

THE SAND HILLS OF NEBRASKA

Interesting Article by G. L. Carlson, Editor and Publisher Carlson's Rural Review

In September, 1913, G. L. Carlson, editor and publisher of Carlson's Rural Review, published at Norfolk, Nebr., published an article on "The Sand Hills of Nebraska." This article, which was recently re-published, is very interesting as well as instructive. We re-print it herewith:

It has been agreed by the editors and publishers of Nebraska that during the month of September each will write and publish a special article, taking for a subject some feature of Nebraska life, production or development. Fearing that one of the most interesting districts of Nebraska will be overlooked by others, I am going to take as my subject for this special article, the "Sand Hills" of Nebraska.

While this name is largely a misnomer as generally applied to many parts of the state, it is usually made to include some fifteen counties, all located in the central northern part of the state. When I say that the term "sand hills" is a misnomer as generally used, I mean that many parts of the so-called "sand hills" are of a clay formation, and contain no more sand than is generally found in clay soils, at least no more than is necessary to make the clay productive of crops.

The Sand Hills of Nebraska offer a rich field for study. As yet many Nebraskans know little or nothing of this region, and even our own soil investigators, and soil experts, have passed over this district of the state without any attempt to give the district more than a passing notice. More has been done with reference to studying the climate of this region than the soil and its possibilities. It is definitely known that the temperature decreases as one goes westward and northward, the mean temperature for the state being 48.5 degrees, the extreme west being two degrees lower than the extreme east, and the extreme north slightly less than six degrees lower than the extreme south. Destructive hot winds do not reach the Sand Hill regions, as they do in the extreme southern part of the state. This year has given excellent opportunity for studying the hot winds and their effect upon the crops of the several parts of the state. This study discloses the fact that soil has much to do with the destructiveness of these hot winds. Throughout the state, without reference to latitude or longitude, crops suffered most in the districts of clay soils, and the purer the clay the more the crops suffered. On the clay soils in the southern part of the state crops suffered all the way from partial to total loss of crops,

and especially true in this of corn. The only areas in the Sand Hills that have suffered from dry weather this year, are the clay soil areas.

It will be impossible in an article such as this to devote much space to the geology of this district. It may be well that this is so, since there is such a wide difference of opinion on this subject. All are agreed, however, that this formation is the result of the erosion and decomposition of the Loup Fork formation. This formation spreads over all western Nebraska and is composed of beds of clay, sand and limestone, which when thoroughly eroded and mixed by the action of the wind becomes the fine sand of the Sand Hill district. The one element always wanting is humus. This has been prevented from forming because of fires and the moving particles of sand in earlier times. Since fires have been prevented the soil has become bound together with vegetation in the form of native grasses. Nature is a great healer, and if fires can be prevented for a few years more, the Sand Hills will become one of the best grassed countries in America, especially if we consider the quality of grass. There is a small area of sand hills extending into Lincoln county, and also Dundy county, the latter extending into Colorado. For the purposes of this article only the district north of the Platte river is considered. Here the Sand Hills consist of rounded dunes, saucer-shaped valleys, clay valley lands, and extensive hay flats, the latter subirrigated with a water table quite near the surface.

The Sand Hills differ in agricultural value and importance as do all other soil formations. In no other one characteristic can the value of Sand Hill soil be foretold with such certainty as in the substrata of water. In the poorest districts of this region the water table will be reached without encountering anything but sand. In other districts the water will be reached underneath a strata of clay. The latter is the more general rule of finding water, and in this formation the surface soil is always productive. Agriculturally, the poorest soil is found in the eastern limit of the Sand Hill area, the soil increasing in value as one goes westward, until the clay lands of western Nebraska are reached, except that the rainfall decreases with longitude.

There is also a difference noticed in the productive value of Sand Hill lands between those drained to the north, and those drained to the south. The Sand Hills of north central Nebraska drain into the Niobrara at the north and into branches of the Platte toward the southeast. Immediately south of the ridge or highest dunes are to be found the most productive lands, and it is here one finds more of the saucer-shaped valleys, or flats, and a belt of clay land from a few sections to several miles in width. Most of these flats are as fertile and productive as the high-priced lands of Iowa and Illinois, and many farms on such soils will

harvest better crops this year than will \$200 lands farther east.

Another district in the Sand Hills of Nebraska call for special mention. These are the extensive and valuable hay flats at the source of the Elkhorn river system. Here entire townships will be found, all of a very productive type of soil, and with the water table but a few feet below the surface. It is such soils that have made Newport, Bassett, and other towns known to all Americans for their immense output of hay of the highest quality. There is no failure of crop here, always an income, and in the near future such lands will command a very high price.

No district in America surpasses the Sand Hills in water, either in the quality, or the ease with which it may be secured. The best of pure soft water, and very cool, may be had anywhere in this region at depths of ten to fifty feet. The water is always found in gravel, and with the exceptions of a few places in the extreme eastern edge of the district, under clay. The district is well watered with running streams, which find their way to the Niobrara or Platte rivers.

In dry hot seasons such as the present one, the agricultural value of a country may be studied best. The proof of the fact that the Sand Hills district of Nebraska is to play an important part in the future wealth of the state and country is seen this year in the millions of dollars worth of grass going to waste for want of cattle to eat it. And this grass is of excellent quality, as seen in the quality and condition of the cattle being grazed there. Sand-Hills cattle have long been known in the markets of the country, both feeders and packers being quick and ready buyers of them. There are some 10,000 square miles of so-called Sand Hills in Nebraska. Every square mile is capable of supporting 100 head or more of cattle. If this region were stocked with cattle to its full capacity, a million head of cattle could be counted there. This would represent a wealth of forty to fifty million dollars—no mean sum in the wealth of any state.

Dairying, cattle, horses, hogs and poultry are the hope of this district. Alfalfa, all the clovers and mellilotus (sweet clover) will grow on the highest hill, and the seed crop from this plant and alfalfa are highly profitable. In the valleys as good corn will be harvested this year as can be seen anywhere in the corn belt. Vegetables and especially potatoes are equal to the best that can be grown anywhere. The Sand Hills potato has already made a place for itself in all the markets of the country because of its excellent quality.

The homesteaders for the most part were men and women from the shops and schools and railroads of the country, who possessed no means to improve their homes or stock their land, and who possessed no knowledge of the needs or possibilities of the country. This makes the

present need of the district men with some money to stock their land, and who possess some knowledge of farming and stock growing. The district will make no rapid progress in the way of producing wealth until a new type of owner secures the land. Those of the first settlers who came from farms and possess some knowledge of farming and livestock are making good. These are interested in the very best development of the country, and are building school houses, making roads, and in many other ways are proving themselves valuable assets of the district.

Another need of this district, as it is of every other new part of our country, is a national banking or currency system which does not penalize the first settlers, and first producers, of a new country by compelling them to pay a higher rate of interest than those who do not so much need financial aid are compelled to pay. It seems impossible for these settlers to obtain money at a lower rate than ten per cent while the new settlers of Canada, Costa Rica, Chile and Argentina can obtain financial aid at a four or five per cent rate. No agricultural district of this country can pay ten per cent interest on the productive capacity of the district, and yet these poor people who need financial help so much are compelled to pay a rate no country can justify. This is retarding the progress of the district, and will retard it as can nothing else. No part of the country is more sure of returns on investments than the Sand Hills of Nebraska, and if these people could secure money to finance themselves at just rates their progress would be most rapid.

With other editors in Nebraska I have long advocated Nebraska investments for Nebraskans. Those who follow most closely to the lines of their own latitude and climatic conditions will succeed best in their land investments. Millions of dollars have been invested in lands in the far southwest by farmers living in Nebraska, Iowa and Illinois. I was recently in western Oklahoma and the Panhandle of Texas where farmers told me they had paid up to \$25 an acre for land that would not support more than 25 cows to the section of land. Empty elevators, idle grain mills, abandoned farms, and rivers with no water, speak with a greater emphasis than can my pen of the folly of such unwise investments. Why men will leave a country known to them for years for its certainty of crops for one of which they know nothing is one of those unexplainable things no man can understand.

This district by reason of its rich grasses, pure water, healthful climate and cheap lands is singularly fitted to make homes for the renters on high-priced lands farther east. There is no reason why a renter should not become his own landlord while such opportunities are his. There is no better way of solving the landlord and tenant problem in rural America than for renters to buy

this land while it can be had at a low price. They will not only become their own landlords, but they are sure of a double profit, the one from the production of the land, the other from the rise in the value of the land. In a few years it will require a large sum of money to buy a section in the Sand Hills of Nebraska. Any land, anywhere in America that will produce the wealth these lands are capable of producing will not long remain cheap. Today these lands can be had at a very low price.

Those intending to buy and settle upon these lands will do well to study the machinery needs of the district. Much of the farm machinery used in Iowa and Illinois will not be needed here. Such machinery as dairying and stock growing require will be the machinery needed by them. This district is preeminently a livestock country, and to convert the grasses of the country into money should be the aim of the farmer here. There is a place for a silo in this country, and they are being built quite rapidly. Pasture for summer, alfalfa, mellilotus and the native hay for winter, supplemented with silage, will soon develop this district into a high class of independent farmers, if good stock be provided to consume this feed. Many of the first settlers now have bank accounts from the sales of cream and poultry, and some of these had very little to begin with.

Settled by men who mean business, who are not afraid of honest labor, who fully appreciate the future possibilities of this district, the Sand Hills of Nebraska will play an important part in the production of Nebraska wealth for all time to come.

Hadley's Fame Soon Gone

V. O. Lawrence, an Oakland business man, was talking to the Rotary Club about advertising.

"If you want to get results you must advertise continually," he said. "The public forgets. Just to prove this to you, I will give a prize to any man here who can tell me off-hand who was President Taft's running mate at the last election. I'll venture there isn't a man here who can remember the name, although it was a household word with all of us at the time."

The speaker paused while the 100 men in the room pondered. Finally one said:

"Do you know yourself who it was?"

Lawrence laughed. "I do not," he admitted. "I intended to call up one of the newspapers to find out, but I forgot it."

The question remained unanswered.

It haint what's in th' Baltimore platform, it's what's in th' pantry that interests the consumer. Th' feller who mixes business with pleasure allus gits a red effect.

RURAL SCHOOLS (Continued from Page Three.)

economy, since these reorganized districts could be operated at about one-half the present cost of our county schools.

The consolidation of rural schools is a live subject at this time. The demand for consolidation is the result of our want of a good system of district organization, or so organizing our districts that they do not serve the purpose for which they were intended. If our districts were organized along the lines indicated in figure 5, there would be no demand for consolidation. Such a district on the basis of the average size of our farms would serve about 65 families. This number of families could support a good agricultural high school, and the tax to support it would be no heavier burden than that now borne by the taxpayer living in the average rural school district as we have organized them. In addition to supplying every educational need, such a district would also supply the patrons with every social and other need. In view of the fact that our present rural school districts are pronounced failures by all who have studied the subject, is not some such plan of reorganization worthy of our most serious consideration?

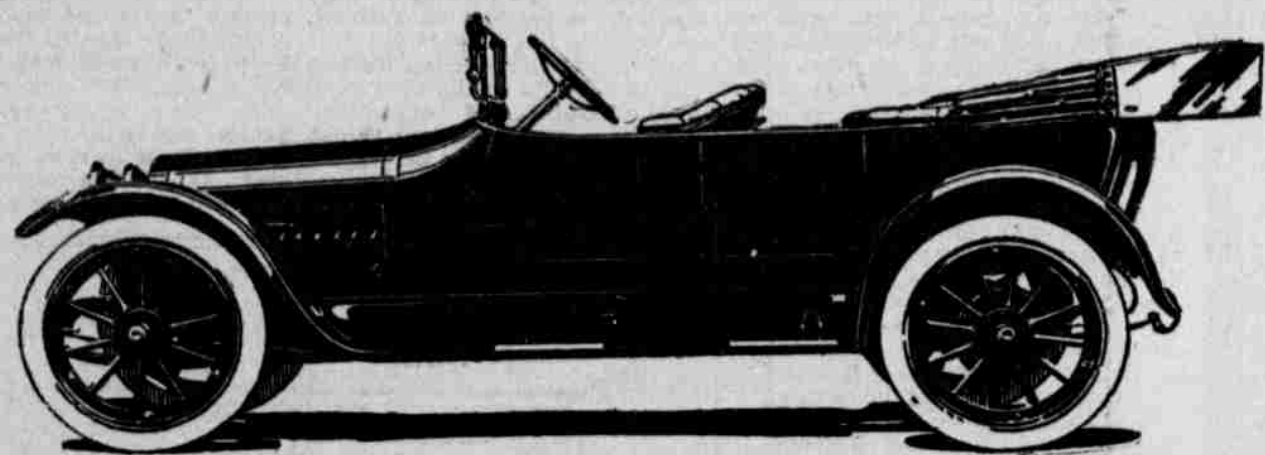
As a people we are inclined to judge values by the cost of things. One frequently hears the boast that we pay more for education than any other people, and yet those who make this boast make no comparison of what we get for our money as compared with other peoples. True it is that we spend more money in education than the people of any other country, yet there are several other countries that are far ahead of us in that they get more for their money than we. We spend more for government than any other people, but in many instances our investment in this way is a mighty poor one. We are constantly spending money without getting any results. We are all the time building and planning for the present, but seldom build or plan for the future. Is it not time that we should begin to exercise sufficient intelligence to consider our future needs in all our school and civic work and planning? Is not a change along these lines well worth our most earnest consideration?

Death of Baby Girl

The baby daughter of Dr. and Mrs. L. S. Campbell of Alliance died Tuesday night, after an illness of some time. Neither Mr. nor Mrs. Campbell are in Alliance, it having been found necessary to take her to California on account of serious illness.

Death of Lizzie Dunn

Lizzie Dunn, daughter of Daniel Dunn of Alliance, died Sunday morning at Hastings. The body was brought to Alliance. The funeral was held this morning at 9 o'clock from the Catholic church.



Announcing The New Regal

Touring Car or Roadster \$1085 Including Electric Starting, Lighting

The New Regal Has

Roomy comfort for five people; weighs less than 2400 pounds; fully equipped, with a motor that develops 39 h. p. brake test; exceptional beauty of design; one chassis only, produced in ten thousands by \$3,000,000 company with a ten-acre factory

The New Regal is a real 5-passenger car. Five grown folks can ride in it with plenty of room for everybody—body-room and foot-room, too. The rear seat is 48 inches wide—you don't have to sit all crunched up and crowded together. 23-inch tonneau doors make it easy to step into the car, instead of edging in sideways. Plenty of room for the driver, too, without hunching up his knees like a bicycle rider.

The design is modeled after that of a \$6,000 foreign car which attracted most attention at the last London exhibit. There is beauty in the whole car, and beauty in little things. For instance, you'll wonder at first how you put water into the radiator; and then you'll see how it smooths the lines of the car to put the radiator-cap under the hood.

The New Regal is an overhung car, with a greater road clearance than many bigger cars. But it has a special spring suspension that makes the center of gravity low. These cradle springs, together with the deep Turkish upholstery, make the Regal one of the easiest-riding cars in the world.

The New Regal motor develops 39 h. p. on actual brake test. It takes the car over long, hard hills in an effortless, don't-care way that's a real delight. The entire top of motor comes off in a minute, if you want to get at the pistons or valves.

And the New Regal is a wonderfully light car. By the use of pressed steel and forgings instead of castings wherever possible, the

weight has been reduced to less than 2400 pounds with all equipment. That's 300 to 500 pounds less than the average—yet the car is stronger.

The Regal electric starter is the simplest, most efficient, ever devised. It acts directly on the flywheel, with none of the intermediate gears that clash, burr and cause trouble. There are from 40 to 60 less parts than in the ordinary starter. There are three sources of current—generator, storage battery and dry cells.

Ignition is by the Atwater-Kent improved unispartaker. This is a famous device that experts say has solved all ignition troubles. It delivers a single fat spark, regulating the spark automatically to varying engine speeds.

The New Regal is completely equipped with every device necessary for your motoring comfort. Read the detailed specifications. The Regal Roadster, with its thoroughbred lines, is just the car for young fellows, professional men or salesmen. The whole back end can be uncovered, and there's room for more than the contents of a big trunk.

A demonstration ride in the New Regal will do more than pages of print to convince you that it is the handsomest, smoothest, sweetest-riding car you ever saw.

And it's made by one of the most responsible companies in the industry—a company backed by seven years of success—that guarantees your satisfaction.

What You Get—

- Direct Electric Starter.
- Electric Lights, with "Dimmer."
- Electric Horn.
- Simplified Electric Wiring.
- Removable Motor Head.
- Gasoline Saver Valves.
- Extra Size Brakes—12 inches.
- One-Man Top.
- Left Side Drive.
- Center Control.
- 300 to 500 lbs. Less Weight.
- 112-inch Wheel Base.
- Unusual Foreign Design.
- 23-inch Tonneau Doors.
- 48-inch Rear Seat.
- Adjustable Wind Shield.
- Inside Curtains.

SPECIFICATIONS: Motor, 4 cylinders, cast en bloc—3 1/2 x 5. Removable motor top, giving easy access to pistons and valves. Three point suspension. Starting: Electric, acting directly on fly-wheel; three sources of power—generator, storage battery and dry cells. Drive: Left side, with center control. All operating controls on dash. Springs: Front, semi-elliptic; rear, three-quarter elliptic. Ignition: Atwater-Kent Unispartaker, delivering single spark and automatically adjusting itself to engine speed. Brakes: Internal expanding, external contracting; 12-inch brake drums. Body: Full stream-line. Wheelbase: 112 inches. Weight: Under 2,400 pounds with all equipment. Equipment: One-man top; inside curtains; electric head-lights with dimmer attachment; electric tail-light; electric horn with button in center of steering wheel; 32 x 3 1/2 inch tires; demountable rims, with one extra rim; clear-vision windshield; tools and tire repair kit.

Carload Now On Display Opposite Drake Hotel

WARD B. NORTON, Agent