

(b.) The Government may establish, either directly or by concession, any means of communication that it may deem necessary, or may authorize the State railways, or any other vicinal railway, or the suburban tramways, to be connected with a vicinal railway, without the society having any claim for prejudice which may arise from any of the above causes.

(c.) The Government may grant permission to any other transport agency to run its rolling-stock over sections of the vicinal lines, on payment.

(d.) If the defence of the country requires it the society must, on the first application of the military authority, remove or destroy any part of the vicinal railway; and in urgent cases the military may have the line removed or destroyed at the cost of the society without the society having any claim for damages under this head. (This last seems very unfair.—F.W.F.)

The majority of the lines traverse easy country. The older ones almost invariably follow the roads and streets, without fencing. Where it is absolutely necessary to cross over private land, only the absolute minimum width is taken. Frequently this is not fenced, cultivation extending almost up to the ends of the sleepers.

Of late years there has been a tendency to make lines more direct, cutting across properties and fencing the same, and a somewhat heavier class of formation has been done. (This may have something to do with the decreased dividends being earned—making the line of a more expensive nature than was justified by the probable traffic.) Earthworks generally are very moderate, the grades and curves being adjusted to follow the surface of the ground as closely as possible. Permanent structures are well built, of concrete, brick, and steel. From an æsthetic point of view the track-maintenance is not first-class, weeds being allowed to overrun the ballast, overhanging trees are not trimmed, crop grows up to the line, structures are unpainted, &c.; but a good running top is maintained on the line, and relaying is not unduly delayed. Sleepers are all creosoted. The usual weight of rails is 48 lb., under heavy traffic 60 lb., and where electric traction is in vogue 90 lb. per yard.

The steepest grades are 1 in 25 (4 per cent.) on electric lines, and 1 in 40 to 1 in 33 (2½ per cent. to 3 per cent.) on steam lines. The sharpest curves are 30 m. radius; these, however, are rare. Generally the curves are not sharper than 50 m. (164 ft.; 2½ chains).

All the rolling-stock and locomotives are designed and constructed by the National Society, and are handed over to the lessee. Also workshops for repairs are erected by the National Society at convenient points, and are placed at the disposal of the lessees of the lines.

Generally speaking, the locomotives and carriages are well maintained. The locomotives are of simple design and moderate power. As the policy is to run frequent trains, usually five per day each way, for the convenience of travellers, it is not necessary to have great hauling-capacity. The carriages are light and cheap, there being practically no upholstery (seated much like our electric cars). The moderate speeds and the shortness of the trains make a light carriage possible. The trucks, as a whole, are of ordinary types, like our K, L, and U mostly, and all goods are transhipped from the vicinal-railway cars to standard cars at the junction-points with State railways. This work is done expeditiously by raising the vicinal line or depressing the standard line and bringing them close together, thus bringing the floors of both level and contiguous.

The cost of transferring sugar-beets, of which as much as 3,000 tons per day is handled at one station, is only 1½d. per ton. However, the general charge for transferring is 2½d. per ton for ordinary cargo.

On one line near Dinant, which carries china clay to a pottery-works and brings back manufactured china, unloading from one truck to another would be expensive one way and lead to breakages the other, and as a consequence a type of truck has been developed on to which the loaded standard wagons can be run, and so carried bodily to their destination. This type of car is used elsewhere for special purposes, but is quite the exception. (NOTE.—A very similar car is used in England, India, and elsewhere for the same service.)

Though a fast time-table is not aimed at, the trains are very punctual. Probably this is accounted for by the fact that in case of delay passengers may recover damages.

The passenger-fares are very moderate, being based on 7 centimes first class and 5 centimes second class per kilometre single, with a minimum of 2 kilometres. Returns are still lower, 11 and 8 centimes per kilometre, counting distance one way. As previously mentioned, the tariffs for each line are separately fixed, but, the following may be taken as a fair average of prices:—

Partial Loads.

(Per ton, with minimum of 100 km. = 2 cwt.)

30 centimes per ton per kilometre for 10 kilometres.

22·5	„	20	„
20	„	30	„
19	„	40	„
18	„	50	„
17·5	„	60	„
17	„	70	„
16·8	„	80	„
16·7	„	90	„
16·5	„	100	„