

*Erie Freight Station at Jersey City Where Cars and Motor Trucks Meet*

## Off-Line Stations and Store-Door Service in New York

*Erie and Lehigh Valley use motor trucks to improve service  
—Reduce car floating and pier rental*

**T**WO railroads, the Erie and the Lehigh Valley, are making extensive use of motor vehicles through contract with the United States Trucking Corporation in reducing freight handling costs and improving service to shippers in New York. New York is a peculiar terminal from a freight standpoint. Only one railroad, the New York Central, has direct all-rail freight service into the heart of Manhattan. All the other trunk lines must depend upon rail-water terminals, where cars of inbound freight are placed on car floats and towed to pier freight stations in various parts of the metropolitan area. These pier freight stations are variously located to serve different parts of the city, in Brooklyn and at various points along the East and North river waterfronts of Manhattan and the Bronx.

Little freight except that from and to the New York Central enters or leaves the city without a water trip. The New Haven, to be sure, has a rail terminal at 129th street whence freight to and from the northern part of the city is handled, but New Haven freight destined to downtown points is floated down the East river to downtown piers. There is, of course, direct rail service to parts of the city (the outlying boroughs of Brooklyn and Queens) served by the New York Connecting and the Long Island. On the other hand, a large part of the freight handled by these two lines must first be floated to reach them. And, too, the New York Central has to float all freight for its West Shore line.

Handling freight on car floats is a costly business—particularly when the distance is short. That is to say, it takes just as many costly waterside rail facilities and just as much time and labor to put a car over a float bridge for a trip of a mile across the Hudson from Jersey City to Lower Manhattan as it does for the comparatively long trip around the Battery and up the East

river to Harlem. It is, then, the comparatively short water trip where the disadvantage of floating cars as compared with handling the freight by motor truck on existing ferries is first evident and it is in this area—the lower part of Manhattan—which is closest to the New Jersey terminals of the Erie and the Lehigh Valley, that the motor freight service by contract with the United States Trucking Corporation is offered.

### Saving Pier Rent at New York

There are other elements in delivery of freight to New York by car float which have to be considered. Water front property is extremely valuable. If all business is to be handled by car float, increases in business mean constant additions to rail-water terminal facilities. The railroad pier freight stations in New York are virtually all held under lease and the rents are extremely high. Handling freight by motor truck from the railroad terminal on the New Jersey side of the river, instead of in cars on a car float, enables the establishment of New York stations at warehouses away from the water front in quarters which, while more convenient to shippers, are not so costly.

### Direct Collection and Delivery Optional

The United States Trucking Corporation operates five such "inland" stations in Manhattan, serving shippers and consignees south of Twenty-third street. All merchandise, inbound and outbound, of the Erie and the Lehigh Valley in this area is handled by motor truck to and from Jersey City via ferry. All of it, except that in direct collection and delivery, passes through one of these five inland freight stations. These inland stations are operated on the ground floor of warehouses. Incoming freight is held for the consignee's 48 hours free time or,

if the shipper so desires, it is promptly warehoused for him and is subject to his further orders at regular warehouse rates.

The close affiliation between the railroad and warehouse service is an important feature for some shippers. The average difference in the rate on carload and l.c.l. freight will pay for from three to four months of warehousing. Consequently the shipper selling small quantities of his product in the district from day to day can

This direct delivery of course is an additional advantage to the consignee, particularly in view of the vehicular congestion in New York and the long delays often experienced in getting a truck to its place at the outbound platform of a railroad freight station. Nevertheless, the service was a new one to shippers and one which they had to learn to use before it enjoyed any wide popularity. At the outset of these operations, direct delivery service was utilized on but 7 per cent of the inbound freight.

FORM NO. A 1087

**UNITED STATES TRUCKING CORP.**  
FREIGHT SERVICE DEPARTMENT

DRIVER'S LOAD TICKET T. C. No. 60377

INLAND STATION \_\_\_\_\_ DATE \_\_\_\_\_

DRIVER'S NAME \_\_\_\_\_ TRUCK NO. \_\_\_\_\_

USTC OR SS PRO	CONSIGNOR	CONSIGNEE	DESTINATION	STEAMER	NO. PKGS.	WEIGHT	PREPAID CHARGES	CARTAGE

Fig. 1

afford to ship it in by the car load, pay a warehouse fee for a portion of it for a short period and still be the gainer over the alternative practice of shipping in small quantities of his commodities every few days under l.c.l. rates.

In addition to the motor truck service to the inland station, however, the railroads, in conjunction with the Trucking Corporation, offer direct collection and delivery to patrons who desire it. The contract of the railroads with the Trucking Corporation calls for the payment of a portion of the through rate for carting freight from Jersey City to the inland stations or to West street, New York. The Trucking Corporation, in view of the fact

This has now increased to 57 per cent. Direct collections are made on the same basis of cost, the shipper paying only for the trip to the New York waterfront and the railroad paying for the balance of the trip to

**ERIE RAILROAD COMPANY**  
UNLOADING TALLY AND DELIVERY RECORD

Car Initial \_\_\_\_\_ Car Number \_\_\_\_\_ Track \_\_\_\_\_ Date \_\_\_\_\_

Seals North Side \_\_\_\_\_ South Side \_\_\_\_\_ East End \_\_\_\_\_ West End \_\_\_\_\_

Condition of Drip Pans \_\_\_\_\_ Drain Pipes \_\_\_\_\_ Car Floor \_\_\_\_\_

Quantity of Ice in Tanks \_\_\_\_\_ Time Load Started \_\_\_\_\_ Finished \_\_\_\_\_

U. S. Truck Number \_\_\_\_\_ Public License Number \_\_\_\_\_ Checker's Name \_\_\_\_\_

Driver's Name \_\_\_\_\_ Truck Dispatched to \_\_\_\_\_

MAKE DAMAGE NOTATIONS DIRECTLY BENEATH ENTRY TO WHICH THEY APPLY, SHOWING NATURE, EXTENT AND APPARENT CAUSE OF THE DAMAGE

CONSIGNEE'S NAME AND MARKS	ADDRESS	KIND OF PACKAGE	TALLY	TOTAL

RECEIVED ABOVE PROPERTY FROM ERIE RAILROAD COMPANY IN GOOD ORDER

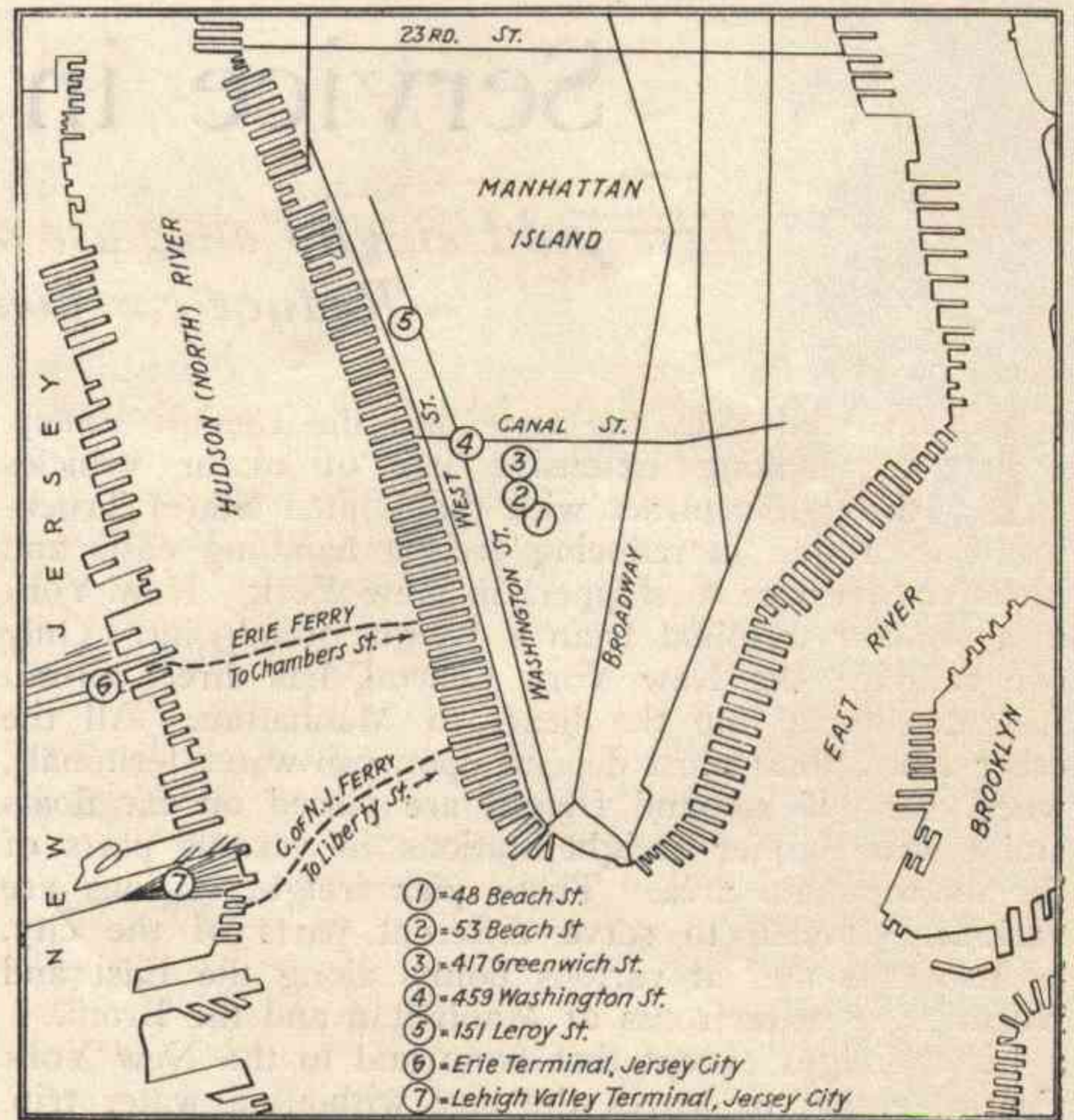
Sheet Number \_\_\_\_\_ Total Sheets \_\_\_\_\_ Driver's Signature \_\_\_\_\_

WHEN MORE THAN ONE SHEET IS USED ON ONE CAR, ALWAYS SHOW CAR NUMBER ON EACH SHEET, ALSO NUMBER OF SHEETS USED

Form 4941  
3-22-25

Fig. 2

that the shipment on arrival at West street is already loaded on its truck, offers delivery to the consignee in downtown New York at a much lower rate than if the same haul were made by individual trucking concerns, the cost of loading being also absorbed by the Trucking Corporation. Consequently the additional cost to the consignee of direct delivery is often less than he could handle it for himself, even with his own fleet of trucks from the "inland" or pier freight stations in New York.



Inland Stations (No. 1 to No. 5) and Area Where Direct Collection and Delivery Is Offered

New Jersey. Of outbound freight handled by the trucking company 52 per cent is collected at the shippers' places of business on this basis.

Aside from the advantage of direct collection and delivery to shippers, the service effects important savings for the railroad companies by reducing the number of costly piers which must be rented on the New York side and also in the incidental handling of shipments on such piers. The direct trucking arrangement provides that cars be placed on team tracks on the Jersey shore, consignees notified immediately upon arrival and arrangements made to truck the freight direct from the car to the consignee's place of business, at his convenience.

Practically the same arrangement is in effect covering this procedure as from the New York piers; i.e., consignees have the benefit of 48 hours free time, after which demurrage or storage charges are assessed in accordance with tariff regulations. The railroad companies pay the Trucking Corporation for the cost of trucking shipments to the New York side and consignees pay for the trucking from that point to the ultimate destination. This transaction saves time and reduces cost to the shipper. If the shipment were picked up at a New York pier, the consignee would be obligated to pay a loading charge of not less than 60 cents per ton, whereas, by taking the shipment through direct delivery channels, this cost is eliminated, the shipment being already loaded on a truck when it reaches New York, the point when the consignee begins to pay for the service. Similar arrangements cover direct collection i.e., con-

Jersey City as the shipper's agent. The trucking company pays any freight charges, acting also as the shipper's agent, and sends him the bill of lading.

On inbound direct delivery freight the railroad company makes out a tally sheet of the articles, as is usual in the case of freight destined to the inland stations. A copy of this does not go to the consignee, however, but is retained by the trucking company. The trucking company lists the contents in each vehicle on one of its own delivery sheets (Fig. 3) and the driver secures the signature of the consignee on each by way of receipt. Unloading of inbound freight is performed by the Trucking Corporation at its expense. The railroad loads outbound freight at its expense.

**Equipment and Operating Practice**

The great bulk of this operation is handled by tractors and trailers, although where congestion creates delays some horse-drawn vehicles are still in use. The tractors, of which there are 8, are Macks and the trailers, of which there are 36, are bodies built by the Trucking Corporation in its own shops on Lapeer trailer chassis. These trailers have a capacity of 20 tons each—although, of course, this lading is seldom reached except with commodities of small bulk in proportion to weight. It takes from three to five trailers to keep one tractor busy. Inbound and outbound operations continue throughout the day. A tractor will bring a loaded trailer into an inland station, spot it for unloading, and immediately start with a trailer already loaded with outbound freight for Jersey City. There it will leave its load with the railroad and pick up another load for New York. By the time it has reached New York again, the inbound load it took to New York on the previous trip will have been unloaded and the trailer loaded again with outbound freight. A tractor will average seven round trips a day.

In the evening just prior to the closing hour the Trucking Corporation makes it a practice to remove all freight from inbound cars at Jersey City in spite of the fact that it is too late to effect delivery in New York that day. This releases the cars. The trucks are then housed in a pier on the Jersey side for the night under the surveillance of a watchman. Tractors coming from New York on the first trip the following morning with empty trailers for the first loading of inbound freight spot their empties and then take the loads waiting for them on the pier, obviating the necessity of killing time prior to the first inbound loading.

**Gas-Electric Drive  
for Motor Buses\***

By H. L. Andrews  
Assistant Engineer, General Electric Company

WE perhaps think of electric drive as applied to motor buses as a recent development, but as a matter of fact records indicate a sustained activity and endeavor in this field for more than 25 years. The first important installation was made in 1905 when a single-deck, 30-passenger bus so equipped was placed in operation on Fifth avenue, New York, and this was followed three years later by ten 34-passenger buses on the same route which operated in regular service until 1914. The fact that the basis idea of electric drive has persisted throughout all these years is evidence that the practice of shifting gears with several reductions in com-

\*Abstracted from an address delivered on April 16, before the New York Railroad Club at its annual "Electrical Night."

Fig. 3

signees pay for the cartage from their places of business to the New York side of the Hudson river and the railroad company pays from that point to Jersey City.

The Trucking Corporation in the receiving and delivery of freight is the agent of the railroad. It receipts bills of lading and collects freight charges. In direct collection and delivery and in its warehouse service it is also agent of the shipper or consignee. When outbound freight is received at one of the inland freight stations, it is weighed by the trucking company's checker, the bill of lading receipted and the shipment loaded on a waiting vehicle for haulage to Jersey City. Information from each duplicate bill of lading loaded into the vehicle is entered on a triplicate form (Fig. 1) of which one is kept at the inland station and the other two sent, attached to the bills of lading, with the driver to Jersey City. There with this list and the bills of lading the railroad checkers account for each piece of freight as it is unloaded from the truck.

Similarly with inbound shipments, a tally list of the lading of each truck (Fig. 2) is receipted to the railroad company by the trucking company's driver who takes a copy with him to the inland freight station at New York, where the individual articles are checked off as they are unloaded. The list is then filed in a book and when cartage agents call for the various shipments they are required to sign in a column opposite each shipment by way of receipt.

Direct collection and delivery service is largely restricted to carload shipments. On outbound direct collection freight, the trucking company's vehicles do not stop at the inland stations to weigh the shipments, but proceed to Jersey City where the weighing is done.

With direct collection freight the railroad issues and receipts the bill of lading to the trucking company at