## Motor Transport Section



The Fleet of the Freight Division of the Burlington Transportation Company Consists of Modern, Safe Equipment

# Burlington Trucks Make Their Schedules Safely

Consistent runs, rather than spurts and delays, produce excellent on-time record and prevent accidents—

HE freight division of the Burlington Transportation Company was not organized until the summer of 1935, but in 1936 more than two million truck-miles were operated over 1,500 highway route-miles. Moreover, in the same year, this was the only central western trucking company to receive the safety award of the American Trucking Association. During 1936, also, it was one of the few highway freight transport companies engaged wholly in hauling and independent solicitation of freight to show a net income instead of a loss, after all factors, including depreciation, had been considered.

The Burlington Transportation Company, wholly-owned bus-operating subsidiary of the Chicago, Burlington & Quincy, has been in operation for a number of years, and several articles covering its operations have appeared in the Motor Transport Section of the Railway Age. It was not until 1935, however, that the C. B. & Q. decided to form a freight division of this company to engage in highway trucking. In September of that year, the negotiations were completed and the necessary authorizations procured.

The Merchants Cartage Company, with headquarters at Galesburg, Ill., one of the largest Illinois truck operators, was the first to join the freight division of the Burlington Transportation Company. Later, the Peterson Truck Lines, Corning, Iowa, and the Corn Belt Trucking Company, Ottumwa, Iowa, were also consolidated into this system which now operates between Chicago and Omaha and between Omaha and Kansas City, roughly paralleling the parent railroad, with numerous branch lines, as shown on the accompanying map and with headquarters in Galesburg, Ill. Applications are now on file with the Interstate Commerce Commission at Washington, D. C., for the inclusion in this system of the Sands Motor Express and the routes of the Bell Transfer Company in Burlington territory, which, if granted, will mean that the mileage of the system will be approximately doubled.

So far, no attempt at rail-highway co-ordination has been made between the freight division and the parent railway. The question, however, has been the subject of much careful study for some time past. It is expected that, in the near future, the results of these studies will be put into actual operation and a complete system of rail-highway co-ordination installed. However, the operating, solicitation and accounting forces of the trucking company are operating independently of the railway.

although the president of the transportation company is also assistant to the executive vice-president of the railway.

### Equipment

The freight division owns a fleet of 103 highway freight units, in addition to numerous service cars, etc. Believing that modern equipment and its proper maintenance are potent factors in safety, the management has modernized and standardized its equipment in the last two years, until now the fleet is in excellent condition mechanically.

The main shops are located at Galesburg, Ill., Kewanee and Rock Island, and at Ottumwa, Iowa, and the division does all its own repainting, body-building and general overhauling of motors at these shops. Maintenance is conducted on a mileage basis, and this is rigidly adhered to. For example, no truck is permitted to run beyond the fixed mileage between valve-grindings, regardless of whether the valves still seem to be in good condition. It is felt that, by following this fixed program, road delays and breakdowns are avoided and the cause of safety furthered.

### Inspection for Safety

At the completion of each run, each driver turns in a report as to the condition of his vehicle. In addition, the schedules are so arranged that each unit is garaged frequently at one or the other of the main shops where it receives a thorough inspection.

Thus, both the driver and inspector make trouble reports, and, regardless of the circumstances, the units are not permitted to go out on the road again until the trouble has been fixed. Such reports cover not merely accessories in need of repair, but also include a check after each trip of the safety appliances carried with each truck, such as light bulbs, flares, fusees, fire extinguishers, etc., to see that the full complement is there.

All equipment is supplied with air brakes, and a special device automatically applies the brakes on multiple units in case of accidental separation of the coupling between the tractor and the trailer.

### Schedules

The schedules for the runs are worked out as a result of an operating officer actually riding the truck under normal conditions and gathering data as to traffic congestion, stops that must be made, the gradients of



General Offices of the Burlington Transportation Company at Galesburg

the road covered, etc. Thus, the schedules are worked out from actual operating practice, and not on a theoretical basis. No driver is permitted under any circumstances to "make up time." If he leaves a terminal late, he is still expected to arrive at the next terminal in the same elapsed time as an on-time run, thus avoiding speeding to make schedules, which is perhaps the most fruitful cause of accidents. Each truck of the Burlington freight division is equipped with a governor which holds the speed to a maximum of 35 m.p.h., and also with an automatic speed recorder which shows the speed for the entire run on a tape which is carefully checked by the operating officers. As a further safety factor, the driving hours of the employees are watched carefully. The longest run for any driver is 259 miles, and the longest tour on duty is 9 hr. 35 min. Also, no driver may start on a run unless he has had his legal hours of rest.

Actual experience with this system has shown its



The New Terminal at Galesburg, Ill., Includes All Modern Facilities



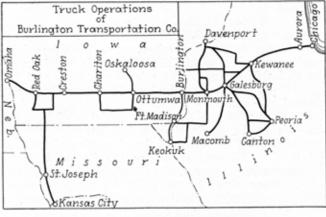
Protected Indoor Loading Is Done at the New Galesburg Terminal

benefits. By eliminating the necessity for the driver to speed, a source of many accidents is removed. Schedules are maintained, not by fast running, but by seeing to it that the departure time is met in dispatching trucks from the terminals. In this operation, there is no such thing as a terminal superintendent expecting the driver to cover up terminal inefficiency by fast and dangerous running.

Terminal dispatch is aided by the fact that the freight division has its own terminals at all cities into which it operates. As a part of this system, a new terminal was opened at Galesburg, Ill., on July 1 of this year. This new brick building covers an area of 23,000 sq. ft., is surrounded by driveways to permit of easy access and departure, and is served by a sidetrack from the railway so that interchange from car to truck will be facilitated. The dock is 140 ft. long by 40 ft. wide, and 24 trucks may be spotted along it at one time. Sliding doors provide for inside, protected loading in inclement weather, and the terminal is equipped with an automatic, thermostatically-controlled heating system. This building, in addition to the loading dock and the general offices, also contains a large refrigerated room for the storage of perishables, which is an important commodity handled by the freight division, all highway units being equipped with refrigeration.

#### The Human Element

All drivers hired must be between 21 and 35 years of age and must have had at least three years previous experience as truck drivers. Before being employed, each



Over 1,500 Route-Miles Are Operated

one must take a thorough physical examination, equivalent to that given railway men. In fact, these examinations are now conducted by the local surgeons of the railway. Particular stress is laid upon correct vision, and some 25 per cent of the applicants are turned down because of defective vision, particularly color blindness, Each employee is also given a further thorough examination every year, to see that he maintains himself in proper physical condition after employment.

Those who are found by examination to be physically fit are then sent out on student trips with experienced drivers who have shown themselves to be good teachers. Then, if they qualify, they are assigned to the same unit and to the same run, insofar as possible, as a thorough knowledge of the vehicle and of local road conditions has been found invaluable in accident prevention.

The drivers must also familiarize themselves with a detailed book of rules, which covers all possible contingencies. The fact that safe arrival is far more important than on-time arrival is constantly stressed. Any driver is authorized to tie up and report to the dispatcher under unusual weather conditions that would make it hazardous to proceed.

Inspectors are constantly on the road to see that the rules are observed, but, since the drivers are never urged, or even permitted, to violate the rules in order to make up time or for any other reason, the rule infractions are few and far between.

As an example of the clarity with which the rules are issued, rule 63, dealing with crossing railway tracks at grade, is quoted in full below:

Movement over railroad crossings: (a) Operator must STOP, LOOK AND LISTEN in both directions for approaching steam or electric locomotives, trains or cars, before crossing any tracks of a steam or electric railroad at grade. The stop must be made within not less than 10 ft., nor more than 50 ft., from the rail nearest the front of the motor vehicle. This rule must always be observed and a stop made, even if the signal shows clear. (b) Operator must make certain that no train is closely approaching before driving across tracks. In foggy, wet or stormy weather, when visibility is poor, extra precaution must be taken before crossing tracks. (c) If a warning signal or automatic safety device indicates an approaching train, operator must be governed by this warning and will never believe that the signal is out of order, but must always accept it as a danger signal. He will never cross tracks while a warning signal is in action, unless, after a sufficient period, he positively ascertains that no train is approaching. (d) An operator

must never cross tracks when a train is slowly approaching and warning signals are operating, regardless of the fact that the crossing may be made in plenty of time. Many railroad warning signals are so regulated to start operating for high speed trains that are a long distance

from the crossing. (e) Relief from stopping before crossing unused tracks will be granted only by special instructions. (f) When stop has been made within 10 feet of tracks, operator must use low gear in crossing the tracks, and must not shift gears while on the crossing.