

Hester Wallace

1909

ANNUAL REPORT

OF

THE DIRECTORS

OF

AMERICAN TELEPHONE & TELEGRAPH COMPANY

TO THE STOCKHOLDERS

FOR THE

YEAR ENDING DECEMBER 31, 1909

BOSTON

GEO. H. ELLIS CO., PRINTERS, 272 CONGRESS STREET

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American Telephone & Telegraph Company

OFFICERS

President,

THEODORE N. VAIL.

Vice-Presidents,

EDWARD J. HALL,

H. B. THAYER, B. E. SUNNY, U. N. BETHELL,
WILLIAM R. DRIVER, CHARLES P. WARE.

Treasurer,

WILLIAM R. DRIVER.

Secretary,

CHARLES EUSTIS HUBBARD.

DIRECTORS

CHARLES W. AMORY.

GEORGE F. BAKER.

FRANCIS BLAKE.

ALEXANDER COCHRANE.

T. JEFFERSON COOLIDGE, JR.

W. MURRAY CRANE.

HENRY P. DAVISON.

RUDOLPH ELLIS.

HENRY S. HOWE.

CHARLES EUSTIS HUBBARD.

JOHN J. MITCHELL.

WILLIAM LOWELL PUTNAM.

THOMAS SANDERS.

SYLVANUS L. SCHOONMAKER.

NATHANIEL THAYER.

THEODORE N. VAIL.

JOHN I. WATERBURY.

MOSES WILLIAMS.

REPORT OF THE DIRECTORS
OF
AMERICAN TELEPHONE AND TELEGRAPH COMPANY.

NEW YORK, March 8, 1910.

TO THE STOCKHOLDERS:

Herewith is respectfully submitted a general statement covering the business of the Bell system as a whole, followed by the report of the American Telephone and Telegraph Company, for the year 1909.

BELL SYSTEM IN THE UNITED STATES.

SUBSCRIBER STATIONS.

At the end of the year the number of stations which constituted our system in the United States was 5,142,692, an increase of 778,063. 1,508,790 of these were operated by local, co-operative and rural independent companies or associations having sub-license or connection contracts, so-called connecting companies.

WIRE MILEAGE.

The total mileage of wire in use for exchange and toll service was 10,480,026 miles, of which 649,308 were added during the year. These figures do not include the mileage of wire operated by connecting companies.

TRAFFIC.

Including the traffic over the long-distance lines, but not including connecting companies, the daily average of toll connections was about 517,000, and of exchange connections about 19,925,000, as against corresponding figures in 1908 of 463,000 and 18,500,000; the total daily average for 1909 reaching 20,442,000, or at the rate of about 6,582,300,000 per year.

PLANT ADDITIONS.

The amount added to plant and real estate by all the companies, excluding connecting companies, constituting our system in the United States during the year 1909 was:—

For exchanges	\$20,958,700
For toll lines	6,316,100
For land and buildings	<u>1,425,300</u>
	\$28,700,100

PLANT ADDITIONS OF PREVIOUS YEARS.

The amount added in 1900 was \$31,619,100; in 1901, \$31,005,400; in 1902, \$37,336,500; in 1903, \$35,368,700; in 1904, \$33,436,700; in 1905, \$50,780,900; in 1906, \$79,366,900; in 1907, \$52,921,400; and in 1908, \$26,637,200, making the total expenditure for additions to plant during the ten years \$407,172,900.

MAINTENANCE AND RECONSTRUCTION.

During the year \$44,838,900 was applied out of revenue to maintenance and reconstruction purposes.

The total expenditure for maintenance and recon-

struction charged against revenue for the last seven years was over \$231,500,000.

Our charges against revenue for maintenance and reconstruction are no more than a conservative policy would dictate. It is necessary to make suitable provision for any change of plant and equipment required by the evolution and development of the business.

In the meantime the public is getting the benefit of the surplus and reserves without cost to it.

PERMANENCY OF PLANT.

All that was said last year about the permanency of the plant could be re-said and emphasized this year. Steady improvement is being made in both plant and apparatus, but as the lines on which it is based are of a permanent character the process is one of evolution, not revolution. Careful comparative studies seem to warrant the statement that there is no one of the larger public service corporations that has a greater ratio of plant value to its outstanding obligations than has this company, nor has the plant of any other such company as great a ratio of realizable value to the book valuation.

Real estate, underground conduits, copper wire, cables of lead and copper, rights of way on private property—which represent such a large proportion of the company's assets—have a permanent value in the business and even a realizable value outside of the business which would be no mean asset.

CONSTRUCTION FOR THE CURRENT YEAR.

Estimates of all the associated operating companies and of the American Telephone and Telegraph Company for all anticipated requirements for 1910 have been prepared. Maximum expenditure in each case has been agreed upon, and all who are responsible for the expenditures are working in entire accord with these agreements and understandings, and it is believed that the results will be, as they were in 1909, well within the limits fixed.

ASSOCIATED OPERATING COMPANIES.

(AMERICAN TELEPHONE AND TELEGRAPH COMPANY NOT INCLUDED.)

FINANCIAL CONDITION.

The associated operating companies (not including the American Telephone and Telegraph Company) show for the year, as compared with last year, an increase in gross of about \$10,000,000; operating expenses and taxes increased \$2,484,000. (Total taxes paid \$6,316,000.) Charges to maintenance out of earnings increased \$5,214,000. Interest charges were \$80,000 more. The balance available for dividends was \$30,899,000—\$2,217,000 more. Dividends to the amount of \$22,610,000 were paid, an increase of \$1,004,000.

The undivided profits were \$8,289,000, an increase of \$1,212,000.

ASSOCIATED OPERATING COMPANIES IN UNITED STATES.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY NOT INCLUDED.

COMPARISON OF EARNINGS AND EXPENSES, 1908 AND 1909.

(DUPLICATIONS EXCLUDED.)

	1908.	1909.	Increase.
Gross Earnings	\$127,117,200	\$137,112,700	\$9,995,500
Expenses Operation . .	\$49,083,800	\$50,425,700	1,341,900
Taxes	5,173,600	6,316,200	1,142,600
	<u>\$54,257,400</u>	<u>\$56,741,900</u>	<u>\$2,484,500</u>
Balance	\$72,859,800	\$80,370,800	\$7,511,000
Maintenance and Depreciation	37,204,200	42,418,000	5,213,800
Net Earnings	<u>\$35,655,600</u>	<u>\$37,952,800</u>	<u>\$2,297,200</u>
Interest	6,973,700	7,053,900	80,200
Balance	<u>\$28,681,900</u>	<u>\$30,898,900</u>	<u>\$2,217,000</u>
Dividends	21,605,300	22,609,900	1,004,600
Undivided Profits . . .	<u>\$7,076,600</u>	<u>\$8,289,000</u>	<u>\$1,212,400</u>

COMBINED BALANCE SHEET, 1908 AND 1909.

(DUPLICATIONS EXCLUDED.)

ASSETS:	Dec. 31, 1908.	Dec. 31, 1909.	Increase
Contracts and Licenses,	\$8,107,600	\$7,212,800	\$894,800*
Telephone Plant . .	475,034,600	501,757,100	26,722,500
Supplies, Tools, etc.	14,858,500	15,713,400	854,900
Receivables	36,359,400	22,578,100	13,781,300*
Cash	8,730,400	11,709,900	2,979,500
Stocks and Bonds . .	23,450,400	28,765,400	5,315,000
Total	<u>\$566,540,900</u>	<u>\$587,736,700</u>	<u>\$21,195,800</u>
LIABILITIES:			
Capital Stock . . .	\$375,891,600	\$358,938,000	\$16,953,600*
Funded Debts . . .	39,649,800	79,364,600	39,714,800
Bills Payable . . .	85,179,300	66,347,900	18,831,400*
Accounts Payable . .	<u>17,205,500</u>	<u>21,133,800</u>	<u>3,928,300</u>
Total Outstanding Obligations,	\$517,926,200	\$525,784,300	\$7,858,100
Surplus and Reserves	48,614,700	61,952,400	13,337,700
Total	<u>\$566,540,900</u>	<u>\$587,736,700</u>	<u>\$21,195,800</u>

* Decrease.

ENTIRE BELL SYSTEM IN UNITED STATES.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY AND
ASSOCIATED HOLDING AND OPERATING COMPANIES
IN THE UNITED STATES.

NOT INCLUDING CONNECTED INDEPENDENT OR SUB-
LICENSEE COMPANIES.

There can be no boundaries to a telephone system as it is now understood and demanded. Every community is a centre from which the people desire communication in every direction, always with contiguous territory and often with distant points.

Every exchange must be the centre of the system.

The following tables, showing the business in the United States treated as one system, giving the amount collected from the public and the amount paid in dividends and interest to the security holders, will be of interest.

The gross revenue collected from the public for telephone service by the Bell system—not including the connected independent companies—was \$150,000,000; an increase of nearly \$12,000,000 over last year. Of this, operation consumed \$50,000,000; taxes, \$7,000,000; current repairs and maintenance of property and provision for depreciation \$45,000,000.

The surplus available for charges etc., was \$48,400,000, of which \$10,220,000 was paid in interest and \$24,000,000 paid out in dividends to the public.

The capital stock, funded and floating debts outstanding in the hands of the public at the close of the year were \$581,300,000. The surplus of liquid assets was \$57,200,000, leaving \$524,000,000 as the net obligations of all the system to the public.

ENTIRE BELL SYSTEM IN UNITED STATES.

COMPARISON OF EARNINGS AND EXPENSES, 1908 AND 1909.
(ALL DUPLICATIONS, INCLUDING INTEREST, DIVIDENDS AND
OTHER PAYMENTS TO AMERICAN TELEPHONE AND TELE-
GRAPH COMPANY BY ASSOCIATED HOLDING AND OPERATING
COMPANIES, EXCLUDED.)

	1908.	1909.	Increase.
Gross Earnings	\$138,144,300	\$149,914,700	\$11,770,400
Expenses Operation . .	48,081,900	49,732,000	1,650,100
Taxes	5,558,100	6,976,300	1,418,200
	<u>\$53,640,000</u>	<u>\$56,708,300</u>	<u>\$3,068,300</u>
Balance	\$84,504,300	\$93,206,400	\$8,702,100
Maintenance and Depre- ciation	39,736,700	44,838,900	5,102,200
Net Earnings	\$44,767,600	\$48,367,500	\$3,599,900
Interest	10,874,100	10,221,400	652,700*
Balance	\$33,893,500	\$38,146,100	\$4,252,600
Dividends	20,719,000	23,910,600	3,191,600
Undivided Profits . . .	<u>\$13,174,500</u>	<u>\$14,235,500</u>	<u>\$1,061,000</u>

* Decrease.

COMBINED BALANCE SHEET, 1908 AND 1909.

(DUPLICATIONS EXCLUDED.)

ASSETS:	1908.	1909.	Increase.
Contracts and Licenses,	\$8,107,600	\$7,212,800	\$894,800*
Telephone Plant . .	528,717,000	557,417,100	28,700,100
Supplies, Tools, etc.,	15,618,100	17,048,200	1,430,100
Receivables	23,283,800	49,744,900	26,461,100
Cash	53,827,600	32,055,900	21,771,700*
Stocks and Bonds . .	37,032,500	38,166,300	1,133,800
Total	<u>\$666,586,600</u>	<u>\$701,645,200</u>	<u>\$35,058,600</u>
LIABILITIES:			
Capital Stock . . .	\$304,139,100	\$352,904,100	\$48,765,000
Funded Debts . . .	236,017,400	187,685,300	48,332,100*
Bills Payable . . .	35,680,800	40,721,600	5,040,800
Accounts Payable . .	21,488,600	24,633,800	3,145,200
Total Outstand- ing Obligations,	<u>\$597,325,900</u>	<u>\$605,944,800</u>	<u>\$8,618,900</u>
Surplus and Re- serves	69,260,700	95,700,400	26,439,700
Total	<u>\$666,586,600</u>	<u>\$701,645,200</u>	<u>\$35,058,600</u>

* Decrease.

Against these obligations, the companies had property \$612,600,000,—an excess of \$88,600,000, or 17 per cent.

In addition, there is the intangible property, such as licenses, contracts, patents, rights of way, etc.,—not including any public franchises—of great value, which it would now be difficult to obtain at any price.

In every case where the public authorities have appraised the plant of the companies, the valuation has been far in excess of the book valuation. It is within the bounds of conservatism to say that the obligations of all the companies outstanding in the hands of the public are represented by 150 per cent. of property at a fair replacement valuation of the plants and assets, *not including public franchises.*

WESTERN ELECTRIC COMPANY.

The policy adopted last year with regard to the Western Electric Company has been more than justified. The company for the year 1909 shows an improvement of \$3,125,053 in net over the previous year.

Both the foreign business and the domestic business other than with the Bell system show a marked improvement over last year.

The business is being concentrated at Hawthorne as fast as possible; as soon as completed, the company will have for sale real estate valued at several millions.

Since the close of the year, the company has disposed of \$5,000,000 two-year 4½% notes, and \$8,750,000 of its 5% bonds. The proceeds of these sales will enable the company to pay off all its floating debt and have working capital sufficient for a largely increased business.

REPORT OF THE AMERICAN TELEPHONE AND TELEGRAPH COMPANY.

The improvement which has marked previous years still continues. The net revenue for the year was \$30,190,765.86, out of which were paid interest \$7,095,377.34, and dividends \$17,036,275.64. The balance, \$6,059,112.88, shows an increase notwithstanding the large increase in dividends due to the exchange of convertible bonds for shares.

CONVERTIBLE BONDS.

At the close of business December 31st, 1909, \$101,861,000 of the \$150,000,000 convertible bonds sold had been handed in for conversion, leaving outstanding at that date \$48,139,000.

SHARE CAPITAL.

Due to the conversion of the bonds, and the sale of the shares of the company which were in the treasury, there has been an increase of \$97,998,700 in the outstanding share capital. This increase has been well distributed. The number of shareholders, 35,823 on December 31st, 1909, shows an increase of 9,453 during the year. The distribution is general, there being 35,510 shareholders out of the 35,823 holding in blocks of less than 1,000 shares each, 1,700,543 shares—an average of 47 shares each. The distribution continues, as the number of shareholders has increased 1,500 during the first two months of the present year.

INCREASE OF CAPITAL STOCK.

The limit of the authorized capital with what is reserved against the conversion of the convertible bonds has almost been reached. The expansion of our business is continuous and probably will continue at least as fast as in the past. It is believed, however, that in the future, much of the financing can be done locally, thus relieving this company of the burden and strengthening the local associate company.

While there are not in contemplation any large financial operations, yet a company of this magnitude should be in a position where every situation can be met promptly and effectively; it is recommended that the authorized share capital of this company be increased from \$300,000,000 to \$500,000,000.

None of this increase will be needed during the current year for ordinary capital expenditures.

INDEPENDENT AND OPPOSITION COMPANIES.

A large number of opposition and independent companies have been absorbed into the Bell system during the year. Our position has been consistent. Wherever any opposition company can be legally brought into and made a part of the Bell system, it is done if it can be done to the advantage of the public, by and with the assent of all parties interested, including not only the public served, but the public authorities.

REARRANGEMENT OF TERRITORY.

Some effort has been, and is being, made to make a closer adjustment of the boundaries of our associated companies to the commercial or geographical boundaries.

This has been completed during the past year in the Middle States by bringing together into the New York Telephone Company and the Bell Telephone Company of Pennsylvania the territory naturally belonging to each. In both cases this was accomplished by a virtual consolidation of the various companies operating in the territory, and in both cases the outstanding obligations after the consolidation showed a considerable reduction below the total outstanding obligations of the various companies combined.

In later pages of the report will be set forth the relations between the Western Union Telegraph Company and this company, and the advantages which are expected to result from these relations.

It will also be shown that the capital of the American Telephone and Telegraph Company represents actual cash paid in by its shareholders in excess of the par value of all the outstanding obligations in the hands of the public, and that it is not represented by stock obtained for surplus earnings, inflated valuations, franchises or other intangible property no matter how valuable;

That the shares of the American Telephone and Telegraph Company are not largely concentrated in the hands of a few individuals;

That improvements in plant and operating methods are more responsible for reduction in rates than competition; and that there is within reach of almost if not every one desiring it, some kind of telephone connection;

That the organization is probably the most effective that could be devised for the business as a whole, and certainly is the only one possible under all the existing conditions;

That the administration and policy have been consistent and uniform from the very beginning;

That the interests of the Bell system are dependent upon giving the best service possible under existing conditions, and anticipating as far as possible any improvement.

Telephone service in its close personal touch with every subscriber is a unique service, different from all other public services; efficient service requires the co-operation of the user, it requires prompt attention on the part of the public.

In every use of the telephone system three human factors are brought into action—one at each end, one or both anxious and probably impatient, the one at the central office, as nearly a machine as is possible, a trained expert with at least as much intelligence and reliability as the best stenographers, typewriters or book-keepers. This central office factor is the personal servant for the time of the factors at the end and is entitled to the same consideration that is given to their own personal staff. Perfect service depends on the perfect co-ordinate action of all of these factors—any one failing, the service fails. This should never be forgotten. All attempts so far to eliminate the personal factor of the central office, to make it a machine, have failed in systems of any extent; there are times when, at the central office, action guided by intelligence, is absolutely necessary.

HISTORY AND DEVELOPMENT OF THE TELEPHONE SYSTEM.

In spite of repeated attempts to make known the real facts of the early history and evolution of the Bell system, there seems to be still much misunderstanding.

At the risk of being prolix, and of repeating what has often been told, the history and evolution and development will be retold as briefly as possible.

The telephone was first introduced to the public in 1876, and put to the first practical or commercial use in 1877. During that year was organized the first "association" or "company" to hold the patents. The first companies to systematically exploit the business were formed in 1878, one for New England, and one for the rest of the United States and Canada. These two companies succeeded to all the rights and property of the original association. The capital, \$650,000, 6,500 shares at \$100 par each, represented the patents, such rights and property as had resulted from the time and money expended up to the spring of 1878, and in addition \$100,000 in cash.

Early in 1879, these two companies were consolidated into one company, the National Bell Telephone Company, the first company to attain any prominence.

The capital of this company was \$850,000, 8,500 shares of \$100 par value each. \$650,000 in shares was given share for share for the stock of the two old companies and \$200,000 in shares left in the treasury. The treasury stock was sold as the company required the money, *for the best price obtainable*. The \$200,000 par yielded to the treasury \$430,000 in cash, an average of \$215 per share, the last 500 shares having been sold for \$600 each.

It was during the existence of this company that the permanent foundations were laid upon which is built the present comprehensive system.

It was in the fall of 1879, that the settlement was made with the Western Union Telegraph Company which removed the most formidable and powerful competitor from the field.

It was during this period that those fancy flights in the prices of the stock took place, the \$100 shares (of which there were only 8,500) being quoted at one time at \$1,000. Few, if any, transactions took place however at this price or anything near it. The sale of 500 shares of the treasury stock at \$600 per share was probably about the best price at which any considerable transaction took place.

The stock of this company was fairly well distributed among 338 holders, an average of about 25 shares each, twelve holding in lots of 200 shares or over an aggregate of 4,795 shares out of the 8,500 shares.

At the highest quotation the total market value of all the shares of the company would have been \$8,500,000. According to the popular belief, over twelve of the original investors have been credited with realizing, if not more, at least as much as this.

No dividends were paid by this company.

The rapid increase in the business called for more capital. Early in 1880 the American Bell Telephone Company was organized and the business of the National Bell Telephone Company transferred to it. The shareholders of the National Bell Telephone Company were given for each share of their stock six shares of the new American Bell Telephone Company stock. 8,500 shares of the treasury stock were at the same time sold at par.

At the close of 1880 there were 540 holders of the 59,500 shares, an average of 110 each. Twenty holders of 500 shares or over had in the aggregate 33,190 shares. This was the last year that a majority of the stock was closely held.

In 1881 the first dividend was paid.

The American Bell Telephone Company continued the business until 1899, during which time the capital stock had increased from \$5,950,000 to \$25,886,300. The \$25,886,300 capital was held by 6,961 shareholders. 62,649 shares were held by 61 shareholders in blocks of 500 shares or over, while the balance, 196,214 shares, was held by 6,900 holders.

The increase in the stock had been sold for cash at various times, yielding the company more than enough in premiums above par to offset the shares that had been issued for patents, inventions, and property of the National Bell Telephone Company.

When the American Bell Telephone Company transferred its business to the American Telephone and Telegraph Company there had been over \$28,000,000 actual cash paid into the treasury of the company by shareholders as against \$25,886,300 capital outstanding. During the time no stock dividend or dividend of surplus in cash to pay for stock issued was made.

The market price of the American Bell Telephone Company shares during the year ranged above \$200 a share. The company was paying 15 per cent. dividends yearly.

The demands of the business required much larger capital than could be provided under the corporate powers of the American Bell Telephone Company. The American Telephone and Telegraph Company, a company organized to operate the long-distance traffic,

purchased the business in 1899. The consideration was cash, but in effect the shareholders of the American Bell Telephone Company received two shares of the American Telephone and Telegraph Company for each share held. The dividends were put on a $7\frac{1}{2}$ per cent. basis and were increased in 1906 to 8 per cent., at which rate they still continue.

Since 1900 the stock of the American Telephone and Telegraph Company has been increased from time to time as the business called for money. At the close of 1909 there were in the hands of the public \$256,475,300.

So much of this stock as was not sold to the shareholders at par was sold for cash at a premium, the highest at \$152 per share, or was issued in exchange for the convertible bonds at about \$134 per share. None of the stock has been issued as a dividend, nor have any cash dividends been declared to meet payments for stock issues.

At the close of 1909 the premiums thus received over the par of the outstanding share capital amounted to over \$14,000,000.

The original owners and promoters of the telephone were first of all business promoters. Their idea was to develop the business on broad lines. Whatever reward they expected or received was the legitimate reward following a legitimate development of a substantial and beneficial business.

The Bell system was founded on the broad lines of "One System," "One Policy," "Universal Service," on the idea that no aggregation of isolated independent systems, not under common control, however well built or equipped, could give the public the service that the interdependent, intercommunicating, universal system could give.

This is no recent or new idea or theory. It is co-existent with the business; in fact the theory was evolved and developed before the business, and the business has been developed on that theory.

To develop the business it was first necessary to develop the "art." It was unique, nothing like it existed; the whole art of the practical application of electricity was new and undeveloped.

To develop the business to the best advantage all the best in the way of instrumentalities, apparatus and methods must be controlled. Apparatus and methods at the start were crude, but new instrumentalities and new methods were suggested from daily association, practice and study.

It was necessary to develop these, improve and reduce the useful to practice, and eliminate the worthless. For this purpose a staff of technical, electrical and mechanical operating experts must be gathered together and educated. To educate and assist these, to enable them to do intelligent work, avoid repetition and duplication, all that had gone before and all that was being done here and elsewhere must be known. For this purpose a bureau of research and information was formed. Patent and legal experts must be employed and educated to secure the advantage of this work and study, as well as to furnish protection in the use of the patents.

A highly developed manufacturing organization under proper supervision and control was required to reduce to practical use these ideas and inventions, as well as to secure the standardization and uniformity of instruments and apparatus.

To ascertain which were the best of the methods being evolved in field practice, to educate the others in the use of them, to assist generally in the develop-

ment, and to bring about standardization of operating practice and methods, a staff of traveling experts, observers and teachers was placed in the field.

It is necessary to the growing and constantly improving business that this work be continued. It is being done much more economically and far more effectively by this company than it could be done by the associated companies, and without expense to them except so far as it is covered by the miscalled "rental" of telephones.

The preliminary work was certainly difficult enough. Add to that the necessity of educating a doubting, hesitating public who looked on the invention as little better than a toy, and some idea of the task can be formed.

In the promotion and exploitation of the business two methods were possible.

One company covering the whole country. This would require a large executive and administrative staff in the field, and a large capital which, at the time, it was impossible to secure. Under this method, state organizations would also have been necessary to hold franchises.

The other way was to enlist a large number of individual workers, each with some capital, large faith and expectation, with great capacity for work, who would cover the field and develop the business.

To insure a common policy and central control, all licenses were issued for small units of territory under restricted terms, confining the business entirely within each territory. The parent company owned and furnished the telephones, had all reversionary interests or rights in the territory, and the right to connect the units with each other for the purpose of forming a universal intercommunicating telephone system. For this purpose the long-distance lines and other toll lines were

built. Under these temporary licenses certain rentals, so-called, or royalties, were paid to the parent company for the use of the telephones and other inventions owned, and also as compensation for all the many other services rendered, as described above. When these licenses were made permanent and included all future as well as all existing inventions, and the right to the business within the units of territory, the parent company retained an interest in the business which was represented by a stock interest in each company.

These licenses called for a continued certain percentage of the stock of the company, but this right was soon waived by the parent company.

Through purchases to defeat the attempts of hostile interests to get possession of some of our associated companies, through the necessity of financing the companies for the purpose of keeping up with the demands for development, and through the purchase of its pro-rata of new issues, the American Telephone and Telegraph Company acquired its large holdings.

The book valuation of the American Telephone and Telegraph Company's interest in the share capital of the associated operating companies December 31st, 1909, was nearly \$306,000,000; *of this only \$16,000,000 was received through contract or for licenses.* The balance, \$290,000,000 was obtained under precisely the same conditions that shares have been received by the other shareholders.

While the settlement with the Western Union Telegraph Company in 1879 removed from the field the most formidable and powerful competitor, it must not be concluded that the American Bell Telephone Company had the field to itself. The Bell system did not then, nor did it in any year or any time since the great value of the telephone to the world was established,

have a monopoly of the business or anything approaching it.

Patents and inventions were necessary for defence, but were no protection against imitators.

There was a continued running fight in the courts and in the field. The fact that the Bell won every case in the courts availed it nothing except that it was credited with a monopoly which did not exist.

The only time that the Bell Telephone was without a competitor was at the Centennial Exhibition of 1876.

COMPETITION.

There is not, nor can there be, any competition between these local associated operating companies, as under the conditions under which they can use the instruments and inventions, they must operate entirely within their respective territories; nor can there be competition in the telephone exchange systems operating in the same territory such as exists between other public utilities, certainly not such as exists between two gas companies or even between a gas and an electric light company.

The telephone system does not give you a "commodity" or a "product," or even a "service" except so far as it is service to make up a "path" or "line" or "highway" for personal communication with a party at some distant point.

The value of a telephone system is measured by the possibility of reaching through its connections *any one—at any possible place.*

There can be said to be no limit to those with whom one may desire communication at some one time or other. Ordinarily your communications are confined to a certain few other subscribers; occasionally you may wish to reach certain others, but there are times

when it is an absolute necessity to get a connection with some one possibly unthought of or unknown before, and the importance of this connection may be vital.

A purely *local* exchange has a certain value.

If it has, in addition to its local connections, a connection with outlying contiguous localities, it has a largely increased value.

If it is universal in its connections and intercommunication, it is indispensable to all those whose social or business relations are more than purely local.

A telephone system which undertakes to meet the full requirements must cover with its exchanges and connecting lines the whole country. Any development which is comprehensive must cover some territory which is not, and may never become, profitable in itself but must be carried at the expense of the whole. *It must be a system that will afford communication with any one that may possibly be wanted, at any time.* To do this the system must offer a connection of some kind, and at such rates, as will correspond to the *value* of the system to *each and every user*.

"Interdependence," "intercommunication," "universality" cannot be had with isolated systems under independent control, however well connected. They require the standardization of operating methods, plant facilities and equipment, and that complete harmony and co-operation of operating forces, that can only come through centralized or common control.

Wherever two systems exist, each has, with the exception of a percentage common to both, a different list of subscribers. Those of large and extended social or business connections must connect with both, while those who do not connect with both get only partial service—the same character of service offered by two street car lines, each having its tracks on and running through the principal main street of the town but each extending into and serving entirely different sections of the community.

Offering a connection with a so-called competing exchange, having a list of subscribers either entirely or largely different, is offering a different service, except so far as they connect the same subscribers, and there it is of no benefit, as either one would serve the purpose. Two exchanges, each with the same list of subscribers, cannot, in the nature of things, exist. One or the other would be unnecessary because a subscriber would be paying twice for the same service when either exchange gave all that could be obtained from both. It would be like paying two fares each time you ride in a street car to maintain a parallel line, although you could ride in but one at a time. Competition of that character increases the cost to you. Competition is only of service when it reduces your cost or increases your service.

ECONOMY OF COMPETITION.

By reason of duplications, duplication of investment, duplication of operation, competition in telephone systems cannot, in the nature of things, produce economy in operation, and without economy there can be no reduced charges.

With only one system, at once is eliminated the duplication of subscribers' lines—so also is eliminated the greater part of the unused and idle staff, equipment and plant, and with this are also eliminated capital investments, capital charges, operating salaries, plant maintenance and depreciation. That it contributes also to the comfort and convenience of the subscribers is in itself no small consideration.

WHAT HAS COMPETITION DONE FOR THE PUBLIC?

No one can dispute the fact that the Bell methods and system are the standard and have been accepted as the best the world over.

Telephone rates have fluctuated. Beginning with simple and crude instrumentalities and methods, with small developments, the rates were low. As facilities increased, as methods and apparatus improved, and apparatus almost new and hardly in use had to be discarded to make place for new and improved methods, rates had to be increased.

In the New York City exchanges, apparatus and plant practically good as new to the value of over eight and one-half millions of dollars, have been discarded because new improvements had made them obsolete, nearly all between the years 1883 and 1902, and the same is relatively true of any exchange system. As methods, plant and apparatus became more fixed and permanent, methods of operating improved, operating expenses declined, and reductions in rates followed—not because of competition.

REDUCTION OF RATES AND DEVELOPMENT.

The diagrams on pages 26 and 27 show the course of rates and development from 1894 to 1909, in the principal cities and exchanges with and without competition. The non-competitive cities and exchanges are about 50 per cent. larger than the competitive.

The *average revenue* per exchange station in competitive and non-competitive Bell exchanges each year for this period is shown in diagram on page 26. The slightly higher average revenue in the non-competitive cities is due to their larger size.

The two curves showing the reduction follow almost exactly the same lines, and the percentage of reduction is almost the same.

Competition certainly had no effect on the Bell revenue, was of no benefit to the public, compelled all to pay two subscriptions instead of one for complete service, besides all the other disadvantages of dual exchange systems.

CHART
showing
**REDUCTION IN THE AVERAGE YEARLY
"BELL" EXCHANGE REVENUE**
derived from
CERTAIN GROUPS OF CITIES
arranged by
Five Year Periods — 1894 to 1909.

NOTE—This Chart shows graphically the relative changes in the Average Bell Exchange Revenue derived from a group of Cities **WITHOUT** Competition as compared with another group of comparable Cities **WITH** Competition during the period.

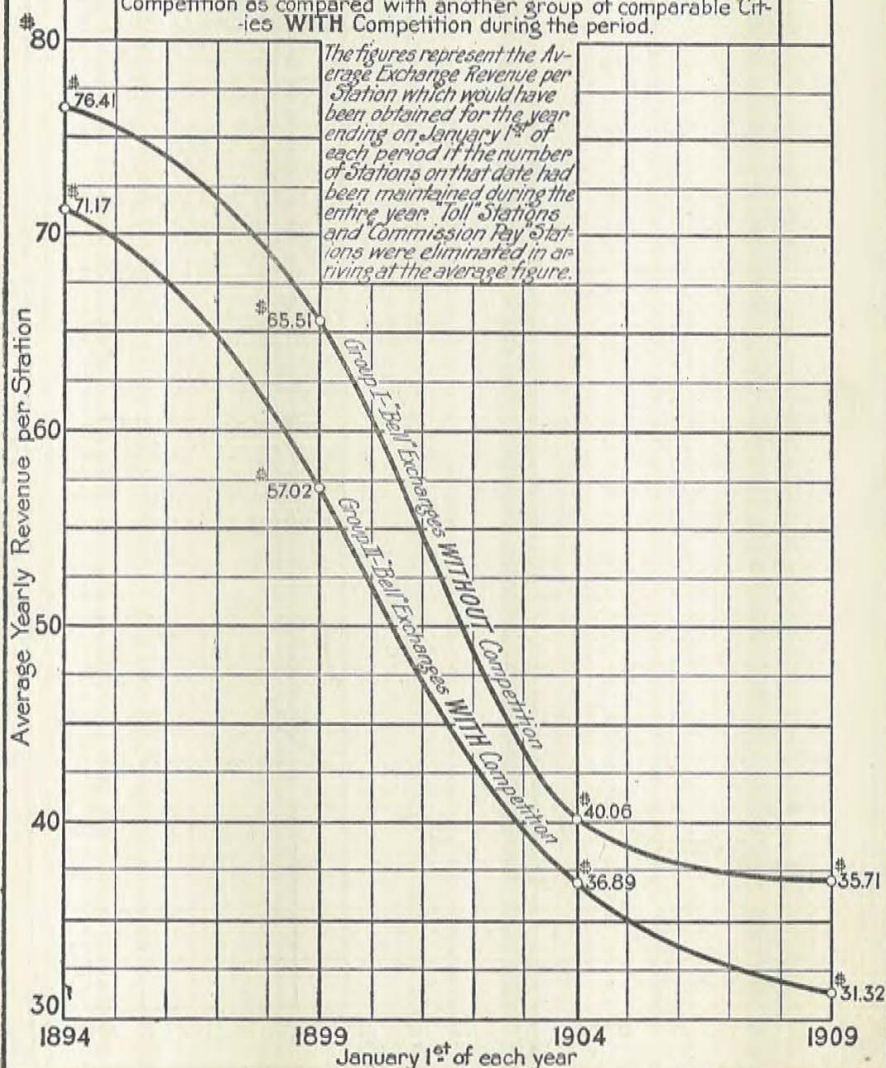
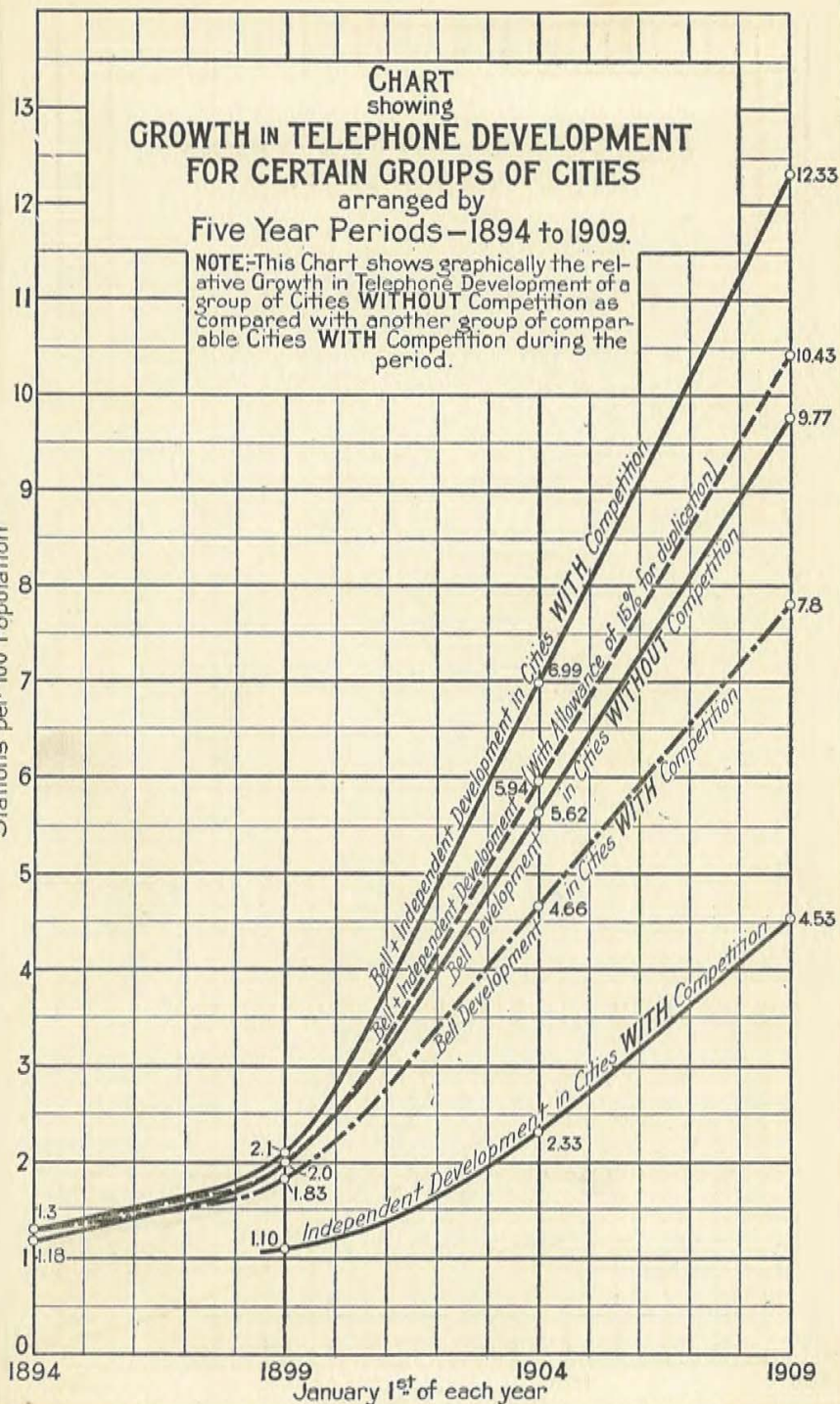


CHART showing GROWTH IN TELEPHONE DEVELOPMENT FOR CERTAIN GROUPS OF CITIES

arranged by
Five Year Periods—1894 to 1909.

NOTE:—This Chart shows graphically the relative Growth in Telephone Development of a group of Cities **WITHOUT** Competition as compared with another group of comparable Cities **WITH** Competition during the period.

Stations per 100 Population



The *development*—that is, the number of exchange stations per 100 population—for Bell exchanges without competition and for the Bell and opposition exchanges in cities with competition, is given on page 27. The same cities are used as for page 26.

The combined Bell and opposition development in the cities with competition in 1909, allowing 15 per cent. for duplication, was 10.43 per 100 population. The average duplication is probably nearer 20 per cent. than 15 per cent.

The Bell development in cities without competition was 9.77—only three-quarters of one station per 100 population less.

The Bell development alone in cities with competition is 7.8 stations per 100 population, or only 2.5 stations less than the combined development, as against the opposition development of 4.53 stations per 100.

The opposition figures are taken from opposition statements and include all the larger places where there were such exchanges and those of the largest development.

MINIMUM RATES.

For Bell exchanges aggregating some 700,000 stations with no opposition, the mean minimum rates for 1909 were \$36.00 per year for business, and \$23.75 for residence, as against the mean minimum rates in 1894 of \$68.10 for business, and \$56.00 for residence.

In cities with competition, where there were Bell exchanges aggregating 550,000 stations and opposition exchanges aggregating 322,000 stations, the mean minimum rates for Bell service were \$41.25 for business, and \$22.80 for residence; for the opposition service, the mean minimum rates were \$37.15 for business, and \$23.25 for residence.

AVERAGES OF OPERATING UNITS OF ASSOCIATED OPERATING COMPANIES, 1895 TO 1909.

(See Table, next page.)

The table on page 30 shows the averages of the revenue, expenses and other average operating details of the associated operating companies for the years 1895, 1900, 1905 and 1909.

Taking the years 1895 and 1909, the average exchange revenue per station for exchange service was reduced from \$70.00 to \$31.50, or 55 per cent.; the total revenue including toll revenue per exchange station reduced from \$81.00 to \$41.00, or one-half; the operating expenses including taxes reduced from \$31.50 to \$17.10, or 45 per cent.; maintenance per station reduced from \$26.20 to \$13.00, or one-half. Total operating expenses were reduced from \$57.70 to \$30.00 per station, or not quite one-half,—that is, reduction of operating expenses of about one-half brought about a reduction in cost to the public of exchange service of over one-half.

The other figures show the various costs and expenses. The average plant cost, including toll and exchange construction, was reduced from \$260 to \$145 per exchange station, about 45 per cent. All plant costs show a decrease per unit, although there has been an increase in both labor and material.

These statements, statistics and diagrams should establish the claim already made that reduction in rates followed closely reduction in expenses, and that reduction in expenses was the result of the broad policy of development and improvement, the policy of the Bell system from the beginning, and not forced upon it by competition;

That competition in the telephone business is not a beneficial competition; and

That there is within the reach of every one needing it a connection with the Bell telephone system.

AVERAGES OF OPERATING UNITS OF ASSOCIATED OPERATING
COMPANIES, 1895 TO 1909.

AVERAGE PER EXCHANGE STATION.	1895.	1900.	1905.	1909.
EARNINGS:				
Exchange Service	\$69.75	\$44.68	\$33.31	\$31.37
Toll Service	11.35	12.60	9.95	9.42
Total	<u>\$81.10</u>	<u>\$57.28</u>	<u>\$43.26</u>	<u>\$40.79</u>
EXPENSES:				
Operation	\$29.15	\$21.63	\$16.96	\$15.14
Taxes	2.23	2.37	1.49	1.93
	<u>\$31.38</u>	<u>\$24.00</u>	<u>\$18.45</u>	<u>\$17.07</u>
Balance	\$49.72	\$33.28	\$24.81	\$23.72
Maintenance and Depreciation .	26.20	17.68	13.91	12.93
NET EARNINGS	<u>\$23.52</u>	<u>\$15.60</u>	<u>\$10.90</u>	<u>\$10.79</u>
Per Cent. Tel. Exp. to Tel. Earn- ings	71.0	72.8	74.8	73.6
Per Cent. Maint. and Depr'n to Aver. Plant, Supplies, etc. . .	9.1	8.4	8.9	8.4
Per Cent. Incr. Exchange Stations†	15.7	26.5	24.5	11.6
Per Cent. Incr. Miles Exchange Wire†	15.9	33.2	27.2	7.1
Per Cent. Incr. Miles Toll Wire† .	21.3	25.2	12.4	4.4
Average Plant Cost per Exchange Station (including Exchange and Toll Construction)	\$260.00	\$199.00	\$145.00	\$145.00
Average Cost per Mile of Pole Line (Toll), including Wire . .	\$219.00	\$348.00	\$438.00	\$610.00
Average Cost per Mile of Wire (Toll), including Poles	\$81.00	\$71.00	\$62.00	\$63.00
Per Cent. Gross Tel. Earnings to Average Constr.	33.4	31.7	31.7	29.6
Per Cent. Net Profits to Aver. Capital Stock	10.11	9.44	8.34	8.14
Per Cent. Dividends to Aver. Cap. Stock	5.07	6.19	5.75	5.95

† Increase during year shown, over previous year.

WESTERN UNION TELEGRAPH COMPANY.

In taking over a substantial interest in the Western Union Telegraph Company, this company assumed a substantial obligation to the public in addition to that which it already had. To make clear the extent of this obligation and the resulting advantages, and to illustrate the various shades of relation between the telegraph and the telephone, some explanations will be interesting and instructive.

The connection or relation between the telephone and the telegraph is not in any sense one of substitution, it is supplementary; one is auxiliary to the other.

Telegraphy eliminates the time of transit of correspondence, by the electrical transmission of the text from office of origin to office of destination, but it is incomplete in that the methods of collection and delivery are slow and primitive.

Telephony eliminates distance by placing parties at distant points in direct personal communication with each other, but the expense prohibits its use for the transmission of written messages over long distances.

Telegraph operation as carried on must have a separate, distinct and entirely different operating organization and equipment from that of a telephone company.

Line construction and maintenance are common to both the telephone and the telegraph, and can be combined or performed jointly with economy. The same wires may be used for both telephone and telegraph circuits and at the same time. The differentiation between telephone and telegraph construction and operation begins with the stringing of the wires.

Where there is density of message traffic sufficient to keep busy an expert telegraph operator, the telephone

cannot be used in competition with the telegraph in the handling of message traffic, but at some point of less density of traffic the telephone will gradually supersede the telegraph in handling message traffic.

The elementary differences in the scope and operation of the telephone and the telegraph in the handling of telegraph traffic indicate that each will occupy a distinct and a well-defined field.

The telegraph between centres of density and for long distances.

The telephone for short distances and for the collection and distribution between the customer and such centres.

About 65 to 70 per cent. of the telegraph traffic is between, that is, both originates and ends in, about 550 cities and towns of 10,000 or more population. The Western Union telegraph lines reach over 22,000 smaller cities and towns and villages, at most of which the commercial telegraph traffic would not of itself support a telegraph office. This business is now being performed necessarily under some joint arrangement, for the greater part with the railroad companies. While these arrangements will be continued, a greatly extended and improved service will be given in connection with the Bell system with over 5,000,000 stations located in 50,000 cities and towns, most of which will be put in immediate connection with telegraph offices at central points. *In this way the electrical transmission of messages will be extended from the actual point of origin to the actual point of destination.*

There are comparatively few places where there is business enough to warrant a "night and day" telegraph service, but there is no place where "night and day" telegraph service is maintained that is not in the centre of a "Bell system." Practically no Bell

exchange is ever closed—therefore there are few subscribers of the Bell system who cannot be placed within reach of night and day telegraph service.

Under the new conditions, when in full operation, each service, the telephone and the telegraph, will find its level of use, its field of best usefulness, with a distinct improvement in, and advantage to, both services.

Such economies as follow will be taken advantage of to increase the facilities and where possible reduce the cost to the public.

Before any change can be made in the existing rates for existing service, it will be necessary to await the result of studies now being made, as it is claimed that the irreducible cost of handling is so near the revenue received for each commercial message that no reduction in rates would be justified by any probable increase in business.

Improvement and extension of existing service and introduction of new classes of service will be the first effort of all interested. The first of these will be the introduction of the "Night Letter" and others will follow.

The benefits and advantages from this complementary operation will come, but not all at once. Careful study and consideration are being given to all questions by all interested. Existing plant will have to be rearranged or reconstructed, new plant constructed on proper lines. The necessary safeguards for the protection of the company and the public will have to be worked out.

The idea of operating the telephone and the telegraph in accord, each supplementing the other, is not a new or untried one, but has been ineffective because of the lack of common influence in the control of the operations. With the employees of both companies actuated by a common purpose, this can be effectively done; without a common influence in the operation it has been practically impossible.

GENERAL CONSIDERATIONS.

It is the duty and obligation, as well as self-interest, of a public service corporation to give efficient service up to the limits of reasonable practicability and to furnish such service at a reasonable price.

As a rule all capital invested in any public utility is permanently invested. It cannot be salvaged to any extent, nor can it be used for any other purpose. The chance of any return upon the capital is entirely dependent upon inducing or educating the public to make use of the service so offered. To do this, whatever is offered must be offered at a price which leaves the user a margin of profit—if not in money, in comfort and convenience—at a price which the public will accept, and that must necessarily be below the actual value of the service to the public.

Although there have been abuses in corporate management and in the manipulation of both property and securities, *for which there is ample remedy if existing laws are enforced*, yet it must be admitted that the tremendous development of utilities in this country as compared with other countries, with their contribution to the comfort and convenience of the public, is to a certain extent due to the lack of proscriptive restrictions.

The profits that have been realized by public service corporations in the development of new and beneficial facilities are insignificant in comparison with, and are certainly justified by, the enhancement of values and the unearned increment which have accrued to the public and which could not have existed but for this development.

The one attracts more attention because of its corporate character, while the benefits are of a private character, widely dispersed in smaller units and as a rule to individuals.

It is but natural that corporations should have some misgivings about a control of internal management by a body *without any responsibility that could be called accountability*, and without the practical knowledge or experience or information which comes from the daily dealings with questions; a control which would undertake to decide upon questions widely different, complex and far-reaching, over which expert managers of life-long study and experience are sometimes at a loss; a control over methods of business which usually are the evolution of years of practice, and are so interwoven with the fundamentals of business that they cannot be changed suddenly without great disturbance.

Too much importance is apt to be attached to claims of theorists or inventors, as any one can judge by comparing the wonderful promises and claims made with the results achieved.

All great developments in any line of industry have been from crude and imperfect beginnings by a process of evolution, by improvement in detail the result of suggestion from association, operation, or study.

The original idea upon which may be founded great development may be revolutionary but it never springs full-fledged or perfect into the world.

Public utility companies have obligations and are responsible both to the public and to their shareholders. It is a responsibility with accountability. Prevent them from imposing upon the public with fictitious issues of securities, or with exactions on the public with which to pay dividends on those fictitious securities.

As to their internal management, operating methods, leave something to their self-interest, to their responsibility with accountability; do not impose upon them such control as might force upon them new methods, new

apparatus, new ideas which have not been tried out, which have not been put through the crucible of practical experience. Theories and new ideas will be welcomed by any progressive corporation for without them development would be stayed, but all that is improvement must come through a process of evolution, by the gradual elimination of the useless and adoption of the useful, through experimental application modified to existing conditions.

We believe that if there is to be control, there should be protection, and that beyond the lines set forth above, any control ceases to be control and becomes management or operation. We believe that management or operation by a body without any accountable responsibility would be prejudicial to the best interests of the service and of the public, and destructive of property and the rights we are supposed to possess.

Our company has a vital interest in the proper solution of the telephone problem, and we believe that we are working the problem out on the broad lines of the greatest benefit to the public as a whole.

For the Directors,

THEODORE N. VAIL,

President.

BELL SYSTEM IN THE UNITED STATES.

	Dec. 31. 1895.	Dec. 31. 1900.	Dec. 31. 1905.	Dec. 31. 1908.	Dec. 31. 1909.	Increase. 1909.
Miles of Exchange Pole Lines	25,330	30,451	67,698	108,539	113,893	5,354
Miles of Toll Pole Lines	52,873	101,087	145,535	161,452	164,111	2,659
Total Miles of Pole Lines	78,203	131,538	213,233	269,991	278,004	8,013
Miles of Underground Wire	184,515	705,269	2,345,742	4,909,449	5,337,436	427,987
Miles of Submarine Wire	2,028	4,203	9,373	19,906	22,698	2,792
Miles of Aerial Wire	488,872	1,252,329	3,424,803	4,901,363	5,119,892	218,529
Total Miles of Wire	675,415	1,961,801	5,779,918	9,830,718	10,480,026	649,308
Comprising Toll Wire	215,687	607,599	1,265,236	1,732,039	1,804,552	72,513
Comprising Exchange Wire	459,728	1,354,202	4,514,682	8,098,679	8,675,474	576,795
Total	675,415	1,961,801	5,779,918	9,830,718	10,480,026	649,308
Total Exchange Circuits	237,837	508,262	1,135,449	1,668,211	1,829,942	161,731
Number of Exchanges	1,613	2,775	4,532	5,043	4,968	75†
Number of Bell Stations	281,695	800,880	2,241,367	3,215,245	3,588,247	373,002
Number of Bell Connected Stations*	27,807	55,031	287,348	1,149,384	1,554,445	405,061
Total Stations	309,502	855,911	2,528,715	4,364,629	5,142,692	778,063
Number of Employees	14,517	37,067	89,661	98,533	104,956	6,423
Number of Connecting Companies				7,721	10,354	2,633
Exchange Connections Daily	2,351,420	5,668,986	13,543,468	18,499,376	19,925,194	1,425,818
Toll Connections Daily	51,123	148,528	368,083	463,021	517,341	54,320

* Includes private line stations.

† Decrease.

American Telephone and Telegraph Company.

Balance Sheet, December 31, 1909.

ASSETS.

Stocks of Associated Companies . .	\$306,948,309.10	
Bonds of Associated Companies . .	3,527,000.00	
Capital Advances to Associated Companies	49,990,850.38	\$360,466,159.48
Telephones	\$10,510,702.91	
Real Estate	2,181,728.67	
Long Distance Telephone Plant . .	44,295,659.76	56,988,091.34
Cash and Deposits	19,654,016.04	
Temporary Cash Loans	11,418,000.00	
Short Term Notes	12,022,466.52	43,094,482.56
Special Demand Notes		26,775,000.00
Current Accounts Receivable . . .		6,766,073.28
		<u>\$494,089,806.66</u>

LIABILITIES.

Capital Stock		\$256,475,300.00
Four Per Cent. Collateral Trust Bonds, 1929	\$53,000,000.00	
Four Per Cent. Convertible Bonds, 1936	48,139,000.00	
Four Per Cent. American Bell Bonds, 1908	1,000.00	
Five Per Cent. Coupon Notes, 1907,	5,000.00	
Five Per Cent. Coupon Notes, 1910,	25,000,000.00	
Indebtedness to Western Union Tele. Co. for New York Tel. Co. Stock, payable 1910 to 1915	22,500,000.00	148,645,000.00
Dividend Payable January 15 . .	\$5,137,528.00	
Interest and Taxes accrued, but not due	2,634,039.49	
Current Accounts Payable	714,996.91	
Reserve for Unearned Revenue . .	102,334.93	8,588,899.33
Depreciation Reserve	\$33,693,547.78	
Surplus	46,687,059.55	80,380,607.33
		<u>\$494,089,806.66</u>

C. G. DuBOIS, *Comptroller*

American Telephone and Telegraph Company.

Comparative Statement of Earnings and Expenses.

EARNINGS:	1908.	1909.
Dividends	\$13,280,127.54	\$15,949,213.73
Interest and other revenue from Associated Companies	9,720,466.04	10,661,431.03
Telephone Traffic (net)	3,976,512.07	4,360,104.94
Real Estate	160,007.95	95,723.97
Other Sources	761,856.45	1,694,867.76
Total	<u>\$27,898,970.05</u>	<u>\$32,761,341.43</u>
 EXPENSES	 <u>2,003,956.06</u>	 <u>2,570,575.57</u>
NET EARNINGS	\$25,895,013.99	\$30,190,765.86
Deduct Interest	7,773,306.73	7,095,377.34
Balance	\$18,121,707.26	\$23,095,388.52
Dividends Paid	12,459,156.00	17,036,275.64
Balance	\$5,662,551.26	\$6,059,112.88
Carried to Reserves	\$3,000,000.00	\$3,000,000.00
Carried to Surplus	2,662,551.26	3,059,112.88
	<u>\$5,662,551.26</u>	<u>\$6,059,112.88</u>

C. G. DuBOIS, *Comptroller.*

American Telephone and Telegraph Company.

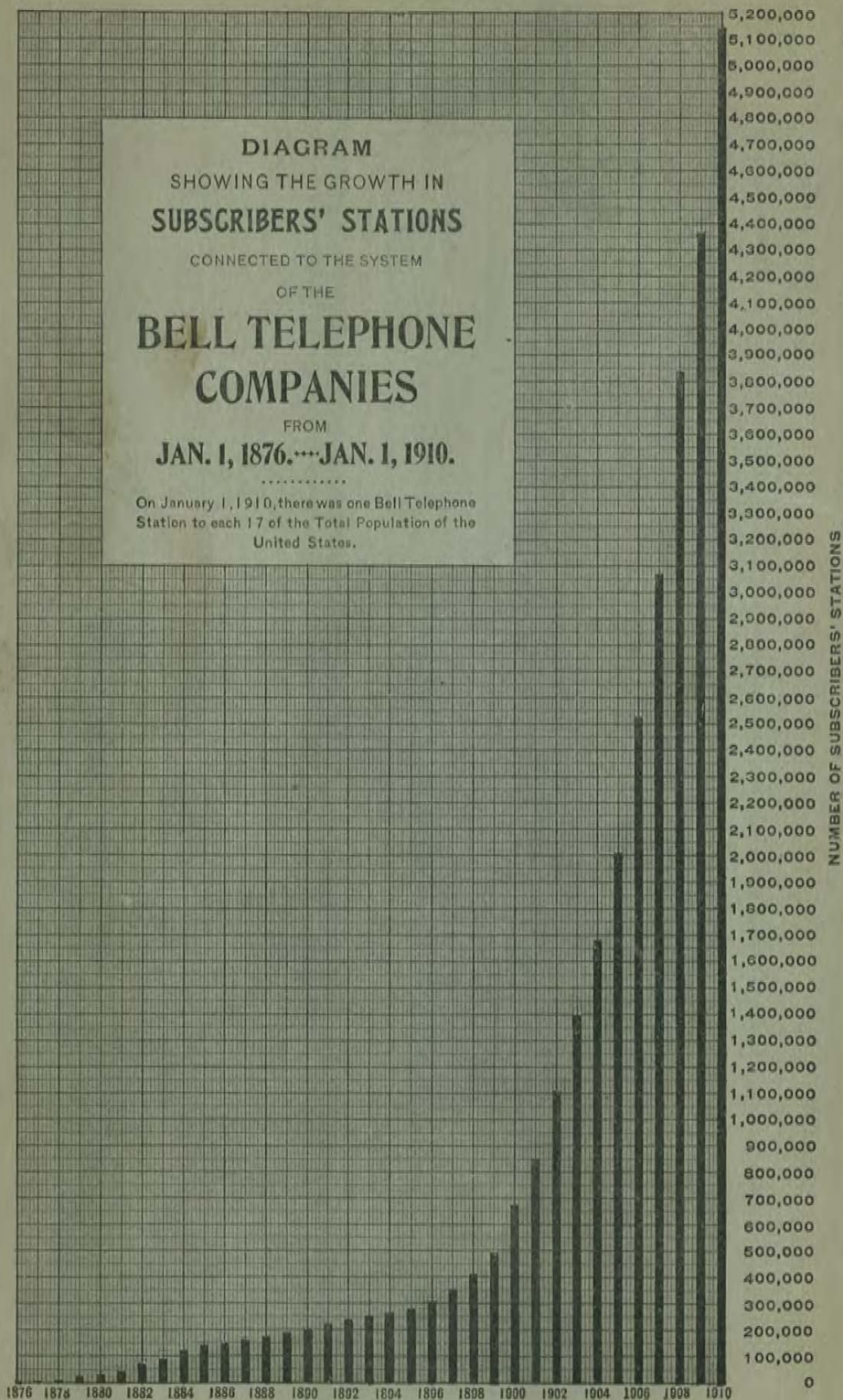
Annual Earnings and Dividends.

Year.	Net Revenue.	Dividends Paid.	Added to Reserves.	Added to Surplus.
1900	\$5,486,058	\$4,078,601	\$937,258	\$470,198
1901	7,398,286	5,050,024	1,377,651	970,611
1902	7,835,272	6,584,404	522,247	728,622
1903	10,564,665	8,619,151	728,140	1,217,374
1904	11,275,702	9,799,117	586,149	890,435
1905	13,034,038	9,866,355	1,743,295	1,424,388
1906	12,970,937	10,195,233	1,773,737	1,001,967
1907	16,269,388	10,943,644	3,500,000	1,825,744
1908	18,121,707	12,459,156	3,000,000	2,662,551
1909	23,095,389	17,036,276	3,000,000	3,059,113

C. G. DuBOIS, *Comptroller.*

DIAGRAM
 SHOWING THE GROWTH IN
SUBSCRIBERS' STATIONS
 CONNECTED TO THE SYSTEM
 OF THE
BELL TELEPHONE
COMPANIES
 FROM
JAN. 1, 1876.---JAN. 1, 1910.

On January 1, 1910, there was one Bell Telephone
 Station to each 17 of the Total Population of the
 United States.



NUMBER OF SUBSCRIBERS' STATIONS