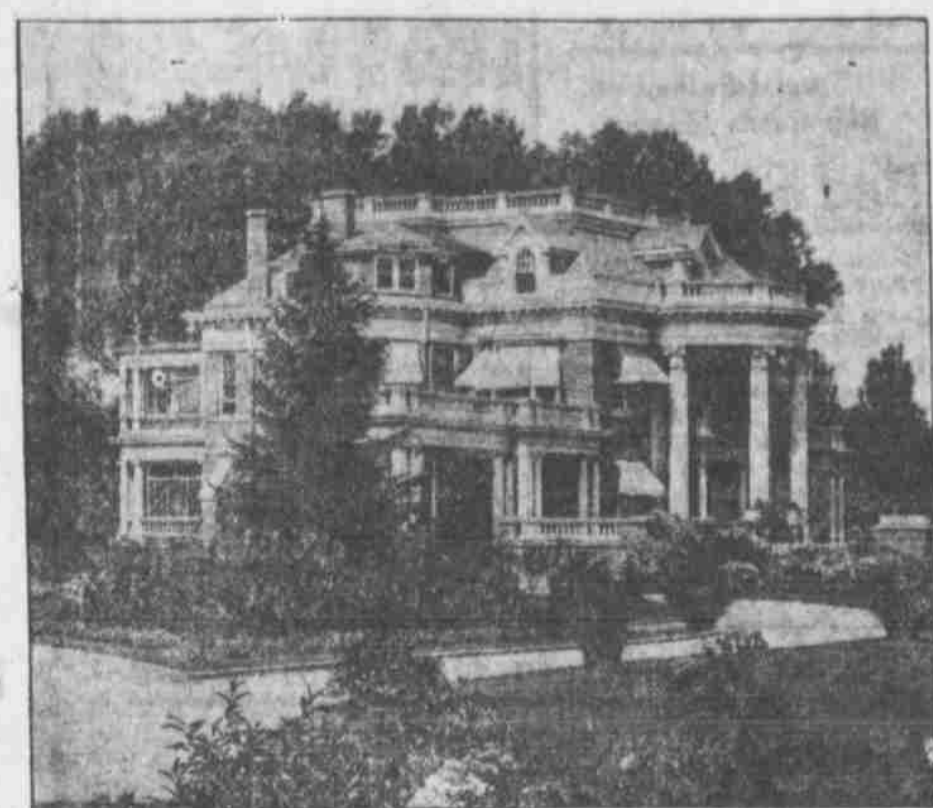


Dodge County's Capital City a Bustling Center of Profitable Industry



RESIDENCE OF FRANK FOWLER, FREMONT.

FREMONT was platted in 1858, a little south of the present city. That was during the Fremont-Buchanan campaign, and the settlers adopted the name naming everything after the most popular man of the time. Military avenue was the only road, and indeed no other was needed, for less than forty years ago only frontier houses were contained in the square mile plat.

If one would properly picture the earliest days of Fremont, he must begin 100 years ago when, in July, 1801, Lewis and Clark arrived in the vicinity of the Elkhorn and Platte rivers, and with a small band of explorers came upon a deserted Oto settlement on the present site of Fremont. Fremont was made the county seat of Dodge county in 1850, but in 1861 eleven other towns attempted to seize the honor from it. It had its trials, as every infant has.

The impression received by a visitor to the city is one of rest and quiet, but not the rest which betokens idleness. From his car window he will notice block after block of pavement, broad cement walks, thousands of trees, beautifully kept lawns, homes of elegance, and a prevalent air of comfort and contentment. For the summer months the visitor may take advantage of the water environments and spend day after day enjoying the shade, the bathing and the camping afforded by the Platte river and its beautiful bluffs. If he is fond of sport, he may rest on the banks of any one of the many lakes for a day's fishing and feel well repaid. He may select as the scene of his sport the Platte, the Elkhorn, Elm creek, the Rawhide. A general survey of public buildings, schools, churches, imposing stone postoffice and library, normal college, orphan's home grounds, greenhouse or poor farm, could benefit even the most sceptical. For the matter of lodges, benevolent orders and social facilities, in every sense of the word, Fremont has few competitors. Among the most beautiful rooms and buildings are those occupied by its lodges. Their equipments are the best that time and care can make them.

"Progress" is a word whose use is necessitated often in reference to Fremont. As long as it did from a wilderness only about half a century ago, it has shaped itself into the very picture of progress and aggressiveness. Not only is the city itself progressive, but the farms surrounding it. Fremont supports two daily newspapers and two tri-weeklies, the Tribune being a republican issue, and the Herald democratic. The Monthly Grain Growers' Journal, and a weekly edition of the Platte River Zeitung, a German sheet, complete its news spreading facilities.

It was back forty years ago that railroad communication was had with Fremont, and at that time, or even a trifle later, town lots sold at 5 cents each. As a center for some twenty-three passenger trains and

to the city a dignified and completed appearance.

The Union Pacific reached Fremont in 1867, taking the course of a well-beaten track over which oxen and mule traffic had been carried on between here and Omaha. In 1880, three years later, the Sioux City & Pacific formed a junction with the Union Pacific and a year later the Fremont, Elkhorn & Missouri Valley road was laid. By means of these roads, the latter now being called and known as the Chicago & Northwestern, confuence and communication is had with the extensive lumber and mineral centers of the northern regions, the stock districts of the west and every city and station into which Fremont's local exports are shipped. Without mention, the fact is apparent that the railroad system has added much to the growth of Fremont as a center of industry and manufactures.

Fremont has over forty manufacturers and jobbers; factories that employ nearly 50 persons, eighty traveling men representing local concerns; seventeen churches, all in good flourishing condition; four national banks and three savings banks.

The large number of factories and industrial pursuits carried on within the city is due to several reasons. The location of the city, within such easy access to the Missouri river, in the very heart of one of the most fertile valleys of the continent, the good railroad connections, the large retail trade and the great advantage over surrounding cities in the facilities for handling freight.

A side from the factory and manufacturing feature, Fremont boasts of its city schools, its German and its Normal school. The high school, in outward appearance and inner excellence, is unsurpassed. The broad streets give the impression, in themselves, of expansion, and the block after block of cement curbing which adds so much to the symmetry and beauty of the laws and places of residence, denote that the citizens are interested even in the smaller improvements. It is well, when considering the efforts of energetic citizens, to consider the cause of their enthusiasm.

thirty-six daily mails, with even a larger number of freights, the necessity of good depot accommodations can be readily seen. Fremont is at last prepared to point with pride to this feature of its railroad system. The Union Pacific has had, perhaps, the greatest influence toward building up the city of any one feature now connected with it, and it was not doing itself justice as long as it continued to do business in the little, old, red freight and passenger depots.

Fremont has always been the great Chicago & Northwestern town of the state. Lines of that system run out in seven directions from this city. Division headquarters are located here in a beautiful



DODGE COUNTY COURT HOUSE, FREMONT.

company building, and a large force of employees reside here. The monthly payroll of the company is more than \$25,000.

The Union Pacific, with its great double track overland line through the city, is responding promptly and meeting every growing need of the industry and business at this point with ample terminals, local switch engines, track scales, etc. In the Burlington line the city has a great north and south route, connecting the Burlington with the related Great Northern and Northern Pacific lines. It is no uncommon thing to see four great freight trains follow each other over this line at fifteen-minute intervals. The new Union depot was erected at a cost of \$60,000 and gives the approach

of setting forth the advantages of the city, and believe that acquaintance among business men in the state can do more toward the upbuilding success of a city than all the free advertisement of many books. They trust to the good judgment of every one who becomes acquainted with Fremont to add another word of encouragement to some prospective investor and homeseeker. Through the Commercial club Fremont is ever in readiness to undertake a convention or to welcome a public man. The club spends \$1,000 or more per year out of its own treasury in co-operation with the local road-making authorities on surrounding roads leading into the city, being careful to concentrate on one main long distance highway from each direction toward which the farmers from far and wide converge and always be sure of reaching the city. The club holds that it is vain to rail against the farmers patronizing catalogue houses when it is not made comfortable and convenient for them to get to local merchants to trade.

Fremont is an exceptional degree in the enormous corn production of the surrounding counties and the inexhaustible supply of native hay from the adjacent Platte and Elkhorn valleys. It is a common thing for Dodge county, of which Fremont is the county seat, to produce 5,000,000 bushels of corn per annum, and Saunders county, to the south, raises from 7,000,000 to 8,000,000 bushels a year. The valley lands to the north and east of Fremont are one vast hay field, the landscape being thickly studded with haystacks as far as the eye can reach.

Fremont was the pioneer in the winter feeding of sheep. The first band was brought in 1877 to Fremont from New Mexico and winter fed here by the Reynolds brothers, still active in the stock business. It was followed up later on a large scale by Blewett & Holding. As many as 300,000 sheep have been fed in this way in winter, and the profits realized per head have at times been very handsome.

Dodge county has always been a great horse market. In the early pioneer days when but few horses were raised in Nebraska, great numbers of work horses were brought from Iowa and Missouri and distributed from Fremont. In later years the process has been reversed and horses are shipped by the carload from this point to points clear through to the Atlantic coast and to the south.

The "Golden Rod" Creamery company has its milk routes covering the surrounding country and ships in cream-beds, by rail. The Fremont Creamery company handles eggs and grocers' butter by the carload. Fremont is asserted by the poultry experts to be the biggest fancy and general poultry center in the state. There is no annual county poultry show anywhere in Nebraska that begins to equal the Fremont show and birds are attracted from several surrounding states.

The farmers are given in the main to general farming, raising corn, some winter wheat, and an increasing acreage of alfalfa, some oats and a great many hogs. Potatoes are not extensively raised in this section of the state. For corn raising, the soil is practically inexhaustible. There are fields which have been continuously in corn for forty years and yet which are still producing as high as seventy bushels per acre. Generally speaking, however, better results are obtained by occasional rotation of corn with winter wheat and oats. Some farmers provide that at least one-third of the farm must be put in small grain by a tenant each year, thus making an entire rotation every three years.

It is a constant pleasure to drive through the surrounding farming country for an indefinite number of miles in any given direction and observe the beautiful farm homes, many of them fitted out with every modern convenience. Handsome mansions are springing up here and there on the farms, with colonial pillars, hot and cold water supply, individual gas plant and other city conveniences. Fine carriages are common in this section of the country who could drive with his family to church or to town in a new farm wagon with a spring seat or two was considered an aristocrat among his neighbors. Now there is an abundance of single and double carriages and many of the best of the kind in the state. The farmers and their wives and daughters buy the best things the clothing and dry goods stores afford. The farmers frequently are among the directors and officers of banks in nearby towns. Many of their children take high school and college and university courses. There are rural base ball nines, rural orchestras and rural women's clubs.

It is an axiom of the city that while it works early and late to secure new manufacturing industries, distributing interests and transportation facilities, there is nothing so important as securing the trade of the wide and wealthy farming constituency. To this end its merchants give liberal advertising support to its two daily papers, which reach practically every farm family within a radius of fifteen miles in some directions and thirty-five miles in others.

Fremont is claimed to

watered. One-third of the entire area of the county consists of valley and bottom land. The county, wedged in as it is at the junction of the Platte and Elkhorn rivers, seems to be not only the natural concentration of fertility, but the outlet for the transportation of the great stock product of the state. The southern boundary of the county is the Platte river, named by Lewis and Clark in 1804, on account of its width and shallowness. Its fall is about six feet to the mile. The Elkhorn

manufacturing concerns. New industries are steadily coming of their own accord to the city from smaller points within a hundred miles or two in Nebraska and Iowa to take advantage of the city's superior railroad and banking facilities and the fine market from this point for their wares.

The city in its building up of industries is doing so on the well demonstrated principle that it is better to found its manufacturing prosperity on a multi-plicity and wide variety of products than on a few, even though the few, were of an overshadowing magnitude. Its manufacturing plants, and distributing concerns number sixty-seven, ranging from small interests, with only a few thousand dollars capital, but with elements of growth, to a great wide spreading corporation with a paid up cash capital of \$2,000,000.

The average deposits of the Fremont bank is something over \$2,000,000. The bank clearings for 1908 were \$1,582,000.

In postoffice receipts Fremont ranks next after Omaha and Lincoln, being considerably in excess of any other city in the state. For 1908 the receipts were \$40,123.22, making it an office of the first class. This was an increase of 10 per cent over the preceding year. The large receipts above those of other cities, arise from the extensive correspondence of the manufacturing and jobbing institutions, including such concerns as the Sure Hatch incubator company.

Religiously, all the leading denominations are represented. The strong churches are the Baptist, Christian, Congregational, Roman Catholic, German Lutheran, Methodist, Protestant Episcopal and Presbyterian. Some of the strong clergy of the state are represented in the several pulpits. The leading churches have a large membership and the finances are well cared for. Among the membership are some of the best business people in the city. The new \$60,000 Young Men's Christian association building, as yet completed, is a fine testimonial to the religious spirit of the city. It is a thoroughly modern and complete structure, with every convenience included that is known to Young Men's Christian association architects. The board of directors having the construction in charge was composed of some of the

leading business men of the city, who had the courage of their conviction and built for the future as well as the present. One of the distinctive structures of which Fremont boasts, not common to many towns in a religious way, is the temple of the Woman's Christian Temperance union. This is a handsome frame structure, with a large auditorium, reading room, etc., and is owned by the union, free of debt.

Dodge county is in the second tier of counties west from the Missouri river. Its area is 540 square miles, and there is not a single township which is not abundantly

river runs through the county from northwest to southeast and with its tributaries furnishes good water powers, and in early years the streams were so well timbered that several saw mills were very successfully operated.

The water powers have been partially utilized in the operation of several grist mills throughout the county. The first claim made in Dodge county, were by John and Arthur Bloomer, near the mouth of Maple creek, in 1858. Miss Charley Colson taught the first school in Fremont, during the summer of 1858. The following summer, Miss McNeal taught the first district school. The Congregational church was the pioneer religious organization of the county and Rev. I. E. Heaton the first pastor.

Dodge county has 217,514 acres in farms, with 172,549 acres under cultivation. It has a valuation of \$61,410,000, and a railroad mileage of 408 miles. It has eight frame and twelve brick school buildings. The schools of the county employ 167 teachers, and the school population of the county is 7,124. Number enrolled in the public schools is 5,631, with an average daily attendance of 4,827. The average number of months of school held in the county is 8.70. The average monthly salary of the teachers of the county last year, was \$41.95. Three modern, up-to-date school buildings were built in the county during the last summer, and two brick structures, one to cost \$10,000 and the other \$25,000, are now being erected. Many improvements have been made during the last year in other school buildings, school houses painted and repaired; walls have been papered or tinted, libraries provided, pictures hung, the grounds cleaned up, and in practically all the town schools and in a number of the rural schools a piano or organ may be found. School buildings and school grounds are in the best condition they have ever been. A crusade for better school grounds and buildings has been waged during the last three years from the county superintendent's office, which has had a marked effect.

The first paper published in Dodge county was the Tribune, a weekly, at Fremont on July 23, 1863. This was also the first paper published north of the Platte river. The publisher was J. Newton Hayes. The first copy off the press of this edition is still preserved and was presented to Ray Nye this Christmas by Mrs. E. C. Usher.

There are ten papers in five towns in this county. Would estimate that 25 to 30 per cent go out on rural routes. These rural deliveries have been great factors in keeping the farmers up to date and in touch with the outside world. The greater proportion of the papers taken by the farmers are dailies.

Y. M. C. A. BUILDING.

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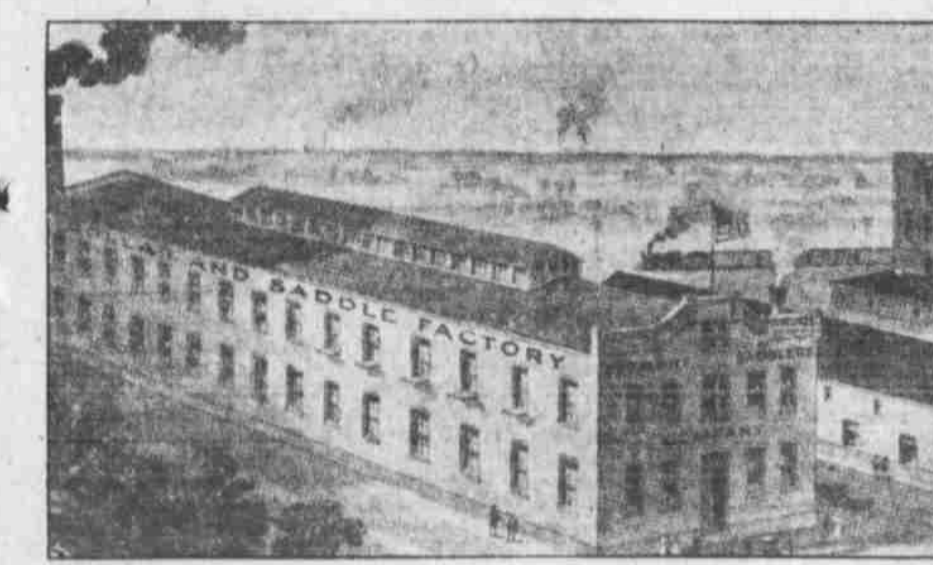
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FREMONT SADDLERY COMPANY'S PLANT.

In the Field of Electrical Experiment

A Wireless Tests.

NOTABLY elaborate series of experiments with wireless telegraphy, according to a Boston dispatch to the New York Tribune, is now contemplated by the United States Navy department. It is proposed to install on the flagship of the Atlantic fleet and two scout cruisers apparatus capable of transmitting messages 1,000 miles under the most unfavorable circumstances, and three times as far when satisfactory conditions prevail.

The country has been treated to some surprises in respect to the distances to which radio-telegraphic dispatches have been sent from war vessels, but there has been a lamentable variation in the range of the instruments hitherto used. Perhaps any approach to uniformity is still out of the question, but an improvement on former achievements may at least be hoped for. Many clever electricians have been studying the art of which Marconi gave the world the first hint, and it would not be strange if some of his students were able to outdo their master. Communication by means of Hertz waves can hardly be supposed to have reached its full development at present.

From the announcement that the Connecticut, the Salem and the Birmingham will exchange messages with a land station at Brant Rock, in eastern Massachusetts, it is inferred that a system of which the world has heard comparatively little is about to be tested, the one devised by

Prof. Reginald Fessenden, an American. The company which uses it has an experimental station at Brant Rock, and from that base of operations has attempted transatlantic telegraphy. The company has also sought a contract for installing apparatus at Washington which would send messages 4,000 miles. If from Brant Rock it should now prove the feasibility of such a performance its hope of completing negotiations with the government would doubtless be strengthened.

Noteworthy Feat in Telegraphy.

A noteworthy feat in telegraphy is the transmission of messages from London, through India, to Burma, a distance of nearly 8,000 miles, without relaying. This feat has been exceeded in the total number of miles coupled in one circuit, as when the midnight signal is flashed all over the United States at New Year's. But the new line dips twice under seas, crosses mountains and is carried through dense forests and across deserts, thus passing through every extreme of temperature and humidity.

To Great Britain the demonstrated practicability of this electrical connection means much. It is another step toward the solidarity of the empire, by bringing all its parts into close and quick touch. There was already communication between these points by telegraph and cable, reports the Washington Herald, but they were by roundabout routes, following the plan of

stations are placed in saloons and barber shops, where women cannot go. It will have the additional advantage, too, that in the street one can talk without the unpleasant knowledge that a roomful of loungers can hear all that is said.

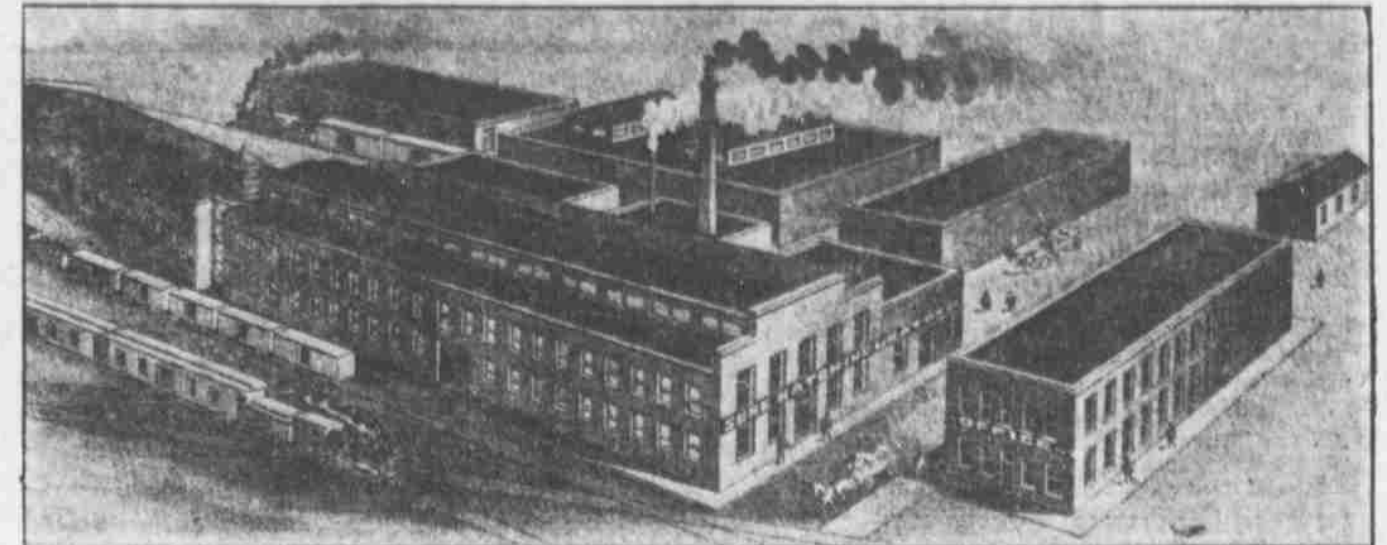
Those who have tried the street telephone say that the rumble and noise of the traffic does not cause any particular annoyance, as the head of the person using the phone is inside the little box in which the telephone is placed, and the extraneous noise does not interfere with hearing the voice of the person at the other end of the line.

To the telephone company the advantage is an obvious one. Not only does the new street box bring money into the coffers of the company by the use of the phone, but the profit is almost 100 per cent, the boxes being placed on the company's own poles, eliminating, therefore, expense for rent.

The directory books are placed inside the boxes and chained. The toll is the usual nickel, which is dropped in the familiar slot.

Improved Storage Battery.

The storage battery can only be used with continuous currents and therefore is seldom proposed in connection with alternating current electric traction. It is proposed this year to begin electrifying the Baden main line railways between Basel, Zell and Säckingen on the single phase system, and an equalizer or buffer battery will be employed in the substation. Three-phase current will be received from the power station, and a large motor which will drive a single-phase generator feeding into the overhead system, and will also be



SURE HATCH INCUBATOR PLANT, FREMONT.

connected to a continuous current machine. When the demand for single-phase current is low the three-phase motor will expend part of its power in driving the common current machine as a generator. The current from this machine being employed to charge a storage battery. When the demand for single-phase current is above the normal the continuous current machine will take current from the battery and set as a motor driving the single-phase generator. In this way the fluctuations of loads are much smoothed out, and as experience with the Liverpool-Southport electrification has shown, a smaller installation is sufficient. The distribution system of the Liverpool-Southport railway is continuous current and therefore more suitable for an equalizer battery, but from an engineering point of view, at least, the battery should work well on the alternating current system.

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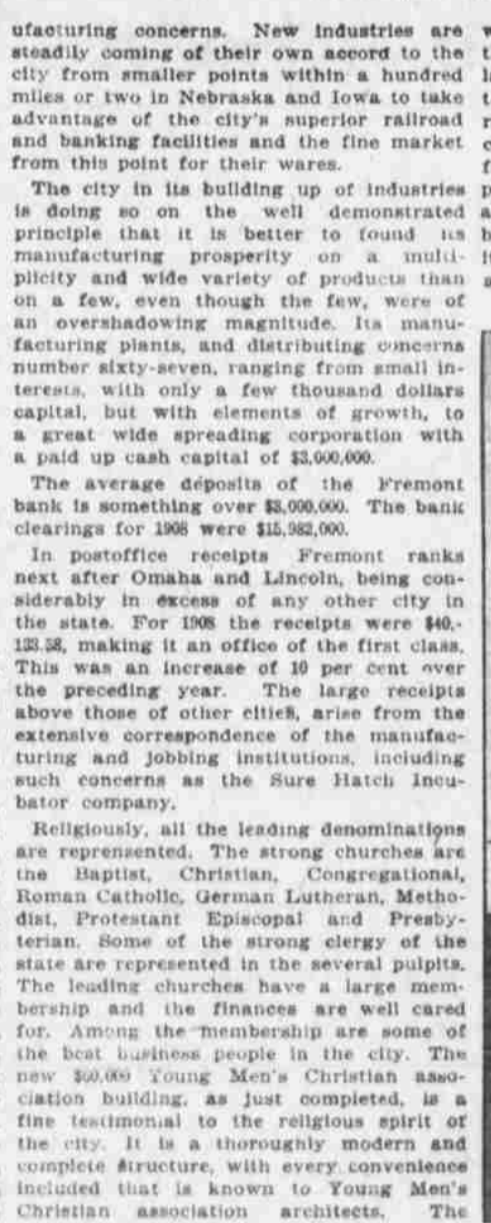
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connected to a continuous current machine. When the demand for single-phase current is low the three-phase motor will expend part of its power in driving the common current machine as a generator. The current from this machine being employed to charge a storage battery. When the demand for single-phase current is above the normal the continuous current machine will take current from the battery and set as a motor driving the single-phase generator. In this way the fluctuations of loads are much smoothed out, and as experience with the Liverpool-Southport electrification has shown, a smaller installation is sufficient. The distribution system of the Liverpool-Southport railway is continuous current and therefore more suitable for an equalizer battery, but from an engineering point of view, at least, the battery should work well on the alternating current system.

Phoning Across the Ocean.

A fresh experiment is to be made with a method of promoting submarine telephony devised several years ago by Prof. M. I. Pupin of Columbia university. It consists of the introduction of carefully computed intervals, in a cable of what electricians call "choking coils." These increase the distance at which speech can be made audible, not by magnifying the sound, but by lessening the rapidly with which electric vibrations die out. According to the London Times, the British government—doubtless in co-operation with that of France—has decided to lay a cable prepared in this manner across the English channel. As it will connect with land lines at Dover and Calais, it is ex-

pected to facilitate telephonic communication between London and Paris. Though some use of Prof. Pupin's invention has been made in the United States to enhance the efficiency of overhead wires, it has thus far had only one trial under water—on a telephone cable which crosses Lake Constance from Switzerland to Germany. As for some reason the pioneer experiment has not proved entirely satisfactory, the outcome of the second trial under water will be awaited with exceptional interest.

If in this instance the system should work perfectly it is not unlikely that there would be a fresh discussion of the feasibility of trans-Atlantic telephony. It has repeatedly been pointed out that even if all the technical difficulties in the way of such an enterprise should be overcome it might not prove commercially successful. The hours during which a telephone line between New York and London would be patronized would be limited, and the cable devoted to such service would cost much more than one for telegraphy alone. It is to be remembered, however, that a cable equipped with "choking coils" could be employed for telegraphy as well as telephony. It would not necessarily be idle, therefore, when it was not used for conversation. Indeed, experts say that it would work better than any other telegraph cable of the same length.

Substitute for Condensers.

As a substitute for large condensers using paper, glass or mica for dielectric, an electrolytic condenser has been devised, which consists of aluminum electrodes immersed preferably in ammonium borate.

Magnesium or tantalum electrodes can be used, but aluminum is preferred because it is cheaper. The current acting upon the metal causes it to be coated with a thin layer of oxide, but this oxide is very porous, and in the pores a gas is formed which serves as a dielectric between the metal and the electrolyte. The resistance of this gaseous dielectric increases with the tension up to a certain critical point. Experiments have been made with various electrolytes, and it was found that the critical tension with sulphate of soda was forty volts, permanganate of potassium 112 volts, bichromate of potassium 123 volts, silicate of soda 415 volts, citrate of ammonia 470 volts, borate of soda 490 volts, and citric acid 528 volts. The best effect was that of ammonium borate with a critical tension of 408 volts. There was quite a loss of current with tensions above ninety volts.

A Light Dinner.

Cornelius V. Collins, the brilliant criminologist and superintendent of New York's state prisons, narrated at a dinner in Troy some reminiscences of his interesting work.

"A clever criminal of gluttonous proclivities," he said, "once coughed a complaint in father next term.

"My suspicion entering his man's cell one day, found it very hot and stuffy.

"Why have you got your ventilator closed?" he asked.

"The burly and gluttonous prisoner answered plaintively:

"Well, inspector, yer honor, the last time I had the ventilator open, the waast flew in, you see, and carried off my dinner while my back was turned."