

TIMELY TOPICS OF THE FARM, FIELD AND ORCHARD

DRY FARM CONGRESS TO MEET

SPOKANE TO ENTERTAIN ORGANIZATION IN OCTOBER—GOOD RESULTS EXPECTED.

With the dry farming movement, represented in its concrete form by the Dry Farming congress, embracing every country on the globe where arable land is being developed or awaiting settlement, but handicapped by limited or deficient rainfall, many people are asking how it started; what is back of it; who is responsible for it; what has it done; and what does it mean for the future of humanity? It is the intention of the writer to present in this and succeeding articles, a resume of the facts concerning dry farming.

Preparations.

Every community in the Inland Empire is interested in this subject now, because the fifth Dry Farming congress and International Dry Farming exposition will take place in Spokane during the week of October 3, 1910. John T. Burns, secretary-treasurer has established the international headquarters of the organization in Spokane, where the Dry Farming congress bulletin, the official journal, is published twice a month. All the literature of the congress is issued and the correspondence which keeps the office in touch with the agricultural development of governments in all parts of the world and with farmers and scientific agriculturists everywhere, is conducted from these headquarters.

Dry Farming.

Dry farming has been practiced in parts of the west for more than half a century. Utah and California are rivals in claiming the earliest dry farmers in the western United States. In eastern Washington and eastern Oregon, successful crops have been raised without irrigation under limited precipitation for more than a quarter of a century. Nearly two decades ago pioneer farmers began invading the cattle ranges of eastern Colorado and Wyoming. They were not encouraged, and their daring efforts resulted in some of the tragedies of the plains. Western Kansas and Nebraska have had dry land farmers for many years and Montana has given the west some notable pioneers in this new agriculture. Large areas of the Dakotas have been conquered by dry farming. Today in all these states and in Texas, New Mexico, Arizona, Nevada, Oklahoma and Idaho the dry farmer is recognized as the great factor in the permanent prosperity of the west and dry farming principles are regarded as essential to the agricultural supremacy of the nation.

Trials.

The beginnings were discouraging. The first ripples of the great tide of western emigration crept upward over the eastern slope of the Rockies more like harbingers of an inexorable flood of disaster, than the presage of a sun-kissed ocean of peaceful prosperity. In the exploitation of the dry lands, of eastern Colorado a few years ago, when real estate speculators were luring settlers from the east with glowing descriptions and fulsome promises, there was threatened a repetition of the failures that only a few years before had wrung heart-rending appeals from "bleeding Kansas."

The settlers came. Homesteaders built their shacks amid the sagebrush and turned their furrows where the alkali reflected the blinding sun glare by day and the coyote howled dismally by night. Many of them failed. Not because the land was poor, not because climatic conditions made agriculture impossible.

Failures.

They failed because they did not know dry farming. Colonies were established in eastern Colorado and the settlers left to shift for themselves. They found themselves in unfamiliar environment, confronting new, unexpected conditions. Their first crops were failures. They had no resources to carry them through until they might solve the problems they faced. Trainload after trainload of supplies were sent to their relief and many were taken back to their former homes in the east. All because the settlers did not know how to farm in an essentially dry farming region.

But the settlers continued to come. Some of them did not fail. Some knew what to do, studied their conditions and adapted their farming methods to their conditions, and succeeded. The few proved that the country was good and that agriculture was possible in the so-called desert.

Mr. Burns was secretary of the Colorado State Commercial association when the emigration to the eastern part of the state began to assume dangerous proportions and to threaten disaster, not only to the settlers, but to the state. It failed about swampy entire colonies. He drew attention to

the situation and a convention was called to organize the Transmissourian Dry Farming congress at Denver in January, 1907. Its purpose was to investigate the exploitation of the dry lands and to discover what there might be in the dry farming which was then beginning to attract notice.

Ignorance.

That convention brought together dry farming advocates from several western states. It was learned that the experience of the eastern Colorado settlers, like that of those in Kansas, Nebraska and the Dakotas in the days of hardship and famine in those states, was the result of ignorance of the principles underlying dry farming. It was discovered that farmers who followed moisture conserving methods of tillage did not fail. It was perceived that the secret of success in dry farming in eastern Colorado was in knowing how to farm under dry farming conditions.

Corollary to this, it followed that the secret of saving the settlers and the western states from disaster through ill-advised colonization of the dry lands, lay in the education of the settlers in dry farming methods.

Scope.

Naturally, an economic problem like this involved in the settlement of the vacant lands and the building up of agricultural industry in districts where rainfall was so slight as to seemingly justify the term desert which so long had been applied to the greater portion of the west, could not be limited to eastern Colorado or western United States. The congress started communication with government officials in other countries where similar conditions prevailed. At the third Transmissourian Dry Farming congress at Cheyenne, Wyo., in February, 1909, representatives of seven foreign countries participated. Dry farming became a world question and the organization became the Dry Farming congress, international in scope, with many nations represented on its official roster.

The movement has gained phenomenal prestige in the last three years, but its present eminence has not been gained without struggles. Its beginning was inauspicious. Three years ago there were few people, except the farmers who had "made good" on dry land homesteads, who seriously believed there was anything in dry farming. The idea of raising crops with less than 20 inches annual precipitation was scouted and when farmers said they had raised crops with 10 inches annual precipitation their sanity or their veracity was questioned.

The Congress.

The Transmissourian Dry Farming congress had no definite organization its first year and only elementary from its second. It started without financial support and drifted aimlessly until the Utah meeting in January, 1908. The possibilities of the movement attracted attention and resulted in an outline of plans for a definite purposeful organization.

The movement was regarded in many quarters as emanating from land promotion offices, fostered either by impractical theorists or dangerously practical speculators for selfish ends. Its mission was misunderstood and its work cavilled. A few took it seriously and carried on the work as best they could with the limited means at their command. A publicity campaign was started and the facts about the west, the farmers, the regions in which dry farming was practiced, and the successes and failures were given to the press of the country. At the same time there was started a campaign to interest the farmers of the dry land states and those who joined the movement were given such instruction as could be obtained regarding the methods.

Results.

Scientific agriculturists, a few of whom had been studying the dry land problems for years on their own initiative, were interested and their assistance secured in giving the necessary education to the western settlers. Farmers who had "made good" and those who were conscientiously applying dry farming principles and getting results, were encouraged to give others the benefit of their experiences. The failures were studied and investigated, to learn the causes, so that others might be warned and recurrence of failure prevented.

All this work has borne fruit in the present organization. The dry farmers of the western states have demonstrated that they can raise successful crops with limited precipitation. They have joined hands in the Dry Farming congress to show others how this can be done and have established an organization which has for its ultimate object the development of agriculture on the basis of scientific acriculture.

MITCHELL MAKES AN APPEAL.

John Mitchell, who is still a vice president of the American Federation of Labor, has come out with an appeal to the organized workers in this country to do missionary work to get others to join the ranks of organized labor, with a view of improving the general labor conditions.

READY TO CAPTURE BIG PRIZES



DOUBLE WHEAT CROP SAYS WORST

PRESIDENT OF NORTH DAKOTA COLLEGE TELLS OF GOOD DRY FARMING RESULTS.

That modern methods of dry farming would add \$51,329,000 to the farm value of the wheat field of North Dakota, is asserted by Dr. J. H. Worst, president of the North Dakota Agricultural college, declares the Iowa Homestead. North Dakota had 6,625,000 acres of wheat last year; the production totaled 99,762,000 bushels, an average of 13.7 bushels an acre, and the farm value of the crop December 1st, was \$83,501,000, according to the Year Book of the department of agriculture for 1909.

Under modern scientific dry farm methods, Dr. Worst asserts, the acre average yield should be 22.2 bushels. On 6,625,000 acres this average would give total production of 147,267,500 bushels, an increase of 56,445,500 bushels over the actual yield last year. As computed by the United States department of agriculture, at practically 92 cents a bushel, the farm value of the possible crop would be \$135,430,000, an increase of \$51,929,000 over the figures as given for 1909.

Dr. Worst bases his estimate of the acre average production under dry farm methods upon the results of experimental work carried on at 24 stations conducted under the direct supervision of the state agricultural college. At each of these stations 24 acres are devoted to experimental work with small grains and other crops in rotation. Four five-acre tracts at each station are used for different crops. The crops used in the rotation are clover, oats, Canadian field peas, corn and wheat.

Five-year rotations have been practiced at the stations. Clover or field peas have been planted the first year and the crop cut for hay; corn was the second year crop; then wheat was grown for two years and the fifth year oats. The tracts were treated with manure the first year and the plan is to repeat this treatment every five years, using five to ten wagon-loads to the acre, according to the soil conditions.

Deep plowing is practiced wherever possible. In the drier sections the ground is broken six inches deep and arrowed once immediately after plowing. It is harrowed after each rain to conserve the moisture. A press drill is used for seeding. When the crop is up three inches a weeder is used. Only pedigreed seed is used on the experiment farms. The seed is treated with formaldehyde. Light seeding is the rule.

The experiment stations have been divided into sections, so that variations in the rotations can be tried and comparative results noted. For example, at one set of stations wheat is a first year crop, at others the second and third years. At the first year stations the results are practically the same as those obtained by the farmer in actual practice on farms. The results with wheat follow: First year stations, 14.4 bushels an acre; third year stations, 22.2 bushels; fourth year stations, 22.49 bushels.

CATTLE-POISONING PLANTS

KNOWLEDGE OF FORAGE GROWTH THAT IS ESSENTIAL IN FEEDING STOCK.

Frequently the farmer and the dairyman lose valuable cattle in what seems the most mysterious fashion, but science has now come to their aid in explaining that many of the common trees and plants found in meadow-land are violent poisons. In fact, the leaves of the yew, box, ivy, elder, wistaria, walnut, juniper, beech, oak, black alder, buckthorn and peach are poisonous to cattle.

The leaves of the peach tree are especially dangerous as they contain a high percentage of prussic or hydrocyanic acid which is a most violent poison. A solution of peach leaves, or rather an infusion made from them would have killed the ancient Greek philosopher Socrates far more rapidly than the fatal "hemlock" of classic memory.

But the trees are not the only dangerous vegetation in meadows. There are the poppy, the fennel flower, meadow saffron, dandelion, cornflower and vetch. Now many of these are found in meadows frequently in most dangerous abundance.

All of the poppy is poisonous, and the cattle that have fed on it die quickly standing upright in a true opium stupor until they fall down to die in a few moments of asphyxia. The

Basin. Dry farming is based upon the principle of conservation of moisture in the soil. According to the methods used by dry land farmers in the semi-arid west, the conservation of moisture in the soil is accomplished by systematic tillage. Deep plowing so that the falling moisture may penetrate the earth to the greatest depth, is one of the fundamental principles of all successful dry farming systems. Systematic cultivation of the surface to maintain a mulch, or dust blanket, is the supplemental principle applied to retain the moisture in the soil.

The deep plowing and systematic cultivation of the soil reservoir for storing indefinitely the bulk of the moisture that falls upon the ground in the form of rain or snow and that the conservation of moisture in the soil by these methods makes agriculture in the semi-arid sections of the west where the rainfall is extremely limited, not only possible, but profitable, is attested by Dr. V. T. Cooke, state director of dry farming experiments of Wyoming; Congressman Frank W. Mondell, of Wyoming, president of the Dry Farming congress, and thousands of practical farmers who have been successfully producing crops by dry farming methods in districts with limited rainfall during periods ranging from three to 40 years.

HEAVIEST HORSE EVER SHIPPED

A FINE PERCHERON COMES TO AMERICA FROM WELL-KNOWN FARM IN FRANCE.

Vance Thompson, in his Paris letter to American papers, says: The biggest horse that ever went across the ocean left France today to sail on an Atlantic Transport liner for New York. He is Galba, a big black Percheron stallion, born at Nogent le Rotrou in April, 1900. He weighs 2,500 pounds, is 18 hands high, and so broad across the back that he looks like a barn door. There is not a white hair on him.

This enormous black horse has been known in the horse-raising district of France for the last few years as "Black Beauty." The price paid for him was \$10,000. Galba is not a gentle beast. He was brought to Paris by a special car, and special gangways were built to get him from the cross-channel boat to the Thames dock.

Colonel James B. McLaughlin, of Columbus, Ohio, who has taken over big horses to America for the last 20 years, and who has thus created in the United States the heavy draft horse type, says: "Galba is the biggest horse I have ever seen."

If all goes well with the Minnesota steamship, Galba will land in New York about August 16. The French government is greatly interested in the export of big French horses to America, and has made Colonel McLaughlin Chevalier of the Legion of Honor, also commander of Merit Agricola. The colonel, with the red ribbon of the Legion of Honor and the biggest horse in the world, are on the same steamer.

CROP SHOWING GOOD FOR DRY YEAR

GOVERNMENT REPORT FOR JULY GIVES SOME INTERESTING COMPARATIVE ESTIMATES.

The Crop Reporting board of the bureau of statistics of the United States department of agriculture estimates, from reports of the correspondents and agents of the bureau, which, boiled down indicate the following conditions: The average condition of corn August 1, was 79.3, as compared with 85.4 last month, 84.4 August 1, 1909, and 82.1 the average, August 1 for the past ten years.

Preliminary returns indicate a yield of about 15.8 bushels per acre, or a total of about 458,294,000 bushels, as compared with 15.8 and 446,368,000 bushels, respectively, as finally estimated last year. The average quality of the crop is 92.6, against 90.3 last year.

The average condition of spring wheat, August 1, was 61.9, as compared with 61.6 last month, 61.6 August 1, 1909, and 61.9 the ten-year average, August 1.

The average condition of the oat crop August 1, was 81.5, as compared with 82.2 last month, 85.5, August 1, 1909, 78.8, August 1, 1908, and 82.6 the ten-year average, August 1.

The proportion of last year's oat crop in farmer's hands on August 1 was about 6.3 per cent, or 43,249,000 bushels, as compared with 3.3 per cent (26,323,000) bushels of the 1908 crop on hand August 1, 1909, and 5.8 per cent (56,394,000 bushels), the average proportion on hand for the past ten years, August 1.

The average condition of barley on August 1 was 70.6, as compared with 73.7 last month, 85.4, August 1, 1909, 83.1, August 1, 1908, and 85.3 the ten-year average, August 1. About 7,263,600 bushels, or 4.3 per cent of the 1909 crop was on farms August 1.

The average condition of white potatoes, August 1 was 75.8, as compared with 86.3 last month, 85.8, August 1, 1909, 82.9, August 1, 1908, and 86.0 the ten-year average, August 1.

The preliminary estimate of the average of hay is 45,005,000 acres or 1.6 per cent (739,000 acres) less than last year.

The average condition of the hay crop on August 1 was 83.0, as compared with 80.2 last month, 86.8, August 1, 1909, 92.1, August 1, 1908, and a ten-year average August 1 of approximately 87.2.

The condition of the apple crop, August 1 was 47.8, as compared with 48.6 last month, 46.3 August 1, 1909, 52.2, August 1, 1908, and 55.4 the ten-year average, August 1.

LARGEST BUTTERFLY.

The largest butterfly in the world is found in British New Guinea and the best specimens are worth from \$100 up. The male measures eight inches across the wings, and the females often measure 11 inches. About a year ago there was a party of scientists organized in England to go in search of the wonderful butterflies. The expedition cost several thousand dollars and two members of the party fell victims to cannibals. But several specimens were obtained, one of them being shot with a rifle.

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The "Don't Need to" Theory

In a recent debate at Reno, Mr. James Jeffries failed to convince Mr. John Johnson. Some seven or eight years ago Mr. Jeffries was the leading man in his line of work. Business was good and profits were big. Having all the money he could handle at the time, he concluded to take a rest. To be sure, he planned to get into the field again at the proper time. But everything was rosy and there really seemed no good and sufficient reason why he should spend so many hours a day keeping his muscles lithe and strong and his wind good and his heart and nerves in trim. Eventually the meeting with Mr. Johnson was arranged. Mr. Jeffries was still tolerably content with what he had done. (Brother, a has-done is about as bad as a has-been.) Mr. Jeffries did not care to stand up in the training ring and punch and take punches. He did not see any necessity of practicing side-steps and feints and rushes. He knew all about them. Why, seven years ago he had done all of that he ever needed to do. Mr. Johnson did not overlook the boxing and the wrestling and the clinching and the side-stepping, etc. As a result, Mr. Jeffries received Mr. Johnson's compliments on the point of the jaw, and his business career closed. Advertising a business is the training of that business. Advertising keeps a business healthy. It tones up its liver, strengthens its biceps, steadies its heart and keeps its nerves in order. Once in a while a man decides that he is doing so much business that he can stop advertising for a while and run on momentum. Momentum is the gradual process toward a full stop. The momentum business is usually prematurely full-stopped by the straight left jab of the well-trained competitor who finds his opening in the fifteenth round. If you want to stay in business stay in the advertising field. No matter how much business you are doing, keep up the energy that makes it. You might as well cut off your legs because you are running well in a foot race as to cut off your advertising because your business is too good. You might as well tell the insurance man that you are so healthy you will drop the policy for a few years as to stop advertising because the orders are piling up. "Don't need to" is the eventual preliminary to "Can't do it." The only man who doesn't need to advertise is the man who has retired from business. The only policy holder who doesn't need to pay his premiums is dead. Mr. Jeffries doesn't need to train any more. He is licked.