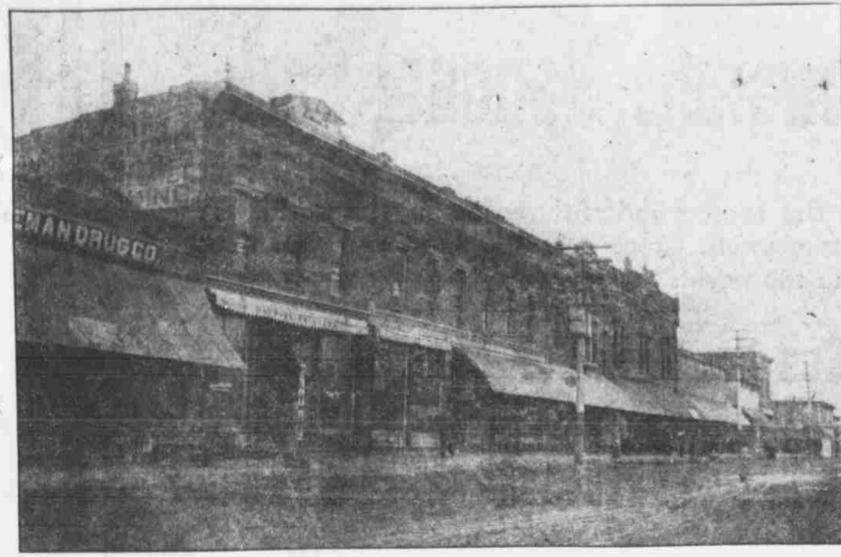


Clay County Headquarters for Many Odd But Prosperous Industries



MAIN STREET, CLAY CENTER, NEB.

WE were to make comprehensive map of Nebraska should mark off Clay county with a red circle around Clay Center as being one of the spots on earth where people take to the odd, the queer and the curious. More industries that are out of the ordinary are engaged in Clay county than in any other five counties of the state combined. They will be mentioned later on. Lured by the price of farm land and excited by the prospect of a climate and country that robs property of half its terror, the average citizen who came to heal his lungs or his fortune has become an enthusiast for Clay county. John H. Weston was the first white settler of the county and built the first log house in 1857 at Pawnee ranch, on Pawnee creek. James Hainter was the early historian of the county. The Hoper brothers owned a ranch that was established in 1860. In 1864 there was no settlement in the county excepting at Pawnee ranch. In 1863 and 1864 entire tracts were very heavy, passing through the county on the old overland trail, principally men going to Pike's Peak, or any place where they could escape the war. There were weeks at a time when there would be as many as 200 teams passing a given point each day. The pony express had been discontinued and stages were used for running one way daily. There were plenty of buffalo, elk, antelope and thousands of wild turkie, but the latter nearly all disappeared after the big storm of April, 1871. The sale of farm products to the emigrants at this time was of much help to the early settlers. Potatoes sold for five cents a pound, hay for the same and other things in proportion. There were many Indians—Pawnees and Omahas—but all friendly. The winter of 1862 and 1864 was rough and cold, but travel on the trail continued through the entire winter.

Clay county was established by act approved February 22, 1857. The county was organized September 11, 1871. On March 2, 1872, B. G. Brown's house at Sutton was designated as the place of meeting and the office of county clerk. The first regular court house was completed November 30, 1880. The presidential election of 1872 shows 264 republican votes and thirty-one demo-

cratic. Four years later, in 1876, there were 1,035 republican votes and 31 democratic. The tide of emigration flowed steadily into Clay county from 1870 and 1871 until the county was literally covered with substantial farmers and the villages filled with enterprising citizens. The Harvard Champion was established in 1873 and was the pioneer newspaper of the county. There have been over thirty papers established in the county at different times.

The first school of Clay county was established December 1, 1862, by Thomas M. Gregory, District No. 6. Twenty years later, in 1882, there were sixty-nine districts established, and seventy-four school buildings in existence. There were over 3,000 children, and eighty-nine teachers were employed, who received \$20,000 salary. The Clay County Agricultural society was organized April 15, 1872, at the court house in Sutton.

Clay Center was surveyed into 600 lots in 1870. The first buildings erected on the site was a large one story frame building built in 1873 by W. D. Young, and used as a court house. In 1888 a number of persons from Fairfield visited Clay Center on the first passenger train that entered the town.

Sutton is the center of new associations. Its first settlers were iron souled men, who determined to hew out a town and build a prosperous community. It is the oldest town in Clay county, and claims to be the largest in point of population. Its early history is interesting in every particular and instructive in many. The town site, named after Sutton, Mass., was entered as a homestead, March 14, 1870, by Luther French. The postoffice was established in June, 1871.

Harvard village and vicinity may be termed the site of some of the parent settlement of the county. When the first settlers came to this old Indian camping ground the prairie extended to the horizon in every direction. In 1871 the site of Harvard was pre-empted by N. W. Braas and three others. The postoffice was established at Harvard in December, 1871, with E. J. Stone as postmaster. The railroad depot was established here in the fall of 1871. The first school was opened in the winter of 1872 and 1873, by Mrs. C. K. Mor-

by the same spirit of progress and enterprise which first suggested the building of a village at this point. The townsite was pre-empted by Henry Gipe, and the survey was made in May, 1871. The school office was established in June, 1872, with A. J. Ritterbush as postmaster. It was kept in his log store building, adjoining the townsite. Gipe erected the first house—a sod house—and in 1872 the depot and section house were erected by the railroad company. The first school building of Edgar was built on the site of the present new school building. It was a one-room frame building. School was opened in the fall of 1873. The first teacher was Ida Hodges, who received the splendid salary of \$25 per month.

Clay county is 145 miles southwest of Omaha, and eighty miles from Lincoln. The county has 316,966 acres in farms, and 257,000 acres under cultivation. It has a population of 18,000, and is a county unique in many respects. It occupies first place in more different lines than any other county in the state. It is the richest in the state as it produces more wheat than any other county in the state. Last year the farmers sold and shipped out of Clay county, 2,253,000 bushels of wheat. They also sold and shipped out 1,422,800 bushels of corn. Besides this they marketed 153,000 bushels of oats. But this is not all. These farmers sold and shipped out 11,173 head of beef cattle and 52,000 head of fat hogs. Besides 1,200 head of horses and 1,200 head of sheep, Clay county is fast reaching the point where the farmers will not consider that beef, pork, corn and wheat are everything that can be produced in Clay county. This present season the farmers are using 30 hand separators and keeping 6,000 sows on their farms. They also have 17,000 chickens on their farms. The county is well adapted to many kinds of fruit, such as apples, peaches, plums and cherries, of which there are 120,000 trees in full bearing. The present season the farmers raised 600 acres of potatoes and 100 acres of sorghum. Besides this they produced 10,000 acres of alfalfa, 4,000 acres of timothy and 5,000 acres of wild hay. The county also sold and shipped out 4,300,000 pounds of flour and 200,000 pounds of mill feed. As an example of what the dairy and poultry interest amounts to in the county, let us remember that Clay county sold and shipped out last year 158,969 pounds of butter, 28,000 dozens of eggs, 150,000 gallons of cream, 12,000 pounds of dressed poultry and 28,300 pounds of live poultry.

Clay Center is the largest little city in the state, if not in the United States. This is not merely a poetic expression, as



PUBLIC SCHOOL AT SUTTON, NEB.

the following statements will show. It is a little town of only one thousand inhabitants, but it is distinctly in a class by itself, its many and varied sources of income within the village limits, and its being surrounded by the richest and best developed farm lands in the state, will make it easy to maintain that Clay Center is the banner town for its odd and peculiar industries. The cream separator and the incubator are twin brothers of modern times. And it is the incubator business that has done much and is doing more for this thrifty little town.

It would be of course, impossible to determine just what proportion of the rapid and substantial growth of Clay Center is due to the rich agricultural surroundings. And just what proportion of its late prosperity and progress is due to the remarkable enterprise and business tact of M. M. Johnson, the founder and proprietor of the incubator business of this city. Certain it is, however, that Clay Center

has received much in both directions and combined results are in the highest degree entirely satisfactory to all citizens whose interests or attachments are centered here.

Mr. Johnson established the incubator business here in Clay Center in 1856. He established and built the present factory which employs about 200 hands. Last season he turned out 45,000 incubators, which were shipped to every state and some foreign countries. Mr. Johnson has his own photograph gallery and printing plant, and an office force of seventy-five. Mr. Johnson does largely a mail order business. The following statement pertaining to the post-office business at Clay Center is due largely to the immense business of this one manufacturing house. The Clay Center postoffice has grown since 1858 from a fourth class, to a second class office, doing a business for the last five years of \$150,000 to \$200,000 per year in money order payments, and \$18,000 to \$20,000 in postal receipts. Only seven offices in the state outrank the Clay Center office in volume of business.

One of the most practical organizations of this little city, and one that is doing much for the farmers is the Nebraska Poultry company, under the management of W. F. Holcomb. This company makes a specialty of high grade, well bred poultry of various breeds, which are kept on different farms scattered over the county, where much care and pains are taken to breed and raise the best varieties and the most hardy and thrifty of each variety that can be produced. This organization has been a success from the start.

This little city seems to be the center of a circle that is doing much to develop a better grade of stock on the farm. This section stands first in the state in the breeding of Duroc-Jersey and Poland-China hogs. There are at least three breeders here who have developed some of the best specimens and sold for the highest price of any in the state. One hog was recently sold for \$1,500. And the price of from \$100 to \$200 is not at all uncommon. These high grade breeding animals are shipped out through Nebraska and adjoining states.

The Shetland pony industry is neither the last nor least of Clay Center's many enterprises. H. H. Johnson has a Shetland

pony farm, stocked with about fifty well bred animals. They range in weight from 250 to 300 pounds. It is quite a treat to visit this farm and see these little animals at play. For it is all play with them. These animals are bred and raised for almost the sole purpose of making the children of this country more happy. They are well broke before being sent out.

H. H. Harvey may truthfully be called a dog fancier. He engaged in this industry some five years ago, and his business has steadily increased. He keeps nothing but the Scotch collie and some of these are imported from Scotland. He raises nothing but the very best strain of this breed and in the last year he has shipped out 200 dogs, going to many states in the union.

Last of all, the most peculiar industry of Clay Center is a ferret farm, where this little animal is bred and reared and shipped to all parts of the country. L. A. Brown is proprietor of this most peculiar farm. These animals are sold for the hunting of rabbits and other small game, and to large grist mill and elevator companies and similar concerns, that are apt to be overrun with rats.

Clay Center is not a retired farmers' town. It is largely a workingman's town, and the laboring man has a good home life. Cheap living expenses, good schools and churches, a substantial lot of retail stores, and work the year round. Men who have families, where the boy and girl want superior educational advantages, are wanted here. The flour mill, one of the best in the state, runs night and day, furnishing employment to quite a force of men. Wages are good and this little city is and always has been free from labor troubles.

Of late the best citizens are taking an active part in the city government, so that the city council is composed of strong men. Mr. J. E. Wheeler is serving his third term as mayor, and the city has prospered under his administration. He is one of Clay Center's most active and progressive citizens.

Recent Interesting Developments in Field of Electrical Application

Long Distance Transmission.

PROPOSITION, made ten years or more ago, to convey power in the form of electricity from a point on the upper Rhone to Paris is receiving fresh consideration. The promoters promise an unfailing supply of 200,000 horsepower when the program has been fully carried out, reports the New York Tribune. Recent modifications of the plan in France, making it possible to utilize private rights of way along a part of the route, reduce the estimated length of the transmission line to about 150 miles. Prof. Blondel, its chief advocate, believes that a pressure of 150,000 volts could be easily maintained if an alternating current were used, and 150,000 or 100,000 volts with the use of a direct current. Indeed, he is so favorably impressed with the claims of M. Thury, a Swiss engineer, who has invented the apparatus for raising and lowering the voltage of a direct current—a notable innovation—that he thinks a voltage of 200,000 might be found practicable.

So unfamiliar are American electricians with the Thury system, which is said to have rendered fairly successful service in modest enterprises in Europe, that they will probably hesitate to form an opinion regarding its suitability for the work now in question. Little doubt will be entertained, however, in regard to the feasibility of carrying out the plan in other respects, if an alternating current is adopted. For more than a year a pressure of 110,000 volts has been employed on a transmission line in Michigan. So well do the improved insulators used on that line prevent leakage of current that a contract was closed a few weeks ago by a Canadian power company for the construction of a line to transmit current at the same pressure. Prof. Blondel's plan therefore calls for only a slight advance over what has actually been accomplished, and probably few electricians think that even 120,000 volts will mark the limit beyond which it will be impossible to go.

In the length of the proposed French line there does not seem to be anything unreasonable. One transmission line in California (from Colgate to San Francisco) is more than 200 miles long, and the increase in the distance to be covered in France is only about one-quarter. It is axiomatic that the higher line voltage used the further a current can be sent over a wire of a given size. Prof. Blondel's scheme is much less pretentious than the one which contemplated transmitting power 600 or 700 miles from Victoria Falls, but which has never been carried out.

Almost the only question to be answered relative to the French project is, will it pay? Many things are technically feasible which are commercially impracticable. That is apparently the trouble with the South African enterprise referred to. What Prof. Blondel needs to ascertain is whether he could sell electrically generated power, light and heat in Paris more cheaply than they are now produced by steam, and yet be able to pay his operating expenses and the interest on the necessary investment, which he estimates at \$50,000,000.

'Phone Meters.

The efficiency of a woman in measuring

the talk of another woman is seriously questioned by General Manager Hibbard of the Chicago Telephone company. In fact, he is convinced that his corporation is losing money because their women operators, with lead pencils and pads, often forget to put down a black mark against the use of a measured 'phone service.

Therefore, the company has installed nearly 2,000 "talk measures." These telephone meters, according to Mr. Hibbard, are much more accurate than are the women operators in keeping track of the amount of talking done on each wire.

The franchise of the company provides that meters shall be installed just as soon as an office meter is found. An engineer of the Chicago Telephone company has invented a device which is being tested. This is only one of fourteen which have been investigated, but objections were found to each. That now being tested is the same which is used in New York. The only difference is that New York uses a shorter circuit, and Mr. Hibbard said that the plan which was the most efficient would be recommended by the company.

In addition to counting the number of calls of subscribers this instrument also counts the number of connections made by each operator. Its chief advantage over other meters is that it is impossible for it to be manipulated to register more than the number of calls in a conversation. When a subscriber gets the number desired the operator pushes a button and the call is registered.

"All of these are attached to main exchange wires," explained Mr. Hibbard, "and I believe they will save money for the company. With girls and a pencil we have missed many calls. The operator forgets to put down every call made. Of our 15,613 'phones about 100,000 are nickel-in-the-slot, 3,894 are flat rate (unlimited service), 26,500 are private exchanges and only 1,182 are measured service on which meters can be placed.

"No one has invented a satisfactory meter to be placed on the premises of the subscriber. One man came along with an idea which we have purchased, and perhaps later we will be able to make a meter which we can place on any instrument."

No Injury from Wireless.

Statements have been made in the medical and general press that the electric waves used in wireless telegraphy are injurious to the operators and produce various diseases, such as conjunctivitis, corneal ulceration, and leukemia. Mr. Marconi writes to the London Times to deny these assertions. He says: "As I am not ambitious to be associated with any new addition to the already sufficiently sorrowful list of occupational diseases, perhaps you will kindly allow me to beg of your columns to be supplied no evidence whatever in support of these suggestions. Just as it is necessary to protect the eyes from the effects of any source of intense light, so, in our night-power stations, we find it convenient to surround our sparks and discharges with

a non-transparent screen or box; but no other precautions have been found necessary, and the health of our operators and other employees has, I am glad to say, been uniformly satisfactory. During the twelve years or so of our operations I have had to deal with no single case of compensation for any injury of this origin, nor, so far as I can ascertain, has any injury been suffered. Speaking for myself, I may remark that my own good health has never been better than during the often extended periods when I have been exposed for many hours daily to the conditions now challenged, and in the constant neighborhood of electrical discharges at our transatlantic stations, which I believe are the most powerful in the world."

Shall the Servant Be Master?

Electricity has escaped from the factory and has entered the home, says a writer in Hampton's Magazine. All over America are houses in which coal is a stranger; houses in which the lighting, the cooking, the ironing, the heating is all done by the electric current. These houses are fast increasing in number. All over America are farmers who have on their land small brooks which, if harnessed, will supply this power. But most of us become the tenants of some big corporation owning a waterfall grabbed from us—perhaps 200 to 300 miles away. We have never seen the fall, but we can tap the slender wire by our gate and draw from it—at a cost reaching \$100 to \$250 a horsepower year for small users—the current which in a mo-

ment heats the bathtub of water; which heats the iron; which broils the steak; which lightens the housewife's labors and takes fire and soot from the house.

On the farm in Germany—and soon it will be true here—electric traction motors tapping wires close by drag plows across the fields and harrow and harvest as well. Electricity in New York and Wisconsin already milks the cows; runs the churns; works the butter; saws and splits firewood; lights and heats the house; operates the cider press; charges the storage batteries of the farmer's runabout. In the south it will soon run the mechanical cotton picker and the gin and press. There is no end to its uses. It comes closer to us every day, and in a generation it will be our master or our slave. It is for us to choose, and we must choose soon, whether we will take charge of it and own and operate it, or whether we will bow down to the Hydro-Electro-Cyanamid-Carbide-Copper-Trust, the hydra-ty, to every loaf of bread, every pound of beef, every manger of oats must pay its tribute.

Largest Transformer.

The largest electric transformer ever built is described and illustrated in Popular Electricity (Chicago). The machine, according to this authority, is about twenty feet tall and weighs 120,000 pounds, with the outer casing in place, not including the water which is kept in the casing to cool the interior parts. A transformer is necessary in order to boost or step the voltage (pressure) of the electric current generated by the dynamo up to a value sufficient to force the current through a long transmission line, perhaps in which it is to be utilized. Copper or aluminum wire being expensive, as small a size as possible must be used in the transmission line. The smaller the wire the greater the resistance to the flow of current, consequently the transformer is employed to furnish sufficient voltage to overcome this resistance. A transformer is a comparatively simple piece of apparatus, with no moving parts. When two coils of wire are placed one over the other and an alternating current is passed through one of them, an alternating current is set up in the other, although the two coils are entirely separated and insulated from each other. This is caused by an electrical phenomenon known as induction. This effect is increased if a mass of iron be placed within the coils. If the primary coil, or the coil receiving current from the source, has, say, 100 turns, and the secondary coil has 1,000 turns, the voltage delivered by the secondary will be ten times as high as that impressed upon the primary, although the current, measured in amperes, will be only one-tenth that delivered to the primary. The above, in brief, is the principle of the step-up transformer.

State Control of Wireless.

A scheme of legislation drawn up by the ministers of posts and telegraphs, of war

and of the navy, dealing with radiotelegraphy and radiotelephony, will shortly be introduced into the Italian Chamber of Deputies. At the present moment the state enjoys the monopoly of the employment both of radiotelegraphy and radiotelephony. The chief enactment of this law is to the effect that the government reserves to itself the right to establish and maintain radiotelegraphic and telephonic installations, and in general all the systems, both in the case of the state and its allied colonies, which, either on land or on board ship, may employ energy in order to obtain effects at a distance without the use of conducting wires. It will, moreover, be competent for the government to concede to all persons, companies or administrations, whether of a public or private character, for scientific, education, or even for public or private service, the right to establish and maintain installations of the above nature on land, or on vessels used for purposes of sports or commerce, after formal application for the concession has been duly made.

Wireless Telegraphy in China.

The acting president of the board of communications, says an United States consular report, has sent an order to the telegraph administration in Shanghai, directing it to obtain from foreign firms tenders for wireless telegraphic installations which the government desires to establish between the Altai mountains and Ahsien in the northwest of Chinese Turkestan. The ques-

tion of a wireless telegraph installation in the interior was pointed out by the administration to the Italian Chamber of Deputies. It is said the board considers it practically impossible to establish the ordinary land lines across the great deserts between Peking and the extreme northwest, but the natural difficulties could be surmounted by the use of wireless. Dalkon's system is considered by the local board to be the most important, most efficient, and the administration was instructed to make the necessary inquiries and were also given a list of questions as to the technical matters which it was their business to answer.

Playgrounds of the Nation

The nation that leads the world in feverish business activity requires playgrounds as well as workshops. If we aspire to maintain industrial supremacy we must perform that of conserving not only minerals but men. Arguments for scenic preservation need not be limited to esthetic or sentimental postulates; the playgrounds of the nation are essential to its very life. Not only can the nation, aside from this demand of the times, for no greater value can be won from mountain slopes and rushing rivers than through the utilization of natural scenery in the development of cities.

John Muir has justly termed the mountain parks "fountains of life." Here he had the recreation that makes for increased and maintained efficiency. The appreciation of the beautiful in nature should become more and more an American characteristic, and in these days of national stock-taking we do well to invent the nation's wealth in wild scenery.

The national policy of preserving the best of America for present and future enjoyment is well fixed. Since 1872 twelve national parks have been established, including public domain within as many different States, with an aggregate area of 2,900,000 acres. In addition to these reservations there have been created since June, 1890, eighteen national monuments in nine States, with a total area of over 1,500,000 acres. The Grand Canyon and the petrified forest in Arizona and the natural bridges in Utah are the most notable of the national monuments; of the national parks the Yellowstone, the Yosemite, and the Mount Rainier are the best known. The Secretary of the Interior is the Federal officer charged with the administration of these national reservations and congress makes annual appropriations for their maintenance, those for the current year amounting to \$174,000. The present policy is to make the utilization of these resources for recreation available to the greatest number of people by building roads and trails, issuing maps, and safeguarding the health and comfort of visitors through sanitary improvements and supervision of the transportation and hotel concessions.—Review of Reviews.

Picturesque Musicians of Western Nebraska



COWBOY BAND OF NORTH PLATTE—G. A. LOWELL, DIRECTOR.