The soil is mostly poor and covered with small spruce, tamarack, birch, jackpine and poplar of medium size. There is no hay. No water-powers exist. No stone nor minerals of economic value were seen. Bourque lake, a fine body of water, 4 miles long, extends into the northern part of the township, and Bourque creek runs south from the lake and out of the township. The climate is good. Game is plentiful and consists of moose, deer, bears, ducks and partridges.—M. W. Hopkins, D.L.S., 1910.
 - (North Outline.)—(See report for township 72, range 1, west of the fourth 72. meridian.)—B. J. Saunders, D.L.S., 1910.

RANGE 5.

- The mail stage road from Medicine Hat leads southerly to Eagle Butte postoffice in township 8, range 4, from which place the old Fort Macleod trail is followed into this township. A more direct trail may be followed from Medicine Hat by way of Bullshead lake in the township to the north. These roads run through partially settled country, and being well travelled, are usually in good condi-The soil, generally speaking, is a sandy loam, varying from 5 to 8 inches in depth, underlaid by a clay subsoil, and is suitable for farming or ranching purposes; it is rather light and does not hold moisture well. The surface of the portion surveyed is open prairie, and varies from level to rolling, except in the northeastern corner of the township, which is hilly. No timber occurs. There are no hav meadows, water-powers nor land liable to flooding. Water is not plentiful, and is slightly alkaline. Peigan creek, a small stream, flows across the northern portion of the township; usually the flow is very small. General indications point to dry, hot summers without frosts. Soft coal is the most readily available fuel, and may be obtained near Eagle Butte, but no indications of coal or lignite were seen in this township. No stone-quarries nor minerals of economic value exist. There is no game.—E. S. Martindale, D.L.S., 1911.
- The land in this district is much broken by deep ravines. The soil is 10 & 11. clay loam and should make good agricultural land. At present it is used as pasture land by the neighbouring ranchers.—G. A. Bennett, D.L.S., 1911.
- This township is traversed by the Grand Trunk Pacific main line from Winnipeg to Edmonton, the flag station of Heath being in section 16. The surface is covered with scattered clumps of poplar and willow. In the southern half it is very hilly and broken, and more adapted to stock-raising than to general farming. In the northern half it is more of the nature of rolling prairie. Here, the soil is good, and wheat and oats are grown. Ribstone creek, a small creek tributary to Battle river, flows through this township. There are also a number of lakes of various sizes, the water of which is quite fresh. In Ribstone lake, there is good fishing. Ducks were plentiful. No stone-quarries nor minerals were noticed. St. Patrick lake, lying mostly in section 13, was traversed here as well as another small lake in its immediate vicinity. The banks are well defined, especially on the south side where they are quite high, and in some places about 30 feet. The lakes are quite deep and the water very fresh, considering that there is no inlet nor outlet.—R. C. Purser, D.L.S., 1911.
 - (North Outline.)—(See report for township 72, range 1, west of the fourth 72. meridian.)—B. J. Saunders, D.L.S., 1910.

RANGE 6.

The best way to reach this township is by a good wagon trail from Seven Persons which runs in a southwesterly direction and enters the township in section 32, leaving it in section 1. The soil is a light clay loam and with sufficient moisture is well suited for farming. The township is all rolling prairie, but is considerably broken by numerous coulées, from 20 to 40 feet deep. A few of the larger coulées contain a small amount of willow brush and small scrubby poplar. Almost all the coulees are dry and water is scarce. Peigan creek contains running water all the year and is the largest stream in the township, being 10 feet wide and 4 inches deep. No land can be flooded and there are no water-powers. One-half of

RANGE 6.—Continued.

the moisture of an average year is precipitated during the months of May, June and July, but the rainfall is never great and the climate may be said to be dry. No summer frosts occur. There is practically no fuel in this township and the nearest wood available is distant 30 miles to the east in the Cypress hills. There are no stone-quarries nor minerals of economic value. The game consists of a few coyotes and jackrabbits.—W. A. Scott, D.L.S., 1911.

The best route to this township is a good wagon trail running in a southeasterly direction from Seven Persons and entering this township in section 31, whence it continues almost due south. The soil is in general a light clay loam, being lighter and somewhat stony in the southeastern portion. The entire township is suitable for agriculture. The surface is all prairie, but is very rolling and hilly and is cut up by many coulées of which only a few contain willow scrub and poplar. There is no other timber. Nearly all the coulées contain small springs which run only in the spring or in a very wet season. Peigan creek, which traverses section 1, contains running water all year and is the largest stream in the township, being 10 feet wide and 4 inches deep. There are no water-powers and no land is liable to be flooded. One half the moisture of an average year is precipitated during May, June and July; but the rainfall is never great and the climate may be considered dry. No summer frosts occur. There is practically no fuel in the township, and the nearest wood procurable is 30 miles distant in the Cypress hills. There are no coal veins in this township, although there are lignite veins in surrounding townships. There are no stone-quarries nor minerals of economic value. The game consists of a few coyotes and jack-rabbits. W. A. Scott, D.L.S., 1911.

(See report for townships 10 and 11, range 5, west of the fourth meridian.)—

10. G. A. Bennett, D.L.S., 1911.

RANGE 7.

The best way of reaching this township is by a good wagon road from Seven Persons, which enters this township in section 33. The soil is a light clay loam and is suitable for agricultural purposes. The entire township is prairie land with some willow brush and small poplar in the coulées. The eastern half of section 15 and the western half of section 14 are very much broken by coulées, and the surface is strewn with large, round, brown boulders. There are also small pieces of gypsum on the surface of the ground, but no veins of gypsum were seen. grass may be cut from any portion of the township. With the exception of a small spring in section 17, there is no water in this township. The coulées are all dry, and appear to be so for the greater part of the year. There are no water-powers, and no possibility of any land being flooded. One-half of the moisture of an average year is precipitated during the months of May, June and July, but the rainfall is never great and the climate may be called dry. No summer frosts occur. There is a small vein of lignite in the northwest quarter of section 2, but it is of little if any value, and will be used, if at all, by those only in the immediate vicinity. Lignite of a fair quality may be procured some 15 miles west of this township. There are no minerals of economic value. The game consists of a few coyotes and rabbits.-W. A. Scott, D.L.S., 1911.

RANGE 9.

The Winnipeg to Edmonton, Canadian Pacific railway main line passes north of this township, the nearest railway station being Amisk, a village in section 35 of township 41, range 8, The country is quite rolling and covered with

RANGE 9 .- Continued.

clumps of poplar and willow. The soil is good, and produces good crops of wheat and cats. Battle river flows through the township. There are no minerals nor stone-quarries. No game was seen.—R. C. Purser, D.L.S., 1911.

RANGE 10.

This township is well settled, and the homesteaders have made extensive improvements. The district is undulating prairie, which yielded a good crop of grain this season.—G. A. Bennett, D.L.S., 1911.

A resurvey was made of a slough lying in these townships. The area 14 & 15. rendered worthless by water was found to be much less than in the original survey and to lie almost entirely in township 15. As the slough is very shallow, from 6 to 12 inches, it may disappear entirely when the surrounding country is brought under cultivation. That portion of the old slough bottom, from which the water has receded, is grown up with grass and weeds so as to produce hay and pasture; none of the land has been brought under cultivation. The soil in this bottom is heavy clay, suitable for grain-growing. This district is undulating prairie. Most of the land is settled and fenced, good progress having been made by the homesteaders in making homes.—G. A. Bennett, D.L.S., 1911.

- This township may be reached by following the Heart Lake trail from the 66. Hudson Bay Company's post at Lac LaBiche around the eastern end of the lake and as far as the eastern boundary of section 7, township 67, range 12, thence by the Mosquito Lake trail. This trail is fairly good as far as the eastern boundary of section 2, township 67, range 12, but from there it is rough, wet and difficult for wagons. The soil is clay with, in some parts, a covering of 18 inches of moss. The surface is rolling and covered with poplar, spruce, tamarack, birch and willow bush. Small quantities of slough hay may be obtained around some of the ponds. The water is fresh and plentiful, but there are no water-powers and the land is not liable to be flooded. The climate is similar to that of central Alberta, summer frosts occurring. Wood as fuel is readily available in every part of the township. There are no stone-quarries nor minerals. Moose, caribou, deer, bears, lynx, foxes, coyotes, muskrats, rabbits, ducks and partridges are found.—T. A. Davies, D.L.S., 1911.
- This township may be reached by following the Heart Lake trail from the Hudson Bay Company's post at Lac LaBiche around the east end of the lake as far as the east boundary of section 7, township 67, range 12, west of the fourth meridian, thence along the Mosquito Lake trail running easterly and passing through the township. The trail is in fairly good condition as far as the east boundary of section 2, township 67, range 12, and from there easterly it is rough and wet. The soil is mostly clay, black loam being found in some few parts. The surface is rolling and covered with poplar, spruce, birch, tamarack and willow bush. Small quantities of hay may be obtained along the shores of some of the ponds and lakes. The water is fresh and plentiful. The land is not liable to be flooded. There are no water-powers. The climate is very similar to that of central Alberta. Summer frosts occur. Wood as fuel is readily available in any part of the township. There are no stone-quarries nor minerals. Moose, deer, bears, caribou, lynx, foxes, coyotes, muskrats, rabbits, ducks and partridges are to be found.—T. A. Davies, D.L.S., 1911.
- This township may be reached by following the Heart Lake trail from the 68. Hudson Bay Company's post at Lac LaBiche around the east end of the lake, northeasterly through township 67, range 12, and 4 miles into township 68, range 11; thence by a newly cut trail going easterly to join a pack trail crossing the

RANGE 10 .- Continued.

north boundary of section 19 in this township. The condition of this trail is fairly good as far as township 67, range 12, and from there on it is rough and wet. The soil is clay and is covered in some parts with about 12 to 18 inches of moss. The surface is rolling and covered with a thick growth of spruce, tamarack, poplar, birch and willow bush. There is no hay in this township. The water is fresh and the supply is plentiful from the creeks. The land is not liable to be flooded and there are no water-powers. The climate is similar to that generally experienced in central Alberta. Summer frosts occur. Wood as fuel is readily available in all parts of the township. There are no stone-quarries nor minerals. Moose, deer, bears, caribou, foxes, coyotes, lynx, muskrats, rabbits, ducks and partridges may be found.—T. A. Davies, D.L.S., 1911.

RANGE 11.

- This district is heavy rolling prairie with clumps of willow and small poplar.

 48. At one time there were numerous small hay sloughs, but these are fast disappearing.—A. L. Cumming, D.L.S., 1911.
- This township may be reached by the Heart Lake trail from the Hudson Bay Company's post at Lac LaBiche around the eastern end of the lake and as far as the eastern boundary of section 7, township 67, range 12, thence by the Mosquito Lake trail running easterly. The condition of this trail is fairly good as far as the eastern boundary of section 2, township 67, range 12, but from there it is rough, wet and difficult for wagons. The soil is mostly clay, with black loam in a few places. The surface is rolling and covered with poplar, spruce, tamarack, birch and willow bush. Small quantities of slough hay may be obtained around some of the ponds. Water is fresh and plentiful, but there are no water-powers and the land is not liable to be flooded. The climate is the same as that of central Alberta, summer frosts occurring. There are no stone-quarries nor minerals. Wood as fuel is readily available in every part of the township. Moose, caribou, deer, bears, lynx, foxes, coyotes, muskrats, rabbits, ducks and partridges are found.—T. A. Davies, D.L.S., 1911.
- This township may be reached by the Heart Lake wagon trail from the Hudson Bay Company's post at Lac LaBiche as far as the eastern boundary of section 7, township 67, range 12, thence by the Mosquito Lake trail which has now been cut as a wagon trail. The condition of this trail is fairly good for travel as far as the eastern boundary of section 2, township 67, range 12, but from there it is rough, wet and difficult for wagons. The soil is mostly clay, with black loam in some places, as along the eastern boundary of sections 33 and 28. The surface is rolling and covered with spruce, tamarack, poplar, birch and willow bush. There is a small quantity of slough hay around the shores of sloughs and ponds. The water is fresh and the supply plentiful. The land is not liable to be flooded and there are no water-powers. The climate is similar to that of central Alberta and summer frosts occur. Wood as fuel is readily available in all parts of the township. There are no stone-quarries nor minerals. Moose, deer, caribou, foxes, lynx, coyotes, muskrats, rabbits, ducks and partridges are found.—T. A. Davies, D.L.S., 1911.
- This township may be reached by the Heart Lake wagon trail starting from 68. the Hudson Bay Company's post at Lac LaBiche, passing around the east end of the lake and running northeasterly. This trail is difficult to travel on account of mudholes, creeks and hills, especially in this township. The soil is generally clay with, in some places, about 2 inches of black loam. The surface is rolling and covered with poplar, spruce, tamarack, birch and willow brush. In sections 23, 24,

RANGE 11 .- Continued.

25 and 26 there are small areas of spruce averaging 20 inches in diameter. Slough hay may be obtained in small quantities in sections 4, 5, 6, 9 and 10. The water supply is plentiful and fresh. There are no water-powers and the land is not liable to be flooded. The climate is similar to the general climate of central Alberta and summer frosts occur. Wood for fuel is readily available in all parts of the township. There are no stone-quarries nor minerals. Moose, caribou, deer, foxes, coyotes, lynx, muskrats, rabbits, ducks and partridges are to be found.—T. A. Davies, D.L.S., 1911.

RANGE 12.

- This township can be reached by wagon road from Coutts or Milk River. The soil is too light for successful farming; but the country is admirably adapted to stock raising, and a large portion of the township is still held under lease. No timber nor scrub is found in this twonship. Some bench hay can be cut on the unbroken lands. Water can be secured for domestic use by digging or drilling from 40 to 100 feet. The cimate is good for ranching or mixed farming and stock can be wintered out with good results. Summer frosts are common, and extreme changes of temperature frequently occur in summer. No water-powers were discovered in this township. Fuel must be bought, wood being especially scarce. Some low-grade coal occurs in the northeastern part of the township, but has not been worked to any extent up to date. No other minerals nor stone-quarries were noticed. The rock outcrops show the same soft sandstone that is found along the Milk river and the Verdigris coulée to the west. A few jack-rabbits are found, but no other game. The settlers in this township have not gone ahead as rapidly as those located to the west, and judging from the nature of the soil and the small amount of rainfall, this township will not have a very prosperous lot of settlers for some time.—P. B. Street, D.L.S., 1911.
- This township may be reached by the Beaver Lake trail, a branch of the G6. Heart Lake trail from the Hudson Bay Company's post at Lac LaBiche, to Heart lake. The trail is rather difficult to travel, being very soft and wet in this township. The soil is mostly clay; the surface is rolling and covered with spruce, tamarack and birch. Hay can be procured in small quantities throughout sections 35 and 34. The water is fresh and the supply is plentiful. No land is liable to be flooded. The climate is similar to that generally experienced in central Alberta, with summer frosts occurring. Wood as fuel is readily available in any part of the township. There are no water-powers. No stone-quarries nor minerals exist. Moose, deer, caribou, bears, foxes, coyotes, lynx, muskrats, rabbits, ducks and partridges are found in this township.—T. A. Davies, D.L.S., 1911.
- This township may be reached by a wagon trail from the Hudson Bay Company's post at Lac LaBiche going around the east end of the lake and thence northeasterly. The condition of this trail—called the Heart Lake wagon trail—is fairly good as far as this township, in a dry season. The crossings of soft creek bottoms, mud holes and hills make it rather difficult to travel in the north part of this township and also farther north as far as we travelled. The soil is clay. Grain and vegetables have been successfully grown. The surface is mostly rolling, and with the exception of a few small prairie patches in the southwestern part is covered with poplar, spruce, tamarack, birch and willow bush. Hay in small quantities may be procured in sections 3, 4, 5, 6, 7, 8, 9, 10 and 36. The water is fresh and the supply is plentiful and permanent. There are no water-powers and the land is not liable to be flooded. Summer frosts occur and the climate is similar to that generally experienced in central Alberta. Wood as fuel may be readily found in any part of the township.

RANGE 12.—Continued.

There are no stone-quarries nor minerals. Moose, deer, caribou, bears, foxes, coyotes, lynx, muskrats, rabbits, ducks and partridges may be found.—T. A. Davies, D.L.S., 1911.

This township may be reached by a wagon trail from the Hudson Bay Company's post at Lac LaBiche, going around the east end of the lake and then northeasterly as far as the north boundary of section 22 in township 68, range 11. From that place a new trail was cut across into this township. This trail, called the Heart Lake wagon road, is difficult to travel, on account of mud holes and crossings of creeks and hills. The soil is clay with 18 inches or more of moss covering it in many parts of the township. The surface is almost entirely level and is covered with spruce, tamarack, poplar and willow bush, and a small quantity of birch along the shore of Square lake in section 19. There is no hay. The water is fresh and the supply is plentiful from the lakes and creeks. The land is not liable to be flooded. There are no water-powers. The climate is similar to that of Alberta generally. Summer frosts occur. Wood as fuel is most readily available and may be obtained in any part of the township. There are no stone-quarries nor minerals. Moose, caribou. bears, foxes, coyotes, lynx, muskrats, rabbits, ducks, and partridges may be found.— T. A. Davies, D.L.S., 1911.

RANGE 13.

- This township can be reached by wagon road from Coutts or Milk River. The land is generally undulating, and the soil rather light, especially for the amount of rainfall. Good crops can be grown only in an excessively wet year, and even then, there is great danger of losing the crop from summer frosts. Water is carried from Milk river, which flows through the southern half of this township, very few of the settlers having wells of their own as yet. Water can be found in quantity by boring from 75 to 125 feet. A few small poplar and willow are found along the river, but there is not enough for fuel even for those who have their lands bordering on the river. Fuel can be purchased about twenty miles west of here at low prices. No minerals nor coal indications were found in this township. No water-power can be developed. There is no game. This township will never be a prosperous farming community, but will afford a good living to the settlers as soon as they learn to give up trying for large wheat crops and raise grain for their stock.—P. B. Street, D.L.S., 1911.
 - This is a prairie district with numerous clumps of small poplar and willow.

 50. The land is low and contains many valuable hay sloughs.—A. L. Cumming, D.L.S., 1911.

RANGE 14.

This township can be reached by good roads from either Milk River or Coutts,

towns on the Alberta Railway and Irrigation Company's line from Lethbridge
to Great Falls. The soil is mostly a dark clay loam and mould, and would
support good crops if the climatic conditions were favourable, but this whole district
is subject to long droughts and to early frosts. Water is rather hard to get, drilling
being necessary to insure a permanent supply. Many settlers were hauling the water
from Milk river. Every quarter section that is of any use at all has been taken up.
Fuel can be obtained in the neighbouring towns, and coal seams are being worked in
section 31, township 2, range 15, and in section 26, township 2, range 16, thus providing
cheap fuel for domestic or for traction engine purposes. No water-powers are found
here. The exposed rocks are very impure sandstones, soft and useless. No minerals
were found. With the exception of a few jack-rabbits and prairie-chickens, no game

Townships West of the Fourth Meridian.

RANGE 14.—Continued.

exists here. The farmers are not very far advanced yet, several not even having their stacks built. The yield this year was poor, and I believe that they will have to turn to mixed farming and feed their grain in order to make a living. Very few have any live stock, except horses.—P. B. Street, D.L.S., 1911.

(See report for township 50, range 13, west of the fourth meridian.)—A. L. 50. Cumming, D.L.S., 1911.

From Edmonton to Lac LaBiche there are a number of trails which are in fair condition most of the year. From the Hudson Bay post at Lac LaBiche there is a trail around the east end of the lake to a small settlement in township 68. range 13. Parts of this trail are very bad and impassable with any but very light loads. From the settlement I cut a new trail northerly through townships 69 and 70, range 13, and township 70, range 14, thence southerly into this township. This trail is fairly good. In the southern one-third of the township there is some fair soil, but the balance is either worthless sandy ridges or muskegs. The soil referred to in the south is a black loam on a sandy clay subsoil and appears well adapted to agricultural purposes. The balance of the township is practically worthless for farming. The township is timbered throughout. In the south there are spruce, poplar, birch and balm of Gilead up to 14 inches in diameter, and also considerable jackpine from 4 to 12 inches in diameter. The northern two-thirds of the township are timbered almost entirely with jackpine from 4 to 14 inches in diameter, and with spruce and tamarack of a very scrubby nature. Small patches of scrubby poplar are also found. Very little hay is found in this township. A number of small creeks flow in different parts of the township, and there are also quite a number of lakes. The water in these is all good, as is also the water found in the numerous muskegs. As the country is rolling there is no danger of the better portions being flooded. No water-power could be developed. Owing to the numerous muskegs summer frosts are likely to occur, but otherwise the climate appears to be about the same as that of Edmonton. Wood for fuel is abundant everywhere, but no coal nor lignite is known to occur. There are no stonequarries nor minerals of economic value. Moose, caribou, partridges and ducks appear quite plentiful.-W. H. Waddell, D.L.S., 1910.

RANGE 15

This township is well settled and roads run to it from all directions, the nearest railway station being Milk River, which is located about the centre of the 2. adjoining township to the west. The soil is mostly a brown loam, which gives big yields in a good year; but good years are not the general rule. The chief disadvantage of farming is the lack of sufficient rainfall. The surface is rolling and the drainage is good. Probably three-fifths of the township is under cultivation. There is a distinct tendency on the part of the earlier settlers to go into horse-raising and mixed farming. Crops are too uncertain for an ambitious man to depend upon. There seems to be no trouble in locating water at a depth of from 30 to 100 feet, and Milk river which flows through the southern half of the township supplies those who have not yet bored wells. No water-powers exist in this township. Summer frosts are never absent and it is impossible to see how No. 1 hard wheat could ever be raised in this district. Fuel is abundant in section 31, where a coal seam is being worked. The coal is of very fair quality, and is used with satisfactory results for domestic use and for steam ploughs. No other minerals were noticed. Wood is entirely absent in this township and must be purchased. The stone found in this locality is a poor quality of sandstone, and is of no value whatever. No game exists here now .- P. B. Street, D.L.S., 1911.

RANGE 15 .- Continued.

These townships are about 2 miles distant from the thriving town of 44 & 45. Strome, Alberta. The only lines I ran were those affected by the retracement survey of Wavy lake. These townships are prairie with scattered clumps of willow and small poplar. The soil is a black loam from 6 to 20 inches in depth with a subsoil of clay. These townships are all settled and extensive mixed farming is being carried on. Wavy lake has greatly altered since the original survey. The eastern shere has not changed a great deal, except at the southeast portion of the township. The west shore has receded in some places as much as half a mile. The north boundary is also changed; section 26 originally was practically covered with water, now it is high and dry. There is no outlet to this lake. The water is about 2 feet deep in the deepest places, and it is becoming stagnant. The reclaimed land adjoining the lake is good hay land. All the surrounding farms are well supplied with wells. No water powers exist. The climate is very good for all kinds of grain. Summer frosts occur very seldom. Coal is used for fuel. No minerals nor stone-quarries exist in this township. No game other than prairie-chickens was seen.—A. L. Cumming, D.L.S., 1911.

RANGE 16.

This township is best reached by taking the Canadian Pacific railway to 26. Bassano and from there over a good trail northerly to Dorothy. Crossing the Red Deer river at this place by ferry a good trail running east enters the township along the north boundary in section 31. The surface is rolling and the southwestern third, especially along the banks of the river, is deeply indented with coulées. This part of the township is good for grazing only. On the remaining part the soil is a light loam with a sandy subsoil and with sufficient rainfall would be good for grain-growing. The Red Deer river enters the township in section 18, and leaves it in the south boundary of section 4. Along the river banks are found small poplar and willow up to 4 inches in diameter, and there is a good deal of cottonwood up to 15 The land that is occupied has been so only recently, and the inches in diameter. settlers appear satisfied with their holdings. Good water can be obtained at an average depth of 40 feet. A good deal of wood for fuel may be obtained along the Red Deer river for the present needs of the settlers, while there are good indications of coal along the edge of the coulées in township 26, range 17. No minerals of economic value were found, but some crystallized gypsum was found in sections 5 and 6, indicating that larger deposits were near at hand. Ducks, prairie-chickens and coyotes were the game seen. Many traces of beavers were observed along the banks of the river.-C. Rinfret. D.L.S., 1911.

There is no wagon trail-into this township. The wagon road from Lac La64. Biche ends in the southeast corner of section 6, township 66 of this range.

This is the nearest point to this township which can be reached by wagons. A pack trail enters the township in section 17, coming from township 64, range 17. This trail ends near the north side of the lake in section 5 of this township. I have never followed this trail westward so cannot say positively where it comes from, but I am inclined to think that it is the trail which leaves the wagon road in section 8, township 65, range 17. I did the work here in winter and opened only a sleigh road as far as section 9; this would be impassable in summer as I followed the lakes as much as possible. The soil of this township is poor, being a sandy loam with clay in places and loose stones everywhere. The heavy timber on the northern tier of sections was destroyed by fire some years ago, and a thick growth of small poplar and willow now covers this burnt area. The remainder of this township is densely wooded with poplar, spruce and willow; the poplar and spruce are of good size. There is no prairie. The surface is generally rough and hilly, broken by numerous muskegs and swamps. No

RANGE 16 .- Continued.

hay is found in the township. There seems to be an abundance of good, fresh, permanent water. There are no streams except Beaver river which crosses the northeast corner of section 36, and a small creek from 10 to 15 links wide, which flows from the lake in sections 9, 10 and 16 through sections 16, 22, 23, 26, 35 and 36 and empties into Little Beaver lake. This creek has the appearance of being dry in summer. There are no water-powers. The climate is similar to that of northern Alberta, with fine summers and severe winters. During the past winer, 1910-11, the weather was very cold, with about 30 inches of snow. The indications are that there are summer frosts. Wood is the only fuel and of this there is an abundance in every section. No stone-quarries nor indications of minerals were observed. There is very little game—a few moose, jumping deer, muskrats, minks, rabbits and a few ducks and partridges. No wolves were seen.—P. T. C. Dumais, D.L.S., 1910.

The northwest corner of this township may be reached by the Lac LaBiche trail, through townships 65 and 66, range 17. There is no trail of any kind in the township, except a sleigh road which I opened during the winter of This road would be impassable in the summer, as it follows the lakes and crosses on the ice in several places. The land is very poor, consisting of sand and sandy loam, with boulders everywhere. It is covered with timber and scrub, but when cleared would be suitable for mixed farming. The surface is from slightly rolling to hilly and is densely wooded with poplar, spruce and willow. There are numerous lakes, swamps and muskegs. A few tons of inferior hay could be cut near Little Beaver lake. There is an abundance of good water in the numerous lakes. Beaver creek, the only stream in the township, contains a large volume of fine, fresh water. It averages 50 links in width and 2 feet in depth, normally, and has a swift current. It enters the township in section 7 and flows northeasterly through sections 7, 8, 9, 16, 15, 10 and 14. In section 14, it turns abruptly to the south and flows through sections 11, 3 and 2, entering Little Beaver lake in the latter section. It leaves the above lake in section 1 and as Beaver river it flows through a part of section 1 and crosses the extreme northeast corner of section 36, township 64, range 16. There is no land liable to be flooded. There are no water-powers, but considerable power could be had by erecting dams on Beaver creek. Nearly everywhere in this township the banks of the creek are high, so that it would be comparatively inexpensive to construct dams. The climate is similar to that prevailing throughout the remainder of northern Alberta. summers are fine, but the winters are severe. During the winter of 1910-11, snow fell to a depth of about 30 inches. While there were no bad storms the cold was intense. Wood is the only fuel available, but it is found in abundance. No stonequarries nor indications of any minerals were observed. This is a poor country for game, only a few moose, deer, muskrats, minks, partridges and ducks were seen. Rabbits were plentiful.—P. T. C. Dumais, D.L.S., 1910.

A wagon trail which leaves the main Athabaska Landing—Lac LaBiche road 66. in section 27, township 67, range 16, runs south through this township. In section 4 it divides into two branches, one branch going southwest into township 66, range 17; the other going in a south and east direction enters township 66, range 16, in section 33, just west of the quarter-section post on the north boundary. It continues east and south through sections 33, 34 and 27 and ends in the latter section on the north side of Long lake. This is the only road in the township and is a fairly good one. There is some moderately good soil, sandy loam and clay loam, undulating, with some muskegs in sections 33, 34, 27, 26 and 25. In the rest of the township the soil is very poor, mostly sand, muskeg and swamp with boulders everywhere. Mixed farming would be most suitable. The western third of the township is very rough, broken and hilly, with numerous small muskegs. The central, south and east parts

RANGE 16 .- Continued.

are mostly swamp and muskeg. East of sections 28 and 33, and north of Long lake, the ground is fairly level with less muskeg. This township was heavily timbered at one time, but numerous fires have killed a good part of the timber, utterly destroying it in the northern part, which is scrubby. There is no prairie. Quite a few tons of excellent hay could be cut in sections 33, 34, 27, 22 and 10. Elsewhere there is very little hay. There is plenty of good fresh water, fairly well distributed: There are no streams, only a few small brooks of no importance. Water could be obtained anywhere by digging. There are no water-powers. The climate is the same as that prevailing in the rest of northern Alberta. The summers are fine, but the winters are severe. During the winter of 1910-11 about 30 inches of snow covered the ground. There were no bad storms but the cold was intense. There are indications of summer frosts. Wood is found in abundance everywhere and constitutes the only source of fuel. There are no stone-quarries nor indications of any minerals. There is very little game here—a few moose, deer, rabbits, partridges and ducks. No wolves were seen and but few muskrats and minks.—P. T. C. Dumais, D.L.S., 1910.

RANGE 17.

A wagon road from Lac LaBiche enters this township about 10 chains east of the northeastern corner of section 33. It follows close to the eastern shore of Lac LaBoucanne to nearly the southern end of that lake in section 21. Continuing south through sections 16 and 17 and for about 15 chains into section 8, it ends on the northern side of Beaver creek. From this point a pack trail crosses Beaver creek and continuing south and east through sections 8 and 4, passes into township 64 near the southeastern corner of section 4. Another wagon trail branching off from the former one in section 33, is opened through sections 34, 35 and 36 and passes into township 66, range 17, about 30 chains west of the northeastern corner of the township. This road ends at the small lake in section 6, township 66, range 16, Both of these roads pass through rough, broken country, but are fairly good, except in wet seasons. In the greater part of this township, the soil is poor, consisting of sand, gravel and light sandy loam with boulders of different sizes everywhere. In a few places there is clay loam, which is best suited for mixed farming, the rough, broken character of the surface being against its economical use for grain growing. There is no level land, the country being rolling, rough and broken, with muskegs of different sizes. There are, in places, elevations of over 200 feet above the general level of the township. There is no prairie, the surface being generally timbered with poplar, spruce, tamarack and jackpine and these predominate in the order named. Fires are rapidly destroying this timber and its place is being taken by willow and poplar scrub. There is an abundance of good, fresh water which has all indications of being permanent. There are only two streams. Beaver creek, which enters the township in section 18, flows eastward and southward through sections 18, 17, 8, 9, 10, 11 and 12. It has an average width of 50 to 60 links and a depth of 2 feet. The water is good and the current swift in most places with numerous boulders, although in many places it has narrow shores of a swampy character. The other stream, LaBoucanne creek, has an average depth of 18 inches and a width of 25 links. This creek is short, flowing through sections 21, 20 and 17 and joining Beaver creek about the centre of the latter section. These streams do not flood any land. There are no water-powers but considerable power might be developed on Beaver creek by erecting dams. A good location for one would be in section 8 near the north boundary. There is very little hay. A few tons can be cut in sections 35 and 36, and a few more along Beaver creek in the different

RANGE 17 .- Continued.

sections through which it passes. The climate is similar to that of the rest of northern Alberta, with fine summers and severe winters. The past winter 1910-11, the snow averaged 30 inches in depth. There were no bad storms but the cold was very severe. The indications are that summer frosts occur. Wood is the only fuel and of this there is an abundance in every section. No stone, except boulders, was seen, and there are no indications of minerals. There is very little game of any kind. A few moose and jumping deer, some partridges and ducks were seen. There are no wolves, but a few minks and muskrats were seen.—P. T. C. Dumais, D.L.S., 1910.

A wagon trail leaves the Athabaska Landing-Lac LaBiche road in section 27, township 67, range 16 and running in a southwesterly direction, enters the township in section 36, 26 chains west of the northeast corner. Continuing in a general southwesterly direction through sections 36, 26, 23, 14, 11 and 3, it leaves the township in the latter section about 12 chains from the southwest corner. This road passes through very rough, hilly country and has but a few swampy places which would be difficult to pass in a wet season. With the exception of the northeast quarter of section 32 and the north half of section 31, which are fairly level and of moderately good soil, this township is very poor. The soil is light and full of boulders, while the whole township is rough and broken by numerous muskegs and lakes. Mixed farming could be successfully carried on. This township is generally timbered with poplar, spruce and tamarack, with some jackpine along the eastern part. The spruce and tamarack are found in and around the muskegs and swamps, while the poplar is pretty well scattered throughout. Fires some years past overran the country and killed the large standing trees. A heavy growth of poplar, willow and spruce now covers these burnt places. There is no prairie and no level country. The whole surface is either heavily rolling or rough and hilly, particularly the eastern half. This is a very poor township for hay. A few tons could be cut near the lakes, especially around the lakes in sections 35, 25 and 13. There is an abundance of good fresh water. There are no streams, but a good portion of the township is occupied by lakes of a permanent character. There are no water-powers. The climate is generally similar to that of northern Alberta. The summers are fine but the winters are severe. During the winter of 1910-11 the snow averaged 30 inches in depth. There were no bad storms, but the cold was intense. There were indications of summer frosts. Wood is the only fuel and is found in abundance. There are no stone-quarries nor any minerals of economic value. There is very little game of any kind. A few moose, jumping deer, partridges and ducks, muskrats and minks are found. Whitefish and pike of excellent quality are taken from Lac LaBoucanne.—P. T. C. Dumais, D.L.S., 1910.

RANGE 20.

- Kingman, a station on the Edmonton to Calgary branch of the Grand Trunk

 49. Pacific railway, in section 8 of township 49, range 19, is the nearest railway
 point. This township is very hilly, and wooded to a large extent with small
 poplar. The soil would be good for farming, but the hilly nature of the locality makes
 it more suitable for stock-raising. There are no minerals nor stone-quarries. No
 game was seen.—R. C. Purser, D.L.S., 1911.
- The whole area surveyed varies from gently rolling in the south to very hilly 52. with steeply inclined knobs in the north. These latter are noticed especially in the northern parts of sections 7 and 8. As the country has been burned over twice—once within the last few years—there is practically no timber standing. The

RANGE 20 .- Continued.

former forest is now evidenced only by the great number of charred trunks scattered about. The quality and kind of soil varies within wide limits. Speaking generally the soil in sections 5 and 6 is sandy, and in sections 3, 4, 7 and 8 is clay with a light surface soil of dark brown humus. Gumbo is found from 2 to 6 feet deeper. clay is light brown in colour and very heavy. In the small valleys are a great many muskeg swamps which, in many cases and especially in the southern sections, are capable of being drained, by a little ditching, into one or other of the lakes. soil seems to be especially adapted to the growing of vegetables. Oats are grown very successfully as is barley also. Wheat has not been attempted on account of the difficulty of getting a threshing outfit into the country. There is an abundance of grass but on account of the rough nature of the surface very little hay is gathered except on the borders of the larger lakes. The northern halves of sections 7 and 8 are too rough for cultivation but are especially good for grazing, having an abundance of grass, pea-vine and good water. The water is fairly hard, not alkaline. No borders of alkali were noticed around the lake shores or the small sloughs. There seems to be no difficulty in striking water suitable for drinking purposes and it may nearly always be obtained by sinking from 8 to 18 feet. The water in wells dries up somewhat during winter but there is a permanent supply the year through. The climate is the same as that prevalent throughout this portion of Alberta. Oats are sown from the 15th to the 24th of May; vegetables after the 24th of May to the 1st of June. Hay is cut about August 1st; oats about September 1st. Rain is plentiful during June and July. Ducks, prairie-chickens, grouse and partridges are very plentiful. There are at present a great number of muskrats around the lakes. Deer, moose and bears have been seen by the inhabitants and there are said to be minks and weasels. Jackfish are caught in Cooking lake. Wood is the only kind of fuel. The trunks of firekilled trees are still standing and are an excellent source of fuel.-R. C. Purser, D.L.S., 1911.

RANGE 21.

- The section surveyed in this township consisted of extremely rough country 8. along the Belly river. The land is used only for pasture but is becoming valuable as suburban property to the town of Lethbridge.—G. A. Bennett, D.L.S., 1911.
- This township is for the most part pasture land. The large canal of the irritation of of the irrit
- The old lake was very alkaline so that the bottom is covered with white 19. alkali, which injures it as farm land. However, a good growth of grass has sprung up over the higher parts, suitable for hay, while in the lower portions grass is starting to grow which will afford a little pasture. None of the lake bottom is worthless except one small pond. The settlers are breaking up the most barren parts and sowing rye-grass, so that it will probably produce hay over the entire area.—G. A. Bennett, D.L.S, 1911.

RANGE 24.

Ghostpine lake is situated in this township; it is a very pretty lake and has 36. attracted much attention as a prospective summer resort. Although this district has been long settled, bluffs of poplar and willow still cover half the surface and only the prairie land is farmed.—G. A. Bennett, D.L.S., 1911.

RANGE 26.

An investigation of a reported lake in section 21, was made, and the small body of water found. The greater part of an old lake which covered part of this section has become dry and the bottom yields considerable hay and pasture. It seems probable that the small body of water remaining will soon disappear as it is very shallow and varied greatly in area during this present year—G. A. Bennett, D.L.S., 1911.

RANGE 30.

The town of Pincher is located in section 1, and the township is well settled.

7. There are well graded roads, with bridges across the Oldman river and its branches. Good water can be found by drilling and the Oldman river furnishes a good supply for those who care to haul it. The surface is rolling and the soil is a clay-loam which in ordinary years gives good yields of crops. Several settlers were keeping small herds of cattle and in a few years, cattle raising will be, the mainstay of the district. Hay grows well and pasturage on unbroken land is excellent. No water-powers exist. As the altitude is nearly 4,000 feet, summer frosts are experienced, but on the whole the climate is good. Fuel can be obtained at Pincher at a reasonable price. No coal nor lignite outcroppings were found. No stone is quarried and no minerals were found. A few prairie-chickens and jack-rabbits constitute the only game. Owing to high winds this district does not seem to suffer severely from the early frosts and some very good wheat was produced this year although the climatic conditions in southern Alberta were very bad.—P. B. Street, D.L.S., 1911.

