

The Automatic, Ever-Ready, Girl-less Telephone



ILENTLY and rapidly the Secret Service Phone is here and is making its way into public favor. The new system is going into use because its patrons are finding it the only absolutely private, noiseless, always-ready telephone. The long waited for, much desired, ideal system has arrived. The Northeastern Telephone Co. is now one of the established institutions of Portland.

We may, as citizens and patrons of the now universal necessity, which ought to be called the "Auto-Phone," rejoice that we had in Lewis A. Goudy, a man willing to make a great fight against every possible obstruction—not only for himself and for his company—but also for the public. It has been a long and hard struggle, but Mr. Goudy is a descendant, as a local paper recently said, of the Macgregor branch of that famous Scottish Clan Alpine, also of stout Pilgrim Soule of the "Mayflower," as well as from that colonial warrior, Major Church, a tablet to whose achievements is erected in Deering's Oaks, and as becomes a man of such descent, Mr. Goudy could only be a born fighter, though usually one of the most affable of men.

A glance backward will not be without interest in this connection. This, the *first independent telephone company* in the United States, was organized in Portland in 1882. In 1883, amendments were made to its charter by the Maine legislature, and it was given exceedingly broad rights and privileges. From 1883 to 1895, but slight progress was made, owing to the contesting by rival companies of its right to use its own patents granted its management. After the expiration of the Bell patents, in 1895, this independent telephone company began to extend its lines over the State, from Farmington, its then headquarters in Franklin County. But little progress was made at first, as the promoters encountered tremendous opposition from its financially stronger rival.



LEWIS A. GOUDY,
Vice-President and General Manager, Northeastern Telephone Co.

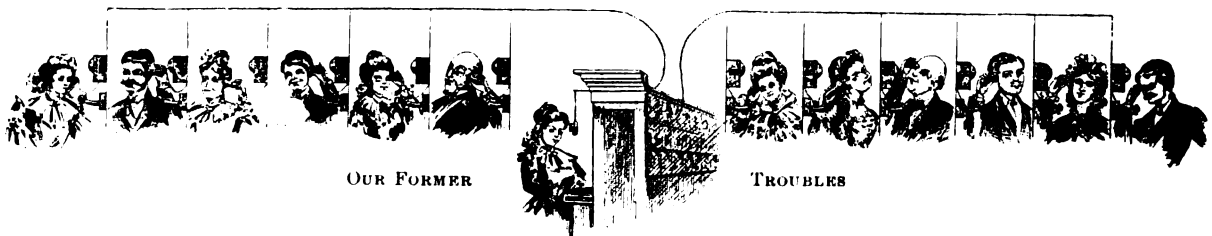
In 1900, Lewis A. Goudy of Portland, was made President and General Manager and became the controlling spirit of the company. The real battle for independent telephony in Maine then began. The first victory of importance was won when the company was given the right to enter Portland.

After the war with Spain and before the great telephone battle opened which he was destined to win, Mr. Goudy went to Cuba and on his way visited Washington, where he in-

spected the workings of the automatic telephone system at the White House, installed by President McKinley. He saw at once that at last a real telephone system, secret and yet practical, had been devised, and when he entered into the telephone business, he did so, fully convinced that the automatic was to be the telephone system of the future. In beginning his great work, he not only had to re-organize and finance a company, pay its debts—which he did in full—but he had to create public sentiment in favor of a new system, not an easy thing to do in a conservative State like Maine. There soon came an urgent demand for extension of the company's lines to villages and farming towns of western and northern Maine, which was responded to as far as was possible and which is still going forward rapidly. It would take more than the space available for a sketch like this, which must of course be incomplete, in telling the story of the great telephone war yet going on throughout Maine and which may spread over New England. The fight was long

and bitter in Portland and even after the installation of the system was begun and the building for the central exchange and general offices had been in process of construction for some time and miles of streets had been entered, the fight was renewed. But Mr. Goudy not only won a final victory here, but made possible the winning of the "second series of battles," as Col. Bryan would say, at Lewiston.

The warfare was continuous, now fighting against those



who for a time *promised* to do their best to extend independent telephony throughout Maine, but who proved false to their pledges and the people, by selling out, thereby strengthening the sentiment of the public that defeat only would prevail. Working day and night to bring people over to his side and the support of competition, through it all Mr. Goudy kept true to his first thought "the largest possible number of persons must be given an opportunity to secure the use of the telephone in rural communities," on the one hand, and for connection with, and installation of, the automatic system in cities, on the other hand. He won every contest for the people and his company.

The company has obtained the right to enter Portland, Lewiston, Auburn, Augusta, Waterville, Skowhegan, Westbrook, South Portland, Gorham, and many other places, all the while keeping up a rapid extension of its lines in the country districts, the idea being to install the automatic, secret system in all cities of the State as soon as possible.

The company's State charter authorizes a capital of \$1,000,000. Under Mr. Goudy's management the working capital was fixed at \$600,000, leaving \$400,000 for subsequent development.

Before the beginning of the work in Portland and the construction of what may be termed the central plant, the company had expended between \$100,000 and \$200,000 on its rural, village and long distance trunk lines extending from the Rangeleys to Portland, its system running through six counties for the accommodation of the people of more than sixty towns and villages. During 1903 the company expended about \$400,000 in Portland and other sections of the State, the exchange building on Casco street costing about \$40,000, exclusive of its automatic switchboard and equipment.

The work of installing its underground system progressed rapidly and to the satisfaction of the city authorities and the citizens of Portland generally. The conduit and underground cable construction extends through about eleven miles of the

streets, with between 300,000 and 350,000 feet of duct. More than 7,000 miles of cable and aerial wire is installed in Portland, showing in itself the great extent of the work done here.

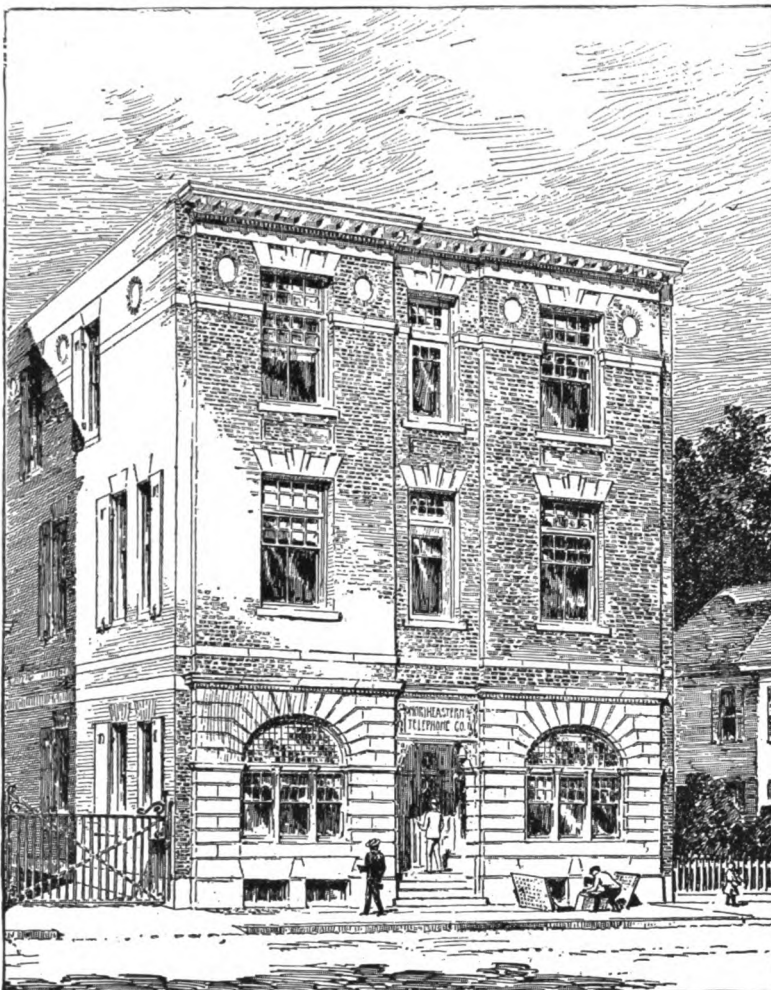
Before the exchange had been completed, the work of installing telephones began. The first was installed at the city building for the mayor's use, and is appropriately inscribed as follows: "To His Honor, the Mayor. The first Automatic Secret Service Telephone installed in Portland, November, 1903." The liberal policy of the company in dealing with the city was displayed by contributing the use of twenty-five instruments free of charge. The work of installing telephones is going on at the rate of about forty a day,

but not rapidly enough to meet the demand. When completed, this will be one of the best telephone systems in the world, because the United States leads the world. The system is in operation now on a large scale in Chicago, Dayton, Ohio, Grand Rapids, Mich., New Bedford and Fall River, Mass., and many other cities.

The first exchange at Chicago is primarily for the accommodation of 10,000 subscribers, to which branch exchanges will be added, from time to time, for 100,000 or more subscribers ultimately. At Dayton there is a plant with a capacity of 19,000, 6,000 subscribers already being secured and 3,000 are connected, additions being made to their number daily. Grand Rapids, Mich., has installed a similar plant, discarding the old system.

Mr. Goudy was the President and General Manager of the company during

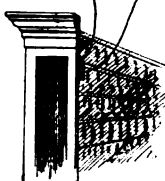
all the opening years of the bitter fight in this State, and after expending a large amount of money on the trunk line and rural installation, he realized that a large capital would be required to insure full success and that in order to meet the demand of the citizens of Maine and New Hampshire, men of great financial ability, used to the management of large affairs, must be given an opportunity to come into the company's management, and he immediately interested the men promi-



NORTHEASTERN TELEPHONE CO.'S AUTOMATIC EXCHANGE, PORTLAND



SOLVED BY THE MECHANICAL



GIRL-LESS EXCHANGE.



ment in the great Chicago and other installations in progress, representing in gross a capitalization of \$18,000,000. In order to do this he retired from the presidency and elected Thomas R. Brooks and Edwin W. Gearhart, of Scranton, Pa., President and Treasurer, respectively. Mr. Goudy retained the Vice-presidency and was elected General Manager. The coming into the Northeastern Telephone Co. of Messrs. Brooks and Gearhart as President and Treasurer, made it perfectly certain that financial success was assured and that the stock of the company would be a first-class investment.

A visit to the exchange will amply repay one for the time and trouble. The illustrations tell the story better than any description, more especially one written by a person without the necessary and exact knowledge regarding the electrical mechanism there exhibited. The "mechanical girls" as Mr. Goudy calls the automatic switchboards, work in the main, silently. Standing in the exchange during busy hours, from every part of the room can be heard a merry little click, announcing the making of a connection, but the

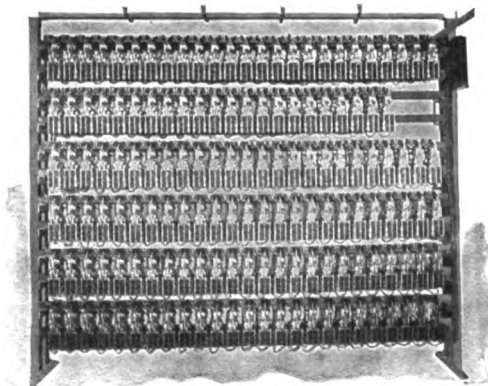
man in the exchange examining the system, knows nothing of conversations being carried on along the 7,000 miles of wires and their rural line connections. The system is absolutely automatic and secret. The party at one telephone has called some other party and they alone know what is passing between them. The automatic switches are mounted on iron racks of 10 to a section containing 100 switches each or 1,000 to a section. A very important feature of the switchboard is that it can be increased to any capacity by simply adding new racks to each section with the desired number of switches mounted thereon, without rewiring or in any way interfering with existing conditions.

Everything possible has been thought of, and had to be. The handsome wall and desk telephones, the tell-tale trouble indicators (automatic), the power plant in duplicate, the distributing rack and testing apparatus, combination toll board connecting the manual rural service with the city automatic, all calling for the highest mechanical, electrical training, which with the executive and private departments of the exchange, make the plant unexcelled. Such a system can be seen, must be admired, but can not be described by a layman. Why need it be? The result of all this is the system the people of Portland welcomed and are now enjoying.

So pages might be devoted to the story of this marvelous system and its success here and elsewhere. But to speak of conditions existing here. The

automatic system is a splendid demonstration of the genius of man.

From Franklin's kite to the automatic system is a far cry, but look at it, talk over it and exclaim "Wonderful! The half has not been told," and for it, so far as Portland is concerned, so far as Maine is concerned, for that matter, we have to thank that sturdy fighter, worthy of his Pilgrim and clan Alpine blood, which was never brought to acknowledge defeat, that good citizen and man of the people, Lewis A. Goudy.



SECRET SERVICE GIRL-LESS SWITCHBOARD.

DESCRIPTION OF NORTHEASTERN TELEPHONE CO.'S NEW SECRET SERVICE AUTOMATIC EXCHANGE BUILDING, CASCO ST., PORTLAND, ME.

Ground area, about 3,500 feet.

Floor space above basement, about 10,000.

Height above basement, 3 stories.

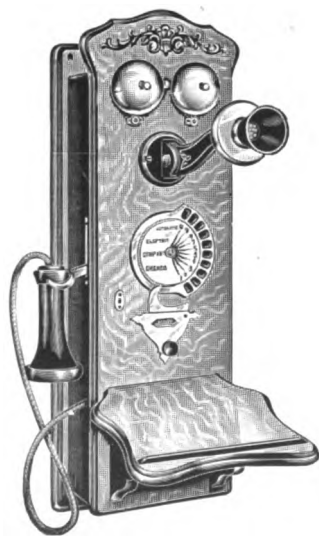
Interior material used, iron girders, hard pine, mill construction, wire lathing, no air spaces.

Basement contains steam heating apparatus, enclosed in fire-proof room; fuel apartment; large fire-proof vault for office supplies, maps and papers; fire-proof tunnel for underground cables from the company's conduit system; remainder of basement is used for general stock room.

First Floor: Business offices, fire-proof vault, Directors', Manager's, Engineer's, Superintendent's, Manager Contracting and Asst. Engineer's departments, with public reception room, private booths for long distance toll department, with open beam construction, harmonious colors, finished and furnished under the direction of Architect John Calvin Stevens, in Dutch Colonial styles, make the several departments for use of the company's officials and its patrons most artistic and striking.

Second Floor: This is used for the battery rooms, distributing rack, testing station, surplus instruments and other supplies sufficient for anticipated requirements of the company's rapidly increasing business, with ample excess room for ultimate requirements up to 8,000 subscribers, or sufficient area for 3,000 subscribers in excess of the 5,000 accommodated on the third or top floor.

Third Floor: On this floor are located racks to accommodate 3,000 switches or secret service phone connectors, with 2,500 already installed for immediate connection, with surplus room for 2,500 more, making an ultimate capacity for 5,000 subscribers. This room is lighted by double glass sky-



WALL PHONE.



DESK PHONE.

lights, and is framed for three more, whenever necessary; the roof is fire-proof, gravel and copper cornice construction, thus completing the most substantially constructed and equipped telephone exchange in the world. The location was selected for present and future development, which must be largely West and North, connecting with all of the company's rural, village and farmer lines and exchanges.

The general and executive officers of the company are as follows:— Directors: Thomas R. Brooks, Scranton, Pa.; R. G. Brooks, Scranton, Pa.; Edwin W. Gearhart, Scranton, Pa.; Lewis A. Goudy, Portland, Me.; Melville H. Kelly, Saco, Me.

Mr. Thomas R. Brooks is President; Mr. L. A. Goudy, Vice-president and General Manager; Mr. Edwin W. Gearhart, Treasurer; Oscar H. Hersey, Corporation Clerk; Mr. Elford L. Durgan, Asst. Treasurer and Supt. of Exchanges; Mr. W. H. Park, Auditor; Mr. F. A. Smith, Assistant; Miss Annie I. Scamman, Stenographer and Assistant.

The construction departments are under the supervision of General Engineer and Superintendent John B. Pierce, with Lerol E. Dow as Assistant. W. H. James is Superintendent of conduit construction, and J. F. Slattery, Superintendent of pole and aerial line construction.

The automatic switching or operating department and power plant is in charge of Mr. Oscar S. Bowen, with Geo. W. Mellow and Archie J. Durgan as his assistants, these being the only men required for supervising the switches and their connecting appliances and fixtures.

Misses Nansen and Spencer, with Mr. W. H. Anderson, have charge of the combination toll board connecting the long distance, rural lines with the company's automatic city system for day and night service. They also have charge of the information department.

Mr. H. T. Williamson is Monitor and General Assistant.

The rural lines have been constructed under the direction of Superintendent Durgan, by E. P. Sweeney and Arthur H. Bodkin, and their assistants.

The Rural Division Managers are Edgar E. Jackson, Farmington division; J. J. McCarty, Livermore division; B. N. Lewis, Lisbon division; A. S. Noyes, of the Falmouth division.

The Cumberland Telephone Co., Lewiston & Auburn Telephone Co., and Bangor Automatic Telephone Co., are licensees of and in affiliation with the Northeastern Company and managed by their respective boards of executive officers.



One of the important results of the Atlantic & St. Lawrence railroad enterprise was the organization August 8, 1846, of the Portland Company, under an act of incorporation authorizing a capital stock of \$20,000. Operations were begun under John A. Poor as President, Horace Felton as Superintendent, with a subscribed capital of \$100,000, held by 350 shareholders. A steam engine for the ferry-boat Elizabeth, was the first output by the new company. This was followed by a locomotive built in 1848 for the Portland, Saco & Portsmouth Railroad Company. So excellent was the quality of its work that orders soon flowed in from all quarters, and in less than three years from the time its shops were opened, the company turned out ten locomotives, nine passenger cars, thirty platform and forty box freight cars, and other works aggregating in value about \$300,000. Orders for locomotives came not only from remote parts of the United States, but also from foreign countries. It was soon deemed advisable to increase the capital and enlarge the works.

During the Civil War the building of gun boats and the casting of large cannon for the United States Government were added to the other work of the establishment. Some years later, when railroad work slackened, the company turned its attention to building and repairing marine engines, for which it has always had unusual facilities. Hence, while the larger number of other locomotive works in New England practically suspended operations, the Portland Company was able still to give employment to a large force of men. The works of the company on Fore street, near the water's edge, and on the line of the Grand Trunk railway, are very favorably situated for handling heavy work. The company has always played a prominent part in shipwork, having built the St. Croix, Bay State, State of Maine, Cumberland and many smaller ones, including two for Boston, during the past year.

The company has a wharf of its own, especially convenient for the repair of marine engines, steamboats being able to come directly up to the works. The long parallel lines of brick workshops are most conveniently connected and arranged, and constitute with the 485 men employed, an industrial village of over twelve acres, of which the larger part is under roof. The total floor space occupied is 150,000 feet. While there are several distinct departments in the various buildings, each has the oversight of a capable foreman who receives his instructions from the superintendent or assistant superintendent, thus providing the whole plant with a perfect system of management. The departments include two large machine shops, brass foundry, and pattern, electric, elevator, blacksmith, tin and copper, car and boiler shops. Each of these departments is equipped with all the modern improvements, and its facilities are consequently unexcelled. The motive power is steam, compressed air and electricity. Nearly all the machinery is operated by the two last named powers furnished by the company's own plants. The company includes among its varied products, elevators, marine engines, boilers, standpipes, pulp mill machinery, including digestors, (of which they are the largest manufacturers in the world. The first digester they built was 10 x 26 feet. They have since increased in size to 16 x 60 feet), bronze work, castings, structural iron work, railroad work, W. H. C. voltage regulators and electric motors. The industry has always been run by Portland men and Portland capital, and our citizens have a right to be proud of its success and prosperity. The present officers of the company are: President, Franklin C. Payson; Treasurer and Manager, R. C. Payson; Purchasing Agent, Harold Smith; Superintendent, Charles F. Mantine; Sales Manager, George F. Reynolds; Engineer, Wilson Sprague; Elevator Engineer, H. J. Willard; Electrical Engineer, W. H. Chapman.



A man that is bringing much attention to the agricultural advantages of Maine, and doing a vast amount of good in placing her farms and their products before the people of the United States, is Mr. E. A. Strout of 120 Exchange St. During the present year, Mr. Strout has made over one hundred and seventy sales of farms in the sixteen counties and the greater part of the buyers came from twenty States. He has developed a large business, having branches located at various points in the State, and will early in the coming year establish a New York office for the sole purpose of handling Maine real estate. Mr. Strout, also, handles properties outside of farms, doing a good business in lake camps and seashore cottages. Since residing in Portland, Mr. Strout has been associated with the Board of Trade.