LXII. TELEPHONE.

The telegraph is one of the most wonderful and also one of the most useful inventions of modern times. The remotest portions of the world through its instrumentality are brought within speaking distance. The benefits to trade and commerce by its use are incalculable, In a thousand ways it is beneficial to mankind. In fact, so necessary has it become in the every day transactions of business that it could not be dispensed with without serious loss.

The first telegraph line built in this part of the state was what was called the Ohio and Mississippi line. It extended from Chicago through Michigan City; LaPorte, Plymouth, Rochester, and thence to Logansport, where it intersected a line extending from Toledo, Ohio, along the Wabash river, and having its terminus at Evansville, Indiana. An office was opened in Plymouth in 1852, mainly for the purpose of enabling the company to keep its line in repair. Before the office was opened here there was no office between LaPorte and Logansport, a distance of nearly 100 miles, and the frequency with which the line "got down," owing to the wilderness through which it was built, and the long distances the repairers had

to travel to repair it, and the difficulty of finding out where the break was, made it necessary to shorten the distance between stations. The merchants, and businessmen of Plymouth contributed to the purchase of an instrument, and the office was established in John Cougle's store, which stood where the post office is now located. An operator was sent from Chicago, who put the office in shape and taught Henry Cougle the telegraph alphabet and how to operate the machine. He was an apt pupil, and it took him but a few days to master the whole thing. In those days messages were taken and conversation carried on between operators on what was called paper instruments. These instruments were made so that strips of paper an inch in width could pass through between the cylinder and pen lever when the line was being used by any operator on the circuit and the impression made on the paper, which enabled the operator to decipher the message by dots and strokes. Mr. Cougle learned very rapidly and soon became an expert operator. He and his father had a misunderstanding and he left the office in 1853 and was stationed at Kansas City, Missouri, where he had charge of the repeating office. A year later he returned to Plymouth, was taken sick and died. After he left the office it was turned over to Daniel McDonald, who was then postmaster, who operated in connection with the post office immediately west of the Masonic Temple until the office was closed and the line removed to the New Albany and Salem railroad about two years later.

From that time until the completion of the Fort Wayne and Chicago railroad Plymouth was without telegraphic communication. Upon the completion of that road, in 1858, the Western Union Telegraph Company built a single line along the track of the railroad, when an office was again opened in Plymouth, the writer of this history was employed as the first operator, who continued as such until the breaking out of the war in 1861. After the beginning of the war the movement of troops from west to east commenced, and as the soldier trains were usually run through in the nighttime, operators were required to remain until relieved, which frequently did not happen till morning. The business of the road increased so rapidly from that time on that it became necessary to establish a night office and employ a night operator, which was done in 1862, and has been continued until the present time. The business of the telegraph increased rapidly, also, so much so that it became necessary to erect additional lines. As the business increased lines were stretched until now there is a network of lines on either side of the Pennsylvania road, numbering probably forty. Lines have been built along all the railroads in the county and offices established in all the principal towns in the county.

It would be impossible, even were it necessary, to get the facts in regard to the date of establishing offices and building the lines that have been erected since the first line was built in 1851. The whirligig of time whirls us around too rapidly to permit us to keep track of the rapidity which these numerous public improvements grow into existence before we are aware of it.

A Totally Deaf Operator.

Totally deaf, yet able to distinguish the dots and dashes of the Morse telegraph alphabet, William E. Elliot, of Tippecanoe, in Tippecanoe township,

Marshall County, has for twenty-six years represented the New York, Chicago & St. Louis Railroad company, commonly known as "The Nickel Plate" road, as agent and operator. Just after the railroad was built through to Chicago in 1891, Mr. Elliott took a position as the sole representative of the company at Tippecanoe. At that time his hearing was far from being good and in time it gradually became worse, so that he was unable to detect any sound.

Some years prior to the time Mr. Elliott began to learn telegraphing, operators caught messages that were sent them by letting long strips of paper run through their machines, on which the pen lever left the indentations of the letters and words so that operators could take their time and decipher the message at their leisure. But since that time paper instruments, as they were called, have been entirely abandoned and operators are required to read by the sound of the instrument, and, pencil in hand, have the message written out in full when the operator at the other end of the line has finished sending and closed his key. The telegraph letters are made entirely of dots and dashes properly spaced, and to an inexperienced ear when rapidly made by an operator on his instrument, convey no more meaning than the sounds produced by the falling of shot in a tin pan.

As soon as Mr. Elliott realized that there was a time not far distant when he would be totally deaf, he set about to devise some way of reading the telegraph by which he could still continue in the employ of the railroad company. Following the idea adopted by the old-time telegraph operator, he loosened the hammer on the telegraph sounder and read the dots and dashes by sight. There were times, however, when he was not watching the instruments, and on these occasions the train dispatcher frequently called and called without a response from the "TP" station. Mr. Elliott realized that some other plan was necessary, and he tried attaching a metal cord to the sounder and holding a metal plug fastened to the cord in his mouth.

This was not altogether satisfactory and he tried other things. An old horsewhip fell into his hands. He had never paid much attention to a horsewhip before, but this particular whip interested him. He cut a piece about two feet in length from the butt, and to one end he attached a metal plate. The other end was fastened to a telegraph sounder. Elliott placed his forehead to the plate and his problem was solved. For years he has received the code through his frontal bone and through a horsewhip. Mr. Elliott is fifty-five years of age, but he is still regarded as one of the most expert sending operators on the division of the road on which he works.

The writer, having during his life been a telegraph operator nine years, four of which were under the original paper ribbon system and the remainder of the time as a "sounder," is prepared to say that the achievement of Mr. Elliott has probably never been equaled in the history of telegraphing the world over.

The Telephone.

The telephone, which came into use about the latter half of 1878, is the latest and most useful discovery in connection with electricity yet made. In its first invention it was considered only useful as a toy, but it was but a very brief and a very short space of time before it was found out that it

was to be an invention, when permanently introduced, that not be dispensed with.
It is an instrument attached to a telegraph or other wire, similar in appearance to a mouthpiece to a speaking tube, and is so arranged that the voice of the speaker talking at it in an audible tone is forced over the wire; almost any distance, and can be distinctly heard by the listener at the other end of the wire listening through a similar tube. Telephones are very useful in transacting business, and in social intercourse. In fact, they have become so thoroughly interwoven into our business and social relations that they are a part of us, and we could hardly get along without them. The Bell Telephone company was the first to start here, probably in the latter part of 1878. The price for the use of phones was, the people thought, exorbitantly high, and as they had not been educated to the necessity of their use they did not give it sufficient patronage to make it a paying invest- ment. Mr. C. A. Reeve secured their franchise to do business in Plymouth, and later, in connection with Dr. D. C. Kt1ott, built up an excellent system, which gave general satisfaction, and by fixing the price at living rates succeeded in securing nearly all the business men as patrons. He also extended his wires to all the towns of importance in the county and to many farm- houses as well. He also connected his system with the long-distance wires, giving his patrons facilities to communicate with all the large cities. He recently disposed of his plant to the Winona Telephone *Co.* Bremen, Bourbon, Argos and Culver each maintain a telephone exchange.

Wireless Telegraphy and Telephony.

The most marvelous discovery of the infancy of the twentieth century in which we are living is that of telegraphing and telephoning through the air without the aid of wires or any other mechanical appliances. The rapidity with which wireless telegraphy has come into general use is as marvelous almost as the discovery itself, and while the machinery and appliances by which it is operated are not as perfect as they undoubtedly soon will be, they are much more so than the Morse system of telegraphy was in the early history of that marvelous invention, less than sixty years ago. The government of the United States, after experimenting and thorough investigation, has adopted it in the naval service especially, and finds that it is a perfect success. The great fleet of United States battleships commanded by Admiral Evans, before leaving Hampton Roads in December, 1907, were furnished with wireless telegraph and telephone instruments and appliances, and as the fleet moved out into the boundless sea communications were carried on between the officers of the several vessels of the fleet as easily and correctly as if they were sitting together in one of the cabins of the flagship" This is the first practical application of the wireless telephone in the history of the science of navigation, and the experiments thus far have produced results that are almost incredible. For the first time the commander of a fleet can give his orders silently and secretly into a mechanical apparatus and have them communicated instantly and accurately to the subordinates for whom they are intended. This seems like a fairy story, but it is nevertheless true. It seems almost beyond belief that a man can sit in the cabin of his ship and converse across the water with a man in the cabin of another ship without even a wire-without anything but atmosphere and water

between them. But Admiral Evans reports daily to the department at Washington from across the sea that the wireless system, both as to the telegraph and telephone, is almost a perfect success. As the poet has well said:

We are living, we are dwelling
In a grand and awful time-
In an age on ages telling-
To be living is sublime!