



OVER THREE MILES FROM THE WELL, A REAL "HEAD" OF WATER

HOW IRRIGATION INCREASES THE VALUE OF LANDS

(Continued from Page 1)

success of Craft and Edgerton at Grand Island, whose big project is described below. It is very probable that efforts will be made early this coming spring to install one or more Kelly wells near Alliance for experimental purposes.

The Grand Island Daily Independent of December 23rd published an illustrated article entitled "The Transfiguration of Poverty Ridge into Prosperity Row." This article and the pictures are reproduced herewith. It was the privilege of Lloyd Thomas just before the first of the year to visit this locality and although the ground was covered with a heavy blanket of snow, a good idea was obtained of the installation of the irrigation project on "Poverty Ridge."

THE TRANSFIGURATION OF POVERTY RIDGE INTO PROSPERITY ROW

(From the Grand Island Independent) As each succeeding year draws to a close the people of a community quite naturally look back to the accomplishments of the year. Especially the larger things, at such times attract.

As to Grand Island and vicinity one of the biggest things accomplished during the year is the transfiguration of "Poverty Ridge" into "Prosperity Row."

It is not meant to say that this big development was the work of a single year; but it can in truth be said that the year 1920 made the work certain—put on it not only the finishing touches but also permanency.

Some years ago two enterprising young lawyers and business men of Aurora, the Messrs. Craft and Edgerton with faith in more intensified agriculture when combined with a sure water supply or rainfall, looked about in this neighboring state for some cheap lands upon which to try their well thought out plans. The finally secured options on several thousand acres immediately north of Grand Island—on what has for two generations been known as "Poverty Ridge." There is a good top soil but it is shallow, two feet take you to sand. In the most favored seasons it had raised some crops; but in the years when the rainfall was at all deficient, farming exploits on it were failures.

Came the Kelly well and Craft and Edgerton!

Were Told 'Twas Folly.

Men told them it would be folly to attempt to irrigate because the soil was so porous that the water would go straight down. One could not spread it. There was too much seepage. But one, then two, then a few more Kelly wells were put in. At first it looked a bit as if the seepage was going to make trouble, but it was soon ascertained that, after a few hours, a fine film gathered and covered the bottoms and the sides of the ditches. The first year water was led across the quarter sections. This was in 1919. Moreover, a later start was had and efficient labor was scarce. But

the tryout was successful. In the small tracts which had been irrigated in the right time, the yield of corn and of potatoes were greatly increased.

This year the firm was better prepared for a more complete test. While the natural rainfall was quite favorable, and the vicinity was not visited by the usual hot and dry spell in August, irrigation was nevertheless applied at the right times and never before has "Poverty Ridge" outclassed better soils and regions in the yield of produce per acre. The seepage problem disappeared. One ditch was irrigating a field of corn nicely, at a distance of over three miles across fields.

Additional lands were purchased since the original venture and the Craft-Edgerton farms now comprise a total of 2,740 acres. Twelve Kelly wells equipped with American Well Works turbine pumps and General Electric company motors are now connected to the electric line from the city plant. About 1,800 acres are now under the irrigation system.

Sixteen Plants.

Four additional wells will be connected with the electric line in the spring. These sixteen wells will irrigate about 2,500 acres. They average from 1,200 to 2,300 gallons per minute. The 1,200 gallon well will irrigate 140 to 160 acres, while the 2,300 gallon well will take care of 280 acres.

To install the irrigation ditches is costing from \$35 to \$50 per acre, depending on the amount of water the particular well happens to furnish, also depending upon the lay of the land.

The crops this year consisted of 300 acres of sugar beets, 650 acres corn, 400 acres sweet corn, 400 acres fall wheat, 30 acres beans, 25 acres potatoes, 50 acres alfalfa.

Several new houses and barns have been built. They have been finished or are under construction, a total of fourteen houses and six barns. Most of the buildings are constructed of vitrified hollow tile.

In addition to the four Russian-German families located on these lands this year, there were ten English families and 30 to 35 single hands. Next year there will be twelve English families and sixteen Russian-German families. Under the farm leases already made, there will be more than 800 acres in sugar beets next year. Formerly only one or two families occupied the entire ridge. A new school district will have to be made.

See the Certainty.

These Russian-German families are from the Scotts Bluff-Bayard county, and are all experienced beet growers and irrigators. Several of them visited the Craft-Edgerton farms during the summer, and kept in touch with the results had by the four Russian-German families handling the sugar beets on the land this year. By the close of August the splendid system growth of the sugar beets plus the excellent working of the irrigation system attracted them greatly, and more of them have been here to lease land for next year than Craft-Edgerton could supply with farms.

Possession was taken in spring of 1919, and since that time more than \$150,000.00 have been expended in the irrigation system and farm improvements.

The sugar beets now being harvested will yield from ten to twelve tons per acre. Several weighing 14 pounds each have been picked from the different fields.

Some of the farms have been supplied with feeding yards and silos and such by-products as beet leaves, bean stalks, etc., are saved for roughage or put up in silos. To make the system complete some hogs are kept, following the cattle. Every family quarter is also provided with poultry yards, garden plots, etc.

The bean crop was very successful this year. It is realized that this may never be a specially favorite crop but is added for diversity and sureness. The forage retained after threshing is said to be especially nourishing for cattle.

The feed corrals numbered eight this year and probably be increased. Altogether there will be kept about 500 head of cattle for feeding. Superintendent Christoffersen was employed this year for general overseer of the work. He is well versed in intensified agriculture and especially in irrigation.

The field corn made from 50 to 65 bushels per acre, the beans 20 bushels per acre, and the potatoes from 100 to 200 bushels per acre. The sweet corn made from 2½ to 4 tons per acre.

The irrigation ditch system is so constructed that the water from the well on one farm can be carried to some more distant farm, if need be. For example: water was carried from a well at the northeast corner of this city to 100 acres of corn in the northeast quarter of 36-12-8, a distance of more than 3 miles, thus exploding the formerly often heard statement that the soil was too sandy to carry the water in ditches. It is fine black silt in the soil that seems to plaster over the interstices in the soil and enables the water to be carried long distances with slight loss.

The Kelly Well.

The American Beet Sugar company, through its local manager, Mr. Demman, and its field man, Mr. Baker, have taken great interest in the irrigation work and beet growing. They feel highly pleased over this year's splendid beet crop, and the large acreage arranged for next year.

"The Kelly Well," say Craft and Edgerton, "is responsible for the success of the enterprise." They add that the concrete casing and screen are a complete success, and that they would never have undertaken to develop the irrigation project if they had been obliged to use the metal casing and screen, which from rust and corrosion, is limited to a few years of service, and worst of all cannot compare with the Kelly screen in amount of water it will permit to enter from the gravel strata. But the faith of the two young business men, others observe, back of that good well was also a mighty big factor in the reclamation.

CITY ATTORNEY METZ GIVES AN OPINION ON LEGALITY OF ELECTION

Alliance, Neb., January 14, 1921.—To the Editor of The Herald: You have asked my opinion as to the effect of the alleged failure of the notice preliminary to the election upon the adoption of the city manager form of government to be published during the full thirty day period. I regret that I have not as yet found time to make a complete investigation touching the matter. The statutes governing the city manager form of government provide that the election shall be held in the manner prescribed by the general election laws, except as is otherwise prescribed in that act. There is no provision as to notice found in that act. Turning to the general election laws governing municipal elections we find no requirement whatever as to notice. In connection with national, state and county elections, a twenty-day posted notice is prescribed. The statutes provide that the council may by ordinance call special elections. It would seem then that no notice whatever was necessary, but if those who contend that a thirty day printed notice was necessary are correct, the election would still seem to be valid for the notice, as I am informed, was published twenty-one days and the decisions of this state are uniform to the effect that even where the statute provides for a notice to be given for a certain length of time the failure to give such notice does not invalidate the election.

I am advised that some contend that a thirty day notice was necessary in this instance because such notice is provided by the act establishing the initiative and referendum in cities of this class. A perusal of that act will show that the initiative and referendum act only applies to cities where it has been adopted by a vote of the people of that city, and such is not the case in Alliance.

W. R. METZ, City Attorney.

SOCIETY

KNIGHTS TEMPLAR BANQUET

A six-course banquet was given by the Knights Templars at the Palm Room of the Alliance hotel, Wednesday evening. There were twenty-five members present, including the two guests of honor, Grand Commander Arthur C. Stem and Grand Lecturer Charles C. Town. The tables were arranged to form the Passion Cross, pink and white carnations being used as decorations. After the banquet they adjourned to the Masonic Temple where the degree work was exemplified for the visiting officers.

BRUCHMAN—PETERSON

William E. Bruchman of Salt Creek, Wyo., and Mrs. Sophie Peterson of Fort Robinson, Neb., were married at the Lutheran church Wednesday morning.

REEVES—MARVIN

R. B. Reeves of Newcastle, Wyo., and Miss Lusy S. Marvin of Hubbell, Neb., were married Tuesday by Judge Tash.

RAY—ELY

Thomas J. Ray and Callie Ely, both of Alliance, were married by Judge Tash Tuesday.

The members of the M. E. choir enjoyed an elaborate banquet last Wednesday evening at the home of the leader, Mrs. Inice McCorkle-Dunning, the affair being the culmination of a contest begun sometime ago. The choir was divided into two divisions, with Miss Edna Benedict captain of one and Gaylord Chase of the other, and the side having the smallest percentage of attendance at practice and church was to banquet the entire number. A great deal of interest was shown in the contest, the race being very close up to the last. Mr. Chase's division was the winner. About fifty were present to enjoy the spread and a delightful time is reported. During the course of the evening a beautiful floral offering of carnations was presented to Mrs. Dunning, as the occasion happened to be her birthday.

Miss Alta Young gave a miscellaneous shower Thursday evening in honor of Miss Alta Dye whose engagement to Mr. Edwin W. Lundquist of Cedar Rapids, Ia., has been announced. Guests were the Misses Marie Howe, Elsie Fowler, Esther Zobel, Elsie Simpson, Dora and Dolly White, Nellie Tyree, Thelma Westley, Laura Wadum, Violet Henry and Alta Dye, Mesdames H. Campbell, T. A. Cross and E. G. Laing and W. B. Young. The guest of honor received many useful and beautiful gifts. A dainty lunch was served during the evening.

Christian Young People's class held a reception at the Epler home Tuesday evening in honor of Mr. and Mrs. Woolridge. A set of silver teaspoons was presented to the couple. Games were played and a musical program was enjoyed by all. Light refreshments were served by Mrs. Epler.

An evening full of pure wholesome fun is yours if you attend the musical comedy, "The Minister's Wife's New Bonnet," at the M. E. church, Thursday evening, January 20, at 8 o'clock. Admission, adults 50 cents; children 25 cents.

Spring styles will soon be out. "The Minister's Wife's New Bonnet" leads them all.

SUMMARY FOR POTATO SEASON

Federal Bureau of Markets Issues Report on the Western Nebraska Crop

The western Nebraska white potato section embraces all territory west of Long Pine in the northern, Holdrege in the southern and Ravenna in the central part of the state. Shipments given as from "western Nebraska" do not include those from the Kearney section, which has a season distinct from western Nebraska and which shipped approximately 325 cars during August and September this year and 250 last year.

The counties of western Nebraska raising potatoes on a commercial scale and their respective acreages in 1920 are: Box Butte, 8,101; Dawes, 3,150; Sheridan, 8,106; Brown, 2,262 and Kimball, 1,355, in the dry land area; and Morrill, 1,822; Scotts Bluff, 4,736, and Sioux, 4,093, in the irrigated area. The territory is quite distinctly divided into the Rushville-Gordon, the Alliance-Hemingford and the Scotts-bluff-Morrill districts, named for their principal shipping points. After digging was completed, it was estimated that the yield averaged 90 bushels per acre in the dry-land area, as compared with 50 last year, and 140 bushels per acre in the irrigated area, as compared with 120 last year. As there was a decrease in acreage from last year, however, amounting to 20 per cent in the dry-land and 14 per cent in the irrigated area, the shipments this year are not expected to total more than 2,500 cars.

Because of considerable damage to the 1919 crop from freezes on the 9th and 10th of October (when digging was only half done) the growers this year were anxious to harvest the crop as early as possible, and digging was practically completed by October 10. The damage done by two light freezes in the last week of September was negligible. But because of the haste in digging, much immature stock was put into storage, and the consequent heating resulted in a considerable loss in the Scottsbluff-Morrill district. Practically no trouble of this kind was met in the dry-land districts, but some stem-end rot was evident in the Alliance-Hemingford district. Western Nebraska potato growers have nothing to contend with in the matter of insects, but scab, particularly in the dry-land districts, shows on a very large part of the crop, varying from practically none on potatoes from new land, to deep-pitted scab on potatoes from old, poorly drained fields. This scab and the cuts and bruises caused by rough handling were the chief disqualifying items which figured in the shipping point inspections this year. Damage from second growth was not great, as the rainfall was normal during the growing season. No frozen stock appeared at the track except a little during the second week of November, caused from hauling in zero weather.

Grading Requirements.

The grading of potatoes in Nebraska is a recent requirement. In spite of the potentially high quality of their product, Nebraska growers probably give their potatoes as rough treatment and exercise as little care in sorting as do the growers in any other important section of the country. For this reason, the state department of agriculture, in July, 1919, adopted "U. S. Grade No. 1" and "U. S. Grade No. 2," as state grades specified as "No. 1" and "No. 2," and now requires that all shipments be inspected at point of origin. No shipments of undergrade stock are permitted, except during seasons when, owing to abnormal crop or market conditions, the state secretary of agriculture may so authorize. A table showing the requirements of these grades and a comparison of the two, will be found on page 5. Seed stock must conform to the requirements of grade No. 1, except with regard to size. To November 13, inclusive, the inspections made by the state were: No. 1, 1,059 cars; No. 2, 394; mixed cars, 8; re-inspections, 10.

The tabulation of destinations on page 4 shows that most of the western Nebraska potatoes are shipped to nearby markets, the bulk of the shipments being sent to towns within the state itself, and those going outside being mostly destined to points in Missouri, Iowa, Kansas and South Dakota. An increasing amount each year is being shipped south for seed, and some seed is sent to Colorado. The southern shipments are mostly made in December and January, although it is the custom for buyers to visit the producing districts at digging time and contract stock for later delivery. Nebraska's dry-land product, because of its uniform growing conditions, possesses exceptional vitality as seed. The Bliss Triumph is practically the only variety shipped out of the state for this purpose.

The usual basis of sale for western Nebraska potatoes is by wagonloads or carloads cash track. The number of sales made "carloads f. o. b. usual terms," that is, sales by wire, inspection allowed at destination, is increasing, however, due largely to the standardization being effected by the state grading law. Stringent money conditions this season, reducing speculation, made early buying slow. There were very few cash buyers at shipping points before October 20th, and prior to that time practically all shipments were consigned or rolled unsold. The tone of the market at shipping points

THE WEATHER

Forecast for Alliance and vicinity—Fair tonight and probably Saturday. Rising temperature Saturday.

in western Nebraska (and in other potato states as well) was weak at the outset of the season, reaching its lowest point during the peak movement of the crop (October 10 to 20), and showing greatest activity during the week of October 24 to 30. Considerable seed stock was sold this year for December delivery as follows: sacked Bliss Triumphs, No. 1, \$1.65 cwt.; certified, \$2.00 cwt. (certification involves three inspections, during growing and harvesting, for disease, yield and trueness to type).

The only market taking any amount of western Nebraska potatoes from which quotations are available, is Omaha. And it was impossible to get quotations on carlot sales there, before October 20th. After that date, until November 3, the prevailing price per hundred for No. 1 Early Ohio was \$1.50 to \$1.60 in the bulk and \$1.75 in sacks. In the first week of November the prices strengthened to \$1.75 for bulk and \$1.90 to \$2.10 for sacked stock. Minnesota and Idaho potatoes sold at a premium of 25 to 50 cents per hundred over Nebraska's on account of their better grading and handling.

The bureau of markets operated a field station at Alliance from September 27 to November 13, inclusive, issuing daily during that time, reports showing primary destinations of western Nebraska shipments, shipments for the entire United States by states, shipping point conditions and prices in six important sections, and carlot quotations from the four terminal markets most important to Nebraska growers. Reports were mailed to all growers, dealers and other interested persons making application.

Conclusion.

The 1920 season for western Nebraska white potatoes saw a normal yield on a reduced acreage; as compared with 1919. Prices were low, and the tone of the potato market, in common with the tone of the produce market generally, was weak, except during the period of October 24 to 30. But the progress which has been made in grading made it possible for a larger number of shipments to be handled by wire. There was an increased demand for dry-land seed for southern shipment, and an increased acreage of seed stock certified by the state specialist. All conditions and requirements point toward the necessity for more care in handling and grading by the individual grower.

Winter Suits, Coats, Dresses and Skirts at Less than Half Price, Saturday, Monday and Tuesday. Highland-Holloway Co.

METHODIST CHOR WILL PRESENT MUSICAL COMEDY

The members of the M. E. choir, under the direction of Mrs. Inice McCorkle-Dunning, will present a musical comedy, "The Minister's Wife's New Bonnet," at the church, Thursday evening, January 20, at 8 o'clock. The music is bright and catchy, the conversation witty, and there is not a dull moment from start to finish.

Admission will be fifty cents for adults and twenty-five cents for children. Following is the cast of characters:

- Rev. Grundy, the minister, Dr. E. E. Drake.
- Hepsiba Grundy, his wife, Nellie Acheson.
- Samantha Slick, president of the sewing circle, Mrs. Floyd Donovan.
- Nodanna Simppins, always asleep, Mrs. M. Smith.
- Penelope Perkins, she's so precise, Mrs. Walker.
- Agatha Squalls, the blusterer, Mrs. Drake.
- Cayenne Pepper, who stutters, Mrs. LaMou.
- Dephe Hardabear, who is deaf, Mrs. Dunning.
- Vivian Walker, the city milliner, Janet Grassman.
- Always Knoxit, as his name implies, Mr. LaMou.
- Billy Butcher, a good fellow, Mr. Chase.
- Hugh Howler, the country sport, Mr. Dow.
- Prof. Highvoice, the choirmaster, Mr. Walker.

Other members of the choir, sewing circle and improvement committee: Misses Grassman, Benedict, Graham, Sward, Drake, Mirk, Martin, Dow, Mesdames Acheson, Pate, Deering, Noble, Hugh Smith and Messrs. Cunningham, Deering, Duncan, Lucas, Donovan and Norman McCorkle at the piano.

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DEATHS AND FUNERALS

The funeral of Mrs. Catherine Gorman, who died at the home of her son Thomas Gorman, 923 Big Horn ave., at the age of fifty-two years, was held Friday morning from Holy Rosary church. The cause of death was rheumatism, with which Mrs. Gorman had been afflicted for twelve years. A sister, Mrs. Margaret Conway, of Lead, South Dakota, has been here in Alliance since August with Mrs. Gorman.

Max Feidler will leave in a few days for Orchard, Nebr.



KELLY WELL AND ITS STREAM, ON "POVERTY FLATS"

Mrs. Barbara Scott of Antioch was in Alliance Wednesday.

The fad of wearing pajamas to tea leaves the breakfast table rather bare.

Mrs. N. S. Fielding has been ill the past week with tonsillitis.