

EIGHTEENTH ANNUAL REPORT

OF

THE DIRECTORS

OF

THE AMERICAN BELL TELEPHONE COMPANY

TO THE STOCKHOLDERS,

YEAR ENDING DECEMBER 31, 1897.

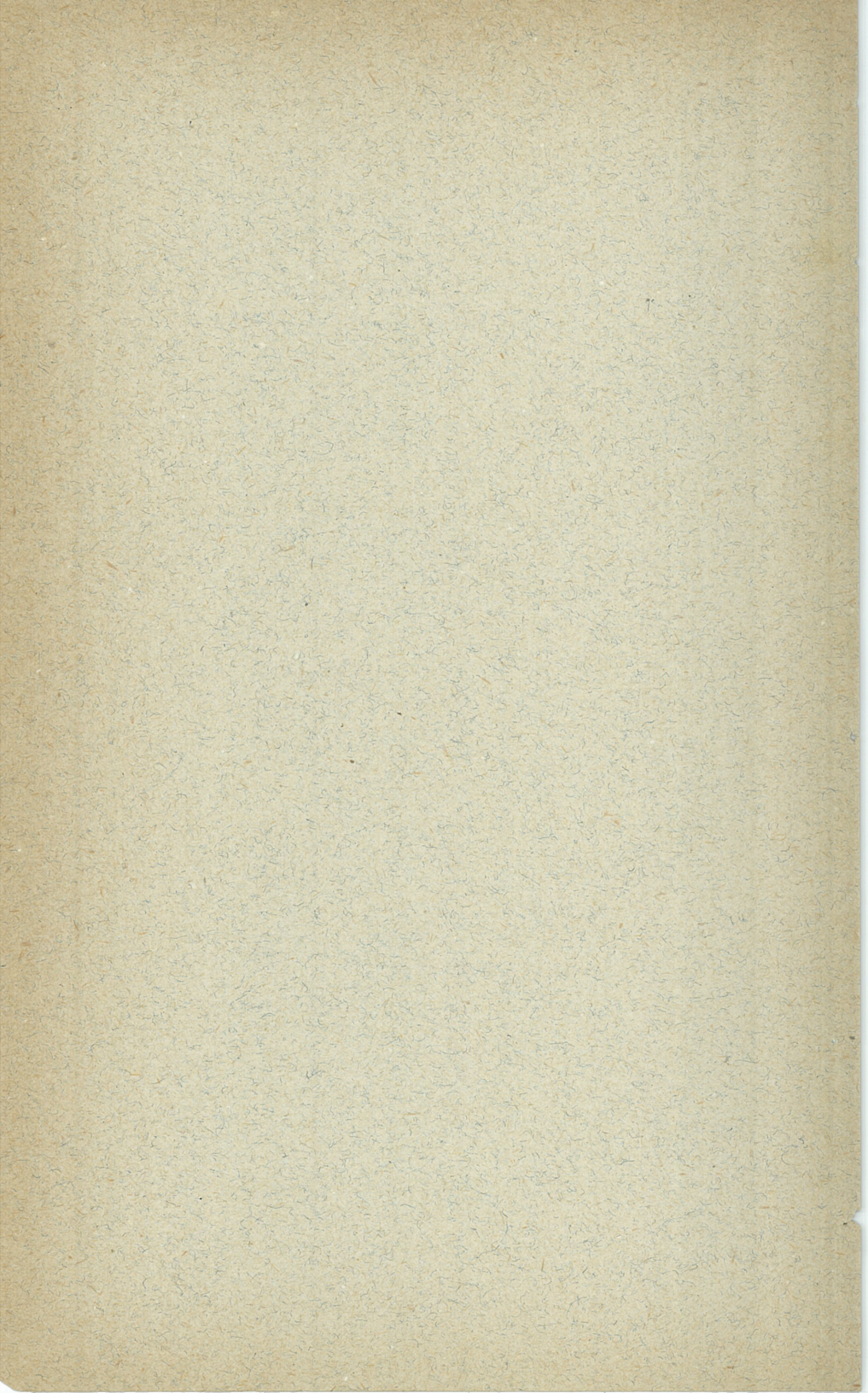


BOSTON:

ALFRED MUDGE & SON, PRINTERS,

24 FRANKLIN STREET,

1898.



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OFFICE OF
THE AMERICAN BELL TELEPHONE CO.,
BOSTON, MARCH 29, 1898.

TO THE STOCKHOLDERS :

The output of telephones from 1884 to the beginning of this year and the various statistics — consolidated — of the company's licensees, are set out in the tables which follow : —

INSTRUMENTS IN THE HANDS OF LICENSEES, UNDER RENTAL.

THE FIGURES IN LOWER LINE SHOWING INCREASE FROM YEAR TO YEAR.

Dec. 20, 1884.	Dec. 20, 1885.	Dec. 20, 1886.	Dec. 20, 1887.	Dec. 20, 1888.	Dec. 20, 1889.	Dec. 20, 1890.	Dec. 20, 1891.
325,574	330,040	353,518	380,277	411,511	444,861	483,790	512,407
	4,466	23,478	26,759	31,234	33,350	38,929	28,617

Dec. 20, 1892.	Dec. 20, 1893.	Dec. 20, 1894.	Dec. 20, 1895.	Dec. 20, 1896.	Dec. 20, 1897.
552,720	566,491	582,506	674,976	772,627	919,121
40,313	13,771	16,015	92,470	97,651	146,494

EXCHANGES.

	Jan. 1, 1884.	Jan. 1, 1885.	Jan. 1, 1886.	Jan. 1, 1887.	Jan. 1, 1888.	Jan. 1, 1889.	Jan. 1, 1890.	Jan. 1, 1891.	Jan. 1, 1892.	Jan. 1, 1893.	Jan. 1, 1894.	Jan. 1, 1895.	Jan. 1, 1896.	Jan. 1, 1897.	Jan. 1, 1898.	Increase
Exchanges . .	906	772	747	736	739	742	757	774	788	812	838	867	927	967	1,025	58
Branch Offices,	419	481	428	446	452	452	471	467	509	539	571	572	686	832	937	105
Miles of wire on poles . .	—	88,481	100,332	111,349	127,839	142,631	154,009	171,498	180,139	201,259	214,676	232,008	260,324	286,632	327,315	40,683
Miles of wire on buildings,	—	11,886	10,043	10,587	10,225	10,266	11,484	13,445	14,954	14,980	16,492	14,525	12,861	12,594	13,776	1,182
Miles of wire underground,	—	1,225	3,417	6,030	8,009	17,038	27,117	54,690	70,334	90,216	120,675	148,285	184,515	234,801	282,634	47,833
Miles of wire submarine .	—	—	254	265	365	536	603	779	1,029	1,336	1,637	1,856	2,028	2,818	2,675	143*
Total miles of wire . . .	85,896	101,592	114,046	128,231	146,438	170,471	193,213	240,412	266,456	307,791	353,480	396,674	459,728	536,845	626,400	89,555

EXCHANGES — Continued.

	Jan. 1, 1884.	Jan. 1, 1885.	Jan. 1, 1886.	Jan. 1, 1887.	Jan. 1, 1888.	Jan. 1, 1889.	Jan. 1, 1890.	Jan. 1, 1891.	Jan. 1, 1892.	Jan. 1, 1893.	Jan. 1, 1894.	Jan. 1, 1895.	Jan. 1, 1896.	Jan. 1, 1897.	Jan. 1, 1898.	Increase
Total Circuits .	97,422	107,440	112,067	121,260	132,004	143,687	156,780	173,665	186,462	201,322	205,891	212,074	237,837	264,645	295,904	31,259
Total Employés	4,762	5,168	5,438	5,843	6,183	6,310	6,758	7,845	8,376	9,970	10,421	11,094	11,930	14,425	16,682	2,257
Total Stations .	123,625	134,847	137,750	147,068	158,712	171,454	185,003	202,931	216,017	232,140	237,186	243,432	281,695	325,244	384,230	58,986

* Decrease.

EXCHANGE CONNECTIONS.

The estimated number of exchange connections daily in the United States, made up from actual count in most of the exchanges, is 3,099,472

Or a total per year of about 998,000,000

The number of daily calls per station varies in different exchanges from $1\frac{7}{10}$ to 18, the average throughout the United States being $8\frac{1}{10}$, which is the same as the number reported last year.

The average cost to the subscriber by exchanges varies, according to the size of the exchange and character of the service, from less than 1 to 9 cents per connection.

EXTRA-TERRITORIAL AND TOLL LINES.

	Jan. 1, 1884.	Jan. 1, 1885.	Jan. 1, 1886.	Jan. 1, 1887.	Jan. 1, 1888.	Jan. 1, 1889.	Jan. 1, 1890.	Jan. 1, 1891.	Jan. 1, 1892.	Jan. 1, 1893.	Jan. 1, 1894.	Jan. 1, 1895.	Jan. 1, 1896.	Jan. 1, 1897.	Jan. 1, 1898.	In- crease.
Miles of Pole Lines	20,592	25,766	30,697	31,143	32,478	34,010	35,254	35,541	41,298	42,894	46,727	49,324	52,873	60,453	67,791	7,238
Miles of Wire,	29,359	35,631	41,745	43,767	56,179	73,293	86,728	91,230	115,088	133,002	154,106	180,557	215,687	268,866	324,883	56,017

TOLL CONNECTIONS.

The average daily number of toll connections is	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	75,208
Or a total per year of about	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	24,200,000
The toll revenue reported by all companies for the year 1897 was	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	\$4,435,515.40*
Earnings of extra-territorial lines included in the above sum amounted to	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1,949,132.61*
Of which last amount this company received	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	211,507.21
An increase over 1896 of	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	29,241.89

* Not including herein earnings of the American Telephone and Telegraph Company.

We omit, in this report, the list of cities and towns in which the underground system of wires has been adopted, with the comparative figures of mileage in successive years, which has formed part of several preceding reports.

This system has now come into general use for the placing of conductors, for exchange use, in the closely built sections of the larger cities.

While the initial cost of underground construction is much greater than that of aerial lines, it has effected good results in removing large masses of wires from the streets, and, indeed, presents the only method by which the necessary number of conductors can be carried into the great central exchanges which have grown up within recent years.

While it has been found that lines carried in this way are exposed to disturbing causes, peculiar to this class of work, they secure immunity from the effects of destructive storms, and, on the whole, this may be regarded as the more durable class of construction.

The limitations of the use of underground lines, as regards distances, are quite obvious. It has been found that, with the best class of cables built for the purpose, transmission can be accomplished by this means for distances of only a few miles. So far, therefore, as the development of the art has gone, it is still impracticable to employ underground lines for what is known as toll or long distance service.

The underground system is now in use in 130 of the exchanges, and 282,634 miles of exchange wire, that is, nearly fifty per cent of the total mileage in the United States, are now carried by means of underground conduits.

The output of telephones and the increase of the number of exchange subscribers reported by the companies operating under our licenses are unprecedented in the history of the business. In fact, the gain of exchange stations recorded for the past two years equals the aggregate gain of the six years which preceded.

Almost the entire increase for the last year is made up of stations connected by metallic circuits.

Part of this growth may be attributed to the general enlargement of population and business throughout the country, the greater efficiency of the service, and the growing recognition of the telephone as a valuable agent for the transaction of business and a convenience of home life.

In part also, it is unquestionably due to the efforts of the operating companies to bring the service within the reach of the numerous class of those who have need for a limited use of the system, and have not felt justified in incurring the expense for an exclusive circuit and unlimited exchange service.

Improvements in the method of equipment have removed the difficulties which formerly attended the operation of party lines, and have made it possible, without confusion or material delay, to furnish service to two, three or more subscribers on the same circuit, who do not require a great number of connections. This service can be rendered at lower cost than would be the case were it necessary to maintain continuously a circuit for the exclusive use of each of these subscribers, which would remain unemployed a great proportion of the time.

The system of measured service continues to grow in public approval. The subscriber pays for the specific number of outgoing exchange connections for which he contracts, or as many more as his needs require, and is at no expense for inward calls.

This system of charges, based upon the amount of usage, is doubtless the more logical one, and its introduction has resulted in extending the service of the telephone to large numbers who would not otherwise have employed it as regular subscribers. While it supplements most usefully the older system of commutation, or unlimited service at yearly fixed rates, it is not likely to supersede it, for there will always remain a large proportion of the subscribers whose wants can be met only by the unrestricted use of their own circuits, with the right to call into requisition, as often as they desire, the circuits of other subscribers to the exchange, as well as the system of trunk lines which are necessary in the great cities, to connect the numerous offices into which the

exchange is divided. With the increase of the number of subscribers in an exchange, it is obvious that this right of unrestricted use becomes of larger consequence and of larger value.

Much is to be said, therefore, in favor of the retention of both systems together, as contributing, in the largest degree, to the interests of those who regularly employ the telephone in the conduct of their affairs. For those who have only occasional use for it, provision has been made in the public pay stations distributed over the county, which now number more than 18,000.

As the system has become more elastic, providing by the gradation of prices and the different forms of equipment for the greater and the lesser users of the exchange service, the results have become apparent in the statistics of usage, the unlimited service subscribers continuing to increase, year by year, their average of calls upon the exchange, while the measured service plan has the effect of keeping the general average of use throughout the country nearly uniform with that of earlier years.

During the year the Long Distance Company's lines have been extended to reach Omaha in the west, Minneapolis to the north, and southerly to Petersburg and Norfolk. There were in operation on the first of January, 1898, 8,778 miles of pole line and cable, and 116,116 miles of wire connecting 238 offices; a gain during the year of 1,433 miles of pole line and cable, 8,706 miles of wire, and 55 offices.

COMPARATIVE STATEMENT.

	Number of Companies	Number of Stations.	Connected by Metallic Circuit.		Cabinet Sets.
			Number.	Per cent.	
January 1, 1897 . . .	32	259,198	105,091	40.54	21,452
January 1, 1898 . . .	35	325,250	146,394	45.01	22,928
Increase	3	66,062	41,303	4.47	1,476

In all there are 35 companies reached whose systems furnish our long line terminals. These companies report a total of 325,250 stations, of which 146,394 (45.01 per cent) are equipped with metallic circuits; and of these 146,394 stations, 22,928 are equipped with long distance cabinet sets.

The twentieth anniversary of the application of the art of telephoning to commercial use, by the establishment of the first telephone exchange in the world, has just been passed, and in tracing the development of this new industry, which has grown up, from its very inception, within the knowledge of most of those now living, it is interesting and instructive to note that in the United States, among all the leading nations of the world, is found the highest development of the system, whether measured by the number of people who employ it, the standard of efficiency, or the distances over which conversation is held.

The tables which precede show the number of exchange stations operated under the licenses of this Company to be 384,230. This equals, within a few thousand, the aggregate number of exchange stations in all of Continental Europe. Next to our own country comes the German Empire with 122,362 exchange stations (1896), and next, Great Britain with 85,316. In the United States conversation is now had by subscribers over distances of 1,800 miles, which is twice the length of line anywhere else employed for telephonic use.

Not only is the discovery of the art of transmitting speech by telephone due to a citizen of this country, but it is also true that most of the appliances essential to operating a system adapted to commercial use, for example, the multiple switchboard and its numerous improvements, the construction of metallic circuits and underground conduits, had their origin here, and have later been adopted in other countries.

We note a steadily advancing standard in the quality of service furnished by the companies operating under our licenses. The greater part of the toll lines throughout the country have been made metallic circuits, and copper wire has been extensively used in the construction of new lines, and to replace iron upon the older lines. With the improvement of the toll lines, a higher

grade of terminal equipment is fast being introduced, furnishing the subscriber better facilities for talking over long distances.

The new construction completed in 1897 by companies with which we have contract relations amounted to \$8,712,914.10. Of this sum \$4,865,317.92 was expended upon exchange construction and equipment, and \$3,847,596.18 upon toll lines. In addition to the above, \$1,484,331.71 was invested in real estate to be used for company and exchange purposes.

The entire expenditure for construction, including real estate, to the close of 1897, has been \$97,946,102.27.

In the suit of *The United States v. The American Bell Telephone Company et al.*, the so-called Berliner Case, it will be remembered that the Circuit Court of Appeals for the First Circuit rendered a decision in favor of the defendant, and that from this decision an appeal was taken; that this appeal was argued on November 9-11, 1896, but that a decision thereon had not been rendered at the time of the last annual report. A decision has since been rendered affirming the decree of the Court of Appeals dismissing the bill, the opinion being filed on May 10, 1897.

The ledger balances as they stood on the 31st of December, 1897, and a detailed statement of the earnings and the expenses for the years 1897 and 1896 in comparison, are furnished by the Treasurer and are appended.

The Long Distance Company had invested, up to December 31, 1897, in line construction, franchises, equipment, and supplies, \$13,888,751.81. The Company shows an increase in gross earnings in 1897 over 1896 of $16\frac{1}{10}$ per cent, the amount for 1897, gross, being \$1,879,293.95.

Copies of the reports of the Auditing Committee of April 17, 1897, August 6, 1897, October 26, 1897, and January 27, 1898, are subjoined.

For the Directors,

JOHN E. HUDSON,
President.

LEDGER BALANCES, DEC. 31, 1897.

DEBTORS.

Telephones	\$1,772,596 55
Real Estate	1,052,695 92
Stocks and Bonds	52,827,205 59
Merchandise and Machinery	18,319 68
Bills and Accounts Receivable	3,275,059 70
Cash and Deposits	1,833,964 11

CREDITORS.

Capital Stock	\$25,886,300 00
“ “ Premium Account	6,110,582 00
Debenture Bonds, 1888	2,000,000 00
Bills and Accounts Payable*	1,216,330 89
Patent Account (Profit and Loss)	12,399,047 16
Profit and Loss	6,551,431 94
Reserve	4,025,628 29
Surplus	2,590,521 27
	<hr/>
	\$60,779,841 55
	<hr/>
	\$60,779,841 55
	<hr/>

* Of this amount \$1,164,883.50 is for the dividends payable January 15, 1898, to stockholders of record December 31, 1897.

Comparative Statement of Earnings and Expenses.

EARNINGS.

	1896.	1897.
Rental of Instruments . . .	\$1,238,378 03	\$1,597,959 36
Dividends	2,616,307 00	3,085,379 00
Commission from Ex.-Terr. Lines .	182,265 32	211,507 21
Commission from Teleg. Business .	34,046 88	33,174 32
Real Estate	80,864 38	84,709 85
Interest	171,355 23	117,071 93
Miscellaneous	4,107 41	1,043 25
	<hr/>	<hr/>
	\$4,327,324 25	\$5,130,844 92
	<hr/>	<hr/>

EXPENSES,			
Expenses of Operation	•	\$499,052 31	\$509,314 02
Legal Expenses	•	100,744 78	136,333 49
Real Estate	•	40,117 87	41,560 76
Interest and Taxes	•	303,731 38	273,961 92
Miscellaneous	•	97 47	
		<u>\$943,743 81</u>	<u>\$961,170 19</u>
Net Earnings	•	\$3,383,580 44	\$4,169,674 73
Surplus Account, Dec. 31, 1896	•		
Net Earnings, 1897	•	\$2,151,011 61	
	•	4,169,674 73	
		<u></u>	<u>\$6,320,686 34</u>
Regular Dividends, 1897	•	\$2,939,904 00	
Extra Dividends, 1897	•	743,044 50	
Reserve for Depreciation of Insts.	•	47,216 57	
		<u></u>	<u>3,730,165 07</u>
Surplus Account, Dec. 31, 1897	•		\$2,590,521 27
			<u></u>

REPORTS OF AUDITING COMMITTEE.

BOSTON, MASSACHUSETTS.

17 April, 1897.

JOHN E. HUDSON, Esq^{re}.,*President Am'n. Bell Telephone Co.**Dear Sir, —*

With this I enclose the report of Mr. Chas. T. Plimpton, an expert accountant employed by me to examine the books of our Company for the quarter ending March 31st, 1897.

Respectfully yours,

FRANCIS BLAKE,

Auditing Committee, A. B. Tel. Co.

BOSTON, April 17, 1897.

I have audited the books and accounts of the American Bell Telephone Co. for the quarter ending March 31, 1897, and have to report: —

I have made examination of the Cash in hand and in the banks and trust companies at the close of business March 31, 1897, and find the amount, after allowing for outstanding checks, to agree with the balance of the Cash book upon that date.

I have seen approved and receipted vouchers for all disbursements, and have verified the records of cash receipts.

I have examined and verified the accounts of revenue, including rentals, commissions and concessions, and have seen that all notes, Stock certificates and other securities owned by the company are in hand or properly accounted for, and correctly entered upon the books.

I have found all Cash book and Journal entries duly posted to the Ledger, and the footings correct, and have proved the Balance Sheets.

I have examined the Stockholders' Ledger and the Stock Certificate books, and found the amount of outstanding stock to agree with the Capital Stock account in the General Ledger.

I hereby certify that in all my investigations, as above recited, I have found everything correct.

CHA'S T. PLIMPTON,

Auditor.

DINARD, FRANCE.

6 August, 1897.

JOHN E. HUDSON, Esq^{re}.*President Am'n. Bell Telephone Co.**Dear Sir,—*

With this I enclose the report of Mr. Chas. T. Plimpton, an expert accountant employed by me to examine the books of our Company for the quarter ending June 30th, 1897.

Respectfully yours,

FRANCIS BLAKE,

Auditing Committee, A. B. Tel. Co.

BOSTON, July 17th, 1897.

I have audited the books and accounts of The American Bell Telephone Company for the quarter ending June 30th, 1897, and have to report as follows:—

I have made examination of the Cash in hand and in the banks and trust companies, at the close of business June 30, 1897, and find the amount, after allowing for outstanding checks, to agree with the balance of the Cash Book upon that date

I have seen approved and receipted vouchers for all disbursements, and have verified the records of cash receipts.

I have examined and verified the accounts of revenue, including rentals, commissions and concessions, and have seen that all notes, Stock certificates and other securities owned by the company are in hand, or properly accounted for, and correctly entered upon the books.

I have found all Cash Book and Journal entries duly posted to the Ledger, and the footings correct, and have proved the Balance Sheets.

I have examined the Stockholders' Ledger and the Stock certificate books, and found the amount of outstanding stock to agree with the Capital Stock account in the General Ledger.

I hereby certify that in all my investigations, as above recited, I have found everything correct.

CHA'S T. PLIMPTON,

Auditor.

BOSTON, MASSACHUSETTS,

26 October, 1897.

JOHN E. HUDSON, Esq^{re}.,*President Am'n. Bell Telephone Co.**Dear Sir, —*

With this I enclose the report of Mr. Chas. T. Plimpton, an expert accountant employed by me to examine the books of our Company for the quarter ending September 30th, 1897.

Respectfully yours,

FRANCIS BLAKE,

Auditing Committee, A. B. Tel. Co.

BOSTON, October 25, 1897.

I have audited the books and accounts of the American Bell Telephone Company for the quarter ending September 30, 1897, and have to report: —

I have made examination of the Cash in hand, and in the banks and trust companies, at the close of business September 30, 1897, and find the amount, after allowing for outstanding checks, to agree with the balance of the Cash book upon that date.

I have seen approved and receipted vouchers for all disbursements, and have verified the records of cash receipts.

I have examined and verified the accounts of revenue, including rentals, commissions and concessions, and have seen that all notes, Stock certificates and other securities owned by the company are in hand or properly accounted for, and correctly entered upon the books.

I have found all Cash book and Journal entries duly posted to the Ledger, and the footings correct, and have proved the Balance Sheets.

I have examined the Stockholders' Ledger and the Stock Certificate books, and found the amount of outstanding stock to agree with the Capital Stock account in the General Ledger.

I hereby certify that in all my investigations, as above recited, I have found everything correct.

CHA'S T. PLIMPTON,

Auditor.

BOSTON, MASSACHUSETTS.

28 January, 1898.

JOHN E. HUDSON, Esq^{re}.*President Am'n Bell Telephone Co.**Dear Sir, —*

With this I enclose the report of Mr. Chas. T. Plimpton, an expert accountant employed by me to examine the books of our Company for the quarter ending December 31st, 1897.

Respectfully yours,

FRANCIS BLAKE,

Auditing Committee, A. B. Tel. Co.

BOSTON, January 27, 1898.

I have audited the books and accounts of the American Bell Telephone Company for the quarter ending December 31, 1897, and have to report: —

I have made examination of the Cash in hand and in the banks and trust companies, at the close of business December 31, 1897, and find the amount, after allowing for outstanding checks, to agree with the balance of the Cash book upon that date.

I have seen approved and receipted vouchers for all disbursements, and have verified the records of cash receipts.

I have examined and verified the accounts of revenue, including rentals, commissions and concessions, and have seen that all notes, Stock certificates and other securities owned by the company are on hand, or properly accounted for, and correctly entered upon the books.

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I hereby certify that in all my investigations, as above recited, I have found everything correct.

CHA'S T. PLIMPTON,

Auditor.

