

TELHARMONIC TIMES

WEEK ENDING SATURDAY, NOVEMBER 23, 1907.

MUSIC IN THE AIR, THE BIG WONDER OF THE NEW YORK AUTO SHOW.

Madison Square Garden an Eden of Fairy Strains Sent From Afar.

EDWARD BELLAMY'S PROPHECY OF MUSIC FOR THE UNIVERSE IN THE YEAR 2,000 ANTE-DATED BY A CENTURY.

Auto Show's Big Audiences Greet the Wonder With Cheers.

RANKS WITH MARCONI'S WIRELESS IN MARKING THE MARCH OF MODERN MIRACLES.

(SPECIAL, NEW YORK, NOVEMBER 2.)

A PUBLIC benefaction that in importance must ultimately take a place beside the utilities of the telephone and telegraph had Madison Square Garden for the scene of its introduction Saturday evening, Nov. 2, and the Eighth National Automobile Show for its sponsor. Music by wire—Telharmony—generated by 145 dynamos at a Central Station a mile away from the big enclosure, filled the great Garden, concert hall, rathskeller and cafe with beautiful harmonies, the airs running a wide gamut of classic and popular numbers, from the Waltz Song in "The Merry Widow" to the newest of Sousa marches, and even taking in tuneful bits of George Cohan's newest score, "Fifty Miles from Boston." It was at eight o'clock sharp, following brief ceremonies of the Auto Show's committees, formally opening the exposition, that the first note of the new music—Sousa's march *Semper Fidelis* (Always Faithful) was the opening number—dropped into the hubbub of sound in the Garden. Telharmonic music had been advertised as a special feature of the Show, and the crowd was expectant. The first phrase of the tripping measure found the big auditorium silent save for the inspiring air. Then, as if by one accord, the big assembly broke into applause. Public approval had like demonstrations throughout the evening, as one after another of the wired music's numbers floated into the ether of the Garden from a score or more of diaphragms exposed and concealed in the ceiling decorations of the big amphitheatre.

The concession was general—and emphasized freely—that the new music at last solved the problem of uniform musical sound at all parts of large auditoriums, besides conveying a sweetness of quality of tones only hitherto approximated in dreams.

The miracle of transmitting currents to

make the music of the opening concert was approximately equaled by the variety of effects offered by the Telharmonic concert in its entirety, almost every known character of musical effect being included.

Not less dramatic than the spectacle at the Garden at the instant of the arrival of the first note of Telharmony, was the scene at Telharmonic Hall, at Thirty-ninth Street and Broadway, the sending point, a mile away, at the same moment when the key was pressed that released the note from the dynamos in the subterranean machinery hall. Dr. Russell Bellamy, a cousin of Edward Bellamy, whose novel, "Looking Backward," written in 1887, anticipated music for the masses by electricity in the year 2000, was the Telharmonic player who linked to-day's fact with his dead relative's fiction, by pressing the key that sent the first note of *Semper Fidelis* to the Garden. Seated at a long keyboard with four other Telharmonists, Captain Bellamy, a large, handsome man, who has but recently retired from the post of Chief Surgeon of Squadron A, N. G. N.Y., an open timepiece before him, pressed the opening key of the keyboard at precisely the second of eight

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Comic opera material surely was the scene about a manhole in the roadway at the junction of Broadway and Twenty-sixth Street, obliquely in front of the Cafe Martin, on the Monday evening immediately preceding the opening of the year's big National Automobile Show at Madison Square Garden.

During the day workmen had led Telharmonic cables—wires conveying electricity that is music when it reaches diaphragms at terminals—from Telharmonic Hall, at Broadway and Thirty-ninth Street, the central generating station of a new system of music by wire, to the Garden, proceeding via a conduit running down Broadway and turning east at Twenty-sixth Street to the big auditorium. Tests following the installation of the cables in the Garden revealed a leak—runaway electricity—somewhere along the line. With the aid of portable diaphragms workmen located the leak at the Twenty sixth Street and Broadway junction point. Through the inevitable misunderstanding that occurs in the best regulated families, someone neglected to remove the inserted diaphragm when the day's work ended. Accordingly when the staff of musicians at Telharmonic keyboards in Telharmonic Hall promptly at seven-thirty in the even-

ing started to send to the Garden rehearsal currents of Telharmony, the music resounded from the depths below the manhole through the vents of the iron cover.

Policeman Rohrs of the Thirtieth precinct found a pop-eyed mob of several hundred people about the hole when he reached the scene a few minutes later.

The waltz number from "The Merry Widow" was resounding in celestial strains at the moment from beneath the opening.

The cop looked at the crowd and the crowd, composed mostly of cabmen, messenger boys, theatregoers and passersby peculiar to the neighborhood at the hour, looked back at the cop.

"It's a Dago wot fell through de hole wid his organ an' his monkey," speculated a messenger boy.

At midnight the music was still leaking, and crowds were still wondering and speculating as to its source.

Not until the newspaper reports of next morning told of the leak in the Telharmonic cable did the patrons of the asphalt symphony concerts get the real explanation of what to many seemed phenomena.

Telharmony: The musical voice of electricity!

About sixty metropolitan restaurants will this winter regale patrons with Telharmonic programs.

Dr. Thaddeus Cahill, the inventor of Telharmony, experimented fourteen years before perfecting his electrical music. The inventor has not yet turned forty.

Bonci, Caruso, Gadsby and Dalmores are among famous singers who say Telharmony marks the dawn of a new era in concerted music.

Victor Herbert, Campanini, Campanari, Arturo Vigna and Alfred Hertz—the two last Metropolitan Opera House musical directors—are among musicians and composers who acclaim Telharmony as a coming triumphal musical factor because of its creative basis.

Mark Twain says Telharmony is destined to be of greater benefit to the human race than the telephone and telegraph.

About forty million dollars yearly is the estimated cost of orchestral music throughout the country. Telharmony will give the same service at an infinitely lower rate.

Prophecies:—Telharmony will be a music trust of the future; ultimately it will become an absolutely public commodity; Then the customer of an Avenue A cafe may share the privilege of a patron of the Manhattan or Metropolitan House in listening to the world's musical classics.

TELHARMONIC HALL
HOME AUDITORIUM, SUBTERRANEAN MACHINERY HALL AND CENTRAL GENERATING STATION OF
DR. THADDEUS CAHILL'S
SYSTEM OF ELECTRIC MUSIC
CARL HERBERT - - - - - MANAGER
FOUR PERFORMANCES DAILY INCLUDING SUNDAY
10, 3.00, 7.30, 8.30 P.M.
LECTURE AND DEMONSTRATION PERFORMANCES AT 3.00 AND 8.30 SESSIONS ONLY

General Admission..... .25
 Reserved Seats..... .50
 Divan Seats..... 1.00
Special Rates to Parties of Ten or More.

MUSICAL STAFF:

Karl W. Schulz, Musical Director.
Franklin Harris, Assistant Musical Director.
William H. Curley, Sol. Lichtenstein,
H. Leslie Goss, Clarence Reynolds,
Arnold R. Janser, Chester B. Searle.
Irwin E. Hassell,

ELECTRICAL STAFF:

Henry Morgan, Supt. of Construction.
Percival G. Burgess, Engineer.
A. M. P. Maschmeyer, Plant Supt

GENTLEMEN'S SMOKING ROOM DOWN STAIRS

Telharmonic music may be played by anyone familiar with the piano or organ keyboard. Every musical authority who has played the Telharmonic keyboards concedes the infinitely finer delicacy of expression possible thereat as compared with any other creative instrument.

As in all concerted musical effects, the expression of Telharmonic music is guided by a director, the individual members of the staff each reflecting in expression the demands of the score as interpreted by the leader.

During the early weeks of the new season the concerts at 1.30 and 7.30 daily are only preliminaries to regular and complete concerts and demonstrations given beginning at 3 and 8.30 P.M. Visitors to the preliminary exhibitions—periods when Telharmony is being despatched by wire to distant points—the Waldorf, Sherry's Martin's and other hotels, the New York Theatre and other auditoriums—are privileged to retain seats for the regular performance to follow.

Following the close of the regular performance in the hall, visitors are invited to an inspection of Telharmonic Machinery Hall, underground, with its half acre of dynamos and tone mixing and tone building electric retorts, where the causes and effects of mechanical phases of Telharmony will be further explained.

of all the struggles, engine and art and of its absolute perfection. **NEW YORK AMERICAN** OCTOBER 22, 1907. **MUSICAL MANHOLE BLOCKS BROADWAY** **And Wandering Crowds Block the Street—It Was a Wire Leaking.**

MANHOLE MUSIC JARS BROADWAY **BROADWAY HEARS A WEIRD CONCERT** **Music Pours Out of a Manhole and Everybody Has a Guess at What It Means.**

The weirdest concert that Broadway has heard in a month of blue moon preceded from a manhole at the corner of Twenty-ninth street for several hours last night. Right out of the pavement, apparently, came the strains of the prelude to "William Tell," Schubert's "Fugue" and such like pieces.

There was a crowd in a minute, and the crowd started up the street when it was dark. It is believed that they had a posse of police over from the Tenderloin station to keep the way open for the street cars.

Where did the music come from? At least every man in the crowd had a guess at that and all the guesses were different. The explanation that found the most supporters was that a street subject had jacked his organ and the monkey into the manhole and that the monkey was striding out a musical score to be received. Exactly how the monkey got into the hole or why they didn't find him out nobody ventured to explain.

Broadway went to bed having gathered up a lot of music, which has been laid through a conduit to the Telharmonic in Madison Square Garden, when the Automobile Show is to open next week. When the wires were tested it was found that the manhole at the Garden was farther in distance than it ought to be. This means a leak somewhere on the line and men were sent out to find it.

THE WORLD: TUESDAY, OCTOBER 22, 1907. **A MANHOLE SPOUTS MUSIC IN BROADWAY.** **And Wandering Crowds Block the Street—It Was a Wire Leaking.**

Every man and then the police had to clear a crowd from the middle of Broadway at Twenty-ninth street last night so that the cars and cabs would keep running. The crowd was kept in line by the police. Through the hole of the manhole, a series of notes, which were sweet strains of music and entered on the still air.

A little German band is practicing in the sewer as that the usual music was "let them," said a hard-faced man who had passed down from the manhole street. At the corner of Broadway and Broadway street, the manhole was being cleared through the pavement.

The "stump" crowd that there was a leak in the wire, yesterday, but it was after 5 o'clock when the electricians went out to discover the exact spot. Broadway at Twenty-ninth street, where a monkey, secretly made, was going to be used to repair the leak; the monkey was placed in the hole and the electricians left attached to the monkey were their string apparatus, which is a receiver and transmitter in connection with the sewer pipe. The monkey got into the hole by a hole in the pavement.

But the Telharmonic's virtuoso went to the place to practice on usual nights. That he heard the music last night that of a pipe-organ. The wires are laid in a conduit from the manhole to the Telharmonic in Madison Square Garden.

at a notable banquet, the Company's many subscribers, including restaurants, apart- **NEW-YORK DAILY TRIBUNE** **MANHOLE WAS MUSICAL.** **Ground Soaked with Melodies, Said Officer—A Broadway Mystery.**

Broadway sounds were heard yesterday by a pool of water from a manhole at Broadway and 29th street last night. A company which sends music over telephone wires to the Automobile Show at Madison Square Garden by underground cables between the city and the headquarters of the company, at Broadway and 29th street, discovered, in testing the cables, that there was a leak somewhere on the line, and located the trouble at Broadway and 29th street, outside the Cafe Star.

Through a manhole and the water, the music was heard. The manhole was covered with a board, and the board was removed. The music was heard. The manhole was covered with a board, and the board was removed. The music was heard.

Some men dropped nickels down through the hole of the manhole, and the music was heard. The manhole was covered with a board, and the board was removed. The music was heard.

George M. Cahill's general secretary, who is in charge of the Telharmonic in Madison Square Garden, is expected to be absent tomorrow. Other members of the staff are expected to be present.

A RECENT BIT OF TELHARMONIC NEWS.

Information concerning Telharmony in all its elements, historic, musical, utilitarian and commercial not conveyed in the demonstration lectures, will be furnished cheerfully upon application to the management.

Literature of the service embodying matters of interest may be had upon application at the box office.

The offices of the Telharmonic Securities Company, in the Knickerbocker Theatre Annex Building, diagonally opposite the Thirty-ninth Street entrance of the hall, Rooms 120, 121, 122, 123, 124, 125, 126, 127, are open daily from 8 A.M. to 6 P.M.

The biggest appreciable fact about Telharmonic music is not that it is music transmitted over a wire; not that it excels all other forms of music in that its modulations are not limited to sharps and flats, nor to finite units; not that it can be instantly transmitted simultaneously to 25,000 or more receiving stations, each alike

receiving the full and perfect effect; not in its infinitely small cost.

The wonder of Telharmonic music is in the quality of the music itself.

Arturo Vigna, the distinguished musical leader of the Metropolitan Opera House says it "will eventually mean the death of the present orchestral system."

Enrico Caruso, the famous tenor, predicts that "it will bring a revolution into the musical world, both through its artistic expression and by bringing really good music to all kinds of people."

N. Y. TIMES: "Caused the greatest wonderment. IT WAS SO PRACTICAL AND YET SO STRANGE, THAT WOMEN SAT CLOSER TO EACH OTHER AND MEN LOOKED ABOUT FOR A TANGIBLE CLEW TO THE SOURCE OF THE MUSIC. The various tones of the music came from graceful ferns, flowing syringas and hydrangeas, and from stately vases and urns. Even the lights as they flickered with the increase and decrease of current force sang their share in the song.

Can you imagine a bowl of goldfish moving rythmically about a crystal tank in fine accord with the sinuous sweetness of the waltz l'Amoureuse?

A receiver was dropped into a bowl containing about a dozen of the fish of golden tint in Telharmonic Hall the other day by a naturalist to see what effect if any Telharmonic strains might have on their sensibilities.

At the first note of the famous waltz number, the fish which had been moving slowly about the bowl came to a dead halt, their eyes expanding and their fins cocked in attitudes of rapt attention. With the completion of the first phrase of the waltz, the fish as if by a common impulse began to move forward in slow and graceful serpentine movements. The specially invited spectators gathered to watch the effects of the experiment fairly gasped with surprise at the first revelation of the response. As the strains of the waltz proceeded the fish added to their gyrations new graces of flexibility, their gold tails curling in evident ecstasy and their bodies conforming to arched lines symphonically realizing in the eyes of idealists present the soulful beauty lines of the waltz air itself. At a point of the phenomena when it seemed human expectancy could go no further, the largest of the fish dropped slowly to the bottom of the bowl and opened its mouth. Several tiny bubbles mounted to the surface of the water. Again, the fish at the base of the tank opened its mouth, and then singly and in couples, the entire colony of fish floated musically down to the base of the bowl, and thereupon, after what was obviously a squawk of instruction from the apparent ichtyological master of ceremonies, the fish paired off and ended the waltz number in couples, each pair moving about the tank, shoulder to shoulder and fin to fin.

From Nature Fakes, A. D. 2000.

PROGRAM WEEK OF NOVEMBER 18th

TELHARMONIC HALL PERFORMANCES.

3 and 8.30 P. M. Daily.

VIEW OF MACHINERY HALL.

NOTE:—Every person should arrive at these performances in time to view the machinery in the basement before the program begins. Only in this way can one realize the magnitude of the process by which the entire production is made possible.

1. OPENING SELECTION..... Announced
2. INTRODUCTORY ANNOUNCEMENT
Outlining the significance of the Telharmonic process as it is viewed by the leaders of thought of the world.
3. SELECTION, "Carnival of Venice" with Variations..... Arr. by K. W. Schulz
Illustrating how tone is produced wherever desired, in different tone qualities.
4. SELECTION teleharmonic equivalent of string quality.
Andante from Concerto for 'Cello. Golterman
5. SELECTION revealing the diaphragm and horn with which tone is evoked from electric currents.
6. SELECTION during which the true converter is dissected, discussing the method of tone production direct from electric currents.
7. SELECTION illustrating the use of resistance boxes, by which every one of thousands of users of Telharmonic Music can in his own premises control the volume of the music. Drum and Fife and Trumpet band.
8. VIEW OF THE MUSIC CURRENTS producing light in an ordinary incandescent lamp at the same time they produce sound.
Selection..... Announced (accompanied by the light in the lamp)
9. SELECTION..... Announced
10. THE MUSICAL ARC LAMPS
Selection played.
11. MINOR APPROXIMATIONS—
a. Scotch Bagpipes.
b. Intoned Bells and Chimes.
12. SELECTION..... Announced
13. ADDRESS
Explaining the process, with an illustration of the marvelous capacity of the Telharmonic System to produce the partials or overtones which are the very elements of tone quality in different instruments. This is the first musical instrument in history upon which a pure fundamental tone may be produced, making the elements of tone, as elements, separately available to the musician.

14. SELECTION, "William Tell,"..... Rossini
15. SELECTION..... Announced
History of the Telharmonic enterprise and its proposed scope.
16. VIEW OF KEYBOARDS.
Public Service Information in the Executive Office.
A music program of several numbers will follow the performance, played also to outside points; selection to be announced.

OUTSIDE MUSIC CONCERT.

Rendered daily 1.30 to 2.15 and 7.30 to 8.15 P. M.

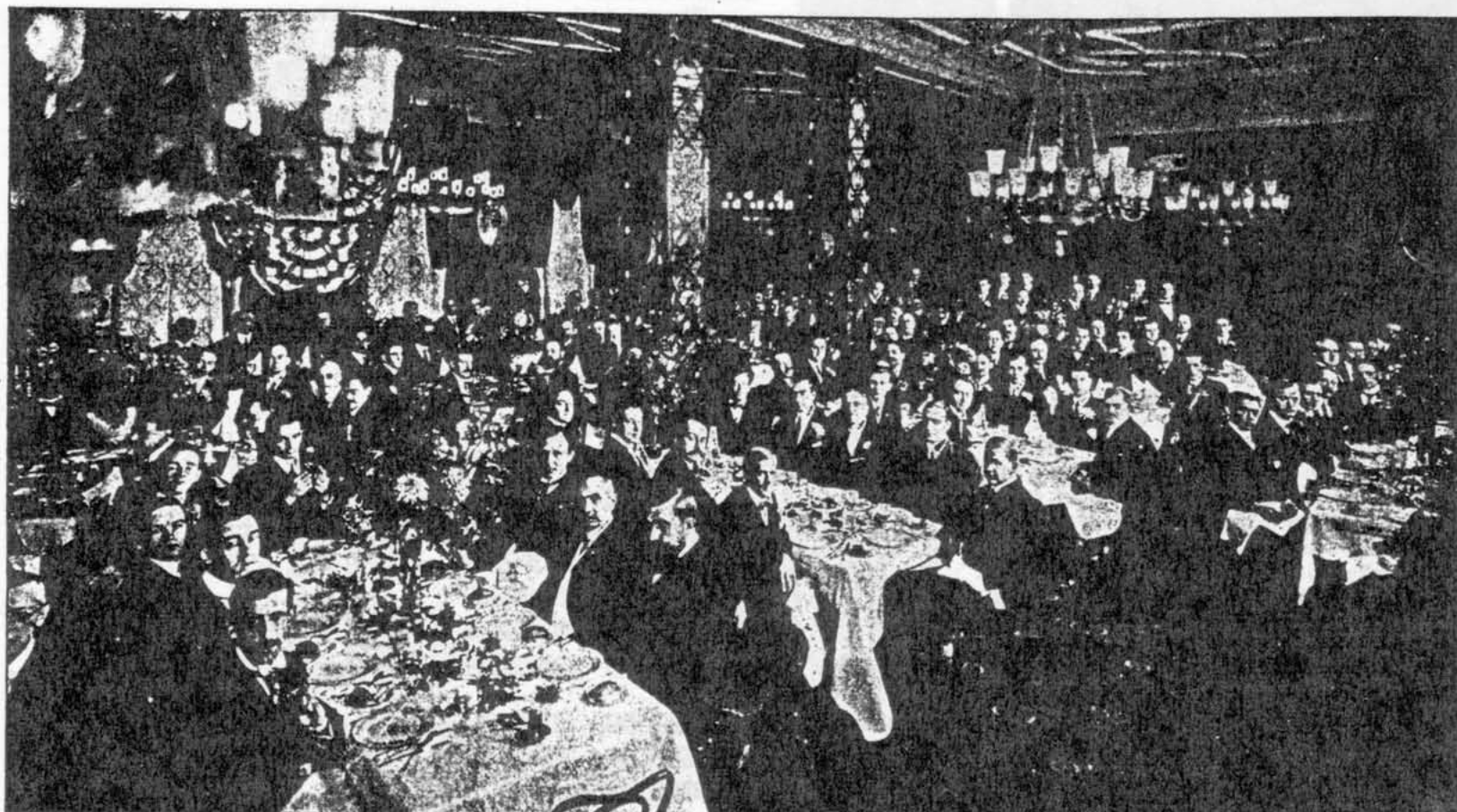
(Program A or B will be played as announced from the Stage).

A

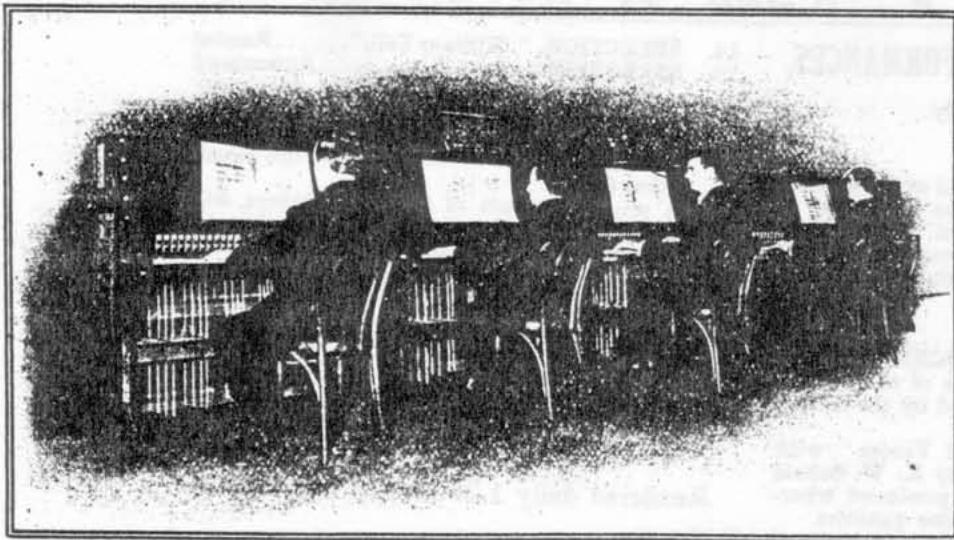
- I. AMERICAN PATROL.... Meacheam
- II. EVENING STAR..... Wagner
- III. SCHATZ WALTZ Strauss
- IV. INTERMEZZO RUSSE..... Franke
- V. DEARIE..... Witt
- VI. SERENADE..... Herbert
- VII. JOLLY WIDOW WALTZ Lehar

B

- I. ITALIAN ROYAL MARCH .. Galetti
- II. ENTR'ACTE, Gavotte..... Thomas
- III. COCOANUT DANCE..... Herman
- VI. INTERMEZZO "Dew Drops,"..... Armstrong
- V. SEXTETTE from " Lucia ".Donizetti
- VI. WALTZ "Faust"..... Gounod
- VII. MARCH MILITAIRE Schubert



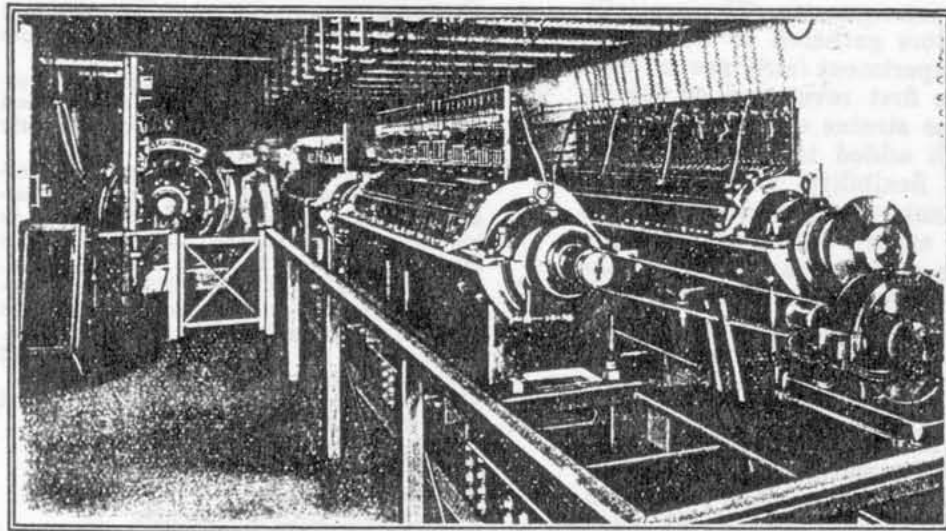
AMERICAN MOTOR CAR MANUFACTURERS ASSOCIATION LISTENING TO A TELHARMONIC CONCERT AT THEIR SECOND ANNUAL LUNCHEON AND BANQUET AT THE HOTEL MANHATTAN, FRIDAY AFTERNOON, OCTOBER 29 1907.



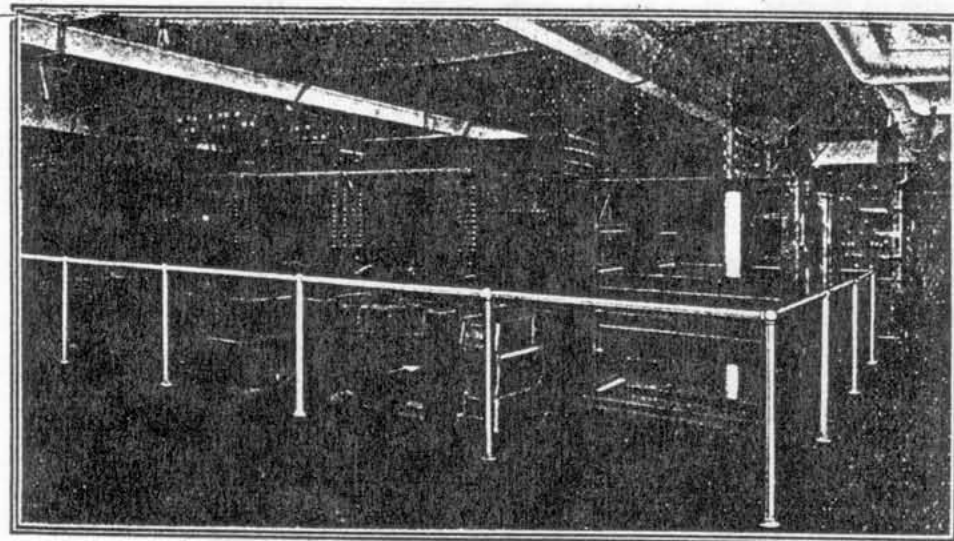
THE MUSICIANS SEATED AT THE KEYBOARDS
AT
TELHARMONIC HALL

These four keyboards are sets of electric switches put into this form merely for the convenience of the musician. Each key or switch, as operated, controls a certain one of the currents generated in the dynamo room.

Thus the musician, wishing to play a given selection, presses the keys called for by the score. These keys acting as switches set free those particular currents which have already been organized to produce those notes.



THE ALTERNATING CURRENT DYNAMOS.



THE SWITCHBOARDS.

In order to render the music at the place of the subscriber it is now necessary to convert this musical current into sound. This is done by passing the current through two small electro magnets, in front of which is placed an iron diaphragm. This device is known as a sound converter and is not much larger than an ordinary incandescent lamp; it can be concealed in a vase or in any manner desired, and gives a volume of sound sufficient to fill the room in which it is placed. These converters are indicated by a red arrow in the pictures shown here-with.

To produce music in homes, restaurants, offices, hotels, places of public amusement, etc., etc., the musical currents must be transmitted to these places by wires. But it is impracticable to run wires from each dynamo to each subscriber. Thus these currents (after they have been organized by the musician) are run into the transformers shown above, which, without destroying their individuality, reduce them to a composite form. In this form they can be sent broadcast over two wires.

Here are 145 alternating current dynamos, each dynamo so constructed that each will generate an electric current, vibrating (or alternating) a different number of times per second.

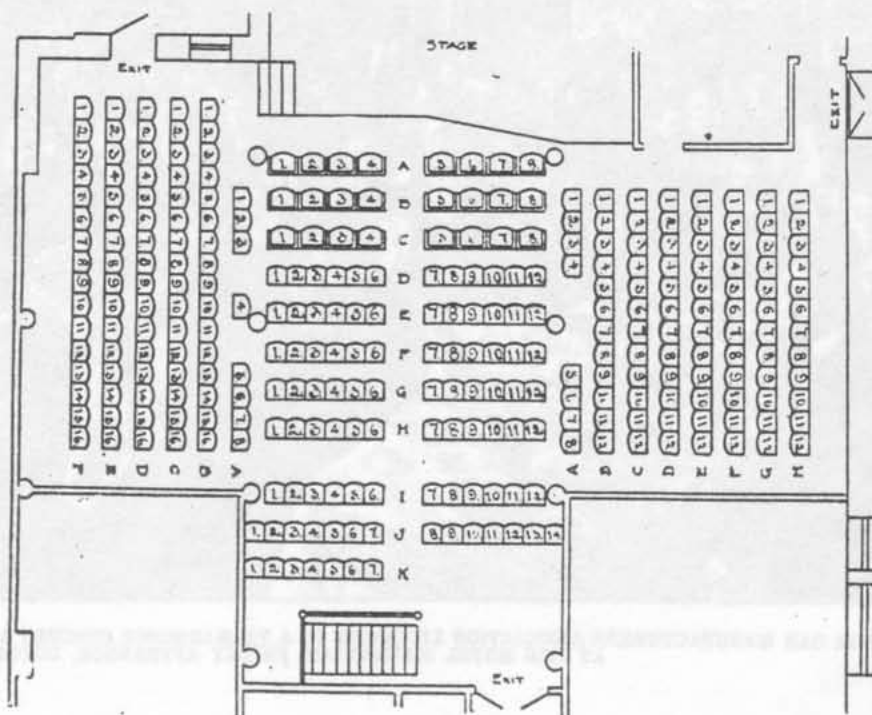
All notes (i. e., musical notes) are produced by a definite number of vibrations.

The musical scale is made up of 84 notes.

Thus 84 of our dynamos are so constructed that each gives the given number of vibrations necessary to produce one of the 84 notes of the musical scale.

The 61 other dynamos are so constructed that the currents from any of them, when used in combination with any of the 84, give a different quality to that note.

Telharmonic electric currents, like any other electric currents, can be transmitted by wires wherever desired.



EXIT DIAGRAM OF TELHARMONIC HALL.