

ON WEST AFRICAN RAILWAYS

BY FRED SHELFORD, B.SC. (LOND.), M.INST.C.E., F.R.G.S.

Delivered at the Ordinary General Meeting of the African Society,
on April 8th, 1902.

I AM one of those people who think that the world would go along more smoothly if we all worked harder and talked less, and I am certain that in the case of a Civil Engineer the wisest man is he who keeps his ears open and his mouth closed ; takes in all that he sees and a certain amount of what he hears and expresses his opinion only when called upon.

I am acting against these principles this evening in giving you a Lecture upon West African Railways, but I have my reasons for doing so,—Firstly, I have been honoured with an invitation from the African Society to say a few words about West African Railways, and to show some views of the works with the aid of a magic lantern, and I am most anxious to assist in any way I can, however humble that way may be, a Society which has before it I am convinced a future as great as its scope and which is already showing evidence of being a great success.

Secondly with regard to these West African Railways and our work upon them we have no secrets, we have nothing to conceal, and there is nothing of which we are ashamed. So far is it from a fact that we wish to conceal anything with regard to these works that the exact opposite is the case. And I wish that people about to write articles in the Press or to make speeches at meetings of shareholders of Gold Mining and other companies criticising West African Railways and everything and everybody connected with them would be good enough to call at our office beforehand and learn the true facts of the case. They would be received I hope with courtesy and all information they required

would be given to them and they would be saved from writing inaccurate articles and making perfectly absurd speeches, but then of course I fear that some column of a newspaper badly in want of copy might remain empty and some obscure person might have to remain without an advertisement of which he was perhaps in need.

You will be glad to hear that that is the only piece of temper I am going to show all the evening. There are many controversial matters connected with West Africa as well as with the Railways in West Africa and almost any of these might be taken and I hope will be taken as a subject for a discussion to be held under the auspices of the African Society on some other occasion, when perhaps I may have a chance of meeting our critics in fair and open fight.

It may seem to you curious that a lecture upon West African Railways should be of more interest than a Lecture upon any other Railways. You may say that you are all familiar with Railways and that there is little more to be said about them. Well the only reason that Railways in West Africa are of unusual interest is that in the case of each of the three important lines we have had to approach a new unhealthy often swampy country covered with forest and have had to start from the commencement of all things without the assistance of any skilled workmen of any kind and having to carry with us every appliance from an engine to an envelope, from a station to stationery.

More particularly is this the case on the Gold Coast where we had to land upon an inhospitable shore at a place where the landing was extremely difficult and where there was no accommodation or convenience of any kind.

This is of course work to which the civil engineer is accustomed, his profession being that of converting the great resources of nature to the use and convenience of man, but the conditions are very unfavourable when expedition is required.

On the arrival of our Engineers upon the Gold Coast the natives were, of course, most interested in the white men and most pleased to hear they were going to make a railway which would make them all rich men and they said they would be glad to sit down and see the railway made, but on being informed that they themselves had got to do all the hard work upon the

Railway they changed their opinions and did not think that Railways were such nice things after all.

I will now show you some views of the three railways which have been made, or are being made in the three Colonies of Sierra Leone, Lagos, and the Gold Coast, and if I should succeed in interesting you in these important undertakings for a short time I shall have had my reward.

I will if you will allow me show you the views of one railway, and then refer to some important question such as cost before proceeding to the next and in this way combine amusement with instruction.

In order to reach West Africa you leave Liverpool on an Elder Dempster Steamer, about which a good deal might be said, but I will merely mention that Messrs. Elder Dempster are in possession of a fine fleet of steamers, and the steamers leave Liverpool something like eight times a month.

The first West African Colony we pass is the Gambia, which, although interesting in its way is not of interest to us to-night, because it is small and situated on the banks of the Gambia River, and has at present no need for railways.

SIERRA LEONE RAILWAY.

About a fortnight after leaving Liverpool we reach the Colony of Sierra Leone and the Sierra Leone Railway is about the first object to be seen on landing.

As you have now seen some views of the Sierra Leone Railway, I may mention as promised a most important point about the West African Railways—*i.e.* their cost. You may have seen in articles in the papers that the Railways in West Africa which the Colonial Governments have constructed under our supervision have been very expensive as well as slow. I will come to the question of speed later on. It is I believe according to these authorities a recognised and accepted fact that the Gold Coast Government Railway has cost or is costing about £20,000 a mile. This railway is still in progress and its exact cost is not yet known, but I can give you some facts about the Sierra Leone Railway. An estimate was once made by a very eminent Engineer some years ago for the Sierra Leone

Railway and he placed it at £10,000 per mile. A very well-known and first class contractor (we will name no names) expressed a desire to make it at £8,000 a mile. It may interest you to know that the first section of the Sierra Leone Railway from Freetown up to Songo Town, a distance of only 32 miles, including the high steel viaducts you have seen and of which there are 11 in the first 18 miles, workshops, rolling stock, quarters for the engineers and working staff and including the training of the native staff as guards, porters, etc., and the hundred and one accessories of a complete railway was constructed for just £6,000 a mile. The second section of the line only 23 miles in length, cost £4,200 per mile, while the extension of the railway now on hand to Mattru, which is now almost completed, a distance of 80 miles, is likely to cost only £3,500 per mile, including all rolling stock and accessories.

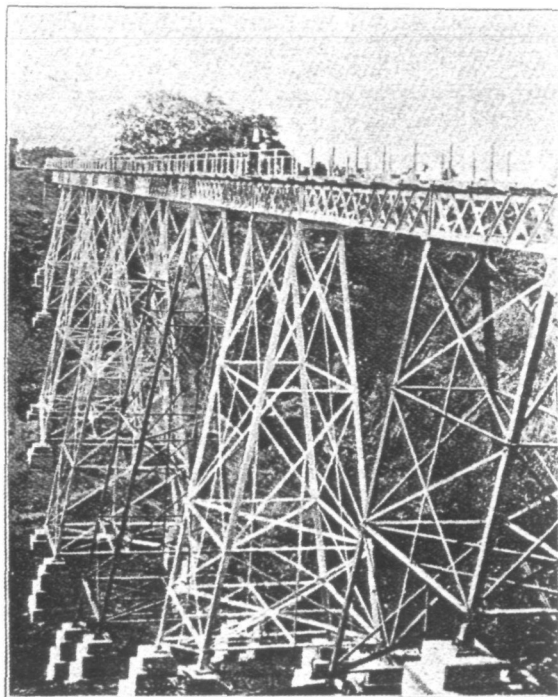
This must be compared with anything at all comparable, and the Congo Railway which was built by the Belgians in the Congo Free State further South and which is of the same gauge (2 ft. 6 ins.) as the Sierra Leone Railway naturally occurs to one.

The cost of the Congo Railway including everything was exactly £10,400 per mile.

I may as well give the cost of the Lagos Railway (3 ft. 6 ins.) now I am on the subject. This line was opened as far as the Ibadan in March of last year, a distance of 125 miles, at a cost of about £7,000 per mile including all rolling stock, quarters, etc., as before.

The cost of the Gold Coast Railway, which is generally accepted as being £20,000 per mile, I am unable to give you, because it is incomplete, but I think when finished including the steel pier and other harbour works at Sekondi, the enormous station at Sekondi not forgetting the Hospital and the quarters for the staff it will not amount to more than £8,000 per mile. This, however, is not the cost of the railway only, and I find the cost of the Tarkwa-Kumasi Extension without the terminal and harbour works is expected to amount to £6,300 per mile, which includes the cost of importing some 12,000 labourers and the cost of feeding them from England.

It is of interest to mention that the Uganda Railway which is



SIERRA LEONE RAILWAY.

The "Maroon" Viaduct on the Sierra Leone Railway (2 ft. 6 ins. gauge), 80 feet high and 350 feet long, constructed on steel trestles with concrete foundations.

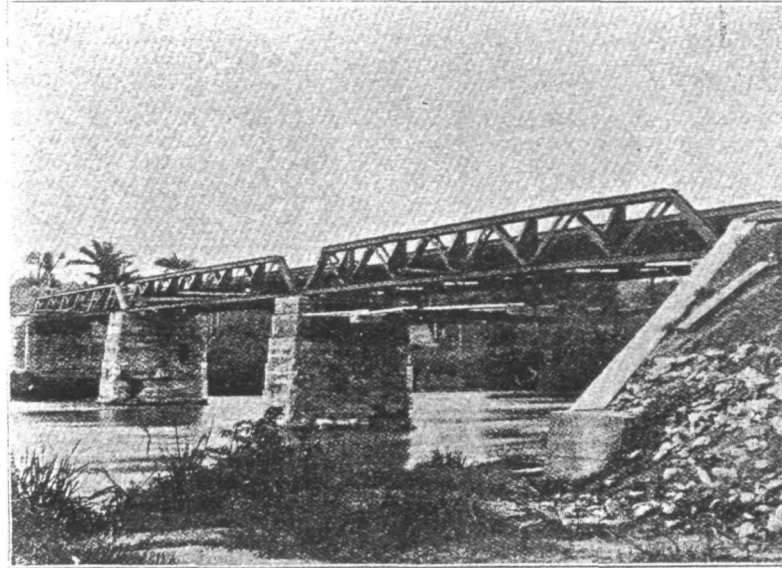
There are eleven such viaducts in the first twenty miles of line.



GOLD COAST RAILWAYS.

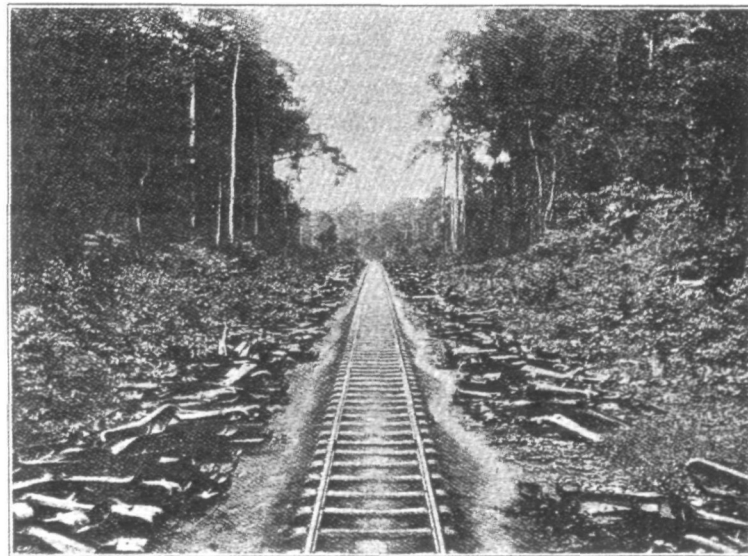
An Embankment in course of construction. The whole of the earthwork is carried on the heads of the natives, and it is an economy in transport to excavate earth from "borrow pits" alongside of the bank to be made.

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LAGOS RAILWAY.

A Bridge on the Lagos Railway, over the River Oyan. The piers have to be made exceptionally strong to withstand the swift current and floods during the wet season.



LAGOS RAILWAY.

A Long Straight on the Lagos Railway, showing some steel sleepers lying alongside. It is curious to note that it is more economical to use a steel sleeper made in England than to cut down and prepare sleepers from the timber growing in the forest.

metre gauge much the same as Gold Coast and Lagos (3 ft 6 ins.), but which passes through an open and healthy country with a good port as compared with our dense forest, extremely bad climate and very bad ports, cost £8,505 per mile according to the last parliamentary estimate, and I understand that more money yet will be required.

The Cape Government Railways cost about £10,000 a mile, and it is not without interest to note that the average estimate (so often exceeded) for light railways in England with all the advantages of labour and materials in a recent year came to £5,780 per mile.

I cannot conceive a more convincing answer to accusations of excessive cost of the West African Railways.

LAGOS RAILWAY.

We will now steam past the Gold Coast and proceed to Lagos, situated 1,400 miles from Sierra Leone.

Of the works in this Colony I can show you, I think, some interesting views.

The map on the wall shows the railway itself to a small scale, and shows that it has at present only been carried about one-third of the way to the Niger River. I should explain, in order that you may understand the views that you are about to see, that the town of Lagos is situated upon an Island inside the Lagos Lagoon. The town of Lagos used to be the headquarters of the West African slave trade and it owes its origin to this. The population of Lagos is something like 60,000 people, but as it is separated from the Mainland, the first work which the Government wished to have done was to connect the Island with the mainland by means of a bridge. These bridges are three in number, the first goes from the Lagos island to a small island called Iddo Island, on which is the terminal station of the Lagos Railway. This bridge is called the Carter Bridge and is a road bridge, and from Iddo Island to the Mainland is another road bridge called the Denton Bridge, alongside of which is the railway bridge. You will see therefore that to reach a point in the Hinterland of Lagos is a somewhat complicated matter, but for cargo it is worse. The ocean-going steamers have to go

past the mouth of the Lagos Lagoon and call at Forcados and there cargo has to be transhipped from the ocean steamer into a small branch boat, drawing nine feet of water, which then has to go back and cross the bar of the Lagos River and proceed to Iddo Island to be unloaded.

The railway connects Lagos itself which has a population of 60,000 people, with the interior and has many small villages along its entire route, but the other principal places served are Otta at 20 miles (population 2,000), Ifo, Arigbajo, Papa Alanto, Abeokuta (population 150,000) and Ibadan (population 180,000).

Having now shewn you some views on a railway 125 miles long in the Lagos Colony, I will put on the screen a slide showing this railway with regard to Lagos, Northern Nigeria and Southern Nigeria which together form a solid block of British Territory. You will see that the railway forms a quite insignificant mark upon the map of these Colonies.

I will not enlarge upon the possibilities of the territory, that you see before you, and will merely mention that this vast extent of country is about 360,000 miles in area, about one-third of the size of India, has a fertile soil in almost all parts and probably has great mineral resources and above all is fortunate in possessing in the the Hausas in Northern Nigeria a people who have already shown themselves to be industrious and amenable to European civilization. Kano is a commercial centre of great importance, whence caravans proceed to Algeria and Tripoli in Northern Africa occupying as long as a year or so in the journey. In Southern Nigeria where the Aro Expedition is now operating we have a vast country with a very fertile soil and abounding in palm oil, rubber, and other tropical products, with a large but still wild population, soon however to learn I hope to form a useful addition to the population of the British Empire.

Ladies and Gentlemen with these utterly inadequate remarks I pass away from this vast portion of our Empire beyond the seas and I would ask you how long you consider that such a country will remain almost unknown and almost the Darkest Part of Darkest Africa.

GOLD COAST RAILWAY.

I will now refer to the Gold Coast Railway which has, during the last eighteen months, caused considerable interest on account of the industry in gold mining which has recently sprung up in the Gold Coast Colony. It is also the cause of the issue of a Loan by the Gold Coast Government in which I hope you have all taken shares. The Loan was for £1,035,000 issued at 91, bearing interest of 3 per cent. This appears to be a good investment and is really better than it looks for reasons I cannot mention here. Unfortunately the photographs I have of the Gold Coast Railway are somewhat few and poor. The water at our headquarters at Sekondi is scarce and bad in quality and it is difficult to get good photographs of the works, and moreover the whole country through which the Railway runs is covered by a large forest and in the whole length of the line there is not a single view to be had of any extent. I will, however, show you what I have. The Cartoon on the wall shows the railway now in course of construction.

I must particularly ask you to note that although this railway forms one continuous line yet this work is in reality two separate undertakings, viz., The Sekondi-Tarkwa Railway which was originally to be constructed and was only authorised to be greatly extended upon being guaranteed by the Ashanti Goldfields Corporation.

The other surveys and proposed railways are shown upon the Cartoon (explained).

To return to the Sekondi-Kumasi Railway, I should like to impress upon you that the work carried out on the Gold Coast is on a large scale and that it has been much hampered by difficulties of every kind. Unlike the Colonies of Sierra Leone and Lagos, the Gold Coast has no port or harbour worthy of the name. The harbour at Sekondi is the best we could find but it is, in the proper sense of the word, not a harbour at all. It merely consists of a portion of the shore which receives a certain amount of shelter from a projection of rocks. It has a sandy beach and the steamers cannot approach nearer than about one mile from the shore and cargo has to be transhipped into surf

boats and lighters which cannot enter the bay except at half tide or over.

On landing at Sekondi you get a fair idea of the enormous number of accessories which go to make up the terminus of a railway in an undeveloped country. The area of Sekondi Station is about the same as Euston Station of the London & North Western Railway and here will be seen the bungalows of the Staff, a hospital on the top of the Hill, which is at the disposal not only of the staff of the railway but of all the labourers that work upon it, and of all the gold mining Companies' employees who care to make use of it. There is also at Sekondi a Recreation Club, which organises sports and cricket matches at intervals and has a billiard room in a special building, all of which we provide in order to add to the comfort of the engineers employed on the work. I may add that it is being seriously considered whether we should not put up a church at this place.

I will now be bold and refer to another point which seems to be of great interest to those connected with West Africa, viz., the speed of construction of the West African Railways—a question which I know has received a considerable amount of attention. I hope the slide now on the screen may serve to illustrate my remarks. (Explain curves.)

In the case of the Sierra Leone Railway you will see that after some time had been spent in the construction of headquarters, erection of workshops and other preparations, the construction went steadily forward, and the rate of construction steadily increased until the last section of the railway has been constructed at the rate of about 6 miles a month. As the construction of all these railways has to be carried out from the one end only, I do not think that this rate will ever be much exceeded in West Africa, except in a healthy and open part of the country. The Sierra Leone Railway received a great number of interruptions during its construction, such as the Hut Tax Revolt in 1898, which caused all the Engineers to retire into Freetown, the labourers to be scattered, and the railway to be left at the mercy of the enemy.

A military expedition was sent up at the end of 1898 which again caused interruption to the construction of the works as our

labourers were taken away in order to serve as carriers for the troops. You will however see by looking at the diagram that when we are left alone the construction of the railway attains a speed of some 6 miles a month. The Lagos line also shown on the diagram also suffered from severe interruptions. The disturbance with the French in the Hinterland caused the labourers to be taken away to serve as carriers to the troops and stopped the progress of the works for some time at the end of 1897. You will, however, again see that when the disturbances ceased the rate of progress reached 5 miles a month as shewn on the diagrams.

Amongst the many causes which tend to prevent the rapid execution of works in West Africa, I should like to mention first an event like the engineering strike in this country in 1898 which caused engines, carriages and wagons on order for some of the West African railways to be kept back for a space in some cases of one whole year.

Another example which has occurred quite recently is the wreck of ships conveying materials for the construction of railways, which have been carefully timed to arrive when required. You may have heard of the total loss of the ship called the "Lagos" which occurred about Christmas time and which was filled with rails, sleepers, and other materials for the railway.

Another incident which occurred within the last few weeks was the grounding of the "Cabenda" in the Gambia. She also was filled with materials for the railway, and in order to get her off a certain amount of material had to be thrown overboard and the assistance of several other ships also filled with materials had to be called in to help the "Cabenda" off the mud, thus delaying several ships at one time.

As it is necessary to carefully arrange the weekly shipments of materials in small quantities in order to prevent any overcrowding at the termini of the railways, but at the same time to avoid hampering the speed of the works, it may be guessed how vexatious these interruptions are.

With regard to this question of speed I beg particularly to call your attention to the fact that a delay of the kind mentioned does not bear simple interest but compound interest with a vengeance.

In the case of the Gold Coast Railway I will point out to you the almost innumerable causes of delay which have occurred. (Explained.)

When the work was commenced upon the Tarkwa Railway in 1898 the people of the country, the Fantis, refused to come forward at all except in very small numbers. The Railway only being a small line, some 40 miles in length, it was not worth while to organise the importation of labourers on a large scale, and the then Governor of the Gold Coast, Sir Frederick Hodgson, was particularly anxious that the Railway should be constructed by the natives of the Gold Coast and discountenanced the importation of labour from other parts. The consequence was that the labour on the Gold Coast line fell at one time to as low as 600 men, a number absurdly inadequate to carry on the works at all.

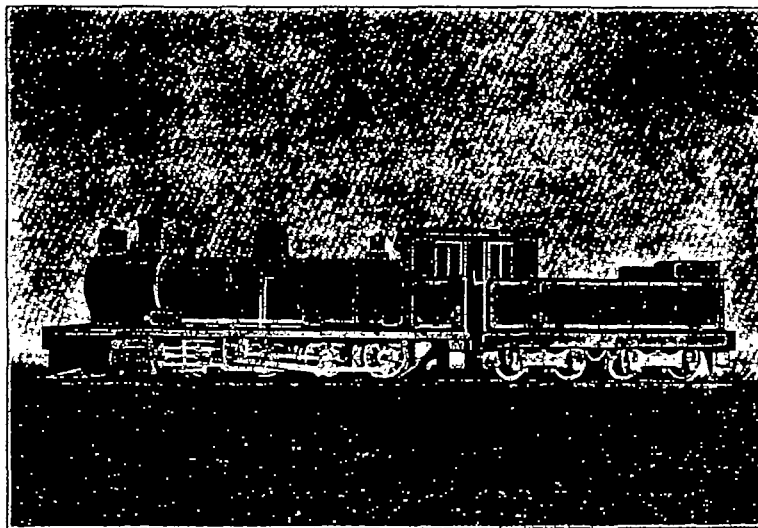
It was not until the Tarkwa-Kumasi extension was authorised in 1900, that it became obvious to the Governor that men must be imported to the Gold Coast if the project was to be carried through. The matter was therefore gone into and schemes for importing labourers from almost every part of the world were carefully considered. It was however decided that work in West Africa ought to be carried out by the West Africans themselves, as West Africa was perfectly capable of supplying any amount of labour. The colony of the Gambia was asked if they had any labourers to spare and promptly replied that they had not, but some 1,500 men were got from Sierra Leone, but the Governor of Sierra Leone thought this was against the interests of the Colony, and put a stop to any further exportation, although the men were, as a matter of fact, anxious to come, as they had become used to the work in their own country. The Government of Sierra Leone has of course to consider the interests of their own Colony. In the colony of Lagos the people were not anxious to come at first and it was only after eighteen months' effort that any of these labourers were induced to come to the Gold Coast in considerable numbers. Eventually however a large number were obtained on yearly agreements, but I regret to say that this source of labour has now been closed to us on account of the action of the Government of that Colony passing an Ordinance which places a tax upon every

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GOLD COAST RAILWAYS.

The heavy work of clearing is an obstacle to progress on the Kumasi Railway. This is one of many trees which have to be cut down before the work of construction can commence. A native can be seen beneath the tree.



GOLD COAST RAILWAYS.

One of the new powerful 8-wheel coupled Locomotives on the Kumasi Railway. To protect the European drivers from the sun and rain the cab is made roomy, and is fitted with a double roof. The engine also has a cow-catcher, and large head-light in the American style.

man exported. The Gold Coast, therefore, seems to be left to its own resources in the future in the matter of labour. I am, however, glad to say that during the last six months the natives of the Coast, the Fantis, have, after some years' careful consideration, come to the conclusion that they might do a little work on the railway, and the total number of men now engaged on the railway is no less than 12,000 men. It is interesting to note that these natives, who are of the most uncivilized kind, have to be used as station masters, guards, porters, etc, white men being too expensive to be employed on any such work.

The question of labour in West Africa is of some interest, but I cannot go into that now but will merely say that in the case of Sierra Leone the Mendis took to the work well and we had few complaints to make against them. We have had about 5,000 of them employed.

At Lagos the labour has been abundant and there were at one time over 10,000 men employed on the Lagos Railway alone. Most of them are Egbas and Yorubas, a strong and active race, but, like natives of other tropical parts, not over anxious perhaps to exert themselves.

(Explain curves of Gold Coast.)

The diagram on the screen shows the progress of the Gold Coast Railway, and the various stoppages due to want of labour, the Ashanti Rising, and the very wet seasons, and other causes, but it will be seen that after the extension beyond Tarkwa was authorised and more labour was obtained, and after the Ashanti War was over, and after the terribly wet season of 1901 was over, in fact when at last the conditions became more reasonable, the progress became very good, and in the last 12 months the heavy clearing of the dense forest has advanced no less than 80 miles, and the rails 45 miles.

The difficulties upon the Gold Coast have been extraordinary. The survey of the line had to be carried through a quite unknown and impenetrable forest, every yard having to be cut through tree bush, and this means not only every yard of the railway itself, but every yard of the hundreds of miles of trial lines and cross sections which are necessary to determine the best route for the line. The survey of the extension was begun in 1900, immediately the line was authorised, but it was broken

up by the Ashanti rising which drove in the advance surveyors. The next dry season no less than 27 white engineers and 2,000 natives were put on to this survey and this great party accomplished what was required in the location of the line as far as Obbuassi, but at the cost of the invaliding of one leader, and the death of his successor. This present dry season the work has been pushed on by 20 engineers and about 1,800 natives, and there is now no chance of the operations being hampered by want of survey.

The quantity of earthwork still to be done is very great, there being many banks and cuttings of great size.

The clearing, of which I have shown you some pictures, has been very heavy the whole way, but has proceeded during the last 12 months at the rate of nearly 7 miles a month.

It is interesting to note that the distance from Sekondi to Kumasi is 170 miles, or equal to that from Euston to Hertford (12 miles beyond Crewe) on the London and North Western Railway, and equal to that from Waterloo to Exeter on the London and South Western Railway, and has to be made under circumstances vastly more difficult with regard to labour, food supply, climate, dense forest, etc., than the same distance in this country.

It is a most unfortunate thing that the rainfall on the Gold Coast line is about the heaviest in West Africa. The rainfall in Lagos is much less. The rainfall at Sierra Leone is perhaps equal in amount but the soil is hard and the rain runs off, but probably the least rainfall in West Africa occurs at the eastern end of the Gold Coast, the rainfall at Accra occasionally being as low as 18 inches of rain in a year, but unfortunately for us it is quite different in the West end of the colony where we are at work, the rainfall there being much higher and, as luck would have it, the wet season of 1901, at a time when we were so anxious to push ahead the Gold Coast line, was the heaviest that had been known for a long time, the actual figures being 31 inches as an average of the three years 1898, 1899, and 1900, while in 1901 it was 78.9 inches. This fell in six months, but the rainfall for May, June, and July alone was no less than 60 inches, and this caused serious floods in an already swampy country.

In conclusion, I will say that I have now had the honour to

show you a considerable number of views of the West African Railways. I have said a good deal in explanation of them, yet I feel that I have not mentioned more than a fraction of the points of interest in connection with these works. Much less have I ventured to refer to other matters of interest in connection with West Africa, such as the Gold mining industry and the working of the Concession Ordinance, the customs of the natives, and many other subjects. You will, I hope, have seen that the fascination of such works consists in the large scale on which they are carried on, that it is as important, for example, to arrange for a good working scheme for the supply and sale of food stuffs for the engineers as for the proper design of locomotives and bridges.

I will merely conclude by saying that the best efforts of my firm always have been, and always will be, I hope, given to the good cause of converting our Crown Colonies of West Africa from little known heathen and undeveloped portions of the great continent of Africa to valuable markets for our manufactures, and rich sources of raw products for our own industries.

PROCEEDINGS

*At the Ordinary General Meeting of the African Society,
April 8th, 1902.*

The Right Hon. VISCOUNT DUNCANNON, C.B., in the Chair.

LORD DUNCANNON :—I have much pleasure in responding to the invitation extended to me to take the Chair this evening.

Before I introduce the Lecturer perhaps I may be permitted to say that I have received letters of regret from Lord Ripon, our President, and from Sir Alfred Jones who takes a very great interest in all that is going on in West Africa.

Lord Ripon writes saying that he is sorry that he cannot be present. But a long standing engagement made it impossible.

Sir Alfred Jones wrote this morning to say that he was more than sorry that he was not able to be present at what he considered to be a most interesting meeting, and that he would therefore not be able to hear Mr. Shelford's lecture on West African Railways. He had sympathised a good deal with the

difficulties that had had to be encountered in making these railways from the Coast: and nothing would have given him greater pleasure than to be present to-night.

Mr. Fred Shelford, Member of the Institute of Civil Engineers belongs to the Firm of Messrs Shelford & Sons Consulting Engineers to the Colonial Office for West Africa. Mr. Shelford has had considerable personal acquaintance with the three West African Colonies in which railways are being made. After visiting British Honduras in 1896 on behalf of the Colonial Office he was appointed in 1897 as leader of a large pioneer party at Lagos; and in 1898 he was the first person to march in a direct line from Tarkwa to Kumasi through unknown forest country now forming the route of the railways.

Mr. F. Shelford then proceeded to deliver his Lecture, and at its conclusion

LORD DUNCANNON said:—Ladies and gentlemen, I am sure that I am only expressing your feelings in rising to propose a vote of thanks to Mr. Shelford for his exceedingly able and interesting lecture which he has just delivered.

In proposing this vote you will understand that I do so in my capacity as a member of the African Society, a Society in which I am deeply interested. And perhaps in passing I may be allowed to say that I have a right to belong to such a Society because I first went to the West Coast thirty-seven years ago in one of H. M. Ships and was engaged watching the Slavers at the mouth of the Congo River and other places.

There is no doubt that Mr. Shelford has shown great pluck in coming forward and giving this lecture and explaining, in face of the considerable criticism that has arisen lately, all about these railways, and especially about the Gold Coast Railway which has evoked most criticism.

From what he has said you are able to realise in great measure the difficult nature of the work he has had to carry out. The difficulties in regard to climate, heavy rains, dense forests, and labour are very great in ordinary circumstances; but very much greater in carrying out pioneer works such as these were.

I am informed it is probable that in West Africa branches will be made in various directions from the trunk lines. This work

will be carried out under much more favourable circumstances ; as experience will have been gained and should be for the general advantage.

At any rate, it is now possible in each of these three Colonies for mining experts and others who arrive on the Coast to get away from the sea-board into the Hinterland at once and so pass quickly through what you all know to be the most unhealthy part of that country.

In referring to the Gold Coast Railway Mr. Shelford made a remark personal to myself as to being a Director on the Board of one of the Companies in Ashanti. It is, I am bound to admit, a great temptation to me to launch out and say something about the work that has been going on there. But, as I began by saying, I am here as a member of the African Society—I am interested in West Africa generally, and not only with one particular branch.

But it does occur to me, as I have the honour of seeing so many ladies in the room, that I might mention an interesting fact which has only recently come to my knowledge ; and that is that a white lady has gone up to the property in which I am interested with the full consent of the Government. Now, I view this with much pleasure, as it goes to prove that the conditions for security of life there have much improved.

Just one word more. You have seen from the slides that have been shown something of what is being done in West Africa ; and I should like to take the opportunity before this assembly of the African Society separates of thanking the present Secretary of State for the Colonies for instructing the engineers to push this work forward with all possible speed ; but we know full well that Mr. Chamberlain himself takes a deep interest in the development of the Gold Coast, and sets a brilliant example of energy and determination to all those interested in successful colonization.

I am obliged to you for the attention you have shown in listening to my remarks ; and I beg to move a hearty vote of thanks to Mr. Shelford for his lecture. (Cheers.)

Mr. C. H. NEWMAN said :—My Lord, ladies and gentlemen, during the last three months I have been in West Africa, and whilst

there I have travelled from Sekondi to Tarkwa on two or three occasions ; and made a thorough inspection of the Gold Coast railway ; and the conclusion I have come to is that Messrs. Shelford and Sons have performed a great work under immeasurable difficulties. I think the highest praise is due to them for the way in which they have carried out a work which I venture to say as a Surveyor and one having some knowledge of engineering would not have been carried out had they not put great energy into the work. I have great pleasure in saying that so far as my knowledge goes the railway can serve all purposes for which it was intended when the construction was undertaken. It can serve every purpose connected with the big Tarkwa firms. It can carry the necessary machinery up to those mines. I have been 10 or 12 miles, thanks to Mr. Shelford's subordinates, beyond Tarkwa ; and I was enabled by their courtesy to go considerably beyond the point to which the railway was opened. There I found that the railway was being pushed on rapidly and in a business-like manner ; that the provision was all that one could desire, and that before very long we should no doubt see, although I was not able to go there, the railway up to the Ashanti Gold Fields. And when I go out again I hope to travel to Ashanti and to see a large gold production.

I have much pleasure in seconding the vote of thanks to Mr. Shelford, which has been moved by Lord Duncannon ; and I desire further as a Chairman of Companies to express my appreciation of the way in which this railway work has been carried on.

Lord Duncannon then put the vote to the meeting ; and it was carried with acclamation.

Mr. SHELFORD :—You have heard so much from me to-night that I must not detain you longer than to say I am extremely obliged to you for the kind way in which you have listened to this lecture ; and I am extremely obliged to you for the vote of thanks.

Colonel Stopford then moved a vote of thank to Lord Duncannon for presiding, which was warmly accorded.