eight feet long is split in half. The halves are placed parallel to one another, the edges down and flat face to the front. They are firmly braced together in this position, with three cross-bars wedged into holes bored through the log. A chain-hitch is attached in such a manner as to incline the drag at the desired angle, say forty-five degrees, the forward corner being at the outer edge of the road, and the rear corner at the centre. By dragging this implement up one side of the road and down the other, making a number of circuits, using two or three horses, the edges of the log plane off the tops of ridges and rough places, drawing the material sideways and forward to fill hollows and ruts, crowning it at the center of the road. This drag, used eight or ten times during the year on an earth road, while the earth is in a moist condition after a rain, will keep an earth road in the best condition that an earth road can be made to reach.

Somewhat similar work may be done, and is commonly done, with a scraper having a single blade, and with a tongue rigidly attached. Why is this not as good as the split-log drag? The common scraper requires in operating it two teams and two drivers, which handicaps its use very materially. To secure two teams and two drivers is seldom an easy matter and the common practice has been for a pathmaster to charge half a day for procuring them. Even then the one has to wait on the other, and they seldom can get on the road when the soil is in the best condition for its use. The split-log drag can, if properly made, be handled by one team of horses and one driver, and takes less time to use it on the road than does the ordinary scraper, as two round trips can be made on a half mile of road in less than an hour with good results. The split-log drag is more cheaply and easily made than the single-blade scraper, and every farmer can have one in his own barnyard. Being cheaply made and easily handled, it can be driven out on the road at the noon hour, or at any slack period, with little loss of time. The angle at which it travels along the road is not fixed as with the single-blade scraper, and the operator, by stepping from one end to the other, can change the angle according to the requirements of the road. The split-log drag being made of two parallel blades, instead of one, rides over the hollows, drops earth into them, and fills them up, whereas the single-blade scraper tends to go into depressions and make them deeper; and finally, the split-log drag can be used earlier in the spring, or at any time when the road is extremely wet.

The split-log drag by no means does away with the grading machine. On the contrary, it, if anything, makes the grading machine more valuable, The work of the grading machine is to construct, but the sphere of the split log drag is to repair and maintain. Districts where earth roads prevail commonly use the grading machine on the main roads year after year to keep them in repair. As a result the side lines and little-travelled roads have been neglected, and have not been improved as they should be by using the grading machine. By establishing a proper scheme on any "earth road" for the use of the split-log drags, these can be made to take the place of the grading machine for repair, while the grading machine can be sent on its proper mission of construction, to outlying roads which have heretofore been neglected and upon which it is so much needed.

Alberta Creameries Convention

The convention of delegates from the Government creameries of Alberta, held at Red Deer, on January 5th and 6th, 1910, was probably the most important one in the history of the creameries. Some forty delegates were in attendance, and Hon. Duncan Marshall, George Harcourt, deputy minister of agriculture; C. Marker, dairy commissioner and W. F. Stevens, live-stock commissioner were also present.

Among the important points decided upon was that the creameries should take up a greater share of the work than has been done in the past; that patrons should be paid according to the quality of the cream supplied by them, and that the creameries should be paid in accordance with the quality of the butter shipped into cold storage. By these changes it is expected that the high standard now secured for government creamery butter will be maintained, and the careful farmer will no longer have to assist in paying for the sour and poor stuff sent to the creamery by his careless neighbor. The delegates were unanimous for the change, and it is expected that the whole plan will be worked out in detail before the summer season opens up.

(A full report of this meeting will appear in our issue of next week.)

Saskatchewan Crop Report

The final crop report for Saskatchewan for 1909 was issued last week by the Department of Agriculture. The total area in grain crops was 6,898,559 acres, and the average acreage of grain crops per farm for the province was 84.9 acres. The acreage of all crops in Saskatchewan in 1909 was 7,016,272. The area in grain crops was 6,898,559 acres, compared with 5,981,802 acres the year before.

The acreage, total yield and average yield per acre of the various grain crops was as follows:

	Total Acreage.	Total Yield.	Average Yield.
Wheat	4,085,000	90,255,000	22.1
Oats	2,420,000	105,465,000	47.1
Barley	244,000	7,833,000	32.1
Flax	319,000	4,448,700	13.9

This yield of crop places Saskatchewan in the third rank among the provinces of the Dominion and States of the Union as a producer of wheat and oats. Minnesota with 94,000,000, and North Dakota with 90,700,000 bushels are the only states that produced more wheat than did Saskatchewan. After Saskatchewan comes Kansas with 87,000,000 bushels. Minnesota's average yield was 16.8, North Dakota's was 13.7, Saskatchewan's 22.1, Kansas 14.1, United States' 15.8. Illinois and Iowa were the only states in the Union that produced more oats than did Saskatchewan in 1909, their production being 159,000,000 and 116,000,000 bushels respectively, as against Saskatchewan's 105,465,000 bushels. Illinois' average yield was 36.6, Iowa's 27.0, Saskatchewan's 47.1, Minnesota's 33.0, and United States 30.3 bushels per acre. Saskatchewan produced very nearly one-eighth as much wheat as did the United States and more than one-tenth as much oats.

The average price on the farm for all grades of the wheat crop was 84c per bushel, which means that the wheat crop was worth $75,780,600 to the producers.

The oat crop at an average price of 26c per bushel, was worth $27,420,000, and the total value on the farm of all grain, roots, fodder crops raised in Saskatchewan in 1909, together with that of milk and its products was $132,539,242.

There were in Saskatchewan on July 1, 1909:

429,766 horses, valued at	$21,488,800
234,458 milch cows, valued at	8,637,946
594,632 head of other cattle, valued at	11,892,640
152,601 sheep, valued at	839,305
352,385 swine, valued at	1,938,117
Poultry valued at	1,058,911

making a total of argicultural assets in the province valued at $178,421,961, owned by 81,303 farmers, and grown by less than 12 per cent. of the estimated areable acreage in the province south of parallel 55.

In harvesting this immense crop, the farmers of Saskatchewan received aid from 12,500 harvesters brought from the east on seven excursions and distributed throughout the province. This province received over 65 per cent. of the harvesters who came west this year.

There are in the province at the present time, 1,758,000 acres of new land and 1,772,000 acres of summer fallow, together with a large area of fall ploughing, ready for the 1910 crop.

The above figures both of acreage, yield and numbers of live stock, were compiled from the reports of 20,000 individual farmers and the average yield was verified for the reports of several thousands of threshermen.

There are in the province at the present time 842 grain elevators, having a total capacity of 2,729,000 bushels.

Events of the Week

Some sensational feats in air navigation were accomplished at the flying competition held last week at Los Angeles, Cal. A Frenchman, in a frame of wood covered with silk, mounted to a height of 5,000 feet, breaking the world's record for altitude. The contest was the largest of its kind yet held in America.

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Twenty-one townships in Southern Alberta, due south of Bow Island, were thrown open for homesteading January 10, and one of the biggest rushes ever seen in Lethbridge was on when the land office doors were opened. The people began lining up early the day before, and at least a thousand were before the office door when it opened at nine o'clock. Some brought lanterns in boxes to supply heat, and had friends bring them food or relieve them in the line.

Quite an exciting race promises to develop this year for the honor of discovering the South Pole. Expeditions are being fitted out in France, England and the United States, while a German scientist is endeavoring to get a fourth one under way. Two British expeditions are preparing to set out, one commanded by Lieutenant Shackleton, who reached the farthest southern point last year.

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Interest in the British elections was maintained at fever heat all week. Leaders on both sides have been going over the same arguments, and very little new matter has been touched on. Ninety-one elections were held on January 15 with the following results: Liberals, 34; Unionists, 43; Labor, 9; Nationalists, 5.

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A company has been formed with a proposed capital of five million dollars to develop the oil fields in the district of Fort McMurray, 400 miles north of Edmonton, which are said to be as rich and extensive as anything in America. In the same district there are said to be large asphalt deposits, the company aiming to develop also and supply petroleum and paving material for Western Canada. Some leading business men in Winnipeg and capitalists from the United States are interested.

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It is said that certain American and English capitalists are considering building a railway from Winnipeg to the Yukon. The line would be two thousand miles in length and would cost fifty million dollars. It is claimed that the Peace River Valley and the mineral wealth of the Yukon country would provide lucrative traffic for the road. It is unknown to what extent the scheme has been considered. J. J. Hill and Jos. E. Leiter are among the American financiers interested; Lord Fitzroy is one of the English promotors.

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The Railway Commission has decided against the C. P. R. in the matter of the application of the Western Associated Press to prevent the railway descriminating in press despatch rates in favor of its own news service. The C. P. R. maintains a news distributing service which it wires over the country on its own wires at a cheaper rate than it would allow the Associated Press. The commission rules that the same rates must apply to the company's service as to the Associated Press.

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The Royal Northwest Mounted Police report for 1909 states that on September 30 last the strength of the force stood as follows: 51 officers, 600 non-commissioned officers and constables, and 558 horses. Compared with last year this is a gain of two constables and 35 horses. There are 240 men in Alberta, 306 in Saskatchewan, 31 in the Northwest Territories and 74 in Yukon. Commissioner Perry points out that villages, railway stations and isolated settlements are increasing so rapidly that the strength of the force will have to be doubled to meet demands made upon it.

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The American public got an idea last week where some of the increased cost of meat is going, when Swift & Company, one of the largest Chicago packers issued their annual statement to stockholders. It shows that in 1909 the company's assets increased from $101,000,000 to $112,924,296. It also shows that it distributed $4,200,000 to the holders of $60,000,000 of stock, that it paid full interest on its $5,000,000 worth of bonds, that it set aside a liberal sum for maintenance and replacement, and that it put away the enormous surplus of $4,000,000 out of last year's profits alone. The total surplus of the company to date is $22,000,000, which is more than 35 per cent. of the total capital of the company.

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The measure providing for the naval defence of the Dominion was laid before the House of Commons by the Premier, January 12. It provides for a navy to consist of five cruisers and six destroyers, eleven million dollars being the estimated cost of construction and three millions the estimated annual cost for maintenance. The cruiser unit will consist of four warships of the Bristol type and one of the Boadicea. A Bristol is a protected cruiser of 4,800 tonnage, carries six guns and a crew of 391, and has a speed of 25 knots. A Boadicea is a non-protected cruiser of 3,300 tonnage, carries six four-inch guns and a crew of 278 men. The destroyers are known as the river-class type. It is expected that construction work on these vessels will be undertaken as soon as the measure is adopted by parliament and arrangements can be made for building.