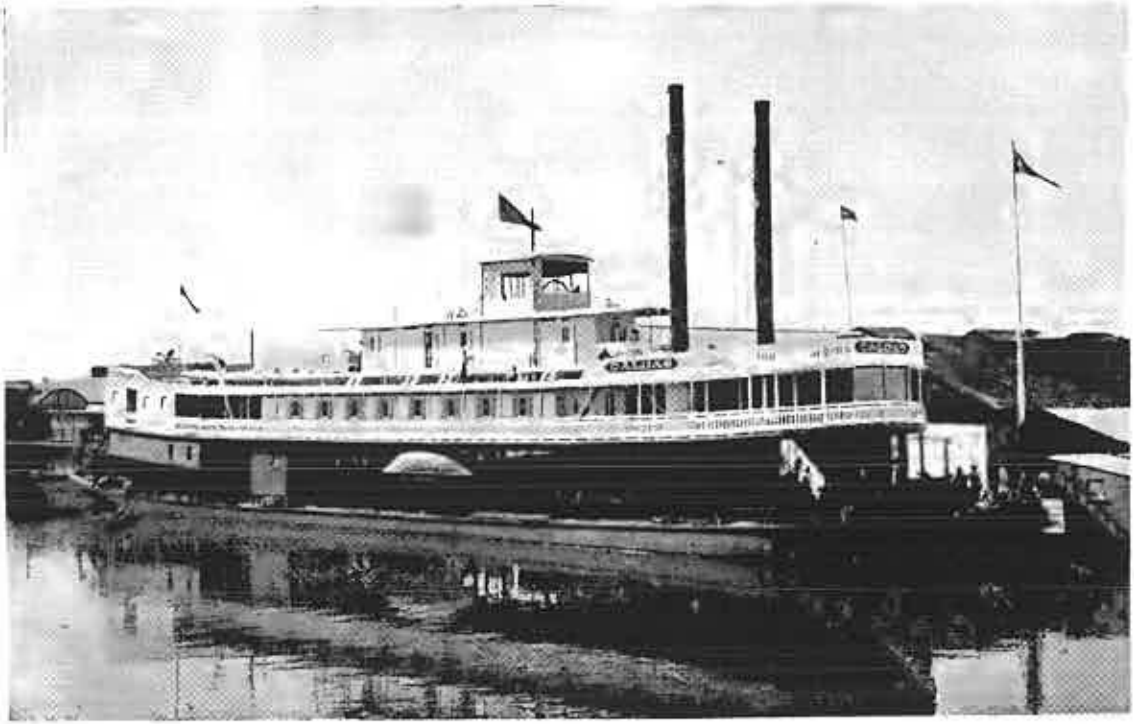
CHAPTER IX

INLAND COMMUNICATION AND TRANSPORT

ONE of the greatest needs of Colombia, if not indeed the greatest of all, is the provision of facilities for inland traffic. Not only is a large part of the country still practically unexplored, but even districts which are comparatively densely populated are often left in strange isolation owing to the lack of railroads and highways. It is this fact that makes travelling in the Republic slow and costly, and the transport of goods a matter of serious concern. No doubt the configuration of this very mountainous country with its deep valleys and rolling llanos, explains much of the present condition of affairs, because the engineering and financial problems to be overcome are considerable. Nevertheless it will be found, especially when the railroads and highways of the country are being examined, that past political history has had much to do with both the deeds of commission and omission, with the new era, therefore, we may justly look for greater wisdom and swifter progress.

We have already dealt with certain provisions for inland navigation, and meagre though these be, it will be found that the river system plays an almost predominant part in traffic possibilities when the country is viewed as a whole.

In regard to river traffic the MAGDALENA stands pre-eminent. In its course of about 1,060 miles (of which 930 are navigable), it traverses nearly three-fourths of



River Magdalena—Stern-Wheel Steamer "Caldas"

the central part of the Republic, and by means of its tributaries taps many of the most thickly populated of the agricultural and industrial regions. Unfortunately, although the fourth largest river in South America, it partakes for long stretches the character of a mountain stream. Broadly speaking, the river is navigable for large steamers from the Atlantic almost up to Honda, a distance of about 1,000 kilometres; for small steamers from above Honda to Neiva; for boats and rafts up to the confluence of the Paez. As a matter of fact, however, there are numerous obstacles to be met with. Much dredging and rectification of banks are required in the lower reaches before large steamers can enjoy a free and easy course all the year round. Real difficulties begin at Honda, just above which are the celebrated Fall and Rapids of that name. These cause most of the steamers to anchor a short distance below the port. For up-country traffic this stoppage generally takes place at La Dorada, where there is a short railway running to Honda and then on to Ambalema. By using this railway passengers avoid the Falls of Honda and the narrow straits of Colombaima, where the river races between high rocky cliffs. At Ambalema passengers and goods once more join the river, a short distance by small steamer being traversed before reaching Girardot, where the railway to Bogotá begins. The steamers continue up to Neiva, and then further progress must be made by canoes, or the peculiar raft-boats known as *Champans*. On the banks of the Magdalena are numerous ports, some little more than wharfs and warehouses. The river has also many tributaries. Soon after leaving

Barranquilla on the south bank is Calamar, the river port and railhead of the Cartagena railway. Just above, on the north bank, is Heredia, an important collecting depot of the rich agricultural Magdalena plains. Higher up, on the south bank, is the mouth of the Cauca. A regular service of steamers ply up the river from Barranquilla to Valdivia; also up a tributary of the Cauca, the Nechi, as far as Zaragoza. The Cauca is used on many of its stretches by both steamers and rafts, assisting in traffic between such towns as Cali and Cartago, but the bed is in many parts impassable owing to falls and rocks. Returning to the Magdalena we find on its north bank the river Cesar, which affords a waterway through fertile regions to the Valle Dupar and the Goajira Peninsula. Here is also the mouth of the partly navigable Lebrija, which runs south-east, steamers going as far as Estación Santander, *champans* continuing the voyage to Puerto Santos, where the pack-mule trail commences. Other tributaries useful as collecting and distributing channels are the Opon and Carare, opening up the country of Santander; the Sogamoso, tapping Santander and Boyacá and the Nare, traversing part of Antioquia. To return once more to the main stream of the Magdalena, Jesus del Rio and Zambrano are important as the coffee and tobacco depots of Bolivar; Magangué is the gateway to the cattle-raising plains of Corozal. From Puerto Wilches a railway is under construction to Bucaramanga, which district is also served by La Gloria, Bodega de Carmen, and Bodega del Sur. From Puerto Berrio a railway runs south-west to La Quiebra and is being continued to Medellin.

It has already been said that the navigation of the Magdalena is by no means easy, this is due to sand-banks, rocks, and at certain seasons lack of water. Consequently the service is apt to be slow and somewhat irregular, moreover, it is extremely expensive owing to the frequent transhipments In his report to the Board of Trade, Mr. G. T. Milne says : " With a view to improving conditions a canalisation tax is imposed on both exports and imports, the product being applied to the acquisition and upkeep of dredges." The work is carried out under the direction of the Minister of Public Works and a Canalisation Board. According to a recent decree the tax is as follows—

	Dollars Gold per ton
On imports of general merchandise	4 5
On national manufactures for consumption in the country	2 10
On national manufactures for export—	
On sawn or squared timber, sugar, rubber, minerals, hides, coffee, cocoa and salt ..	1.60
On timber in logs, and fibres . ..	0 60

In 1912 this tax yielded about 117,000 dollars gold, on an import cargo of 44,500 tons and an export cargo of 53,300 tons. Mr. Milne adds : " While the Canalisation Board probably does something to improve navigation, to deal effectively with the problem (which is stated to be getting more serious every year owing to the diminished amount of water in the rivers through deforestation) technical advice of the best kind available would be necessary, with presumably the expenditure of very large sums of money. At present canalisation works on an extensive scale might prove to be beyond the country's resources, although a loan, secured on the

revenue derived from the tax and expended by responsible foreign engineers and contractors, might greatly improve existing conditions. The first essential would be a thorough investigation of the problem by a competent engineer. If his report should be favourable to expenditure a loan could presumably be arranged on condition that the collection of the tax by the lending house was satisfactorily provided for In the event of the necessary works being deemed beyond the country's resources, the only solution of the difficulty would seem to be for the Government to assist such railway enterprises as would tend to facilitate communication between the littoral and the interior. Eventually a trunk line, linking up existing and projected railways, may cross the country from ocean to ocean ; but it seems improbable that a work of this magnitude will be undertaken in the near future."

Before discussing this and other aspects of the railway problem we must say a few words about the steamboat accommodation in the Magdalena, and also on the other navigable waterway systems of the Republic. That such facilities as the Magdalena offers should largely monopolise attention is explained when we realise that close upon 80 per cent. of the value of imports, and over 60 per cent. of the exports pass through the Customs of Barranquilla and Cartagena, and as only a small proportion of these goods remain in the two cities, or are distributed in their neighbourhoods by rail or carts, or transhipped to Santa Marta, it is clear what a preponderating part this river plays in the business life of the country. While there is a fair amount of competition in the provision of steamboat service, the two leading

organisations are a local company, the Empresa Hanseatica, and an English company, the Empresa Aliadas, both of which are managed by Colombian firms. The Hanseatica has a fleet of seven steamers of 1,269 tons in all, and the Aliadas twenty-nine steamers of over 6,000 tons. These steamers, and those of other owners, are flat-bottomed stern-wheelers, drawing little water and designed on the lines of the American river steamboats. A weekly express mail service to Bogotá, and intermediate services, are run by the Aliadas for a monthly Government subsidy of £1,000. Passenger rates and cargo freights are on a tariff approved by the Government, rebates being allowed on certain classes of goods. Thus the charge for carriage of general merchandise from Puerto Colombia to La Dorado, thence over rail to Arranca Plumas, then by river, and again by rail to Bogotá is about £12 per ton, calculated thus in gold dollars per ton—

Railway freight, Puerto Colombia to Barranquilla	3 63
River freight, Barranquilla to La Dorado	14 0
Sundry charges Manifest and Stamps	1 60
Loading river steamer	60
Canalisation tax	2 0
Customs despatch	20
Cartage	10
Commission	1 20
Through freight, La Dorado–Bogotá	35 35
	58 68

The through rates from Cartagena are the same. It should be noted that there is a rebate of 25 per cent. on the river freights for agricultural and mining machinery,

tools and wire netting, and 50 per cent. on railway material.

Mention has already been made of the CAUCA, which taps part of Bolivar, Antioquia, Caldas, El Valle and Cauca. It is navigable from the Magdalena, near Magangué, to Rio Nuevo; but thence to the city of Antioquia the river is impassable. Above that there is a considerable reach of fair waterway, a busy traffic being kept up from a little above Cali and rather beyond Cartago. The Nechi and other tributaries bring additional traffic to this river, giving access to districts lying eastward.

The SINU, draining the low-lying cattle and sugar plantation lands of western Bolivar, is open to steamers from the Gulf of Cispata to Monteria.

Going west, there is the Atrato, falling into the Gulf of Darien and navigable as far as Quibdo. Plans have been prepared for a short canal from Cupica Bay, by which this river would be given an outlet into the Pacific.

While the eastern slopes of the Cordillera and wide valley of the department of El Valle is served by the Cauca, the western slope and coastal forest regions are served by the San Juan, which is open for steamers from Buenaventura to San Pablo, and for small boats to Dipurdu. There is a project to join the San Juan with the Atrato by canalisation, which would also have the effect of giving direct water communication between the Atlantic and the Pacific. But the engineering difficulties are very considerable and the probable cost, in view of the class of possible traffic, appears prohibitive.

The PATIA drains the south-western border of Cauca

and the western part of Nariño, flowing into the Pacific not far from the Ecuadorian frontier.

On the eastern side, the META rising in the Cerro del Nevado (where snow-capped peaks, 14,140 ft. above sea-level, feed enormous glaciers), lying to the south-west of Bogotá, skirts the foot-hills of the Eastern Cordillera, and, flowing through the great territory of Meta and the southern border of the Comisaria of Arauca, which is tapped by tributaries, joins the Orinoco at the Venezuelan frontier, and affords an outlet into the Atlantic through Lake Maracaibo.

The GUAVIARE river rises on the southern slope of the Cerro del Nevado, and just below Uribe is joined by the Ariari, which rises in the foot-hills of the Cordillera de Sumapaz and passes by the town of Arana. The Guaviare continuing with a north-eastward trend, cuts the Meta territory almost in two and flows into the Orinoco. One day it may become of great importance. The Yupura, which flows right through the Caqueta territory, tapping it right and left by means of many tributaries, and the Putumayo, south of the Caqueta, both of which flow into the Marañon, are waterways whose usefulness are bound to be largely developed in the near future.

Other rivers are navigable, though they are generally tributaries of the systems already mentioned. Some particulars of these will be found in the chapter on *Ports and Harbours*.

RAILWAYS.—For the moment the railways of Colombia present an extraordinary absence of systematic development. There are fourteen lines, ranging from 15 to 55

miles in length, dotted about the country, few having any direct connection with any other. This seemingly haphazard scattering of short stretches of railways in isolated districts is to a considerable extent the result of the old Sovereign State regime, when there were seven or eight Governments each ambitious to enter into the civilised world's race for railway construction, but without much regard to what their neighbours were doing, or to the needs of the Confederation as a whole.

Two of the obviously necessary lines are those of the *Barranquilla* and the *Cartagena* railways, both owned by English companies. The first is 15 miles long and links up Puerto Colombia with Barranquilla, and has a capital (in shares and bonds) of £300,000 The second runs between Cartagena and Calamar on the Magdalena, a distance of 65 miles; it has a capital of £1,350,000. The Barranquilla railway carries four times as many passengers and rather over twice as many goods as the Cartagena line. Both perform a useful purpose, yet they entail an expensive system of transhipment.

Santa Marta Railway. Santa Marta, whose port is regularly visited by the Elders-Fife line as well as the ships of the United Fruit Company and the Hamburg American line, is the starting-point of a railway, owned by the English Santa Marta Railway Company, Ltd. (capital, shares and bonds, £506,370), which runs to Cienega on the river Fundación. It has 72 miles of track, and is moreover fed by about 10 miles of short private lines serving banana plantation estates. There is a project to carry the line to Banco on the Magdalena, near to its confluence with the Cesar. This would add about 135 miles to the line.

On the Pacific coast the *Cauca railway*, which was started forty years ago and has had a chequered career, is now in the hands of a local company, the Compañía del Ferrocarril del Pacífico. It has a paid-up share capital of 854,000 dollars gold, and a bonded debt floated in London of £119,200 Its line runs from Buenaventura towards Cali, which it has nearly reached, about 83 miles being open and in operation.

Harking back to the Magdalena, at a point known as Puerto Wilches we find the *Great Central Northern Railway Company, Ltd* (an English concern with a share and bond capital of £1,001,760 , the Government of Colombia holding £50,000 of shares), constructing a line to Bucaramanga, of which over 12 miles are completed. This company secured the right to prolong its line from Bucaramanga, so as to form a junction with the Ferrocarril del Norte.

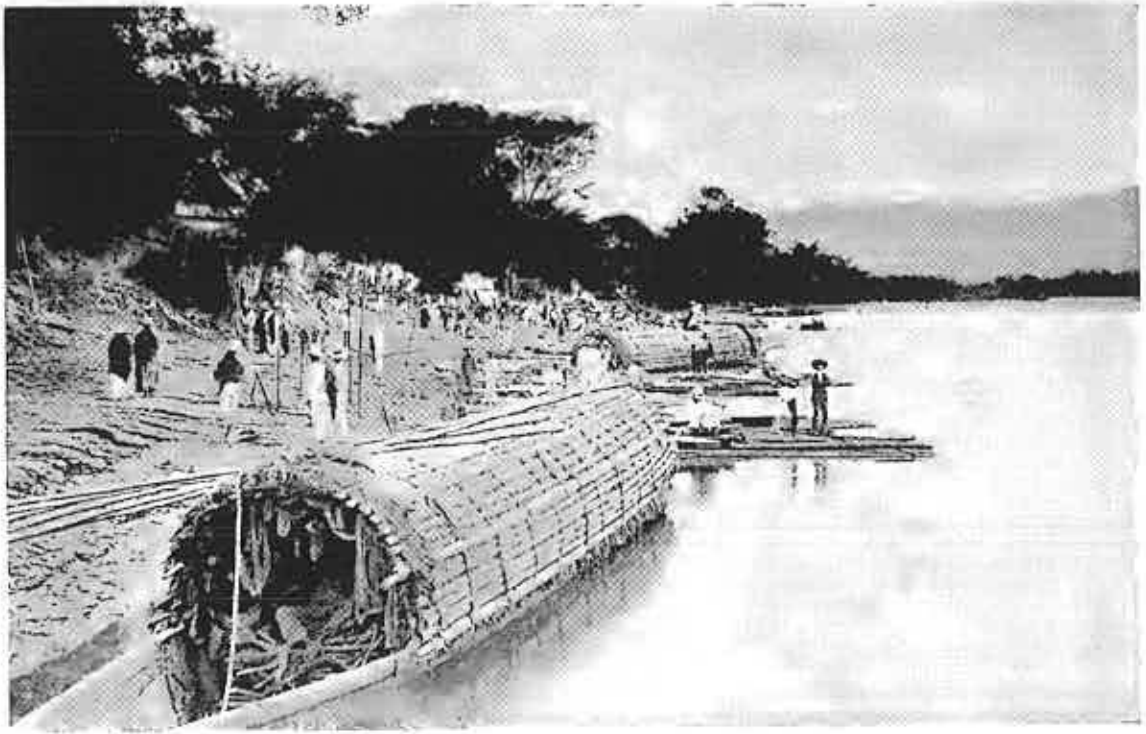
Higher up the river, on the west bank, is busy Puerto Berrio, where commences the *Antioquia Railway* (which is owned by the department). It is now nearly completed as far as Medellin, a distance of 120 miles. Practically an extension of this railway is being run from Medellin through Amaga to the Cauca river. This extension now reaches Caldas, 19 miles distant, and still has to be carried another 23 miles. Mr. Milne states that freights on this railway, from Puerto Berrio to Cisneros (109 kiloms.) are 20 cents gold on general merchandise, 18 cents on cotton yarn, petroleum, flour and salt, and 15 cents on machinery, galvanised iron, wire fencing and steel, all per ton-kilometre.

Some distance farther up on the west bank, just below

Honda, commences the *La Dorada Railway*, owned by the Dorada Extension Railway, Ltd., with a capital of £700,000. As elsewhere already explained, three of its Stations, La Dorada, Honda and Arranca Plumas are on the Magdalena, and there is an extension to Ambalema. Its chief reason for existence is to act as a portage, carrying all passengers and goods traffic between La Dorada and Ambalema, thus avoiding the impassable rapids about Honda. It also receives much traffic from Manizales and elsewhere, which comes over the Quindio pass road. The main, or river skirting line, is 31 miles long, and the extension 51.

Still higher up, at Girardot, commences a narrow gauge railway, owned by the English *Colombian National Railway Company, Ltd.* (capital £900,000, one-third owned by the Government, and a bonded debt of £1,480,000).

The 82 miles of the Colombiano National Railway end at Facatativa, whence another railway of 24 miles starts for Bogotá across the plateau. It carries over 70 per cent. of traffic to and from the Sabana of Bogotá, though up to 1913 more than half of the total found its way down to the valley by way of the Honda mule track and the Camboa cart road (Bogotá itself is the centre of four railways serving the Cundinamarca plateau. Besides the *Girardot line* there is *the Sabana* (practically owned by the Government), which has 25 miles out, to Facatativa. The *Ferrocarril del Norte*, owned by the English Colombian Northern Company, Ltd. (capital, shares and bonds, £780,000) has a 29 mile line to Zipaquira. It has made over its concession



The Port of Girardot, on the Magdalena

for the construction of an extension from its terminus to Chiquinquira, where it would connect up with an extension from Bucaramanga, to the Colombian Central Railway Company, a short branch (9 miles) connecting Zipaquira and Nemocon. The *Ferrocarril del Sur*, the property of the Government, runs from Bogotá to Sibaté, a distance of 19 miles. It is proposed ultimately to link up Girardot with Ibagué, in Tolima. Work has already been commenced on this Tolima Railway, which is the property of the Government, from the Ibagué end, about 15 miles being in working order.

North-east of Bucaramanga, in Norte de Santander, is the go-ahead town of Cucuta. In 1888 its merchants, with the assistance of the Municipality which owns a third share, constructed a railway 37 miles long to Puerto Villamizar, on the Zulia river; subsequently an extension of 10 miles was made to the Venezuelan frontier, joining the town of Chiguara.

Such is the railway position to-day. The Government is credited with projects to link up these various isolated lines. The *Buenaventura line* to Cali would be carried north, passing through various towns, to join the Cauca-Medellin line and so through to Puerto Berrio. Thence it would turn south to join the Dorada line, where a branch would run to Tocaima on the Girardot line, thus linking up with Bogotá. From Bogotá the Norte is to be prolonged to Chiquinquira, forming a conjunction with the Bucaramanga line to Puerto Wilches. A line across the Quindio would connect Cartago with Girardot, and a branch line from Medellin would run to the Gulf of Uraba. A branch would run from Girardot to La

Plata, while the Buenaventura railway would be run south through Popayan and Pasto to the Ecuadorian frontier. To complete the network, a branch would be built from Bucaramanga to Cucuta. Thus only the three Atlantic lines would be left unconnected.

A free hand has been reserved by the Government in the matter of railway construction. A law passed in 1892 gives power to the Executive to grant concessions without reference to the Legislature Subsidies may be granted in the form of not more than 300 hectars of public lands, plus a sum not exceeding 10,000 dollars gold, payable in 6 per cent. amortisable bonds, per kilometre open to traffic; or a guarantee for not more than twenty years of interest not exceeding 7 per cent. on capital actually invested, and not exceeding 30,000 dollars gold per kilometre open to traffic. This guarantee ceases if and when the railway succeeds earning in three consecutive years a profit sufficient to pay the guaranteed interest A concession may be given for as long as 100 years. As a rule, the Government reserves power to purchase the railway at any time after fifty years on valuation, and after seventy-five years on payment of 50 per cent. of actual value

It will be readily gathered from what has been said above that when all allowances have been made for river traffic and railway service, the commerce of the country as a whole is still chiefly dependent on ordinary land transport. While in a few districts, mainly in the immediate neighbourhood of a few of the big cities, there are good high-roads, available for public and private motor traffic, and a rather larger mileage open to heavily built carts, most places are only accessible for foot

passengers, pack-horses and mules, over more or less well defined tracks.

ROADS.—On the Sabana of Bogotá some excellent highways are to be found. The most notable of these is the Carretera Central del Norte, which unites Bogotá to Santa Rosa in Boyacá. It passes through the municipalities of Usaquen, Chia, Cajica, Sopo, Tocancipa, Gachancipa, Nemocon, Suesca, Choconta, Villa Pinzon, Boyacá and Santa Rosa, a distance of 200 miles, and is traversable by carriages and motors. Next in importance is the Carretera de Cambao, uniting Bogotá with Cambao some 130 miles away on the Magdalena. These are supplemented by a number of smaller roads and bridle paths. In Antioquia the good cart roads also radiate from the capital. There is the North Eastern road to Santo Domingo, the southern to Caldas, and others to Envigado and La Quiebra. In Atlantico the only cart road is that between Barranquilla and Usiacuri, about 30 miles long. In Bolivar there are projects for highways uniting Barranquilla with Calamar and Turbaco, and another between Monteria and Magangué. In Boyacá fairly good branch roads from the great North Road unite Quetame with Sogamoso and so with the Magdalena, the other running out to Carare. Over a mile of the new road to unite Samaca, Sachica and Chiquinquira, has been constructed. In El Valle a road of some 40 miles unites Buga and Palmira. In Norte de Santander the Carretera Central del Norte is under construction, and is making slow progress. In Santander the only cart road is between Bucaramanga and Florida, a distance of about 15 miles. It is not a long list.

Apart from these are several well-known and much frequented tracks, some traversed by horses and mules, others only possible for foot passengers. The most famous of these is the [1]Quindio road, which may be entered from Girardot on the Magdalena, touching at Ibagué and then over the Central Cordillera by the Quindio Pass into the Cauca valley to Cartago. Another ancient and much frequented road is that from [2]Neiva on the Magdalena, across the paramos of Guanacas and Coconucos on the Central Cordillera to Popoyan. A track is being made between Quibdo, capital of the Choco territory, to Bolivar.

Many of these tracks are difficult at the best of times, and even the good ones are often impassable in the rainy season. Mules are preferred to horses, as being hardier and more sure-footed. For pack mules a load, or cargo, is limited to two packs of from 60 to 70 kilogs. each, according to the route to be traversed, and for light but bulky loads 300 cubic decimetres is the limit. For the more difficult tracks and passes smaller and lighter packs are necessary as they have to be carried on men's or women's backs. In all districts mule and carrier contractors will be found, with their strings of well trained beasts or human porters.

It is obvious that for such transport as this careful packing is essential, not only as regards size and weight, but the strength of the cases or bales and the outer waterproof covering.

In the past very serious mistakes have been made in connection with the sending out of heavy merchandise. While wonders have been done in transporting machinery

into the interior, for instance railway material to the Bogotá plateau before the days of the Girardot and cart roads, on the other hand it has often happened that expensive mining and milling machinery, sent out from Europe, has had to be abandoned in the forest as being too bulky and heavy.