## Telephony Magazine

October, 1907

## SYRACUSE INDEPENDENT COMPANY

Interesting History of Exchange Which Entertained the New York Telephone Convention Sept. 25

By H. C. Slemin

**\THE** New York State Independent Telephone Association held its annual convention this year at Syracuse, N. Y., which fact attracts attention to the Independent company operating in that city, especially as the sessions

of the gathering were held in the building occupied by that com-The convention met September 25 and proved to be of great importance to the Independent telephone men of the empire state. Not only the unique history of the Independent Telephone Building, which is the home of the Syracuse company, but the luxurious fittings and complete and modern equipment of the exchange aroused remarkable interest among those who attended the convention.

The organization and development of the Independent Telephone Company of Syracuse dates back to the spring of 1905, when several prominent citizens of that city began to take a keen interest in the subject of telephony. After

development, they organized the Independent Telephone Company of Syracuse with a capital of \$1,000,000. This company acquired all the rights and property of every kind

of the old Syracuse Telephone Company, the Columbia Long Telephone Distance. Company and the People's Subway Company, which began the development of Independent telephony in Syracuse in 1899.

The plants of these three companies were in poor condition, and inadequate, in many respects, to take care of the increasing business demanding more efficient service, and the principal reason for the purchase of them was to enable the new company to equip and extend its

system to the pro-portions and efficiency of the neighboring exchanges at Rochester, Buffalo and Utica. From the beginning, the new enterprise was well received by the public, and the company commenced operations with a large number of local subscribers in the business and residential sections, and also

gave long distance and some toll service. Syracuse has become a most important terminal point for the entire state of New York and part of Pennsylvania, and has connected the eastern and western localities that before had remained

separated until its toll lines were

in service.

Independent Telephone Company of Syracuse purchased and remodeled for occupancy for commercial purposes, the building which the late eccentric million-aire, D. Edgar Crouse, constructed for a private club house and stable, at an expense estimated at \$400,000. The new exchange is probably without a peer in the world in the luxuriousness of its appointments. No other telephone company can boast of solid silver door knobs, of cut glass chandeliers and mahogany mantels in the telephone girls' recreation room. of offices of the traffic manager and general manager with walls and ceiling of carved rosewood with a piano finish, of a directors

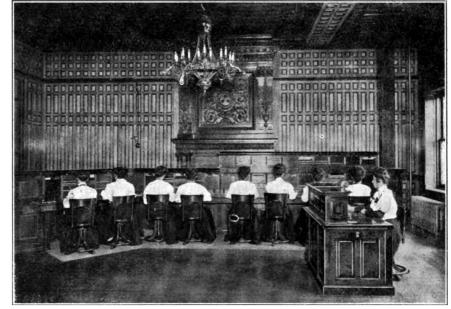
associating themselves with a number of Rochester capitalists, Independent Telephone Company building. Syracuse. N. Y. hand-carved mantel, with paneled who had a good deal of experience in the Independent walls and ceiling of the same wood elaborately carved. The telephone company, of course, made several changes in and about the building to adapt the structure to its service. A large addition was built on the rear, the second

story being extended upward, doubling the floor space on the third floor, which has been transformed into one large and well lighted apartment where the 12,600 central energy multiple switchboard, manufactured by the Stromberg - Carlson Telephone Company of Rochester. New York, is installed.

The toll board is located in the old billiard room, where are to be seen elaborately carved representa-tions of billiard balls and cues, which form a centerpiece over the mantel. The room is finished in mahogany,

birdseye maple and white locust. The floor is a pattern one, of mahogany and oak combined. The chief feature of the decoration in the dining room, which is now maintained for the operators, is a massive cut glass chandelier which is put together without the use of any metal. The gas which



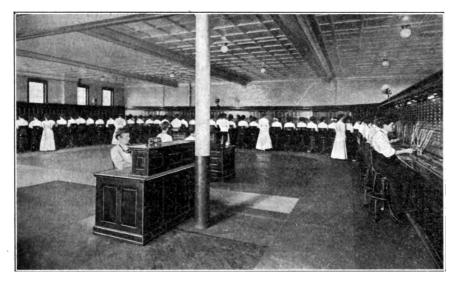


Toll board equipment.

## Telephony

supplies the numerous burners passes through hollow pieces of glass, which figure in the decorative features of the chandelier, no metal pipes being used.

The main exchange room, which occupies the third floor of the building, has 5,000 square feet of floor space and is lighted by numerous windows on three sides. The steel ceiling and the walls have been enameled white, which en-



Operating room of main exchange.

hances the light effect. Dark green trimmings relieve the monotony of the vast expense of white. In the eastern half of this apartment the switchboard is installed, which is the latest lamp line signal, relay multiple, central energy switchboard of 12,600 lines frame capacity, equipped for the present operation of: One incoming trunk operator's equipment, 6,000 central energy subscriber line equipments, fifty local operators' equipments and forty local outgoing trunks. This equipment is distributed in fifty-one operators' equipped positions, including a trunk position, assigning 120 central

energy subscribers' lines to each regular operator's position. The main switchboard consists of eighteen sections, of three operators' positions each, of the nine-panel type in the multiple, trunk and answering space. and the arrangement is such that the first position of the first section shall be a multiple annex position, while the second and third positions of this same section are arranged as an incoming trunk position. All of the positions of the sixteen sections and the first and second positions of the eighteenth section are wired and equipped complete for 120 lamp line equipments, making a total suitable for the present operation of 6,000 central energy lines. The third position of the last section is also equipped as a multiple annex position.

The multiple jacks for a capacity of 12,-600 lines are arranged in each section of three operators' positions, distributed in nine panels. The space immediately below the multiple jacks is provided for installing the outgoing trunk jacks in strips of twenty, of a capacity for 360 lines. Below the trunk

line space are mounted the lamp line signals and answering jacks in strips of ten, providing for an ultimate of 150 lines in each operator's position with 120 equipped at the present time.

The switchboard contains 108,000 multiple spring jacks distributed in eighteen sections, all connected in multiple throughout the switchboard and with the corresponding answering jacks—6,000 being multiplied in each of the eight-

teen sections. The jacks are mounted in strips of twenty, and have a German silver thimble and individual springs for both tip and sleeve side of each line. The answering jacks are of corresponding design, mounted in connection with the lamp line signals of one-third candle power, and numbered by means of removable lamp caps associated with the answering jacks. Individual transparencies bearing the

number of the subscriber's line are furnished with the lamp jacks. Of the rest of the equipment much more could be said if space permitted. In each regular operator's position there are fifteen pairs of cords, with double lamp supervisory signals wired so that one lamp indicates when a called subscriber has "hung up" and the other when a subscriber is "waiting" or when both have "hung up"; also a new type vertical cam ringing and listening keys, associated apparatus, operator's breast-plate equipment, five order wire keys and pilot equipment.

All cables used in this switchboard are made of No. 24 B & S gauge, tinned annealed copper wire, 98 per cent pure, covered with two layers of silk and one of cotton, the outside layer of cotton being colored in accordance with a predetermined color code to facilitate rapid handling and testing of the lines. The dye in these cables

is such that it will not impair the insulation of the wires and was prepared and mixed in accordance with the formulas of the Stromberg-Carlson Telephone Manufacturing Company. The terminal equipment is located on the second floor, in the rear of the building, and consists of a 6,400 capacity construction main, intermediate and relay frame; main frame equipped with 6,100 pairs of Cook's protectors.

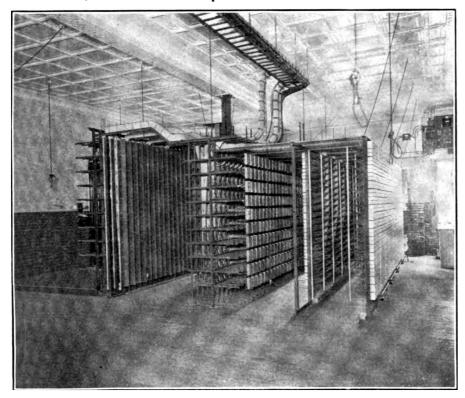
The two-position wire chief's desk and power equipment, consisting of duplicate set Holtzer-Cabot current motor generator to operate on direct current power circuit, a ring-



Operators' retiring room.

ing dynamotor to operate on 40-volt storage battery, and two busy-back and howler attachments are also in the same room. Off the terminal room is a well ventilated storage battery room containing a duplicate set of twenty cells type G-27 Electric Storage Battery Company's accumulators equipped with G-15 elements. The equipment also maintains a two-position monitor's desk and a single position chief operator's desk.

The new company has built twenty-five miles of new underground construction in addition to four miles that was originally installed in the old subway. This construction required 800,000 duct feet of vitrified clay multiple duct conduit, which is encased in porcelain cement concrete



Terminal room.

of three inches on all sides. The manholes are of oblong shape and entirely concrete. The cable distribution throughout the business section within a radius of one mile of the

exchange is entirely underground, consisting of 300 pair double wrapped paper lead cable of No. 22 B. & S. gauge copper, with an electrostatic capacity of .10 m. f. per mile and No. 20 B. & S. gauge is used for lines extending beyond the mile radius.

In this section laterals are run from manholes in each block to the basements of the buildings, which does away with the unsightly distribution of poles. The economical advantages of an all cable plant are admirably demonstrated in the residential section of Syracuse, where no cross-arms or open wire construction appear. The cables are opened every third or fourth pole into 10-pair terminal boxes and run from there with service wires to the houses. The maintenance of this type of construction is considerably lower than open wire and cross-arm construction, more liable to destruction by storms.

The toll line service has been an important branch of the new company's business since the construction of its several long lines in different directions, connecting with other companies operating in the states of New York and Pennsylvania. These lines are of standard construction, using

30-foot poles and No. 10 B. & S. gauge copper wires. Building sixty miles south to Lisle, where connection is made with the York State Telephone Company, of Binghamton, toll lines, the company has an outlet to the south-

ern part of the state and Pennsylvania. A similar line has been built east to Vernon, connecting with the Utica Home Telephone Company, giving service through to Albany and eastern parts of the state. The northern section of the state is reached through a new toll line built forty-five miles

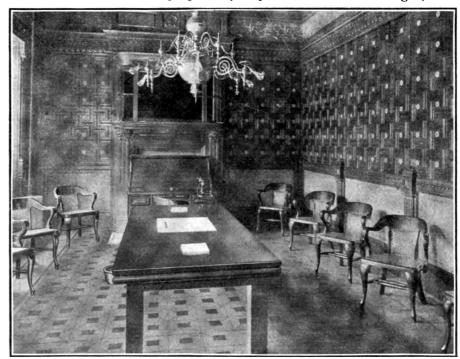
to Pulaski, connecting with the lines of the Black River Telephone Company to Champlain, Watertown and other northern points. West to Elbridge, sixteen miles, a line was extended to connect with the Auburn Telephone Company, of Auburn, and the toll line system of the Inter-Ocean Telephone Company of Buffalo, permitting good service.

Throughout Oneida county several small exchanges and farmers' lines have been installed, connecting with the main exchange in Syracuse, some of which are at Tully, East Syracuse, Liverpool and Camillus.

The officers and directors of the new Independent Telephone Company of Syracuse are as follows: President, Hendrick S. Holden; vice-president, George R. Fuller; secretary, Alexander H. Cowie; treasurer, Albert K. Hiscock; general manager, John B. Pierce; directors, Hendrick S. Holden, George R. Fuller, Alexander H. Cowie, Albert K. Hiscock, Jacob Amos, Gates Thalheimer, John J. Cummins, Thomas W. Finucane, Frederick W. Zoller, Carl F. Lomb and Charles M. Warner.

The Independent Telephone Company of Syracuse has advanced the Independent cause to a great extent in New York state by the efficient service it has given its patrons. In all of the towns and cities where

it operates exchanges the company has catered to the telephone using public and demonstrated to a gratifying degree what the people may expect from a well-managed, ade-



Interior directors' room.

quately-equipped concern. In its local as well as its toll line business the Syracuse company is steadily making strides in advance, and its prospects for still greater success are most flattering.