17 H.-34A.

There is a range of 13 single-floor, 1 two-floor, 6 three-floor, 5 four-floor, and 12 five-floor transit-sheds, for the sorting of frozen meat and other produce; also 13 warehouses, seven stories each, fitted with 27 friction hoists worked by gas-engine; and in Trafford Park the Ship Canal Company has 4 single-floor warehouses, each 300 ft. by 100 ft. The docks, quays, sheds, and warehouses are lighted by electricity, and there are 30 hydraulic and 16 electric capstans on the quays.

The new ferro-concrete transit-shed of four floors, situated at No. 9 Dock, where the Federal-Houlder-Shire steamers are berthed, is, I have no doubt, the largest and most up-to-date structure of the kind in the world. (Manchester, being a new seaport, enjoys this advantage over her older rivals: that she is not burdened or hampered in her development by the possession of inadequate, imperfect buildings or obsolete appliances.) This shed, or, rather, series of sheds, is half a mile in length. On its flat roof are a number of cranes, and space for stacking enormous quantities of timber. Other goods can be loaded or unloaded under cover, the arrangements for handling being as nearly perfect as possible. This shed cost £350,000 to construct.

There is the largest grain-elevator in the United Kingdom provided at the docks. Its capacity is 1,500,000 bushels. The Ship Canal Company has plans ready for a second elevator of equal or larger capacity, as soon as trade may warrant its erection. The Foreign Animals Wharf, lairages,

&c., are most complete and commodious.

Near Mode Wheel Locks, close to the city end of the canal, are the Manchester Dry Docks Company's works, fitted for ship building or repairing; a graving-dock 535 ft. long by 65 ft. wide, with 22 ft. of water on the blocks, which are 4 ft. high; another dock 425 ft. long by 65 ft. wide, with 18 ft. of water on the blocks, which are 4 ft. high; and a floating pontoon 260 ft. long by 63 ft. wide, with 16 ft. of water on the blocks, which are 3 ft. 9 in. high, capable of lifting vessels weighing up to 2,000 tons.

## Meat-transit Shed and Cold-stores.

Most ample and satisfactory provision is made at Manchester for the handling and storage of frozen meat and other perishable produce. A portion of the ferro-concrete shed already referred to has been insulated as a transit-shed. This refrigerated transit accommodation consists of an insulated chamber 123 ft. 6 in. long, 99 ft. 3 in. wide, and 7 ft. 5 in. high, on the first floor. The chamber has a capacity of 85,500 cubic feet, and provision has been made for further extension whenever required by the trade. In front of the chamber, facing the dock, a covered verandah has been provided, with tilting platforms, on which the goods are landed from the vessels by means of electric cranes stationed on the quay. There are also movable platforms for dealing with carcases discharged from steamer's hatches not lying immediately in front of the refrigerated chamber. The insulating material employed on the walls, floors, and ceiling of the chamber is silicate cotton, and the whole work has been carried out on the latest principles and in accordance with the requirements of Lloyd's, the chamber being in the "approved list" of the London Underwriters. The refrigeration of the chamber is on the cold-air system; it is entirely free from snow, fog, or damp, and all superfluous moisture is removed by a supply of cleansed and purified cold air constantly in circulation throughout the chamber, which is, therefore, capable of being used for any class of perishable goods. In case of breakdown in any part of the plant, there is a complete spare plant installed in readiness to maintain the temperature in the chamber, and there is no possible risk of goods being damaged through insufficient plant for controlling the temperature to secure any reasonable degree of refrigeration.

There are excellent facilities in the City of Manchester for storing frozen produce, the Manchester Corporation having provided spacious cold-stores in a central position in the city, within easy cartage distance from the Manchester docks. These stores form a valuable adjunct to the extensive meat-markets and abattoirs of the Corporation, and are constructed to accommodate 120,000 carcases of sheep. The Union Cold-storage Company (Limited) has also erected a cold-store at the Manchester docks capable of holding 175,000 carcases. A wharf for large steamers, with railway connections, has been provided, so that steamers carrying any considerable quantity of frozen produce can be berthed alongside. The same company also has a cold-store in Miller

Street, Manchester, with a capacity of 80,000 carcases.

## GROWTH OF TRADE.

The expansion of trade is said to follow the line of least resistance; in other words, the increased volume flows in those channels where the best facilities are provided at the lowest rates.

With its magnificent port, up-to-date sheds and stores, and efficient mechanical appliances, Manchester could not fail to show an enhanced traffic; and if the progress made had not been commensurate with the facilities provided, the retarding cause must be assumed to be the vis inertia that operates in commercial as in other concerns—the disinclination to depart from the old ways, even when better ways are ready to hand. Nevertheless, the growth of traffic at the Port of Manchester has been most gratifying, and even remarkable, as may be seen from the following table, which gives the total tonnage in traffic and the total revenue since the opening of the canal in 1894:—

|              |                   |          |       |                   | and the second second |
|--------------|-------------------|----------|-------|-------------------|-----------------------|
| Year.        | Tons.             | Revenue. | Year. | Tons.             | Revenue.              |
| 1894         | $\dots 925,659$   | 97,901   | 1901  | $\dots 2,942,393$ | $309,\tilde{5}17$     |
| $1895 \dots$ | $\dots 1,358,875$ | 137,474  | 1902  | $\dots 3,418,059$ | 358,491               |
| $1896 \dots$ | $\dots 1,826,237$ | 182,330  | 1903  | 3,846,895         | 397.026               |
| $1897 \dots$ | $\dots 2,065,815$ | 204,664  | 1904  | $\dots 3,917,578$ | 418,043               |
| 1898         | $\dots 2,595,585$ | 236,225  | 1905  | $\dots 4,253,354$ | 449,436               |
| $1899 \dots$ | $\dots 2,778,108$ | 264,775  | 1906  | $\dots 4,700,924$ | 498,837               |
| 1900         | 3 060 516         | 990 830  | 1     | · ·               | •                     |