

*"Your future wealth cannot help being great.  
You could not keep back a country that will produce  
what we have seen to-day any more than you could  
keep the tide out with a pitchfork"*

## SPEECH

OF

# J. J. HILL

ON

## President Taft's Day

AT THE

# Montana State Fair

AT

HELENA, SEPT. 27, 1909

Together with

Remarks of Prof. Shaw and Statistics of  
Crop Production.

by the Department of Publicity of the Bureau of  
Agriculture, Labor and Industry of the State of Montana.

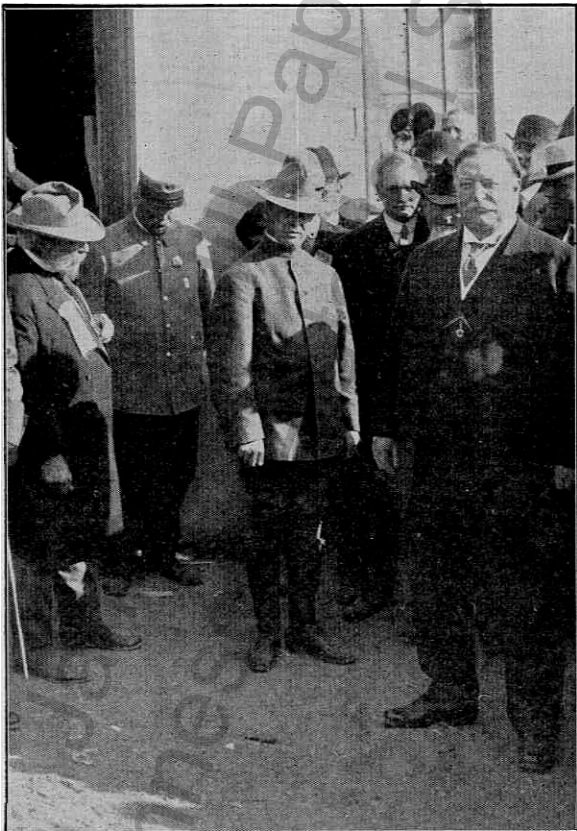
# TAFT DAY

AT THE

## MONTANA STATE FAIR

"Mr. President, I want to show you the best agricultural exhibit I ever saw."<sup>7</sup>

These words were spoken to President Taft as he entered the Agricultural Building at the Montana State Fair, held at Helena, September 27, 1909, by Mr. James H. Hill. President of the Board of Direc-



President Taft at the Fair Grounds.

tors of the Great Northern Railway. Mr. Hill had spent the morning of that day among the exhibits and found every product which is grown in the northern half of the United States, and in such quality of perfection as to elicit the above comment. Mr. Hill is a student, an observer and one of the best authorities upon agricultural matters. •

Such an unreserved tribute will be a surprise to thousands in the State and an inspiration to more

thousands outside of the State. The truth of the prolific yields and superior quality of Montana products is known to a few who have carefully followed their amazing progress from year to year, as will appear by facts and statistical statements heretofore published by this Bureau, some of which will be found at a later page herein. To those in closest touch with, the facts, Mr. Hill's words are not astonishing; but in view of the interest which his further statements in this connection must arouse, the Commissioner of the Bureau feels impelled to reproduce, in full, his speech made at the Fair Grounds on this day. He said:

#### SPEECH OF JAMES J. HILL.

Mr. Chairman, Ladies and Gentlemen:

Your Chairman was entirely too complimentary. If I have been able to do anything to better the conditions of the Northwest, I am glad of it—heartily glad of it—and while it has helped me individually, I hope I am not so fond of money as to put that in the first place. Money is only good for what it will buy, or what it will bring. (Applause).

**Montana**, as your **Chairman** said, leads, or **has led**, in the production of gold, **and of silver, and of copper**, and they have all been **extremely valuable in opening up your State**; but let **me say that the natural wealth of the soil of Montana is greater than the wealth of all the mines within her borders—many times greater.** (Applause).

#### STATE HAS VAST WEALTH.

It is not at all a fancied picture to say that Montana can produce, **AND THAT SHE WILL PRODUCE WHEN SHE HAS THE PEOPLE—THE INDUSTRIOUS POPULATION TO GO OUT ON THE SOIL—OVER \$300,000,000 ANNUALLY**, and that will come out of the soil; and when it is done they are ready to turn to the same sources and produce it next year, and the year following, **AND SO ON FOREVER.** (Applause). Because our kindly old Mother Earth renews her fertility; she has the ability to nourish all the children her bosom has borne, and she will do it if we observe her laws. She carries in one hand a scourge, and with the other hand she offers us our daily bread. We must regard her laws; we must regard the natural provisions by which she maintains the fertility of the soil, and its power to renew itself year after year. If we do not, depend upon it, she will punish us in the end.

Now, how are we to know our duty to the soil? The whole world is devoting intelligent attention to the science of agriculture. People say, "Oh, he is a farmer;" and they mean by that that he is not blessed with more intelligence than he ought to have. Let me say, there is no profession, there is

**no occupation, that calls for or can use a higher degree of intelligence than the cultivation of the land.** (Applause).

#### **FUNCTION OF AGRICULTURAL COLLEGES.**

Now, how shall the world get this high order of intelligence in matters of agriculture? There are in every civilized country on the face of the earth agricultural colleges; they publish their experiments; each knows what the other does; each knows what will bring success in one direction and under certain conditions, and what will bring certain failure under conditions that may apply even to all of them. The agricultural colleges of these states should do the experimenting, should test all the questions of 'breeds of cattle, of qualities of soil, and the effect of cultivation on the soil and of the exhaustion of soil and what will restore the fertility of soils, the adaptation of seed to soil and soil to seed. These are questions that should be determined by the agricultural colleges and experimental farms in this country. This work is being done by your college in Montana, in North Dakota, in our college in Minnesota, and in all the various colleges over the country and, let me say, at the head of them the agricultural college of the state of Wisconsin. Practically they are in a class by themselves there, because they have advanced farther and they keep in touch with all their graduates, and they do their work in a more scientific, thorough, up-to-date manner; and it is bringing results in the State of Wisconsin that a few years ago were entirely unlocked for.

#### **WHAT THEY ARE DOING.**

Many of her farmers said: "Is it possible that these college fellows can tell us how to plant a field, how to farm? What do they know about it?" Well, now, I want to tell you about one of the professors in their college. President Van Rise, the head of the university, told me he found that man teaching a country school. He had the children, cultivating a six by eight foot plot during vacation and during the play hours. He was teaching them plant life. He was an 'enthusiast. When President Van Hise proposed to bring him to the State University some of the professors, some of the faculty, said: "No, he is not a college man; he has no degree." But he brought him, and in six years he developed a variety of Indian corn that raised the average yield in Wisconsin from 27 to 47 bushels per acre, and added \$15,000,000 to the value of the crop in a single year. (Applause). I said to him: "President Van Hise, surely you can afford to give that man a degree;" and he thought he could. (Laughter).

Now, my farmer friends, and everybody else, remember that in this country, and not only in this country, but throughout the whole world, every nation that continued to exist for any length of time built its foundation on the cultivation of the soil. It was man's first occupation and will be his last: because if the soil was not cultivated for a single year the population of the earth would pass away; they would starve to death. Even back when the first ox was yoked to a crooked limb of a tree for a plow it meant as much to the human race as did the invention of the steam engine.

#### THE SOIL IS THE SOURCE OF LIFE.

No nation has continued to live for any great length of time that neglected the cultivation and the preservation of the fertility of its land. You can go back to the valley of the Euphrates, which we are apt to consider the cradle of the human race, at least that portion of it that spread westward through Western Asia, Northern Africa, over Europe and finally to America. At the time of its highest prosperity, it was the greatest agricultural country in the world. Herodotus tells us that with poor cultivation they got fifty fold—a return of fifty bushels to the bushel planted—and with good cultivation they got a hundred to a hundred and fifty fold. How is it to-day? Babylon and Nineveh, the great cities built by the enslaved captives of conquered tribes brought to that country by the rulers who dominated the known world—these cities to-day are marked by piles of desert sand; and their once fertile valleys are the homes of a few poor, wandering Arabs seeking a green spot upon which to pasture some sheep and horses. Every nation in the world to the present time that neglected the cultivation of the soil has practically ceased to exist. Professor Ferrero, in his late and very interesting history of Rome, sums up in a philosophic manner the result of the experience of all the nations during all the years; and he says that the only victories, the only triumphs that were ever permanently won, were won by the plow and not by the sword. (Applause).

#### GERMANY AN EXAMPLE.

We know that France and Germany have been cultivated for fifteen or eighteen hundred years. We know that to-day in Germany—a country not naturally as fertile as our own—they get an average yield of 27 or 28 bushels' of wheat per acre. They have neither the soil nor the climate that we have, but they have learned the hard lesson of necessity—how to conserve their soil. When we think of wealth we are apt to measure it by some other standard than that of agriculture; but let me call

your attention to the fact that the Department of Agriculture gives the total value of the crops raised in the year 1908 as nearly \$8,000,000,000. Eight billions is no larger a mouthful than eight millions, but it is a thousand times greater in quantity. When we consider eight billion dollars, it is somewhat difficult for the human mind to comprehend it. It makes all oilier wealth production sink into insignificance.

Again, we take lumber and build a wagon or furniture; we take iron and steel and build the automobile, and it is worth so much. But it is only the change in form by adding some days' work that has given it its increased value, while the eight billion dollars of products of the farms were wealth created out of elemental conditions; every dollar of it new wealth, taken out of the earth and handed over to mankind for its benefit. (Applause).

#### **A LESSON FROM ROME.**

The Roman Empire overran the world in its day. Its entire foreign policy was influenced and governed practically by its desire to secure food for its people. When Rome conquered the Island of Sicily it levied a contribution—an annual contribution—of twelve million bushels of grain upon the people of the Island of Sicily, and Sicily was known as the granary of Rome. To-day that island does not raise a million and a half bushels of grain all told. And what has become of the people? What has become of the sons and descendants of the people who built the cities of whose extent we can only judge by their magnificent ruins? They are strangers in a strange land; seeking to support their wives and children, laboring on our railroads for less money than anybody else will accept, all because they neglected the primary, the one essential condition that would save them as a nation.

#### **AN ECONOMIC COMPARISON.**

A good illustration of the value of an economic and sound system of agriculture is found in the parallel between France and England. After the Napoleonic wars, when Napoleon was safely housed on the island of St. Helena, Great Britain settled her silver and gold standard about 1819 and started on a period of great commercial expansion and colonization. Her colonies were built up until it was said that you would never get out of reach of the sound, of the reveille of her drums, and that the sun never set on the dominion of her empire. The Frenchmen were too poor to colonize. The bones of her best young men were left on every battle field in Europe, but those who were left went back to the soil of France and in a prudent, intelligent manner set to work and cultivated it. Let us see

the result: At the close of the Franco-German war, when they were called upon, to pay a thousand millions of war indemnity, they paid it. And nineteen or twenty years later, when the oldest English "banking house in Great Britain failed, France came to the rescue and said: "How much money do you want?" She has little in the way of mineral value—coal, iron or other minerals—but she has an industrious, frugal people cultivating her soil, and their savings to-day have made the French nation the banker nation of the world. (Applause).

#### **AGRICULTURE IS PROSPERITY'S FOUNDATION.**

Twenty-five or thirty years ago in the Northwest—what we called the Northwest then, Minnesota and the Dakotas—we thought that twenty-five bushels of wheat to the acre was a fair crop; and if a man got less than twenty we thought he had a partial failure. To-day the average crop of the Northwestern states—at least up to the present crop, because we have not the returns from that yet, but up to the crop of 1908—is less than 13 bushels per acre. Now, if we go on in that way, falling off about a bushel every two or two and a half years, how long will it be before the land will not pay for the cultivation?

#### **WHY I TAKE AN INTEREST,**

Sometimes people wonder why I take such an Interest in this subject. Well, let me tell you, I take that interest in it because the cultivation of the soil is the foundation upon which the prosperity and even the life of our people must depend, not only now but for all time.

**THIS A PERIOD OF ECONOMIC CHANGE.** Now, at this particular period in the history of our country, there is a great change coming. Ever since the first settlements at Jamestown and at Plymouth Rock we have had an unlimited public domain upon which the surplus population could spread itself and make homes free; where every man might sit under his own vine and fig tree and raise his family in comfort, if not in affluence. That time and those conditions have changed and the change is becoming more and more emphasized every year. When I came west fifty-three years ago, Chicago had about 90,000 people. To-day she has two millions and a half; and within one hundred miles of Chicago there is wild, unoccupied prairie. During that time the front wave of settlement has gone West until it has finally reached the Pacific coast, and is now turning back inland. Portions of it are going to the Canadian Northwest, seeking homes. Maybe some of you think it unfortunate that Montana should not have been in a position at

an earlier day to receive her share of *the* •westbound population; but let me say, it is never too late to do right; it is never too late to do a good thing.

When we built into northern Montana—and I want to tell you that it took faith to do it—(laughter and applause) from the eastern boundary of the State to Fort Benton was unceded Indian land. No white man had a right to put two logs one on top of the other. If he remained too long in passing through the country, he was told to move on. Even when cattle crossed the Missouri River, during the first years, to come to our trains, the Indians asked 50 cents a head for walking across the land a distance of three miles, and they wanted an additional amount per head—I don't remember what it was—for the water they drank in crossing the Missouri (Laughter). Happily that is all changed.

#### **MONTANA IS GREAT—HER FUTURE GREATER.**

Now I have never lost faith for one moment in the fertility of the soil of Montana. And to-day what have I seen? I have seen the fruition of our hope, maybe our hope deferred, 'but in that building there is an exhibition of agricultural products that cannot be surpassed by any state or province on this continent. (Applause). And in some respects I know that it cannot be equaled by any state or province on this continent. (Applause.) I was glad to see your cattle, and they are fine and a credit to the State. I was glad to see your livestock. I was glad to see your fruit. It all goes to make happier, more comfortable lives for the people. But let me say that the great foundation of your future prosperity is in your ground: and Montana, in my judgment, will be the greatest grain growing state in the Union. (Applause). I am speaking of small grain, but, from what I saw I am not prepared to say that Montana will not eventually be a great corn state. But if you are not a great corn state, you will rank among the very first in alfalfa, and alfalfa, will take the place of corn. If you want to feed livestock and put your cattle and your hogs in prime condition, remember that with alfalfa and barley you can make as good beef and as good pork as ever was offered anywhere. The best hams in the world are known as Westphalia hams, and my German friends here know that there never •was a kernel of corn fed in "Westphalia. Wiltshire bacon in England commands a fancy price, and there never was any corn fed to hogs in Wiltshire. The people of Denmark are a pattern for us. They started the first agricultural college in 1788. They are doing to-day 'better 'dairy work than any other country, in the world. They sell largely to Great



Britain. The last returns say that they sold to Great Britain forty-eight million dollars' worth of dairy products and twenty-one million dollars' worth of hams and bacon. Now, they have a country of which only about 12,000 square miles can be cultivated—not any bigger than one of your western counties—and still they support 2,600,000 people, and they support them well. They have about 175 to the square mile, and the United States has about thirty people to the square mile. We can readily take care of five times that number, or one hundred and fifty people to the square mile. But how? By better cultivation of the land. By getting people on small farms and getting the last and best results that can be got out of the land. A man raising 20 bushels of wheat per acre will make twice as much profit as the man who raises fifteen. It is the quantity, the yield per acre, that brings the money.

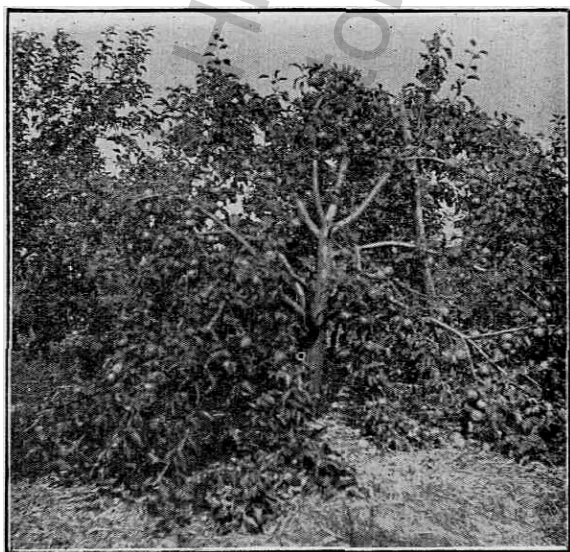
#### **A VAST ESTATE.**

Now, you have nearly 94,000,000 acres of land in Montana. Thirteen to fifteen million acres of this land you may say is mountain side. If it were in Switzerland it would be in dairy farms, and their cattle would follow the melting snow in the spring up the sides of the mountains and come down in the fall as the snow drove them. You have, say, forty or forty-five million acres of pasture land, and that leaves you somewhere from thirty-three to thirty-five million acres of good arable farm land. The state of Illinois has thirty-five million acres of farm land within her borders, and you have as many acres of good arable land as they have in the state of Illinois. What you must do is set your minds, your agricultural college, the intelligence of your people at work to see how to best use this land—Many will say: "Oh, we cannot irrigate it all." They used to talk about the irrigation in the United States of fifty million acres by the Government, and then it got down gradually to thirty and finally, I think, now they consider that at any reasonable cost it will be limited to about ten. Well, ten million acres, allowing forty acres to an irrigated farm, would provide for two hundred and fifty thousand farms. Put five human beings on forty acres and that would take care of a million and a quarter people. That would be equal to the increase of our population for about eight or nine months. It isn't going to relieve you very much. Away back in 1882 the United States produced 504,000,000 bushels of wheat. Twenty-five years later, in 1907, the total crop was 634,000,000 bushels. The increase in twenty-five years was 25 per cent in the yield of wheat, and the increase in population, in mouths that had to be fed, was 64 per cent. So

that we are to-day coming to a point where sooner than we know we shall have no wheat to export. We shall use it at home. God speed the day, because it will make your land that to-day you may consider worth three or five dollars an acre, worth twenty-five to fifty dollars, and the better land worth even a hundred dollars an acre. You have a bright future if you will take intelligent care of it. What we want to do is in every way in OUR power to help you show the people of this country that it is not necessary for them to leave their own land, the land of their adoption or the land they were born in, to go to any strange country, however near us, in order to make a home. (Applause).

#### **THE FARM IS A SURE MONEY-MAKER.**

Now, notwithstanding the fact that the last agricultural crop amounted to about eight million dollars, a great many of the young people think that the farm is not the place to make money. The young people think that they must get rich quick and get away from the farm. There could lie no greater mistake; no greater mistake for them individually, no greater mistake for all of us collectively. The

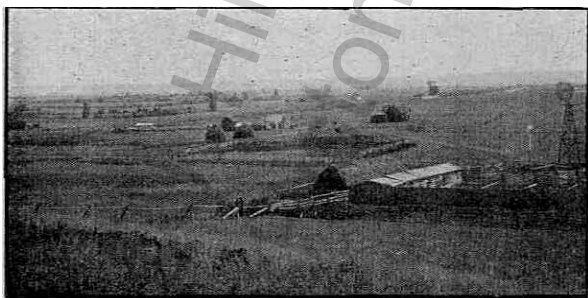


A Montana Apple Orchard.

first United States census showed that less than four per cent of the population lived in the cities. In 1860, before the civil war, it had risen to 16 per cent. The census of 1870 was the first to classify population by occupation, and of those who were winning a living by their own efforts, 48 per cent were on the land. In thirty years, by 1900, it had decreased to 35 per cent. To-day I have no doubt

whatever the coming census will **show** that it *is* less than one-third. Now, if one-third or the people produce more money **from** the farms than all the other two-thirds, from all other sources, why is not the farm a good place to stay? Why need the young people leave the **land and go** to town **to try to get rich quick, and to bring up on the forward end of a motor car?** (Laughter and applause).

There are only two states in the Union which, have any large amount **of** agricultural land left in the public domain. We could increase that **acreage if** we took in Texas, but that land is not a part of the public **domain, but It is a part of the property** of the state of Texas. **Montana has within her borders unoccupied agricultural lands practically or nearly equal to the entire state of Iowa, or the state of Illinois.** Certainly these **may be considered** the richest states **in the Union, but NEITHER THE STATE OF ILLINOIS NOR THE STATE OF IOWA CAN MAKE AS GOOD AN EXHIBIT ON ALL COUNTS AS YOU HAVE SHOWN TO-DAY IN THE EXPOSITION BUILDING OVER THERE.** (Great applause).



In the Valley.

#### **LET YOUR LIGHT SHINE.**

**You** must put your light on the **hill and you must not** hide it under the **bushel any longer. YOU MUST LET THE WORLD KNOW WHAT YOU HAVE GOT. YOU WILL BE BETTER OFF, AND THEY WILL BE IMMENSELY BETTER OFF.** Your mines have served the state a **great purpose, and are** doing it to-day. Their pay-rolls amount to enormous sums, weekly and monthly. But beyond the money that is paid out for mining and refining the- material, and beyond the price of the food that you supply to the people working in these **different callings, the balance of the profit goes out of the state. The money taken out of the 'soil remains in the State.** It belongs to your people. It seeks your hanks. Your merchants and all the people get the full benefit, and every dollar of it will equal two dollars won in any other direction. (Applause).

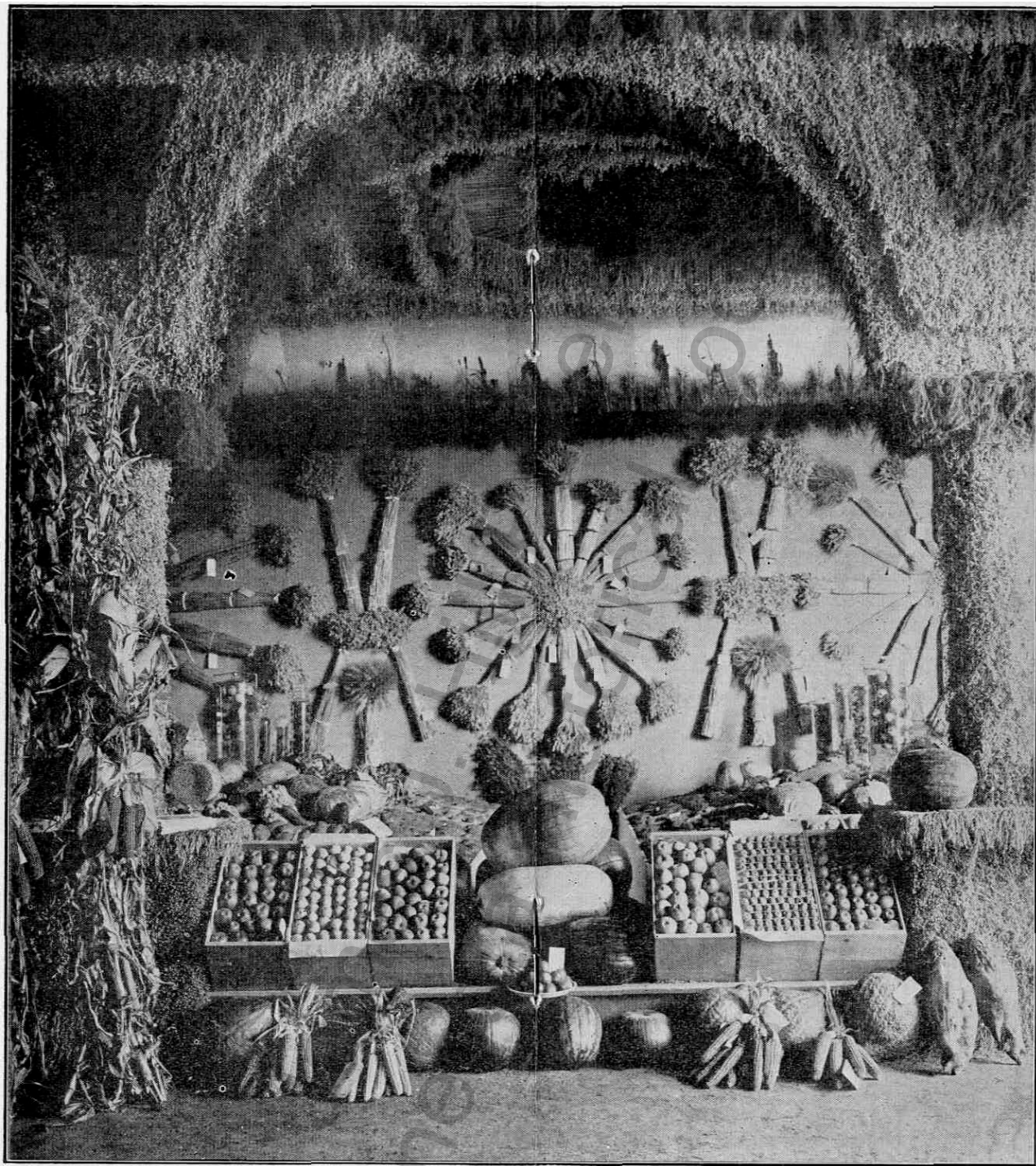
## **MUST PUT YOUR SHOULDER TO THE WHEEL.**

Your future wealth cannot help being great. You could not keep back a country that will produce what we have seen to-day any more than you could keep the tide out with a pitchfork. But let us all put our shoulder to the wheel; let us all know that we are going- to march together and keep step together, and put Montana forward and keep her forward until she has taken her place at the very head of the column. (Prolonged applause).

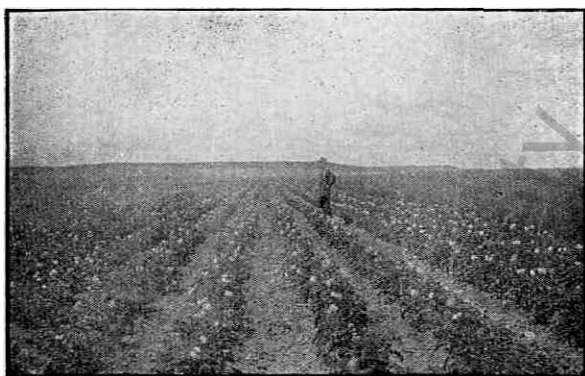
We can help you to do it; and it is our best interest to help you, because every dollar that we get you have got to win before we can get it; and if you are not prosperous, depend upon it we are poor with you. You need practically as many more miles of railroad as you have to-day. Now, don't discourage us. Treat us just as you would like to be treated. Treat us just as you would your neighbor, and we will try and be good neighbors with you. (Applause).

If you have burdens to bear, we will be ready to bear our part of them. I have always felt like that I remember the first time I visited Butte. The rate on copper from Butte to Omaha was \$17 a ton. The first rate we made for the same transportation was \$8 a ton. Now that helped. (Laughter and applause). We have tried to keep our shoulder behind your wheel from that time to this. But don't leave it all to us. Let us join hands together.

I am very glad to have met you here to-day. I am glad I came. I am glad to see old friends, and I hope to make a few new ones, but I want you to bear this in mind: that an old man down in Minnesota is always ready to raise his hand or his voice in anything that will promote the prosperity and growth of the country in which he has lived over half a century. (Applause). I am greatly obliged to you all, and I wish, you all manner of happiness and a safe return, to your homes. I want you to have confidence in yourselves and confidence in the future of your State. Do that, and depend upon it, you will win. (Applause).



Montana Farms.



A Potato Field.

## An Opinion From Prof. Shaw.

Prof; Thomas Shaw, of the University of Minnesota, was also a visitor at *the* Montana State Fair. Mr. Shaw is one of the agricultural experts of the world and few are quoted as frequently. He 'had entire charge of the National Corn Exposition at Omaha last December so far as the connection of the Great Northern Railway therewith was concerned. In a verbal reply to Mr. Hill in the directors' room at the fair grounds, Mr. Shaw said: "I have been in Montana not a little during the last two years, watching developments, particularly grain raising, by both irrigated and dry farming methods. I have just completed a thorough inspection of the exhibits in the main hall over there and paid critical attention to the root crops and vegetables.

"This is the first opportunity I have had to see a collective exhibit in Montana, and after going over it carefully, I am of the opinion there is only one place on the American continent that could raise crops ANYWHERE NEAR APPROACHING IN QUALITY THOSE EXHIBITS I HAVE SEEN TO-DAY. That is the province of Ontario. Unqualifiedly the crops of Ontario are lacking in the superior quality of the Montana products, and they are produced, too, by farmers of many years' experience and under conditions of the very highest class of cultivation, which, of course, Montana farmers up to this time have made no pretense of doing.

### IMPROVING METHODS.

"But the Montana farmer is rapidly improving his methods of culture, and in the not far distant future we may expect an even finer display than this, although the limit already would seem to have been reached."

## Montana in Competition with the World.

Perhaps the best means of judging the climate of Montana so far as its bearing upon agriculture is concerned is a list of its productions. Every fruit, vegetable and grain that matures west of the Ohio River thrives in some part of Montana. At every one of the great expositions of recent years exhibits from Montana have been put in competition with exhibits from other states and other countries. At the Chicago Exposition in 1893, besides awards to the State of Montana for "Gold Nuggets, Crystals and Placer Gold;" for "Collections of Silver and Silver Crystals;" for "Copper Ores," for "Coal," for "Bulldozing Stones," and for "Montana's Statue of Justice" (in silver), awards were given to the State and exhibitors from the State, for agricultural and horticultural displays, as follows:

### CHICAGO WORLD'S FAIR, 1893—AWARDS TO MONTANA EXHIBITORS.

Apples; Collective Exhibit of Flax Seed; Oats; Hay:	State of Montana.
Flour:	Bozeman Milling Co. • Elling & Hyndman; R. M Herold; Nelson Story.
Barley:	J. W. Dawes; M. GVI. Fergus on; Samuel Fowler; Halting- Manhattan Co.
Wheat:	William Caldwell; J. Mason.
Hay:	Bailey & O'Donnell.
Timothy Hay:	Thomas Blake: Mrs Ed Duke.

At the Louisiana Purchase Exposition held at St. Louis in 1904, the Grand Prize for the Mining Industry was awarded to the State of Montana. The State of Montana was awarded a gold medal for fruit: Bass Brothers of Stevensville received a gold medal for apples; and the Bitter Root Farm of Hamilton a gold medal for "Apples and Crab Apples." Thirty-eight silver and 23 bronze medals were received by various exhibitors from Montana for apples, crab apples, strawberries, plums and prunes. For agricultural exhibits from Montana the awards were: Gold medals, 69; silver medals, 62; bronze medals, 53.



**ST. LOUIS EXPOSITION, 1904—GOLD MEDALS  
AWARDED TO MONTANA EXHIBITORS  
FOR AGRICULTURAL PRODUCTS.**

Barley :	Duncan Cameron, Cascade; B. H. Kemp, Cascade; A. H. Sales, Salesville.
Barley and Oats:	C. F. Anderson, Belt; J. E. Morse, Dillon; P. R. Nash, Bozeman; James A. Potter, Bozeman.
Barley, Oats and Wheat:	E. M. Davidson, Belgrade; W. C. Newton, Bozeman; Daniel Payne. Monarch; Robert Scott, Sand Coulee.
Barley, Wheat, Oats, Rye and Speltz:	Experiment Station, Bozeman.
Barley, Wheat, Rye and Oats:	B. Bison, Great Falls.
Beans:	Frank Reno, Echo.
Beans and Peas:	Samuel Dick, Great Falls.
Bromus Inermis:	J. R. Krueger, Plains; Christ Prestby, Kalispell.
Hay—Alfalfa:	Paul McCormick, Billings.
Hay—Timothy:	J. M. Horan, Belt.
Hay:	Claud V. Flynn, Toston.
Hay Seed — Timothy:	Ed Peterson, Kibbey.
Irrigated Products:	Montana Commission.



# **Oats:**

F. K- Armstrong, Bozeman; A. M. Austin, Flathead; C. H. Austin, Flathead; O. H. Barnhill, Holt; Joseph Braith-vant. High wood; Henry Brush, Chinook; James Cook, Chinook; Wallace Cook, Chinook; C. R. Featherly, Dil-lon; John H. Green, Plains; Frank Harlem, Missoula; B. J. Heaney, St. Peter; J. M. Moran, Townsend; Carl In-nes, Dillon; Otis Johnson, Plains; J. H. Lamphear, Manhattan; C. H. Lind, Great Falls; Con Mannix, Town-send; Theodore Nelson, Dil-lon; Theodore Norman, Bozeman; C. B. Skidmore, Bozeman; G. W. Sparr, Bozeman; Leonard Stone. Central Park; Chas. Stephens, Highwood; J. H. Stubbs, Kalispell; M. D. Sullivan, Townsend; Otis Thompson. Plains; C. Van Wagen, Laurel, and M. L. Wade, Choteau.

Oats and Wheat:	C. M. Anderson, Belt; W. R. Callen, Monarch; Jacob Carolus, Bozeman; John C. Coulson, Cascade; C. A. Lee, Sand Coulee; J. J. Patterson, Truly; C. W. Winslow, Waterloo, and W. L. York, Riceville.
Vegetables—Col- lective Exhibit of:	Montana Commission.
Wheat:	Pete Fake, Eden; H. Hicke, Truly; G. P. Kessner, Stockett; Joe Manxer, Eden; Charles Morgan, Truly; John R. Ross, Great Falls.

At the Lewis and Clark Centennial Exposition, held at Portland, Oregon, in 1905, the State of Mon-tana was awarded a gold medal for "Educational Exhibit," gold medal for "Collective Exhibit of Grains and Grasses," gold medal for "Mineral Exhibit," and gold medal for "Gold Exhibit."

In the agricultural exhibit the following awards were made to Montana: Gold medals, 62; silver medals, 13; bronze medals, 2. Each exhibitor from Montana of horticultural products received a medal.

**PORTLAND EXPOSITION, 1905—GOLD MEDALS  
AWARDED TO MONTANA EXHIBITORS  
FOR AGRICULTURAL PRODUCTS.**

Barley :	Manhattan Malting Co. and J. P. Stone.
Barley and Oats;	J. E. Morse.
Barley and Wheat:	W. J. Bowers.
Barley and Timothy:	Ed Peterson.
Barley, Wheat and Oats:	Nash Bros, and C. R. Gearch.
Barley, Spring Rye, Wheat:	Manhattan Malting Co.
Bromus Grass Seed, Wheat, Oats and Flax:	C. Prestby.
Flax and Oats:	P. R. Nash.
Oats:	John Kinner, Mrs. A. Lock, J. Carolus, C. Van Wagner, W. A. Little, G. N. Featherly, John H. Stubbs, John Mc-Kennick, Pabst Steel, S. Holmstead, Thomas Bauers, Thomas Nelson, J. E. Morse, Clark Harlan, W. C. Newton, C. Mancat, George Bentley, C. W. Winslow, Carl Innes, Charles King and U. Marte.
Rye:	C. H. Campbell, E. E. Wilcox.
Rye and Wheat:	C. H. Lindle.
Timothy Seed:	J. C. Gibson.
Wheat-	Thomas Kening, A. C. Vanderpool, James Baker, S. D. Luce; S. Holmstead, H. F. Peterson, E. F. Mann, A. H. McMillan, Daniel Cummings, and George Sparrel.
Macaroni:	John Epperson.
Wheat and Oats;	John Baumgardner and Otis Johnson.



**PORTLAND EXPOSITION, 1905—MEDALS  
AWARDED TO MONTANA  
COUNTY EXHIBITS.**

County.	Kind of Medal	Medal Awarded For,
Beaverhead	Gold	Grains, Grasses and Decorated Panel.
Cascade	Gold	Grains and Grasses.
Flathead	Gold	Grains and Grasses.
Gallatin	Gold	Grains, and Grasses Used in Decoration of Panel.
Missoula	Silver	Grains, and Grasses in Sheaf and Decorated Panel.
Ravalli	Silver	Grains and Grasses. Grains and Grasses in
Yellowstone	Gold	Sheaf.

The products of the soil of Montana **are** of **such** superior quality that they **win prizes** wherever exhibited. At the Dry Farming Congress, held at Cheyenne in 1908, Montana exhibitors received most of the prizes, and Montana apples won prizes at the National Apple Show at Spokane in 1908.

**OUR BARLEY THE BEST IN THE WORLD.**

At the National Irrigation Congress, held at **Salt** Lake, the large, beautiful and costly Pabst cup was awarded to the Manhattan Malting Co., of Manhattan in Gallatin County, for the best brewing barley raised in the United States. The variety shown was<sup>1</sup> the Saale or Chevalier barley.

In 1899, Mr. Henry Altenbrand of New York, and Manhattan, Montana, who has been prominently connected with the malting business for twenty-five years, procured from Germany 2,000 bushels of Saale barley, a variety possessing superior malting qualities. This seed was planted in Wisconsin, Minnesota, Iowa, Illinois, New York and Montana. At the end of the season samples of the barley grown in these different states were carefully collected and compared with the original seed in the hope of finding a section of the country especially adapted for the growth of this cereal. All samples showed deterioration in quality and appearance except those grown in Montana, which showed wonderful improvement on the imported seed, being fuller, heavier in weight and brighter in color. It has become an important crop in Montana and has been exported in large quantities to England, Germany, Norway, Japan and Australia.

On its first appearance in Europe it created a sensation. In 1893 the Imperial German Government sent a commission to investigate the grain growing regions of the United States. The commission visited various parts of the country, including the Gallatin Valley in Montana. Prof- Delbruck, Chief Commissioner of the Department of Agriculture of Germany, was at the head of this commission and says in his report. "Barley that is damaged by rain is unknown here, for there is no rain; withered or dried-up barley is equally unknown for the Gallatin River furnishes water in abundance. A country and a system of cultivation ideal for barley growing; in fact, here I have seen the finest barley grown in the United States. For the most part Saale barley is used for seed and grown with admirable results: bright in color, large in size, fine as to husk, equal to the very best European barleys, and conspicuously superior among the barleys' of North America."

The cultivation of barley, which began in Gallatin County, has spread to other sections of the State with like abundant yields of the highest quality.

#### **FACTS AS TO QUANTITY.**

The awards of prizes prove the quality of the products of the soil of Montana, and the quantity produced per acre is attested by the official figures published by the United States Department of Agriculture. From the Year Book of the Department of Agriculture for 1907 (pages 621 et seq.) the following statistics are taken:

AVERAGE YIELD PER ACRE OF WHEAT IN THE UNITED STATES AND IN MONTANA, 1898 to 1907.											AVERAGE FARM VALUE PER ACRE OF OATS IN THE UNITED STATES AND IN MONTANA, 1898 to 1907.										
	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907		1898	1899	1900	1901	1902	1903	1904	1905	1906	1907
U. S. Average. . . Montana Average	15.3 29.5	12.3 25.7	12.3 26.6	15.0 26.5	14.5 26.0	12.9 28.2	12.5 23.9	14.5 23.8	15.5 24.0	14.0 28.8	U. S. Average. . . Montana Average	\$7.33 \$14.21	\$7.52 \$14.82	\$7.63 \$16.38	\$10.29 \$15.12	\$10.60 \$15.08	\$9.68 \$16.24	\$10.05 \$17.34	\$9.88 \$17.76	\$9.89 \$19.01	\$10.51 \$22.54
AVERAGE FARM VALUE PER ACRE OF WHEAT IN THE UNITED STATES AND IN MONTANA, 1893 to 1907.											AVERAGE YIELD PER ACRE OF BARLEY IN THE UNITED STATES AND IN MONTANA, 1898 to 1907.										
	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907		1898	1899	1900	1901	1902	1903	1904	1905	1906	1907
U. S. Average... Montana Average	\$8.92 \$17.11	\$7.17 \$15.68	\$7.61 \$16.23	\$9.37 \$17.76	\$9.14 \$16.12	\$8.96 \$18.61	\$11.58 \$21.28	\$10.83 \$16.90	\$10.37 \$15.36	\$12.26 \$23.33	U. S. Average. . . Montana Average	21.6 36.0	25.5 35.0	20.4 38.8	25.6 39.0	29.0 37.0	26.4 40.2	27.2 29.9	26.8 33.0	28.3 33.0	23.8 38.6
AVERAGE YIELD PER ACRE OF OATS IN THE UNITED STATES AND IN MONTANA, 1898 to 1907.											AVERAGE FARM VALUE PER ACRE OF BARLEY IN THE UNITED STATES AND IN MONTANA, 1898 to 1907.										
	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907		1898	1899	1900	1901	1902	1903	1904	1905	1906	1907
U.S. Average... Montana Average	28.4 40.6	30.2 38.0	29.5 39.0	25.8 42.0	34.5 41.9	28.4 46.4	32.1 37.7	34.0 41.3	31.12 43.2	23.7 49.0	U.S. Average. . . Montana Average	\$8.93 \$20.52	\$10.28 \$17.85	\$8.32 \$18.62	\$11.57 \$22.23	\$13.28 \$18.87	\$12.05 \$23.32	\$11.40 \$18.54	\$10.80 \$18.48	\$11.74 \$18.48	\$15.86 \$23.53

Of rye the average yield in bushels of the United States for the years 1901 to 1907 was: 15.3, 17.0, 15.4, 15.2, 16.5, 16.7, 16.4, having a farm value per acre of \$7.23, \$7.36, \$7.73, \$8.51, \$8.63, \$8.39, \$10.46, \$10.07, \$9.83, \$11.98. In Montana the average yield in bushels per acre was: 26.7, 25.0, 24.6, 19.9, 20.0, 20.5, 22.0; and the farm value per acre, \$16.02, \$16.00, \$15.50, \$15.32 \$13.00, \$13.53, \$15.24.

The average yield per acre of potatoes in the United States 1898 to 1907 in 'bushels was: 75.2, 88.6, 80.8, 65.5, 96.0, 84.7, 110.4, 87.0, 102.2, 95.4. In Montana the average yield per acre was: 104, 141, 134, 157, 153, 176, 143, 120, 152, 150. The average farm value per acre was in the United States: \$31.11, \$34.60, \$24.78, \$50.27, \$45.22, \$51.99, \$49.96, \$53.67, \$52.29, \$55.86. In Montana the average farm value per acre was: \$57.20, \$74.73, \$71.02, \$114.61, \$76.50, \$77.44, \$87.23, \$70.80, \$92.72, \$75.00.



A Field of Oats.

### **SOME STRIKING CONTRASTS.**

For the ten-year period, 1898 to 1907, in the principal wheat producing states the average farm value per acre of wheat was: Minnesota, \$8.74; Kansas, \$7.5C; North Dakota, \$7.71; Nebraska, \$9.85; Illinois, \$10.62. In Montana it was \$17.83. In barley, oats, corn, rye, potatoes and hay, Montana leads in a similar proportion. A statistician has compiled from figures published by the Department of Agriculture a table showing that Montana exceeds the average for Minnesota, Illinois, Iowa, Missouri and Nebraska in value of crop at farm per acre as follows: \$8.03 per acre in wheat or 83 per cent; \$10.09 per acre in barley or 105 per cent; \$8-30 per acre in oats or 105 per cent; \$5.03 per acre in corn or 51 per cent; \$4.70 per acre in rye or 52 per cent; \$32.78 per acre in potatoes or 91 per cent; \$18.60 per acre in hay or 208 per cent.

The following figures of crops for 1908 were taken from the Crop Reporter published by authority of the Secretary of Agriculture, December, 1908. In

1908 Montana produced 3,703,000 bushels of spring wheat on 153,000 acres which was valued December 1st at 86 cents a bushel which was worth at the farm \$3,185,000. The average yield was 24.2 bushels per acre. This is a return of \$26.81 per acre. Kansas produced 5.5 "bushels per acre of the same crop and Minnesota 12.8.

Of oats Montana produced 10,566,000 bushels on 254,000 acres, which was valued December 1st at 49 cents a bushel, a total of \$5,177,000. The average yield was 41.6 bushels per acre and the value per acre was \$20.38. In Montana 'grain is sold by the hundred pounds, and a bushel of oats weighs from 36 to 44 pounds, 32 pounds being the standard weight in the East. In Illinois, the greatest oat growing state, the average yield per acre was 23.0 bushels or a value per acre of \$10.81.

Of barley, Montana produced in 1908, 875,000 bushels. The average yield was 35.0 bushels per acre, valued at 65 cents a 'bushel, or a value per acre of \$22.75. In Minnesota, the greatest barley producing state, the value of the barley crop per acre was \$12.25.

Of flaxseed Montana produced 104,000 bushels on 9,000 acres. The average yield per acre was 11.5 bushels, the value per bushel \$1.00 and the value per acre \$11.50. In North Dakota, the greatest producer of this crop, the average per acre was 9.0 bushels and the average value per acre \$10.71.

Montana produced on 20,000 acres, 2,760,000 bushels of potatoes, an average of 138 bushels to the acre of a value of 70 cents a bushel, or \$96.60 to the acre. In New York, the greatest potato producing state, the average yield per acre was 82 bushels and the value of the crop per acre \$61.50.



A Little Bunch of Money-Makers,

Montana Wins at the National Corn Exposition,  
Omaha, Neb., Dec. 6 to 18, 1909.

Montana again showed her ability to cope with the best agricultural states in the Union by taking many prizes at the National Corn Exposition. The list of awards shown below is a great tribute to the intelligence of Montana's farmers, as well as a forceful demonstration of the fertile soil and favorable climate.

**Competition Open to the World.**

- Best Sheaf Blue Stem Wheat—  
Second—M. Baker, Cascade, Montana.
- Best Sheaf Durum Wheat—  
Third—Broadview Seed Co., Broadview, Montana.
- Best Sheaf Red Winter Wheat—First—S. K. Kloch,  
Great Falls, Montana,
- Best Sheaf, Other Than Fife, Blue Stem, Hard  
Winter, Durum or Red Winter Varieties—  
First—Geo. B. Manning, Kalispell, Montana.
- Best Sheaf White Oats—  
Third—Nelson Barry, Kalispell, Montana.
- Best Sheaf Two Row Barley—  
First—Gus Siegeling, Armington, Montana.
- Best Sheaf Field Peas—  
First—H. F. Albrecht, Kalispell, Montana.  
Second—L. L. Smith, Eureka, Montana.
- Best Peck Alfalfa Seed—  
Second Lohr Bros., Tampico, Montana.  
Third—J. Griffin, Chinook, Montana.
- Best Bale Alfalfa—Ninth—H. O'Hanlon,  
Chinook, Montana,
- Best Four-Inch Sheaf Upland Wild Hay—Second<sup>1</sup>—  
M. Stringfellow, Havre, Montana. Third—J. M.  
Croft, Stanford, Montana. Fourth—Gus  
Siegeling, Armington, Montana.
- Best Bale Upland Wild Hay—  
First—J. T. Laugh, Stanford, Montana.
- Best Peck Navy or Pea Beans—  
First—Gus Siegeling, Armington, Montana.
- Best Peck Marrow Fat Peas— First—B.  
F. Booker, Helena, Montana.
- Best Peck Field Peas, Navy Varieties—  
First—H. O. Alberts, Kalispell, Montana.

**Sweepstakes, Open to States in Western Zone.**

- Best Peck Wheat—  
Won by Gus Siegeling, Armington, Montana.
- Best Ten Ears Corn Raised by Dry Farming  
Methods—Third—W. M. Wooldridge, Hinsdale,  
Montana.



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Montana's climate is mild. The soil is fertile. Transportation facilities are good.

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**S. J. Ellison,**  
Genl Pasgr. Agt.  
ST. PAUL,



**1C. C. Leedy,**  
Gen. Immigrat'n Ag.  
ST. PAUL.