

The
SOLUTION
of the
FIVE CENT FARE

FOREWORD

Your City has its transportation problems, as has every progressive city in the world.

You are of necessity interested in the solution of this problem which means progress—the growth of your city's population and the increased value of your city's real estate.

ADEQUATE TRANSPORTATION IS THE ANSWER.

Tremendous fortunes have been made in the operation of public utilities and the transportation of passengers for hire.

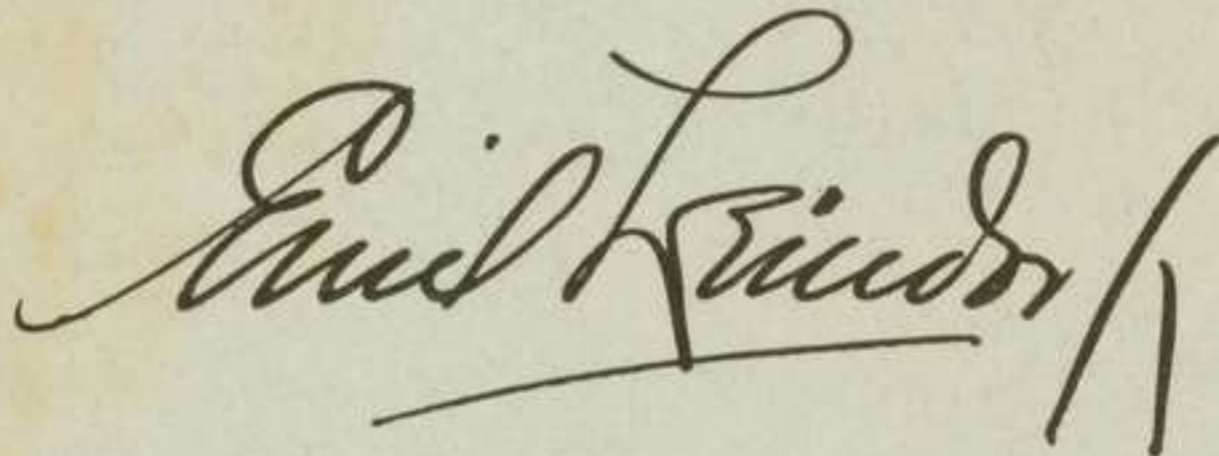
Adequate transportation facilities, properly conducted and properly managed, have invariably accomplished these results.

Our Transportation Department is composed of men who have devoted years of study to the new modern approved phase of transportation development, viz.—the method of carrying passengers by motor buses, safely, rapidly, economically, and at the same time insuring to the operator maximum returns upon his investment and an added profit in bus transportation heretofore unheard of.

This department of bus transportation experts is now at your disposal.

We are prepared to analyze your transportation problems anywhere.

We invite you to avail yourself of this opportunity without obligation.

A handwritten signature in cursive script, reading "Paul Krueger". The signature is written in dark ink and is positioned at the bottom right of the page.



A Billion Dollar Industry by 1925

Expert statisticians estimate that there are now 40,000 gasoline motor vehicles in regular scheduled bus passenger service in the United States.

Of these 40,000 motor vehicles now in the passenger carrying bus business, only a few thousand are especially designed and especially constructed new buses. Therefore, the replacement business alone in this already existing bus field is enormous.

A number of the soundest transportation experts in America now agree with Carl W. Stocks, the well known editor of "Bus Transportation," in his prediction that by 1925 there will be at least 100,000 motor buses in operation in the United States.

This means a \$1,000,000,000 industry in the new automotive field of passenger carrying motor buses.

For over two years the tremendous possibilities in the bus field have been urged on the motor truck industry by the National Automobile Chamber of Commerce, by the Society of Automotive Engineers, by the editors of automobile journals and by the operators of motor bus fleets and by municipal authorities.

The predictions of these men are rapidly coming true.

The public wants buses.



Paul Lindorff

The Business Career of Emil Leindorf

Mr. Emil Leindorf, acknowledged to be one of the foremost motor truck and transportation authorities in the United States, entered the automotive industry at the age of twenty-one years.

After having completed his studies in the public schools of New York, the New York University and the New York School of Law, his first position was office assistant with the Studebaker Corporation of America.

In one year, through his aptitude, he was advanced to the sales department of the Commercial Car or Truck Division.

In a short time he became an expert, analyzing truck delivery problems, and installing truck delivery systems for such prominent concerns as the Knox Hat Company, Louise & Company, Hickson's, Mme. Irene, J. M. Gidding, Gilbert T. Washburn, R. H. Macy, and a number of the leading Fifth Avenue merchants and other business houses.

So great was the increase in motor truck sales by Mr. Leindorf, that the Board of Directors of the Studebaker Corporation, at the end of that same year, made him manager of the Commercial Car Division.

During this period many large truck companies offered generous inducements for his services.

Finally the Rainier Motor Corporation, pioneers in the automotive industry, felt the need of such a man to assume charge of its sales department, and succeeded in inducing Mr. Leindorf to become their General Sales Manager.

Under Mr. Leindorf's management, the Rainier Company began to show very large sales increases, and instead of confining the manufacturing output to the small one-half ton delivery wagon, they began to build trucks to meet the requirements of every business.

In addition to managing the Rainier Truck sales, Mr. Leindorf made many changes in the construction of Rainier Trucks, equipping them with "Continental Motors," "Brown Lipe Clutch and Transmission," "Parish & Bingham Frames," "Timken Front and Rear Axles," "Schwartz Artillery Type Wheels" and other appliances of established value and standard quality.

Then with an excellent line of trucks, he set out to fight the competition confronting the Rainier organization, and in the two years that ensued he installed Rainier units for Nathan Schweitzer Company, Oppenheim Collins Co., C. Percival, Inc., F. A. Richmond, Inc., H. Jaekel & Sons, Browning, King & Company, Barthold Michaels Company, New York Transfer Company, Bleeker & Simmons, Best & Co., Brokaw Bros., Bonwit Teller Co., and numerous other prominent firms.

He soon placed the Rainier Company on a parallel with its closest competitors and made it a very large factor in the motor truck industry.

In 1920 he resigned from the Rainier Company and organized the Equitable Motor Truck Company, The Leindorf Motor Sales Corporation and The Lion Motor Corporation, which now occupies a square block at 136th and 137th Streets and Madison Avenue, New York City, all of which companies have made motor truck history. In this huge structure the fleet of buses operating along the Grand Concourse and Boulevard are also housed.

Commissioner Richard E. Enright, of the New York Police Department, made a valuable addition to the force in 1920 by establishing the first Emergency Motor Truck unit in the United States.

The Commissioner designated Mr. Leindorf to the task of organizing this Emergency Motor Truck Division of the Police Department, which is composed of the truck fleets of leading merchants and business houses in Greater New York. This Motor Truck Division is used in the event of railway strikes, street car strikes, freight congestion, etc.

Commissioner Enright conferred the rank of Captain upon Mr. Leindorf for bringing this branch of the Police Department into being and enlisting ten thousand members, each pledging one or more trucks to be used in the event of these emergencies.

One year later Captain Leindorf was promoted to the rank of Deputy Chief of the Emergency Motor Truck Division of the New York Police Department.

During the late war, Mr. Leindorf was frequently called upon by Government officials at Washington for advice on motor truck operations.

The above is a brief sketch of the life and experience of the man who has developed the revolutionary Leindorf One Man Double Deck Safety Bus.

5 August 2005 Schoyer's Books #06621

f
Tgm
2005.045

On July 3rd, 1921, Mr. Leindorf established the Concourse Bus Line, Incorporated, having been granted the right to operate by Mayor John F. Hylan and the Board of Estimate and Apportionment of New York City, with the understanding that not more than a five-cent fare be charged a passenger for one continuous trip between prescribed terminals or intermediate trips.


Despite opinions from many sources to the effect that large buses could not be operated successfully and maintained properly at a five-cent fare and a reasonable margin of profit be realized from the receipts, he installed a dark green fleet of twenty double decked buses, affording the public a pleasant, comfortable ride along the Grand Boulevard and Concourse of seven and a half miles at a five-cent fare.

Possessing a wide range of experience, he has developed the largest double decked five-cent fare bus line in the entire country.

In the first fourteen months of operation the Concourse Bus Line carried in excess of seven million passengers without a single fatal accident, and at the present time it carries about forty thousand passengers daily.

As a tribute to his untiring and successful efforts to solve the transportation problems of New York, he received the following engrossed set of resolutions from one of the most important Merchants Associations of the Greater City.

Resolution of Thanks



As a committee of residents, merchants and business men of the Borough of the Bronx, Greater New York, we are vitally interested in everything that pertains to the welfare and progress of the Bronx. We have watched with great interest and with a real sense of appreciation the splendid, safe, and comfortable transportation that Mr. Emil Leindorf has furnished us in the Bronx at a five-cent fare during the past fifteen months. We have watched the tremendous increase in apartment dwellings and housing facilities along the Grand Concourse since he started the operating of the Concourse Bus Line fifteen months ago. We have been advised that this Bus Line has carried over 7,000,000 passengers to date, without a single fatal accident, therefore

Be it resolved, that in behalf of the residents of the Bronx, a vote of thanks for this splendid transportation service, operated by him at a five cent fare in the interests of the people, be extended to Mr. Emil Leindorf, and

Be it further resolved, that a copy of these resolutions suitably engrossed be presented to Mr. Emil Leindorf.

Abraham...
Albert...
Arthur...
Samuel...
Edward E. Mc...
Julius...
George...
Henry...
Saul...
John...
Isaac...
Jack...
Leah...

Sam...
Walter...
Walter...
Walter...
Walter...
Walter...
Walter...
Walter...
Walter...
Walter...
Walter...
Walter...
Walter...

FORDHAM MERCHANTS ASSOCIATION

Max... PRESIDENT
Joe...
Chas...
Walter...
B...
D...
Joe...
Chas...
Chas...
Chas...
Chas...
Chas...
Chas...

Presented to Mr. Leindorf by the Fordham Business Men's Association of Greater New York, after the completion of the first year's operation of his Concourse Bus Line in New York City. The only large bus line in the United States under one ownership operating at a five-cent fare. The Concourse Bus Line is seven and one-half miles long—a fifteen-mile round trip. Over seven million passengers at five cents were carried on the Leindorf Concourse Bus Line the first year, without a single fatal accident. Over two hundred million dollars have been invested in apartment houses on the Concourse since the Concourse Bus Line started running. Satisfactory transportation invariably leads to increased building and increased real estate values.

London Was Right

London met and solved the problem of heavy city street traffic and city surface transportation years before our leading American cities had such a problem. London solved her traffic and street transportation problem with buses—first, with horse-drawn buses, then motor buses.

Every year that has passed since London adopted buses has proved that London was right.

In 1922 the London City Buses carried nearly 1,000,000,000 (one billion) passengers.

The London Buses are adequately built to carry seated passengers and "standees," in short, to meet the requirements of the traffic.

Read the most elaborate articles by electric street railway advocates,

—study the electric street railway experts' statistics,

—study their formidable looking charts,

—study their every attempt to prove that the street surface car is the best and cheapest form of city street transportation, and you will still decide that London was and still is right.

The public transportation of passengers through city streets by privately owned or municipally owned carriers will always be in the nature of a public utility and as such must meet certain requirements or cease to be satisfactory.

The essential requirements of a satisfactory street surface transportation are—

1. The ability to handle the carrying of all passengers at all times with speed and comfort.
2. The carrying of all passengers at the lowest possible fare that admits of a reasonable profit.
3. The carrying of passengers with the least possible interference with other street traffic.

Today the electric street surface car fails to satisfy in the second and third requirements.

The electric street car no longer seems able to exist and operate at a 5c carrying fare, with a reasonable profit upon the investment.

The electric street surface car with its fixed tracks occupies a great deal of valuable road space.

The electric street car,

—with its absolute lack of flexibility,

—with its inability to deflect its carriers around street emergency obstacles,

—with its weakness in becoming blocked as a whole through the blocking of a single carrier,

—with its weakness in becoming blocked as a whole through damage or interference with its power current feed, has today become by far the greatest single factor in causing street congestion.

Let us analyze the present status of electric street car fares of today.

We quote the following table from the latest available compilation made by the American Electric Railway Association:

	Number of Cities	Total Population
Group I. Ten cents cash fare	129	8,285,788
II. Nine cents cash fare	7	335,439
III. Eight cents cash fare	89	8,268,659
IV. Seven cent fare, two cent transfer charge	25	1,621,835
V. Seven cent zones	5	377,172
VI. Six cent city zone, one cent charge for rides outside	1	45,393
VII. Six cent city zone, six cents outside zones, two cents transfer charge	10	469,275
VIII. Seven cents cash fare	166	8,972,095
IX. Six cent zones	4	117,564
X. Six cent zones, average length two miles	1	60,203
XI. Six cents cash fare	108	5,787,736
XII. Two five cent zones	2	195,900
XIII. Five cent zone—five cents outside	9	253,801

Trend of Street Railway Fares in American Cities

Compiled by The American Electric Railway Association and Published In Their Bulletin to Members, September 1st, 1922

Average Rate of Fare Charged by Electric Railways. Based on Rates in Effect in 275 Cities of Over 25,000 Population

Date	Average Rate of Fare	Date	Average Rate of Fare
December, 1917.....	5.09c	April 1, 1922.....	7.37c
December, 1918.....	5.72c	May 1, 1922.....	7.37c
December, 1919.....	6.25c	June 1, 1922.....	7.36c
June, 1920.....	7.23c	July 1, 1922.....	7.36c
November 1, 1921.....	7.46c	August 1, 1922.....	7.35c
March 1, 1922.....	7.37c	September 1, 1922.....	7.35c

The day of the five-cent fare on electric street cars has passed.

The very few electric street railroads still operating under a five-cent fare are practically all in the hands of receivers.

The day of the motor bus is here.

Unprejudiced transportation experts are just beginning to realize and admit that the motor bus is the ultimate solution of street transportation for congested city streets.

There has existed heretofore only one sound argument against the general use of motor buses for the handling of all street transportation in crowded cities.

That argument has been the heretofore necessary consideration of a fare higher than that charged by electric street cars.

The Reason for the Leindorf One Man Double Deck Bus Passenger Safety—Greater Economy—Elimination of Thefts

The Leindorf One Man Double Deck Safety Bus absolutely eliminates that argument.

A five-cent bus fare is now possible and profitable; it is practical and entirely feasible to operate profitably this epoch-making safety bus at a five-cent fare in any city that has a reasonable amount of street transportation requirements.

On suburban routes, where 20-cent and 25-cent fares are now being exacted, the Leindorf One Man Double Deck Bus can operate profitably at 10 cents with a reasonable amount of traffic.

The Leindorf One Man Double Deck Safety Bus is not only the solution of the five-cent city fare but it is the ultimate bus for practically every purpose, and it carries the passengers safely and economically. It also eliminates theft.

In the Spring of 1921, Mayor John F. Hylan of Greater New York, in his fight for the people, inaugurated a series of five-cent fare motor routes to meet the growing and unsatisfied demand for surface transportation that the electric street cars of New York failed to meet.

The very short motor bus routes are still in operation at a five-cent fare—the longer routes could not be operated at a profit with the old style motor buses.

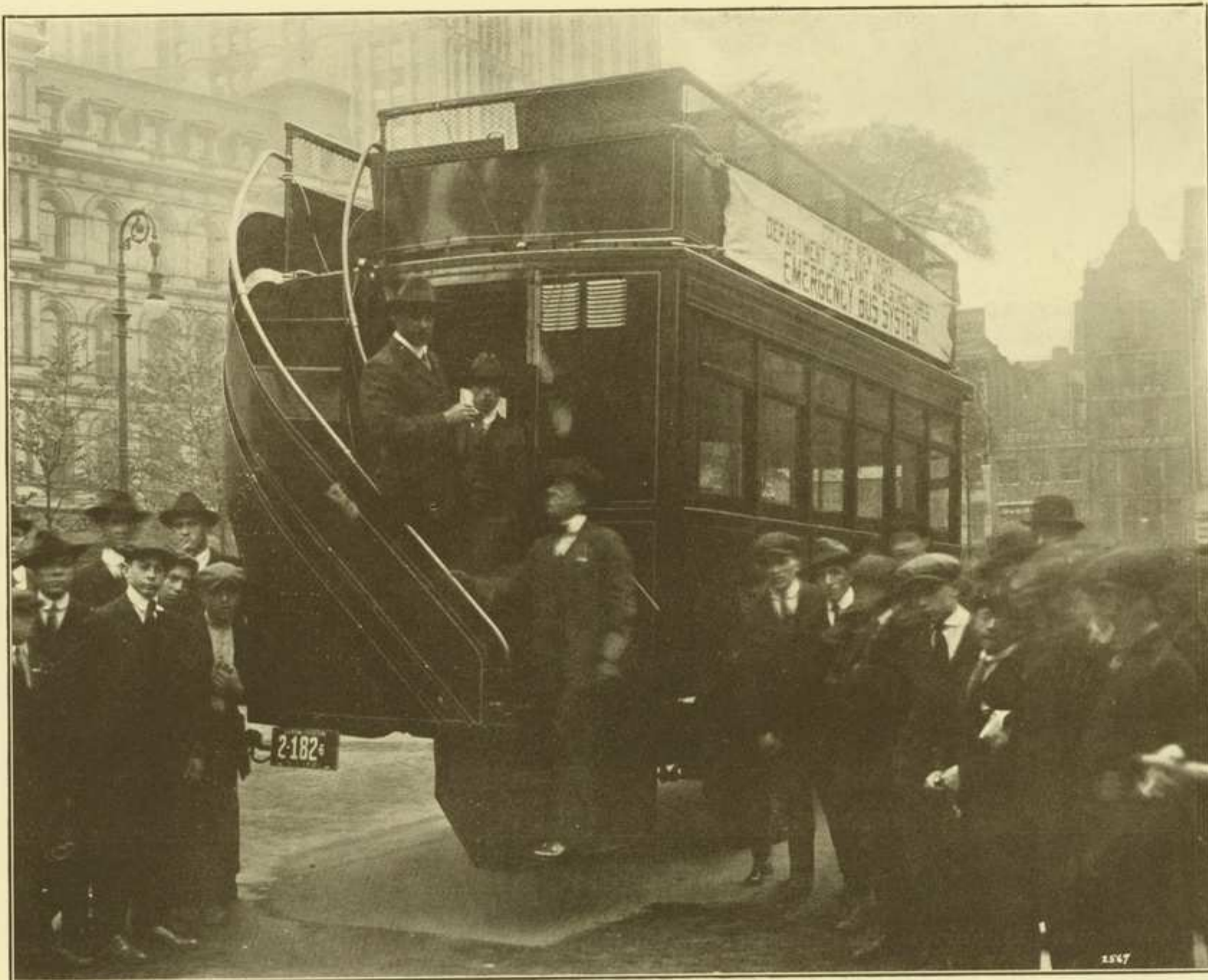
One route planned, from 110th Street and Fifth Avenue to the end of the Grand Concourse, a distance of 7½ miles, or a round trip of 15 miles, was admittedly a serious problem at a five-cent fare.

One man, however, Emil Leindorf, for sixteen years the leading motor truck authority of New York, decided to undertake this route as an experiment.

On July 3d, 1921, Mr. Leindorf started a fleet of two men double decked buses on this extra long route at a five-cent fare and steadily added to the number of buses operated.

For the people, this route, known as the Concourse Bus Line, was an instantaneous success—for Mr. Leindorf, it was a gratifying, vitally useful experience, but a financial loss.

Within fourteen months, the Concourse Bus Line, with twenty buses, had carried over 7,000,000 passengers, notwithstanding the acknowledged risks of open door accidents, the high cost of two man operation and the loss from theft. From the experience gained in this operation the One Man Double Deck Safety Bus idea was born.



Two Man Double Deck Bus

Has no safety door feature—Records prove that practically all accidents arise from entrance and exit of passengers while entrance platform is unguarded—Admits of theft by conductors—Costs \$11.00 to \$12.00 a day more to operate than the Leindorf One Man Double Deck Safety Bus—Impossible to operate profitably at a five-cent fare in excess of two and one-half miles route distance.

The Double Deck Bus

The Double Deck Bus is practically two buses in one.

The upper deck has an equal seating capacity with the lower—usually a few more seats.

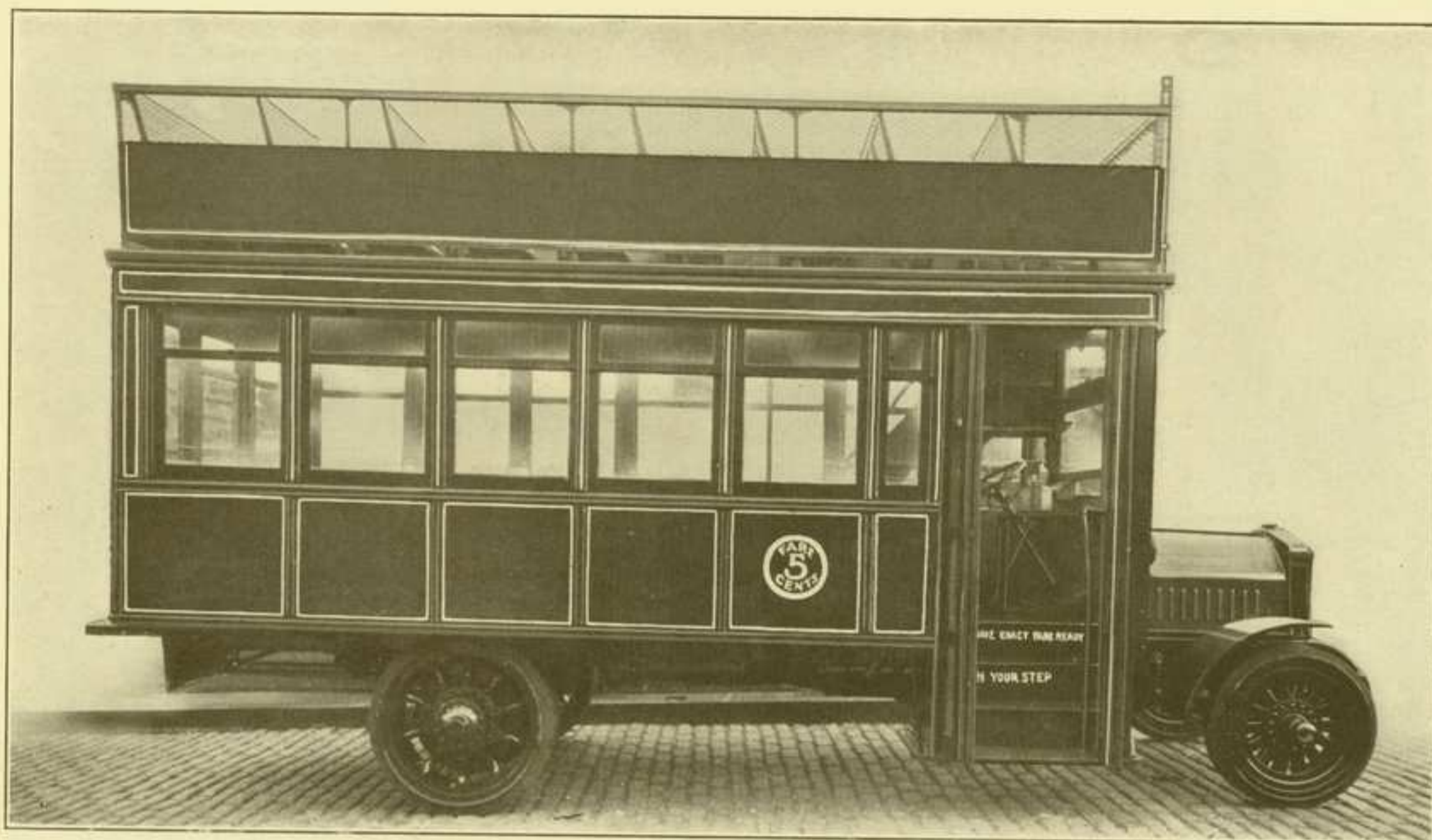
From June 30th, 1921, to June 1st, 1922—one year—one of the large Bus Lines of New York City, operating about 290 double deck buses, carried over 52,000,000 passengers. Over 16,000,000 of these passengers were carried on the upper deck.

This Bus line does not carry "standees." The total number of passengers carried last year by this line would be 10 to 15 per cent more if "standees" had been carried.

The net profit for the year ending June, 1922, shown by the statement of this Bus Line, operating at a 10-cent fare and operating 296 buses, was over \$1,100,000 net.

The loss of travel to the upper deck on rainy or very inclement days is greatly offset by the great number of extra passengers who are stimulated into riding during good weather on the upper deck—genuine "joy riders" not carried by single deck buses.

Before the invention of the Leindorf One Man Double Deck Safety Bus the bus illustrated above had come into use on a number of Bus Lines owing to its greater carrying capacity.



Two Buses in One Operated by One Man

The Leindorf One Man Double Deck Safety Bus—Eighteen-foot body type, seats fifty-four, accommodates twenty standees—Operated profitably at a five-cent fare over city routes. Fully protected—any infringements will be promptly and vigorously prosecuted.

On January 26th, 1922, Mr. Leindorf filed with the United States Patent Office, patent applications for what is known as the "Leindorf One Man Double Deck Safety Bus."

The principal claims in Mr. Leindorf's patent applications have been granted by the United States Patent Office, and this absolutely new and practical idea in motor buses has become a reality, and is now placed on sale by the Leindorf Motor Sales Corporation of New York City.

Fifty of these new "One Man Double Deck Safety Buses" will be placed in operation on the Concourse Bus Line by May, 1923, and operated at a five-cent fare, replacing the "two men double deck buses" now in operation, which can only be operated profitably at a ten-cent fare.

These fifty buses will be necessary to accommodate the tremendously increased traffic which has been created by the operation of the Concourse Bus Line, and the growth of housing construction along its route.

Over \$200,000,000 has been expended in new apartment house construction along the route of the Concourse Bus Line since these buses started operating.

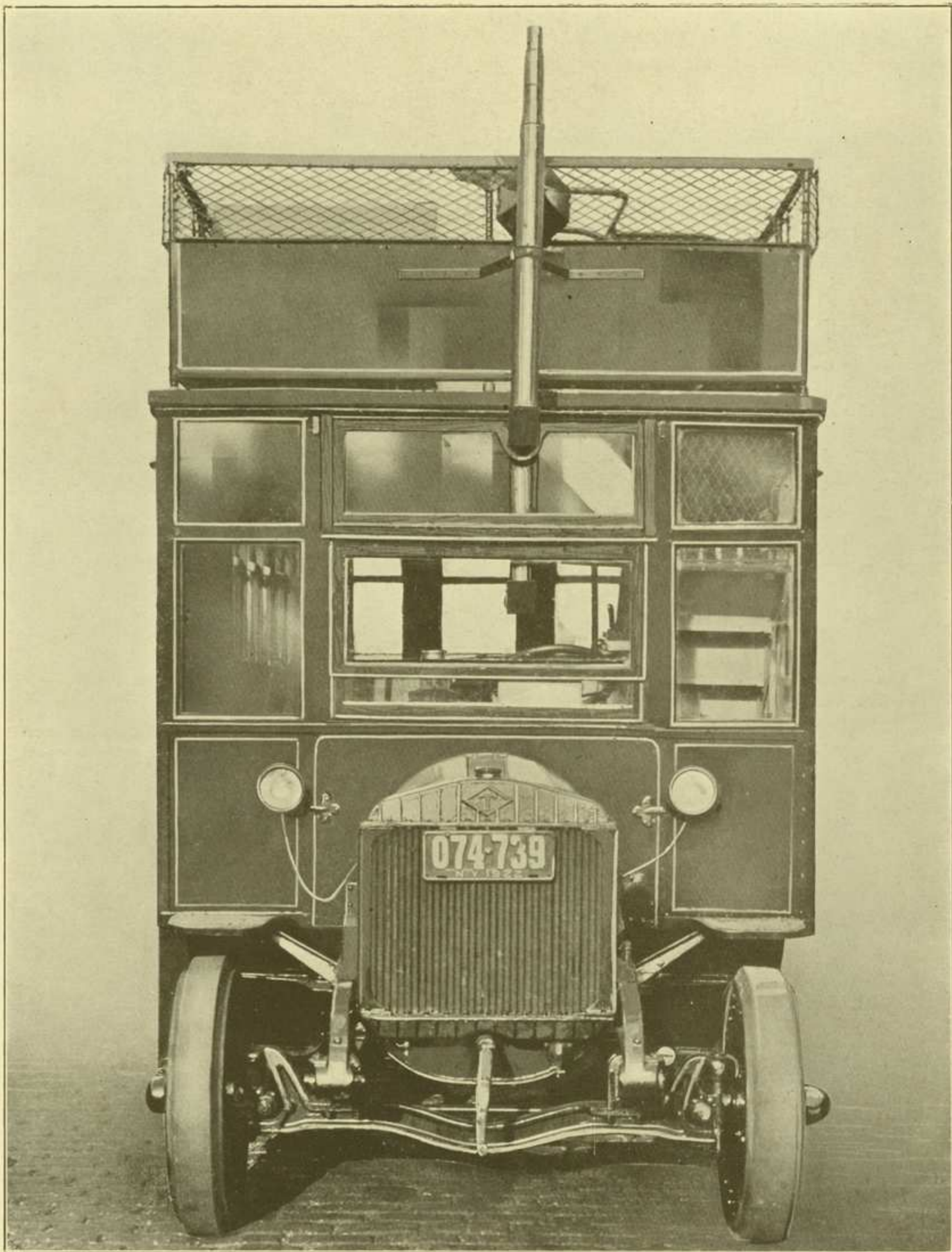
It is obvious that the Leindorf "One Man Double Deck Safety Bus" will supplant other forms of city motor bus transportation.

A National Authority on Bus Transportation, Formerly an Electric Street Car Transportation Expert, Recently Stated In an Address

In New York City, as in several of the more densely populated New Jersey cities, several bus lines are being successfully operated with the rate of fare fixed at five cents.

Without a doubt the popularity of a bus line can be increased if the rate of fare can be maintained at five cents. But to do it, careful attention must be paid to operation, especially as to the type of vehicle operated. A two man double decker may be a good merchandizer of rides on fair days and warm summer nights, but as an all year round bus operated by two men it is unprofitable at a five-cent fare, aside from its large percentage of passenger accidents due to no safety door. The answer is the one man double deck bus. If the capacity of the bus can be varied as the seasons of the year vary, so as to get a greater capacity in the warmer and heavier riding seasons of the year, also to meet rush hour traffic conditions, it is then possible to operate either at a lower base rate of fare or over a route that has a longer average length of haul than if the standard two man double deck type of bus is used.

Without question, the open top of the double decker sells more rides on a hot night than the single deck type of bus does. * * * *"



*Head-on view of Leindorf One Man Double Deck Safety Bus, showing periscope, extra wide tread tires, extra heavy axles, and general strength and neatness of design.
NOTE—Periscope for operator's control of upper deck.*

Fully protected by patent claims allowed and further patent claims pending. Any infringements on inside stairway or any other Leindorf features will be promptly and vigorously prosecuted.



Exterior rear view—with emergency door closed—The Leindorf One Man Double Deck Safety Bus, eighteen-foot type, seats fifty-four and yet occupies three and one-half feet LESS ROAD space than the old-fashioned rear entrance double deck bus.

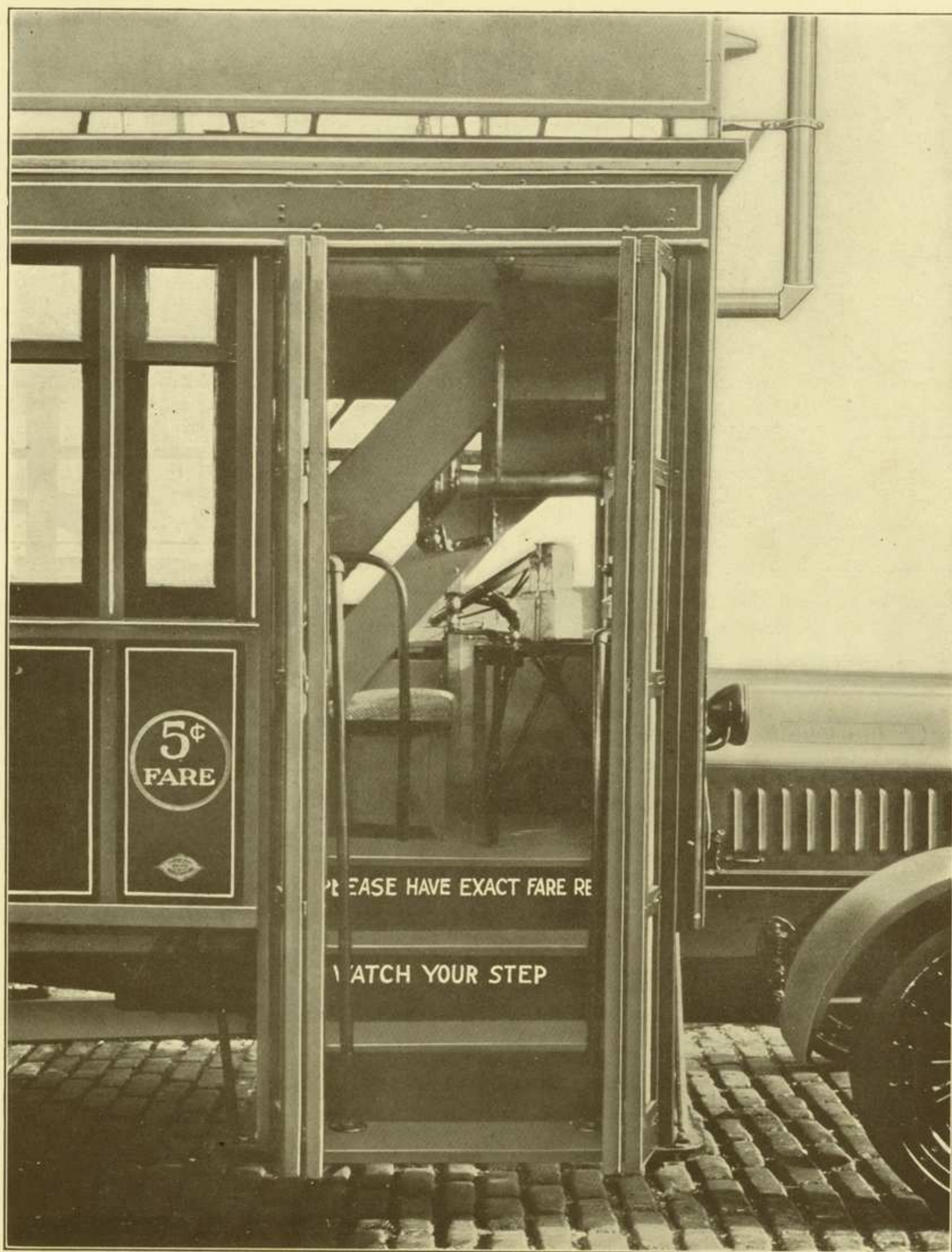
IMPORTANT—Economy of space is of vital importance in congested city streets.

Fully protected by patent claims allowed and further patent claims pending. Any infringements on inside stairway or any other Leindorf features will be promptly and vigorously prosecuted.



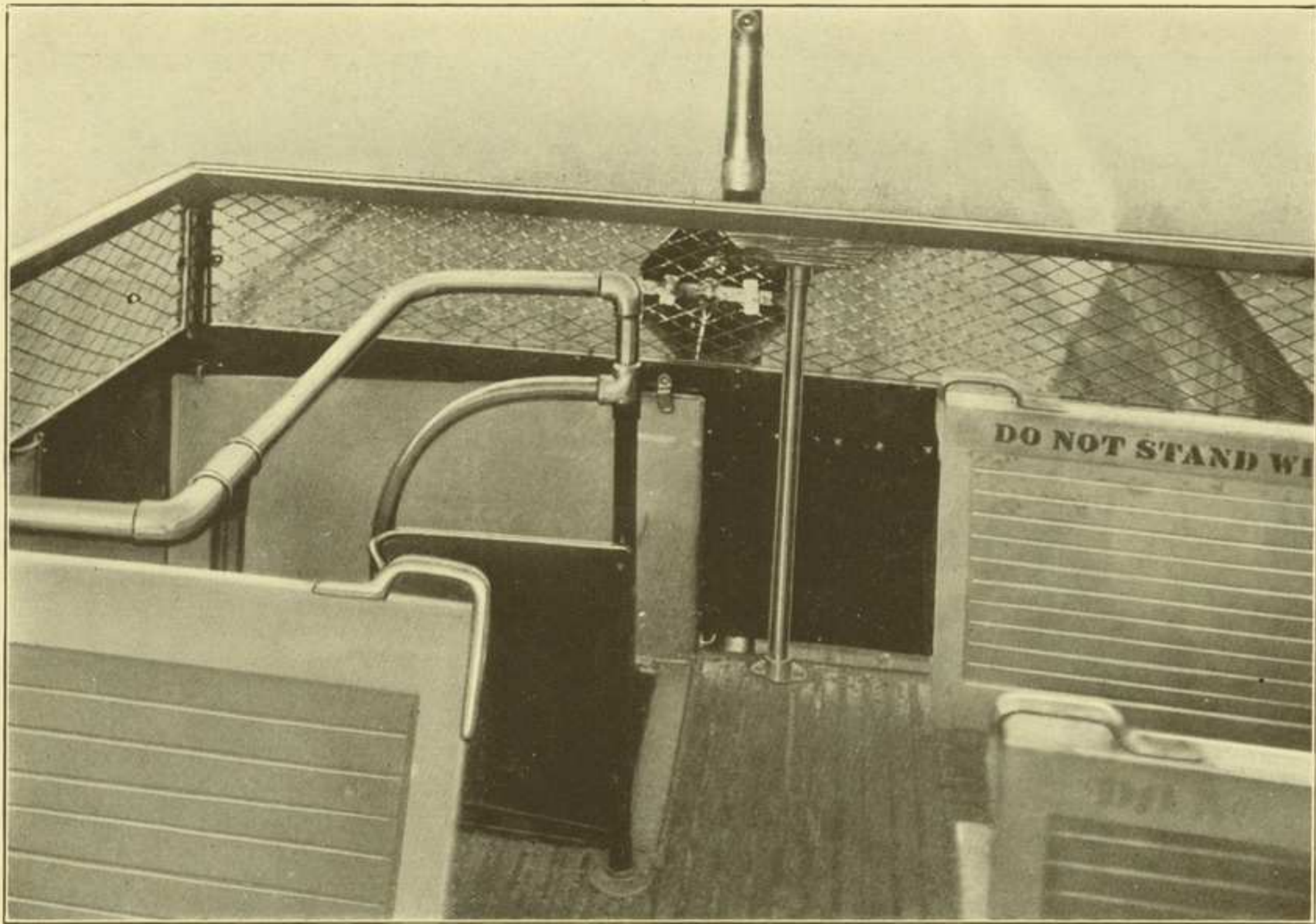
Exterior view of Leindorf One Man Double Deck Safety Bus, showing emergency exit door open and step dropped automatically by the opening of the door—IMPORTANT—The majority of transportation experts now insist that a rear emergency exit door is absolutely necessary for safety in front entrance buses—The majority of front entrance single deck buses are still built and operated without them.

Fully protected by patent claims allowed and further patent claims pending. Any infringements on inside stairway or any other Leindorf features will be promptly and vigorously prosecuted.



Safety door entrance to Leindorf One Man Double Deck Bus—"Pay as you enter"—Driver operates safety door, eliminating accidents due to passenger boarding or alighting from buses in motion—Opening of door automatically turns on electric lights to illuminate steps.

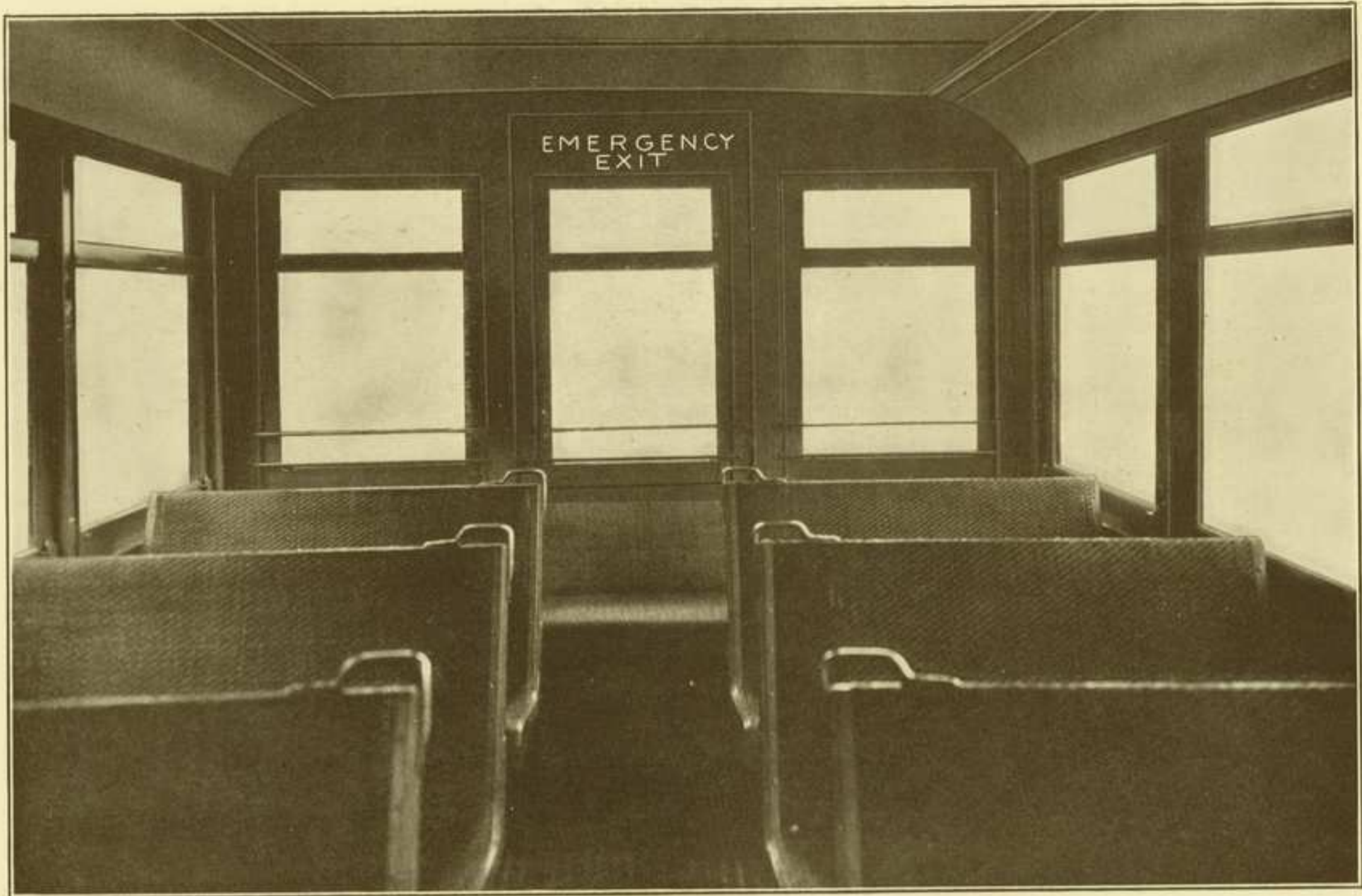
Fully protected by patent claims allowed and further patent claims pending. Any infringements on inside stairway or any other Leindorf features will be promptly and vigorously prosecuted.



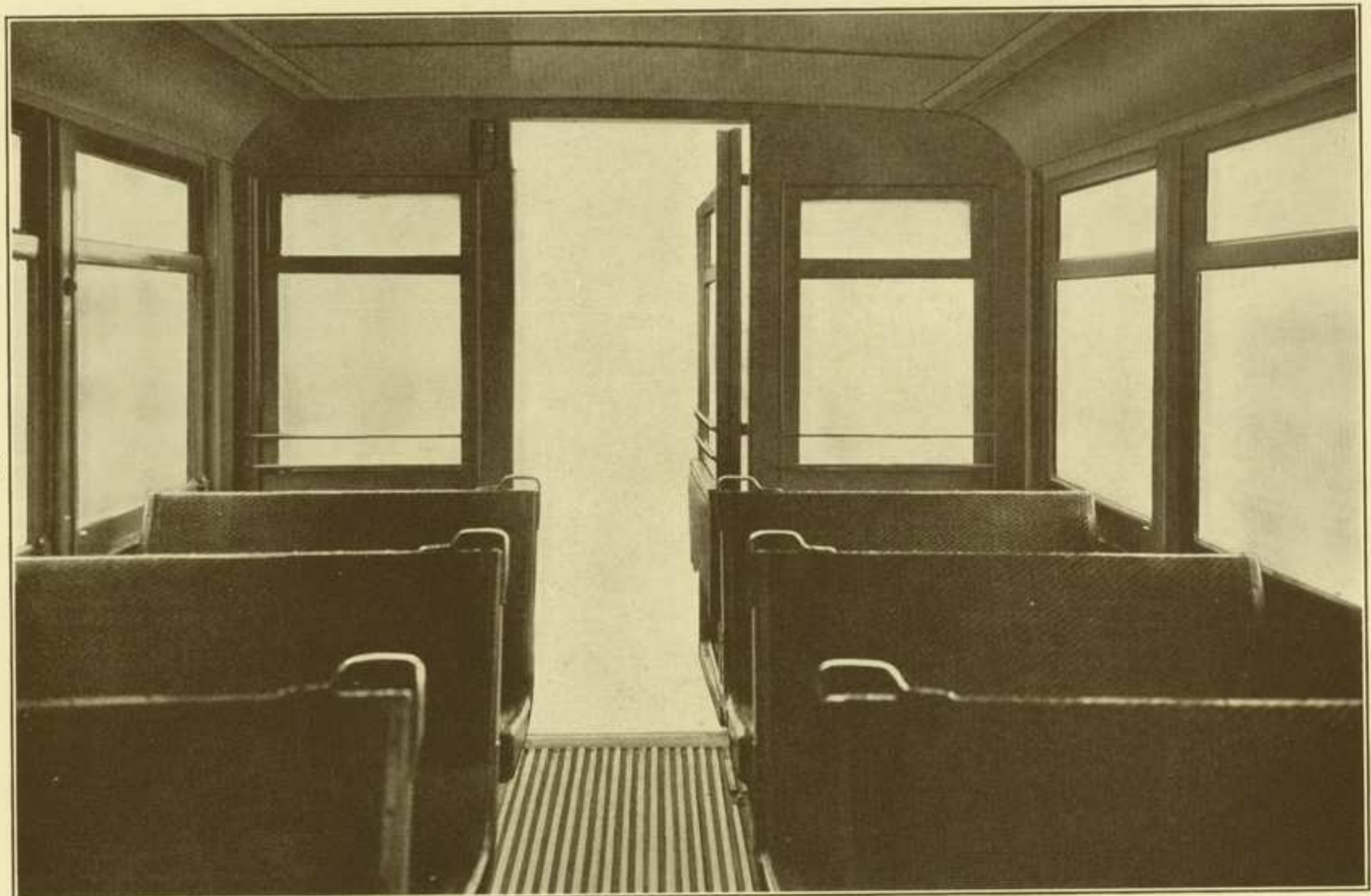
View of entrance to upper deck of Leindorf One Man Double Deck Safety Bus, showing driver's periscope and telephonic megaphone announcer.



Interior view through opened emergency exit, showing safe aisle space for standees—Note space at top of rear for route designations or advertising.

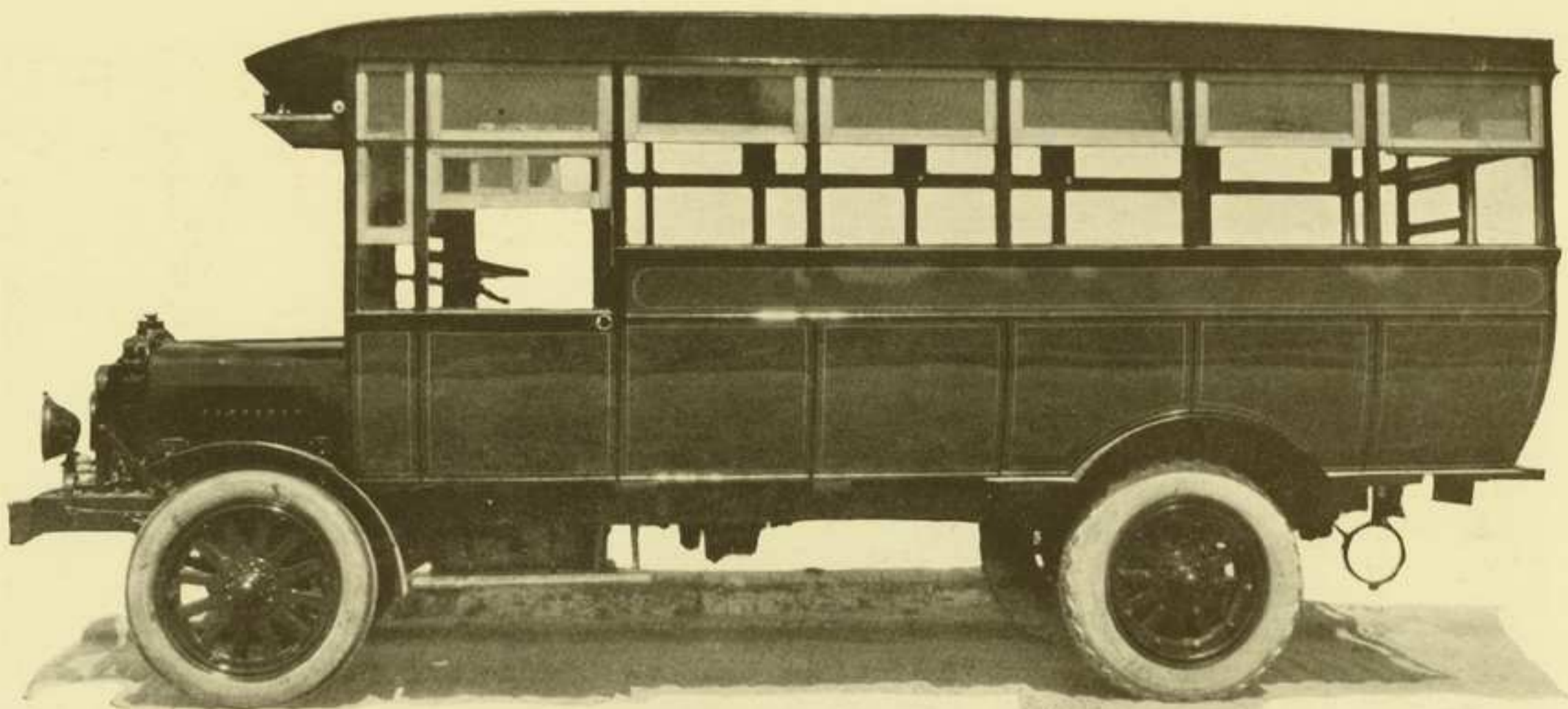


Interior view of rear with emergency door closed and extra removable seat in place—IMPORTANT—Emergency door can be opened by button in front of driver or by safety box over door by passengers.

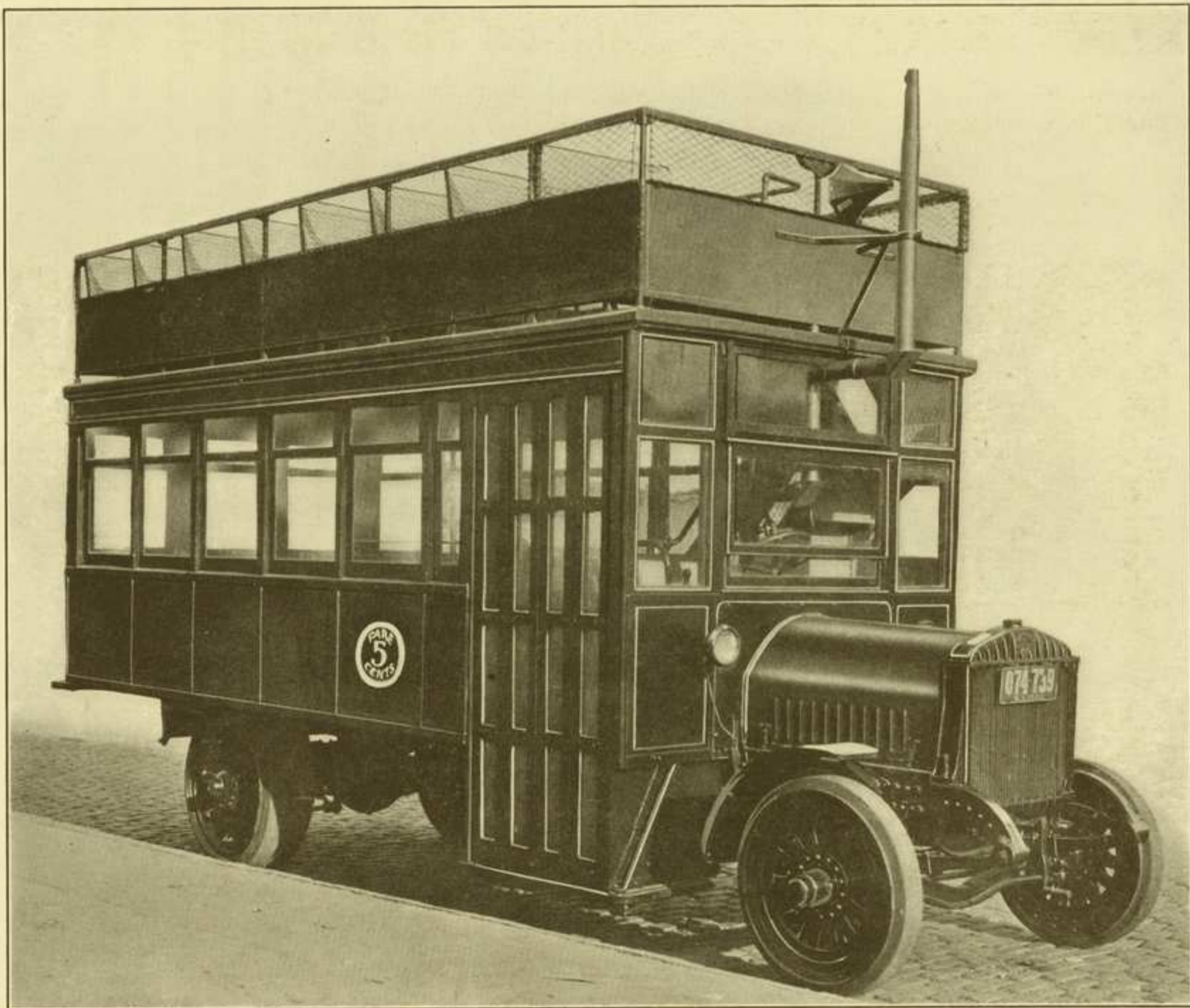


Interior view of rear with emergency door open—IMPORTANT—Rear emergency exits are necessary in all buses for safety sake—Several states by law already require them.

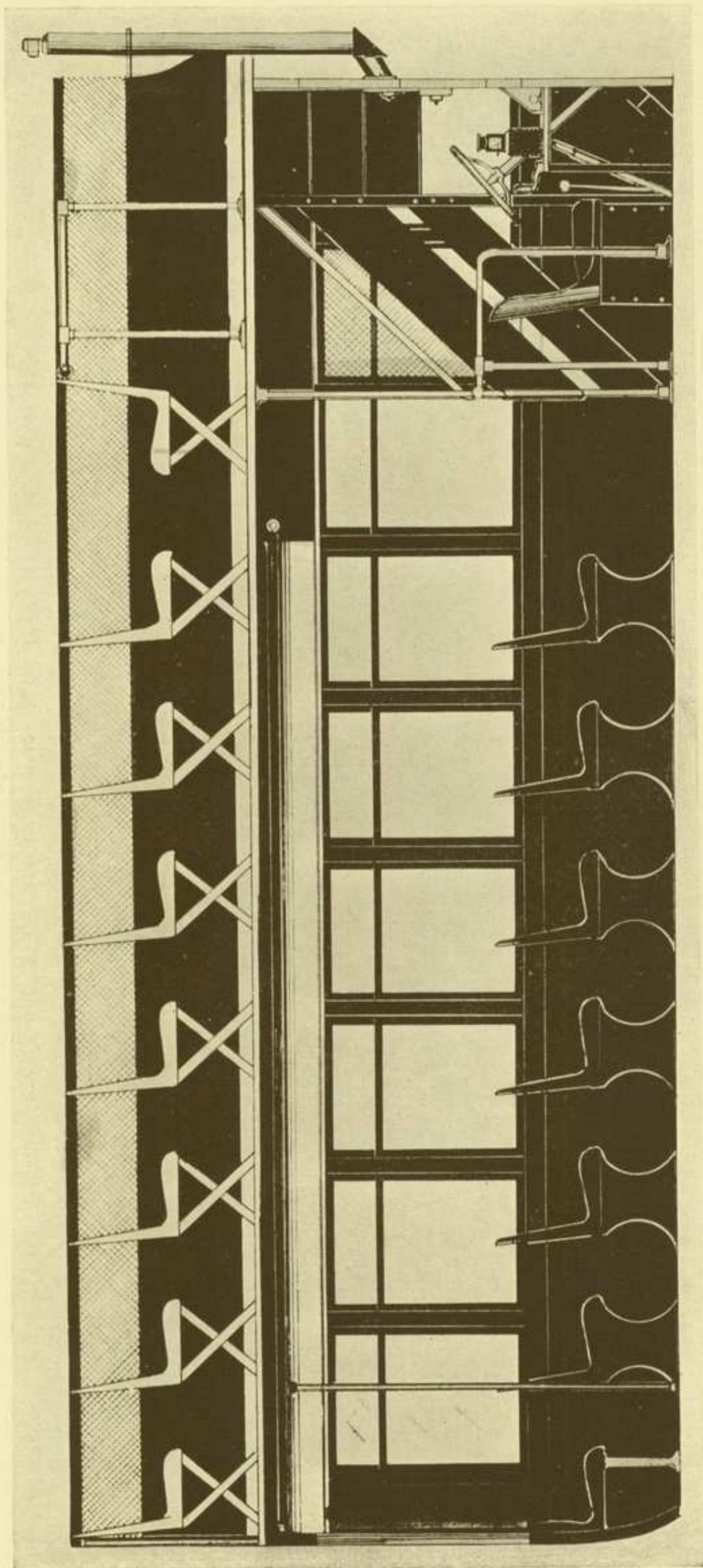
Fully protected by patent claims allowed and further patent claims pending. Any infringements on inside stairway or any other Leindorf features will be promptly and vigorously prosecuted.



Average type of Single Deck One Man Bus—Seats twenty to thirty, according to length—Very few built to carry standees—Very few built with emergency rear door exits—Impossible to operate profitably at a five-cent fare over a route more than two and one-half miles long—Average cost, \$7,500.



The Leindorf One Man Double Deck Safety Bus—Two Buses in One—Eighteen-foot body, seats 54—Chassis built to stand additional load of 22 “standees”—Type now in operation in New York City on The Concourse Bus Line and proving by its daily records a running time schedule and a stop and start record decidedly faster than the Two Man Double Deck Buses which depend on a conductor’s signals.



Sectional view of twenty-three-foot body type seating seventy passengers.

Seat Specifications

Lower deck, standard cross seat type of best design and construction, 32 in. x 21 in. rattan covered, and with hand grabs on lazy back. Average knee room, 9 in., with 20-in. aisle. Long rear seat folding in center at emergency door, permitting access. Driver's seat, approved type bucket, upholstered in leather. Upper deck seats, standard size with weather-proof veneer backs and slatted seats, attached on channel iron at side of body and at center in special slotted plate, or other approved fastening.

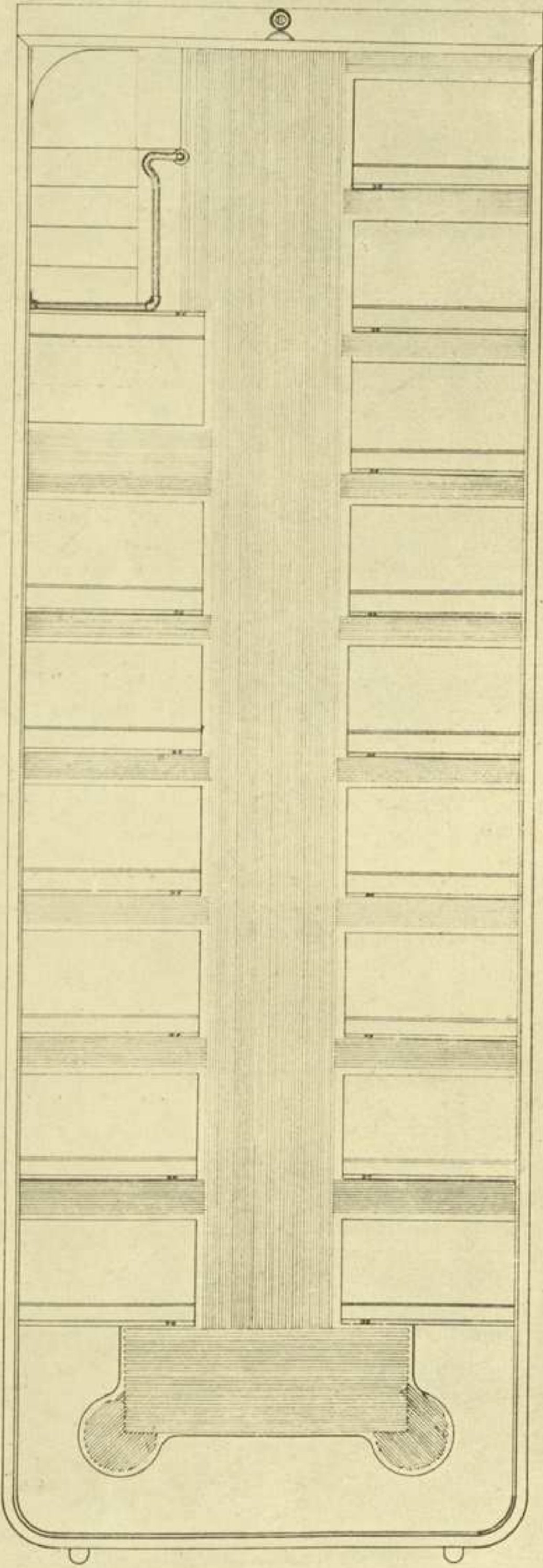
Stairway Specifications

Metal sides and risers with wood treads, covered with "Peralin" or its equal, special tread, including entrance steps. Windows at inside of stairways to be protected with wire mesh screens, easily removed for window cleaning.

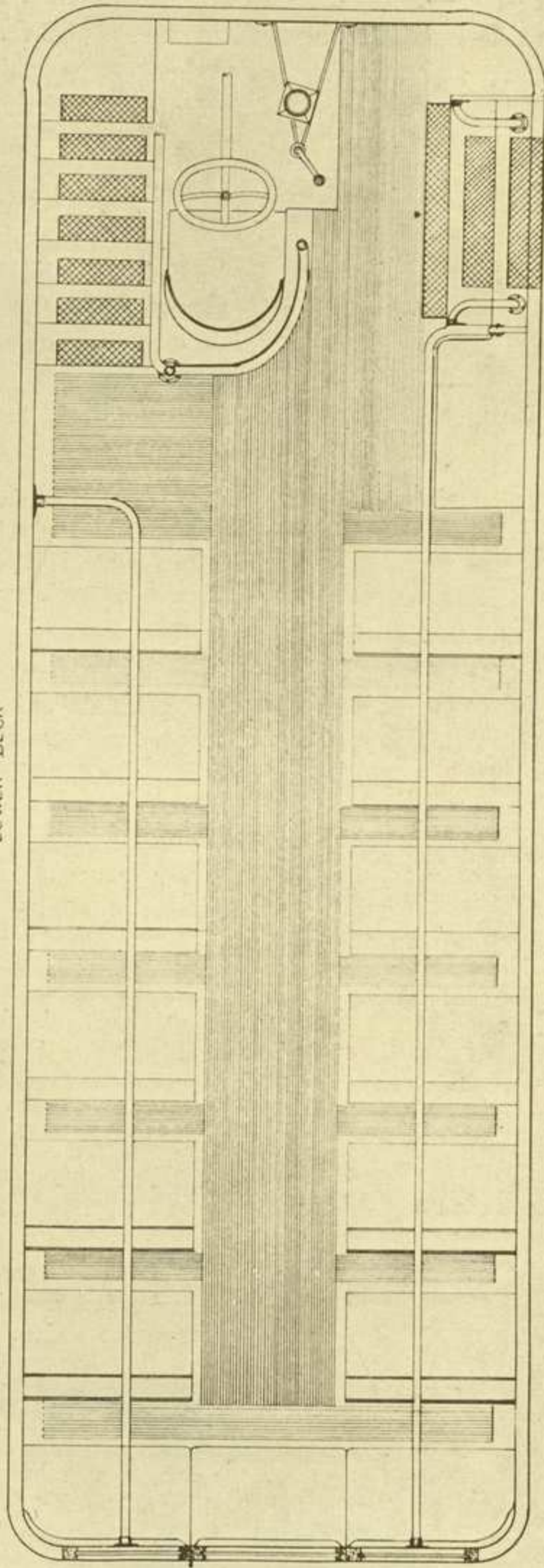
Hatchway Cover, Open or Closed According to Weather

Metal, properly stiffened and hinged to drop down, and with both opening and closing fastenings. Storm gutter on roof around hatch with concealed pipe for carrying off water.

SEATING ARRANGEMENT TOP DECK



LOWER DECK



Upper deck and lower deck view of seating capacity of twenty-three-foot body type of Leindorf One Man Double Deck Safety Bus, showing seventy passengers and standee space on lower deck.

BODY SPECIFICATIONS

of

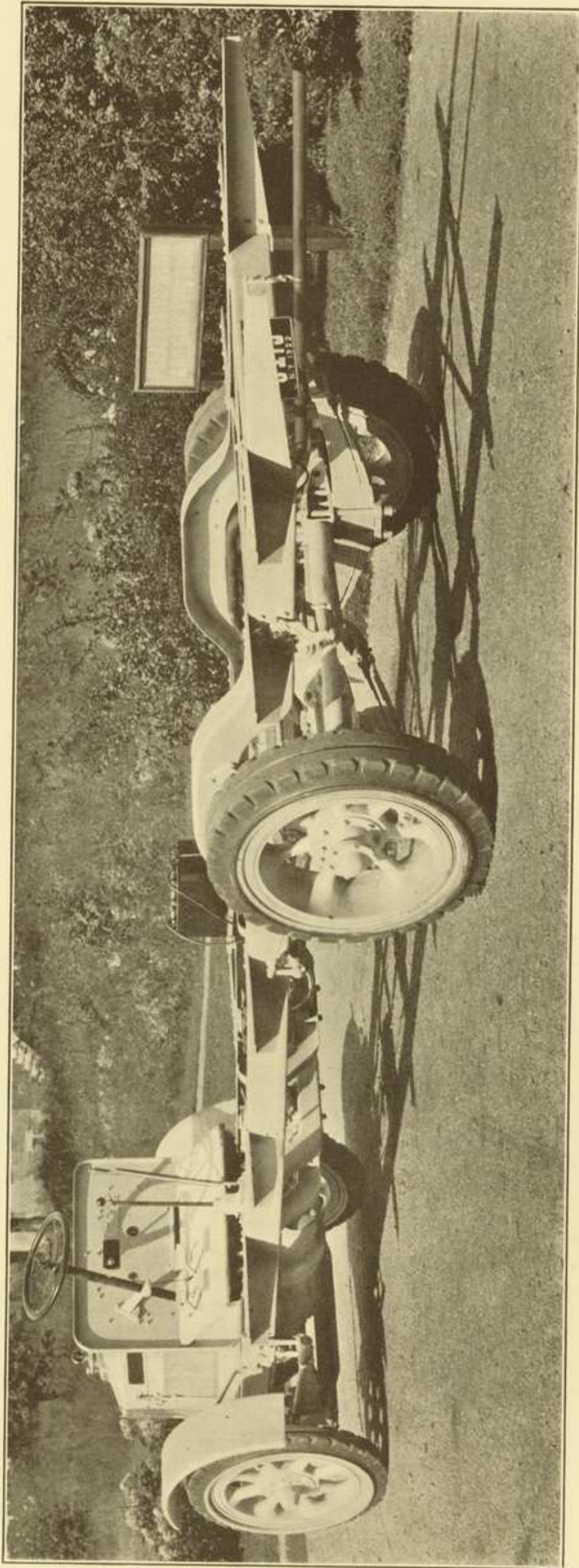
The Leindorf One Man Double Deck Bus

Patent Claims Allowed and Further Patent Claims Pending

Type DD-1—Body dimensions over all, 23 ft. x 7 ft. 6 in. x 6 ft. 2 in.—70 Seats

Type DD-4—Body dimensions over all, 18 ft. 6 in. x 7 ft. 6 in. x 6 ft. 2 in.—54 Seats

Sills, Bolsters	First quality seasoned oak, free from checks.
Pillars, Rails	First quality seasoned ash, free from checks.
Roof Bows	First quality, extra heavy oak, cut and spliced and each bow ironed and bolted.
Sash	REX brass sash, lift type, upper light stationary, double strength glasses, Syracuse anti-rattlers.
Flooring, Roof	$\frac{7}{8}$ in. No. 1 pine, tongue and groove. Top deck covered with heavy canvas, laid with solution of white lead, gold size and varnish. Tread slats, $\frac{7}{8}$ in. x $\frac{3}{4}$ in. on aisles and between seats, screwed down. Lower deck floor slatted same as upper deck.
Interior Finish	Ceiling, window risers and panelling, 3-ply birch veneer, natural wood finish. Standard 11-in. advertising gutters. Push buttons at each pillar, wired to bell. Push buttons at each seat on upper deck, wired to buzzer. Stanchions and hand rails along ceiling with sanitary hand straps.
Doors	Forty-inch entrance and exit door at right side front with duplex folding units folding inwardly, fitted with wire glass and controlled by invisible leverage, either ball bearing or vacuum action, from driver's seat. Emergency door, standard width, together with step and exit light at rear, to be controlled by one button at driver's seat, the door and step to open automatically.
Panels	Top deck, 18 gauge metal panel around roof section and 11-in. wire screens at sides and rear. Front panel all metal to top rail. Lower deck, rib panel type below belt line of individual panels screwed on and easily removed for repairs.
Lights	Hunter roller destination sign at front with lights port and starboard, running lights directly under roof peak. Automatic step light at door. Step light at top of first landing of stairway. Stop light on rear. Not less than eight dome lights of best design in ceiling of lower deck, wired zigzag.
Ventilators	Best design of ventilators to be installed in roof rail directly over windows, also in rear.
Heating	Perfection or equal, connected with Shelby seamless tubing running completely around body and connected to engine exhaust with disconnecting union.
Miscellaneous	Body braced at each pillar and bolted down firmly on chassis to carry overhang. Gas tank and battery placed suitable to type of chassis. Angle iron bumper at rear of body. Nickel or brass grabs at main door. Rostand three-way windshield or its equal. Hand rail around driver. Bracket for coin box. Heavy curved glass at front corners of body.
Extras	Specially designed periscope, mounted in front of driver, permitting view of upper deck. Specially designed megaphone amplifier at driver's seat for announcing. Mirrorscope for lower deck view.
Finish	Not less than ten coats of paint. Color optional. Chassis painted appropriately with necessary number of coats.



Chassis Specifications of One Type Recommended—the Leindorf-Guildler

Motor—Buda EBU, 4 $\frac{1}{4}$ x 5 $\frac{1}{2}$ coach model.
 Transmission—Fuller, 4 speed coach model.
 Universal Joints—Spicer.
 Carburetor—Zenith.
 Frame—Special, built to carry 10 ton load.
 Front Axle—Shuler, 610B, special drop, coach axle.
 Rear Axle—Wisconsin, double reduction, coach axle, 120K
 7 $\frac{3}{4}$ —1 Rating.
 Magneto—Eiseman G-4, with impulse starter.
 Springs—E. R. Merrill, electric furnace Halcomb steel.
 Wheels, Optional—Smith steel or Morand cushion, 36 x 5 front—
 36 x 6 dual rear or 36 x 10 inch single.
 Gas Tank—12 inches diameter, 48 inches long.
 Muffler—Powell pressed steel.
 Hood and Dash—Special.
 Lamps—Deitz, heavy duty electric.
 Battery—Willard SJRT 28, heavy duty truck type.

Electric Stop-Left-Right Signal—Leindorf.
 Vacuum Tank—Stewart Warner, large, heavy duty truck type.
 Brakes—In addition to rear wheel brakes, 2—5 inch x 11 inch
 brakes on propeller.
 Tires—36 x 5 single front, 36 x 6 dual rear; solid rubber or 10 inch
 single shaft.
 Steering Gear—Ross.
 Radiator—G & O aluminum polished shell with tubular cord.
 Wheel Base—196 inches.
 Track Front—64 inches—Track Rear—73 inches.
 Length of Frame from Dash to End of Frame—20 feet.
 Width of Frame, Rear—51 inches.
 Spring Centers, Rear—50 $\frac{5}{8}$ inches.
 Front Spring—2 $\frac{1}{2}$ inches wide, 46 inches long.
 Rear Spring—3 $\frac{1}{2}$ inches wide, 60 inches long.
 Wick type oiling system used on spring shackle pins.

State of New York
TRANSIT COMMISSION

IN THE MATTER

of the

Investigation by the Transit Commission into the general condition of all
railroads, street railroads, stage or omnibus lines or routes, and
all persons and corporations within its jurisdiction

Hearing of October 24, 1922

Emil Leindorf on the Stand

* * * * *

Q. What about the wear and tear on the pavement with a bus as heavy as this?

A. I have been particularly careful in watching that, and thus far after fifteen months of actual operation, using the twelve inch tire tread that I do, I find that there has not been the slightest indentation along the route that I traverse in the time that I have operated, as a result of using tires of sufficient tread. Regardless of the weight of the chassis or the bus complete, plus the passengers loaded, I haven't made the slightest indentation on the roadway along the Concourse.

Q. Just describe the organization that you have, in a sketchy way and let us see how you have built up your operation?

A. I, of course, am President and General Manager. Do you want the names of all the people?

Q. No, I don't care for all the names. I just want to see what sort of an organization you have?

A. I have a transportation department. I have a service department. I have a crew of mechanics operating both night and day, and one of the greatest features about my operation is the fact that no bus can go by my door and on the Concourse, without having been thoroughly examined.

I value human life very highly. I should feel very much distressed indeed if anything of a serious nature, an accident, would occur.

Q. Have you had any fatalities since you have been operating the line?

A. Not one single fatality since the operation of the Concourse bus line, and that, despite the fact that we go through the most congested district of upper Fifth Avenue in New York City.

Q. How do you account for that?

A. The care that I exercise in the training of the chauffeurs and the qualifications they must possess in order to secure a position on my line.

Q. Go ahead and describe your organization further?

A. We have the double shift crews. We have the emergency division that takes care of any possible road work that may come up, such as minor difficulties, clogged gas lines and things of that kind. We have our overhaul division which takes care of general repairs. We have our night and day transportation division. We have our heads of transportation which take care of schedules and headways. We have almost a Weather Bureau, which anticipates the coming of rain or sunshine. We do those things because we must know what service to give the public.

Q. How many men approximately do you employ?

A. Well, in the height of the summer, when the riding is the heaviest, about 180.

Q. And at a time of year like this?

A. Oh, I should judge about 100 or 120.

Q. We have put in evidence the route that these buses follow. Is there any regular schedule maintained?

A. Absolutely.

Q. And what is the schedule?

A. Depending upon the weather. On a bright and sunny day we will maintain a six minute headway. It depends upon the riding. For example, in the morning hours, between six and eight, we do not get as heavy a riding on the part of the public as we do from eight to ten or nine. Then from ten until twelve there will be a lessening of the riding and we won't have to use as many buses as we use between the hours of six and eight or eleven and one in the morning, and we then serve the public with approximately the quantity of buses that they really need, that the riding would warrant; because to do so, with the tremendous cost of maintenance and upkeep that we are necessarily subject to, would be running them without taking into consideration the economical operation of the buses.

Q. Well, you don't maintain the rule that there shall be a seat for every passenger?

A. Well, it is very difficult to maintain that, Judge, because you take on Sundays and holidays, and you find the joy-riding element wants to ride exclusively on the top decks, and it is remarkable how long they will wait to get a seat on the top deck.

Q. Well, are they ever permitted to stand on the top deck?

A. No, sir; never.

Q. So then the only place you permit people to stand is in the body of the bus?

A. That is the only place.

Q. The reports of the inspectors that we have put in here, of observations taken early this month, show very little overcrowding on those lines. But it is quite different in the summertime, is it not?

A. Well, as I say, we have got a certain amount of joy riders. It is a remarkable thing how the riding fluctuates and how it twists.

In the summertime you find lines at the terminals extending perhaps a block or two waiting for their turn to get on the buses; and yet our receipts would not be any greater on a day like this, if it were not windy, when we would take a tremendous amount of short riders along the Concourse. It is a wonderful study. I have watched it very carefully, and it certainly has been a remarkable thing the way that fluctuates. Now, with the lines on the ends of the terminals for a block long, we won't take any greater revenue, we won't get any greater revenue, than some days when it is a nice day and we have no lines, and still serve the short rider along the Concourse, and without excessive crowding.

Q. The reports of the inspectors show that instead of your getting a large number of passengers at any one point on the line and carrying them through, that you are picking up one, two and three, from block to block, all down the line.

A. Very many of the riders all along the road.

Q. That is a very important consideration when it comes to operating at a profit—short rides?

A. Very important.

Q. Then you do not carry the bulk of your people through from one end of your route to the other?

A. No.

Q. You could not do that, I suppose, profitably?

A. Not very much.

Q. Your ride is how long?

A. 7½ miles.

Q. I take it that it would be impossible to run on a line 7½ miles and carry people on a five cent fare under present conditions?

A. Not with my new bus, which solves the problem.

* * * * *

My instructions to the men are of course to be on the back platform as much as you possibly can, so that the bus shall be under your control. It is a very great responsibility and I found that there was a danger.

I set about to overcome that, for one thing. The new type of bus which I have perfected is of the double-deck variety and has a front entrance and exit, with an emergency door in the rear, electrically operated, to be used instantly in the event of any accident occurring, which will enable the passengers to either exit front or rear.

Q. But in ordinary operation, you would not use the rear door?

A. No.

Q. That would be just an emergency exit?

A. Purely.

Q. In case you got a back fire and the machine caught fire or something of that sort?

A. Purely so.

Q. Is that a serious danger in this automobile bus operation?

A. Well, it is my opinion that the bus body construction that is in vogue today is wrong. I believe that there is always an element of danger in the operation of a bus with a single entrance and exit, because if anything were to happen, there would be no means of getting out with any degree of safety at all.

Q. Then you would have in this bus that you are speaking of your passengers enter and exit at the front?

A. Correct.

Q. And where would they pay?

A. As they enter or exit.

Q. You have one of these coin receiving devices on your line now, have you not?

A. Yes, I use the same that another bus company uses, manufactured by the same company and leased from them, not bought. They cannot be bought. But I have perfected one of my own.

Q. Would your bus operator handle that in addition to his operation?

A. No, the coin box is stationed conveniently right beside the operator of the bus. He does not touch it at all. They simply come in and insert their fare, drop it in and

go on inside and take their seat inside or on top.

Q. *What do you have, a turnstile or something of that sort?*

A. No.

Q. *How do you know whether they put their fare in?*

A. He is sitting there and he sees them drop it in. It is just a question of dropping it in. He is sitting there and he sees that operation performed.

Q. *Would he make the change if it was necessary?*

A. We would naturally place signs to have the exact fare ready. If it were necessary he would have sufficient to make the change.

Q. *It is the same principle that has been in use on these one-man safety cars in that respect, I suppose, having the entrance at the front end, and you deposit your money under the supervision of the motorman?*

A. So far as the money is concerned, but we have a stairway inside instead of at the rear of the bus, which I have done away with entirely.

Q. *You would do away with that entirely?*

A. Entirely, yes, sir.

Q. *How do you get away from that?*

A. Right inside as they enter through the entrance, they go right on behind the chauffeur and in the manner of this construction they would literally have to throw themselves off the bus to meet with an accident.

Q. *There would be no way of getting on and off unless the bus was stopped?*

A. Absolutely not.

Q. *But the bus driver, I suppose, has his head considerably below the top of this bus?*

A. To be sure that was the problem.

Q. *How would he see the people leaving the bus or see what is going on behind him?*

A. Well, the war has taught us many things, as the General knows. I have taken from the submarine a periscope and placed it right before the chauffeur so that he can see before him everything that takes place on the upper deck, and besides the periscope is a megaphone through which he can announce the overhead wires and any obstructions that are overhead or streets or crossings where anyone might want to get off. With both the periscope and the megaphone operating beside him, he sees, hears, and the bus is perfectly and naturally under his control at all times.

Q. *Can he see what is taking place in the immediate rear of the vehicle; I mean behind the vehicle?*

A. He can see what is taking place behind him with the microscope, that he has before him. He can see immediately behind him and

he can see through the periscope what is taking place on the upper deck.

Q. *How would the people on the upper deck signify their desire to alight from the car?*

A. By a signaling system. We use a buzzer on the upper deck and a bell on the lower deck, and he knows if the buzzer rings somebody from the top deck wishes to alight, and he knows if the bell rings somebody from the lower deck. He sees the moves instantly.

Q. *You have the people inside of the car; what about them?*

A. A bell. In addition to that, if the bell and the buzzer signal system should go out of order; in addition to that we have a light system, where if both the bell and buzzer go out of order, the light will show the upper deck, and another light show the lower deck.

Q. *Is this something that you have thought out, put on paper, or have you ever embodied it in any actual car?*

A. The bus is completed at my premises on 136th Street and Madison Avenue.

Q. *You have a bus embodying these improvements?*

A. In every detail.

Q. *Is there any objection to our sending an inspector to look it over?*

A. On the contrary I would like to have you come up and it will be shown.

By Commissioner O'Ryan:

Q. *Is this car lighter than the other?*

A. Not very much lighter, General. It is a much more practical and much handsomer vehicle than the other.

* * * * *

By Judge Shearn:

Q. *You spoke of improvements in the operation, the handling of these transportation problems that we have been going over. We would like to have the benefit of any suggestions that you can make?*

A. Judge, I would like to make a suggestion for the improvement of conditions along the lines of my specialty throughout the city.

Q. *Yes.*

A. But I am not prepared to make it at this moment. I have plans devised for that. I have given the matter exhaustive study, and if you are interested, sir, I will be very glad to produce them for you and go over them with you in detail.

* * * * *

Daniel L. Turner, Consulting Engineer, told the Transit Commission that he recommended the use of buses for all congested centers in the place of surface electric cars, adding, "the buses do not interfere with other vehicular traffic as much as trolley cars and their tracks do now."

The Proof!

The tables attached to the inside back cover prove that a Leindorf One Man Double Deck Safety Bus will make a net profit of \$7,743.38 in one year, or \$3,722.17 more than a Two Man Double Deck Bus carrying an equal number of passengers at a five cent fare on a route through a fairly populous district.

A Leindorf One Man Double Deck Safety Bus will more than pay for itself in its first eighteen months of operation, aside from its elimination of accidents and theft.

The interior stairway entrance to the upper deck and many other vitally new features of the Leindorf One Man Double Deck Safety Bus are fully protected by patent claims allowed and further claims pending. Any infringements will be promptly and vigorously prosecuted.



ENTERPRISES

CONCOURSE BUS LINE, Inc.
Operating the Grand Concourse Bus Line of
Greater New York

LION MOTOR CORPORATION
Manufacturers of Bus Chasses

EQUITABLE MOTOR TRUCK CO., Inc.
Motor Truck Distributors

**LEINDORF SOLID TIRE SHAVING
MACHINES**
Increases Solid Tire Mileage 100%

LEINDORF MOTOR SALES CORP.
Manufacturers of the Leindorf One Man
Double Deck Safety Bus

For Further Information, Requests for
Transportation Analyses, and Prices on the
Leindorf One Man Double Deck Safety Bus,
Address Geo. B. Van Cleve, Vice-President,

LEINDORF MOTOR SALES CORPORATION
136th to 137th St., on Madison Ave., New York City

The following tables are based on the operation of fifty buses operated under a
 They show the costs of carrying 24,473,150 passengers annually, which 1922 op
 Operating expenses based on heavy duty type buses built especially to carry "s

	Leindorf One Man Double Deck Safety Bus 5c Fare A	Leindorf One Man Double Deck Safety Bus 10c Fare B	Regular Two Man Double Deck Bus 5c Fare C
REVENUES			
BUS FARES.....	\$1,223,657.50	\$2,447,315.00	\$1,223,657.50
ADVERTISING	24,000.00	24,000.00	24,000.00
TOTAL REVENUE.....	\$1,247,657.50	\$2,471,315.00	\$1,247,657.50
PASSENGERS CARRIED 1 YEAR.....	24,473,150	24,473,150	24,473,150
BUS MILES OPERATED.....	2,834,050	2,834,050	2,834,050
OPERATING EXPENSE			
Chauffeurs	\$260,030.00	\$260,030.00	\$223,530.00
Conductors .....	.....	.....	208,024.00
Starters and Inspectors.....	20,000.00	20,000.00	48,894.65
Miscellaneous Labor	22,965.85	22,965.85	22,965.85
Washers and Cleaners.....	38,523.00	38,523.00	38,523.00
Gasoline	101,328.27	101,328.27	101,328.27
Oil and Grease.....	7,237.88	7,237.88	7,237.88
Registers (60).....	.....	.....	2,190.00
Miscellaneous	4,034.00	4,034.00	4,034.00
REPAIRS	47,528.00	47,528.00	47,528.00
DEPRECIATION			
*Buses	100,000.00	100,000.00	100,000.00
Tires	24,609.50	24,609.50	24,609.50
TOTAL OPERATING EXPENSES.....	\$626,256.50	\$626,256.50	\$828,865.15
OPERATING GAIN.....	\$621,401.00	\$1,845,058.50	\$418,792.35
**ADMINISTRATIVE			
Officers and Office.....	60,590.00	60,590.00	60,590.00
***Rent	25,900.00	25,900.00	25,900.00
Stationery	6,542.00	6,542.00	6,542.00
Accident and Legal.....	5,000.00	5,000.00	15,000.00
Interest on Investment.....	30,900.00	30,900.00	30,900.00
Taxes—Corporation, Profit, etc.....	86,000.00	315,000.00	69,500.00
Miscellaneous	2,800.00	2,800.00	2,800.00
Insurance—Working Men's Compensation	6,500.00	6,500.00	6,500.00
TOTAL ADMINISTRATIVE.....	\$224,232.00	\$453,232.00	\$217,732.00
PROFIT	\$387,169.00	\$1,391,826.50	\$201,060.35
PROFIT PER DAY PER BUS.....	\$21.22	\$76.26	\$11.02

* The buses are given a life of five years only and are therefore charged off at the rate of one-fifth of their cost annually.
 ** Based on operations of The Concourse Bus Line, New York City.
 *** Based on high New York City rental paid by Concourse Bus Line and includes building fire insurance. This rental excessive for other

a three-minute headway over a route 7 1-2 miles long, or a round trip of 15 miles. Operations show will be carried in 1923 on routes of the Concourse Bus Line. "standees" and provide for overload.

Regular Two Man Double Deck Bus 10c Fare D	INCOME AND COST PER PASSENGER				INCOME AND COST PER MILE			
	A	B	C	D	A	B	C	D
	\$2,447,315.00	.05000	.10000	.05000	.10000			
24,000.00	.00098	.00098	.00098	.00098				
\$2,471,315.00	.05098	.10098	.05098	.10098	.44024	.87208	.44024	.87208
24,473,150								
2,834,050								
\$223,530.00	.01063	.01063	.00913	.00913				
208,024.00	.....	.....	.00850	.00850				
48,894.65	.00082	.00082	.00199	.00199				
22,965.85	.00094	.00094	.00094	.00094				
38,523.00	.00157	.00157	.00157	.00157				
101,328.27	.00414	.00414	.00414	.00414				
7,237.88	.00029	.00029	.00029	.00029				
2,190.00	.....	.....	.00009	.00009				
4,034.00	.00016	.00016	.00016	.00016				
47,528.00	.00194	.00194	.00194	.00194				
100,000.00	.00401	.00401	.00401	.00401				
24,609.50	.00101	.00101	.00101	.00101				
\$828,865.15	.02551	.02551	.03377	.03377	.22009	.22009	.29247	.29247
\$1,642,449.85	.02547	.07547	.01721	.06721	.22015	.65199	.14777	.57961
60,590.00	.00206	.00206	.00206	.00206				
25,900.00	.00106	.00106	.00106	.00106				
6,542.00	.00027	.00027	.00027	.00027				
15,000.00	.00020	.00020	.00020	.00020				
30,900.00	.00126	.00126	.00126	.00126				
410,000.00	.00381	.01287	.00284	.01675				
2,800.00	.00011	.00011	.00011	.00011				
6,500.00	.00026	.00026	.00026	.00026				
\$558,232.00	.00903	.01809	.00806	.02197	.07912	.15992	.07683	.19697
\$1,084,217.85	.01644	.05738	.00915	.04524	.14103	.49207	.07094	.38264
\$59.41								

Pam
2005.045