FOUNDED 1856.

electric car beater for hotels and restaur- Smithsonian Institution of which he had IN THE FIELD OF ELECTRICITY ants where eggs are used in large quan-

Some of the Possibilities of the Wireless Telephone Explained.

ELECTRIC HEATING IN THE HOMES

Progress that is Bringing the Force Within Range of Economical Utility for Domestic

Purposes.

The report of the progress said to have been made by Valdemar Poulsen in his derelopment of the wireless telephone, while lacking confirmation, has served to renew interest in this recently invented method of communication. Poulsen is reported as having maintained communication over a distance of 300 miles.

If he has actually accomplished that feat, reports the New York Times, he has out- may be assigned primarily to the relative done anything that has been accomplished, costs, but it is also to be remembered that on this side of the Atlantic with the wire- | while, as regards lighting, the majority of less instrument, and those who have been developing it here believe that they have accomplished much. The American record sufficient illumination, as regards heating so far is the successful transmission of they look for an equipment that for moda message from the laboratory in New York | erate outlay will cook their food, supply to the steamship Montgomery of the Ward line, outward bound for Cuba. Communication was maintained until the vessel was 125 miles out from port.

Although many of a scientific and of a practical turn of mind had been working on this offshoot of wireless telegraphy. very little had been heard of the wireless telephone until the navy adopted the system and installed it on the sixteen battleships which Admiral Evans led to the The chief engineer of the com-Pacific. pany made the ocean-to-ocean trip, and in a letter to the general manager says exuberantly:

"We, or rather the boys in the fleet, have made some dandy records with the sets. On the morning of May 6, before coming up the bay of San Francisco, the operator on watch on the Connecticut talked to the Pacific fleet, lying at Mare Island, a distance of thirty-five miles, with about eighteen miles of land included. Yerba Buena Island also reported hearing the Connecticut loud enough to read and unstations. derstand every word spoken. This distance is about fifty miles from where we were laying.

"I now have a station installed at ferry terminal, San Francisco, and have eight navy operators to stand watches, from 9 a. m, to 9 p. m. every day. These men were detailed by the chief of staff United States Atlantic fleet and approved of by Admiral Thomas.

"There are to be some changes made in the fleet, and if the Maine and Alabama are left behind their telephone sets are to go on whatever ships take their places. And it is probable that if the torpedo boats lay up in the Mare Island navy yard their sots will be taken off and installed on ships of the Pacific fleet, so as to be of use both for practice of the operators and communication."

The Ellsworth company, which is energetically pushing the system, promises to be in a position next spring, when an eastern man wishing to communulcate with a friend navigating the Great Lakes, may apply to the nearest long-distance telephone booth and in a few minutes be in direct communication. The telephone people would at first ascertain the neighborhood of the vessel, and would then switch the connection to the nearest wireless telephone station, and that station would make connection with the steamer.

Negotiations are also under way looking to the equipping of railroads with the device, Mr. Gaunt, the assistant general manager of the Sante Fe, is now in San Francisco investigating the work done by the instruments on the voyage of the fleet tantic to the Pac One feature of the device which does not seem to be generally understood is that a vessel equipped with a wireless telegraph apparatus may communicate with one which carries only a wireless telephone instrument, and vice versa. Another popular misconception is that the wireless 'phone can work only over water. But recent experiments have shown that it is equally daptable for land. The reason so little has been heard of it by landsmen is that the land field is already so fully occupied by the telephone companies whose messages are carried by wire.

illes. Like most electrical devices, it is a case of you press the button and the maof a vertical support, with an arm holding the egg beater shaft. Below this is an adjustable bracket, provided with a bowl.

in which the eggs are placed. By pressing the button the beater is set to revolving swiftly in the bowl, and quickly produces the desired result.

Electric Heating.

Although, in its physical aspect, the utilization of electrical energy to produce light is so closely allied to electric heating as to be nearly identical with it, the practical considerations which differentiate these two branches of engineering have led the public to welcome the one and only tentatively to accept the other. For special conditions, electric heating has, no doubt, been effective, but for general purposes it has made little progress. The difference in the comparative degrees of public favor

users are content with the attainment of the single object, clean, cool, steady, and them with hot water, warm the air about them, and ventilate their dwellings. If the question of cost of electrical energy is

set aside, the design of apparatus for any one of these specific purposes is compara-

tively simple; the real difficulty for the engineer, however, is to provide apparatus which shall combine the powers of a kitchen range with the cleanness, control and capabilities of ventilation, that will be attained when electric heating becomes as popular as electric lighting. Progress must be looked for along two lines that, is a measure, converge. Electrical energy must itself be cheapened, and electrical heating apparatus must be adopted to the widely varying functions required of a heating plant, at moderate outlay for equipment,

repairs and maintenance. Coal fires and gas have at present so much in their favor that electric heating must for a long time take a secondary position. The general adoption of electric heating, however, would no doubt favorably increase the load and the power factor of electricity supply

Throughout Germany and Continental Europe, the prevailing method of heating rooms is by means of large ornamental the stoves, which reach nearly to the ceiling, and have a large heating surface at a rather moderate temperature. These, of course, are usually intended for wood or coal. A system of electric heating adapted to these stoves has, however, recently been brought out in Berlin. An electric radiator is mounted inside the stove, so that it will rapidly heat the walls by a circulation of the enclosed air. The heat is given off from the exterior tile surface of the stove. and this is thus tempered so as to avoid the dry high-temperature effect. As the average cost of current in Germany is about 4 cents per k. w. hour, this system seems to have epened up a promising field for electric heating in that country. It is stated that an average-sized room can be heated in one hour, and will then remain warm for a considerable period, as the tiles rotain their heat for a long time. If so,

why not dodo the room in tiles, and do nway with the fireplace altogether? High Voltage.

On the lines of the Muskegon-Grand Rapids Power company, which already held the existing record of 72,000 volts, the ten-This is due to the use of the suspension to deal with pressures which were pre-

been appointed the first secretary. In 1878, two years before his death, he was asked to write an account of his work chine does the rest. The beater consists at Princeton. This is the document now in the university library. It was across the university campus that

he strung the first telegraph wire ever operated in America. A year of two before he left Albany he had been working at his invention of the electro magnetic telegraph for transmitting signals at a distance whereby dots might be made on paper and sells struck, indicating letters of the alphabet. He refused to patent the invention on the ground that it was incompatible with the dignity of science to confine the probable benefits to the use of any one individual. In his statement he says: "I think the first actual line of telegraph using the earth as a conductor was made in the beginning of 1836. A wire was extended across the front campus from the upper story of the college library building to the philosophical hall on the other, Through this wire signals were sent from

time to time from my house to my labor atory. Portions of Prof. Henry's electrical apparatus are still in the university museum, among them being his giant electro magnet nicknamed "Big Ben" by the students for whom he constructed it.

ENGLISH LANDMARK WILL GO Six-Century-Old Inn to Give Way

to Modern Business Block. LONDON, Sept. 26.-(Special.)-If the

plans of the present owner of Clifford's Inn hold good London will soon lose another of its old landmarks. Nowadays the news that this old gray city has lost "another landmark" is so frequently heard that it is a wonder there are any links with past centuries left. Changes are not what an American would call unduly rapid in this city, but those picturesque old places associated with even so recent a celebrity as Dickens, have now almost wholly given away to the march of the builder. Clifford's Inn is situated in the heart of

Fleet street and in the part of London known as "Johnson's." Within hailing distance stood the famous public houses that Boswell's hero used so frequently to visit, and a few paces away stands the "Che-

shire Cheese," the restaurant which is still pointed out to credulous Americans, in particular, as the author's favorite eating place, and where one may even see the spot made on the wall by the greasy head of the writer. Indeed, in Clifford's Inn itself, Lamb. Scott, Coleridge and Southey were frequent visitors, and in one of the rooms lived for a time, Sir Edward Coke, the prosecutor of Essex; Raleigh, and the gunpowder plot conspirators and the great authority on English jurisprudence. But Clifford's inn dates from a time con-

siderably before these famous men. As a matter of fact it is very nearly 600 years. old, having been built in 1210. Thus it is the oldest of the Chancery inns. In 1344, at the death of the widow of the fifth Baron de Clifford, to whom it was granted by Edward II, it became a residence for law students at an annual rental of about \$50. Up to five years ago, when the inn was sold at auction to William Willett for \$100,000, it still was more or less intimately connected with the law, but of late years

the legal fraternity have given way to journalists and architects. The old buildings have many historical

B. H. MEILE,

ASS'T CASHIER

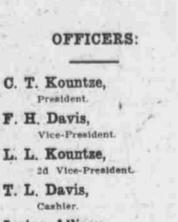
\$800,000

\$6,500,000

JOHN F. COAD

G. E. PRITCHETT

associations. For instance, it was in the sion has now been raised to 110,000 volts. adjust the boundaries of the city of London after the great fire of 1665. A docutype of insulators which renders it easy ment still in existence contains a list of the rules "for the honorable government viously considered to be almost impossible. of the new inn, near Chancery lane" and The pin insulator, when constructed of is said to date back to 1479. Some of the becomes unwieldy and mechanically are still in force. By this list we find that:



Irving Allison, Ass't. Cashier.

Capital and Surplus, \$1,000,000



	DIRECTORS:
	E. M. Andreesen
1	J. D. Creighton
	F. H. Davis
1.	T. L. Davis
	C. B. Kountze
	C. T. Kountze
	L. L. Kountze
	W. A. Paxton, Jr.
	W. S. Poppleton.
	in the second states

NATIONALIZED 1863.

The Oldest National Bank in Nebraska

The first charter taken out in Nebraska, under the National Banking Act of 1863, was the one obtained by "Kountze Brothers." who, for nearly seven years previous to the time, had been operating in Omaha as private bankers. The charter number (209) shows that they were among the first in the country to realize the wisdom of that act and avail themselves of it. The charter was received on August 26, 1863, and the bank organized with Edward Creighton, President; Herman Kountze, Vice-President; August Kountze, Cashier. Since that time the bank has been serving its customers in such a way that each year has shown a steady increase in its business. This has been accompanied, from time to time, by the necessary increase in capital, so that the fixed assets of the business might show

a proper proportion to the deposits. There have been remarkably few changes among the officers of the business, the newer officers having, without excption, grown up in the work, with the result that there has been a constant increase in the experience and ability of the management, thus insuring the most intelligent care and attention to the interests of all customers.

It counts as valued customers, not only a large number of firms and individuals in Omaha but also a constantly increasing number of banks and bankers throughout the west, who find it convenient and advantageous to carry large balances here, against which they may make their drafts for their local customers, in settlement of purchases from Omaha's rapidly growing manufacturing and jobbing trade.

The bank has always kept fully abreast of the times in its facilities for handling each department of its work.

This bank was the first in Omaha to establish an exclusive LADIES' DEPARTMENT. This department is in charge of ladies, is especially equipped for the accommodation and exclusive use of lady patrons, and has proven very popular.

This bank was the first in the city to put in thoroughly up-todate SAFETY DEPOSIT VAULTS, in which are boxes of various sizes for the safe-keeping of papers and other small items; also storage vaults for trunks and other large packages.

Realizing the increasing cosmopolitian character of the city, this bank, years ago, established A FOREIGN EXCHANGE DEPART-MENT, which is in charge of an expert linquist so that careful attention can be given to all customers desiring to make remittances to any country.

The steady increase in the number of Certificates of Deposit (bearing interest at 3%) shows that people desiring to have their surplus funds employed at a reasonable rate of interest, appreciate having such funds in the hands of a bank of the known strength and solidity of the-

Thirteenth and Farnam Sts.

United States Depository.



First National Bank of Omaha

Meanwhile the wireless telegraph people, particularly the Marconi company, are making constant strides, and day by day increasing the celerity and certainty of aerial messages.

The transmitting apparatus, the sensitive receiving device, and last but not least, the directive arrangements whereby impulses are transmitted in a given direction. invented, worked out and patented by Marconi, are chiefly the means whereby these wonderful results have been obtained Electric Egg Beater.

A Jarsey City inventor has produced an

LUTHER DRAKE,

Deposits,

LUTHER DRAKE

Capital and Surplus

GEO. S. ROGERS

PRESIDENT

troublesome, while the use of the suspension insulator actually leads to improvements in line construction. It is pointed out that as the use of more distant powers "Dinner time during vacation to be 11 of the clock, and in term time, noon.' becomes necessary the employment of ex-"Any man bringing a strange man into cremely high voltages will be much more the butterle or pantry in the time of dinfrequent, and that it is possible that lines may eventually be of such length as to be ner or supper to drink shall be fined 6 a material fraction of the natural wavepence for every time of offending. length corresponding to the frequency. "For every word of ribaldry spoken in This may give rise to a new class of the hall during dinner or supper a fine of troubles which will render new devices I farthing. needful.

Pioneer of Electorial Science.

they have been shut; or play at or keep In one of the locked alcoves of the library dice, cards or any ridiculous amusements of Princeton university is a manuscript or unlawful game; or receive, keep, or volume of some seventy-six pages written by Prof. Joseph Henry the famous electorial scientist, giving an account of his researches while a professor at Princeton. hall He was called from Albany to the chair of natural philosophy, or physics as it is now called, at Princeton in 1833 and remained

The Merchants National Bank

of Omaha, Neb.

UNITED STATES DEPOSITORY

DIRECTORS

A STRONG, CONSERVATIVE INSTITUTION

PARTICULAR ATTENTION PAID TO ALL BANKING BUSINESS

ENTRUSTED TO OUR CARE.

FRANK T. HAMILTON

FRANK T. HAMILTON.

The property covers about an acre of ground fronting on Fetter lane and Chancery lane and abutting on the Record ofthere until 1848 during which period he fice. Mr. Willett, who has been unsuc made some of his most remarkable anticipations of modern electrical science such cessfully trying to find a purchaser since he acquired the property intends to erect as for example wireless telegraphy. In 1848 he went to Washington to organize the a modern business block upon it.

F. P. HAMILTON.

ASS'T CASHIER

"The steward for the time being shall shut the gates of the inn at 9 o'clock in general, or at the latest between 9 and 10.

and whitest of the stately range is Mount Huascan, which is over 22,000 feet high. "No member of the inn shall break into the butterle or through the gates after photographs of Huascan are accessible.

other even more impressive pictures of the bring into the inn any dog called a greyhound, grey bitch, spanlel or mastiff; or mountain were taken from points where only one of the peaks can be distinguished. write, cut or scratch upon the tables in the It is this mountain that Miss Annie S. Peck

> highest point. Mount Huascan has several names. The Indians call it Matara-racu, its popular name in Peru is Hugscaran, but practically as Raimondi called it when he wrote the

first description of the mountain, On account of the customary clearness of the atmosphere the mountain usually appears much nearer to the observer than t really is. On a clear day it may be seen from far out in the Pacific; and from every good point of view it is, for several reasons, one of the most impressive sights in South America.

In the first place, it is bound to attract attention because it is a half mile higher than any other mountain in that region. Then, it has the great advantage over Aconcagua, in Argentina, supposed to be the highest of the Andes, that it is not so environed by other mountains as to lose the effect of great height. Its situation makes Huascan appear even higher than it really is.

From several points the view of its long teep slopes is interrupted by no intervening mountains. You see the granite from its base near the valley of Huaylas to its topmost peak. The upper 8,000 feet is perfectly white, and its gleaming mantle of perpetual snow and ice makes it seem like

thing of air. Explorers say that its beauty surpasses anything else in the Andes when its white is turned into rose tints by the rising and setting sun.

Let us compare this white pyramid with Jungfrau, the grandest mountain of the Bernese Alps. The Jungfrau reaches a height of 12,000 feet, but it rises from a very high base which diminishes the effect of its great elevation.

The limit of perpetual snow on the Swiss nountain begins at 8,000 feet, and its snow and ice covering is therefore 4,000 feet in vertical extent. If we could wrap the Jungfrau in the white mantle of Rauscan it would extend to the foot of the mountain and far down the verdant valleys as far as the hamlet of Lauterbrunn.

There are great dangers in the ascent of Huascan. The natives living within sight of it have told every mountaineer who has come to them that it was impossible to get to the top and that to attempt the asget to the top and that to attempt the as-cent was courting certain death. One of the most formidable dangers is the rush of avalanches, which is likely to occur at "In Manila," was the reply. "I was waitthe most formidable dangers to occur at ing.""Waiting for whom?"

From the valley you may see a haze or

white dusty cloud rising above the peaks, and a little later you will hear a dull roar as of distant thunder. It is an avalanche of snow and ice rushing down the slope and tumbling over the lafty precipices Any living thing in its path would certainly be swept to destruction.

Parts of the slope below the snowline are very steep and strewn with huge blocks of sip.

"Well, I was with him at the time and hat establishes the veracity of what I all geographers write the name Huascan⁴ am about to declare. Come up near," he said turning toward a newspaper man who was present. "I want to be sure you hear the figures correctly."

"Yes." broke in the secretary." he might forget them and have to make them up all ver again."

"For what I want." continued the jus tice, ignoring the interruption, "Is to get onto the golf page of the Sunday papers. To do that I must adhere to the truth strictly-the truth, the whole truth and nothing but the truth.

"But, as I was saying, this roly-poly youngster over here-Taft I mean-was just finishing up a bit behind me, as usual; -ahem! three or four behind me, if I remember rightly. It was growing dark and he was in a hurry to complete the score and yet anxious not to be too far behind. He made a terrific drive for the last hole, one that made the ground ripp! like the surface of a lake when a bowlde. drops into it. You all have noticed that often. Then he plunged on, riding the ripples toward the hole and looking for the little white ball.

" By Jove, I struck a good one that time, he sang out, as he went further and further and no ball in sight. I believe 1 made the green."

"And, sure enough, just then the caddy called out:

" 'Here you are, judge, right in the hole, and, to and behold! when Taft looked in, and Taft began to turn handsprings for joy. I confess I thought it was pretty good, too, and I went back to the last tee to see if I couldn't do something like that myself. I knew, of course, it was a fluke, a one in a million drive, but I was bound to try. When I got to the tee I understood. There was Taft's ball just where he had set it up. His club hadn't even grazed it. The rest of the story the caddie can explain."

Waiter Who Waited.

A man who called himself George Arnold was before a police court judge on the charge of stealing a ride on a train to Dag-

"Waiting for whom?" "Just waiting." "What were you waiting for?" "To get my money." "What of rom?" "What did he owe it to you for?" "Por waiting." "How did you start in waiting?" "By beginning to wait." "How did you mean? Explain yourself." "I thought you mean? Explain yourself." "I thought you knew I was waiting in a restaurant." "Oh!" gasped the judge.-Philippines Gos-sip.

