

Nephi, the Dry Farming Wonder

OPPORTUNITY opens wide and the blasts of trumpets give the final call to the great west which in but a few more years will be gone—yes, gone as far as original settlement is concerned; gone if opportunity in its present unprecedented brilliancy is essential to the seeking of a new home.

Other cities have mammoth irrigation projects to proffer the investor, still more have land that needs little improvement to make its value great, but in few can be found land which permits both the making of improvements by private effort and yet requires practically no capital to put it on a thriving paying basis. Such, however, is Nephi, the dry farming wonder of the south.

It is a city of about 3,000 population, situated in the southern end of

done. Not relying on the rains, though, it is the aim of the dry farmer to conserve with this much, the moisture that has accumulated through the winter. Thus with proper conservation of moisture, dry farming is not actually dry farming at all, but wet farming using the moisture that has been saved within the ground rather than in reservoirs to be used to flood the land.

GROUND MUST BE READY.

Experiments in time of planting confront the expert with his most trying task, for never are two seasons just alike, and the time of planting seems to depend entirely upon the rains. The experiments have shown one thing to be paramount. The thrifty farmer must at the approach of planting time, have his ground all ready for the planting. It must be kept ready so that at a moment's notice the seed may be placed in the prepared ground. He must have his animals ready. He must have his

30 bushels to the acre will give \$3,400,000 worth of wheat to the food consuming public with the money in the bank for the farmer.

STILL IN ITS INFANCY.

Scientific dry farming is only six years old in Utah, and Utah leads all other states. It was the first state to support dry farm experiment stations and has been followed by Oregon and Montana in the west. The results are being closely watched by the department of agriculture and much aid is being received from the general government in the support of the station at Nephi. Other stations are located at Tooele, Enterprise, Parowan, Richfield and Monticello, and the success of all is great. The interest of farmers in the stations is gratifying and the future is full of promise.

The Grace Brothers who own about 500 acres in the vicinity, are getting wealthy from their dry farm. They

keatable product. The market for this product is in Utah, Idaho, Nevada, California, Oregon and Montana. It is used for hard wall plaster in construction, fibred plaster, plaster of Paris, and as a fertilizer.

The broken down gypsum is shot down the mountainside by aerial trains to the mill, which is automatic in operation, and the finished product is hauled to the railroad at Jumb with a huge traction engine with two traction wagons, each with a capacity of 25 tons, and making two round trips a day.

Gypsum is a hydrous sulphate of lime, made up of one molecule of lime sulphate combined with two molecules of water. Commercial gypsum is not usually so pure as this, often carrying high percentage of clay, limestone, iron ore, and iron oxide. Pure gypsum is white and when in a crystalline form, translucent. The impurities which it commonly contains usually destroy its transparency and affect its color, so that the mineral as mined is an opaque, finely grained mass, varying from white to reddish, gray, or brown in color. That near Nephi is gray. Gypsum can readily be distinguished from other minerals by its extreme softness for even when in the crystalline form it can be scratched by the finger nail.

The gypsum found at Nephi is of massive rock variety. Alabaster, itself, is merely a pure, white, fine grained massive gypsum, and as it is used extensively in statuary, the commercial importance of the Nephi deposit can well be estimated.

SALT DEPOSITS.

The rock gypsum at Nephi occurs in the form of beds, associated with beds of rock salt and interstratified with these beds of limestone and thicker beds of red shale. The gypsum beds vary in thickness from six to 60 feet. The beds at Nephi were caused by the gradual evaporation of Lake Bonneville, which carried much lime sulphate in solution. In fact any water carries as its three commonest constituents, lime carbonate, lime sulphate, and sodium chloride; and when evaporated deposits of limestone, gypsum and common salt are the results.

From gypsum, several varieties of plaster are produced. The calcinating of gypsum, no foreign materials being added either during or after calcination, produces plaster of Paris. The calcinating of gypsum containing impurities or by the adding to the calcined pure gypsum certain materials which serve to retard the set of the product, produces cement plaster. The calcinating of pure gypsum at a temperature exceeding 400 degrees F. produces floor plaster and the calcinating at red hot or over of gypsum to which certain substances (usually alum or borax) have been added, produces hard-finish plaster. These are all plasters of great commercial value.

The Nephi Plaster & Manufacturing company, whose plant was destroyed by fire last year, has constructed a new steel plant at a cost of \$55,000, with a capacity of 200 tons.

Salt springs containing pure salt in solution are situated in Salt Creek canyon, 12 miles northwest of Nephi. At one time a \$20,000 company was organized to promote the industry, and though a refining plant was erected and an excellent quality of salt produced, the salt syndicate bought the property and tore the buildings down. This was on account of no merit in the spring itself, but rather merely a maneuver in the light for control of prices. The salt impregnated water still issues in profusion from the spring awaiting only the hand of willing capital.

STONE QUARRIES.

Among the many resources of Nephi, none are capable of greater development than the stone quarries—one a red sandstone taken from Dog valley 10 miles west, the other a reddish brown stone taken from the vicinity of Mt. Nebo, the latter being the quarry that furnished the stone which the Deseret News building of Salt Lake City is constructed. Both of these quarries are at present being utilized for local consumption, though for some years there was a railway to the Mt. Nebo quarry, it has for some unaccountable reason been torn up. There is, therefore, great room for judicious investment in this respect for the Mt. Nebo rock is very hard and excellent; in fact it is considered the best building stone in the state where cost is not the first consideration.

There are some oil wells just south of Nephi, though at present the industry is in abeyance as far as commercial importance is concerned.

NEPHI'S ATTRACTIONS.

As to the city itself, many new buildings have recently been constructed; and there are indications on every hand of improvement and progress. Nephi has a water system, electric lights, new pavements, and a commercial club. The schools of Nephi rank among the very best in the intermountain west; indeed, they do not compare favorably with the best in the country. There are three large school buildings and a school population of nearly 700.

The Nephi High School, in its twelfth year—is considered by many to be the best in the state. A four-year course is given with studies in English, algebra, trigonometry, geometry, physics, chemistry, political economy, as well as other studies. Such an institution is of course a great credit to the city.

Nephi has two churches, Latter-day Saints and Presbyterian, and of the Latter-day Saints there are two, the I. O. O. F. and Woodmen.

There is ample diversion about the city. Ducks are plentiful west of the city; rabbits are abundant; chickens and geese are in the mountains; there are trout in Salt Creek, and black bass at Monticello, north of the city, and at Mt. Nebo reservoir. There are also some deer in the mountains.

Nephi has two railroads—two passenger trains each way a day on the San Pedro and one train a day to Mantt. There is a fine army and one of the oldest national guard companies in the state.

There is opportunity for a laundry, a cannery, a cereal food plant, another flour mill, a knitting factory, a good hotel, another plaster plant and a mining stock branch, besides a coal company.

MIXED METAPHOR.

The Wonderful Feet That Was Performed by a Bottle.

An amateur historian is responsible for this: "All along the ever flowing stream of history you can discern the silent footprints of the crowned heads of Europe."

The village reporter on the death of the village poet: "That dauntless pen shall write no more, for his eyes are closed forever."

From the speech of a rising young politician: "The fierce light of public opinion shall dog their footsteps until it strangles them. Then shall they swallow the bitter pill and drink its very dregs."

Advice and warning from a successful man of business to a gathering of young people: "Every rung in the ladder of success is paved with slippery stones, on which only the clear head and the steady hand can retain their footing."

The fearless suffragette was addressing a meeting of mere men. She had

"Oh My, They are Good"

The Reason--McDonald's



The Best of Xmas Gifts

McDonald's
World Famous Chocolates

Just as Good as McDonald's Cocoa.

WHERE PURE MILK IS PRODUCED



VIEW OF THE BEN R. ELDRIDGE DAIRY, FOURTEENTH SOUTH AND WEST TEMPLE.

With a whole nation wrought up to the highest pitch in the making of pure food laws, investigations and enforcement, with a public which is becoming more and more conversant with scientific sanitation, the rules of health and the ravages of the deadly but invisible microbes; and last but not least, with the knowledge that for malady and other preservatives may be put into milk, keeping it sweet to the taste but not delaying for a moment the growth of death-dealing germs, which he thus hidden as a viper in sweet smelling clover—with all these facts and this knowledge, one sighs with unmitigated relief when shown what one knows to be an honest dairy. To know that the milk left at one's door is as pure as when it left its healthy producer; to know that it is not adulterated with water; to know that it is not at one and the same time both sweet and virulent (as it would be were formaldehyde the cause of its not going sour in reasonable time)—to know these things is to feel that baby is safe, that the delights of sweet milk and delicious cream are not lost.

The Ben R. Eldridge dairy at Fourteenth South and West Temple is such a dairy. It has been tried and tested and found worthy of its highest recommendation. When the government requirement is 45 points out of a possible hundred and the Eldridge dairy under the most rigorous examination scores 88½ points, its status as a reputable dairy, a paragon for others to imitate, is thoroughly established. The government cannot be fooled; its agents are, as a rule, hard and cold in their scientific announcement of fact; therefore no praise that can be given is so strong as this one governmental dictum.

Throughout the Eldridge dairy is evidence of that strict sanitation which the inspector's score attests. In whitewashed sheds are five stanchions of healthy, well groomed cows, prize winning Jerseys, shorthorns and fresh, there being a delightful scent of hay and a busy rumble of vigorous feeders. The fodder and hay is fed from a cemented manger in an apportioned amount essential to health and productiveness.

There is not a sickly cow in the herd as tuberculin tests are made semi-annually and any cattle showing unsavory symptoms immediately discarded. The typical cow has a large udder with large soft milk veins, a visible vertebrae, loose hide and solid flesh.

The milkers wear white aprons and the milk pails have only an aperture at the top. Udders and flanks are carefully washed before the milking begins, making every possible assurance of cleanliness.

In the straining room the milk is strained through a closely woven sheeting and the individual product for the milking, weighed.

The milk room, carefully screened and cemented, with abundance of fresh water flowing through it, is well equipped for the cooling process through the expensive and greatly improved cooler a fly is any unknown quantity so rigorously he is shut out of the equation; in fact the place has the immaculate appearance of the kitchen of a most scrupulous housewife.

In the next room hundred of bottles are undergoing the cleaning and necessary to counteract the careless ness of some lazy housewife.

Outside the wagons are all scrubbed daily, and in fact from meadow to home the milk is assured the strictest of cleanliness. In handling any expectation on the part of an employee is equivalent to a discharge. In the spring, summer and autumn the cows roam browsing about the sweet smelling meadows visiting the yards and fields. Wouldn't you like a glass of milk daily from such a dairy?

graphically related to them the fascinating story of the strenuous struggle the ladies had made for that most priceless of possessions, a vote; how every obstacle had been conquered and victory was at last in sight. "We have now," she shrieked, "almost crossed the trackless desert, and the harbor lights are stretching out their arms to greet us!"

The temperance advocate was giving a striking but a true picture of the vast amount of evil wrought by the demon of drink, and the fact that he occasionally got somewhat mixed in his metaphors did not derogate from the truth that underlay his remarks. "What is the greatest devastating agent of our time?" he asked. "It is the bottle, which smiles genially before your face while at the same time it is stabbing you in the back."—T. P.'s London Weekly.

J C. HEESCH,

MODERN

Plumbing and Heating

118 West Second South St.

SALT LAKE CITY.

STREET SCENE IN NEPHI.

Jumb valley, at a point about 92 miles south of Salt Lake City, and at the eastern side of Jumb valley of which it is the county seat. It lies at the foot of Mt. Nebo, a towering snow-covered peak of 12,000 feet height, which forms the south end of the great Wasatch range.

Nephi, from a standpoint of municipal progress, educational advancement, and thrifty husbandry, vies with any city of similar size in the whole intermountain region. Its resources are as varied as those of any city in America, as they include not only farming, wells, salt mines, salt springs, stone quarries, mining, gypsum, timbering and the raising of sheep and cattle on an extensive scale.

Nephi is now attracting the attention of the world to its extensive operations in dry farming. This has reached its present stage through series of experiments carried on by experts and government officials. It is considered without doubt the greatest dry farming district in the state and consequently in the world.

300,000 ACRES AVAILABLE. Only about half of the available land is under cultivation as yet; and this is why Nephi is the realization of the homesteaders' dream, this Arcadia in the western part of the county there are about 300,000 acres some of it mountainous some semi-arid, but all usable under the scientific methods now employed. This land can be purchased from the state at \$2.50 per acre, while dry farming land near Nephi sells at from \$10 to \$25 according to location and the texture of the soil.

As to the industrial result of dry farming, a statement made by Senator Hyde is of great significance.

"After the panic and just before, I believe Jumb county was in worse shape than any other section of the state. Many homes were placarded with 'for sale' and 'for rent' cards, people were moving away in search of employment, especially the younger men, business houses were doing scarcely any volume of business, and the spirit of depression was general among all classes. It was soon after that, that the results of the state experiment station attracted the attention of farmers and young men here and the Paxman and Grace farms and many others were begun. It seemed as if it were a miracle, but it was not. No sooner was the sagebrush grubbed from the wide stretches of land, the plow and harrow at work crops in and then sprouting, than all was changed. Our young men returned. Thousands of acres of land were reclaimed and prosperity seemed to descend upon us. Now after three or four years of dry farming there is scarcely a home for sale in this entire city, hardly a home that can be rented and instead we see on almost every hand a cottage springing up for some newly married couple or some family which has emerged from its former poor condition and is now prospering and preparing to enjoy the fruits of this prosperity."

U. S. EXPERIMENT STATION.

Senator Hyde, answering a question declared that the government experiment station, like the one at Nephi, must not be looked upon as model farms. This is not their purpose. They are to determine things which must not be done as well as to indicate the right way of doing things. He declared that there were many failures on these experiment stations, and that if the farmers would profit by these failures, they would not suffer the losses that otherwise would follow. In following the methods that have brought success they will achieve success, he said. The failures are as important as the successes, and should be regarded as such.

According to Mr. "Dave" Farrell of the experiment station the three most prominent factors in successful dry farming are conservation of moisture, time of planting and selection of seed. Experiments along all three things are constantly being made at the station and the results are made of record for guidance in the future. The method of procedure is as follows:

CONSERVATION OF MOISTURE.

To conserve moisture, land is plowed to different depths and then covered with a mulch of varying thickness. This mulch is regarded as the most important factor of all in dry farming. Its purpose is to make air tight, heat tight and water tight the soil under it. It acts as a cover over the plowed ground and stops the earnest rays of sun heat into the damp ground beneath it. It prevents the evaporation of water through it. It allowed to dry after a rain it cures hard and then cracks, allowing the moisture to pass away in vapor through the cracks. To affect this, after a rain, it is harrowed and again made soft to cover the moist ground. A slight rain is regarded more as a misfortune in dry farming than a blessing, but after sowing the seed after a heavy rain the precipitation is conserved and much good is thereby

help awaiting their call. He must have his eye on the clouds, the sun and the ground, for never are two seasons just alike, and the time of planting seems to depend entirely upon the rains. The experiments have shown one thing to be paramount. The thrifty farmer must at the approach of planting time, have his ground all ready for the planting. It must be kept ready so that at a moment's notice the seed may be placed in the prepared ground. He must have his animals ready. He must have his

Similar tests are made with different seeds. Countless seeds from selected lots may be planted with regard to the size of the seed. Small seeds may be in one row, larger seeds in another, still larger seeds in another and so on throughout the test. The harvest result compared with the record will show which class of seeds has produced the best results. In passing, Mr. Farrell declares that the result of his experiments have shown that for a given class of seed, the largest seeds of the class produce the best results.

Of two different classes, however, he declares that the class producing the largest seeds is not necessarily the one which will give the best harvest. But, in a given class, the larger seeds of this class give the best results. "Blood will tell," even in wheat.

STATE TEST WELLS.

Test wells being driven by the state are also of interest to dry farmers. The flow may not be great from these wells, but with pumps and reservoirs dry farming may be revolutionized in many sections of the state where rains are scarce and streams unknown. In Dog valley just over the range west of Nephi is a well which when pumped by a gasoline engine produces 14 gallons a minute thus supplying the farmers with water for culinary purposes. On the Levan ridge, the state is working on an artesian well which if successful will obviate the necessity of hauling water from Nephi to that point.

There are in Jumb county 20,000 acres under dry farm cultivation and the experiment station officials point out that if the yield on these dry farms can be increased only as much as one bushel to the acre by using scientific methods, it will mean at the least \$20,000 added to the farmer's bank account and 20,000 bushels more of wheat added to the food supply. There are 60,000 acres bought to be cultivated next season, making 80,000 in all and there are 200,000 acres in the valley which should be cultivated before two years more have passed. These 280,000 acres with an average yield of

are able, thrifty men, who are alert enough to take advantage of the latest success of the experiments. J. W. Paxman, also a prosperous farmer, has about a thousand acres. Broadhead Brothers, between three and four thousand acres. Others, who deserve mention along with these are: Belliston Brothers, James P. Anderson, Edward Ingram, Joseph E. Irons, Alfred Lunt, Sheld Lunt, William C. Ocker, George H. Pierce, Robert C. Stephenson, Charles Wilson, Samuel R. Wimm and Joseph E. Wright, each of whom own land in amounts varying from 230 acres to 5,100.

The great amount of wheat produced from these farms is more than the two local flour mills can handle by running both night and day, so any one desiring a good investment would do well to build another flour mill at Nephi.

FRUIT GROWING.

Among the many industries that are attracting attention is the cultivation of large orchards. Nephi itself lies on a flat formation at the foot of Mt. Nebo and at the mouth of Salt Creek canyon. The region along the base of the mountains is of that fine gravelly and sandy loam which is well adapted to the raising of fruits and berries. Connoisseurs have declared that the peaches grown along the northern part of Nephi have the finest flavor of any produced in the state. Elbertas and Early Crawford are the varieties usually planted. David Broadhead has one of the finest peach orchards in the west. Other men who are going into the fruit business on an extensive scale are Robert Beagley, Orson Cazier, L. A. Bailey, and H. W. Howell. There is a great inclination among the farmers who own land close about Nephi to set out orchards on account of the fact that the large dry farms nearby enter too keenly into competition in the raising of wheat, to make that industry very profitable for the owners of the more valuable land.

It may be of interest to many, to know that the large fruit raisers of Colorado are turning their eyes westward, where they declare they find better lands at a much cheaper price.

GYPSUM DEPOSITS.

An industry that was started about 18 years ago in Jumb county has grown to such proportions that the local market no longer consumes the entire output of the state. This industry consists in the converting of the immense deposits of gypsum into a mar-

One of the most highly respected as well as one of the most competent of the business men of Nephi is John Cooper, manager of Cooper, Tyler & Co., dealers in hardware. Mr. Cooper is in every sense of the word a self-made man. Born in Glasgow in 1851, he came to Utah in 1872 with only \$5 in his pocket. He immediately procured employment with David James & Co. in Salt Lake with whom he remained for 15 years.

From Salt Lake Mr. Cooper went direct to Nephi where he began the present business, receiving from the start, though the town was small, an en-

couraging patronage. From the start his establishment has been the only exclusive hardware store in Nephi, and much of the tinning and plumbing work in the city is done by this company.

A heavy stock of the finest hardware is carried, and the business extends from St. George on the south to the northern extremities of Jumb and Sanpete counties. The stock is constantly increased in accordance with the demands of the community, and the business is the largest of its kind south of Provo.

Mr. Cooper has twice been a member of the city council and is in every way a progressive well respected citizen.

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