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THROUGH JUNGLE, BUSH AND FOREST

THROUGH JUNGLE, BUSH AND FOREST

BY
DERWENT GORDON HESLOP

WITH 53 ILLUSTRATIONS

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TO
MY MOTHER,
WHO,
THROUGH ALL MY COMINGS AND GOINGS
ABOUT THE WORLD,
HAS ALWAYS PRESERVED HER FAITH
IN ME

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PREFACE

I MAKE no claim to be an author, and that being so, I take up my pen with considerable misgivings to write this, an account of my travels, partly at the request of my relatives and friends, who think, perhaps quite wrongly, that what is hereinafter to be related may be of great interest to them ; but, I confess, mainly in the spirit of that Commercial Traveller who, when not encouraged to display his goods, exclaimed : “ Well, gentlemen ! Do you mind if I have a look at them myself, they interest me so much.”

This is an account in plain and simple language of the wanderings of a railway engineer all over the Globe, and it will endeavour to describe his successes and his failures in bearing the “ White Man’s Burden,” and in assisting to open up, by means of railways, some hitherto little-known parts of this wonderful World of ours.

So ! Let us get on with it.

THROUGH JUNGLE, BUSH AND FOREST

CHAPTER I

ENGLAND

SOUTH SHIELDS, County Durham, may, if it cares to, claim the honour of being my birth-place, as I first saw the light in that Tyneside town on October 30th, 1877. My parents, however, left the North about one year after this event took place, and migrated to Surrey where they remained for seven years, two more boys and one girl being added to the stock.

Of those early years I remember little, except that I was sent very unwillingly to a school in the village, and that I took a keen interest in a steam-roller working on the road in front of our house and in the railway trains which ran at frequent intervals at the end of our garden. No greater joy was mine than when the roller driver, an employé of my father's, allowed me to get up into his seat and play about with the levers.

When I had reached the age of seven and a half our family moved to Norfolk, and there they have remained ever since. My father being a keen lover of the country and all outdoor sports took a house a few miles out of the County Town, and, there being a river at the bottom of the garden, we boys were early taught to swim and handle boats ; in fact we often rowed on Sunday mornings to the village Church.

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My brother and I were sent off as boarders to a dame's school in Norwich, returning home at the week-ends. During the short time we were there we distinguished ourselves by running away one afternoon and walking the four and a half miles back home. For this escapade I, being the elder, got the blame and suffered severely from the hands of the mistress when taken back the next morning.

At the Paston Grammar School, North Walsham, we entered more into the games than into any book work, and my brother commenced to show great promise as a cricketer which later developed into his playing for his County and College and, for one season, his University. For myself, I was nothing more than a left-handed bowler of some merit, and a right-handed bat of no merit at all.

When we had had enough of North Walsham we were sent to the Grammar School at Norwich, and at first I drove my two brothers there in a pony cart, but later on we became boarders, and so remained until the end of my schooldays. I managed to get into the cricket eleven on account of my bowling, and into the rugby XV mainly, I suspect, on account of my size, and I also took my place as bow-oar in the eight.

I cannot recollect winning any prizes for learning, though I got one second class prize for swimming.

At the age of twelve I was presented with my first gun, a sixteen-bore doubled-barrelled one, and with this I shot rooks and rabbits with my father and shall not forget my delight in bringing down a water-hen on the wing.

My school holidays were spent at home in the country, in summer playing cricket with the village team, rowing and sailing on the Broads, tennis parties, etc., and in winter shooting two or three days a week with my father, skating when there was any, or riding about on one of

the first safety bicycles with solid tyres then in our part of Norfolk.

In the summer of 1904 I went with a school friend in a cargo steamer from King's Lynn up the Elbe to Hamburg, and this was my first voyage and my first experience of sea-sickness. We had a rough passage across the North Sea and the ship, being in ballast, rolled a good deal. In addition, our cabin steward, for some reason best known to himself, hung a string of sausages over my bunk and this proved to be the last straw in my bundle of woes, and I asked for nothing better than to be dumped over the side and have done with it.

Arrived in Hamburg our Captain, a Belgian, insisted on taking us to see the famous Peter Strasse, and there I nearly fell to temptation, but was saved by my friend, a lad of very strict ideas, morally.

At the age of sixteen and a half I left school, as it had been decided for me that I was to become an Engineer. My Father had been an entirely self-taught man and had started at the very bottom, so, thinking that what was good enough for him was good enough for me, I was sent as a pupil to the works of Messrs. Aveling and Porter at Rochester to learn more about the insides of steam rollers than I had been able to acquire when a child in Surrey.

Lodgings were found for me in Strood, and every day at 5.30 a.m. I would go down to the works dressed in the regulation blue overalls and carrying a tin can containing cocoa and a rasher of bacon for my breakfast. I must ask my readers to imagine what my feelings were like, to be suddenly taken away from a quiet country home and thrust, as one of themselves, into the midst of eight hundred workmen, many of them the roughest of the rough.

We pupils were accorded no privileges whatever, but were treated in all respects exactly the same as the men. The hours were very long and would not be tolerated now

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these days of trade unions ; 6 a.m. to 8 a.m., 8.30 a.m. to 12 noon and 1 p.m. to 5 p.m. daily, except Saturdays, when we finished at 1 p.m.

In these works I learnt the rudiments of iron-foundry work, fitting, and erecting and testing engines as the technical side of my education, but I am afraid I acquired a great deal more questionable knowledge from my associates amongst the men. At the age of sixteen and a half one is very impressionable and I had always been of a very shy and nervous temperament. I shall not forget the shock I received when I first heard a really bad swear word. By the time hard, manual labour was finished for the day, I was in no state to undertake classes in the theory of mechanics, neither were there any there if I had had this inclination. I was so thoroughly tired out in the evenings that I longed for bed-time and to have a good rest preparatory to an early start at 5.30 the next morning. As pocket-money I was paid by the firm the sum of three shillings a week, and in the event of my losing any time ("missing a quarter" it was called) sixpence would be deducted from this amount. Only twice, I think, did I draw the full amount, because I never could face those awful Monday mornings with a whole week's slaving in front of me.

I remained in those works over two years and emerged from them with a knowledge of the practical side of mechanical engineering, but none at all of the theory. I had forgotten what little of the science of mathematics I had learnt at school, and I knew nothing of a draughtsman's work or of the strength of materials or any other science necessary for an engineer to know. One thing, however, I had thoroughly learnt, and that was how to drive any kind of steam engine, and this knowledge has stood me in good stead in the course of my subsequent career.

My amusements in the short leisure time I had at

Rochester were visiting Barnard's Music Hall (The Tin Can) at Chatham, sailing in a Medway punt on that river, playing tennis at the Vicarage at Strood, rambles out to Gad's Hill and the "Leather Bottle" at Cobham, and occasional week-ends with an uncle, a doctor, in Clapham.

Every Wednesday while at Rochester we pupils would spend a few hours in the dockyard at Chatham and were taken around by a guide, some of the processes of ship-building being explained to us. But I must emphasize that for those two years I had no opportunity whatever of acquiring any of the theory of my adopted profession, and any brains that I had had become rusty for want of use.

Returning to my home in Norfolk after this training I spent a delightful fortnight sailing on our well-known Broads, and made another sea trip up to Amble, on the Northumberland coast, before entering upon the next stage of my education as an engineer, this time on the Civil side.

The Engineer of the Midland and Great Northern Joint Railways, having his headquarters at Melton Constable in Norfolk, was a great friend and brother-engineer of my father's, and he agreed to take me in, as one of his pupils, at a premium. To Melton Constable, therefore, I went and took lodgings in the house of the station-master.

For the first six months there I spent from 9 a.m. to 5 p.m. in the drawing office doing little else but learning how to print and colour plans. I have always had an aptitude for drawing, and this work came easily to me, but of what use it was in my training I have never since discovered. Generally, I have found abroad that the engineer only makes the rough sketches of his ideas, having a draughtsman to elaborate them into finished drawings. This work was relieved by making a cardboard model to scale of a large swing-bridge the Railway

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Company were going to build at Great Yarmouth, and my training as a mechanical engineer was considered to specially fit me for this job.

After six months in the drawing office I was sent out with a more advanced pupil to learn levelling and theodolite work, and, later, was employed on a tachemometrical re-survey of the line in Lincolnshire and Norfolk. I had no training in permanent-way work and the layout of the station yards, or design of bridges and many other things necessary for a railway engineer to know. All these accomplishments have since been acquired by experience.

Unofficially, I learnt how to drive and fire a locomotive, and many happy hours did I spend on the footplate driving goods or passenger trains under the eagle eye of the driver.

No theoretical training was available at Melton Constable, but I attended a class in drawing given by the chief patternmaker. A short stay in the office of the chief architect showed me how to make beautiful highly coloured plans and elevations of buildings, and another stay with the signal inspector gave me an insight into the working of the block system on English railways. I spent a few weeks on the construction of the line to Mundesley, and did some parliamentary survey work in the fruit orchards at Wisbech and for the line from Mundesley to Cromer.

Some weeks were spent at Yarmouth taking borings in Breydon Water, these to ascertain the nature of the foundations for the large hydraulic swing-bridge later to be built over it.

At the end of three years, viz., in 1899, when at the age of twenty-two, my engineering training, as such, came to an end, and for the next year I was engaged as an assistant upon the construction of that bridge at Yarmouth of which I had already made a model in cardboard. I stayed there whilst all the foundations of piles were put

in and masonry piers and abutments built, but I saw nothing of the erection of the steelwork or the installation of the hydraulic swinging gear.

During the last year of my permanent residence in England the Boer War was in full swing, and I had a great desire to go to it. Answering an advertisement for temporary engineer officers, I was summoned to the War Office in London and interviewed by a sapper major. Everything seemed to be going well, and I had great hopes of getting a commission until I was asked for a reference from my employer. Now, as luck would have it, he had just gone away for his annual holiday of a month to Switzerland, leaving no address behind and it was quite impossible to communicate with him. Upon such little things do our lives turn. Had he been in England he would undoubtedly have given me a good reference, I should have been sent to South Africa, might have got a permanent commission in the Engineers, and have been well up in rank when the War broke out in 1914, or perhaps, on the other hand, a Boer bullet might have found me, and all my earthly troubles would have ended.

Before breaking out into the next chapter, it will be perhaps as well to point out for the guidance of any parents of would-be engineers who read this, where the mistakes were made in my training. In the first place I left school at much too early an age, viz., sixteen and half; my general education should have been continued for two years longer and should have been concentrated on mathematics and all the other sciences necessary to an engineer, whether civil or mechanical. At the age of eighteen and half I should have been sent to an engineering college, and kept there until I had passed the qualifying examination for the Institution of Civil Engineers, thereby giving me a handle to my name and a standing amongst others of my profession. Whether I had the

brains or not for this is a different matter. It was never proved at school that I did not possess them, and by the time I had left those works it was too late to begin on the theory. Having passed the above-mentioned examination, one year in some works would have been ample to have given me an insight into the practical nature of mechanical engineering, and after that I should have been sent to the engineer at Melton Constable.

Armed with the theoretical knowledge first would have shown me what it was necessary for me to learn on the practical side.

The engineering training I have outlined might have brought me up to the age of twenty-six years or so, but quite young enough then to start going abroad. As it was, with my haphazard training I knew nothing whatever of the theoretical side of the profession and could not have passed an examination in any subject to save my life. Only later, when I have been brought up hard against this lack of knowledge, have I had to study each problem at night, when the day's work has been done, and have thus mastered it, ready for tackling in the morning.

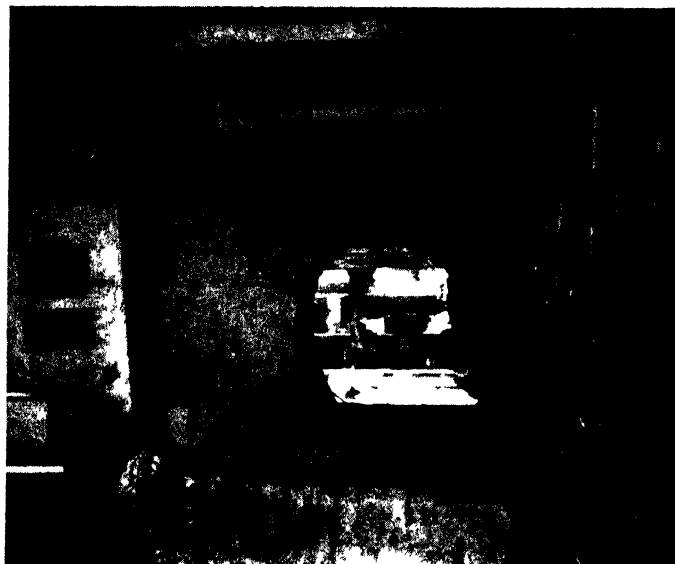
We will now pass on and see where my adopted profession has led me in the years to follow, and I will ask my readers not to forget what I have said about my haphazard training and to make all allowances for my subsequent delinquencies.



RUINS OF HAMA ON THE SUJA RIVER NEAR JALTA



CAMP SURROUNDED AND DESTROYED BY ARABS
MILKARIN YARMUK VALLEY (111)



THE LIGHT RAILWAY TO WHARF, JAFFA



FLOOD AND DESTRUCTION ON THE HEDJAZ
RAILWAY NEAR MA'AN

CHAPTER II

UPPER ASSAM

AFTER my training had been completed, I remained as an assistant upon the Viaduct at Great Yarmouth until August, 1900, drawing a salary of one pound a week. My family were living at Brundall then, about fourteen miles from Yarmouth, and I travelled to my work daily either on a bicycle or by train, as I had a first-class free pass on the Great Eastern Railway, as it was then.

As a boy I had always been a great reader of Kipling's works and had become imbued with a love of the East acquired from his poems, so that when in August my father informed me that there was a job to be had on a tea estate in Assam for the asking, I jumped at the chance of seeing the land of my dreams. An interview with the Secretary and Director of the Company in Leadenhall Street was arranged, and from them I learnt the details of my engagement. I was to be appointed as a mechanical engineer upon their estate with a salary for the first year of Rs 150 (£10) a month, rising by small amounts annually to Rs 250 a month at the end of five years. My passage money had to be paid by myself, a house, horse and servants would be provided.

When my father heard of these conditions he was very averse to my signing the agreement, and suggested that, as an alternative, I should join the staff in his office in Norwich and learn all about highway engineering. Had I known then what I have since learnt, as to what an

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important branch of civil engineering road construction was to become in England, I think I should have been persuaded to accept his offer and the whole future course of my life would have been changed.

But the call of the East was in my blood, and I reflected that if other men could live on £10 a month in Assam, I could, giving no thought to the certainty of not being able to save enough money to pay my passage home again or to the disappointment my decision must have caused my father, and the knowledge that once an engineer has worked abroad he is spoilt for any work in England even if he could obtain any, and so by that decision, I burnt my boats behind me and henceforth became an exile from the land of my birth, visiting it at long intervals only and feeling every time I did so that I was becoming more and more a pariah and an outcast. This feeling has remained with me to the present day.

The Agreement was duly signed, the passage ticket taken, and on the 28th September, 1900, I, being then twenty-two years and eleven months of age, embarked at the Royal Albert Docks as a second-class passenger in the P. & O. ship *Palawan* bound for Calcutta. I will draw a veil over the parting from my mother, she felt it dreadfully and has always since referred to it as my being "the first bird to leave the nest."

My father saw me off on the ship and I well remember his efforts to control his emotion as he turned the corner of the customs shed on his way back to London.

It must be harder for those left behind, I think, than for the one departing. The latter has new sights, new scenes and new companions to distract his attention, but for those left there is the empty chair and the vacant room always in evidence to remind them of the missing member of the family.

For myself I had always been a great lover of home, and it has been a source of wonder to me that I, who, up

to that time, had never been away from it longer than a month or so, should have been at that early age sufficiently courageous to launch out into an entirely new life, 7,000 miles away from England, for an indefinite period, with little prospect of returning unless some miracle happened, and to undertake work which I inwardly felt myself incompetent to carry out. It was too late for any regrets now, however, as the ship immediately got under way and proceeded down the river.

In my cabin was a Captain of the Indian Army returning from leave, and an assistant in Messrs. Manton & Co's gun shop in Calcutta. I was by many years the youngest male passenger on board and was treated with a good deal of kindness and sympathy in consequence.

Life on shipboard is much the same, I suppose, all the world over and needs no description from me. Everything was new and strange; even the stewards were black, and I regarded them with much interest as being the forerunners of the innumerable people of that colour that I was destined to work with in India and subsequently in many other countries of the world.

With a smooth passage across the Bay of Biscay and a run down the Portuguese coast, we made a sharp left turn and pulled up at Gibraltar, that great fortress guarding the entrance to the Middle Seas. An evening stroll ashore and a visit to the Mess with my cabin companion was all we had time for here and a course was set for Malta. Here we had a long day ashore in the blazing sunshine, and I developed symptoms of a heat stroke which kept me confined to my cabin until Port Said was reached.

In 1900 this place was very different to what it is now. Then, there is no doubt, it was a sink of iniquity, and we were expressly warned not to go into the native quarter of the town alone, whilst ladies could not go anywhere unaccompanied. Dragomen and touts pestered us all the

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time offering to show us most bestial entertainments and lose our money in gambling casinos, whilst every shop had its tout outside inviting us to go in and be swindled. At the paper shops the proprietor would endeavour to get us into a corner and would produce disgusting postcards for our amusement and altogether the place reeked of infamy.

It required the Egyptian Expeditionary Force in 1915 to purge the place of its worst features, and this was very effectively done.

The Suez Canal is always a source of great interest to the traveller making his first voyage to the East, and I spent most of the night up in the bows watching the searchlight play on the water and on the desert, and marvelling at the ingenuity of Monsieur de Lesseps in constructing it.

Giant suction dredgers were tied up on either bank and the French seemed to be always working on it, stone pitching the sides and deepening the channel, and on my last journey through it, in 1931, they were just as busy as in 1900.

A short halt at Suez, and then we entered the Red Sea and experienced, in my case for the first time, the heat of the tropics. Not a breath of air, the sea as calm as a mill-pond, everything one touched of iron, red hot, seemed to me to be a foretaste of the nether regions, and going down to one's cabin to shave and dress, after sleeping on deck, was hell itself.

Five days steaming through this purgatory brought us to the " Gate of Tears " and into the Gulf of Aden and then that place " like a barrack stove " above the sea appeared. We just had time to go on shore here and buy a few cigarettes of the well-known " Camel " brand, and away we went on the eight days' trek across the Indian Ocean.

After the treeless, waterless desert of Aden the sight

of that delightful little palm-fringed island of Minicoi was very refreshing, and later when the breeze wafted the spicy smell of Ceylon to us and that island hove into sight, all my dreams of the East came true and I hoped that Assam would be some such place, a veritable garden of Eden, and a Paradise on earth. Little did I dream, then, that I was to spend two delightful years of my life in that enchanted island, and come to know every bit of it, from Galle in the South to Manaar in the North, and from Colombo in the West to Trincomali in the East.

These things were all hidden in the future and, for the moment, I wandered about Colombo drinking in with enthusiasm the sight of the strange people with combs in their hair, the palm trees, the bullock *gharries*, the native quarters, and best of all the palm fringed beach at Mount Lavinia nine miles down the coast. What a thing it is to be young and enthusiastic. I often look back on that first voyage to the East and wonder if others of my age have had the same joy in life that I had then. We were in Colombo three days, and one evening a fellow passenger took me to a house of ill repute in the Cinnamon Gardens. Here I was introduced to a phase of Life with a large "L" which I had not previously come across. Painted and scantily clad women of every European nationality, except English, plied for hire in these houses and judging from their surroundings, furniture, servants, carriages, etc., theirs must have been a lucrative business. I am glad to say that on this occasion I was not to be tempted, but returned to the ship with a new notion of the beauties of Colombo in my head.

Rounding Point de Galle, we steamed up the bay of Bengal, notorious for its cyclones, and came to the mouth of the Hooghly river on the last lap of our long journey from London. Passing the Sunderbans we entered that river which is so dangerous to mariners on account of the shifting quicksands in its channel, and taking on a

pilot steamed the eighty miles journey up to Calcutta at a reduced speed. On the way we skirted the " James and Mary " shoal where a ship of that name was engulfed, taking most of its crew and passengers with it, and finally came to anchor just below Howrah bridge and the long sea voyage ended. This was on November 2nd, 1900.

The first thing that strikes one about Calcutta, is its smell. There is no getting away from it, night or day, indoors or out, eating or sleeping, it's a smell that percolates everywhere, and is, I imagine, composed as to its main elements of sweating native humanity, betel juice, and the miasma of the swamp upon which the city is built. It flavours everything, the food one eats, and the tobacco one smokes, and clings to one's clothing long after Calcutta is left behind.

My school friend, who had accompanied me to Hamburg and now a full-blown member of the Indian Civil Service, met me at Calcutta, and it was like a breath of home to see his cheery face once more. As our ship was two days late, however, he had to return to his station at Gaya, 600 miles away that evening, so we had only a few hours together. Still, it was comforting to find that in that vast expanse of India with its millions of black and white strangers I had one friend to whom I could turn in case of need, and who knew all about me from childhood.

After we had fixed up a room in the Great Eastern Hotel in Old Court House Street, we engaged a *thcca gharrie* (cab) and explored the city, and after a comprehensive survey of it, I came to the conclusion that I was very glad indeed that my future work did not necessitate my living in it and that my lines were laid in a " cleaner greener land " far away in Assam. For those Europeans that I saw in the hotels, the shops and the streets, all had that yellow washed out complexion attributable to malaria fever, a detestable climate, and above all, the SMELL. A visit to the Eden gardens in the evening

allowed me a sight of all Calcutta, black and white, driving in their carriages or strolling about listening to the regimental band. Fat Babus and their women folk lolled at ease in their pair horse equipages, their noses turned up at the poor Europeans who preforce had to walk, but inwardly willing to give all they possessed to be able to change the colour of their skins. Soldiers from Fort William, sailors of every nationality from the ships, the humble coolie, prostitutes black, white and Eurasian, European clerks and business men all mingled together on the Maidan or in the gardens trying to get away from the heat of the city and breathe what fresh air there was from the river. Calcutta was not at all my idea of the East as I had pictured it from Mr. Kipling's works and I made all haste to see the Estate Agents next morning with a view to leaving it as soon as I could.

Provided with instructions as to how to proceed on my journey, I whiled the day away in the town engaging a servant, buying a few necessaries and eating the celebrated Bristol Hotel fish lunch, before joining the Eastern Bengal State Railway train at Sealdah station, for the next stage of my wanderings. Getting no sleep in the train by reason of the heat and the noise of the native passengers, I reached Goalundo on the right bank of the Brahmaputra river at daylight next morning, and found a river steamer tied up to the sandbank waiting for passengers, mail and cargo to proceed up stream into the "back of beyond" of Upper Assam.

No railway connected Assam with Bengal in those days, neither were there any roads, the steamers affording the only lines of communication. Finding myself the only white passenger, I got a beautiful airy cabin on the top deck and settled down for the six days' voyage. At Goalundo the river must be several miles wide and it was hard to see anything on the further bank. The water ran in a swift brown coloured stream and all over the surface

were dotted innumerable sandbanks, many of them alive with alligators, so that a man falling overboard would come to a very sticky end. The river being in its lowest state, no travelling was done at night, the steamer tying up at one of the numerous *ghâts* or wharves until daylight the next morning. In spite of this precaution our groundings were many, and a lot of extra distance must have been made by zigzagging from bank to bank in order to follow the deep water channel. Nothing could be seen over the high bank except where another stream joined the main one and then magnificent views of the snow-clad peaks of the Himalaya mountains could be seen to the North, but on the South only dense jungle, relieved now and then by native huts and clearings, met my eyes. Altogether I felt much as Martin Chuzzlewit and Mark Tapley must have done when on their way to Eden, and this simile was aided by the fact that every now and then we would stop to take in wood fuel for the boiler.

At Tezpur, Gauhati and other European stations I met fellow Englishmen who lavished the proverbial Eastern hospitality upon me, the stranger in their midst, at their clubs. But for most of the journey I felt very forlorn and lonely in my solitude, and could not help speculating on what was the life before me, what the work would be like, and what my companions would turn out to be.

At long last we came to a stop at Dikho Mukh, a small port on the left bank of the river and my destination. A few native huts in a clearing surrounded by jungle formed this port, and here I was dumped, bag, baggage and boy, to make the last lap of my journey to the garden. Leading a shaggy diminutive pony, a half-clad syce came up and presented me with a note from Arthur Showers, my new boss and manager of the garden. After welcoming me in the note he directed me to ride the twenty-eight miles to the estate, the syce acting as guide ; my boy and the

baggage followed the next day. Mounting the pony I found that my long legs practically touched the ground, and not wishing to feel ridiculous before the syce, I decided to walk most of the way and set off. By this time it was nearly dark, the path was only some few feet wide and on each side of it was such dense undergrowth and such enormous trees that no sunlight could penetrate them. Moreover all the trees seemed to be dripping moisture though there had been no rain for weeks. Leading the way, the syce following with the pony, off we set.

As darkness descended on the jungle, jackals started their weird howling, though I had no idea, then, what was making the noise and their orchestra accompanied us most of the way, the big drum being supplied by the roar of a tiger some way off. Monkeys kept up a chattering in the trees, swearing at us, no doubt, for disturbing their rest, and giant moths flitted by like ghosts. In spite of the lateness of the hour it was very hot, that damp kind of heat with temperature of not more than 92° F., but worse than any at 120° when of the dry variety. Now and then a snake would glide across the path, more frightened of us, perhaps, than we of it. We only passed one village and here the Bengali shopkeeper gave me some tea from a Lipton's tin and made in Ceylon. I called in at one planter's bungalow about 4 a.m. and asked him how much farther I had to go; being given this information and a stiff whisky to revive me, as by this time I was nearly fagged out. As daylight came I saw that I was on a path running through endless mathematically exact rows of low green bushes and realized that this must be tea in its native state. About seven o'clock, from signs made by the syce I gathered that my journey was nearly ended, and so it proved to be, for, rounding a corner in the path, I saw before me a whitewashed thatched bungalow which turned out to be my new home.

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So at last I had got there safely, after miles of sea, railway, river and road and thankful I was that my long journey was over.

I found the assistant manager and I were to share this bungalow together, and there he was on the verandah, waiting to greet me. Introducing ourselves, I found him to be Fred Banwell, some years older than myself, who had already been in Assam two years. After a bath and breakfast I called upon the manager and his wife and was instructed as to my duties for the next three months. It appears that in Assam, unlike Ceylon, tea manufacture is not carried on throughout the year, but there is a break of three or four months up to March, during which period the machinery is overhauled, and any alterations considered necessary are undertaken. Considerable alterations were proposed to our factory and machinery and this work fell to my lot.

A new engine house had to be built, boiler and engine moved into it, all the rollers, packing machines, driers, etc., had to be re-arranged, and a well had to be sunk. This appeared a formidable task for a young and inexperienced engineer of twenty-four, especially with the very inadequate and untrained native assistance provided, and his want of knowledge of the language, but I made the best of it all, and started the women off making mud bricks and the men to make a kiln in which to burn them. I had never made or burnt bricks in my life before, but "necessity is the mother of invention," and the bricks were made. Not only that, but for the well I had properly shaped bricks made for the lining.

Whilst this work was being carried out, I myself dismantled the engine and boiler and cleaned the inside of the latter out, and very badly it needed it. Taking down the overhead shafting, lining up the machines in their new positions all had to be carefully supervised,

and in the meanwhile the bricks were burnt and work started on the new engine house.

We usually finished work at 3 p.m., there being no break from seven when we started, so that I was free to make my duty calls in the district with Banwell, either in his buggy or riding my pony. There were no other English ladies within callable distance except our manager's wife, and she was leaving for England early in the year.

I found that each bachelor had a native housekeeper to look after him, this being a custom in Assam since tea planting first started there. I know that my stay-at-home readers will be shocked at reading these lines but they purport to be a true account of my life in Assam, and if I suppress items like this what is the use of writing an account at all ?

For the first three months I resisted any female addition to my household, but when a Nepali gentleman turned up at the bungalow one evening bringing his daughter, about seventeen years of age, to me, I bought the girl for Rs 50 from him ; she became my " housekeeper," and very well she looked after me, my servants, food and clothes. Moreover, she taught me the language in a very short time, and so was a great asset to my work.

Shortly after my arrival in Assam, I became a Trooper in the Assam Valley Light Horse, my first military experience. Dressed in light Khaki uniform and riding breeches, silver buttons, silver shoulder chains and a silver spike in my helmet, and armed with a carbine and sword, I felt very proud of myself, and wished sometimes that I had a taller pony, so that neither my feet nor my scabbard would be so near the ground. It was not all show by any means ; regular sword drill, rifle shooting and mounted exercises took place at frequent intervals, a few miles off, and we were compelled to put in a minimum of drills per annum.

I had not been long in Assam before I became a victim of malaria fever. This was brought on, I think, by getting wet through snipe shooting in the flooded rice fields in heavy rain, though no doubt the mosquito had a lot to do with it. Malaria in those days was not so well understood as it is now. Regular five-grain doses of quinine every evening are now insisted upon by the Government doctors in West and East Africa, and had this been the rule then, in Assam, malaria would have been much less frequent. I had a severe bout of it with the usual fits of ague, high temperature and lassitude, but it eventually succumbed to treatment leaving me but a shadow of my former self and with a face as white as a ghost.

Our European doctor, Grant, lived a hundred miles away and could not pay me regular visits, so I was left to the tender mercies of the Bengali assistant-surgeon, who had charge of the native hospital on our garden.

In March I had got the factory into working order and had a trial run of the machinery. I was delighted to see that everything went well, except that the fly-wheel on the engine would not remain fixed on its shaft. I had nightmares about that fly-wheel, until I obtained advice from a neighbouring engineer, McKercher (now Sir William McKercher) at Amguri, and together we got it firmly fixed.

Then the manufacturing season started and continued every day and night except Sundays. Troops of women plucked the leaf, which was spread on wire trays to wither, after which it was rolled, fermented and dried, finally packed into the familiar tea-chests and sent off by river to Calcutta and thence to London.

My companion, Banwell, neither drank nor smoked and so was eminently suitable to take the rôle of tea-taster, cups of the various grades being prepared for him every afternoon in the factory. For myself, I tried the contents of all the cups, but could find little or no differ-

ence between them. All I was concerned with was to see that the native engine-driver did not let the boiler blow up, kept the engine well oiled and looked after the rolling machines so that there would be no interruption to the manufacture. I usually got to bed about 11 p.m., sometimes to be wakened up by a coolie calling me to the factory because something had gone wrong with the machinery, but I usually found that there was nothing very serious and that the driver had got the "wind up."

We had not much relaxation from work in those days, but on Sundays I generally managed to get away somewhere. On one occasion I made a trip to the top of the Naga Hills, just beyond our garden, seven miles away, taking as a companion a young New Zealander from the Amguri estate.

On the way we were attacked by swarms of leeches and could only get rid of them by stripping and diving into the Jhanzee river, when they released their hold of us. A long climb up a precipitous hill landed us at the top, to be greeted by an English-speaking babu assistant missionary who did the honours of the village. Men and women were absolutely naked, their only ornaments being necklaces of boars' tusks and cowrie-shell bracelets and anklets.

The Nagas are a very independent lot and will not work for the white man. They have given a good deal of trouble in the past and the Manipur affair was still fresh in men's memory at the time of my residence in Assam.

From the village heights we obtained a magnificent view, first of the tea-gardens below, with their broad intersecting paths, next dense jungle, then the silver streak of the great river, more jungle, and away in the distance and forming a frame to the picture, the snow-clad peaks of the Himalaya mountains, beyond which lay

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mysterious Tibet and the unknown source of that great river which bisected the Assam Valley.

Constant tennis and dinner-parties did much to relieve the monotony of the manufacturing season, which continued until November. During my year's residence I learnt what rain is, because in less than six months we had nearly four hundred inches of it. It literally came down as if it had been poured out of millions of buckets ; starting generally about 5 p.m. it continued without a break until seven the next morning, and we turned out of bed to find fog and mist enveloping the countryside until 10 a.m., when the sun broke through and rapidly dried things up. Boots would be covered with a green mildew in a night, everything felt clammy to the touch and, worse than all, snakes and rats invaded the bungalow as their holes were flooded out. Until a thorough search of our bed-clothes and pillows had been made, it was dangerous to go to bed : sponges harboured centipedes and scorpions and were unsafe, and boots had to be well shaken to dislodge any lurking snake proposing to take up his winter quarters in them. The thatched roof of our bungalow afforded a welcome refuge to all manner of pests and, as the ceiling was made of cloth, ominous bulges would appear in it where some rat or snake lay sleeping. So long as they continued sleeping they could remain there, but when they moved about and fell through a hole in the cloth, it was time to clear them out, and for this purpose we let loose two mongooses and they did their work well, not a rat or snake remaining after a few days.

About the end of October I received a letter from the Agent and Chief Engineer of the Bengal Nagpur Railway, offering me an appointment as an assistant engineer upon that line. It appeared that my father had been moving heaven and earth to get me a better job and had seen Sir Samuel Hoare, Bart., then Chairman of the Railway, who

had used his influence to get me the appointment. Matters had been arranged in London with the directors of the Tea Company, who were willing to let me go at the end of one year's service instead of the agreed upon five, a cable to that effect being received by my manager.

For myself, I received the news with very mixed feelings. I had come to love Assam and the work, and had made many friends in the district round about. Though my pay was very small I had managed to live on it in comfort, and had even saved something as well as having paid off some of my passage money. Consulting several experienced managers, however, they told me that there was not much prospect for a young man starting in tea planting, and one and all advised me to accept the railway offer. So I wrote back to the railway people accepting the appointment and prepared to leave Assam. The manufacturing season was then over and no more alterations were required to the machinery, so that I felt that I was not letting my Company down by leaving them.

After several dinner-parties in my honour and a round of farewell visits, I rode once more on that long trail to Dikho Mukh, this time in daylight, boarded the stern-wheel steamer for Goalundo and arrived safely in Calcutta after almost exactly one year's absence in Assam.

CHAPTER III

INDIA

IN accepting the railway appointment I was not forgetful of the fact that by doing so I was returning to my proper profession of a civil engineer, for which I had had a longer training than for the other. In Assam I had been little more than a mechanic and receiving less than a mechanic's wages. The work, moreover, had been mainly manual on my part, and the climate of Assam does not lend itself to hard, manual labour by white men.

Until I saw my new employer I did not know the conditions of my engagement, beyond the fact that I was to be an assistant engineer on the line, but I knew that my salary would be a better one than in Assam.

Arriving in Calcutta I lost no time in going to the Railway office in Garden Reach and seeing the Agent and Chief Engineer who had written me the letter. I found Mr. T. R. Wynne seated at his desk smoking a very evil-smelling pipe, which I learnt later was his constant companion night and day, and he was even reported, no doubt erroneously, to sleep with it. However that may be, he greeted me very kindly and after a few preliminary questions informed me that my salary was to be Rs 350 a month, rising yearly by increments of Rs 33.5.4 to Rs 600 a month, and that I would be paid travelling allowance at the rate of Rs 4 a day for every day over eight hours I was absent on duty from my headquarters. Rs 350 a month is about £23 6s. 8d., more than double the salary I was getting in Assam. My engagement was

terminable by three months' notice on either side, and I was instructed to report forthwith to the District Engineer at Bilaspur, in the Central Provinces, a far cry from Assam. A silver pass was handed to me, with which I could travel over any railway in India first class and free of charge. After the business part of our interview was completed I had lunch with the railway officers at Garden Reach and met some of my future colleagues. After that I was free until the evening, when the mail train left for Bombay. So commenced, at the age of twenty-four, an eventful period of my life which was destined to extend over the next six years, and in which two events occurred which had their influence over my future which has extended to the present day. These events will be recorded in their proper place, but if I could only have known what the next six years held for me, how differently should I have acted.

Leaving Calcutta by the Bombay mail that evening, a run of twelve hours through the hot Indian night brought me safely to my destination at Bilaspur, a place geographically almost in the middle of India, and about as opposite in characteristics and scenery to my former surroundings in Assam as any place could well be. Here a few stunted trees growing on a dusty plain stretching for many miles in all directions, did little to cheer me up after my sleepless night, and when I found out from the station-master that my new Chief was away "on line" for a few days I felt very forlorn and dispirited in my new surroundings.

Until, he returned I had nothing to do but fix up the small furnished bungalow which was pointed out to me as mine, and call upon the administrative officials who lived in the civil station two miles away, a bicycle I had brought with me from Calcutta coming in very usefully for this duty.

The railway "station," as opposed to the civil

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“ station,” consisted of four bungalows for the district officers, a large double-storied railway institute and many small bungalows for the subordinate staff, an engine-shed and the usual railway workshops.

Bilaspur is a junction on the main Bombay-Calcutta line, with a branch to Katni joining the East Indian system.

On my Chief's return I found that I was to assume charge of seventy miles of the main line towards Calcutta, and fifty miles of the Katni branch line, and I lost no time in going over these lengths with him, on a trolley pushed by natives, to see what was expected of me in the way of work. The duties were certainly not onerous or difficult. They were to inspect bridges and buildings, to keep the permanent-way inspectors up to the mark, and personally pay the gangs working on the line once a month. It was, however, expected of assistant engineers that they should spend not less than twenty-four days of every month on the line and to this order I was only too pleased to conform, as it meant Rs 96 travelling allowance added on to my salary. So that practically every day of the month I was at Bilaspur I would be trolleying on the line and especially on the Katni branch, where I had another furnished bungalow at Khodri, in the hill section, and where the climate was much better and the scenery magnificent.

Here, also, with the District Traffic Superintendent I went after a tiger, but without success. All one night he and I sat up in a tree over a buffalo which had been killed, and though we heard the beast come and heard it crunching the bones and eating the flesh, we could not see it to have a shot, and had the mortification of being within twenty yards of it nearly all night and being bitten badly by mosquitoes, for nothing.

About 5 a.m., before daylight, I got tired of sitting in the tree for nothing and fired off a shot before descending.

My companion, however, an older hand, remained where he was until I got down, and just as well he did, for I found that on my way to the line and waiting trolley I was being followed by something, probably the tiger, who resented being disturbed, and it was only when the six trolley boys and I returned with lamps that my friend would come off his perch and return with us for a very welcome sleep in the carriage. This was my first essay after big game, and a very disappointing one, for, had there been any moon that night, one or other of us must have got the beast.

Alternating with the inspection of line and buildings I had quite an amount of green pigeon shooting from the trolley and, on one occasion, an obliging engine-driver held up the train in a small wayside station for over an hour whilst I filled my bag with these pigeons and a peacock. So that in Bilaspur district my lines were laid in pleasant places.

I spent a very happy Christmas Day there, my third away from home, with my Chief, his wife and other railway officers, a Christmas tree and sports for the railway children being provided in the Institute.

I had not been on the railway a fortnight when I became a private in the Railway Rifles and turned out on the first parade in my Assam trooper's uniform, spurs, spike and shoulder chains complete, much to the astonishment of the sergeant instructor.

In Bilaspur I was immediately under the eye of my District Engineer, and I learnt afterwards that most newcomers were sent to him first, so that he could form an opinion of their capabilities and report upon them to Calcutta. The Bilaspur sub-division, of which I was in charge, did not really require a man to look after it, as much of it was on the branch line, where trains were few and far between.

The report upon me must have been a favourable one

because, at the beginning of January, 1902, I received instructions to take over charge of the next sub-division with headquarters at Raipur. Here I found myself the only railway officer in the place, my District Engineer being stationed at Kamptee, over 100 miles away, and near Nagpur. At Raipur I had 180 miles of the main line and in addition 56 miles (all there was) of the 2 foot 6 inch gauge line to Dhamtari, with a small branch to Rajim. My bungalow at Raipur was an imposing edifice built in the middle of a huge compound (or garden) and approached by a long, red-soiled drive leading from the main road to the station, which my windows overlooked. I had a carriage of my own on each line, and spent most of the time trolleying up and down or riding on the cow-catcher of the engine, making my inspections in this way.

Raipur was an important civil and military station in those days, and was the headquarters of a district known as Chattisgarh (or forty houses), meaning that there were forty or so small rajahs scattered about all over it. On the main line I had two rest-houses at Drug and Bhatapara, where I would spend week-ends shooting and making travelling allowance, but when in Raipur itself I had to make my duty-calls on all the Government officials, play tennis, billiards, polo and cards at the Club and join the Badminton games with the memsahibs of the community. I became an honorary member of the XXth Madras Infantry Mess, and found a fellow East Anglian in Captain Bidwell of that regiment. Very soon my calls bore fruit, and practically every night, when at my headquarters, I would be dining out, sometimes with the Commissioner, the Civil Surgeon or the Gaol Superintendent, but more often at the Mess, where I soon became quite a *persona grata*.

By this time I had provided myself with a horse and trap and earned the sobriquet of "Dickie the Driver"

from Captain Oldham, R.E., and his wife, a sister of Conan Doyle.

My main duty at Raipur at this time was the inspection and passing of thousands of railway sleepers cut by contractors in the forests near Rajim, on the small-gauge line, and on one occasion, being camped there in my carriage, the Deputy-Commissioner asked me to dine with him in a village some mile or so away from the line.

After an excellent dinner the guide, who was taking me back to the station, completely lost his way and he and I were wandering about in the jungle till 6 a.m., when we found ourselves near the railway, it is true, but four miles away from the station. That little outing cost me three days of malarial fever on my return to Raipur. Our railway doctor at that time had lately come out from England, and it was discovered that he was subject to violent epileptic fits and could not bear having a bath, so that in a few months he had to return home and India knew him no more.

When I had become, as I thought, thoroughly settled down, had started gardening in earnest, had made a tennis court, fixed up jumps, laid out a tent-pegging run, that bugbear of the Indian official came in the form of another transfer, this time in charge of construction.

This was a feather in my cap because it is the ambition of all "open line" engineers to be sent to new works, and though I got no more pay for this my travelling allowance now became a consolidated one of Rs 180 (£12) a month, the only condition being that I must keep two horses. I already had one, and so when I went to Jubbulpur to my new job, I saw the local gunner-officer and bought a "caster" from him for a very nominal sum. A "caster" is a horse rejected from the artillery and branded "R" on the flank, but one quite good enough for hacking about railway construction. With the horse I got a military saddle and bridle, saddle-bags, picketing

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rope, etc., complete. In fact, I am not quite sure whether, for the purchase of the gear, that the horse was not thrown in with it as a make-weight. Anyhow, with my two horses, servants, etc., I set out for my new headquarters at Shekara, in the Satpura Hills, to construct ten miles of the new 2 foot 6 inch gauge line from Jubbulpur to Gondia. I found a rough wooden bungalow, with out-houses and an office, waiting for me, and a deferential Eurasian Inspector of Works and a Bengali overseer there to greet me.

My superior officer lived in comfort in Jubbulpur and had initiated me into the work that had already been done and what still remained to be carried out. My nearest white neighbour southwards was ten miles off and named Conduitt, a brother-in-law of Mr. Wynne's, and beyond him was Padre Willcocks, also an assistant engineer and brother of Sir James Willcocks. On the north was Jubbulpur, a large military cantonment, to which I was connected by telegraph. The country round me was open jungle, with the Tamar river intersecting the broad plain upon which the stunted trees of the Central Provinces grew in clumps, but southwards the Satpura Hills began, and that five miles of the line in my charge contained some very deep rock cuttings, high embankments and large bridges, and it was here that I saw that my training had been very deficient. I found that I had not been taught how to set out a simple railway curve or work out the vertical curves required at changes of gradients. I was too proud to ask my subordinates, so I studied at night and watched them with the instruments in the day-time, and soon learnt all that was required for me to know. I also had the greatest difficulty with the contractors' accounts, and it is my firm opinion now that every engineer should be taught something of book-keeping and accountancy, as these two accomplishments enter very largely into his work.

Our bridges were built of masonry in lime, and I had to know something about lime-burning too, I found, but it all came to me in time, though I confess I had a nasty moment once, when my District Engineer, on one of his inspections, ordered the contractor to pull down the abutment of a bridge to the foundations, as he considered the masonry bad. These contractors, of course, soon spotted my inexperience and tried to impose upon me. Our schedule of rates contained different prices for hard and soft rock and hard and soft earth, and it would be the aim of these contractors to convince me that soft was hard as often as they could. One cutting I had in rock and over sixty feet deep, contained all sorts of hard and soft rock and earth, and many were the arguments between the contractor and myself as to what was the right amount to pay. The dispute was settled in the end by the Superintendent Engineer, who came specially from Seoni to deal with it.

Every now and then I would be presented with a basket of fruit and cake (called dollies) by these men. Before accepting these I had been told to search them, and doing so I sometimes found a valuable piece of jewellery or a gold watch, and once a bundle of notes carefully concealed in the bottom. The temptation to be dishonest was great, but I am glad to say that I never accepted any of these bribes, which, had I done so, would have lost me all respect from the givers and would have put me at their mercy.

During the time I was on construction my amusements were few. There was nothing much to shoot except peacocks, and the natives had an objection to that ; a black bear sometimes, and rarely a deer. There were tigers about, but I never had any news of a " kill " and had no time to go after them.

On occasional visits to Jubbulpur I dined at the Mess of the South Lancashire Regiment, being present on the

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occasion of the celebration of King Edward's coronation, at which an over-loyal subaltern, after performing a Highland fling on the table, collapsed on to me, breaking my chair and necessitating me being carried out and put to bed much bruised. The "Army List" provided a very good football in the Mess after the senior officers had retired, and all sorts of wild horseplay was indulged in. Gymkhanas, polo, tennis and golf were all in "Jub" for the asking, and then there were picnics to the Marble Rocks, generally ending up by being chased away by one of the numerous swarms of bees that infested the place.

In September of that year I developed an acute attack of pericarditis, a noise like the squeaking of a boot going on in my chest. These symptoms entirely defeated our Armenian sub-assistant Surgeon attached to the construction, and I went into hospital at Jubbulpur under the care of Colonel McKay, the Civil Surgeon. On recovery, I was not sent back to the construction, but transferred to Raipur again and took my horses with me.

The open line work seemed very tame after the strenuous life on new works but my health did not then permit me to be buried in the jungle alone, and so I went back into the civilized world again, and became once more a man of dinner jackets, tennis parties, clubs and society generally as represented in an Indian up-country station.

That Christmas of 1902, I spent tiger shooting with a great friend of mine in the cotton business, in a small native state named Chuikeddan, about forty miles off the line of railway. To get there, we travelled in a bullock tonga or cart accompanied by the Dewan or Prime Minister of the State. On arrival, we found our tents pitched, food ready and all prepared for the beat next day. We had had a bullock tied up the day before and natives came in early to tell us that this animal had been killed. A drive was organized down the bed of the nullah or dry stream, and we three sat up in trees whilst the

beaters started from two or three miles away, to drive the tiger towards us. Along the top of the nullah bank, other coolies were placed to act as "stops." Their duty was to prevent the tiger breaking out sideways and to keep it on a straight line, where it would have to pass one of us.

With a great halloing the drive started, and all manner of living things passed my tree, monkeys, deer, wild boar, rabbits and birds of all sorts, but no tiger. When the beaters reached us, we learnt that they had seen the animal but that it had gone into a cave in the nullah side and would not come out. Drawing lots as to who should go and shoot it, the longest piece of grass fell to me, and off I went to the mouth of the cave, knowing considerably less of tigers then, than afterwards, or I might have thought twice about it.

The mouth of the cave was approached by a path about one foot wide and along this I went. As I was approaching the entrance something rushed between my legs and threw me off my balance; this was a tiger cub intent on making good its escape. I approached the cave and saw two eyes blazing at me from the darkness; with my .500 express rifle I fired one shot between the eyes and heard nothing more. The next morning I went into the cave with the native hunter, and there was the tiger stone dead. So ended my Christmas of 1902, and when I returned to the Club at Raipur a lady said to me, "I knew you had shot a tiger by the way you came in, so tell me all about it." This I proceeded to do, and learnt from her that although I had got the skin I had forgotten to get the most prized trophy. These are two little bones called "floating bones" in the neck, and are highly valued by women for making into brooches.

Having now two horses and a trap I introduced a tandem, the first one seen in Raipur, and as one of my horses had never been in a trap before I put him in as the

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“wheeler,” whilst the trained one became the “leader.” In this way, I soon got them to go well together, though occasionally there was some trouble when the leader started buckjumping. Both horses jumped well and played polo, and in my compound I, with the regimental officers, had many little gymkhanas of our own, tent pegging, heads and posts, jumping, etc.

Trolleying along the line during the hot weather of April, May and June was like passing through a furnace. The heat came up from the stone ballast like a blow in the face and after a time I only travelled in the morning or evening and rested in one of my bungalows on the line at midday. At night I slept on my tennis court in the open air regardless of prowling beasts of prey and only too thankful to get a few hours of real sleep. I wonder if a European can now venture to sleep in the open in India after what one reads of the murders and other atrocities done by black to white. Certainly, there was no danger from natives in the Central Provinces in my years in India, for a more docile and harmless lot of individuals it would be impossible to find. Only on one occasion did anything untoward happen, and that occurred in the Raipur Club one evening, when I, with the Deputy-Commissioner and two ladies, were playing cards.

Without any previous warning, a native slipped in and stabbed the Deputy-Commissioner in the neck and had it not been for a high stiff collar he was wearing the blow might have been a fatal one. I rushed out with several other men and caught this native, who proved to be a notorious budmash (rascal) of the town, who had a grudge against Mr. Napier. At his trial he got transportation for life to the Andaman Islands, and that sentence effectively put a stop to his murderous proclivities.

Feeling that I was probably to be in Raipur for the rest of my active service on the railway, it occurred to

me that it would be a good plan to get married, and after proposing, and being rejected, by one or two of our "spins" at the Club, I wrote home to a girl I had known in Norfolk in 1898, when at Melton Constable, and after several months' correspondence, she agreed to come out and take me for better or worse. So in December, 1903, I, with my cotton growing friend, proceeded to Bombay and met the *Mongolia* on which my future bride had travelled from London. Landing at 10 a.m. on December 12th, we formed in the queue consisting of a dozen more couples, and were duly made man and wife in Bombay Cathedral at 11 a.m., my friend acting as best man.

My Chief in Calcutta had, on my telling him that I was going to get married, written me a letter saying that I would do better to wait until my salary had reached Rs 600 a month, but that if the lady was willing and I had made up my mind, he gave me his blessing and his best wishes. So, with my added responsibilities, we returned to Raipur where I had had the bungalow done up, curtains hung and new furniture installed to receive the congratulations and many invitations to parties, etc., from my friends. A visit to the Elephanta Caves at Bombay had been the only honeymoon for which we had time, but at Christmas we spent a few days in a delightful rest house at Rajnandgaon, lent to us by the Rajah of that place. Here my friend Frederickson lived, and we spent a good deal of time with him, shooting and trolleying on the line.

We now had to do a good deal of entertaining ourselves in Raipur, principally tennis parties, but we did give occasional dinner parties when we had an evening at home, which was a rare occurrence. I sold one horse to help pay expenses, and made as much travelling allowance as I could, my wife almost invariably accompanying me on the trolley.

Amongst our visitors at this time was the Railway

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Chief Medical Officer, Dr. Martin Leake, who won his V.C. in the South African War, and was destined to get another in the Great War. In July, 1904, my health broke down again, and he then ordered me three months' leave to England, and this being sanctioned by the new Agent, Mr. Beckett, in Calcutta, I made arrangements to sail. I had no claim on the railway company for passage money, as I had been what is known as "locally engaged," so I had to raise this myself. The sale of the horse and trap, some furniture and an advance on my next three months' salary, just about covered the amount required, and travelling to Bombay again, my friend Frederickson also going on leave, we embarked on the P. & O. ship *Oriental*, bound for Marseilles and England.

I had been away nearly four years, had left as a boy and returned a married man, and a sick one at that, but the sea voyage worked wonders with me and by the time Marseilles was reached, I felt altogether a different being.



THE LAKE AT KANDY



THE LAKE AND TEMPLE OF THE TOOTH, KANDY



MAIL TRAIN AT RAIFUR STATION



THE AUTHOR'S SHACK AT BRUIHIN, VICTORIA

CHAPTER IV

INDIA (*concluded*)

NO one in his senses would willingly make the voyage from Bombay to Aden in the month of July, as then the South-West Monsoon is blowing and the sea is very rough. I had no choice in the matter, however. The Indian Ocean fully lived up to its reputation and the *Oriental*, a small boat, pitched and rolled like a cork.

Being second-class passengers and, therefore, berthed aft, we had a most uncomfortable six days and, I confess, I was thoroughly and whole-heartedly sick the whole time. My wife, however, proved to be a good sailor, and so did Frederickson, who, his passage having been paid for him, travelled first class.

The ship had a lot of potatoes in the last stages of decay on board, and the smell of these did nothing to assuage the pangs of sea-sickness, and I vowed then that I would never, if I could help it, travel at that season of the year again and, as it happens, I never have. After Aden, however, all went well and even the heat of the Red Sea did nothing to abate my longing for home again.

No stop was made between Port Said and Marseilles and at the latter port we disembarked and proceeded by train to Calais. This was the first time that either of us had been in France and things were difficult, as we did not know anything but school French, which takes one nowhere. In any case I found myself mixing it up

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with Hindustani, greatly to the astonishment of my listeners.

In London we went to the Hippodrome, the Empire, the *Earl and the Girl* at the Adelphi, also to the *Duke of Killiecrankie* at the Criterion, and to the *Cingalee* at Daly's. Where I obtained the money to spend on these entertainments I do not know, especially as these were not the only places we visited. I remember a trip to Earl's Court but do not recollect what was on there, then to *The Orchid* at the Gaiety, Hengler's Italian Circus, and *The Prince of Pilsen* at the Shaftesbury Theatre. All names only, to the present generation, but good shows then, and much appreciated by two exiles from India.

I noticed very few motor cars in London, or in England, and all the buses were horse-drawn, hansom and the old growler still occupying the streets.

Going down to Norfolk I found that my brother had become a permanent invalid, when I had left him four years before an undergraduate at Cambridge, with what looked like a brilliant career before him. My only sister had followed my example and had married, and my youngest brother had entered upon that stage career, which has now landed him upon the London boards.

You may be sure that I and my wife received a warm welcome and, if I mistake not, flags were hung out in the drive and a large "Welcome" displayed over the entrance gates of my home.

As we had only six weeks in England, we determined to make the most of them, and to do so I hired a 6 h.p. De Dion Bouton two-seater, one-cylinder, car from my friend, Hubert Egerton, who taught me how to drive it. My only experience of this new means of locomotion had been in 1900, when the same Hubert Egerton, one of the pioneers of motoring, had inveigled me as a passenger on a motor tricycle he then owned. Sitting in a basket seat in front of a one-cylinder motor, fired by a red-hot tube,

I was ruthlessly driven at top speed (about forty miles an hour) along the Yarmouth road, choked with dust and fumes of burnt petrol and oil and holding on to the sides of my seat like grim death, my only moments of ease being when the contraption broke down, which it did every few miles.

Having driven a steam-roller in my youth, driving the De Dion came naturally to me, and in a few hours I had mastered it. Then began a period of careering along the road from my home to my wife's home, constant stop-pages for something going wrong or to take a fly out of my eye (there was no windscreen) or repair a tyre. Clouds of dust followed us everywhere, as the roads then were not tarred. But motoring in those days also had its compensations: no horse-power tax, and no insurance, very little other than horse traffic on the roads and little chance of accident, all helped to make me an enthusiast in the new means of locomotion, and I determined in my own mind that when I returned to India I would get me, by fair means or foul, one of these machines, and give the natives in whatever place to which I was to be sent on my return, something to think about.

The longest journey I made on the De Dion was to Melton Constable, where I, with my wife, went to see my old Chief.

He regarded it as quite a feat to have run the twenty miles or so without breaking down.

I remember a guard whom I used to know well when a pupil at Melton Constable asking me how I liked India, concluding by saying: "I hope you haven't brought a black wife home with you," and his apologies when introduced to my wife, standing near me.

My friend Frederickson came to stay with us in Norfolk, and at a tennis party at my wife's home we were told that another man from India was coming to play. When he did turn up we spotted him at once for an

Eurasian, and there was much embarrassment on both sides in consequence.

After a very good holiday our six weeks at home came to an end and, embarking in London on the P. & O. ship *Macedonia*, we made the long sea passage again to Bombay, this time the Indian Ocean being like a mill-pond. A letter from the Agent of the railway enclosing first-class tickets for myself and wife from Bombay to Calcutta was handed to me, and I learnt from it that I was to go to Balasore, in Orissa, a station on the main line from Calcutta to Madras. Arriving at Balasore I found that I was relieving one, Godfrey, an Eurasian, who was leaving the line, and who started to give me some trouble in evacuating his bungalow. I sent a wire to Calcutta asking who was to have the house when the handing over was completed, and I believe that this was the cause of some amusement in the Head Office, as it was thought that the handing over might possibly end in a free fight for possession. Having taken over charge, however, I soon got Godfrey out by ordering the staff to put all his things into the garden, which they did, and eventually he and they departed for an unknown destination.

Balasore is not very far from the sea, and is a small civil station presided over by a Collector, as they call the deputy-commissioners on the Bengal side. There were also, at Balasore, two gunner-officers who did big-gun testing at targets moored out at sea, and on many occasions we were privileged to see these tests and, until then, I never knew that a projectile from a big gun can be seen in its flight, if one stands directly behind the gun. Most ingenious instruments were provided for testing the speed and penetration of small-arms' bullets, and altogether a day with Major Moore and Captain Cowie was an education.

My work at Balasore was not hard, but in the rainy

season I had a great deal of anxiety about my bridges and would often, during heavy flood, patrol the line at night to see that none of them got washed away, particularly as the Madras mail train ran through my division late at night.

The climate at Balasore was quite different to that in the Central Provinces. There we did get some cold weather round about Christmas time (I had even seen ice near Jubbulpur in the early morning), but at Balasore we had a hot muggy climate which melted collars and reminded me very much of Assam, from which province it is not so very far off.

There was no club in Balasore and the English people could only meet at each other's houses for tennis, but I found that very little entertaining was done, as the Collector was a bachelor and lived a very quiet life.

At Christmas my wife and I went off to Cuttack, a large station nearer Madras, and stayed a few days with some friends she had met on the ship.

About this time I bought a "Rex" motor bicycle and wicker sidecar and thereafter, in spite of all the troubles and vexations I suffered with it, became an ardent motorist and have so continued to the present day. This "Rex" must have been one of the first motor bicycles made; it had what is known as a surface carburettor, that is, the petrol vapour went through no process of carburation in a special instrument as now, but was simply inhaled by the engine from the surface in the tank, mixing itself with air on its way. The consequence was that at every jolt in the road causing the petrol to "surge," the mixture would be upset and the machine would either stop or run with an annoying series of misses.

For firing the charge a wet battery similar to the wireless batteries of the present day was provided, being housed in a compartment in the tank. No means were provided

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for recharging, as dynamos were then unheard of on motor bicycles, and so, when the battery ran down, as it did on an average of once a week, it had to be taken to Calcutta for recharging. The belt was a flat one and constantly breaking, but the machine was provided with pedals and a chain so that the unfortunate driver could get himself and his passenger home if energetic enough in that heat. Many and many a time had my wife and I set out for a day's enjoyment, provided with a lunch basket and drinks, only to find ourselves a few miles out and the machine refusing to move.

I remedied some of the defects, the principal one being the short-circuiting of the current from the battery against the side of the tank. Luckily, the only main road ran parallel and close to the railway, and on many occasions have I abandoned the machine and stopped a train to take us home. The next morning I would go out on the trolley and either repair the defect or let the trolley boys push it back. It is no exaggeration to say that the simple villagers on our route were terrified of it and men, women and children would rush off into the jungle shrieking and shouting "Shaitan" (the devil) with all their might.

No number plates, driving licences, tax, or insurance were required in those days and there was no speed limit. On the other hand there were no petrol, oil and tyres to be obtained nearer than Calcutta, about 300 miles away, and spare parts, if required, had to come from England.

In January we had our annual camp of exercise at Khargpur, our largest station, and on this occasion I became one of a selected band of Mounted Infantry, having provided myself with a horse for the purpose. Only twenty of us formed the Troop, but amongst them was our V.C. doctor, also a trooper. We all lived in railway carriages laid up in a siding, and had several enormous marquees

for our messes. Regular soldiers from Fort William in Calcutta camped alongside us, and we had manœuvres, sham battles, scouting and drill in the mornings, the afternoons being given over to shooting on the range, polo matches, gymkhanas and sports, everyone returning to duty at the end of a week's training. At the Club in the evening, dancing, smoking concerts and mock courts martial would take place and the presiding genius over all, and the centre of all mischief, would be our Colonel, T. R. Wynne, still with his foul-smelling pipe in his mouth on all but the most formal of occasions. The women would join up with us in the evenings, having found billets with residents' wives in Khargpur. Early mornings would see a heterogeneous collection of horsemen chasing the wily jackal, with a "bobbery" pack of hounds, these latter being joined by every pie-dog in the district, and all vieing with each other as to which could make the most noise.

The camp broke up after a review by the Commander-in-Chief in India, Lord Kitchener, who saw fit to make rather disparaging remarks about the Mounted Infantry, until his cold blue eye caught the red ribbon and bronze cross of our doctor hero when he stalked off.

Soon after this camp I was transferred to Khargpur, to take charge of hundreds of new workmen's quarters, then being erected, and also of a few miles of open line. Here I had to attend office in the mornings from 9.30 to 12, but the remainder of the day I went round the works on my "Rex" when it went, on my feet when it didn't. At this time I managed to sell it to another enthusiast, one Allen, our Adjutant, and bought myself a new "Peugeot" motor bicycle in Calcutta, having first tried it several times round the statue of Lord Roberts on the Maidan. Allen and I, the only owners of motor cycles, would amuse ourselves by racing round the "station," about four miles in extent, until one day we met head on,

and thereafter both of us were in hospital for a little time and the bicycles had to be repaired in Calcutta.

In August, 1905, at my own request, I was transferred back to Bilaspur, as my wife was then in a certain condition, and I wanted her to be attended by an old friend of mine, the Civil Surgeon, there.

In September our baby was born, and at first little hope was held out of her living, but with the attention of the civil surgeon, Doctor Martin Leake, and his assistant, Doctor Philbrick, as well as the devoted nursing of the railway midwife, both mother and child came through and after convalescence I took them up to our bungalow at Khodri, a truck containing our cow being attached behind the carriage. Doctor Martin Leake stayed up there for a time with us, and he and I tried several times for a tiger, always without success. We had some excellent duck shooting however, on a *jhil*, or marsh, and these ducks made a very welcome addition to our scanty menu.

Our stay in Bilaspur was again a very short one, for by Christmas of 1905 we were back in our old home at Raipur, not to leave it again until the final departure from India.

Getting tired of the motor bicycle and not being able to take my family out in it, I sold it to a man in Bilaspur and from Major Moore at Balasore purchased a French car called a "Rochet," which the railway kindly loaded up for me and sent to Raipur, free of all charges. This was the very first car to be seen in the whole of the Central Provinces of India, though shortly after the District Engineer in Bilaspur got an 8 h.p. de Dion, and was constantly asking me to go down and show him why it would not go.

My "Rochet" was a single-cylinder two-seater originally, but with my blacksmith in Raipur, I converted it into a *tonneau*. It had no windscreen or hood, and was

only for use in dry weather. Wooden mudguards were soon smashed up by our cow, which would charge directly I started it up. No number plates, oil lamps, and almost vertical steering column and a Renault type bonnet completed this pioneer car in that part of India, and many an enjoyable ride did we have in it, and many also quite the reverse. I still had to send to Calcutta, 700 miles off, for petrol and oil which my servant brought in ten gallon drums in the brake van of the mail train, there being no regulations in force on the railway then to bring these things in an explosives van, as there is now. The oil lamps gave no light at all, so I bought two acetylene head lamps from England and fixed them on it. Before they came, however, I managed to run into a "borrow pit" at the side of the road, throwing my wife and baby out, luckily with no damage to either.

We made several runs of forty miles to Rajnandgaon to see Frederickson, and on the way we had to cross two dry sandy bedded rivers, on planks which we carried with us. The experience I obtained from the motor bicycles and this car has since proved of great use to me in other countries, as this tale will perhaps show, but the amusement and pleasure I got out of that first car of mine has never been equalled anywhere else in the world.

I had quite abandoned my old love, the horse, for motors, and it was not until six years after that I owned a horse again. My Chief at Kamptee emulating my example in the motoring line had purchased a Phoenix Quad-car, a kind of four-wheel cycle with a seat in front for the passenger, and a bicycle saddle behind for the driver. As he could not get it to run properly he sent it the 70 or 80 miles by train to me, to see what I could do with it.

The first thing I did with it was to accidently smash the tubular frame, but this I repaired by inserting a

smaller pipe in the tube. When taking my wife in it, the front wheels would continually come off as the thread on the axles turned the same way as the wheel revolved and so you beheld my passenger going gaily along with a hand stretched out over each wheel cap ready to shout out to me to stop directly she felt the nuts slackening back.

Though the Phoenix Quad-car had no doubt an excellent turn of speed, this asset could not be utilized as one always had the fear of those front wheels flying off at a tangent and depositing driver and passenger in a sticky mess in the road. I returned it to its owner saying I could do nothing with it.

Ever since my daughter had been born, my wife and I had seen, far off, it is true, but still on its way to us, that spectre of separation which comes to all married Anglo-Indians. We saw that Susan could not remain in India much after the age of two years, and that my wife would necessarily have to go home with her and stay with her there. This would mean my keeping up two establishments, an impossibility on my salary. I also saw that, having married, I had little chance of improving my prospects on the line, and that it might be years before I should be promoted to the District Engineer rank. The initial mistake was having married at all, and it led to the greatest mistake I could have made and that was giving in my resignation at three months' notice. It is too late now to cry over spilt milk, but I simply could not endure the thought of having to work on in India alone again with little prospect of promotion and none at all of getting to England again for many years. So I resigned, and when, in Calcutta, I saw the Chief Engineer, he gave me a testimonial in which amongst other things he wrote, "I admire his pluck in throwing up a job which is practically permanent." I felt alas, too late, how foolish I had been and would have withdrawn my resignation if I could have done so. As it was. returning to

Raipur, I sold my car to Frederickson for Rs 1100, and saying good-bye to many friends of six years' standing, left by the mail train for Bombay and embarking in the Natal Line ship *Umhlali*, left India behind, never to set foot in it again, or to see any of those places where I had been as a young lad of twenty-three, or where I had been married or where my daughter had been born.

A "Land of Regrets" is surely a good name for India, and even now, twenty-six years after, I sometimes lie back in my chair and see that cave in which I shot my tiger, my bungalow and gardens, my horses and trap, the bar at Raipur Club and the plates of chipped salted potatoes put there to assist the revenue, the view of the country from the cow-catcher of an express engine, the gymkhana at Jubbulpur, and all the khaki-clad soldiers, the Eden gardens at Calcutta in the evening, but, above all, those few months in Assam, the gaily-clad girls bringing in the leaf and the faces of all those men friends of mine now gone, who knows whither? All pass before me as I dream day-dreams of the days that are gone. So let us ring down the curtain on the Indian scene and see what the future brings forth.

CHAPTER V

ENGLAND AND CANADA

WHEN I said good-bye to India in March, 1907, I had in my mind's eye to go to Canada, as my wife's relatives came from there, and perhaps I might, through their influence, get some engineering work upon the railways in that great Dominion. I gave little thought to the question of climate and the effects of perhaps 40 degrees below zero on a man who had been living in a shade temperature of anything between 90 and 120 degrees above, in India. In fact, I am sorry to confess I gave little thought to anything in those days, or I should certainly have remained in India.

Having drawn a substantial sum of money from the Railway Provident Fund, to which I had been contributing during my six years' service, I determined that we would have a good time in England, to make up for our years of exile, and let the future "go hang" until the money was exhausted. My father had always said of me that, though I should always make money, I would never be able to keep it, and this has been one of the truest things ever said about me.

The *Umhlali* proved to be a one-class small ship, but a very comfortable one with only about sixty passengers on board. Consequently there was no crowding or the usual morning rush for baths or the search for an unoccupied shady spot on deck for our chairs. As usual, on the homeward voyage, the crew under the Chief Officer were busily engaged in painting the ship, and when

I asked him what they would do when the painting from stern to stem was finished, he informed me that they would begin at the stern again.

No unusual incidents occurred, except that we called for a day at Algiers, an unusual port for an Indian boat, and were enabled to go ashore and see something of how the French ran their colonies. Spahis and Zouave soldiers formed the garrison and the place looked like a replica, on a small scale, of Paris with its boulevards and open-air cafés.

Landing at Weymouth we proceeded to Norfolk next day, and presented our daughter to her grand-parents, greatly to their delight. My father never uttered one word of reproach to me for my foolishness in leaving India, but I knew that he was very disappointed after all the efforts he had made to get me the job.

I lost no time in buying a second-hand car from Egerton. This was a five-seater "Richardson" with a two-cylinder Aster engine, and I had not had it long when I discovered that one of the cylinders was cracked, but I could get no compensation from the firm from whom I had bought it. Cars were still, in 1907, very few and far between, in Norfolk at any rate, and the horse buses, hansoms and growlers still plied the London streets.

That summer of 1907 was a glorious one in England, and we made the most of it. Two of my Indian friends came to stay, and with one of them I made a tour of the Midland counties, this time in a two-seater Humber which had replaced the Richardson.

In July I made up my mind that the time had come for me to look for work, and as I had given out that I was going to Canada, I booked a second-class cabin on the Allen liner *Victorian*, and sailed from Liverpool. Before going, however, I had told my wife that directly I got a suitable job in Canada, she and the child were to join me, and with this understanding I left them.

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The ship was full of emigrants, principally Russians and Italians, with a sprinkling of agricultural labourers from England. These people were travelling third class.

Until we got within twelve hours of the mouth of the St. Lawrence river, nothing untoward had happened, though we had passed some majestic icebergs coming down from the Polar regions and "calving" as they went.

I know few more impressive and awe-inspiring sights than that of a huge berg in the sunshine and the blue water, and when big lumps broke off and fell into the water with a tremendous splash, I realized what a menace these were to shipping, though the *Titanic* disaster was away off in the future. When near these bergs the cold was intense, and when a thick fog came down and wrapped us in cotton-wool I retired to my bunk and got under the blankets, so cold was it.

The mournful hooting of our siren at regular intervals did little to remove the depression and the feeling of utter helplessness that one has when in a fogbound ship. In this state we remained stopped for three days, and as there was then no wireless, the shore people must have been getting very anxious indeed about our safety and the safety of many other ships in a similarly parlous state.

Then, when the fog lifted for an hour or so our Captain made a dash into the Straits of Belle Isle and we entered the St. Lawrence River to experience a heat much worse than anything I knew in India. A short halt at Rimouski in Labrador and our journey up the river continued, passing on the way the newly constructing Quebec Bridge which three weeks later collapsed into the river with great loss of life.

All the emigrants disembarked at Quebec, proceeding to their destinations by train. Going ashore here I was struck with the *pavé* of the streets, the patois French of the inhabitants and the magnificent view from the

Heights of Abraham. The Château Frontenac, which is built on these Heights, was closed, as it was a Sunday, so that we could not get a much needed drink, after scaling the cliffs in that heat.

Arrived at Montreal, an uncle of my wife's met me and took me off to stay in his house in Westmount. By and by other relations turned up, all anxious to see the new member of the family. The next day I started off in earnest to look for work.

Calling on the Dominion Bridge Company, I learnt that they had no work on, and it was the same with other bridge concerns. At the Canadian Pacific Railway Office I was offered a job by the Chief Engineer, but the conditions were not to my liking at all. They were that I should take a survey party up to the north of Lake Superior and make an astronomical survey of the line there. I was to provide my own instruments, the work was to continue right through the winter and the salary offered was \$75 a month (£15). Apart from the salary and other conditions I felt sure that an "astronomical survey" was then beyond my powers, so I declined with many thanks.

My host did all he could to help me but he knew no engineers in Montreal, so that after a week I gave up the search and devoted myself to amusement. This consisted firstly in being taken for a trip down the Lachine Rapids near Montreal. As luck would have it, we had selected the same day for our outing as the Montreal Police had done, and had chosen the same trip, so that the steamer was crowded with uniformed policemen. I chose a place right up in the bows. Led by an Indian in a small dug-out canoe as pilot, we started off on one of the most fearsome rides I have ever experienced. A tremendous current and rapids rushing past huge rocks so close together that it seemed to me impossible for the steamer to get between them; spray thrown high up

in the air very soon wet me thoroughly and tremendous descents on a rapid at frequent intervals brought my heart into my mouth. A glance at the anxious faces of the captain and steersman on the bridge told me that they were fully conversant with the danger run and what might be expected to happen to the ship if a slight error of helm took place. The Indian ahead bobbed up and down like a cork, but kept his canoe straight and made no mistakes. Though that trip did not last more than half an hour or so it has left a lasting impression on my mind which does not get less as the years pass. Thoroughly enjoying the thrill of it, I was nevertheless glad to be on shore again, because it seemed to me almost a certainty that there must be a serious accident one day on that hazardous joy ride, though I have never heard of one occurring.

All this time the heat in Montreal was terrific and to get away from it my uncle took me by coach to a little hotel at Lac St. Joseph, in the pine woods, for a week-end, and here I saw something of the Canadian backwoods. The forests were of spruce and fir trees and underfoot were the trunks of fallen trees rotted into punk. A little fishing for trout on the Lake and a Sunday walk round the village where every house, without exception, flew the Union Jack in its garden, finished up our week-end and we returned refreshed to Montreal.

Another day an aunt took me to play golf on the links at Dixie, and going there I experienced for the first time a ride in a Canadian railway train. A visit to Luna Park, the great amusement centre of Montreal, at night, showed me how the young men and maidens in that city disported themselves when the day's work was done, and I entered into the spirit of it, being photographed in a wheelbarrow, shooting down a dreadful incline into the water, getting on to the "Windy slide" and roundabouts.

The tramcars, or street cars as they are called, interested

me very much ; they ran with the speed of railway trains and only stopped at specified places. Maple trees lined the streets, and I had some samples of the excellent maple sugar and syrup produced from them. I had given up the idea of getting work in Canada, and made up my mind that the country was not suited to a man from the tropics after I had heard my uncle's account of a Canadian winter, so I joined the *Corstican* at Montreal and left that country of snow, ice and terrific heat for Liverpool again. I have no doubt, however, that had I taken that American's advice and "gone west," I should have found some work, but not in Montreal.

Well, Canada was another country to be added to the growing list of those I had visited, and it was the one of all I had seen and those to come, which I liked least.

Arrived once more in England, it behoved me to get a job as soon as I possibly could, and to this end I went to see Sir Douglas Fox and Partners, in Westminster. Mr. Francis Fox of that firm saw me and informed me that though he had nothing to offer me himself, he would send me to a firm in River Plate House, Finsbury, who might fix me up. Mr. Fox asked me, in the event of my being sent abroad, whether I would be good enough to send him any small thing I might come across for his private museum, and I promised to do so.

The firm in Finsbury, a very well known one in the South American engineering business world, offered me an appointment as a surveyor to join a party going to locate a small railway in the Republic of Colombia, in South America. I had to know all about instrument work, and particularly tacheometry, which for the benefit of my lay readers is the science of measuring distances without a chain, and levelling without a level ; in other words a complete contoured plan of an area can be made with the one instrument, if you know how to use it.

Now, at Melton Constable I had used this instrument,

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but only for measuring distances, but I felt confident that I could use it for all its purposes and said so. In my own mind, however, I determined to have a few lessons before sailing for South America.

The conditions of my engagement in this case were an agreement for one year only, passage out and back, £40 a month, and all tents, camp equipment, even food, drinks, and smokes provided. I was to see the Chief of the party and help him to collect all the hundred and one things required for a stay of one year in a place where nothing was procurable.

This occurred in September, 1907, and we were not to sail until November, so I had ample time to get some lessons in tacheometry and make my arrangements.

I saw that my family would have to remain behind, and the very thing for which we had left India, viz., to avoid separation, now loomed up and became an accomplished fact.

Whilst in Norfolk I asked one of the City Engineer's assistants to give me some lessons in the theory of tacheometry, but left him as much in ignorance as when I went. I bought a book on the subject and studied it, but these things cannot be learnt from books, and only practical experience in the field will make one a quick and accurate instrument man.

For the remaining weeks at home I stayed in Norfolk getting my things ready, and parting once again from my family on November 1st, I set off for Liverpool, and joining the two other men who made up our party, embarked on the Leyland line ship *Floridian* bound for the Spanish Main and a new adventure, incidentally following in the tracks of Drake, Hawkins and other freebooters of the Elizabethan age.

CHAPTER VI

REPUBLIC OF COLOMBIA

THE year 1907 was a year of much sea travel for me, for I had come from Bombay to England in March, had crossed the Atlantic twice in July and August, and now in November had started on a fourth voyage across the South Atlantic.

The *Floridian* turned out to be a cargo steamer with accommodation for a few passengers, and there were only ten of us all told. Of these, we three of the Survey and one engine-driver, returning to Trinidad from leave, were railway men, the others being the wife of the Governor of the Leeward Islands and her sister, and two men and two women making a tourists' round trip. We carried a few live sheep on board to provide the meat, and the remainder of the cargo consisted of half a hold full of our equipment and merchandise for South American ports.

We sighted the Azores, but made no stop until we reached Bridgetown, the capital of Barbados, but here no one was allowed to go on shore as there was an epidemic of yellow fever, and so we sailed away for Port of Spain, Trinidad.

On the voyage, in addition to studying my text book on tacheometry, I began on a Spanish grammar, as that was the language of the inhabitants of the place for which we were bound. Up to that time my linguistic accomplishments had been confined to my own language and Hindustani, six and a half years in India having given me a good speaking knowledge of the latter.

My associates on this survey were much older than myself, and amused themselves on board by playing cards and drinking, the latter vice never having been mine, though I have others. Consequently I looked upon the future alone in camp with these two with some misgivings, especially as we had brought twelve months' supply of liquor with us.

At Trinidad I went ashore with the engine-driver, and he showed me round the town. It seemed to me to be in many respects like Ceylon, only much hotter. There were the same coconut palms, and the same types of houses, the same race-course and shops, only the natives were different, consisting as they did in the main of West Indian negroes all speaking English and all wearing European clothes. Mixed up with them were the Spanish Indians from the mainland, East Indian shopkeepers and merchants, and a smattering of Greeks, Germans, Italians and others, with the lordly Englishman domineering everybody, as is his wont.

Leaving Port of Spain, with its muddy roadstead, caused by the mingling of sea water with the waters of the Orinoco, we proceeded to La Guayra, the main port of Venezuela, and here the ship stayed two days. Thinking it a good chance to see Caraças, the capital, we three went off by train on the thirty-two miles long mountain line to that city. Some formalities had, however, to be gone through before we could enter Venezuela, as no less a person than the President, General Castro, had to give us his gracious permission. This was duly accorded, and we put up at the one and only hotel Caraças boasted and had a look at the city. Of course, one expected to see statues of the Liberator, Bolivar, much in evidence, nor was one disappointed, for there were plenty of them in the parks. At the time we were there traffic in the streets was much disorganized because an American firm was laying the tramway rails and had taken complete possession.

I had a foretaste here of the law as known in South America. Some malefactor had escaped from custody and, looking out of the hotel window, I saw two policemen taking pot shots at him with revolvers as he ran, but never hit him as far as I could see, and he made good his escape.

Foreigners appeared to be treated with scant courtesy, and many were the scowling looks we received on our walks. I suppose some twisting of Castro's tail had been taking place and accounted for their animosity.

We came down the line to La Guayra on a motor trolley driven by a girl of fifteen, daughter of the English General Manager of the railway, and we covered those thirty-two miles at a breakneck speed, so much so that I expected to be landed over the side and down the few hundred feet of precipice, but we arrived safely.

Sailing that evening, our next call was at Puerto Cabello, another Venezuelan port, presenting no features of interest. At Curaçao, our last halt, we had half a day ashore and met a kindly Dutchman, who took us all to his villa, imported direct from Amsterdam by the look of it, and gave us tumblersful of the liqueur for which the place is noted, so that we were much obliged to him when he sent us back to the ship in his bullock cart.

Passing the Gulf of Maracaibo and turning a rocky spit of land, Santa Marta lay before us at the head of a small bay, and this, my fourth long voyage that year, was over.

Drawing up to a tarred mahogany planked screw-piled wharf we watched our equipment being unloaded into the railway trucks and hauled off to the Customs House, and in this place we spent a feverish three days explaining in Spanish what each article was, of what it was made, and its use, so that the officials could assess the amount of duty. Eighty per cent *ad valorem* eventually was charged on practically everything, even to penny pieces

of rubber and pencils. We had brought whisky in a hogshead and the town was searched for empty bottles into which we could decant it, and as no corks were available paper stoppers were used.

The General Manager, Chief Engineer, Traffic and Loco. Superintendent, all combined in the person of Mr. Marshal, met us and fixed up our accommodation in the only hotel of which the place boasted. What an hotel and what food, best to leave it to the imagination perhaps, but it was not the Ritz by any means. After three or four days haggling with the Customs officials we loaded up our gear, and with eighty Spanish Indians under an American overseer travelled the sixty miles to rail head at Fundação, where our work was to begin. Curiously enough the railway terminated just over a large steel bridge.

On the way we had passed through miles of banana plantations, and also some sugar cane, but for the last half of the journey through dense forest. Water for the engine was obtained by stopping at any convenient stream and the tender filled from it by buckets, whilst most of the passengers stripped and bathed.

At one place the line was strewn with quantities of the avocado, or alligator, pear, and we instructed our men to collect baskets full of them to take with us.

Choosing an excellent tree-shaded spot by the side of the river, our camp was pitched that same evening and I took stock of our surroundings. Ahead of us and beyond the river was a large open *portrero*, or meadow, with a few scattered clumps of trees and old mealie patches. This extended for perhaps half a mile, but beyond that no signs of civilization existed and the forest shut down on everything. Behind us and on each side was dense forest also, in which lived gorgeous blue and red macaws screeching away at each other at the least sign of disturbance. Beautiful though they were, I had to shoot them now

and then to provide us with fresh meat. A snow-clad peak, which we roughly worked out with our instruments to be 17,000 feet high, lay to the north-east of us, and served as a good landmark when we entered the forest.

No account of South America could be complete without mention of the terrible insects that continually pester one. Chief of these was the "plaga," an almost invisible fly which stings all exposed parts of one's body, the place bitten becoming a tiny black spot and itching horribly. Then there is the "garapatta," a hard-shelled insect about $\frac{1}{4}$ inch long, which has a pleasant habit of finding the most inaccessible parts of one's anatomy and there laying its egg. Daily search is necessary if you do not want your body to be made into a breeding-place for little garapattas. Mosquitoes swarmed at night, but I do not think they were of the anopheline or malaria-carrying variety, or perhaps they were and not infected.

There were no signs of any inhabitants anywhere near us, and it seemed that the whole country was deserted, though one would have thought that with a railway and a river with permanent running water, some enterprising Colombian would have started banana or sugar-cane planting.

When we had settled down as comfortably as we could in camp, work started. The *mozos* (labourers) under the American were sent forward into the forest to cut a *trocha* (trench) two metres wide straight through, so that we could follow with our instruments for surveying purposes. It was not for me to criticize the method, being by far the youngest of the party, but it seemed to me waste of energy and money to cut down enormous mahogany and cedar trees which happened to be on the line, when a slight deviation sideways would have avoided them ; also, when the *trocha* ran into hilly ground and terrain obviously not suitable for a railway, it seemed the wrong way of going about it to charge blindly along on the one bearing

which was calculated to lead us to Plato, our objective on the Magdalena river. Except for the Petrograd-Moscow line in Russia no railway in the world takes a dead straight course from end to end, and we were certainly not expected to survey a "Czar of Russia" line, as it is called. Some of the ironwood trees encountered were so hard that no axe or saw would touch them and these we got rid of by burning.

No maps of the country existed and we navigated our course as a captain navigates his ship at sea. Owing to the dense forest and the impossibility of getting long sights the tachometer was dispensed with and levelling and chaining resorted to, but I am not going to bore my readers with technical details, and it is only necessary here to state that when the, what is called, preliminary survey was completed and the new line laid off on the contoured plans we were making, the whole work of setting out and levelling would have to be gone through again, ready for construction if it ever came to building the line. As a matter of fact, the line has never been built and all our labour was in vain.

After spending three months on this work my services were requisitioned by the General Manager in Santa Marta to rebuild some of the railway bridges which were in danger of collapse. I was not at all sorry to leave the survey, because I could not hit it off with the other two members of the party. It appeared to me that they were taking too much advantage of my youth and enthusiasm and putting all the hardest work on to me. Certainly there was every temptation to drink, there was no other relaxation from work at all, and I have never before or since seen such a poor sporting country. The only wild animal I heard of at all was the sloth bear, and his curious moanings would keep me awake at night. After we had moved our camp beyond the river, the country was bone dry and very few animals could exist in it in consequence.

To obtain our drinking, cooking and bathing water, donkeys in increasing numbers were employed to carry it in small barrels, one on each side of the saddle. All our food was tinned and only occasionally did we get fresh vegetables, so that I welcomed the transfer to the comparative richness and plenty of Santa Marta, and took leave of my companions with no regrets.

Arrived at the coast again, I took up my quarters with the General Manager, who delegated all the engineering business of the line to me. The first thing I did was to send a cablegram to my wife telling her to come out with the baby and a companion and join me, and whilst she was arranging this I began to look about for a house. It so happened that the Spanish Governor of the town was going to Europe on leave and it was arranged that he should be paid rent for his house and furniture, and that these would be at my disposal directly after he had gone.

I now had a little leisure time to look round the town and make the acquaintance of the other European inhabitants. Santa Marta is built on the shores of a bay formed by two long rocky arms of land stretching out into the Caribbean Sea. In the centre of the bay there is a high island upon which is the lighthouse and a gun used for signalling the arrival of ships. The town itself consists for the most part of single-storeyed flat-roofed houses with the old Spanish Cathedral towering over them all. None of the houses have glass in the windows but are strongly barred, presumably to make them impenetrable during a revolution. None of the streets are straight for the same reason, in that if rifle or machine-gun firing commences at one end, it would be impossible to hit anything at the other end, owing to the curvature. The roads were of sand and built with the centre lower than the sides, and when it rained, which was seldom, the streets became roaring torrents of dirty water carrying

all the refuse and garbage thrown into the street with them. Of sanitary arrangements there were none, and drinking water had to be carried from a common supply some way off.

In common with many other South American Republics, nearly all the Government officials in Santa Marta boasted some title, generally a military one. Generals and colonels abounded, though none of them appeared to have any military duties. The only chemist combined his dispensing abilities with his army title of general, and he was also the Colombian Government's consulting engineer for the British railway. In his spare time from these duties he went into the country to superintend the cutting of sleepers for the line for which he had the contract. In spite of the plethora of military officers, I understood that when a revolution broke out the civilian officials assumed the supreme command, the officers taking subordinate positions.

Amongst the better-class people preference always seemed to be given to black clothing. This peculiarity of wearing dark clothes in an exceedingly hot climate is not confined to South America; I have since experienced that the women of East Africa always wear a black outer garment (*bui-bui*), if they can afford it. For headgear the lower classes wore a species of home-made panama hat, the upper classes favouring bowlers, and in one or two instances, toppers. I could not get used to wearing a thin hat in that heat, and luckily I had brought my topee from India with me and it was the only one in the place; other Europeans wore soft black hats or white panamas, but how they escaped sunstroke I never discovered. The lower-class men wore dirty white trousers, sandals and shirts, and round the waist a leather belt in which was almost invariably carried a revolver, and the long South American knife called a machete. Lower-class women wore long dirty white dragging

skirts, no shoes, and a blouse very often open at the neck. Some of the better-class women would have been quite beautiful if they had avoided plastering their cheeks with rouge and their lips with paint, and this remark applies to England as well as to the Spanish Indians of Colombia.

Only one motor car existed in Santa Marta in those days and it was owned and driven by the American Consul. Made in Birmingham, it was a small two-seater called a "Bijou" and had one cylinder. Tyres, petrol and oil had to be imported from New York and spare parts from Birmingham, so that the car was much more often laid up waiting for one or more of these necessities than running. No roads fit for a motor car existed out of the town and so the Consul just drove round and round the blocks when he wanted fresh air. However, he had the distinction of being the pioneer motorist in Colombia and now I hear he owns a big garage there and is doing well.

It was, at first, very difficult to make out how all the inhabitants lived. Apart from the Government officials, of which there were quite a goodly number, swarms of men with apparently no occupation for four days of the week loafed about at street corners. For the other days they were certainly very busy loading bananas on to the New York and Philadelphia steamers. Some were undoubtedly engaged in the lucrative business of smuggling, especially liquor. All foreign wines and spirits were sold at a prohibitive price in the shops; for instance, whisky was 30s. a bottle, and a pint of beer was 2s., the only drink that could be obtained at a reasonable price was rum, this being manufactured in the country. Rum is a very good drink no doubt, especially in cold climates' but it is not to everyone's taste, not even a Colombian's, and so the smugglers, in league with a foreign member of the ship's company, would arrange for a case or two

of liquor to be gently lowered over the stern at midnight and left on the sea bottom until the ship had sailed, being recovered the next night when the Customs officials were off duty. One Antonio, a Turk, was the principal smuggler, and from him almost any liquor could be bought at not much over New York prices. As he generally looked the best dressed and smartest inhabitant of Santa Marta, it would seem that he had many clients. The law inflicted severe penalties for the offence of smuggling, both natives and foreigners being liable for five years in gaol if caught, followed by deportation for the latter.

My duties as Engineer in charge of the line naturally took me all over it, and to get about I was given a four-wheeled push cycle of American make, with rubber bands fastened on to the railway wheels. The machine was so light that it could be lifted off the rails with one finger, but it required great effort to propel it along on an up-grade and against a head wind. Absolutely silent when running, it enabled me to make some good bags of green pigeon feeding on the tops of the cactus plants and quail on the side of the line.

Only one passenger train ran daily outwards, returning in the evening, but when steamers were loading in the harbour all our seven engines would be engaged bringing in truck loads of bananas which had been loaded up on the line side.

Except for a few bags of coffee, an industry then in its infancy, and a case or two of avocado pears, bananas were our only export, but many thousands of bunches went away weekly to Philadelphia and New York. When a bunch of bananas is cut down, the tree upon which it grows is cut down with it, and immediately afterwards another tree is planted, only one bunch growing on a tree. The bananas are cut down a week before they are ripe, and it requires expert knowledge to know the correct time to cut them so that they will arrive at their

destination in America just ready for consumption. The frequent hurricanes in the district played havoc with the banana plantations, and it was a common sight on my travels to see whole hectares of trees levelled with the ground. The banana must have plenty of water to flourish properly and a proper irrigation system is laid out in the plantations.

In June the steamer arrived bringing my family, and Susan had made her second long voyage at the age of two and a half years. The Governor's house was already prepared for us, and we found it to be a single-storeyed structure enclosed on all sides, with a *patio*, or courtyard, in the centre, in which a fountain played and flowers grew. Situated at a corner of the street, one window looked out to sea, whilst the front faced the station-master's house. Whilst I spent most of my time on the railway my family remained in the town, as conditions in the interior were not suited to a young child and they would both have been consumed by the "plaga," those terrible insects which infested everywhere, except the town.

The Railway Company had built some sea baths on the front and all the society of the town congregated there in the evenings to enjoy sea bathing and to flirt and gossip. The sea front was also the grazing ground of scores of donkeys, which roamed about the place at will, and appeared to have no owners. I had taken a third share in a small motor launch at Santa Marta and in the evenings we made trips in it round the bay and did some fishing for barracouta, but more often than not the engine would break down and an obliging fisherman had to come to us in his dugout canoe and tow us in again. The engine was a two-stroke, single-cylinder one, and it may have been that I did not thoroughly understand it then, or that the sea spray which flew over the bows had upset the mixture or short-circuited the sparking

plug. Anyhow, we never dare go outside the harbour in it, especially as the sea was always rather rough off the rocky points. Only once did my family leave the town and that was to spend a week-end with a Cuban family living at Paparés, some twenty miles up the line. These people, consisting of a mother, a son and daughter, had at one time been very rich indeed, and had travelled all over the United States and the Continent of Europe. They had made their money distilling rum at Paparés, but when the Colombian Government seized the monopoly their distilling machinery fell into disuse and their fortunes dropped to a low ebb. To retrieve them, the son became official interpreter in English, French, German and Italian to the Colombian Government in Santa Marta, whilst the daughter set about converting the estate from a sugar growing one to bananas, and the family were beginning to get on their legs again. I had stayed at the hacienda at Paparés before, as I was building a new station there, and it was here that I returned to my first love, the horse.

Many were the rides Manuel de Mier, the son, and I had over the plantation and I induced him to change the ferocious Mexican bit for a more humane one. The saddle too was a Mexican one with stirrup guards of wood, endless cords and straps of leather hanging on to it and a saddle bow in which was a lasso. The latter I tried often to use, but could not master it.

About this time I went in for revolver shooting to a considerable extent. A Spaniard from Maracaibo had turned up in his schooner at Santa Marta and he and I became fast friends. With his help I managed to smuggle off a New York steamer three pistols of the well-known Parabellum manufacture and 1000 rounds of ammunition. Samuel Melendez, my friend, was a regular sea rover, born perhaps five hundred years after his time, and had a profound contempt for the Colombians, so

much so that he would quite openly smuggle liquor from his schooner to the shore and seemed able to get away with it.

When on shore, which was rarely, he stayed with us, and told us many tales of his wanderings in his native state of Venezuela and the part he had taken in the Revolutions there. From him I learnt how to draw and fire a pistol in the quickness of a flash, and also to be an accurate shot. His sailors manning the schooner were as lawless as himself, and woe betide any Colombian who crossed them when in the drinking saloons on shore.

When travelling, either by train or on mule or horse-back, with the intention of being away from his home for several days, the Colombian gentleman does not burden himself with an over-weight of luggage; all he carries is a comb and a small looking-glass. They are inordinately vain as to their facial adornments, but clean linen does not bother them.

The General Manager of the railway had, besides his official duties, taken up coffee planting and owned a hacienda some way off in the hills and 6000 feet above sea level. One week-end I accompanied him up there to see how the coffee was getting on. Our only means of getting there was on mule-back, and for the first five miles or so we rode over the sandy plain followed by the *arrieros* on foot. Reaching the foot-hills of the Sierra Nevada we commenced to climb up precipitous slopes on a path only three feet wide cut in the hill side. As we rose, so did the drop on one side get deeper and deeper, and being advised not to attempt to steer my mule, I dropped the reins on its neck and left it to climb as best it could. These mules were used to carry sacks of coffee berries from the hacienda to the town and had learnt to walk on the extreme edge of the precipice, so that the inside bag would not be knocked off by projecting branches or rocks on the cliff side. Though it had me on its back in the place of the coffee, my mule stuck

to its habit of keeping to the outer edge, and I found half my body hanging over a precipice increasing in depth for every foot we ascended. It was rather a nerve racking experience, as the path was slippery, but my mule knew his job and was wonderfully sure-footed. Arrived at the house we found ourselves in a cool, bracing atmosphere with really cold water to drink and wash in. Magnificent magnolia bushes in bloom surrounded the house and countless humming birds seemed absolutely stationary at the mouth of the flowers, whilst they darted their long tongues in, in search of honey.

There was a dank feeling about the forest as if the sun never penetrated through the leaves and everything was dripping with moisture, a change indeed from the dry climate of the coast.

The two nights up there I had a really good sleep in a bed ; previously I had slept in a hammock on my verandah in the town, and although a hammock can be very comfortable if one knows how to lie in it, I prefer a bed every time. Instead of riding back I walked most of the way down hill as I was not too trustful of the mule when going home.

Another week-end trip I made was to the Lake at San Juan de la Cienaga. Here, with another man, we boarded a large motor boat and cruised about this salt water lake gathering oysters, of which there must have been thousands. So shallow was the water that several times we grounded on oyster beds, and so terrible were the mosquitos on the shore that it was quite impossible to camp there and we had to anchor out in the middle of the lake and sleep in the boat.

There is always some snag in these trips abroad, generally insects of some sort, but I have noticed much the same thing on picnics in England in the summer, when wasps are after the jam and caterpillars drop off the leaves into one's tea and milk.

We were privileged to see the Ruler of Colombia during our stay in Santa Marta, General Raphael Reyes, the President at that time, coming in a Colombian gun-boat, its previous owner having been Gordon Bennett, who called it a yacht. All the rank, beauty and fashion of the town, native and foreign, turned out in their best clothes to meet him at the wharf at 8 a.m., his official time for landing. The President himself appeared on the bridge dressed in old brown check trousers, white sand shoes, shirt and no coat, and caused it to be announced that owing to the heat he would not land until five in the evening. The sweating, discomfited officials thereupon retired. In the meanwhile the military had been endeavouring to fire off a Presidential salute on the front with some ancient muzzle-loading cannon, insecurely tied to their carriages with rope, and making a poor job of it. In the evening we were all introduced to His Excellency, and after a look round the town he returned to his gun-boat and set sail for Cartagena, further west.

In November my one year's agreement expired, and as I could not get any increase on my salary, though living in the town was 100 per cent more expensive than on the survey, I decided to leave South America and go home. In this my wife agreed with me, as Susan was now three years old, and Santa Marta was no place for young European children.

By this time I had that disease known as the "Wanderlust" and felt that I could never settle down in any place for long, but must see as much of the world as possible while young and the going was good. Moreover, I had had some trouble with a Colombian rake who had made improper advances to our lady companion and he had even gone to the extent of climbing over our wall at night and endeavoured to force his way into her room, but had returned the way he came when he caught sight of me and my Parabellum.

As we had come by way of the West Indies to Santa Marta, I thought it would be a change to return to England via New York, especially as the fares came to no more. Having first obtained the necessary permission from the Chief of Police to leave the country, my wife, child and myself boarded the Hamburg-American ship, *Prinz Sigismund*, bound for the United States. I had previously sent the companion home after the Colombian lover episode, as I could not take any responsibility for her safety if she remained in the country. There were several American passengers on board the ship making a cruise, and with these people we soon became friendly. So much so, that one of them gave me a letter of introduction to one of the most distinguished engineers in New York.

Our only halt was at Port au Prince, the capital of the Black Republic of Hayti, and here we were not allowed to go on shore. However, some very gorgeously dressed black Customs officials and others came on board, bedecked in gold lace, swords and plumed cocked hats, and I would have given much for an hour or two ashore to see the kind of place they lived in. However, it was not to be, and we steamed away north, sighting the American coast at intervals until the huge Statue of Liberty appeared on the horizon, and going up the Ambrose Channel we tied up at a pier at Battery Point and had reached "God's own country" at last.

After a thorough search of all our effects by the Customs officials, we went to an hotel in 23rd Street, and at once began to experience the fuggy atmosphere caused by central heating and complete absence of fresh air which distinguishes New York hotels. Although it was November and quite cold outside we perspired in our rooms, and I shut off the radiator, opened the windows and breathed fresh air at any rate.

I lost no time in seeing Mr. Barclay Parsons in Wall

Street, to whom I had the letter, but he informed me that there were hundreds of American engineers looking for work and that I had a small chance of getting any.

Several other well-known American engineers gave me the same reply and so my wife and I had a look round New York before sailing for home. It appeared to me that when the inhabitants are not being rushed along horizontally in the street cars they are being whirled up vertically into the air at breakneck speed in express elevators. (No stop to the fiftieth storey.)

The highest building in New York at that time was the Metropolitan Life, 790 feet from the pavement, and I went up to the top of it to see the "light that never fails." What a magnificent view was seen from the top I leave my readers to imagine. A visit to Brooklyn Bridge, Chinatown and the Bowery followed, as well as a walk in Central Park and a call on the City Hall. All the policemen, mounted and on foot, appeared to be Irishmen, and motor cars were fairly prominent in the streets, but the majority of the vehicles were either horse drawn or street cars still.

I was spotted for an Englishman directly I opened my mouth, and by my shoes, which had not the curious knobby ends so favoured by Americans.

Well, as nothing appeared to be doing in New York, it was time to get back to England and find some employment, and so we left the Western World by means of the White Star steamship, *Majestic*, and after a perfectly smooth crossing landed at Liverpool again, after just over a year's absence.

What had I gained by going to South America, I wonder? Certainly no added knowledge of my profession, because I have seen since that the survey was conducted by antiquated and expensive methods which would not now be tolerated. Neither had the engineering work I did on the open line given me any new experience, so

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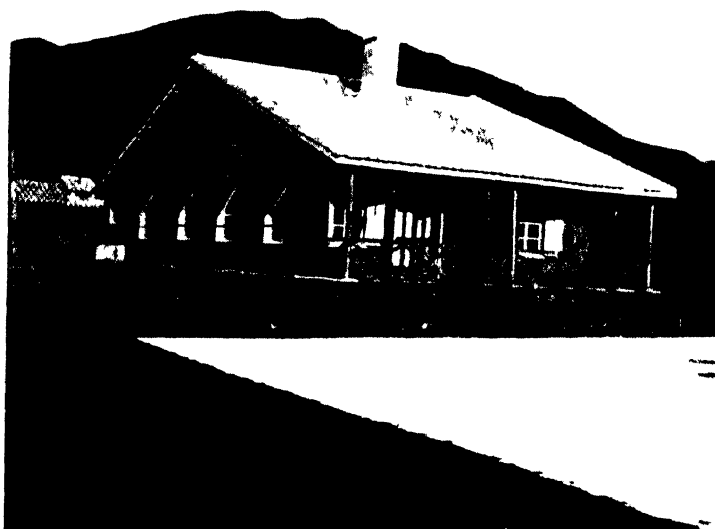
that that twelve months appeared to be wasted effort. I had learnt a certain amount of the Spanish language, but even that was of little use because Spanish is not spoken in Santa Marta as it is in Madrid ; there are too many mispronunciations. Beyond, therefore, seeing a new country and some more of the world, I gained nothing tangible, especially as the money I had managed to save went in paying the return passages of my wife and daughter, my own being paid by the Company.

So we returned once more to England and London, and put up at the Great Eastern Hotel in Liverpool Street, little dreaming that before we went down to Norfolk another job would be in the offing in a country about as far away from England as it was possible to get.



*Nikolaus von und zu
Dohna-Schlodien*

BURGGRAF GRAF NIKOLAUS VON UND ZU
DOHNA-SCHLODIEN
Commander SMS *Moët* Atlantic Ocean



THE AUTHOR'S BUNGALOW AT SHIUCHOW FU



NI JING TISH AT SHIUCHOW FU

CHAPTER VII

SOUTH CHINA

SITTING in the smoking room of the Great Eastern Hotel at Liverpool Street that foggy November evening of 1908, on our return from New York, I sent the page boy out to buy a copy of the *Engineer* newspaper, and glancing down the columns of "Appointments Vacant," I saw that a Resident Engineer was required for railway construction in China, and lost no time in at once writing to the address given applying for the post.

Thinking no more about it, we proceeded down to Norfolk the next day, looking forward to spending a few weeks in England preparatory to setting forth into the great world again on a new adventure.

The following day I received an answer to my letter asking me to go up to London and interview the advertisers in an office in Leadenhall Street. Doing so, and taking my testimonials with me, I was informed after lengthy questioning that a cable would be sent to "our friends in China" strongly recommending me for the job. I was told that I should have to proceed to China early in February and travel by the Trans-Siberian Railway, and so overjoyed was I that I sent a telegram to my wife conveying this information to her, and followed myself by the next train. My father would scarcely credit my getting another job so quickly, and I, myself, found it very hard to believe too. About three days afterwards another telegram came to say that "the friends in China"

were doubtful about my health and that they did not agree to my appointment. This was a severe blow, but when a letter reached me the next morning from the London people saying that they wanted to know my height and weight, as they proposed sending another cable to China strongly urging my appointment, I bucked up a little and sent them the information. After an anxious week of waiting a letter came confirming my appointment and directing me to go by steamer sailing on February 2nd, 1908, instead of by the railway, as my destination was to be Hong Kong.

Overjoyed at this news I spent a very happy Christmas with my family, the first in England since 1899. Several visits to London followed, to purchase kit for China, sign the agreement, obtain a passport and make arrangements for payments to my wife during my absence, and then, saying one of the many "good-byes" to my family and friends, I went down to Southampton and became a first-class passenger on the Norddeutscher-Lloyd ship *Prinz Ludwig* bound once more for the East, and this time destined to be away from England for four and a half years. I had had only two and a half months in England, but was glad to get away from the English winter and looked forward with great interest to seeing China.

The *Prinz Ludwig* carried a number of English and German people wealthy enough to go away to Egypt, Algiers, and some even to Japan, to escape the winter, but there were quite a lot of China merchants and their families on board as well as officials going to Ceylon and the Straits Settlements, altogether a very cosmopolitan and interesting crowd.

We called at some ports then new to me, namely Genoa and Naples, though Gibraltar and Algiers I had seen already. At Genoa we experienced heavy snow-

storms and remained fixed to the mole for three days waiting for the snowbound overland mail and passengers from Germany.

Here, with a young doctor, I visited the Campo Santo, that wonderful cemetery, and went for long walks in the snow over the hills. At Naples another passenger went with me and we had a true Neapolitan fish dinner, in a very low quarter of the town, it being too late and too dark to see Vesuvius or to visit Pompeii. The great earthquake in Sicily had occurred a month or two before and we watched with great interest the ruins of Reggio as we slowly steamed through the Straits of Messina. I say slowly, because the Captain had soundings made in the Straits to ascertain whether there had been any upheaval of the ocean floor.

In the Suez Canal we experienced a really bad sand-storm and lay to, tied up to the bank for two days until the storm abated. Though all port-holes were closed sand pervaded everywhere, on our bunks and in our food, and it was some time before the ship got rid of it all.

A perfectly smooth crossing of the Indian Ocean brought us to Ceylon, where I saw signs of many alterations, especially in the number of cars that now plied the streets, instead of the *ticca gharries* of 1900. The old Galle Face Hotel looked as though it had been done up, and the Bristol gave the finest lunch in Colombo as of yore.

Entering now a stretch of sea new to me we proceeded to Penang and woke up the sleeping inhabitants with our siren, it being barely daylight. A walk up to the Eastern and Oriental Hotel, where the servants were laying the breakfast tables and airing the mats, was all we had time for here, and then off we went to Singapore, the "Clapham Junction of the East," as it is called. As we approached

the "line" it had been getting steadily hotter and hotter, and Singapore was like an oven.

Playing billiards with a fellow-passenger at Raffles Hotel, visiting Malay Street just to "look see," and a tour round the harbour in a naval launch, lent us by the harbour-master, filled in our stay, and then the ship's head was turned NNE. and we entered the China Sea on the last lap of the passage. Five days' steaming in weather getting cooler and cooler, passing a number of Chinese sea-going junks under their curious bamboo-matting sails and with high poops and eyes in the prow, the peak of Hong Kong appeared right ahead, and shortly after we came to anchor well over on the Kowloon side of the harbour, flying the red flag to indicate that we had explosives on board.

Chartering a sampan for my baggage I, with another passenger, was ferried across to the Praya at Victoria, and came to an anchor in the King Edward Hotel, where we stayed the night. Feeling very energetic after so much good German food and no exercise, I did what few Hong Kong-ites ever do, and that was to walk up to the top of the peak and down again. Unfortunately the top, as it usually is, was under clouds and no view could be had of the immense harbour supposed to be only second to that of Sydney for its beauty and area. I have seen both and I prefer Hong Kong. What a magnificent sight is the harbour! Ships of all nationalities lie in it, the graceful white, yellow funnelled C.P.R. boats from Vancouver, the P. & O. mail steamers, battleships, torpedo-boats, river steamers, junks, and the humble sampan in its hundreds, all find room on its broad bosom, and the old *Tamar* depot ship of the Royal Navy, looking like the father of them all, lying anchored a stone's throw from the wharf side. Numerous islands dotted about the sea add to the charm, though one of them, at any rate, is the home of the pirates that infest those seas. On shore the serrated rows of

European houses rising from nearly sea-level to the Peak Hotel, 1,400 feet high at the top, the Murray Barracks, the hospital and the imposing Government House all add a charm to the incomparable beauty of Hong Kong which, once seen, can never be forgotten. My gaze, however, often turned northwards, where behind those distant hills lay the Empire of China and my future home and work. After going over to the Kowloon side by ferry and saying good-bye to those friends remaining on board, and proceeding to North China and Japan, I decided to go and have a look at Macao, that little Portuguese settlement in the estuary of the Pearl river, where the white inhabitants of Hong Kong make a pilgrimage on Sundays to play the game of fan-tan. A fellow-passenger and his wife went with me and the journey was made on a very comfortable river steamer belonging to the China Merchants' Navigation Company.

It surprised me to see that the first-class accommodation was isolated from the second and third classes by a strong iron grille stretching right across the width of the ship and projecting well beyond the bulwarks. Over the gates in this grille were posted Indian sentries armed with rifle and fixed bayonet, also I noticed stands of arms on the first-class deck, and, my curiosity getting the better of me, I enquired the reason for all these precautions from the Captain. It appeared that piracy was much too rife on these trips and often it had occurred that, amongst the third-class passengers, there had been a band of pirates who had seized a ship, looted it and the passengers of all valuables and, where any resistance had been offered, had killed the ship's officers, afterwards taking to the boats and joining one of their confederate junks cruising in the vicinity of the seizure. So that these elaborate safety measures were absolutely necessary.

Arrived safely at Macao, we went ashore and were met by an affable Chinese gentleman, speaking faultless English,

who offered to take us over his garden and residence situated a short way out of the town. Hiring rickshaws we went, and were enthusiastic enough about his place to wreath the Chinaman's face in smiles. Returning, we entered one of the casinos and watched a game of fan-tan in progress. At the end of a table there sits the croupier or Foki, a half-naked Chinese. His business is to count the cowrie-shells, the most important part of the game. In front of the Foki is a small heap of these cowries hidden beneath a bowl of brass, so that it is impossible for the gamblers to count how many there are in the heap. After all the bets have been made the Foki lifts the cover and begins extracting the cowries with a long-handled rake, four at a time. The gamble is, to guess how many cowries will be left for the last draw, one, two, three or four.

If the gambler guesses correctly, then he is the winner. He collects profits equal to three times his bet, less 10 per cent deducted for the good of the house. To bet on one number only is called "Fa'an." There are two or three square metal plates on the table with money piled all round them. Each side of the plate represents a number. There are other varieties of the game, for instance, you can bet on two numbers; this is called "Kwok" and the odds in this case are even. Another one is called "Ching," and is the one most favoured by the regular gamblers. One number is backed and the two adjacent numbers are neutral, losing only if the opposite numbers should be the winner. Odds are even in this case also. Stakes cannot exceed \$50 on Fa'an or \$1,500 on Kwok or Ching. In other words, the possible loss to the house is limited to \$1,500 on each bet. Having staked a dollar or so and lost, it was time to return to Hong Kong and the same evening we boarded another steamer similarly armed and proceeded up the Pearl river to Canton.

As the journey was made at night we saw little of the river life, but most Chinese rivers are, I imagine, the same,

and a description of the Pei Ho, later on, will serve to describe them all.

Reaching the wharf in Canton at 7 a.m. the next morning what a babel of sound met our ears. Yelling and shouting coolies, rickshaw bells, steamers' sirens, winches working, made it impossible to hear oneself speak.

Engaging rickshaws we were pulled to Shameen, the European concession, and made for the Victoria Hotel there. Shameen, in the Chinese language, means sand-bank, and this is all it was before it was handed over to the foreigners in accordance with a treaty made after the Taiping rebellion. Now it is a miniature town about 800 yards long by 200 yards wide, well laid out with gardens and a football ground. Large double-storied buildings house the offices of the great foreign mercantile firms, the upper stories being the managers' living quarters. English, French, Germans, Italians, Japanese, Americans are all represented there, and each nationality, curiously enough, has its own post office. A large cosmopolitan club, containing its own theatre, is the principal rendezvous in the evenings, and for the "pink gins" at 12 noon. Lying in the Pearl river opposite the concession there were usually several river gunboats, the *Moorhen*, *Robin* and *Sandpiper* of the British, taking turns with the *Helena* of the Americans and the *Tsingtau* of the Germans. In any event foreigners were never without naval aid in case of trouble in the native city.

Engaging a well-known guide, we crossed the police-guarded bridge over the canal which divides the city from the concession and at once entered Canton. Previously we had all to enter our names in the police book on the bridge, so that if we had not returned to the hotel at "curfew time" (7 p.m.) a search would be instituted for us, with little hope of success, I should imagine, in that rabbit warren of a city.

The guide had insisted on us taking sedan chairs, but such was the throng of natives in the very narrow streets that we all decided to walk, the chairs following. These streets were about six feet wide and were badly paved with flagstones, many missing or broken, and underneath them ran the sewers. Consequently, the smell was almost overpowering. Gaunt pigs ambled along, picking up a living from the offal in the aforesaid sewers, such pigs as the Chinese variety I had not previously seen. They seemed to have a broken back, because their stomachs practically trailed on the ground giving them a very curious appearance. Overhead in the streets were hundreds of wooden signs, each with Chinese characters lettered on them, describing the virtues of the shops they indicated, and not the shopkeeper's name, as one would expect.

At every shop we were importuned to buy silks, silver filagree work, ivory, rhinoceros horn ornaments and a hundred and one other things, the guide ably backing up the shopkeeper. At every halt the crowds would become very inquisitive and pressed us hard, all wishing to have a close-up view of the lady of our party. One felt that it would not take very much to make them into a hostile crowd, and where should we have been then? Our first call was to the Clepsydra, or water clock, which is 1,500 years' old and still working. This machine consists of four buckets raised on steps one foot or so above the other. The lowest has a graduated rod on a float rising or falling with the water. Every twelve hours the attendant fills the top bucket with water and thence it drips into the others in succession, raising the rod and indicating the time as it does so.

Passing the execution ground, where signs were patent that there had been a performance there that day, we proceeded to the hall of the 500' genii. This was nothing more than rows upon rows of busts of dead-

and-gone Chinese, but amongst them I noticed the bust of one white man. On enquiry from the guide I learnt that this represented Marco Polo, and it may be true.

Halting at the five-storied pagoda for lunch which the thoughtful hotel proprietor had provided, we were able from its top story to see a panorama of the great city spread out below us and to trace its massive walls, completely encircling it. For some reason best known to themselves, all pagodas in China are built with an odd number of stories. After lunch our guide saw fit to take us to a floral hall where rows upon rows of brightly lacquered coffins, obviously occupied, were ranged along the walls, and explained to us that these dead bodies were retained in that hall until the Chinese astrologers had decided upon a suitable place for burial and had fixed the favoured date for interment.

Now and then a mandarin, borne by half a dozen coolies, would pass us in his sedan chair, the colour of the chair and the number of the coolies denoting his rank. In advance would be three or four men carrying sticks, with which they belaboured any inoffensive coolie who happened to be blocking the passage of the great man.

Returning to the hotel for tea and thoroughly worn out with the sight-seeing and the noise, we spent a peaceful evening in the settlement watching the river craft, and at 10 p.m. my friends departed for Hong Kong and Yokohama and my short time as a tourist, pure and simple, ended.

Next morning I proceeded by sampan to Wongsha, the railway headquarters, and reported myself to the Chief Engineer. I found him to be a Chinese about 6 feet 3 inches in height, dressed in his native costume with queue, and smoking an enormous cigar, his name being Kwong King Yang. In China, everything is topsy-turvy and the

surname comes first, so that my Chief's name was Mr. Kwong. Speaking perfect English, he asked me why my wife had not accompanied me to China and seemed sorry that I had come alone. After a long talk about India and its inferiority, in his opinion, to China he told me that I was to take charge of ten miles of construction, about ninety miles up the Pei Ho, or North river, and that a train would take me for the first forty miles, after which a launch and house-boat would be at railhead to take me on.

Mr. Kwong had learnt engineering at Yale University and had afterwards been a pupil of Mr. Kinder, the Stephenson of China. He told me something of the railway upon which I was to work. Originally the Americans had had the concession to build it from Canton to Hankow, the great port on the Yangtse river, 800 miles to the north, and to that end Mr. Barclay Parsons, the same man that I had seen at Wall Street, New York, had made the survey. China bought the concession from the Americans and formed a company of Canton merchants to construct that portion of the line which ran through the province of Kwangtung, of which Canton is the capital. A call was issued for capital to be made up in \$5.00 shares. Every coolie in the city subscribed his \$1.50 for the first call, hoping thereby to get lucrative employment on the works. At the time of my arrival the second call of \$2.50 was being made and great trouble experienced in collecting it.

My Chief told me that I must get a Chinese passport from the Viceroy of Kwangtung, and some visiting cards, also in Chinese, as I should have to make calls upon the authorities in the interior. The first item, viz. the passport, was obtained for me without any difficulty by the British Consul-General. For the visiting cards it was necessary to change my English name into a Chinese one, and the nearest they could get to it was Hien-tz-lau, and

this was my name printed on the cards. I also had a "chop," or wooden seal, made bearing my name in ancient Chinese characters.

賢
士
勞

THE AUTHOR'S VISITING CARD IN CHINA

(The letters were printed in black on red paper. Size 8" × 4".)

My brother-in-law in England had given me a letter of introduction to a man in Canton, and calling upon him in the afternoon we were both invited to dine with a Taipan (or head of a firm) named Griffiths. At this dinner was the Commander of the *Moorhen*, by name George Leith, a name well known in the Navy. Griffiths, taking pity, I suppose, on my lonely prospects, gave me a dog which he called "Sailor," to accompany me into China. The dog was of the breed known as a "tripehound" or "kitchen pointer," but in spite of this he turned out to be a faithful companion until he met an untimely end.

At eight the next morning, with a new boy, dog and

baggage, I boarded the train at Wongsha, the only European amongst a horde of Chinese first and third-class passengers. The engine was an American one, and the coaches were built on the American plan, that is with doors at the ends only. The sleepers were from Australia, and the rails were made in the Hanyang works at Hankow. All the staff, from driver to ticket collectors, were Chinese, as were the station-masters and porters en route.

The country through which we travelled was mostly rice fields and was under water. Everything looked very green and fresh, and the sky was of that beautiful blue which I have only seen in China. Passengers got on and off at the various wayside stations, the station name being lettered vertically on posts and not horizontally as in other countries. Women with their tiny feet would come hobbling along with the aid of two sticks to be assisted into the carriages, and others would depart on the local taxi (a wheelbarrow) to their villages. Flowers and bracken grew in the fir woods surrounding the small brick houses with ornamental roofs in which the villagers lived, and all looked very peaceful in the brilliant sunshine. By and by the Pei Ho hove into sight and we ran along its left bank to the end of the open line at Kou Wong Shek station. The line extended some way further, but was not ballasted, so that nothing but construction trains ran on it.

Two Canadian engineers met me, and whilst one of them, Carr-Harris, was returning to Canton and thence back to Canada, the other, Burnside, went on with me by the launch to Ying Tak, a large city on the right bank. On the way we passed through a gorge known as that of the "Blind Boy" and experienced rapids and whirlpools which swung our launch in all directions. After the Lachine Rapids in Montreal, however, these rapids were child's play to me, and our Chinese skipper seemed to be



RICI CULTIVATION 1101



RICI CULTIVATION HARROWING



RICE CULTIVATION PLANTING OUT



RICE CULTIVATION TILLING GAPS

a thoroughly competent navigator. Behind us we were towing a house-boat which, until I had built myself a house, was to be my home. This boat was a flat-bottomed barge upon which had been erected a square structure made of bamboo matting and divided off into three rooms. Two are for the foreigners and the one at the stern for the crew and hangers-on.

The new railway closely followed the bank of the river, cutting through projecting spurs of rock, and in one place by a tunnel, not yet completed. After passing through the "Blind Boy" Gorge, however, the railway turned inland and, opposite the town of Ying Tak, was quite three miles away. Here were to be my headquarters for a time. Staying that night on the house-boat and visiting the Wesleyan missionaries at Ying Tak, we proceeded next morning up the Ying Tak river about three miles to a tiny village called You Po Ysui, and here my assistant, a young Canadian named Bâby met me and showed me the progress he had made with the house. He had selected a very pretty site about a mile away from the river amongst scattered fir trees and bracken on a hill-side, and a wide view was obtained from the front verandah, which embraced the town of Ying Tak in the distance, between endless rice fields and scattered villages. The house would be ready for occupation in a week or so. Attached to it was a large store-shed, offices and barracks for the guard of soldiers. These soldiers deserve some attention. When I inspected them, under their captain, I found that all wore their uniforms inside out and that interlaced with their hair in the queue were some strands of white silk. Enquiring the reason from my interpreter, I learnt that both were signs of national mourning for the late Empress Dowager. They were armed with a Snider rifle of the year 1870, a Belgian revolver, a fan and a paper umbrella. The number and designation of the regiment to which the man belonged was embroidered in large characters on the

front of his tunic. These men, to the number of fifteen, under a captain, were allotted to every foreign engineer upon the railway, their duties being to guard them when at home or when at work in the field, to keep off inquisitive villagers and to make as much noise as possible to scare off would-be thieves every quarter of an hour at night. For this noise they were supplied with drums and trumpets and succeeded in making night hideous. Never less than six of these men accompanied me when going "on line," one generally being a quarter of a mile ahead with a large white placard on which were red characters describing who I was, and what I was doing, two walked close to me and the remainder brought up the rear. When on active service the queue was wound round the head in the form of a turban and above it was precariously perched, in hot weather, the universal round hat made of straw, with a pointed top and strings.

The queue, long since abolished, was a symbol of servitude to the Manchu conquerors of China, and was cut off when the death of its owner occurred, as thereby his servitude ceased. Where a man could not grow a queue he would buy one of these and fasten it on to his hat. Criminals had a playful habit of plaiting fish-hooks into the hair of the queue, and woe betide any thief catcher who tried to detain them by it. In execution by decapitation, the assistant gets a hold of the queue and thus stretches the criminal's neck, rendering one sword blow usually sufficient to sever head from body.

My staff at You Po consisted of the Canadian assistant engineer, an interpreter, Lau, a paymaster, postmaster, for telegrams and letters, and two Chinese pupils, as well as the soldiers, survey coolies and foremen. Most of my time would be spent in pegging out the line, because no sooner were the pegs put in a rice field than the plough or harrow would root them up and the work had to be done again.

The railway was to cross the Ying Tak river on a bridge of four 200-foot steel spans, and a start was made with the foundations of the piers and abutments, but when the river rose forty feet one night and washed away most of the gear, tools, etc., it was decided to hold work up until the rains had ceased, six months later.

Next to my camp there was a small village called Mo'cheun, the inhabitants of which strongly objected to the new railway passing as closely as it did to the houses, and their objections took practical shape in the way of pulling up pegs, fixing strong barricades across the paths, and twice breaking up a concrete pipe culvert with picks. At the many conferences I held with the elders of the village, in the temple, they suggested an alternative route for the line which would pass their village in front. This line would run through rice fields on an embankment forty feet high and, moreover, would be washed out yearly when the river flooded. This alignment could not, therefore, be considered, and work was consequently held up during the three months I was at You Po and, indeed, for several months after that, when the Chinese engineer, who took my place, requisitioned a force of soldiers from Canton, under whose protection the line was eventually constructed. To understand the Chinese point of view in the objection, one must briefly explain the meaning to them of the word *feng shui*. *Feng shui* means, literally, wind water, and is used to describe the good or bad luck of a place. Certain hills or streams, even fields, contain gods of the Chinese and bring them good or bad luck. It so happened that the section of line under dispute cut through a small hill which contained the god of Mo'cheun village, and the act of making the cutting would, by their reasoning, have killed this god.

Some of these gods take the form of fish, others birds and animals, but all are held in the greatest reverence

and respect, and interference with them leads to rioting and murder of the hapless foreigner.

On one occasion I was riding back from the far end of my section, having had various obstructions removed from the path going out, when a piece of string tightly stretched between two trees caught me under the chin. Thinking little of it, I was surprised to find that in an hour or so blisters began to form and my throat became exceedingly painful. So much so that I had to visit the missionary doctor in Ying Tak and ask him to put me right. He told me that the string had been dipped in some virulent poison, but that as I had no cuts on my throat no harm would result. I reported the matter to Mr. Kwong, in Canton, and he took a very serious view of it, so much so that it was decided to take me, the foreigner, away and send a Chinese to relieve me. This could not take place for a month or so, however, and in the meanwhile a young Englishman named Pole was sent up to assist me in place of the Canadian who had gone back to his home in Hamilton, Ontario, taking his Japanese house-keeper with him as far as Canton.

Pole had been in Portuguese Angola before coming to China, and should have learnt from his African experiences how to take care of himself. In spite of all warnings, however, he would insist on eating Chinese vegetables and salad. Now the Chinese gardener is, no doubt, a very excellent one and can produce crops where others would fail, but he has the objectionable habit of using human excreta for his manure, in fact the contents of all village latrines are used to assist in providing good crops of sweet potatoes, ground nuts, salads, etc. Well, Pole ate some of this salad and in a day or so developed acute dysentery. Telling me that he had had it before in Angola and knew how to deal with it, he did so by dosing himself with Epsom Salts *ad nauseam*. Seeing that he got no better, however, I took him to the missionary doctor

in Ying Tak, who did his utmost to persuade Pole to stop in the Mission until cured. His obstinacy, however, continued and he insisted on being taken down to Canton hospital. One of the missionaries accompanied him in a sampan, but as luck would have it the railway had been washed away in places by floods, and trains were not running. This meant that the journey had to be made all the way by river, an additional three days. A day and a half before reaching Canton the boy died, and his body was taken there and buried in the English cemetery, and I had the melancholy duty of writing to his parents and acquainting them of his death.

Pole and I were the only two Englishmen employed on the line, but, shortly after, another one was engaged and came up to me for a time. He very soon, however, showed that he did not like the life or the Chinese, in fact there was no doubt in my mind that he had the "wind up," and went back to England. My relief, an experienced engineer named Chye, now arrived with his wife, and I proceeded sixty miles further up the river to Shuikwan, a large city built at the junction of two rivers and the most important place touched by the railway in the province of Kwangtung. My house-boats were requisitioned for the journey, and as the current and wind were against us and there was no launch available, the passage took six days, and was accomplished by tracking or towing. Fixed to the masthead was a long rope made entirely of bamboo, and the crew, men and women, with shorter ropes attached to the main rope, would pull steadily all day from daylight to dusk, having in places to climb along precipitous tow-paths cut in the cliff side, and occasionally crossing to the other bank when the tow-path became blocked with falling rock.

The scenery along the river was very beautiful. The green bracken-covered hill-sides were covered with flowers, rhododendrons and azaleas being common. Occasional

villages nestling in fir groves appeared on either bank, and the blue and white striped awnings of the police boats lent a variety of colour to the golden sand and blue sky. Junks and sampans under sail would fly past us, fishermen sat on the bank, and others in their canoes were using cormorants to do the work for them, these queer birds having a string tied round their necks to prevent them swallowing the catch, and being rewarded with a fish at the end of the day's work.

At night we would tie up at some village, where eggs, ducks, pork, and chickens could be purchased at an absurd price, the soldiers mounting guard over the house-boats and keeping up their never-ending din on the drums. Others would gather round on the beach and smoke their bamboo pipes, so long that the match had to be held in the toes to light the tobacco. One whiff was all the bowl contained, the tobacco being like hay in appearance and smelling abominably.

There is one thing the Chinaman can do better than any other race I know, and that is cook rice. As it is his staple food the cooking of it has been reduced to a fine art, every grain is distinct and perfectly boiled, and there is none of that glutinous mess so common even in England.

At times, on the left bank, we saw houses of other engineers and signs of a railway being constructed, and at most of them I stopped to pass the time of day. All the engineers, with the exception of two Americans, were Japanese, however, and could not speak any English.

At long last the city of Shuikwan hove into sight, and passing the pretentious buildings of the Wesleyan Mission on the right bank we came to a halt just north of the town.

CHAPTER VIII

SOUTH CHINA (*concluded*)

SHUIKWAN, or Shuichow-fu, is a city of about 30,000 inhabitants, and at least one-third of these live permanently on the river in sampans and know no other home. The sampan is a small flat-bottomed boat about twenty feet long, the word "sampan" in China meaning, literally, "three boards." It has a flush deck at each end, and a well in the middle, the latter being covered over and made watertight by a bamboo mat. At the stern is the captain, generally a woman, who steers and looks after the food and children, if there are any.

The husband looks after the sail when the wind is a following one, or "quants" the boat with a pole when going up stream and against the wind. Watertight bulkheads have been considered, heretofore, an entirely European invention, but these sampans have been provided with them for at least three thousand years. At night the family spread a bamboo mat on the floor and with a porcelain brick for a pillow settle down to sleep. In cold weather they are wrapped up in a succession of long-sleeved coats, the last one being a quilt. Nothing is added to the brown or blue trousers worn by both men and women. As the sun gets out and warms the atmosphere, the coats are gradually shed, until at noon time they are wearing just the one thin smock. For headwear in the cold weather they have a fur-lined cap with ear-flaps very like the old "deerstalker" of our fathers. In summer they wear the universal round straw hat about two feet

in diameter, and to keep it waterproof oiled paper is interlaced in the plaiting.

My first duty on coming to Shuikwan was to call on the local mandarin to present my credentials and explain the purpose of my visit. My interpreter, Mr. Chan, accompanied me dressed in his best as Chinese etiquette demanded. For myself I donned a European lounge suit with a white topee, thereby classing myself in the mandarin's eyes with the "short-coated men," as the country yokels are called. Coming to the "Yamen," as the official residence is known, my card was taken by the gate-man and given to another servant, and I followed the latter through several court-yards as far as the first closed gate, where I waited to see if the great man would see me. A servant appeared holding my card in his hand and invited me to enter by saying "Ching."

Proceeding through the "Dwelling Gate" and "Screen Gate" to the "Second Hall," the mandarin there awaited me. Greeting him in the Chinese way by holding my hands close up to the chin and bowing, the mandarin replied in the same way and motioned me to be seated in the place of honour, viz., on his left hand, cups of tea being placed on a teapoy at the side of each seat. I had been primed by my interpreter as to the etiquette on these occasions, and I did not therefore start to drink the tea, but waited for the mandarin to question me. This he did, his first question being, "How did I like China," to which I made a suitable reply. I had come to see him about fixing a site for my new house principally, but there were other matters too. It required a great deal of talking and circumlocution to get him to the point, and during the talk he motioned me to drink tea. This was a polite hint that he had had enough of me, but I had not got all I wanted and stuck to him until he clapped his hands for a servant and ordered more tea, and then I knew my interview was over. Drinking tea in China is not so easy as it

sounds. In the first place the saucer is on top of the cup and not underneath as is usual, and, secondly, two hands must always be used, just slipping the saucer slightly to one side to get at the tea. Again, it is usually boiling hot and one has to be very careful not to make a wry face when sipping it, as great offence would be taken.

The site selected for my house was on the north of the town and half a mile away from it, in the centre of the angle formed by the two rivers, the Pei Ho and the Ching Shui, the latter running NE, the former NW.

The new railway coming up on the left bank of the Pei Ho would cross the Ching Shui and continue its course parallel with the Pei Ho. Engaging a local carpenter, I gave him a plan of the house and instructed him to set to work. In the meanwhile, I lived in my house-boat close to, and was able to keep an eye upon the building. As both my wife and myself were tennis players and the Wesleyan missionaries also played, I laid out a concrete tennis court in front of the house with a close bamboo fence to keep the balls from straying.

Towards the end of 1909 my wife and daughter arrived, and I went down to Hong Kong to meet them, a journey involving eight days going and two weeks returning. Susan had made her third voyage of 10,000 miles at the age of four, and was rapidly becoming a world traveller. The journey back to Shuikwan was a tedious one, though of great interest to my wife, but we were glad when we settled down in our new home in the interior of China.

No work had started on my section, nor was it likely to, and all I could do was to prepare plans for the bridge over the Ching Shui river, drill the soldiers and explore the surroundings.

The Wesleyan missionaries proved to be very hospitable and kind, and we were often with them, or they with us, playing tennis, picnicking or going for long walks. Once we visited a coal-mine a few miles away and found

that only the surface had been scratched, but, with proper mining methods, coal could be obtained in unlimited quantities. For four months in the year we had to have a fire in our house and we burnt coal dust and clay made up into a ball about six inches diameter, and, once alight, it would give out great heat all day.

For food we ate ducks, pheasants and partridges from the city at prices which would astonish the housewife at home. For instance, pheasants were fourpence each, whilst ducks could be bought for sixpence a pair. The cooking was done with firewood and, as there were very few trees in China, this had to be bought and carefully weighed before buying. Chickens we kept ourselves and had plenty of eggs.

It was whilst at the new house at Shuikwan that I lost my "kitchen pointer" I had had presented to me in Canton. He disappeared completely for three days and then returned foaming at the mouth and staggering about, so that, rather than Susan should run any risk of being bitten, I most reluctantly had to shoot him. We had a fox terrier bitch that I had bought from a soldier in Hong Kong, and she remained with us to the end, occasionally producing litters of puppies which, do what I could, were stolen by the soldiers and eaten as a Sunday dinner. We had bad luck too with one of our ponies, he was smitten with some disease of which I knew nothing.

It so happened at that time that we had an Englishman staying with us who was a traveller for "Doctor William's Pink Pills for Pale People," and this individual was wandering round the countryside presenting boxes of pills to any coolie who liked to ask for them. I suggested that they might do the pony good, and so we dosed it with the contents of one box. For three days there were, perhaps, signs of improvement, but eventually it died and was replaced by



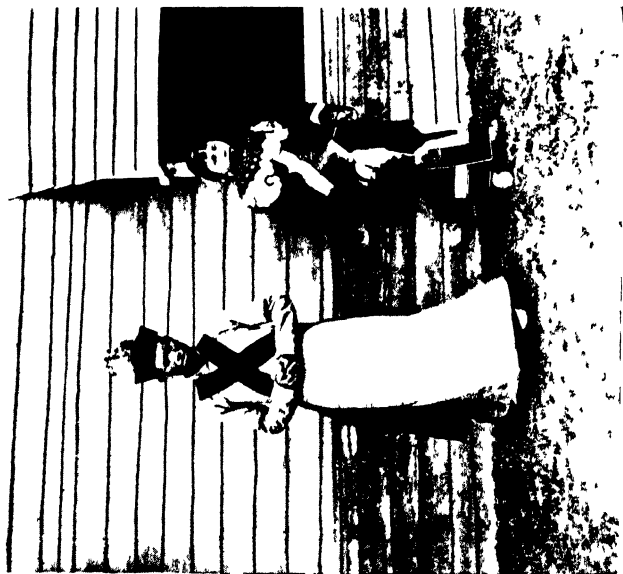
WEIGHING FIRE WOOD



CAPTAIN AND BODY GUARD SHICHOW FU



THE SIGN OF THE PAWBROKER SHIU CHOW FU
Steps lead to top of City Wall



A NEWLY-WED COUPLE OF THE LOWER CLASSES

another. The Chinese *mafoos* (grooms) will never allow a pony to lie down in the stable, night or day, and to ensure them remaining upright they pass a band round their bellies and secure the end to a beam in the roof. I would never allow my ponies to be treated in this manner, and the *mafoo* told me that my allowing one of them to lie down and sleep at night had caused its death. The saddles they use, too, are made of wood and must inflict tortures upon the wretched beast. There is certainly plenty of scope in China for a society for the protection of animals.

Scattered all round the hill-side were the graves of dead-and-gone Chinese. These graves generally face one direction only, and are mounds of earth, at one end being two brick seats and a stone door-slab, upon which is cut an inscription extolling the virtues of the deceased. The seats are used by the relatives on New Year's Day, when they troop out in hordes from the city to pray for their ancestors and make a picnic of it. When the line of new railway cut through any of these graves I, personally, had to be present whilst the coffin was dug up, and if it contained any remains, the sum of \$6.00 Mexican (about 14s.) was paid to the nearest relatives. The precaution of having the Engineer present was very necessary, as in one instance a whole lot of new graves sprung up in a night, like mushrooms, and all on the line of railway. Opening these up in due course, nothing was found in them, and it was just another trick of the "heathen Chinese" to get money for nothing.

The first word of Chinese generally learnt by the foreigner is *cumshaw*, meaning, literally, "golden sand" in other words, a tip. I remember once, at Shuikwan, being taken by my interpreter to see an execution of some pirates caught looting a junk on the river. Generally, executions take place on the sands of a river, so that the head can be washed away by the stream, the body

remaining where it was placed. A crowd of people had collected and the pirates, four of them, were brought down in bamboo baskets slung on a pole and carried by two men. They appeared to be quite unaffected by their impending fate and were laughing and joking with friends in the crowd. Taken out of the baskets and made to kneel with their hands and elbows tightly tied behind their backs, the executioner addressed them on the heinous nature of their crimes. Armed with four long two-handled swords, one for each criminal, fastened in his sash, he then directed his assistant to grasp the queue of the first criminal and, standing in front of him, to pull it out to its full extent, thus stretching the neck of the victim. With a mighty swipe of the sword the head fell off and was tossed by the assistant into the river. The remaining three were as quickly despatched, and then, to my horror, the executioner carrying his four bloodstained swords walked up to me as being the only foreigner present, held out his hand and demanded *cumshaw*, which I very promptly gave him. That was the last time I attended an execution.

Other punishments I came across in my visits to the city were the *cangue*, which is inflicted only on small malefactors, and consists of a board about three feet by two feet, opening in the middle on a hinge and locked at the opposite end ; it has a round hole in the centre to take the criminal's neck. When he is adorned with this necklace and placed in the hottest part of the street, he suffers considerable torture from flies, because he is not able to reach his face or head to brush them off. I have seen a man's lips, eyelids and nostrils eaten away by these insects. In China he may be condemned to fourteen days of this punishment, and although we use the same in Hong Kong, a few hours serve to vindicate justice.

Suspending a criminal by the neck in a kind of triangle so arranged that he can just touch with his big toe a brick

placed on the ground, is a form of delayed execution which was common. By kicking away the brick he would die of strangulation, but such is the love of life that it may be three days before he finally succumbs. In the meanwhile his head is covered by relatives with a cloth and his dying agonies are mercifully not seen by the curious wayfarers. Adultery is punished with great severity. The woman is placed in a pit on the river bank, in which a lot of lime is also deposited and, either when the water reaches the pit or the woman exercises her natural functions, the lime starts to burn her up. The man is castrated and turned loose. Pushing bamboo needles under the finger-nails is a common method of extorting a confession, and no criminal (convicted or not) can appear before a magistrate except by kneeling on chains, a very severe form of torture if prolonged. A rich man, however, can always get a substitute to take his punishment for him, even to decapitation, and when a man is sentenced to "eat the small bamboo," as the Chinese humorously call a beating, the lictors can, if squared beforehand, greatly reduce the number of strokes and can also refrain from drawing blood, even with five hundred strokes, whereas with only one or two strokes they can reduce the flesh to a jelly by making a drawing cut. There are many other ways of torturing a victim, but I think I have said enough to enable my readers to see that 3,000 years have not made much difference to Chinese civilization, and that they are as cruel as ever.

The Chinaman excels in rivercraft and agriculture, and he has the patience of Job himself when manufacturing minute articles of ivory and filigree work, the latter sometimes inlaid with butterflies wings.

The cultivation of rice, his staple food, has been carried on by the same methods and with the same tools for three thousand years. Primitive though they are, he generally manages to get two crops off the same field

per annum, and his irrigation methods are all his own. Ingenious bamboo wheels are made to lift water from a running stream to the levees, and wooden pumps, driven by the feet of his women folk, raise water from standing pools to a height of 20 feet or more with little loss in transit. Formerly they were also good bridge builders and thoroughly knew the principles of an arch. That is, they made the *voussoirs* of the hardest and best stone and cemented them in, whilst the spandrils were of much inferior workmanship as not being required to take much weight. They also knew the principle of the cantilever bridge and their designs for roof trusses are still unique, whilst I have already referred to their water-tight bulkheads in the sampans. They invented gunpowder, and fireworks originated in China, and they are still very glad of any excuse to let off a multitude of their crackers, particularly on New Year's Day, when visiting the tombs of their relatives.

Where the Chinaman fails is in maintenance. He will build good bridges, buildings, pagodas, walls and temples, and there he stops, no attention is ever paid to them afterwards, and they just rot away and become ruins. This fault can be traced on the railways, which, though originally well constructed, began, even in my time, to suffer from want of maintenance and attention.

If it had not been for the Wesleyan Missionaries, and also for Mr. Leuschner and his wife, of the Berlin Mission in Shuikwan, we should have led a very lonely life, and as it was there were no children of Susan's age with whom she could play. Visitors from Canton were few and far between, but after the Pink Pills man we had a commercial traveller in cigarettes come to us in rather dramatic circumstances. One afternoon I was in my office when I was startled to hear afar off the roar of a mob of Chinamen, and thought that we were in for trouble.

Getting my rifle and ordering all the soldiers out, I prepared for an attack. Away off, running for all he was worth, was an Englishman pursued by at least 500 natives. He appeared to be the hare in a paper chase, because he was scattering what looked like pieces of paper as he ran. Going out to meet him, I found that he was throwing away packets of cigarettes of the brand called "Pirate," universally smoked in Kwangtung by the Chinese, and that the crowd were determined to have all he had got. Getting him into my house with all speed, I addressed the crowd through my interpreter, and got them to go away, but the traveller, my wife and Susan had a bad fright. A Chinese mob when its blood is up is of terrifying aspect, but its mood can be changed with a humorous word or two. We had to get that traveller away by night, however, sending him back to the railhead in a sampan, and I do not think he will forget his run across those muddy rice fields in a hurry.

All this time I had had no work to do, so I wrote to Mr. Kwong and suggested that I return to another ten-mile section and start construction. After a time I was moved to the next section, number 14, ten miles nearer Canton, and here work began at last. Another house had to be built, and as the new site was some three miles in from the river, we stayed with the missionaries until it was ready. Between our house and the river the line ran through a narrow gorge, involving heavy earth works and bridging, and I was in my element with plenty to do. Chinese contractors began to arrive from Canton and several foremen of works. Amongst them was a man who had been in America and had married an American woman. This woman came up with him, and he took a filthy room in a small village close to my house. When he married, in America, he had not informed the girl that he already had two Chinese wives, so that

when she came with him she found that her position in the household was nothing more than that of servant to the other two. Many a time did she come up to us to have English food and to receive, with gratitude, any clothes my wife could give her. Her husband treated her badly but not half so badly as did the other wives. I wrote to the American Consul about her to see if I could get her repatriated, to be informed that, as she had married a Chinese, she had become a Chinese subject, and nothing could be done for her. I often wonder whether European and American girls realize that when they marry an Asiatic they lose all claims on their native country and become nothing more nor less than slaves.

One of my Chinese pupils, Lum Kwok Tong, showed great promise of becoming a good engineer. He never went with me without taking his notebook and applied himself diligently to the study of his adopted profession. Ever since I left China he has never missed writing to me every Christmas, and I am glad to see that he has done well in the Public Works Department of Hong Kong and will soon earn his retirement. Others went on to various railways in China and are doing well. The Chinaman is always ready and willing to be taught, I found, and even my guard of soldiers were keen on drill and rifle shooting. Soon after our move to section 14 the German river gunboat *Tsingtau* paid Shuikwan a visit and I invited the Captain, Lieutenant and Doctor with all the crew that could be spared to come to my house to drink beer.

The river falling during the boat's stay, enforced them to remain in Shuikwan a month and Count Nicolaus Dohna stayed with us for that time. To give him his full title, he was known as Count Nicolaus von und zu Dohna-Schlodien, and he told us that his family was an older one than the Hohenzollerns, though they had made better use of their opportunities than he had. He took

a great fancy to Susan and she to him, and they became great friends. This sailor was to do great deeds in the War, which will be recounted in the proper place. He it was, I think, who carried Susan from her bed to see Halley's comet and to tell her that she would be an old woman of over seventy before she would see it again. When King Edward died we heard not a word of it for over a month after the event and were completely cut off from the outside world. The only newspaper we saw was the Overseas *Daily Mail* and *Blackwoods*, whilst the missionaries lent us books to while away the long evenings.

In order to instruct the Chinese as to what a railway train looked like, I ordered from Bassett Lowke, of Northampton, a model Great Western engine, a coach, some rails and sleepers, and fixed them up in my house. Inviting the leading officials of Shuikwan, some of whom had never seen a railway before, to see it running, the first question I was asked was "How much did it cost?" and thereafter all interest waned. It is a custom of the Chinese to take little interest in anything foreign and though the people as a whole are politeness itself, there is always a feeling at the back of one's head that they hate the foreigner and all his works, and bitterly resent his intrusion into their beloved China.

Obtaining a fortnight's leave, we went down to Hong Kong for a change, and during the time I bought a race-horse for £5 and engaged an ex-policeman, a Sikh, who would look after my family during my day-long absences on the works.

Whilst in Hong Kong, I met the Chief Engineer of the British Section of the Kowloon Canton Railway, Mr. Lindsay, and I was privileged to accompany him and the Governor of Hong Kong (Sir Frederick Lugard) on a trolley to inspect the works. The Beacon Hill Tunnel had not then been completed but we went to have a look

at it. At Canton, the Chief Engineer of the Chinese Section, Mr. Frank Grove, also took us over his length of line and asked us to stay with him at his headquarters at Tai-Sha-Tou, just outside Canton. He was very interested to hear of the progress of my line and the difficulties we encountered from the natives. Proposed by Mr. Grove and seconded by Sir Frederick Lugard, I became a Fellow of the Royal Geographical Society and that same year was elected an Associate Member of the American Society of Civil Engineers, so that, at last, I had something to show that I belonged to an honourable profession.

Returning with us to Shuikwan was a young merchant, Oscar Eager, of Shameen, who, though he had been in China some years, had never visited the interior. Leaving him at railhead to accompany my family up the river, I rode my new purchase all the way to Shuikwan, having to swim the rivers and creeks with him, and stay at other engineers' houses for the nights. When I bought him he was, of course, shod, but after riding him for a few weeks the shoes wore out or dropped off, and as there was no blacksmith available, he became useless to me on the cobbled Chinese footpaths, and I used him only for teaching Susan to ride on soft ground.

My ten miles of line was now actively taking shape and began to look like a railway at last. Concrete arches and bridges were soon built and our neighbourhood resounded with the noise of explosions in the rock cuttings and there were nearly 2,000 coolies at work. So my time was fully occupied, and it was most interesting to compare the Chinese methods with those of the Indians. With the former, work started at daylight, and, with a short halt for the midday rice, continued until dark, and it was amazing to see how hard they worked in a blazing sun. Everyone was paid piecework rate and could thereby earn quite a lot of money and there were very few slackers.

Alas, it was all to come to an end before the year 1911 was finished, though we were not to know it then. During my time in the interior of China, my Chief, Mr. Kwong, only visited me once, and that at the very beginning at Ying Tak. He was so tied down with red tape in his Canton office that he could not get away, even for two or three days, and so everything had to be done by correspondence and telegrams. He was, however, kept faithfully informed of all I said and did by the Paymaster, a relation of his and employed to watch the foreigner and report on him weekly to the powers in Canton. In the middle of 1911, Mr. Kwong wrote and informed me that he was leaving the service of the railway, and returning to his home in Peking, and that his place would be taken by Dr. Jeme Tien Yow, who had been President of the Board of Communications, and had also been Chief Engineer of the Peking-Kalgan Railway, then just completed. Dr. Jeme was one of the foremost railway engineers in China, and had been trained under Mr. Kinder, the railway pioneer in that country. My agreement had been for two years, which expired in February, 1911, but it had been renewed for a further two years, and this was confirmed by the new President and Chief Engineer. Of all the foreigners engaged on that railway, I had remained the longest, and had circumstances not occurred as they did, it is likely that I should have spent many years in China, because I had done well and had been complimented on my work by my Chief. For myself, I asked nothing better. The living was extraordinarily cheap, we both liked the country, the people and the work, and none of us had had a day's sickness.

Susan was then too young (five and a half) to be sent away to school, and was learning her A.B.C. and writing from her mother, and seemed to be perfectly happy in spite of a total lack of companions of her own age. But these

ideal conditions were not to last, for towards the autumn I received a warning letter from Canton that political troubles were brewing and it would be as well if I sent my family to Hong Kong where they, at least, would be safe. Consulting the missionaries about this matter they pooh-poohed the whole thing, and said that if any trouble was brewing they would have been the first to hear of it, so acting on their advice I did nothing for another month. During that period, however, ugly stories reached us of an increase of piracy on the river, of rioting in Canton, and general disorders everywhere.

It appeared that no attacks were being made on foreigners, and that the trouble was purely one amongst the Chinese themselves. However, I determined that my family had better go, and I took them down by river and train to Canton and thence by steamer to Hong Kong, where I left them in a private hotel, and returned to Shuikwan, with the satisfaction of knowing that they, at any rate, were safe. The Wesleyan missionaries then insisted that I should stay with them, but my duty was to return to my headquarters, and I did so. About this time a young gunner officer, Crosse by name, came up to see me and did his best to get plans and sections of the line from me. In other words, he was up to spy out the land, and could and did dress himself up as a Chinese and talk the language like one of themselves. He told me long afterwards that, though I had refused to give him any information about the line, he had copied all the plans when I had been away and that on his return to Canton he had told my Chief that I had been very loyal to my employers, in that he could extract no information from me. This young officer was to come into my life again at a later period as will be told in due course.

Great arguments used to take place in my house

between the English missionaries with myself, against the German missionary, as to what was going to happen between England and Germany. Being so far away from Europe, not one of us really knew much about the political situation, but I remember saying that I thought there would be war between the two countries within three years. Whether I got my inspiration from the *Daily Mail*, or whether it was a pure guess, I do not remember; anyhow the idea was vigorously pooh-pooed by the German, and he was backed up by his countryman, the naval man, when the argument started afresh on the latter's visit. Anyhow, my prophecy came true, much to my astonishment.

One of our missionaries happened to be an Australian from the West, and he it was who first put it into my head to go there. He said that if circumstances should force me to leave China, he would give me one or two letters of introduction to people in Western Australia and he had no doubt that I could get work there. On the strength of this statement, I wrote a letter to the Chief Engineer of those railways and in time received a reply that, although no appointment could be made outside the State, he could offer me work if I applied in person to him for it. In the meanwhile, however, I was not a bit anxious to leave China, but when an order came for all foreigners on the line to return to Canton, I saw that this must be the beginning of the end.

Infected by the spirit of lawlessness abroad, the contractors had disappeared, some to their homes, others to join the Revolutionaries, and not a coolie remained on the works, and so I made arrangements to obey the order and leave China.

Reports on the condition of the river, which was the only avenue of escape, indicated a dangerous state of affairs. All craft were being stopped and looted by the river pirates, any resistance leading to bloodshed. The

river police had joined the Revolutionaries, and some Manchu officials had been murdered. There was thus no protection for foreigners and my Chinese passport was not worth the rice paper it was written on.

For some time my interpreter could find no boatman willing to take the risk of transporting me to safety, and only by the offer of a large bribe, a couple agreed to risk it.

For about ten miles down stream all went well, the sampan, with wind and current, making excellent time, but I had scarcely laid down with a Chinese brick under my head as a pillow when a great hullabaloo on the left bank brought me out of the cabin to find that the sampan had been brought up into the wind and had stopped. The woman captain informed me that there was a large gang of pirates on the bank, who had, with many threats, ordered her to close in, so that they could see what she had on board. I ordered her in my worst Chinese to proceed, but no threats would induce her to do so, and the "crew" was shivering with fright in his quarters. All I could get her to do was to make for the opposite bank and to return to our starting place. One or two of the pirates manned a dug-out canoe with the idea of giving chase, but as a large junk was coming down they decided that probably more loot was to be obtained there than from us, and we got away, it taking us four hours to get back against wind and stream.

My camp was completely deserted on my arrival and looked very forlorn. I could not remain there, and passage by the river seemed impossible, so after consulting my faithful guard, I decided to walk across country parallel with the river and try and circumvent the pirates, afterwards getting another sampan to take me on.

The soldier took my uniform case on his head whilst I carried his Snider and ammunition and off we set. There was no definite path and most of the time we were walking

on the narrow strips of dry land, called " bunds," dividing the wet rice fields, any false step landing us up to the knees in mud. Occasionally we came to tributaries of the main river, over which was usually an arch bridge, but on two occasions we waded through up to our armpits. We were able to get hot tea at a small village but nothing whatever to eat, and my small stock of bully beef and biscuits looked like giving out before we reached safety.

About 2 p.m. I thought we might turn in towards the river, and hoped we might find a boat of sorts available. About two hours later the usual fringe of bamboos told me we were at the river bank. No sign of a boat was visible, and by this time we were dog tired and wet through, and just laid down on a clean sandbank and slept, not caring then if all the pirates in China came to molest us.

Later, we obtained one of those dug-out canoes which was used by a fisherman who employed cormorants to do his work for him. The dug-out, consequently, smelt of birds and fish, and this, combined with the dirty water in it, completely took away any appetite I had, which perhaps was a good thing, as there was not much left with which to satisfy it.

The soldier and I proceeded in this craft, he working the paddle and I suffering the tortures of the damned, trying to keep in it, and sitting in the dirty water in the bottom. The owner asked us to leave it with a friend lower down where he thought we might get a sampan.

The inhabitants of this small village had apparently heard nothing of the doings of the outside world of China, and believe me, we did not enlighten them. My military friend proved a very straight fellow, and I am glad to say that he received a very substantial reward when he eventually brought me to safety.

Arriving at our friend's people we bargained for a boat to take us to railhead, still some two days away, and

eventually secured an ancient sampan, leaking in many places and half-full of water. No inducement would make the owner travel in daylight, and so we lay-to until night, when we started off under sail and oar.

Many times we ran full tilt on to a sandbank, and the soldier, myself and the owner would have to get out to heave the boat off, once we were caught in a whirlpool in the Ching Yung Gorge and spun round like a top, and once I gave up everything for lost when we collided with an anchored junk in mid-stream. If it had not been for the bulkhead I think we should have sunk with all hands.

My food supply had come to an end, and for one and a half days I lived on water and a little rice begged (and paid for) from the boatman.

The last night on the river I slept in a cave high up on a cliff face which had once been a temple. To reach it the soldier and I had to climb a rough bamboo ladder, and took the precaution of hauling this up after us. Sleeping on the altar we passed a fair night, in spite of the numerous bats whose home we had invaded, and the next morning proceeded on the voyage.

I saw one or two things that showed me that rumour was not lying about the atrocities that had been committed on the river. I passed a headless corpse on a sandbank kneeling in an upright position but no sign of the head, several bodies floated along in the stream, some headless and others intact. One bloated corpse of a woman made me feel quite ill.

Just an hour or so before we reached the railhead a fusillade of shots rang out from the bank, and an order to stop was shouted at us. I hoisted my Union Jack and waved my white sun helmet to no purpose, and I had great difficulty in making my boatman carry on. This time we were chased in earnest, but reached the railway station at Kou Wong Shek in time to get shelter in the building.

The Chinese stationmaster said that, for the safety of the station and himself and men, it would be better if I would consent to be locked up in a steel-covered wagon until such time as he could telegraph for an engine to take me away. This I agreed to, and in the interval of waiting the stationmaster, who evidently pitied my forlorn state, prepared a delightful meal of rice and chicken, which I shared with my faithful military friend in the wagon.

In the evening a large crowd had gathered at the station evidently after my blood, but the locked wagon defeated them, and when an engine arrived and took the truck, with me in it, to Canton, no one was more thankful than I to have made my escape.

Arrived in Canton I lost no time in reporting my arrival to the Consul-General, who seemed pleased that I had got through safely. The Chief Engineer, Dr. Jeme, said that the country was not likely to be settled for some months and that in the meanwhile all construction work would cease. Under these circumstances I said that I would go to Australia, but that I would come back to China whenever he might want me. With this I said good-bye to him and his staff, and went down to Hong Kong to rejoin my family.

So ended nearly three years in the then Celestial Empire, and when I am asked, as I very often am, as to which of all the countries I have lived in I like the best, my answer is always China, and I add that were I not an Englishman I would like of all others to be of Chinese nationality, because one of these days, when a Chinese Napoleon arises, those Yellow men will become Yellow Perils, and will, I feel sure, overrun the West and conquer all before them. But that time is not yet, and may be a hundred years or more in coming; but when it does, good-bye to Western civilization.

CHAPTER IX

AUSTRALIA

I ARRIVED in Hong Kong with twenty-three boxes of baggage, which had been stored in Shameen, including a theodolite and level which had been presented to me by a Chinese engineer, and rejoined my family, when we had a long discussion as to our future movements. Having accumulated sufficient money in China to either go home or go to Australia, we decided to go to Australia and accordingly I booked our passages on a Japanese steamer, the *Atsuta Maru*, to Singapore, and made arrangements with the Blue Funnel Line to take us on from there.

Embarking in due course on the *Atsuta Maru* we made our first acquaintance with Japanese officers, stewards and crew, the Captain alone being an Englishman. Five days' run down the China Sea brought us once more to Singapore, where the heat was as fierce as ever, and not having time for a run ashore we were towed across in a Malay *prah* to the *Gorgon*, which we learnt had been waiting two days especially for us.

No time was lost in heaving up the anchor and setting a course for Soerabaya, in Java. As we were the only passengers we had the run of the ship and an excellent cabin on the top deck. At Soerabaya I made my second acquaintance with a Dutch Colonial town, and was much impressed with the style in which the colonists lived. Palatial houses, with cool marble floors and open to all the winds of heaven, struck me as the ideal kind of



CANTON SHANGHAI THE FOREIGN SETTLEMENT



RAILWAY CONSTRUCTION ALONG THE PI HO RIVER



SURVEYING A BUSH POOL



THE RIVER AT ADLLAIDE, S A

residence for the hot, damp climate of Java, and when I learnt that business men and officials enjoyed a siesta in the afternoons I thought it a pity that the English did not institute the same custom in some of their colonies. In Dutch colonies I learnt that the Eurasian, that mixture of European and Asiatic blood, which the name implies, is looked upon as an equal by the pure Dutchman. He is said to have Dutch blood in his veins and is therefore one of themselves, and can marry a girl from Amsterdam if he desires.

Soerabaya is some distance inland from the sea and is approached by a canal which ends in a large basin in the centre of the city. A steam tram runs from the Customs House at the sea end to the town, and ships' passengers proceed by this on disembarkation. The road is lined with "Flame of the Forest" trees, and is crowded with the gaily dressed Javanese all intent on their own affairs. Dutch women in Java wear native clothes for most of the day, and can stay in the country for many years without needing a change to Holland, even though the temperature in Soerabaya never falls below 85° F.

The Chinese apparently are the merchants of Java, though the Dutch colonists do the governing and run the plantations, and they treat the "heathen Chinese," no matter how rich he is, or what his standing with his own countrymen, with the greatest contempt. They are compelled to live in the Chinese quarter and have no civil rights, they are taxed to the utmost and are not allowed to purchase land, but so long as he is making money the Chinaman is content to remain in Java, probably feeling, and not without reason, that he is safer there than in his own country.

As in India and Ceylon, betel chewing is very prevalent in Java, though I saw nothing of this habit in China. The nut is about the size of a nutmeg, and when chewed it is cut up into pieces, one of which is wrapped in an

areca leaf. Over it is spread a soft paste made of lime, and all this mixture is chewed together, leaf, nut and paste. It dyes the lips red and the teeth black, and the chewer is constantly spitting out the red juice, so that the pavements are in many places dyed red and the walls are smeared with the superfluous paste from the chewers' fingers. Like smoking, in other countries, it is a habit pure and simple, but is said to be good for both the teeth and stomach, but it gives the chewer a most bloodthirsty appearance and is a dirty and disgusting habit.

Passing on from Java we entered the Straits between that country and the island of Bali, another Dutch possession, and here we were likely to be involved in disaster. About 3 a.m. an alarm of fire was given and acrid smoke was seen issuing out of the after hatch. The hose was rigged and water turned into the hold with apparently little effect. The Chief Officer and two of the crew opened up a part of the hatch to investigate and were almost immediately overcome with the fumes. My wife and Susan slept peacefully through it all, and learnt nothing of how near we were to abandoning ship that night. For not only were the Chief Officer and his men laid out, but others followed and were overcome, so that by the time the fire had been got under control only the engineers and the Captain were able to do anything. It appeared that we had a consignment of cyanide of potassium in the hold, destined for the Gold Fields of Western Australia, and coming into contact with sea water poisonous fumes had resulted. However, "all's well that ends well," and by daylight the next morning the crew had recovered and the fire was out.

Continuing our voyage southwards through the Timor Sea we fetched up in Roebuck Bay, at the pearl fishing township of Broome, on the North-West Australian coast. I confess that the first sight of Australia was disappointing in the extreme, though I hardly know what

we expected to see ; low brown cliffs formed the coastline, and beyond them miles upon illimitable miles of low scrub bush with not a tree visible. Broome itself consisted of corrugated iron shanties laid out in square blocks with red soil roads intersecting at right angles. Away from the town were two cemeteries, one for the white people, the other for the Japanese and Malay divers who had died an early death in the pursuit of their calling. Our ship tied up at a high wooden piled wharf and was met by every inhabitant of the town, white, black and yellow. A ship calling there was an event and not to be missed. Anchored in the bay were hundreds of pearling luggers, as apparently this was not the season for fishing. Here we stayed all night to embark passengers going to Perth to celebrate Christmas and get away from the dreary monotony of their lives in Broome. I learnt that the main source of income was the pearl shell, which sold for £250 a ton. Only very occasionally was a very valuable pearl found, but now and then one worth £3,000 or more might be picked out of a shell, and the astonishment and delight of the fisher when the "Southern Cross" was discovered can be imagined. Divers from Japan and the Malay States went down to great depths in search of the shell, and the aforementioned cemeteries bore witness to the hazards of this work.

Next morning, on going on deck, we found that we were on dry land with no sea visible. The tides at Broome vary by forty feet or so, and as the ocean bed is a level one the sea recedes out of sight. Our ship had a flat bottomed hull to enable her to squat down on the sea bed.

We sailed on the next high tide and reached Port Hedland the following day. Here we were in a small harbour almost landlocked, and the Chief Engineer decided to pump out his bilges to get rid of the sea water used to extinguish the fire. Doing so, a stream of dirty

yellow water mingled with the still dirtier water of the harbour, and had its result in poisoning every fish, large and small, in it. I never saw such a holocaust of fish of all sizes and all the colours of the rainbow. The inhabitants of the township, white and black, were nothing loath in collecting those fish which were washed up on the beach, and I learnt that the poison only affected the head and that the remainder was edible. I noticed, however, that our Chief Steward did not take the risk of giving us any in the saloon.

Port Hedland, at the time of our visit, boasted one tree only, and in order to preserve it from the ravages of the many goats that infested the place, it was fenced round with barbed wire and occasionally watered, though water in these western townships was almost worth its weight in gold.

Continuing round the coast we called at Cossack, Onslow and Carnarvon, and when rounding the North West Cape experienced a mild "willy willy," as a gale is known in those parts, and a rough sea. At all these small ports more settlers came on board and our ship was crowded out ; so much so, that men were sleeping in the saloon, on deck, and in short all over the place, and our stock of liquor was very soon exhausted.

Geraldton, our next stop, proved to be a much bigger town, and boasted of several hotels, a swimming bath, pier and cinema palace, as well as a railway station and good roads. Now, loaded up to the "Plimsoll" mark with passengers, we made for our last port, Fremantle, and here everybody disembarked. I had expected some trouble with the Customs authorities here, but on the advice of Captain Townley had filled in a form stating that I was a "settler" and by this means got everything in free.

Fremantle is the port for Perth, the capital of Western Australia, and losing no time here we proceeded by train

the nine miles to that city, passing on the way several coastal resorts such as Cottesloe, Claremont, Subiaco and others.

Putting up at the Palace Hotel in Hay Street we took stock of this city of the West before making any move to get employment. Broad streets, good shops, a theatre and cinema palaces, a palatial club (The Weld), and a ramshackle wooden railway station were the most prominent features. The streets were disfigured by the numerous wooden telegraph poles and they all ended nowhere, in sand. In fact, we soon learnt that Western Australia is known to the Easterners as the "Land of Sin, Sun, Sand, Sorrow, Sore Eyes and Sir John Forrest," the latter, of course, the famous Premier and explorer who has done so much for his State.

The "Sand Gropers," as Western Australians are called, amused themselves by sailing on Perth Water, a large lake close to the town, and joining up with the Swan River. Across the water was South Perth, a suburb of the main city.

The "Sin" referred to in the opprobrious title given above refers to the happenings in King's Park, a beautifully laid out pleasure ground on the bank of the lake, whilst the "Sore Eyes" are easily traceable to the sand which gets in them when a "willy-willy" is blowing.

Excellent business appeared to be done at the numerous public houses, and at the theatre, where Sybil Arundale was the leading lady in *The Chocolate Soldier*, the house was packed every night.

After a couple of days of sightseeing, I called upon the Chief Engineer of the railways (Mr. Light), and was appointed an Engineering Assistant and told to start in the office next morning. My salary was to be 16s. a day, paid weekly, and I found that £250 a year was supposed to be quite a good salary for an engineer in those days. Removing to a less pretentious place than the Palace

Hotel we took up our residence in a boarding house in St. George's Terrace, and the first person we saw was an old school friend from Norwich, so we forgathered with him and talked about old times.

Every morning at 9.30 I attended the office, and for a time was engaged in making plans for the conversion of the line from Perth to Kalgoorlie, from 3 feet gauge to the standard one of 4 feet 8½ inches, to join up with the proposed trans-continental line from Kalgoorlie to Port Augusta, in South Australia.

Office work, however, had never been to my liking, but I stuck to it for a month. In the evenings we would hunt round for a house, and remembering that my mother had relatives in Australia I made enquiries and discovered a cousin of hers, an accountant in Perth, living at Cottesloe, and went to see him. In fact we became so friendly that he found a house for us next door to his own, and having bought furniture, we moved into it and I became the business "gent" who goes up by the 8.45 every morning to his office and returns by the 5.30 in the evening, a rôle that I have never been fitted for, and please God never will be.

About a month after I had joined the railway staff I was sent to Mullewa, a few miles east of Geraldton, to make a survey and plans for a dam there. The Australian calls a "dam" a large hole in the ground constructed to catch water coming down from the hills or streams in its vicinity.

In order to calculate how large the hole in the ground was to be it was necessary to ascertain how much water was likely to flow into it, and this meant making a survey of the "catchment area," as it is called, to obtain the number of square miles over which rain would fall, and then, with the known number of inches of rain, to calculate the number of gallons of water, deducting a certain amount for loss by soakage. I left my family in

Cottesloe whilst doing this job, and lived in a tent with my two assistants.

There was a "pub" at Mullewa, to which men in the interior would ride on horseback or bicycle for a drink, and I saw one man just off on his bicycle for a ride of 120 miles, of which he thought nothing, as he had half a dozen bottles of "Swan" beer in his knapsack.

During my surveying operations at Mullewa I managed to shoot a couple of kangaroos and some sulphur-crested cockatoos, the tail of the former making a very good soup, whilst the latter in a pie cannot be distinguished from pigeon.

On my return to Perth I received an order to go back to Geraldton and remain there for a while. This meant selling the furniture and giving up the house, both of which cost me money I could ill afford. However, off we went, and took up our abode in the Commonwealth Hotel, kept by one "Billy" James, who had found a gold mine and had, as most Australians do, bought a "pub" with part of the proceeds. Attending the Geraldton office, which was next door to the hotel, kept me occupied for a week or so, during which I developed the scheme for the "dam" at Mullewa. In the evenings we met the gentry of the place, including the one and only doctor, Huntingford, married to a delightful Irish lady and owning the only car in Geraldton. As he had only just bought it when we arrived, he asked me to show him how to drive it. Being a two-seater model "T" Ford, I did not know much about the "sun and planet" gears myself, and on the first occasion of my driving it alone down the main street, kept my foot on the low gear pedal all the time until it accidentally slipped, when I discovered where the top gear was. After that the Doctor would never make any long-distance visits without me, and my Chief entered into the spirit of the thing and allowed me to accompany him. We generally ended up in deep sand

and with no water in the radiator, but by tying rope, which we had with much forethought brought with us, round the back wheels we sometimes got out of sand, at other times completely deflating the tyres solved the difficulty.

When I was sent to Eradu, up the line, to survey a water pool which had been discovered miles away in the bush, I had a coach to live in, so I took Susan and her mother to give them an insight into Australian conditions in the "back blocks."

I had three men with me, but I found that I was expected to carry my theodolite through a foot or two of sand and for several miles in terrific heat, work all day, and then carry it back. Never having previously carried instruments, but relegated this menial duty to Indians, Chinese, or South Americans, I did not like it at all, but carried out the water pool job only to find that, when a most elaborate scheme had been developed and plans and estimates prepared for the Head Office in Perth, the water on being analysed was unfit for use in locomotive boilers.

Whilst at Eradu we stayed a week-end with a Perth bank manager at Northern Gully, where he had a delightful estate upon which grapes grew in profusion.

I visited Yalgoo and Mount Magnet, farther up the line, for small jobs, and at the latter place found that the station master, a Dane, was making quite a good living by washing the creeks for gold on Sundays and at all odd times, sometimes making 15s. in a day.

There being no further work in Geraldton, we returned to Perth, and finding myself back in the office again I decided that three months of Western Australia was quite enough and sent in my resignation.

We had been unlucky in the parts we had seen, because having been sent on a short job to the south-western part of the State, I found that country very different to the

northern part. There were homesteads and farms, running rivers, cattle, trees, and a general state of well-being, quite different to the sandy treeless tracks of the north, and it is possible that had we been sent there first we might have settled down in the West. But it was not to be, the "wanderlust" had got into my blood, and my wife did nothing to dissuade me from throwing up the appointment. The astonishment on the faces of my fellow office-wallahs was great, to think that I dared to resign and risk getting another post in the Eastern States, and the Chief Engineer seemed surprised also.

Bidding farewell to our relatives who came to see us off at Fremantle, we travelled by the same *Mongolia* upon which my wife had come as a bride to India, and crossing the Great Australian Bight arrived at Adelaide, where we disembarked. A man in Perth had given me a letter of introduction to Mr. Kidman, the "Cattle King" in South Australia, and armed with this and an excess of confidence we stayed at the South Australian Hotel, and I made enquiries as to the whereabouts of Mr. Kidman, to be told that he was in Europe, and *that* hope was, therefore, dashed to the ground.

I called on a cousin in Adelaide but he knew nobody likely to be of any use to me, I saw the railway people with no better luck, and decided to go to the heart of affairs in Melbourne.

Travelling by train we experienced that great lack of foresight shown by Australian railway engineers, in having to tranship from the South Australian gauge train into the 5-foot gauge one of the Victorian Railways at the border, and arrived without further incident at Spencer Street Railway Station in the heart of the Metropolis. Avoiding expensive hotels like the "Menzie's," we went to the "Palace," in Collins Street, and I lost no time in calling upon the Chief Engineer of the Victorian Railways, Mr. M. E. Kernot. Referred by him to his assistant the

latter told me that he could say nothing about a job then, but I was to see him again in a week. Our funds were running low, what with the loss on the house and furniture, the sea passages, hotels and railway fares, and things began to look rather desperate, but we managed to find up another relative of my mother's, in the wife of the Crown Counsel in Melbourne, and she very kindly took us down to her house in Hampton, a suburb on the coast, and made us comfortable.

Oscar Asche was then at the Theatre Royal in *Kismet*, and we went there to see him, and, being an Australian, he received a great ovation at every performance. The cinemas in Melbourne were very up to date, and I saw coloured films there in that year of 1912 of such perfection as I have never seen since.

It was a very anxious time for us then, as the future seemed very black indeed, but luckily the clouds lifted and the railways gave me a job just as we were beginning to lose all hope.

Reporting to a man named Beauchamp, in the Spencer Street offices, I was instructed to proceed to Walhalla, a small town in the mountains, to make a survey of a water reserve there. I was told quite frankly that two other men had preceded me, and had both failed to carry out the job satisfactorily, and that this was in the nature of a test job for me. Two men were to accompany me, and I was supplied with a scrap of paper upon which were drawn certain lines and bearings which were to assist me to demarcate the reserve on the plans. Feeling none too confident about it, I set off, and changing into the 2 feet 6 inch gauge line at Moë I reached Walhalla, after traversing a line running through beautiful mountain scenery, and put up at the only inn of which the place boasted.

Walhalla is a gold mining town, the deepest mine in the world, the "Morning Star," being situated there. It was very cold, and there had been snow and ice just before

my visit. The inn was built of weather boarding, and every wind that blew seemed to find its way into my room, and only candles were used for lighting. One street, a very winding one, ran through the township, and alongside it was a stream in which the "tailings" from the mine were carried away. For the whole of the length of this stream Chinese had fixed up water wheels and were making a living out of the gold they were able to extract from the water. So "little fleas have lesser fleas upon their backs to bite 'em."

I arrived in Walhalla on a Saturday afternoon, and in conversation with the proprietor of my hotel I learnt that he was Master of the local Masonic Lodge, and that there would be a meeting followed by a dinner that evening. I omitted to mention that I became a Freemason in India in 1902, in Kamptee, and had got as far as the second degree when my repeated transfers precluded any further progress in the craft, but I had not forgotten the "ancient landmarks," and when put to the test by the innkeeper proved satisfactorily to him that I was what I claimed to be. The upshot of it was that he invited me to the Lodge and together we went. At the subsequent dinner I sat next to the only other Englishman in the place, a young fellow employed in the mine. During conversation he found out from me what brought me to Walhalla, and seeing my difficulty in getting a start he introduced me to the oldest inhabitant, who had been there ever since the place *was* a place, so to speak. The old gentleman furnished me with some very valuable information to the effect that all the old survey marks had been covered up when the tarred footpath had been made in the town, but that, if I would break up this path at each angle, I would come across a small gaspipe stuck in the ground, and with these I could connect up the water reserve.

After a festive evening with the Freemasons, I retired

to bed and slept fitfully, partly on account of the cold, but mainly in thinking about the task before me. Next morning, though Sunday, I put my men to work at the corners of the footpath, and sure enough six inches or so down we came across the pipes. Setting up the instrument and measuring the angles and lengths I found them to agree with the scrap of paper from Melbourne, and I followed these lines through until they brought me to the reserve situated on such a steep hill that both the instrument and myself and the two men had to be roped, to prevent us falling over the precipice to the road.

It will be sufficient to say that I made the survey that day and spent all night with paper and pencil and slide-rule working out the "closing" line and angles. On Monday, Beauchamp came up and congratulated me on being able to carry out the work where two experienced men had failed and in such a short time. All owing to my lucky star in being a Mason and thereby meeting the one man in the town that knew where the points were. Beauchamp and I returned to Melbourne together, traveling partly by a four-horse coach down precipitous roads at a break-neck speed to Moë, where we joined the main line train.

CHAPTER X

AUSTRALIA (*concluded*)

HAVING carried the test job through satisfactorily, I was ordered to proceed to Bruthen, in Gippsland, to assist on the construction of a new railway from Bairnsdale to Orbost, on the Snowy river, and thither my wife, Susan and I departed. At Bairnsdale we got into a four-horse stage coach and were driven over an apology for a road to Bruthen, a few miles away, and took up our quarters, temporarily, in the village inn kept by two young men and their sister.

Bruthen appeared to be one of those typical one-horse Australian townships of the back blocks, with one wide street running through it from end to end, with mostly wooden bungalows on either side, the inn being the only structure built to last. Parallel to the main street ran the Tambo river, on whose banks maize fields flourished in the deep chocolate soil. Just clear of the village the road crossed the river on a long timber bridge, and beyond were "meadows," so called, of perhaps several hundred acres in extent. In every field and in the township itself were those disfiguring items of any Australian landscape, the dead trees, whitened by ring barking and looking like ghosts in the moonlight.

Reporting my arrival to the Engineer in charge of that section of construction, I found him to be a dour old Scotsman by name Andy Kincaid, and with him also were his accountant, Henty, and an office boy. My duties were to drive out every morning with old George, a sort of handyman, and an Englishman, Clem Long, to

set out cuttings and embankments for the contractors to begin work. A four-wheel buggy was hired daily, and in it we three set forth at 8.30 a.m. and spent the day on the line, incidentally shooting rabbits and a kangaroo or so on the way. But previously to doing this routine work I had to re-survey a part of the line which it was proposed to alter, and here I came up against another problem which had to be studied carefully at nights. The setting out of the new centre line was simple, but when it came to making "closed traverses" of the numerous small properties through which the line ran, I learnt something about the very exact methods of Australian surveying. The rules stipulated that every angle had to be taken in the field and no calculated angles were to be used, so that I found myself and instrument straddling barbed wire fences and post and rail fences in an endeavour to get the angle of crossing of the line. Many other exact methods were enforced, but it is sufficient to say that I learnt a lot more about land surveying than had ever been taught me at Melton Constable.

In the evenings I was free to look for a house and obtained one from a German settler who proposed going away to Germany for a holiday. The house was like all the rest, a wooden one, but it had a bathroom, though to my horror, on looking into the bath, I found it full of blood and discovered that the pigs had been killed in it. With the help of Clem Long I soon got the bath into shape, and whilst my wife fixed up the house I started in the garden, of which I had three acres. Everything seemed to grow well in it, lemons, oranges, and vegetables of all kinds, whilst two acres were planted with potatoes. When it got dark I had a Pathé Home Cinematograph which I showed to some of the villagers, until they were tired of "His First Cigar" featuring Max Linder, and the only other two films I could obtain.

Being used to railway construction with blacks and therefore cheap labour, it came as a revelation to me to see all manual work being done by white men. Labourers were then earning 8s. 6d. a day, and we employed many men, who lived in small tents pitched on the side of their work.

Ploughing was used to loosen up the soil, scoops pulled by horses brought the soil to the embankments, dynamite was used in soft earth cuttings, and teams of horses and wagons used to carry the earth out. Exact costs of each class of work had to be kept, and comparisons made between contractors, those not getting enough out of the labourers being discharged. In order to understand, I must briefly explain the system under which railway construction was then carried out in Victoria. A contractor would be given so many cubic yards of earthwork to do, the rate per cubic yard being fixed by the Engineer. The contractor's men were paid by the railway fortnightly, and at the same time the work the contractor had done in that period was measured up and paid for at the agreed rate. The difference between this amount and the amount of the wages was the contractor's profit and paid to him, so that it was to his interest not to engage more men than were absolutely necessary, and to get the most out of those he did employ. Wages were fixed by Government, as were the hours of work, and a timekeeper made his rounds daily to check the men's time. I later introduced this system in a modified form into Ceylon with success. My lay readers will forgive my inserting this purely technical matter, but there may be amongst them some Engineers to whom this system of construction will be a novelty as it was to me.

We had no bridges of any importance on this length of line, and the work was very uninteresting from an engineering point of view, confined as it was to earthworks and concrete pipe lines.

I was instrumental in introducing the ancient game of golf into Bruthen, the new links being inaugurated by a match between me and one of the hotel youths, consisting in driving a ball from the front of his hotel up the main street and over the bridge to the links about $2\frac{1}{2}$ miles off. Followed by the greater number of the inhabitants one Sunday morning we finished up on the first green about one o'clock, and in time to consume large quantities of bottled beer expressly sent out for us by my thoughtful opponent.

And so our lives went on, undisturbed by the goings on of the outside world, missing nothing in the way of cinemas, theatres, dances, dinners and all the other things which seem so necessary to some people to keep them alive, and so it might have continued had not an advertisement in the Melbourne *Argus* caught my eye, and in a weak moment I answered it. It appeared that the Minister of External Affairs in Melbourne was about to engage two locating Engineers with a large party for survey work in the Northern Territory, and before I knew my own mind in the matter a telegram arrived asking me to report myself in Melbourne, and adding that my Chief Engineer had agreed to my coming up there. Proceeding to that city, I was interviewed by Mr. Francis, the manager of the Northern Territory Railway, and offered the post, which was at a salary of £450 a year, at that time quite a good one for Australia. I returned to Bruthen to pack up and left my wife and Susan there in charge of Clem Long, who would get up the two acres of potatoes and sell them, and returned to Melbourne to meet the men and assistants who were to go with me.

It appeared to me strange that of all the Australian engineers who must have answered that advertisement, I, an Englishman, should have been the one selected to go, and I put it down to the report on my Walhalla

success, which must have been made by the Chief Engineer to the Commonwealth authorities.

Anyhow, for better or worse, I embarked in charge of our party on the Dutch steamer *Van Waerwyck* at Melbourne, bound for Port Darwin, and by the time I should have reached there I would have almost circumnavigated the island continent, the only part missing being from Port Darwin to Broome, an insignificant distance. Coming to the fourth of the State capitals I had visited, Sydney, but quite the first in its own estimation, I could not help but be struck with the beauty and immensity of the harbour, though I am still of opinion that I like Hong Kong better. The entrance through the Heads is very awe-inspiring, and inside the numerous inlets and islands make an enchanting scene not easily forgotten, whilst the convenience of having the largest ocean liners anchored in the heart of the city, at Circular Quay, is a great asset.

Leaving here after only a short stay, we ran inside the Great Barrier Reef up the coast to Brisbane, the last of the capitals and, I suppose, the smallest. Brisbane in those far-off days was a very insignificant town indeed, and did not look the part of chief city of the immense State of Queensland, but such it is. Large meat preserving works appeared to be the main feature of the place, and having had a look round one of these, we went to Townsville, an attractive little port on the North Queensland coast, the only thing I remember about it being that I ate some excellent iced passion fruit there.

Leaving the Australian coast, and steering north through a gap in the Reef, our next stop was at Port Moresby, the capital of New Guinea, and here I came into touch with the black man again. A party of us, mostly ladies, went off in the ship's lifeboat to a Papuan village on the coast, and on setting foot ashore I was rather embarrassed to see that the men were stark naked, whilst

the conspicuous upper works of the womenfolk were also revealed in their immensity to anyone who liked to look. Here were the real South Sea Islanders, in all their glory, and very interesting we found them and their bamboo houses built on stilts in the sea. My party of ladies appeared to revel in the novelty of it all and did not seem in the least embarrassed by the nakedness all round.

Returning to the ship, we ran almost due west to Thursday Island, and knew some time before we reached it that we were approaching by the overpowering smell of goats which assailed our nostrils. The town appeared to be very similar to Broome on the other side of the continent; there were the same tin-roofed houses, the same pier with its crowded loafers, the same pearling luggers and the same streets, only whereas Broome was flat, Thursday Island is hilly and has a few trees.

Continuing through those dangerous Torres Straits, which Captain Bligh had navigated in an open boat so many years ago, we saw several wrecks, silent witnesses to the dangerous currents there met with, and steering a course round Cape York we eventually reached the landing stage at Port Darwin and disembarked.

Port Darwin, or Palmerston, is built on top of red sandstone cliffs and is generally enveloped in dust of that colour. The usual crowd of sightseers met the ship, and appeared to be suffering from the effects of the climate which was hot in the extreme. This was Christmas-time, 1912, and everyone was on holiday. I should say that Port Darwin was, so far, one of the most dreadful places it had been my fate to visit. Intense heat, clouds of red dust, poor food, corrugated iron roofs on the houses, shortness of water and hungry-looking country round it, combined to make it a scene of desolation not pleasant to see and we were all, I think, glad to board the train which took us to Pine Creek, the end of the line. From here we were to locate an extension of the railway to the



VIKANDAHIS OF NATIVE HOUSES NEW GUINEA



NATIVE HOUSES ON THI SEASHORE NEW GUINEA



SOUTH SEA ISLANDERS NEW GUINEA



A BLACKFELLOW PINE CREEK

Katharine river, no one exactly knowing how far this river was away from the starting point.

Pine Creek was just such another place as Port Hedland, but smaller, and not having Port Hedland's main attraction, the sea. One ramshackle "pub" adorned the place and a Chinese general shop supplied the wants of the few inhabitants.

Acquiring a horse for the sum of £8 I proceeded to explore the country, my assistant in the meanwhile running a trial line through the bush in the direction we supposed the Katharine river to be. The country, with the exception of one hill to the south of Pine Creek station, was fairly flat and had the Cullen and other rivers running through it, so that we did not have that very usual difficulty to deal with in Australia, viz., a shortage of water.

As there were a good many of the aboriginal men, women and children hanging about Pine Creek, I thought of employing some of them to do the harder manual labour, but was told that I should have to get permission from the Protector of Aborigines, as being a fit and proper person to employ them. Receiving this permission in due course, I was told that they were to be paid in tobacco of a coarse black variety, but that no money was to be given to them, as they would most certainly spend it on gin, a more hideous race it would be impossible to conceive. The old men and their "gins" being generally naked, whilst the *lubras*, or young women, wore cotton shifts. All had deep cicatrices cut in their bodies as tribal marks, and all were expert in the use of the boomerang, the "woomerah," or throwing spear, and other native weapons. As trackers of men or game they are paramount and much can be learnt even from such low specimens of the human race as these.

The work led us farther and farther south into "billa-bongs," or swamps, over long dried-up plains, and through

long grass, but there was a deadly sameness about the country that made it a very easy one in which to get lost ; indeed, two of my men were lost for two days, but were found more dead than alive by the black fellows.

In February, 1913, my wife and Susan came up to join me in camp. They had not liked being left behind in Bruthen at all, and much against my will they arrived at Pine Creek. My men did not like the work or the climate at all, and were continually grumbling about the heat and the poor food which we all had, master and man alike. Sometimes we were dependent on the natives' skill in killing kangaroos to get any meat at all, the tail of that animal making quite a passable soup. Vegetables there were none, except from a Chinaman's garden in Pine Creek, and knowing the way a Chinese gardener manures his soil and remembering my experience with poor Pole in China, I would not allow anyone to eat them. This made me very unpopular with the men, and moreover they showed their resentment in having an Englishman as their " boss," especially as the other survey party was commanded by one of themselves and was assisting to stir up strife amongst my men.

The only people we met outside our survey party were some wolfram miners who had been in the territory for years and liked the life, asking for nothing better than a week-end's drinking bout at the Pine Creek Hotel.

It had been our custom when in camp to all have meals together, and such was the heat that the men usually wore nothing above their trousers. But when my family joined me I thought that they should show some respect to them by wearing at least a singlet. This they refused to do, so we had our meals separately in our own tent. This was another cause of resentment amongst them, and every week-end they would troop off in a body to the other survey camp, five miles away, and discuss their grievances with the men there.

In June matters reached a crisis, and the Superintendent, coming down from Port Darwin (his first visit since we had started), these grievances formed the subject of an enquiry by him. In the end, I said that I would resign, and the men were sent to join the other party under one of their own countrymen. They stated, amongst other things, that having been in India and China I did not know how to work with white men, and in this they had some reason, perhaps, but they had been grumbling, off and on, ever since they had arrived at Port Darwin, and were a very undisciplined lot, the only exception being the assistant engineer, a lad with education who had been at Melbourne University.

Selling my horse and Susan's pony we returned to Port Darwin and saw the Administrator, Dr. Gilruth, who agreed to pay our passages as far as Melbourne, from whence we started.

On the way down I called at the Queensland railway office and was offered a job at 10s. a day as a draughtsman, which I declined, and at Sydney the Chief Engineer of the railway said he could give me an appointment in a month's time.

As Susan was now, however, seven and a half years of age I thought that we would go back to England, especially as I had been away since the beginning of 1909 and it was time for her to get some education. Accordingly, getting off the ship *Eastern* which had brought us from Port Darwin, I booked passages on the one-class steamer *Medic* of the White Star Line going round the Cape of Good Hope to London, and boarding her we set off on the longest voyage we were destined to make.

CHAPTER XI

CEYLON

IT'S a far cry from Sydney, New South Wales, to London when one goes round the Cape of Good Hope, and the passage across the South Indian Ocean, of sixteen days in length, must be one of the loneliest in the world. However, we set off from Sydney that mid-winter of July, 1913, in cold and foggy weather, called at Melbourne for a few hours and again at Adelaide, to pick up our complement of passengers, and saw the last of Australia at Albany, where we stayed for an afternoon to give the passengers a run ashore preparatory to undertaking the next leg of the journey. Up to Albany I had shared a cabin with seven other men, but the purser kindly rearranged matters and I had a cabin with my family henceforth.

For the next sixteen days to Durban we saw not another ship, only a few whales, sea birds, and one or two icebergs drifting away from the Antarctic regions. The passengers on board were a very mixed lot indeed, some decent families going home to England on leave and availing themselves of the extremely low rate of passage money. Others, young men who preferred the comfort of the Old Country to the Australian bush life, and quite a few children going to school at home.

After a perfectly smooth passage we arrived at Durban and spent the day ashore there. It was like getting back home again, to me, to see the nice black faces of the Zulus and Kaffirs in the town, the "Flame of the Forest" tree

lining the broad streets, and the rickshaws plying for hire.

Proceeding down the African coast, where we heard that the *Waratah* had disappeared and never since been heard of, we anchored off Cape Town, having passed safely round Cape Agulhas with its dreaded rollers. Not staying longer than an hour or so we had no time to land, and then the three weeks' journey up the West Coast began, it getting gradually warmer and warmer as we approached the "line." Here we had the usual ceremony with Neptune coming up over the bows, the barber, shaving, and all the rest of it. Sighting no land at all and only a very few ships, of which the *Ceramic*, making her maiden voyage, was one, we passed the Ushant light, that milestone of all Eastern travellers, and ran up the Channel and so to London.

My father met us here, and together we went down to Norfolk after an absence, in my case, of four and a half years. As we had to break our journey in London, however, I bought a copy of the *Engineer* and had a look through the "Appointments Vacant" column to see whether there was anything suitable for me. History repeated itself, for an Engineer was required by the Ceylon Government Railway, and I lost no time in sending in an application to the Crown Agents for the Colonies for the appointment, to be later summoned for an interview and a cross-examination by one of their consulting engineers in Dean's Yard, Westminster. Passing with flying colours a short written examination this old gentleman set me, I was then referred to the Consulting Physician in Manchester Square, and successfully passing him also, I was informed that my application was successful and that I was to sail in November for Ceylon.

It was then August, so I had a three months' wait, and during this time I visited my actor-brother at Eastbourne, where he was running a show, borrowed my father's

De Dion for tours round England, and thoroughly enjoyed the summer months waiting until the sailing date arrived.

Serious floods had occurred in Norfolk that year, and many road bridges had been washed away, and I was able to be of some assistance to my father in making drawings for new ones to replace them, as well as accompanying him on his inspections of the damaged areas.

Joining my ship, the P. & O. boat *Nyanza*, at the Royal Albert Docks, I left England with a heavy heart, as I had heard, late the night before, in London, that my invalid brother had died.

Following the "Old Trail" so familiar to me by now, we made no stop from London to Port Said. On board were several naval officers going out to join their ships, and a sprinkling of young men going to Ceylon to join the Public Works Department of that colony, a few women and some children. Amongst the naval men, however, was Commander Colin MacLean, going out to the *Hampshire* at Colombo, and I was destined to see a good deal more of him later on.

We arrived in Ceylon just about Christmas-time to find everyone on holiday and a festive air in the Colombo hotels, which were packed to capacity. I obtained a room at the G.O.H., however, and made my call on the General Manager of the railway at Captain's Garden, as I had been instructed to do. Referred by him to the Chief Construction Engineer, I found Mr. Cole Bowen at the Galle Face Hotel, where he lived.

Not one word relating to work would he utter, and for the next few days I lived a hectic life at the hotel and the Colombo Club, playing golf in the daytime and billiards until 2 a.m., when the club closed, and then sitting out under the flagstaff with him and some of his friends, drinking black beer.

When the festivities were over I was told that the new Fort station, the new goods sheds, electric cranes, dredging of the Slave lake, and all the necessary works incidental to a complete reorganization of the Colombo terminus, were to be in my charge. Relieving a man called Marwood, whose father was the General Manager of the Trinidad Railways, I found that I had a big task before me. I was assisted by an Inspector of Works, a huge ex-Grenadier guardsman, a Signal Inspector and many other minor officials. At first I took up my residence in the Mount Lavinia Hotel, going to and from the office on a motor bicycle. But Mount Lavinia, lovely though it is, is apt to pall in the evenings, especially when, as it turned out, I was the only resident there. So after a month or so I returned to Colombo and stayed at a boarding house in the Cinnamon Gardens.

What can I say of Ceylon that has not already been written? It is truly a paradise on earth if one has money in sufficient quantities to enjoy oneself. For there is no doubt that it is an expensive country, and my salary of Rs 6,000 a year did not allow me many luxuries.

As it has always been my custom to see as much of a country as possible when resident in it, I made week-end trips to Galle by train, to Kalutara and Bentôt. From the latter place getting as many oysters as I wanted from the rest-house keeper there. I was not allowed to use my Humber motor cycle for any pleasure purposes, so that, later on, I decided to buy one of my own with a sidecar. On one of these trips up to Kandy, with a friend in the Locomotive Department, I stayed at a small hotel, and there met a lady whose husband was in business in Colombo, and arranged to become a paying guest in her house at Dehiwela, seven miles out of Colombo, on the sea coast.

Plenty of work was now my portion, both office and outdoor, and I would be at it from eight o'clock in the

morning until five in the evening, long hours for the tropics. But it was interesting to see the new terminal grow up under one's hand, and there were always the week-ends to get away up to the hills and the cooler climate.

Many were the excursions I made over the roads of Ceylon in those days, principally to Kandy and Nuwara Eliya, but several trips to Galle were included, these being by train as there was no good through road then. Ceylon is favoured with excellent rest-houses, or "dak bungalows" as we should call them in India. There is no necessity, anywhere in the island, to take bedding, food or drink, because all these necessaries are provided at a very small charge at the bungalows, which are never more than ten miles or so apart. The rest-house keeper was generally an excellent cook and did everything possible for one's comfort.

Touring in Ceylon is ideal, and I wondered then why more of the residents did not go in for it. My Chief had an official 16 h.p. Sunbeam of very ancient date, with a native driver. His duties took him up to Bandarawela, where a new line to Badulla was being constructed, and to the Kelani valley, where another small-gauge line was being built. On one or two occasions I went with him as driver, and most enjoyable trips they were. My Chief never drove himself, after an accident in which he was involved, and he did not like to travel fast. If his native driver exceeded twenty-five miles an hour, a tap over the head with the Chief's stick would act as a gentle hint to him to slow down.

Machinery belonging to the Construction Department was in my charge and, with a foreman, I had to erect a new steam-roller and teach a native how to drive it. Two Albion lorries also came out from England, and after erecting these I drove them with a friend up to Bandarawela, and as they were governed down so as not to exceed

a speed of twelve miles an hour, we had a long and slow journey.

There were plenty of cinema theatres in Colombo, and now and then a theatrical party en route for Australia would give a show in the town. I played a great deal of golf on the Ridgeway links with the Traffic Manager, and at Easter took him up in my sidecar to Hatton, in the mountains, preparatory to climbing to the top of Adams Peak. Staying the night at the hotel, we made an early start to the foot of the mountain, as the thing to see is the shadow of it, cast by the rising sun. Climbing up ladders and steps cut in the rock, we reached the little temple at the top and saw the reputed impression of the Buddha's foot, about two feet long, but as there was a thick fog and rain, the shadow eluded us.

My Chief went home that spring of 1914, leaving his second-in-command in charge. As he was very nervous when driven by a native, I acted as chauffeur for a time, and the car, going wrong, I spent a whole day in the garage putting it right, and in the evening, in company with my Locomotive friend and the Traffic Manager and his wife, we went for a drive. On the way back the petrol pipe broke and the car stopped. My friend, who should have known better, detached one of the oil side-lamps and got down to see what was the matter. In an instant the whole car was in flames. Dragging the lady out over the back, I got on to the footboard and, as we were on the top of a long and steep hill, I allowed the car to run down it, meanwhile steering with my left hand only; by this means the flames never reached the front part of the car at all. Arrived at the bottom of the hill, with a blazing trail of petrol along the centre of the road, I turned the car into a muddy rice field and jumped off. Natives then put out what was left of the fire by throwing clumps of mud on it. My hand was badly burned and, luckily for me, the next car passing carried a doctor. Making for the

nearest shop I plunged my wounded hand into a tin of coco-nut oil, after which the lady of the party tore up part of her linen dress and the doctor bound it up, but for several weeks it was out of use. I had, however, saved the car, which was repaired and put into use again.

I have been a motorist for over thirty years and this has, so far, been my only accident, and for this one I did not hold myself to blame, and neither did the Government, to whom the matter had, necessarily, to be referred.

When my hand had recovered I went to dine with my friend, Colin MacLean, on the *Hampshire*, and as I had once mentioned to him that boxing was one of my accomplishments, he remembered it, and we had a few rounds on deck, an interested group of officers, including the captain, Marcus Hill, watching us. I am afraid that I came off second best in this encounter.

With the sanction of the Ceylon Government, I sent home for my wife and Susan to join me, their passages being paid by my employers, and on that fateful August 4th, 1914, their ship arrived in Colombo Harbour.

I had previously taken a house at Dehiwela, furnished it and made all ready for their reception, but they found it so depressing amongst nothing but coco-nut palms and an empty sea to look at that, after a month, we moved into the town to the same boarding-house in which I had first lived.

My agreement with the Ceylon Government had been for three years from November, 1913: they had paid my passage money out and those of my wife and daughter, so that, under the circumstances, I felt I could not reasonably ask to be released from my engagement in order to "join up," but it galled me to see the departure of the Ceylon Planters Rifle Corps and many of my friends and acquaintances, some of the latter sacrificing excellent jobs and paying their own passages.

No railwaymen, however, at that time were allowed to go, and my not doing so, as early on as I wanted to, rather retarded my subsequent promotion in that branch of the forces in which I eventually joined up.

In the meanwhile, I raised a band of the Legion of Frontiersmen, and in answer to my appeals in the Press soon had a body of eighty men. Captain Moore, the organizer of the Legion in Calcutta, came down to see me and promoted me provisionally to Lieutenant and O.C. of the Ceylon branch ; and Colonel Jerry Driscoll, D.S.O., the Commandant in London, sent me out the necessary badges and ornaments for the uniform. This was provided at the members' own expense, and he also provided his own means of locomotion, in our case, motor bicycles. Not all the members lived in Colombo, and in cases where three or four lived within reasonable distance of each other, up country, they would have their little meetings and scouting expeditions together, whilst twice a month I, with my sergeant-major (*alias* my Locomotive friend), would visit them and give them some instruction and drill. Every week the Ceylon newspapers would print, under "Volunteer Notices," my orders for the ensuing week, and long notices of our activities were printed in the Monday morning's issue, much to the edification of the military authorities and the Government, who persistently frowned upon the whole enterprise and wanted to know why we could not join the Town Guard, in the case of the Colombo members, or the C.P.R.C. or C.L.H., in the case of the up-country members.

In spite of my endeavours I could not get any rifles lent me, until much later, when the Colonel Commanding the 28th Punjabis lent me some of his, and in addition told off one of his subadar-majors to drill us and teach us flag and Morse signalling.

Our Saturday afternoon scouting expeditions were most enjoyable. I, with my sergeant-major, would start

off in the sidecar an hour or so before the remainder and leave signs written in chalk on various trees, buildings and bridges, the whole forming a connected message. It was the duty of those following us to observe these signs and bring in to Headquarters a correct translation of the meaning of them.

The whole object of our branch of the Legion was to get recognition as a unit from the military authorities, and to be sent as a body to France or wherever we might be useful. No recognition ever came, however, and the members, growing disheartened, gradually went off to the War on their own account, some of them joining the 25th Battalion Royal Fusiliers, which was the designation given to Colonel Driscoll's body of the Legion of Frontiersmen.

Towards the end of 1914 I was moved to Ragama to commence work on the doubling of the main line from that station to Rambukhana at the foot of the incline to Kandy, and here I introduced the Departmental Labour by Contract system, which I have referred to in Chapter X, and, though it took some explaining to the native contractors, on the whole it proved a success. I also introduced into Ceylon a Chinese pump which I used for un-watering foundations of culverts and bridges, and this evoked much interest from engineers and others in the colony.

Susan being now nine years of age and a very much travelled young woman, we decided to send her to a private school near Nuwara Eliya, and took her up there in the sidecar. By this time I had sold the Triumph and bought a 7.9 horse-power Indian with sidecar, and this machine romped up the long incline to Kandy, and onwards to Nuwara Eliya. So fast was it that at the hairpin bends on the road I was often within an ace of going over the side. We made many trips up there during the term, but I found occasions to visit Trincomalee on

the east coast, then an abandoned naval station with no rail connection, to Manaar, in the north, to see the old pearl fisheries, and to Anuradhapura to see the old temples there. In fact, there was very little of the island that we did not manage to see during our stay there, and every bit of it was delightful and a motorist's paradise.

Everyone in Colombo at this time was scared out of his wits by the German raider *Emden*, and a great sigh of relief, which might have been heard in Kandy, came when the *Sydney* demolished her in the Cocos Islands. My friends on the *Hampshire* had been having a hectic time chasing this elusive raider.

When the first Australian troops came through and halted in Colombo, they caused considerable amusement to black and white inhabitants. Generally unshod, with no putties and coatless, it was no unusual thing to see them taking the place of the rickshaw runner, that individual usually seated in the place of honour and smothered with bunches of bananas and other fruits which were going off to the transport. Perhaps forty or fifty of these rickshaws, each pulled by a perspiring Australian soldier, would make the round of the town, the police looking on convulsed with laughter and unwilling to interfere in, perhaps, the last amusement many of these gallant fellows would ever have.

On account of several rather unpleasant incidents occurring, succeeding transports were ordered not to enter the harbour, and shore leave to the men was stopped, but this made absolutely no difference, as most of them slipped over the side and swam ashore, regardless of the sharks which infest that coast. I often wonder how many of those great, big colonial soldiers survived the Gallipoli fiasco, and later the Palestine campaign, and returned to the scene of their amusing escapades on the way back to their homes in the Antipodes.

At Christmas of that first year of the War my Chief,

who had returned from leave, invited us to spend a few days with him at the Galle Face Hotel and, judging from the gaiety there, the dancing and general merrymaking, the War might have been in another planet. After Christmas I moved my headquarters to Veyangoda, further up the line, and took a furnished house just out of the village, my landlord being a wealthy Cingalee gentleman living in a beautiful house amidst groves of coco-nut and mango trees a few hundred yards from me.

My work claimed all of my attention, as I had a tunnel to construct at Mirigama and a good deal of rock cutting to blast out. As trains were running quite close to the works, great precautions had to be taken, so that no damage from flying rock would occur, and I generally made a point of being on the spot during these blasting operations, often using steel-chain mats to keep down flying debris. The climate was very hot and trying, but my coolies would climb the coco-nut trees on the side of the line like monkeys, and throw down that species of coco-nut called the "King," of a yellowish colour and containing perhaps two pints of delicious milk.

All this time, however, I had been chafing and worrying because I was not allowed to break my agreement. I saw older men than myself giving up everything, some even working their passages home in order to do their "bit." But no, the authorities were adamant, and I saw nothing else for it but to bolt. But, before I could make up my mind, an event occurred in Ceylon, in that summer of 1915, of so serious a nature that the help of all able-bodied white men was urgently required, and no one was allowed to depart. I am referring, of course, to the riots which broke out all over the island.

I do not think that it was ever proved that this rioting was instigated by enemy propagandists, but was purely an inter-racial affair between the Moors and the Cingalese, the latter being the aggressors. At first the rioting took

the form of looting the shops of the Moors, but later assumed a much worse aspect. The Moors are the inhabitants of the south coast of India, and in Ceylon are the principal shopkeepers, merchants and money-lenders. Political officers assumed charge of the troops required to suppress what amounted to a rebellion, and my Chief was the present Colonial Secretary of Kenya Colony, Mr. H. M. M. Moore, then an assistant secretary in Colombo. I had military charge of the Veyangoda district, and had explicit instructions to break up any gang of Cingalese rioters I came across, using force if necessary. To assist me I had about one dozen men of the 28th Punjabis, and I commandeered cars belonging to the native gentry to enable me to get over the district.

Most of the looting was done at night, so that I would depart about 7 p.m. with my men and patrol the roads. Very often I would be out all night, marching to villages off the roads, where perhaps a temple had been blown up or shops fired and looted, and would arrest the head man and send him to headquarters for trial by court martial. On one occasion a temple, which had been supported on four columns, had been pulled down like a house of cards by the ingenious method of attaching an elephant to each column, and at the word "Go" all had pulled together, causing the roof to collapse. I had sent my wife up to Nuwara Eliya when the trouble started, and I understood that Colombo was in a state of siege and that all European women and children had been put aboard some Japanese men-of-war in the harbour for a time. Many isolated European bungalows in the outlying parts had been entrenched and manned by the owner and a few volunteers.

For some time the military authorities had been suspicious of my landlord, and I was directed to keep a watch on him at night. He had a car which he kept, for some reason unknown to us, just in his drive, and it

looked suspiciously like being there ready for him to make a bolt. At last I received an order to arrest him, and proceeding there with two men I handcuffed him and put him in my car. Whilst explaining to him what I intended to do, he said that he supposed it meant death for him, and handed me over all the title deeds of his property, saying that he would present his estates to me and even offered me his gold watch. I never saw a man so utterly terrified in my life and, as I personally knew nothing against him, I felt sorry for him. I attended as a witness at the court martial at which he was tried and sentenced to twenty years' penal servitude by the president.

It would take more space than I have available to tell of the number of rich influential Cingalese gentlemen in the Veyangoda district who "sounded" my clerk as to whether I would accept, in some cases, sufficient money to enable me to retire in luxury, to allow them to evade arrest. Others, poor men, would try the effect of bringing their daughters to me, in some cases their wives, for the same reason.

The looting still continued and it became necessary to make an example "*pour encourager les autres.*" I had a Cingalese Superintendent of Police attached to my party, and with him and half a dozen Punjabis we made a systematic search of one village. At the largest house, that of the head man, we entered, to find that from floor to ceiling it was packed with silks in bales, iron bedsteads, and many other articles obviously looted from Moors' shops. In this case the owner and his brother were caught red-handed. After a consultation with the policeman it was decided to put these two culprits up against the wall of their house and shoot them out of hand. I shall not readily forget the wailings of the womenfolk when this decision was announced. However, England was at war, and it was no time for leniency, and so these two men were shot ; and when a tremendous crowd assembled next day

to give them a public funeral, this was broken up, and the soldiers gave them their last rites on the side of the road. This summary execution of two of the worst *budmashes* in the district had a most salutary effect, the rioting and looting ceasing as if by magic, the Moors being able to return to their shops and take stock of the damage. All loot that we discovered in the Cingalese houses was collected in the cars and sent to a common depot, from which, later on, it was returned to the owners. I caught one of my soldiers "lifting" a piece of jewellery from a certain native gentleman we had stopped and were questioning, and I sent him back to his regiment with a report. I have no doubt, however, in my own mind that both the police and the soldiers made quite a good thing out of these riots and I have often cursed myself as a too-honest idiot not to have done the same.

A bad feature of these riots was the behaviour of some of the younger European men in Colombo. Taking advantage of the terrified state of the Cingalese population, they would come out at night in cars and commandeer some of the women for their own use, and I had many complaints from the harmless villagers living near me of this conduct.

In the meanwhile, no trains were running on the line, and all work had stopped. After a two months' spell of rioting the trouble ceased, and though things were far from normal, gradually people got back to their own jobs and hoped for the best.

I then moved my headquarters to the rest-house at Mirigama, and had a large force of Punjabis sent to me to start on the excavations for the tunnel again. But these men, taking advantage of the general spirit of unrest prevailing, started giving trouble with the native women, and to keep them in check a company of the Colombo Town Guard took up quarters in camp near me.

When I saw the men in this company, many of them

ten years or so younger than myself, I could not help wondering whether it was true that there was a Great War on in Europe and, if so, why they had not gone to it : and I could only turn round and ask myself why *I* had not gone, and, there and then, I made up my mind, agreement or no agreement, that I would go and join up. Acting on this resolution I saw the Chief Engineer and arranged to send my family to England at once, the Government very kindly paying their passages. My Chief told me that he wanted me to go to Chilaw, up on the west coast, and locate the line to Puttalam, further north, and, having seen my family off, went up to Chilaw to look at it, but with no intention whatever of staying there and carrying out the work, especially as my assistant was a Eurasian and fully competent to do it all by himself.

So I sent another letter, one of many, to the Government, pointing out that I had nearly completed two years of my three years' agreement, and asking to be allowed to resign and do my duty in the War. To this letter I received an answer according me the desired permission, and I went down to Colombo to settle up my affairs and arrange for the passage home. I found that the Government, though not bound to do so by the terms of my agreement, had given me a first-class passage to England and also had given me an extra month's pay as a bonus for good work. There was one other thing requiring attention, and that was to get a letter from the General Officer Commanding Ceylon, recommending me to the War Office as a suitable person for a commission. My application was backed up by my Chief and by the Political Officer under whose orders I had been during the rioting, but the General refused to give me a letter. Years later, when I had risen to the rank I did in the Royal Engineers, I sent that General a letter, giving him in detail the dates of my promotion from the ranks

to show him how far I had succeeded in spite of his attitude.

Of all the railway officers employed in Ceylon, only three went to the War, and of them two were killed, whilst I alone survive. Nothing remained now for me to do but to take a graceful farewell of my Chief and his associates and of Ceylon, a country in which I was destined never to work again. I embarked on the P. & O. ship *Khyber*, and, calling first at Bombay, we set a course for Aden, and thereby I left the Shiny East for the last time.

Of the fifteen years that I had so far spent abroad, fourteen of them had been spent east of the meridian of Greenwich, and for the remainder of my active career, apart from the War, the huge continent of Africa was to be the scene of my labours, though, of course, I knew nothing of the future then.

I do not know whether I had added much to my store of engineering knowledge in Ceylon. I had not had to deal with any difficult problems certainly, but I had had a lot of structural work in my charge that had not come my way before, neither had I experienced any dredging work. The only standing monuments I have left there are the new Fort station and all the goods sheds, the electric cranes on the wharf and the level crossing at Parsons Road. The latter may not sound much to write about, but I constructed it in as scientific a manner as I could, so that motor cars could run over at high speed without feeling any bumps. As the line there is on a sharp curve and the super-elevation had to be taken into account, my professional readers will see the problem.

So now let us go to war !

CHAPTER XII

ACTIVE SERVICE

THE *Khyber* was a full ship on leaving Colombo, many of the passengers, young men from the Straits, China and elsewhere going home to do their "bit" in the War. Amongst them was a man whom I had known well in China, the Chief Electrical Engineer of the Power Station in Canton. His ambition was to join the Royal Flying Corps (as it was then), and we both hoped for much from our mutual friend, Captain Crosse of the Artillery, whom we had known in China.

At Bombay, Colonel Sir Mark Sykes joined the ship, and thereafter, under his tuition, all we would-be soldiers were given physical exercises in the mornings and listened to his lectures on military subjects, under the lee of the smoke-stack, in the afternoons.

Our first sign that a war was in progress was at Aden, where several passengers went with me by car to the trenches and saw where, every afternoon, an engagement was fought between the Turkish outposts in South Arabia and the garrison at Aden; no one, however, seemed to take it very seriously. Sir Mark Sykes left us at Suez, and going through the Canal we saw the defence works on both sides and many Indian and other troops, who seemed glad of the cigarettes and oranges we were able to throw to them from the ship. We saw also some of those pontoons which the Turks had carried across the desert (and rumour had it that these pontoons had been



THE GREAT MOSQUE AT GAZA AFTER BOMBARDMENT



AN OLD ROMAN BRIDGE OVER THE JORDAN AT JISR MAJAMIA



THE SUEZ CANAL AT KANTAKA

filled with Jaffa oranges) for the abortive attack on the Canal and Egypt.

At Port Said we were informed that passports would be required before we could land at Marseilles. Our tickets were made out for London, but my friend and I had agreed to get off at Marseilles so as to join up more quickly. We had, neither of us, been told that we should require passports, so we had to get very busy indeed. Seeing the British Consul we were told to have our photographs taken at once, when he would issue us with provisional ones. He sent a guard with us to see that we carried out his order, and after about four hours' weary waiting for the photos the passports were given to us.

No incident of any importance occurred, there were no submarine alarms in the Mediterranean, and we reached Marseilles in safety. At the Customs barrier, Thorne and I were both arrested by gendarmes and taken before the Prefect of Police to give an account of ourselves. Neither of us were linguists, but we managed to convince the Prefect of our good intentions. He made us turn out our pockets, however, and all the gold we had over £9 was confiscated, French franc-notes being given to us in exchange, materially to our disadvantage. Considering ourselves lucky in not having to face a firing squad, we proceeded to the station. French trains were at that time crowded with officers and men, and we had an uncomfortable "sitting up" journey to Paris.

Our "dossiers" had preceded us, we found, and we were ordered to report to the Prefect of Police, who put us through a severe cross-examination, with the help of an interpreter, as to our intentions. Why all this fuss was made I never found out.

Proceeding to Boulogne we crossed over to Folkestone, and I parted company with Thorne in London, and did not see him again; but some six months later I read in the casualty list that he had died of wounds as a prisoner

of war in Germany, having been brought down in an aerial combat on his first independent flight. Truly, "One shall be taken and the other left."

Before going down to my home in Norwich, I went to the War Office, and after some difficulty found my China friend, Crosse, in a room packed with gunner-officers and apparently up to his eyes in work. Making time to talk to me, he led me off to see the Officer Commanding Royal Engineers, Railway Section, Major Cunnington, and introduced me and my misison. The Major informed me that he was overwhelmed with applications for commissions in the Railway Troops, and held out no hope of my getting one for at least two months and advised me to go home and wait. But I could just as easily have waited in Ceylon, so I informed him of my intention to enlist, taking my chance of a commission later.

I then went down to Norwich and was shocked to learn of my father's death, which had occurred on the day I sailed from Ceylon. This was indeed a very sad homecoming for me, as I had lost the very best of fathers possible for a man to have, and my mother the most devoted of husbands.

On December 6th I returned to London, and proceeded to Scotland Yard, where, in company with a lot of other recruits, I took the oath and 3s. 2d., my first day's pay, and became a sapper in the Royal Engineers, Railway Troops, under the trade designation of a platelayer.

In the evening I, with another and much older recruit than myself, met by appointment a corporal of the Scots Guards, and under his escort were taken to Waterloo Station and seen into the train for Liss, the nearest station to our depôt at Longmoor.

My new-found companion and I trudged the three weary miles, carrying our handbags, on a dark and very cold night, to the depôt, and reported ourselves for duty to the sergeant of the guard. Directing us first to the

canteen, where we had some hot coffee to cheer us up, I was separated from my companion, who was destined for the Pioneers, and taken to a wooden hut, in which were about forty men in all stages of dress and undress, preparing to go to bed. Three blankets were thrown at me, and, as all the cots were occupied, I seized a "donkey's breakfast," and made up my bed on the floor, my overcoat making a useful pillow.

All responsibility seemed to have dropped off me as a shed garment, and thereafter everything appeared to be cut-and-dried, and no thinking on my part required. I shall not forget that first night in the hut. The smell of unwashed humanity, the snoring and the lack of fresh air, kept me fully awake until Reveille at five-thirty got us all up, to find it dark, cold, and snowing outside.

Making the beds, cleaning out the hut, and such other menial duties, kept us all occupied until seven o'clock, when the bugle blew for breakfast. Filing past the cooks, we were dished out our food, and a tin pot of tea from a large urn, by another official. The food varied and was good, but I could not get enough. Bacon, cheese, jam and, rarely, an egg formed our menu on alternate days, and after disposing of this we cleaned our knives and forks by the simple process of thrusting them into the ground two or three times, and this done, returned to our huts to clean our boots, etc.

At 8 a.m. the new recruits, of which I was one, paraded separately and were marched off by a corporal to the Orderly Room, where names, ages and all particulars were entered in a book and regimental numbers allotted. Mine, I remember, was 138404, and thereafter I became known as: Number 138404, Sapper Heslop, D.G. I have been called various names in my life, amongst them the "Mistry Sahib" in Assam, the "Chota Sahib" in India, the "Jefe de la Linea" in Colombia, and the "Taipan" in China; but none of these names compared

with the one I was called by the sergeant instructor on the parade ground at Longmoor.

My training in the Assam Valley Light Horse, in the Bengal Nagpur Railway Mounted Rifles, and in the Legion of Frontiersmen, had not fitted me for the infantry drill, and for the next fortnight I was kept hard at it morning, noon and night.

On the second day after my arrival, I appeared before the Major Commanding the Depôt. After hearing my account of myself and especially that I had been in India under Sir Trevredyn Wynne, he was pleased to remark that he considered it very sporting of me to have enlisted and not waited for a commission.

On December 13th I was given my first typhoid inoculation, and thereafter appeared to be vaccinated or inoculated against something every few days or so.

On December 20th, that is, two weeks after I had joined up, I had to appear before the Commandant, Colonel H. M. Sinclair, to see if I was a fit and proper person to be promoted, and thereafter my designation became : Number 138404, Corporal Heslop, D.G., R.E., and I was sent to the 118th Railway Company in the Applepie Barracks, under the new designation of a "draughtsman." Half the Company, the mechanical half, were already in France, and we, the Civil half, were to follow.

Previous to the transfer I had obtained two days' leave in London, and had got my tailor to make me a properly fitting uniform to replace the sack-like garments that had been issued to me.

At the new camp I shared a large hut with another corporal named Commuskey, who had been under me in India, and a sapper, one Lazarus by name, who appeared to act as batman to the corporal.

On Christmas Day I happened to be the Orderly Corporal and had the doubtful privilege of escorting the

Colonel and his Adjutant round the Mess huts, whilst the men were having dinner, there being, however, no complaints in answer to my question.

On January 18th, 1916, the 118th Company were ordered to hold themselves in readiness to embark for France at the end of the month, and on the 20th I again appeared before the Colonel and returned to find my designation altered to : Number 138404, Sergeant Heslop, D.G. Getting three days' leave on the strength of this rapid promotion, I went to Eastbourne to see my brother, who, with the Concert Party, the Brownies, was doing well at Devonshire Park. During the time I walked about in Eastbourne I seemed to be continually saluting first with the right and then with the left hand until my arms ached.

On my return to London I assisted a recruiting sergeant who was holding forth from the pedestal of a statue (is it Gladstone's ?) near St. Clement Danes Church.

The time of our embarkation approached rapidly, and three days before we were due to sail the O.C. sent for me and told me that a letter had been received from the War Office approving of my being given a Commission.

Another journey to London and a visit to the War Office, where I was furnished with a list of what an officer required and a grant of £50 towards it (about half the cost), and off I went to procure the outfit.

On my return to Longmoor the men of the 118th, as also the officers, greeted me with enthusiasm, and after a formal reception by the Colonel we entrained for France. On February 2nd we arrived at Folkestone and crossed over to Boulogne, sleeping in a barn by the roadside that night. Next morning we proceeded to Calais and thence to our camp at Audruicq, where we joined up with the other half of our Company.

At first I was billeted in the village with a French family, the head of which was an Engineer of Bridges

and Roads in peace time, but later on went to the country house of a rich lace maker in Calais, and here I was made very comfortable indeed by Madam and her daughter, so much so that my O.C. moved into it also. For the first three weeks in Audruicq I was engaged in making a tacheometrical survey of the whole cantonment with its miles upon miles of sidings, ammunition sheds, buildings, etc., and I included also the railway station and part of the Chemin de fer du Nord and the village. This plan, when completed, adorned the walls of the Commander-in-Chief's office and many other offices in the War area.

I was luckily one of the few officers of the B.E.F. who was, throughout the campaign, employed on his own work in civil life, in my case railways, and I found myself still learning something about the work, as I have done in every country I have practised my profession. Constructing more ammunition sheds and sidings leading thereto, kept my platoon engaged, and in about April I was transferred to the 114th Railway Company under the O.C., Captain Lyall, moving from my billet into a railway goods wagon. We all lived in a train at that time, the Mess being in a first-class carriage, and living thus, on wheels, we were in a position to be moved off at very short notice wherever railway men were required. Over us all was the Railway Construction Engineer, Major Cowie, brother of the gunner officer of that name I had known in Balasore in 1904.

After a short job at Les Fontinettes, near Calais, I was sent with my platoon and ninety men of the Labour Corps to Marquise, near Boulogne, to put an old disused quarry line into running order. That was a beautiful spring of 1916, and as I had a motor bicycle I made evening rides into Guines and saw the site of the "Field of the Cloth of Gold," to Calais and Boulogne, Wimereux, Whissant, and other places on the coast.

At Marquise I got foul of a most objectionable French-

man, Dagobert by name, manager of a quarry there. He objected to any interference with his sidings and made himself most unpleasant to me and my men.

Having completed my work at Haut Banc, Caffiers and Marquise, I returned to Audruicq and was again employed on ammunition sheds. Up to that time we had had no experience of the enemy at all, and had not even heard any gun firing, but on July 25th he gave us ample evidence of his activities. At 1 a.m. on that day an enemy aeroplane came over us very low and started dropping incendiary bombs. The first one dropped emitted a bright light, evidently for the purpose of guiding him to the ammunition sheds. Be that as it may, he found them and rained petrol bombs on them until they caught alight. For two days and a half a tremendous conflagration continued, the roar of the flames being punctuated with the louder noises of bursting shells and the explosion in one fell swoop of three large sheds containing Mills bombs. Steel girders, corrugated iron, locomotives, cars, wagons and huts were flying about in all directions and many shells of all calibres hurtled through the air, some nearly red hot and still not bursting. Orders were given for all troops and civilians to evacuate the place, and we moved five miles out into the cornfields. It was feared that a shed containing poison gas would be exploded, and the consequent release of the gas would poison everyone in the neighbourhood. As a matter of fact I do not think there was any store of gas in Audruicq then.

I think I was the only officer there who spotted, very high up in a rift in the clouds, the triumphant aviator who came over to see the result of his raid, and very satisfied he must have been. During the height of the conflagration the effect on the ground was like an earthquake, a distinct rippling feeling being felt even five miles away. The damage done not only to the military cantonment, but to the village also, was enormous, and it

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seemed incomprehensible that such a large ammunition depôt should be built, as this one was, so close to civilian houses. When the fire had subsided, we were ordered to return, and the duty of clearing up the mess was assigned to the Royal Engineers, though it clearly looked to be the work of the Ordnance Corps. We were instructed to remain with our men all the time, breakfast and lunch being brought to us. The damage had been enormous, and not a serviceable round of ammunition was left. Two trains in their entirety had been blown to smithereens, corrugated iron looked like fine lace, and the just completed power station had disappeared. Where the sheds containing the Mills bombs had been the explosion must have been downwards, for a hole seventy-five yards in diameter and fifty feet deep had appeared, and in it was a pool of bright red water. I saw a 15-inch shell there with another smaller one driven right into it, but neither had exploded. When the mess had been cleared up new sheds were built and sand-bagged all over and fresh ammunition began to arrive. The casualties were eight men of the 118th Company R.E., who had taken shelter under a railway wagon and had been blown to pieces by a shell penetrating the roof and floor. It was stated that the noise of the explosion had been heard in London, and I can well believe it. Our train had suffered little, curiously enough, only the windows being broken, the only other damage that I could see being that my small stock of whisky had exploded in some unexplainable manner.

After a month spent in clearing up the damage, and reconstructing the sheds, I was sent to Etaples with my platoon to put in some hospital sidings. On the platform at Etaples was a notice board upon which was printed :

“ A Wise old owl lived in an oak,
The more he heard the less he spoke,
The less he spoke, the more he heard,
Soldiers should imitate that old bird.”

This effusion, I believe, emanated from the brain of Major Hamilton, the D.A.D.R.T. at Etaples.

My men worked from 7 a.m. till 3 p.m. on the sidings, and then I would go over by train or walk to Le Touquet and Paris Plage, even then, in war time, not quite deserted by the Parisiennes. From Etaples I returned for a short time to Audruicq, and then went to Abbeville to make a survey for a new ammunition depôt near St. Valery-sur-Somme; I stayed at the Château of Boismont during this time with the "laird" and his wife and two excessively plain daughters. These people all spoke English, and were very curious to know what I was doing upon their estates. Remembering the owl, however, I told them nothing, and great was their anger when they saw later a large body of men arriving to build sheds, lay sidings, and generally play havoc with their place.

The country-side that autumn was excessively beautiful, the leaves had all turned to gold, and where I was then living all seemed peaceful, and it was difficult to believe that a great war was in progress a few miles away. I felt, somehow, that I was not quite pulling my weight in the affair, so I sent in, in reply to a circular, an application for a commission in the Royal Flying Corps, but was turned down on the score of age. Next I applied to join a Light Railway Company, as I hoped thereby to get a more exciting time nearer the front line. This request was granted, and on November 27th, 1916, after ten months' continual service in France, I was promoted to lieutenant and sent back to Longmoor depôt, to join the 268th Light Railway Company, then in process of formation at Bordon Camp.

Arrived at Longmoor, my thoughts were of leave, and I obtained seven days, which I spent in Norwich. I could not help noticing then the large number of *embusqués* of my own age and standing who still brazenly walked the

streets in civilian clothes, many of them taking advantage of the War to pile up their fortunes.

Returning to the Martinique Barracks at Bordon all was hurry and bustle forming the new Company, which turned out to be mostly conscripts, and of very different types to the men I had had in France. The weather was now dreadfully cold and miserable, and I was glad when on December 21st we entrained at Bordon station for Southampton *en route* for Le Havre. The cross-Channel steamers only travelled at night and we were escorted across by four destroyers. Our rest camp at Havre was a mile or so out, and on the highest and coldest spot it was possible to pick. Next day we entrained, and after a slow and weary journey arrived at Albert, from which place we marched through appalling mud and slush, and with heavy firing going on on our left, to Fricourt, where we took up our quarters in some open railway trucks in that station. This happened to be Christmas Day, and we celebrated it by crouching under a tarpaulin in the trucks consuming bully beef and biscuits, washing this down with drowned tea.

There was no doubt about our being in the war area now, shells from both sides flying over our heads almost continuously. From Albert I and my men were sent to Meaulte to double a line running up to Plateau. I lived in a captured German wagon anchored down quite close to the little River Ancre, and my men also lived in trucks. I do not think that up to then I have ever spent a more miserable time than those two months stay at Meaulte. Inhospitable bare country, either a sea of mud or else frozen hard, a wretchedly cold truck and an uncongenial job combined to render things very unpleasant, the only amusement being to go and see the German prisoners in their compound on the hill-side.

In February I was ordered to Acheux Wood to rejoin the main body. The work they were attempting to do

was to lay a line into Bertrandcourt and another into Serre, but for six weeks we could not drive a pick into the ground it was so deeply frozen. About this time I developed a bad go of malaria brought on by the conditions in which I was living, and I was sent to the hospital at Doullens, No. 3, Canadian. Here I was confined to bed for a week. Later I was allowed out, and in company with one of Dr. Mawson's companions in Antarctica, Webb, the Magnetician, now a captain in the Australian Infantry, visited the town and the well-known estaminet called "Bon Air." Here were gathered all ranks of officers from the B.G. in full war paint of brass hat and red tabs, to the newly joined second "loot," but all after the same things, viz. wine and women.

Whilst in the hospital the Germans sent over about fifteen 12-inch shells in an endeavour to hit it, but all fell short; they fell in soft clay, many failing to detonate, and I was told that by making a careful survey of the depth, direction and "dip" of these holes the position of the gun was located and then destroyed by aerial bombing.

After Doullens I was sent to the Duchess of Westminster's No. 1 Red Cross Hospital, at Le Touquet, to recruit, and going in an ambulance train I saw how Great Britain looked after her sick and wounded, and it was a revelation to me. Kindly sisters would bring us cushions, cigarettes, tea, fruit, magazines, and anything else they could think of for our comfort. The carriages were steam heated and rolled along as smoothly as a Rolls-Royce, and there were none of those execrable delays inseparable, apparently, from the ordinary troop trains.

At Le Touquet I played golf in the afternoons and wandered through the pine woods with an Australian friend, or sat on the beach and talked about Australia and our experiences there. After ten restful days at Le

Touquet, I was discharged from hospital and sent to the R.E. base at Rouen, and spending only three days there was despatched to rejoin my unit.

At Acheux, where I had left them, I found that they had gone to Hazebrouck, and I had to make my way there as best I could. At Bethune I was so ill in the train that I had to get out and put up at a small café for the night, a fellow passenger, a Padre, got out with me and looked after me, but next morning I went on to Cassel and joined my company. From there I went with my men and two hundred prisoners to a farm house near Hazebrouck to construct an avoiding line round that town. The demeanour of the prisoners was respectful in the extreme, and I have no doubt that they were very glad that, for them at least, the War was over.

On April 14th of that year, 1917, I was ordered to return to Longmoor for transfer to Egypt. No doubt the doctors had reported that with the malaria germs still in me I was not fitted for the campaign in France, and even on that day in April the snow was two feet deep on the fields round my billet.

I returned by Boulogne and Folkestone to Longmoor, and my connection with the B.E.F. terminated. I had been more or less continuously in France for fifteen months, but, except for the explosion at Audruicq in July, 1916, I had never been in any real danger, although I had lost several good friends amongst the three companies in which I had served.

Now commenced at Longmoor a period of rest and amusement for a few weeks and my military duties were not onerous. I acted as Assistant Adjutant of the dépôt, and gave several lectures on railway construction under war conditions to the newly joined officers. I played a lot of tennis at the Commandant's house, rode round the countryside, went to dinner parties with the married officers, and forgot for the time being that there was still a

war in progress. Twice I was enabled to go down to Norwich and see my people and to visit my youngest brother at Luton, where he had become a gunner in the Royal Artillery. Susan was at school and her mother at Maidstone, but things had not gone well between us, and I had not seen her since 1915.

On May 31st, 1917, I and my draft were paraded before Colonel Sinclair, the Commandant, who wished us all "good-bye" and "good luck." Giving the word "Quick march," the band struck up "The Girl I left behind Me," and we were off to the train, taking us to Southampton and a new theatre of war. I never saw Longmoor again.

With a contingent of the Hertfordshire and other Yeomanry regiments we marched from Havre to the old rest camp on the hill, but stayed there only one night, for with commendable promptitude on the part of the Embarkation Officer and the ubiquitous R.T.O.'s, we entrained next day for Marseilles, and avoiding Paris, ran through the Rhone valley, through Lyons, Orange, Avignon, etc., and arrived safely at that great seaport. Marching the men to the rest camp about two miles to the west of the town, we settled down to wait for the transport to take us on, and during this time we were confined to the camp in the mornings, but the afternoons and evenings were our own to do what we liked.

Sea bathing was then the great attraction, but there were others. I would often go to lunch at a little wayside estaminet on the Corniche road, about five miles out. There I ate the most delicious soles and ham at extraordinarily cheap prices, and I introduced several other officers to the place. In 1931, when there again, I looked for that estaminet to find the whole place had been built over and nothing was known of it.

We were in that camp for two weeks and getting very bored with it, when the order came for us all to embark

on the *Kinfauns Castle* for Alexandria. Discipline was necessarily most severe on the troopship, so many had been torpedoed in the Mediterranean that every possible precaution was taken, including taking a zig-zagging course the whole way. We had over a thousand officers and men on board, besides several hospital nurses, horses and guns. At night officers were posted all round the decks to see that no lights were shown and that no one smoked on deck. Both night and day a submarine guard was posted on every part of the ship, and officers, men and crew alike wore lifebelts, even having to sleep in them. Up to Malta we were escorted by four British destroyers, these, however, being relieved by a like number of Japanese off that port.

We did not sight Malta at all, but not far off that place two hydroplanes came over and gave our Captain some warning, for we turned at once in our tracks and went round by the south of that island, though I do not really know the course we *did* take.

After six days of a very weary and anxious time for all concerned, we steamed through the narrow channel leading to Alexandria, very much relieved to find ourselves safely there, and glad to think that the "Sea Raiders" had been cheated of one of their prey, at any rate.

CHAPTER XIII

ACTIVE SERVICE (*concluded*)

DISEMBARKING, we found ourselves whirled up in a succession of tramcars to Mustapha Camp, and prepared ourselves to take our share in the campaign against the wily Turk.

Sir Edmund Allenby arrived somewhere about the same period, and hope ran high in the Egyptian Expeditionary Force that under his leadership a vigorous offensive would be taken and that the War in that area would soon be brought to a successful termination.

At Mustapha Camp I remained kicking my heels for over a month waiting to be posted to some railway unit, and during that time I took command of all Engineer units in the camp.

Alexandria, even in this War-time period, was a gay place, and race meetings, theatres and cinema palaces were all in full swing, whilst the bathing resorts at Ramleh and San Stefano were well patronized by people from Cairo and other inland towns. But time hung heavily on my hands, and I was very glad when I received an order to join the 116th Railway Company at Kantara.

I found my new Company encamped in the desert a mile or so away from the Canal banks, and they were engaged in doubling the military railway from Kantara up to Rafa in conjunction with their opposite numbers, the 115th Railway Company, camped alongside them. These were then the only two Railway Companies in Palestine, and had done great work in building the line through the desert, and it was always said by other units

that when these two Companies were seen on the move great events were likely to happen.

Large numbers of Egyptian Army Reservists with the Egyptian Labour Corps would precede the platelayers, to form the earthworks necessary. Every morning at daylight our Company would go out by train and lay two kilometres of line, returning about 1 p.m., when the other Company would go out and lay another two kilometres. The men required little or no supervision, having done similar work all their lives, so I amused myself by walking over the desert, or taking long-range shots at the flocks of flamingoes which disported themselves in the salt water lagoons away off to the north. We moved our camp fortnightly, to keep up with the rapid progress of the platelaying, and soon found ourselves in Romani, the first important station. Here there was a branch line to the coast at Mohamedyeh, where there was a hospital, and visits to the nurses on Sundays were the order of the day.

At Romani we were a hundred miles away from our front line, but very shortly after my Company was moved up to railhead at Deir el Belah, with orders to prolong the line to the Wadi Ghuzzi, in front of the important stronghold of Gaza.

Two battles had already been fought for the possession of this place, but it still held out. Our work here had to be done at night, as we were in full view of the enemy, and no risks were taken. At Rafa on the way up we had passed out of the desert into a cultivated area. Khan Yunus, the home of Delilah, was the largest village, and at El Arish we had passed the Turco-Egyptian boundary, when we had crossed the "River of Egypt." We were told that Samson used to row from Gaza in his boat to Khan Yunus, when making love to Delilah.

At Rafa, there was a branch line to Shellal, and across our front at Deir el Belah there was a system of light

railways installed under the command of Colonel Jordan Bell, of whom more anon. I had not been long with the Company at Deir el Belah when I was sent off with a detachment to survey for a low-level line across the Wadi Ghuzzi at Shellal, in preparation for our attack on Beersheba. The line already crossed this wadi on a high wooden bridge, but it was felt that this bridge might easily be destroyed by bombing, and so an alternative crossing was made. At Shellal there was a good water supply formed by a dam built across the wadi and in charge of it were two R.E. lieutenants, Dixon and Hodgson, with whom I lived. My plans being approved about eight hundred men of the Egyptian Labour Corps under white officers, and some Sappers, appeared to construct the line under my orders, which was done in an incredibly short time, as it would be, of course, when money and men were limitless.

Whilst at Shellal I rode over the eight-mile stretch of "no man's land" on a reconnaissance with General Waller, Chief Engineer of the XXth Corps, and peeping over the cliff we saw our friends the enemy camped in tents alongside the Beersheba line. Seeing us also, they sent over a few small shells, but did us no harm. The new diversion being completed, we went back to continue doubling the main line, and were joined by two other Companies, the 265th and the 266th, just arrived from England.

On September 25th, 1917, the 115th and the 116th Company were ordered to Shellal to continue the line to Imara and Karm, as the attack on Beersheba was imminent.

We lived in dug-outs at Shellal, cut into the bank of the river, and remained there until the line was finished to Karm on October 30th.

On that night a huge hospital was erected on a siding at Imara, water pipes were laid to Karm, and on the 31st

Beersheba was attacked and captured, a remarkable feat of organization. I lost no time in going into that town, and having a look at the railway station, to find several "booby" traps, ready for a too inquisitive Engineer officer, laid in the carriages.

On November 7th, Gaza was evacuated by the Turks as untenable, and this ancient town, which had so successfully resisted us on two previous occasions, fell into our hands. The railway was very soon pushed forward beyond the town, and it was whilst engaged upon this work that I received a telegram informing me that I was to be O.C. of the Light Railway Survey Company then in process of formation, and so my connection with the 116th ceased. This appointment carried with it the rank of Captain, to which I was gazetted on January 1st, 1918. I remained as O.C. of this Survey Company until the Armistice with Turkey, when it was disbanded.

As no one of the rank and file had yet been selected for my party, I did various odd jobs under my new Colonel, Jordan Bell, previously mentioned. Amongst them was to take an engine to Huj, the day after our Yeomanry had made their brilliant charge there, and bring in some rolling stock left there by the enemy. I also got some brand-new tents, a complete medical outfit, some engineering tools, and many other useful articles.

My headquarters were now at Deir Sineid, a station on the line to Gaza built by the Turks. Men now began to arrive to form my party, and curiously nearly all of them were in the Royal Army Medical Corps, and had been engaged in sanitary work in Kantara. Apparently no Sappers were suitable for my special work. My main support was Private Morris, in private life a B.Sc., and a schoolmaster at Reading. He was promoted sergeant at once, and later on I got him a commission in the Engineers. Jones, whom I also made a sergeant, was, I believe, in the Halifax Town Surveyor's office ; McGregor

was an expert leveller, and did me yeoman service ; whilst the rest, viz., Jackson, Portlock, Murray (a staff sergeant and a regular Sapper), Sadler, Knight (the cook), two motor drivers, Hooker and Mylward, and my batman, McKechnie, a tram driver in Glasgow, were all good in their respective jobs. Altogether a very excellent lot of men who remained with me throughout the rest of the campaign.

A motor bicycle and sidecar, two Ford box vans, a horse, and the usual survey instruments, etc., were our equipment, and with these we were sent all over Palestine to carry out work.

Junction Station on the Wadi Surar was captured on November 14th, and here we had our first survey job, which was to locate a line to Latron, at the foot of the hills upon which Jerusalem stands. Aircraft bombed the station in which we lived that first night, but did no harm to anybody. The line to Latron was not built, on account of the very rapid advance of our troops, and after making a plan of two large bridges blown up by the retreating enemy on the Jerusalem branch, I and my party were sent on November 20th to Jaffa, which had been captured on the 16th.

The railway from Jaffa to Ludd had been taken up and we were to survey it and also a new line from Jaffa station to the so-called harbour, in order that supplies coming there by ship might be off-loaded and taken on by train. Arrived at Jaffa I seized upon the largest building I could see near the railway station as our headquarters. This building had contained the railway offices in peace time and also a bank, and on the upper storeys were the officials' headquarters.

On entering in I found half-emptied glasses of beer, half-smoked cigars, unmade beds, a child's nursery with dolls and toys scattered about and, more interesting still, many German illustrated papers giving pictures of the

War in France. Looking through these, I came across a photograph of my old friend, Count Nicolaus von Dohna Schlodien, whom I had met in China, and who now commanded the raider *Möewe* in the Atlantic. The picture showed him leaving the Potsdam Palace after being decorated by the Kaiser with "L'Ordre pour le Merite" for his distinguished services to the Fatherland.

The line to the wharf, though short, involved rather intricate surveying, as first of all it ran through the main street and then turned down an alleyway past a mosque and through narrow arches which only left just enough room for our engines to pass, but the line was built and proved of great use.

The Headquarters of the Light Railway Administration now moved up to Jaffa, and also a battalion of South Lancashire Pioneers, commanded by Colonel W. T. C. Beckett, who had, for a time, been my Chief Engineer in India. The Pioneers did all the earthworks for the new line, and frequently I found myself giving instructions to my old Chief.

A survey to the front line at El Jelil followed, but at first could only be taken to Sarona, a German colony and headquarters of the XXIst Corps under General Bulfin.

Riding ahead one day to reconnoitre, I was greeted by a salvo of "pip squeaks" from the enemy guns at Sheik Mu'annis, about a mile off, but escaped unscathed, feeling honoured that I should have been picked out for their attention. At this time my men and I lived almost entirely on oranges, of which there were millions growing round Jaffa, and the box Ford would be laden with them in the evenings to distribute round the various messes in Jaffa.

Jaffa is a town divided up into a German colony, a Jewish colony at Tel Aviv, and the Arab and Syrian quarters, the latter built on a high hill overlooking the sea and very dirty and evil smelling. To me the town was

of great interest, as it was here that Napoleon murdered two thousand of the Turkish prisoners on the sea beach, and where he had also been wrongfully accused of poisoning his own wounded to save the trouble of taking them back to Egypt. Also in Jaffa is the house of Simon the Tanner, which we all visited. According to 2 Chron., ii, 16, timber from the Lebanon Mountains used for building Solomon's temple at Jerusalem was floated down by sea and landed at Jaffa, or Joppa. We did not, however, come across the "young lady of Joppa," though some of my men tried pretty hard.

Until the Turks had been pushed out of Sheik Mu'annis I could not continue the survey, and in the interval I employed my time in staking out the line to Ludd, or Lydda, having endless trouble with the motor bicycle and the cars in thick black mud near the line. When the Turks again retreated the survey was completed to a point across the Auja river, over which a wooden bridge had been built by a Field Company.

Jerusalem capitulated on December 9th, and on the 15th of that month I and my trusty band were sent up there to locate the line from the city to Ram Allah, about nine miles to the north on the Nablus Road. The billeting officer allotted the Greek Archimandrite's palace to me and my party. This place was built on a hill in the midst of a grove of fir and olive trees, about a mile south of the city. I occupied the venerable Patriarch's bed on the top floor, my men being comfortably housed below. Every week-day we would be out surveying, but on Sundays I devoted all my time to seeing all I could of Jerusalem, generally taking my men with me. Morris knew considerably more about the geography of the Bible than any of us, and proved a most efficient guide. A pass was necessary to enter some of the holiest places, but this was obtained without difficulty from Colonel Ronald Storrs, then the Military Governor.

Bethany, Bethlehem, the Garden of Gethsemane were all visited in turn, and at the Church of the Nativity in Bethlehem we crawled with candles to the reputed birth-place of Christ.

My orders had been that the new railway was not to go near the town, and that no buildings were to be destroyed or any damage done. The easiest line, of course, went through the town, but in deference to these orders I had to look for another. Jerusalem is built on seven hills, and these are of limestone rock. Any blasting would necessarily greatly lengthen the time required for construction, and so I had to avoid any cuttings. I was struggling hard to fulfil these conditions when we were ordered back to Jaffa to extend the railway to the front line at El Jelil and run another survey to Mulebbis, a Jewish colony also near the front line. Down the mountains of Judea our trusty Fords took us, and the first line was soon done and built; the second one, however, ran through acres of orange groves, and much damage had to be caused in cutting these down, and then in the end this line was not built.

The Jaffa district was then very beautiful. On the banks of the Auja river anemones of all the colours of the rainbow were in full bloom in large patches, oranges were abundant, and the peach and almond blossoms were out in the orchards. I pitched my camp on a solitary mound upon which Napoleon was said to have stood and surveyed the surrounding country, close to the Jerisheh flour mills. On the hills the dark green of the olive trees and the light green of the vines formed a pleasant contrast against the cloudless blue of the sky, and Palestine in the springtime of the year appeared to me to be indeed a "land flowing with milk and honey."

The maps supplied to me for survey purposes were made in 1877, the year of my birth, by Lieutenant H. H. Kitchener, R.E., and Captain Condor, R.E., for the

Palestine Exploration Fund, and these were then the only reliable plans.

I spent my Christmas Day of 1917 at Mulebbis, with some officers of the Northampton Regiment, and the Turks must choose that, to them, infidel holiday to shell the village from their post at Medjil Yaba across the valley, and many Jewish civilians were killed and wounded.

Having completed my duties in the Auja river valley, back we all went to Jerusalem, to locate that line northwards, and I had been worrying my brain a good deal at night as to how to surmount a very great obstacle. Well, it all came to me in a dream on that first night in Jerusalem, and the next morning I was able, by making the line turn upon itself, to save nearly two and a half miles of length and avoid what I had feared all along, the absolutely necessary destruction of part of the Archimandrite's premises. Camping on the top of Mount Scopus we obtained a magnificent bird's-eye view of the city spread out before us in the hollow, and by moving over to the east a little there lay the Dead Sea three thousand feet below us and the, as yet, unknown mountains of Moab lining the sky on the other side. It was unavoidable crossing the Tombs of the Kings and the Wine Press of the Kings with the new line, but no damage was done to either. The first station established was by line seven and a half miles away from Jerusalem, but as the crow flies only one and a half miles, and this will give an indication of the mountainous country we had to traverse, and all rock at that. Thereafter we were on the water-shed between the Jordan and the sea, and only one line in those circumstances was possible. The next station was fixed at Rama, or Arimathæa, where Joseph lived and Samuel was born. Rachael also mourned here for the slaughter of the infants murdered by Herod (Matthew ii, 18).

Finally, with a grade of 1 in 50 we reached Ram Allah, near Bethel, and this station had to be entered on

a "reverse," so difficult was the country. Whilst camped at Ram Allah, we were shelled by a long-range naval gun firing a composite shell which first burst with shrapnel and then detonated on impact. No casualties occurred, however. When we reached Ram Allah we found that our line was eighteen miles long as compared with nine miles from Jerusalem as the road went, but when completed its effect was to take three hundred lorries off the road and allow of it being put into much needed repair. For this survey I was "Mentioned in Despatches."

On Sundays we paid visits to the Dead Sea and Jericho. During the first visit I took my aneroid barometer with me to see how it worked. At sea level it registered "0" as it should do, but on proceeding down the valley to an elevation of 1,300 feet below sea level it went on strike and never functioned properly afterwards. The atmosphere was most oppressive at the Dead Sea, and one felt as if the whole weight of the world was upon one's shoulders. In a weak moment I started to bathe, but soon came out, my skin irritating most abominably and glistening with the salt, which I washed off in the fresh water of the Jordan close to. No living thing exists in the Dead Sea, and it is said that no bird can fly over it. It was, at the time of our visit, enveloped in fog caused by the evaporation, and I thought of the cities of Sodom and Gomorrah which are supposed to be buried beneath its waters. We also visited Jericho, where Herod the Great died. It was then an insignificant and dirty village, but it had beautiful flowers and trees and still boasted of an hotel called the "Jordan." We visited Elisha's pools close to Jericho, then in the hands of a Water Company of the R.E. The prophet is said to have cast salt and healed the waters here, which before were poisonous (2 Kings ii, 19-22). Certainly we found them very welcome after our dusty visit to Jericho.

Driving out of that terribly hot inferno by the Hill of

Temptation along the steep valley of the Wadi Kelt, we emerged once more to a height of 2,700 feet above sea level and so rejoined our camp.

Our next move was back to Jaffa, to put in a short line to "Carrick Hill," and then we returned to Ram Allah to continue the line northwards towards Nablus, or Shechem. This was in August, 1918, and we ran through groves of beautiful figs just ripe, and vineyards where the grapes were simply asking to be eaten. We were getting nearer and nearer to our front line at Sinjil, and the construction companies were following me very closely when, on September 18th, our long-prepared-for blow fell on the luckless Turk. I remember that morning well. At 4 a.m. I heard a terrific bombardment going on on my left near the sea coast and saw the flashes of hundreds of guns lighting up the still dark sky. Sleeping any longer was impossible, and Morris and I hurried off to Ram Allah in the Ford to get the news. A staff officer told me that the enemy were in flight all along the line and, hurrying back to camp, I ordered it to be moved to our front line at Sinjil. General Waller and Lieutenant Dixon from Shellal were there drawing enemy mines from the road.

Far ahead we could see our shrapnel bursting on the flying Turk, and overhead a succession of our aeroplanes were speeding after them with Mills bombs to complete the rout. The next day Dixon and I, with all the men we could muster in two cars, went off to Nablus to have a look at that historic place. We passed hundreds of captured enemy guns, many dead men and animals at Huwarah, and saw thousands of prisoners, amongst whom were many Germans, being rounded up by the A.P.M. and his police.

Arrived at Nablus, I saw the victorious General Allenby, accompanied by General Sir Philip Chetwode, walking unconcernedly through the village, looking into the houses.

Nablus, the ancient Shechem, is one of the oldest cities in Palestine. It was a city in Jacob's time (Genesis xxxiii, 18), if not in Abraham's (Genesis xii, 6). In the New Testament it is called Sychar (John iv, 5). The Romans called it Flavia Neapolis, and the name was corrupted by the Arabs into Nablus. We drove through the village a short way and picked up a very nice German tent, many rounds of pistol ammunition, a complete portable searchlight from the back of a dead mule, and a revolver. On going back we found the prisoners had been marched off and the police were heaping up the bodies of the dead men and burning them.

We saw the large naval gun which had shelled us at Ram Allah being hauled to Jerusalem on two tractors. The barrel had been mined, but this had not escaped notice and it was rendered innocuous. More interesting still, there was an exact replica of this gun, but made entirely of wood, being taken in with it to Jerusalem. No wonder our airmen had been deceived.

My surveying activities were now necessarily over in this district and on receipt of an urgent telegram from the D.R.T. I proceeded with all speed to Ludd, ordering Morris to get a lorry and follow me with the camp and men. Arriving at the Mess at Ludd at 10 p.m., after a long and weary journey, I was ordered to proceed next day to Haifa, which had been occupied by us on September 23rd. Major Hay, R.E., the survey officer, went with me and pointed out my new job.

First as to my billet. This was in a house occupied by the womenfolk of a German merchant named Keller, who, with his son, had made a hurried exit, leaving his family behind him. Needless to say I was not welcomed with open arms, but they gave me all the lower floor for dining-room, bedroom and office. My windows overlooked the Bay of Acre, with that town, across the sea, ten miles away. Now as to the work. The Palestine Military

Railway was being constructed as fast as possible to try and keep up with the rapid advance of our forces, but was a long way behind them, and, in the meanwhile, lorries, camels and donkeys were employed in their thousands to keep the Army supplied with food and ammunition.

The terminus of the broad-gauge military railway was to be in Haifa, where it would connect up with the metre-gauge line of the Hedjaz Railway there. My job therefore, was first to locate the line through Haifa town, and secondly to construct it, and I was given until Christmas, 1918, to do this.

The town of Haifa lies on the slopes of Mount Carmel, the streets leading away from the sea, all being on a steep gradient, whilst there is only one road running parallel to the coast, which has houses built on each side of it. The houses on the sea-side were, many of them, built actually in the sea. I saw at once that the new railway would have to run for a good deal of its length actually *in* the sea, and that a tremendous lot of explosives would be required to blow up the houses impeding the right of way ; moreover, a strong sea wall would have to be constructed for nearly all the way. I had arrived in Haifa on October 10th, and had to wait two days for Morris and the men, but when they eventually turned up, short work was made of the survey, both field work and plans being completed in three days. None of the inhabitants, particularly those German old men and women who were left behind, would believe that a railway was coming up from the south, but they were soon to be undeceived.

My plans were approved, and, in no time, ships began to arrive with cement, also two companies of Sikh Pioneers, four Engineer officers, and hundreds of the Egyptian Labour Corps under white officers turned up and reported to me, and soon the Germans were given an ocular demonstration of what real work meant. The

Pioneers were put on to blow up the houses obstructing the line, the Egyptians were employed in retrieving the stones and cleaning them, whilst others started the excavations for the wall itself. It is wonderful what an engineer can do when he has an unlimited supply of men, money and materials, those conditions being ideal and never met with in peace time. The Sikhs, just like the children they are, were delighted at the destruction they were ordered to carry out, and both I and their officers had to restrain their enthusiasm, or there would not have been much of Haifa left. A house would be mined and shattered, any walls left standing would be pulled over into the sea by means of ropes, the E.L.C. wading in afterwards and retrieving the stone.

Much of the sea wall, which was ten feet high, had to be built in short sections of twelve feet or so, the sea being kept out by concrete in sand-bags. At one place we came across a sunken ship, but had no time to remove the portion in our way and founded the wall on the iron deck. A mosque also happened to be in the line, but I was not allowed to blow this up, and had to go round it in deep water, and this section of the wall was much the most difficult. Convents, cafés, gardens, country residences, even a bishop's house, all disappeared into the sea.

About this time I was joined in my billet by Lieutenant-Commander Pillans, R.N., the Senior Naval Officer in Haifa. His job was to see that any floating mines in the harbour were located and destroyed by rifle-fire. In the evenings we would read "O. Henry" to each other and roar over the adventures of Andy Tucker and Jeff Peters in the *Gentle Grafters*.

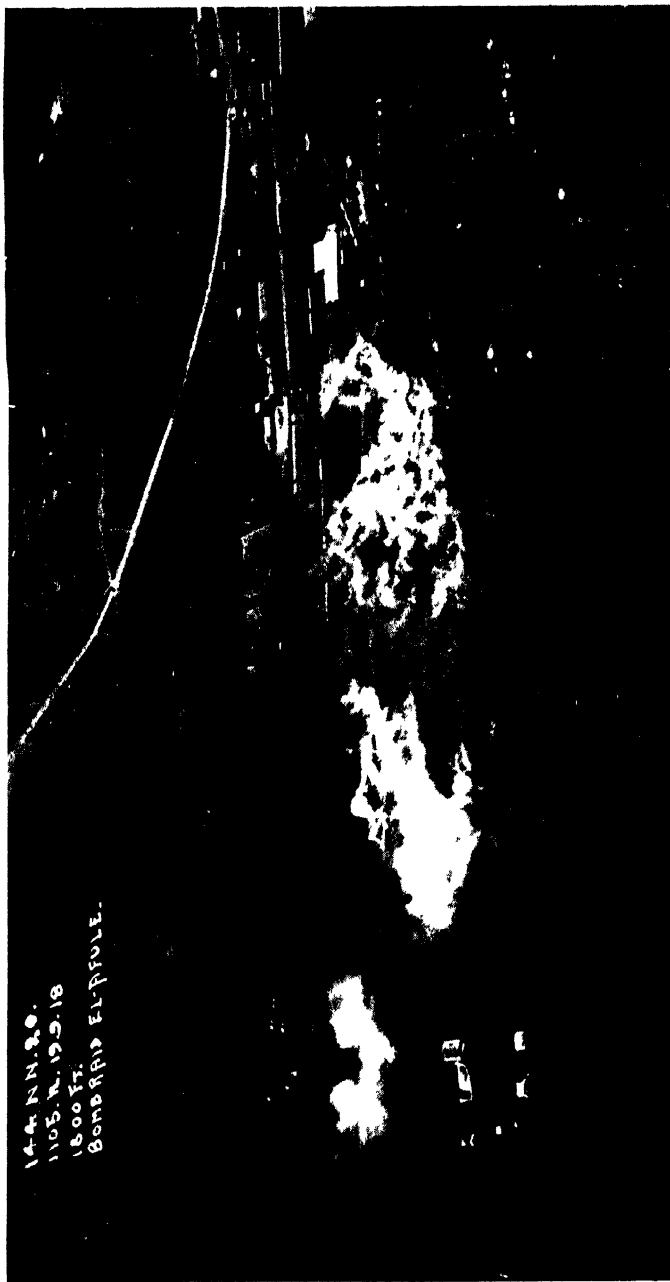
Major Addison, in command of the Australian Flying Corps, was a frequent visitor, and on one occasion took me for a flight in a Bristol fighter over Mount Hermon to Damascus, a thrilling experience.



14.22.50.
15.45 P. 25.9.18.
2000 Ft.
BOMB RAID M.F.F.R.J.K. 67

BOMBING A STATION ON THE HEDJAZ RAILWAY

(Photo Royal Flying Corps, E. E. F.)



144 NN. 20.
1105. N. 193-18
1800 Ft.
BOMBARD EL-FUL.

BOMBING THE TURKS AT EL ALUITH STATION
(Photo Koyul Elm Corp. I.F.F.)

On November 11th the Armistice was declared and great were the rejoicings amongst the troops.

For a long time the Germans could not believe that they had lost the War, and not until they received their home papers could they be convinced.

With the signing of the Armistice my active service came to an end and the rest of my doings whilst in the Army belong properly to the next chapter.

CHAPTER XIV

SYRIA, ARABIA AND ANATOLIA

AN armistice with Turkey had been concluded on October 31st, by which time our men had taken Damascus and had got right up to Aleppo and beyond, incidentally wiping out practically the whole of the Turkish Army in the process. Officers' wives now began to appear in Haifa and the town soon came to wear a peace-time aspect. Excursions to various points of interest were the order of the day, and in my spare time, which was scant, I visited Acre, across the bay, and reviewed the scene of Napoleon's defeat by Gezzar Pasha and Sir Sydney Smith in 1799. It seemed incredible that the greatest soldier the world has ever known should have been compelled to turn back and retrace his steps to Cairo because he could not capture such an insignificant-looking place. His cannon were still lying on the walls of the town at the time of my visit. The ten-mile journey by car to Acre was not without its dangers. The only road was the sea beach, and in order to get the hardest sand, one side of the car generally ran in the water; any involuntary stop meant that the car would gradually be engulfed in the sand, and this actually happened to an ambulance.

Included in my excursions was a delightful run with the O.C. of the Australian Flying Corps to Beyrout, passing through Tyre and Sidon, and at the Ladder of Tyre our Crossley tourer had some difficulty in surmounting the severe gradient. The road hung right over the

sea and any error of steering would have involved a fall of several hundreds of feet on to the rocks below.

At Beyrout we found the French element greatly in evidence and attended a soldiers' concert there, given as only the French can give it.

The first train ran over the completed wall just before Christmas, and the desert line from Kantara to Haifa was an accomplished fact. That Christmas, the first after the Armistice, was spent in merrymaking by all ranks, and only the Germans, who had by now been convinced that their country had been beaten, spent a sad day. As soon as Christmas was over I received instructions to make a reconnaissance of the Hedjaz Railway from Deraá, on the great desert plateau on the other side of the Jordan stretching to Mesopotamia, to "as far as I could get southwards towards Medina," to ascertain the amount of damage done to the line, bridges and stations by Colonel T. E. Lawrence and his followers, and to make an estimate of the cost of putting everything in order again.

Since the armistice with Turkey, no trains had run southwards from Deraá, but the line from that place to Damascus and from Haifa was more or less in working order. The Bedouin of the desert across Jordan, still being in a very unsettled state, it was considered advisable to take an escort, and for this Australians were detailed, and would be picked up at Semakh on the Sea of Galilee, where their regiment was encamped. My party consisted of one officer-interpreter, Lieutenant West, a corporal and two sappers of my survey company, for technical duties, my batman, and the R.A.S.C. driver of the motor trolley. This latter was a captured German touring car, an Adler, mounted upon railway wheels, and could, at a pinch, reach sixty miles an hour on a level grade.

On January 2nd, 1919, a year full of events for me, we set off in the Adler, Lieutenant West, the driver and my corporal accompanying me. A train followed us at a

safe distance, carrying the rest of the party and rations for a month. Passing the northern slopes of Mount Carmel we entered the plain of Esdraelon—I suppose, with Flanders, the scene of more fighting than anywhere else in the world, for, from the days of Nebuchadnezzar to those of Allenby, Jews, Gentiles, Saracens, Crusaders, Assyrians, Persians, Turks, French, Arabs and English, had all fought there, and it is foretold to be the scene of the coming Armageddon. Catching a glimpse of Nazareth, eight miles away to the north, we ran through Afuleh junction, which is at an elevation of about forty feet above sea level. Thereafter the line descended rapidly into the deep gorge of the Jordan, passing, as it did so, through the valley of Jezreel, where Jehu drove so furiously, the village of Endor, and past Mount Tabor, where Napoleon defeated the Mamelukes on April 17th, 1799.

Reaching the large village of Beisan (the Greek Scythopolis) we had arrived at a point 400 feet below sea level, and a remarkable panorama of the Jordan valley lay below us. Dotted about the riverine plain were the black tents of the nomad Bedouin, their flocks and herds grazing round them, and across the deep valley were the mountains of Moab, bare of trees and intersected by deep and gloomy ravines, framing a never-to-be-forgotten picture. This branch of the Hedjaz Railway must be unique, I think, amongst the railways of the world, in that, for fifty miles of its length of one hundred and sixty, it runs below sea level, the Nadir being reached at the bridge at Jisr Majamia, where the rails are 700 feet below the Mediterranean.

From Beisan, the grades and curves of the line became steeper and sharper and, shutting off our engine, we "coasted" down the precipitous slopes to Jisr Majamia station, passing as we did so several very ancient Roman bridges and some very evil-looking Bedouins too, who eyed our intrusion with strong disfavour. Crossing the

before-mentioned bridge I saw the north end of the river for the first time. The Jordan, here, was a clear limpid stream, running swiftly between rocky banks with oleander bushes in bloom lining the shores, and cattle knee-deep in it, reminding one rather of a village scene in England. Reaching Samakh, a station at the extreme end of the Sea of Galilee, we halted for a time to pick up our escort, Australian Troopers of the 10th Western Australian Light Horse, who behaved like a lot of school-boys at the prospect of a trip into the, to them, unknown.

Unlike the Dead Sea, the waters of Galilee are fresh, and it is said that the Jordan river, in its course, does not mingle its waters with those of the sea, but flows straight through it.

We were now eighty miles from our starting-point at Haifa, and leaving Semakh, entered almost at once the gloomy forbidding valley of the Yarmuk river, whose course we closely followed to the end. The railway, a masterpiece of German engineering, crossed and re-crossed this river many times, and at Mekarin station, a name engraved indelibly on my memory, as will hereinafter appear, we reached sea level again and continued ascending to the summit, 3,000 feet above. At El Hamme station (the word meaning "heat" in Arabic, and not without reason) we indulged ourselves in a hot sulphur bath, a natural feature of that place. An immaculately dressed young R.T.O. greeted us here, looking as though he had just popped out of a band-box, his spurs being, no doubt, useful in urging greater speed out of the engines on his section of the line.

Passing a magnificent waterfall at Mezerib station, potential power for future electrification of the line, the valley became narrower and narrower, and the gorge deeper and deeper, until, after passing through three or four short tunnels and a long cutting in volcanic rock, we

emerged upon the Arabian plateau and reached Deraá station, the starting-point for our reconnaissance.

Deraá is an important railway junction, the town itself being some one and a half miles away from the station. The latter had suffered much from Colonel Lawrence and his men, as evidenced by the large holes in the roofs of the buildings and the derelict German aeroplanes scattered about. To the east could be seen the Jebel Druse mountains, the home of that Christian sect who affected, I believe, neutrality in the War. Northwards, beyond Damascus, stood the snow-clad summit of Mount Hermon, whence springs the Jordan and other rivers. The country around Deraá is a flat desert covered with lava, but wheat and barley are grown there in peace time, the volcanic soil being very fertile. We had to wait here two days to get a small tank engine sent from the depôt at Damascus.

The one I had was much too big for our purpose and would probably not have succeeded in crossing some of the diversions, etc., I anticipated we should have to make. When this engine arrived it brought with it an Egyptian engineer in his private coach, a truck of coal, and another with two 800-gallon tanks of water. Kemel Bey had brought with him plans and sections of the line for my use. I attached a third-class carriage for my men, Lieutenant West and I sleeping in a covered goods wagon, as I did not want to deprive the Egyptian of his coach. Leading the way in the Adler car, accompanied by West, Kemel Bey and an Australian with a Hotchkiss, we set off; the train, under Corporal Norris, a ganger in private life, following at a discreet distance of a mile or so behind. It was as well that this procedure was arranged, because we found many abandoned wagons on the line, telegraph poles and wires lying across the rails, and several bridges in a very wobbly state. The trucks were thrown over by ropes, the telegraph obstruction was thrown aside and diversions made round bridges, where possible, and when

impossible, sleeper supports erected underneath them. In this way we progressed as far as Amman (the ancient Philadelphia), which we reached three days after leaving Deraá. Here we halted for two days to see the Political Officer (Captain Hornby, one of Lawrence's men) and take, on his advice, an additional escort, also of Australians. The whole way down to Katrani we found great damage done, not a station was left standing; all the wells had been filled up and many bridges damaged.

By the exercise of a certain amount of ingenuity we got as far as Katrani, however. In places where rails had been blown up we took good lengths from behind the train and relaid them ahead, and if a bridge was impassable we went round it, but all the way great vigilance had to be observed. Captain Hornby had warned me that some mines, laid by Colonel Lawrence under the rails and bridges, had not exploded, and these charges had to be withdrawn before either the Adler or the train could pass. An arched bridge at Katrani stopped us for three days to effect the temporary repairs.

A detachment of Hedjaz soldiers assisted us in the work, and it was accomplished by sawing up telegraph poles and making them into side walls, holding them together with telegraph wire. Having safely got over this obstacle we proceeded, passing over high viaducts with holes blown in the arches, banks washed away, and diversions which sometimes took us a day to repair. We must have passed more than a hundred abandoned lorries, all with the magnetos removed and radiators stove in, and with iron tyres, and any number of dead Turks under bridges, where they had, no doubt, crawled to die, away from the burning desert sun. At the only tunnel at Kasr we found, luckily, that Colonel Lawrence had done no damage, because if he had blown it in, it would have been beyond our power to have got through it.

Approaching a station, Jerdun, late one evening, we

were fired on by a detachment of Hedjaz soldiery, and I ordered the Australian to give a "burst" into the air with the Hotchkiss. Thereafter there was silence and we walked into the station to be received with open arms by a band of officers of that army making their way to Medina on foot. I could not, however, accede to their request to be allowed to accompany us, as we were then short of both rations and water, so I left them behind next day to continue their long march to their homes.

Ten miles short of Ma'an two large bridges, in close contiguity to each other, had been blown up, one of them having a water-tank gracefully suspended over the abutment. A diversion had been made, but was out of repair, so we had to halt and put it in order. The train then stood on the top of the bank, the Adler car being behind it. Looking back, I was horrified to see a single truck careering down the line apparently out of control and, before anything could be done, it crashed into the Adler and crushed it like a concertina. It appeared that the Hedjaz officers, resenting being left behind, had loaded themselves and baggage in this truck and had pushed it up the grade and then, reaching the top, had let it go by its own momentum, not understanding how to apply the brake and stop it. So that was the end of the Adler and it was thrown over the bank and abandoned. The diversion was repaired and the engine sent "light" into Ma'an to get water, with orders to return for us next day. Sleeping peacefully in our carriages that night we were awakened by an almost incredible happening in that desert, this being the noise of rain on the roofs. A veritable cloudburst had occurred, and before we knew it, the riverbeds were raging torrents and we marooned on a small island between them. Away went our truck of coal, away went all the Egyptian water tins (*fantassies*) into the desert, and for a time it looked as though our carriages and

wagons would go too. The engine returned, but could do nothing but stop on the top of the further bank and look at us. When the water had sufficiently subsided, which it did on the next day, we again repaired the diversion and the engine came down. Do what we might, however, we could not induce it to pull up more than one truck, so, making the best of it, we abandoned all the rest of the train and went into Ma'an with what was left. The loss of his private coach was a severe blow to Kemel Bey, but I allowed him to take all his furniture, pots and pans into Ma'an. Our rations had now come to an end and, had it not been for Abdul Latif, the Hedjaz commander at Ma'an, who dealt out Arab food to us, we should have been in a bad way.

Beyond Ma'an I found that two miles of the railway in its entirety had been blown up, and there and then decided that we had gone "as far south as we could get," and determined to return. But how? That was the problem. By railway it was impossible. That cloud-burst must have done great damage all along and I had visions of those miles of track we should have to relay, the bridges to be patched up again, and, above all, our lack of food. After a lengthy conversation with the others, I decided to march to Akaba, on the shores of the Red Sea, and, if possible, get a boat from there. At first I wanted to go across the desert to Beersheba, so that we could have a look at that wonderful city of Petra hewn out of the living rock and presenting all the colours of the rainbow, but, getting into communication with the Commandant at Akaba by telephone he, Bimbashi Peake of the Egyptian Army, informed me that G.H.Q. had been very anxious about our safety and desired us to return. He also said that he would send camels and rations for us, so better counsels prevailed and I decided to go to Akaba. Whilst waiting for the camels we lived in Arab houses and ate Arab food, principally sour milk,

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and had a look at Ma'an. Ma'an is 285 miles from Damascus and our journey from Deraá had taken three weeks for the 125 miles. In peace time there is an hotel at Ma'an, used by the pilgrims going to Mecca, it also boasts a hospital and a caravanserai, as well as the most blood-thirsty looking lot of ruffians roaming the streets it has been my lot to see. Generally armed with a rifle, a revolver and one or two murderous-looking silver-handled daggers in their belts, I would not have trusted one of them had I met him alone, and it was asking for trouble to enquire how these gentry made a living.

Between Amman and Ma'an we had not seen a solitary tree, so that it was refreshing to look upon palms, fig tree and pomegranate bushes growing in the gardens.

The camels duly arrived, and we must have made an imposing cavalcade as we marched out of Ma'an ; comic relief was afforded by Kemel Bey, perched on top of his beast, with chairs, a table and all his cooking pots and pans festooned around him. Except for him, none of us had ever been on a camel before, and after trying it for a mile or so, we preferred to walk the fifty miles to the coast. The first night we camped at Ain Abu Leisal in a hoar frost, about 3,000 feet above sea level. Having no tents we all, men, officers, Arabs and Egyptians alike, huddled close together near the evil-smelling camels to get some warmth, but next day, after a meagre breakfast, we began the descent to the coast and got all the heat we wanted. Our way led us through the Neghb defile, so narrow in places that there was hardly room for a camel to squeeze through. All the rock was of red granite, the volcanic country having been left behind. Emerging from the pass into the Wadi Ithm we followed this dry water-course all the way to the sea, halting on that second night at Kuweira, where we slept in a cave near a well. That evening a generous supply of rations, including a demijohn of that excellent Army rum, reached us,



ROCK FORMATIONS IN THE ARABIAN DESERT NEAR MAAN



PRIVATE HOOKER, A.S.C., AND BOX TORD IN DIFFICULTIES



AN ABANDONED BRITISH TANK NEAR GAZA

and was done full justice to by all concerned, even the Mohammedan driver and his fireman forgetting their caste.

Next day we marched to within seven miles of Akaba and slept on the sand in the Wadi bed near a ruined Roman dam. Precipitous granite rocks, rising sheer, shut us completely in, there was not a breath of air and the heat was like that of a furnace. We reached Akaba and the sea at eleven next morning and were greeted by the garrison, consisting of the Commandant, Peake, the S.N.O., Carter, a major of the King's Liverpools, Saunders, and others. All the remainder of that day I kept the telegraph operators busy sending in my report to G.H.Q., as asked to do, the first question I had to answer being: "Where was the Adler car?"

After a pleasant rest in Akaba, we boarded the little steamer *Min* of the Anglo-Egyptian Oil Company, and, rounding Ras Mohammed, at the tail of the Sinai peninsula, reached Suez, where the party broke up, the Arabs and Kemel Bey to go into quarantine, the Australians to their base camp at Moascar, and the British back to where we started at Haifa. Thus was completed a round trip of over 1,000 miles, during which, having started at sea level, we had gone to 700 feet below, risen to 3,000 above and again descended to sea level, and had experienced a tropical sun and blazing heat as well as frost and bitter cold. The sequel to the abandoned train may be of interest. I learnt that a large body of Arabs had pushed these trucks by hand all the way from where they were abandoned back to Deraá, about 125 miles.

Arrived at Haifa I made a long written report of the journey and an estimate of the cost of repairs, in which I was assisted by my friend Pillans, still in the old billet. This duty having been completed I was ordered to proceed to Damascus to become Chief Engineer of the Hedjaz line and the French line to Beyrout, and also of a

broad-gauge line to Aleppo. My majority was gazetted on February 6th, 1919. All my survey men had been demobilized with the exception of those I had taken with me to Ma'an, and they went directly we returned, and only the faithful tram driver, McKechnie, accompanied me to Damascus.

My new colonel, the Assistant Director of Light Railways at Damascus, sent me down a carriage reserved for my use, and as this was fitted with a kitchen, bathroom and a room for my batman, I decided to make it my home and live in it permanently. Pillans, the ever-faithful, saw me off at Haifa station, and I did not see him again until late in 1920, on the eve of my departure for Ashanti. At Deraá I met some of the men who had seen me off southwards, and they were very interested to hear of our experiences in the desert and wondered much whether I had taken the engine and train with me to Akaba, as they had heard nothing of their whereabouts.

From Deraá to Damascus the line runs through an absolute wilderness of desert, unrelieved by even a tree, and it was therefore with great delight that I, from the engine upon which I travelled, saw from Kiswe station, a distant view of Damascus lying below me and looking, with its mosques and minarets and the green of its orchards, like a veritable pearl amidst those stony surroundings. Bare treeless, verdureless hills surrounded it, making it a very welcome sight to come upon suddenly, and it lost nothing of its beauty and charm on a nearer approach.

Introducing myself to my new C.O., Colonel Lord, I was directed to proceed to Beyrout and report on the condition of the railway to that seaport, so, deferring my pleasurably anticipated visit to the town of Damascus, I set off next morning by train, crossing the anti-Lebanon and the Lebanon mountains en route. Both ranges were covered in snow to some depth, and in one place we ran

through a deep snowdrift at the entrance to a tunnel on the summit. At every bridge I stopped the train and made my examination. I had on several occasions to call the Greek driver's attention to the speed with which he drove the train down the one-in-thirty-three gradient of the anti-Lebanon slopes, and ordered him to reduce it before a serious accident happened. The line followed for a long way the Wadi Barada, the Abana of the Bible, with its torrent-like stream of ice-cold water coming from Mount Hermon's slopes. Along its banks were orchards of apple, pear, peach, apricots, figs, vines, oranges and other fruits, whilst the road to Beyrout ran between the railway and the stream through a narrow valley with high red hills on each side.

Nowhere, outside China, have I seen such blue skies as in Damascus or experienced such enchanting views as I did when descending the Lebanon mountains into Beyrout. At Rayak junction the Damascus-Hama line, a French-owned concern, branched off to Aleppo, and this line was also under my care. Reserving it for a future inspection we reached Chtaura station, at the foot of the Lebanons. Here a rack railway, something new in my experience, started, and continued to the terminus at Beyrout. This rack was on the "Abt" system, by which, on reaching the rack, a third cylinder on the engine drives a toothed gear, which engages in the rack whilst the ordinary two other cylinders helped the ascent by adhesion. The rack was out of repair, some teeth being broken off, and it therefore required great caution driving both up and down it to prevent a runaway. Our speed up averaged five miles an hour, but going down I had to crawl along the outside of the train to the engine and again warn the driver of the danger of running too fast on a broken rack. The gradient up and down was one in fourteen and the descent had, in addition, to be negotiated by "reverses."

The scenery was nothing less than magnificent. Beyrout and the sea seemed to be immediately underneath us and the line could be followed, twisting about the mountain-side in all directions. Arrived at Beyrout I renewed my previous acquaintance with the town and parked my carriage on a siding near the quay wall. Calling upon the head of the American College, to whom I had a letter of introduction, I found him to be a Syrian with a very charming wife and children, and by him was conducted round the College, being much struck with the magnificence of the buildings and their internal equipment. From Beyrout I made an inspection of a short, disused branch line to Juni Bay and Mameltein, little resorts on the sea coast, and then I returned to Damascus.

We had a cinema palace in the town then, but on one occasion, when a Wild West show was being given, with the usual concomitants of the sheriff chasing the gang of desperadoes, Hedjaz soldiers in the gallery became so excited that they started firing at the screen with revolvers, causing a panic. The A.P.M. then closed the place for some months.

At Salahie, on Sunday afternoons, riding exhibitions would be given by Bedouin, but did not appeal to me after I had seen some of the horses bleeding at the mouth, caused by the ferocious bits used.

Wandering down the "Street called Straight," one could purchase German Zeiss binoculars and Parabellum pistols for almost nothing, and one Australian sergeant-major was buying these and carpets wholesale for all he was worth, as a speculation. Beautiful copper inlaid brass work could be seen in the making, and everyone seemed pleased to see the British officer there, mainly, I suspect, because he spent his money freely. In the Street called Straight, I remember, was a small shop where they made the most excellent candied fruits, and many were the piastres I spent there. In the evenings, at the old

German Club, I played bridge with one other English officer and two Arabs, one being H.E. Ali Riza Pasha, the Governor of that part of the Enemy Occupied Territory. When winning, they were paid in Egyptian piastres, but if they lost, all we received was Turkish money, much to our disadvantage and loss.

Amongst my friends in Damascus, at this time, was an American lady doing Armenian relief work, two Scotch sisters, the Misses Scott-Moncrieff, engaged in missionary work, and I often had tea with the French nursing sisters in their hospital. My duties took me only once again to Amman, but Haifa I visited fairly frequently, generally by rail, but on one occasion I did the long journey in a day, in a Ford car. This journey took me to the very beginning of the Jordan river at the south end of the Waters of Merom, and I crossed it on the Jisr Banat Yakub, or "bridge of Jacob's daughters." The Waters of Merom are at sea level, though the gorge of the Jordan valley commences immediately after the river leaves that lake. The road then runs along the west shore of the Sea of Galilee, and I went through Tiberias, Capernaum, Magdala, and then climbed to Cana of Galilee, and Nazareth, before reaching Haifa. A bad road nearly all the way, with steep hills, mud patches and, in one place, at Kuneitra, a long stretch of cobblestones.

Another visit to Beyrout, this time by car, meant my staying in the Orient Hotel there, and I met Lord and Lady Stradbroke and took them to the College for tea. Next day we made a run to Baalbek to see the ancient temples there, and Lady Stradbroke got me to make her a sketch of the "egg and dart" carving of the Romans, this pattern signifying life and death.

I had only made one journey to Aleppo, and met there the Controller of the Baghdad Railway, Colonel Howell of the Welch Regiment, who broached to me the question of whether I would like to join his administration as his

Chief Engineer. Telling him that I expected to go home on leave shortly, he said he would see about it on my return, if I ever returned, and with that I left him.

A first trip to Cairo now intervened, and I visited all the well-known places, climbing to the top of the Pyramids, spending the night on a *dahabeyah* on the Nile, visiting the bazaars, the Citadel and other places. But I do not like any kind of town life, and I was glad to get back to the scenery and climate of Damascus once more.

At long last the time for which I had been longing came round and, in July, 1919, "Leave to the U.K.," as Army parlance has it, was granted to me for a period of one month, plus the time taken to go and return, and I set off. Staying only one night in Haifa en route, I travelled to Port Said via Kantara, and took up my quarters in the rest-camp there. Being now a field officer I was under no restrictions as to times and could go and come as I liked and had no duties to perform. I soon forgathered with the Colonel of the 39th Battalion Royal Jewish Rifles, beg pardon, Fusiliers (The Jordan Highlanders), having as their motto: "No advance without security," who was also going to England on leave. A weary ten days' wait in that sink of iniquity was whiled away by playing golf on the mud links adjoining the Canal and by visiting mail steamers of every nationality, occasionally "getting off" with some lady passengers and showing them the town.

My Syrian professor had given me a letter of introduction to his brother-in-law, Mr. Mouchli, proprietor of Simon Artz, the well-known store, and with him and his Parisian wife we drove round in his luxurious car and saw what there was to be seen near Port Said. Finally we embarked on the transport *Nile*, full up to the Plimsoll mark with soldiers about to be demobilized, and set a course for Taranto, that port in the instep of the foot of Italy. Many men and officers of the 53rd (Welsh)

Division were on board, and wherever two or three Welshmen are gathered together there will be singing in the midst of them, and, sure enough, in the train from Taranto our ears were assailed all day and every day of that eight-day railway journey with songs of Wales, the orchestra being provided by a cornet lustily blown by one of their subalterns. At Turin, I remember, we stopped for some hours one evening, most of the inhabitants of the town turned up to listen, and the subaltern with the cornet outdid himself from the top of the carriage.

Italian troop trains, like the French ones, are not noted for their speed, and ours was no exception. With a colonel and two other majors I shared a first-class carriage, and from the start the Colonel informed us that he would be the cook, as he loved that kind of work. He installed his Primus stove on the lavatory seat, and when the cooking was done only the lid had to be lifted to disclose a most useful sink. Neither would he allow us to wash up, in fact he put the lavatory completely "out of bounds" to all but himself, and it was, consequently, lucky for us that the train was making frequent stops. One such stop was at Faenza, a delightful rest-camp, where we obtained strawberries, cherries and other fruits.

Arriving at Boulogne I went over to Audriucq to see some French friends there, and stayed the night; returning to Boulogne, and crossing over to Folkestone, I arrived home in Norfolk again after over two years' absence.

CHAPTER XV

SYRIA, ARABIA AND ANATOLIA (*concluded*)

THE last time I had been in Norwich was in the spring of 1917, and at that time great precautions were being taken against aerial bombing, and not a light was allowed to be seen at night. Now, however, the town had taken on a peace-time aspect, though there were still many officers in khaki about. Amongst them I was amused to see many who had contrived to put off joining up until the last minute, and were swaggering about, some with white bands round their caps indicating, I think, that they were training to be officers.

Susan, then at the age of fourteen and half, was at school in the city, and her world wanderings had come to an end. Unluckily, most of her journeys had been at such an early age that she could remember very little of the places she had lived in with me.

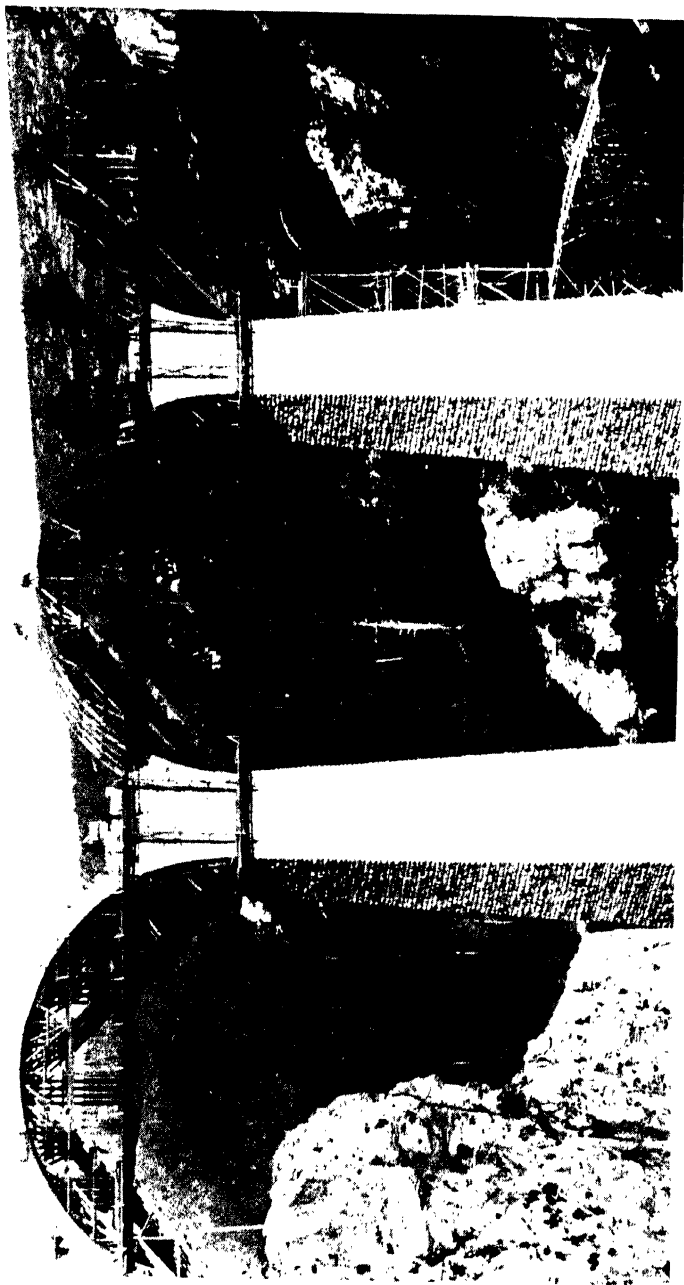
Staying only a short time in Norwich, I went up to Kelso to see some people I had known in Ceylon, and visited Edinburgh, Floors Castle, Jedburgh and Dryburgh Abbeys and played golf on the links there, returning to London later, where I spent the remainder of my leave.

At the War Office, where I had to report, I was given my "warrant" to Port Said via Marseilles, and set off hoping to get to Paris in time to see the French Victory Celebrations there. This I managed to do and a very good show they made of it, my stand being close to the Arc de Triomphe.

Waiting a few days at Marseilles, at the old rest-camp, I



CONSTRUCTION OF A VIADUCT ON THE BAGHDAD RAILWAY



CONSTRUCTION OF A VIADUCT ON THE BAGHDAD RAILWAY

paid several visits with a new friend, Major Hutchinson of the Central India Horse, to my little café on the Corniche road, and then with him shared a cabin on the P. & O. liner *Caledonia*, to return to Syria. Arrived at Port Said we went to Kantara, where I received my orders to return to Damascus, much to my relief. Hutchinson went on to Homs, where his regiment was stationed, and I took up my quarters in the imposing station at Damascus and prepared to inspect the railways once more.

Paying another visit by car to Beyrout I found the French Army much in evidence there, and open-air cafés had been started and a Parisian atmosphere seemed to be prevalent.

I had not been in Damascus long when, at the request of Colonel Howell, I went to Aleppo as his Chief Engineer for the Baghdad Railway. As the gauge changes at Rayak, in the Beka'a, a broad-gauge carriage was sent down there for me, and I found that it was one specially made for the Kaiser. Beautifully upholstered, with bathroom, kitchen, furniture of the best, and crockery made in the Kaiser's own factory with the monogram upon it, quarters for servants, electric light, etc., I felt that I had dropped on my feet indeed. Travelling under these luxurious circumstances I was able to take an interest in the country through which I passed. Leaving Rayak, a long up-grade brings us to Baalbek, formerly one of the richest, largest and most strongly fortified cities of Syria. The chief ruins there are the Temple of the Sun, the Temple of Jupiter and a mixed Ionic and Corinthian edifice, at one time used as a Christian church. The whole place was reduced to ruins in 1759, though six of the columns of Jupiter's Temple are still standing. I, as an engineer, was much struck with the size of the stones of which the temples were built, some of these being over 800 tons in weight, also by the method of joining the sections of the columns. These columns were seventy

feet in height and built of three pieces, all perfectly circular in shape, as I tested them. They were joined together by running melted lead into a three-inch copper pipe fixed in the centre. The Arabs, who sacked Baalbek in A.D. 748, knew of this lead evidently, because they had cut wedge-shaped pieces off the columns in order to extract it. At a quarry near the ruins I saw a stone,¹ partly squared, and nearly ready for transporting to the site, and a rough calculation gave the weight as over 1,100 tons. How did they transport them and how did they lift these stones up to a height? It would puzzle engineers to do it even in these days of Titan cranes.

Our next important station was Homs, sixty-five miles north-east of Baalbek, built near the right bank of the Orontes and a town of perhaps 30,000 inhabitants. Hama, our next main halt, is the Hamath of the Bible, 120 miles from Damascus, its principal feature of interest being the enormous wooden irrigation wheels lifting water from the Orontes to the fields above. These wheels are practically the same in all respects as those employed by the Chinese to irrigate their rice fields. Hama is one of the oldest cities in the world, having been the capital of a kingdom as early as the exodus of the Israelites from Egypt. The railway bridge over the Orontes had been blown up by the Turks when retreating, and my predecessor at Aleppo had patched it up, after a fashion. I stopped the train and made an examination of it, and took the risk of letting the train cross over, but I determined that I would make it stronger as soon as I had settled down in Aleppo.

¹ For the information of those interested, this stone, called by the Arabs "Hajr el Hubla" (Stone of the pregnant woman), measures 68 feet 4 inches long by 17 feet wide by 14 feet 7 inches high. This equals 16,971 cubic feet, at 150 lb. is 1,136 tons. The six remaining columns of the peristyle of the Great Temple are 70 feet in height, 7 feet 3 inches diameter at base, and 6 feet 6 inches diameter at top. They are in three sections only. The total height from ground is 125 feet. The temples at Baalbek are considered to be the finest specimens of Corinthian architecture ever built.

Reaching this place in the evening, the first thing that strikes one's eyes is the enormous citadel built on top of a high mound and dominating the place. It is one of the most beautiful of Eastern cities, with countless cupolas and minarets rising above the plantations of pistachio-nut trees. A new station had recently been completed by the Germans, and here I found the Mess and very excellent living accommodation for the officers engaged on the line. Nearly all the German heads of departments were still employed, being paid by the British authorities, and I found that Herr Kern, the Chief Engineer, was my particular protégé. A curious thing about the Baghdad Railway, I found, was that, though it is an entirely German concern, all correspondence, plans, etc., are in French, and even the name, viz., "*Chemin de Fer Imperiale Ottomane de Bagdad*," is in that language.

Having settled down in my new quarters I sent Herr Kern down to Hama to fix up the Orontes bridge, and on his return I began my inspection of the 800 miles of line under my charge. To do this I was supplied with a 20 h.p. Drewry rail tractor, with eight seats, and an R.A.S.C. driver. This tractor had three speeds forward and three speeds reverse, so that it was not necessary ever to turn it round. All that was required was to reverse the seats and change over the brake and gear levers, a very ingenious arrangement. As it only had oil-lamps, however, I fixed up a large acetylene searchlight, which I took off an engine, to enable me to run at speed through the Amanus and Taurus tunnels.

The ordinary passenger train left on three days a week at 6.30 a.m., so I had my travelling "palace" attached to it one morning, with instructions to take it and leave it at Adana, and at 9 o'clock, Herr Kern and I set off in the Drewry.

I have travelled over and seen many railways in my life, have even helped to build some, but I have never

seen such a railway as this one I was now travelling upon. The thoroughness with which the German does everything he lays his hand to was evident in every mile. What British railway at home or abroad, for instance, would think of building a stone fowl-house for its station-masters? Yet there was one at every station on this line. Where the Indian, East and West African and other administrations are content to use a steel key to keep the rails in place on the steel sleepers, the German uses a clip and a bolt and nut, which, though much more expensive, is, once fixed, there for good, whilst the key has to be tightened up almost daily and sometimes breaks the lug in which the rail is held.

At Muslimie station, $8\frac{1}{2}$ miles from Aleppo, we joined the main line, the line to Aleppo being a branch one only. From Muslimie we ran at a speed of fifty miles an hour through flat cultivated country until we got into the Kara Dagh mountains, the grades being 1 in 40 and reducing our speed to forty miles an hour. At the Héré Déré Viaduct, an enormous steel structure 246 feet high, we halted to inspect, and whilst doing so the guard of Punjabi soldiers stationed there came up and saluted me, and amongst them I recognised some old friends of the 28th Punjabis who had been with me in the Ceylon riots.

Nothing would please them but that we must have a cup of tea with them, that tea which, as made by Indians, is half milk and the other half sugar. The Héré Déré Viaduct was put together by German mechanics specially brought out for the work, the local labour not daring to work at such a height. I may, in passing, say that magnificent as the line is, with miles upon miles of tunnelling, of viaducts, rock cuttings and high banks, none of these works need have been built had it not been for the obstinacy of the Turks, who insisted that the alignment should be so many miles away from the coast,

where there would have been almost a level line. At Islahie, the ancient Iconium, we came to the foot of the Amanus range, and the long ascent to the summit began.

There were no less than fifty-one tunnels in this length, the longest being the Grand Tunnel de Bagtche, nearly three miles long. This tunnel had not been completed, and workmen and props and centreing were still inside it. I halted about half way in, and was surprised to see ahead a tiny pin-point of light. Fearing that, though we had a "line clear" ticket, a train had been allowed to run, I put my ear to the rail, but heard nothing but the drip of water from the roof. Then I knew that it must be the sun shining at the far end, and pushed on with confidence. I am not going to inflict a technical description of this truly wonderful railway on my readers, those interested can refer to my articles on it in the *Engineer* newspaper of November 12th, 1920, and following numbers, but I will say this, that an enormous amount of money had evidently been spent on it for a purpose almost impossible of fulfilment. This being nothing less than a German invasion of India, with Kuwait, on the Persian Gulf, as the railway terminus and their base for this ambitious project. Halting at Adana for the night, we went to Mersina to inspect the almost silted up harbour there, passing Tarsus *en route*, and then proceeded to climb through the many tunnels in the Taurus mountains, each more wonderful than the last. At Belemedik I stayed a few days with the Chief Construction Engineer, Mr. Mavrogadato, a Greek, and his German wife, and everything in connection with the line was explained to me.

At Olookichla we reached the summit of the line, and from there descended to Konia, where the Baghdad railway finishes, the rest of the line belonging to the Anatolian Company. I sent Herr Kern back by train to Aleppo, following in easy stages on the Drewry, for I

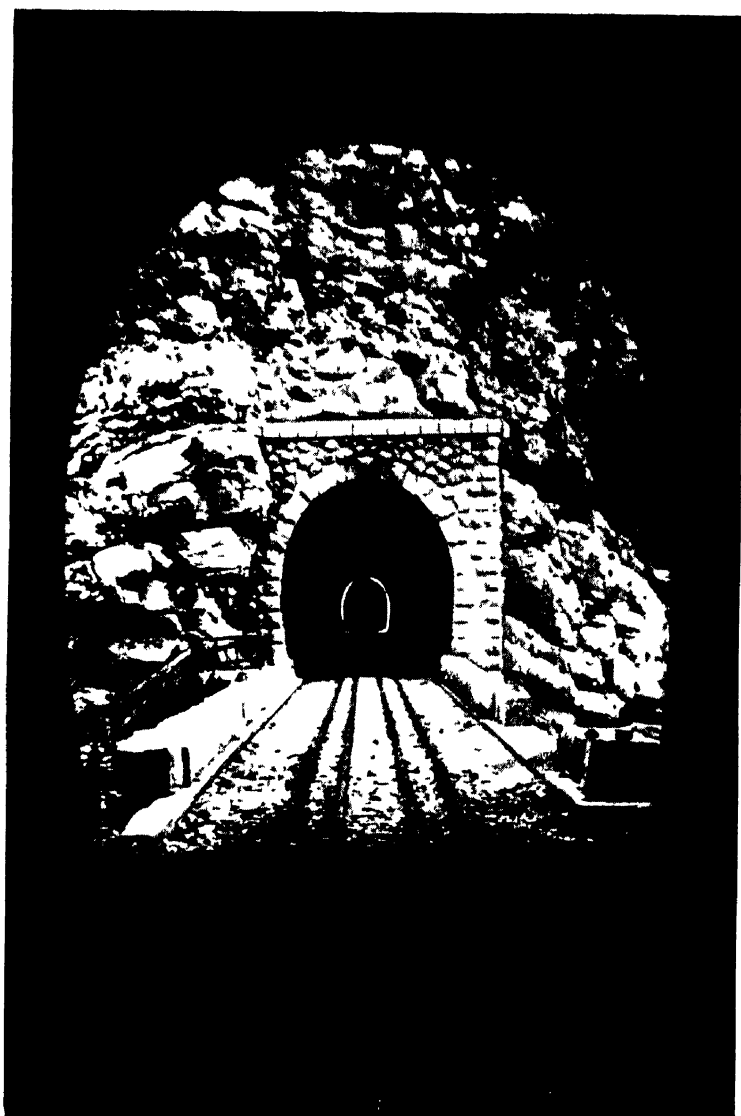
felt that I had much to learn from the Germans' work in those tremendous mountains. The viaduct over the Giaour Déré gorge, for instance, was a magnificent structure. Over 275 feet high, it was built of masonry arches, most of the construction having been done from above by means of an overhead ropeway.

On my return to Aleppo I travelled by the same means to Jerablus and Nisibin, in Mesopotamia, where the Baghdad line finished then suddenly in the desert. The Euphrates river is crossed at Jerablus by a fine steel bridge, and thereafter the stations were built as forts and loopholed for defence against the desert tribes. Excavations by an archeologist were proceeding at Carchemish during my visit. In all I made four trips to Konia, on one occasion taking the Commander of the 5th Cavalry Division with me, but I did not go to Nisibin again as there were no trains running to that outlandish place.

In October, 1919, a strike occurred on the French line running from Aleppo to Rayak, and there being no one else available, I volunteered to drive the troop and supply trains between those points. My firemen were two young soldiers from the Staffordshire Regiment, the guard was a lieutenant in the Indian Army, whilst young officers of the Indian Sappers and Miners looked after the water supply at the stations, and helped to coal the engine and turn it round at Rayak. All sorts of officers, from the General at Homs to the lieutenants in the Central India Horse, begged for a ride on my engine, and some of their ladies came, too, making a regular picnic of it. The engine belonged to the Baghdad Railway, and was an enormous one. It would take me over an hour every morning to go round with the conventional can and a lump of waste to oil all the bearings, and I would be on the footplate until dark, being tired out then and glad to get into my travelling palace for a bath and a sleep.



THIRTY METRE CONCRETE ARCH BETWEEN TUNNELS,
BAGHDAD RAILWAY



FOUR TUNNELS IN THE TAURUS MOUNTAINS

In November of that year the French took over the Syrian Mandate and all British officers were turned out, also I was glad to see that the French made short work of all the Germans employed on the Baghdad line, and they were packed off, bag and baggage, to their homes. I received orders to report to the Colonel of the Palestine Military Railway at Haifa, and from him I learnt that I was to make a complete plan of that railway as finished. This would have been a most uninteresting job had I done it, but at the beginning of December I was ordered to proceed to Cairo and report to Brigadier-General Blakeney, the Director of Railway Transport and General Manager of the Egyptian State Railways. From this General I received instructions to make a preliminary reconnaissance across the Jordan for a proposed oil pipe line and railway which was to run from Haifa to Baghdad.

This was a big scheme which required much organization and good personnel. I was told that I could get much valuable information as to the country from Major the Hon. Fitzroy Somerset (now Lord Raglan), who was living at Deraá as Political Officer there. He happened to be in Cairo then, so we met and discussed the project in the bar of Shepherd's Hotel, arranging to meet again in Haifa in a few days time. Collecting tents, instruments, men and transport, took up a week in Haifa, but I left this to my second in command, Captain Hanby, of the Intelligence Service, whilst I went with Somerset to Deraá and stayed with him in his Arab house there. Daily we would go out either in his "galloping bedstead" (Ford), or on horseback to try and discover the easiest way to bring a railway up those mountains from an elevation of 700 feet below sea level to 3,000 feet above. Of course I shall be asked why the existing railway to Deraá could not have been used. The answer is that that line from Semakh ran in French Mandated Territory, and

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was therefore taboo. We went to Irbid, and from the top of the mosque there took some compass bearings of certain outstanding features and made a sketch of the country, little knowing that that action was to bring disaster upon my party. Next day we started in the Ford with the intention of returning to Haifa. The descent down those mountains was over an apology for a road and was a nerve-wracking experience, and we had got half-way down, when the front axle hit a gravestone covered in long grass. This meant dismantling the whole thing, which we did, straightening the axle with a bit off the gravestone and then putting the thing back again. Whilst we were engaged in this operation, some Bedouin concealed in the hills started taking pot-shots at us, so, telling Somerset to return the fire, I hurried up with the axle and finished it much more quickly than I otherwise should.

We pushed on to Jisr Majamia, crossing the Jordan on a very ancient Roman bridge near the village, and leaving the car at that station, we caught a train for Haifa. Here I found that Hanby had got everything ready, the party consisting of twelve British Sappers and twelve Egyptians. Two trucks were commandeered for our tents, horses, etc., and we all entrained for El Mekarin station, in the Yarmuk valley, Somerset remaining in Haifa.

Pitching our camp in a very picturesque spot near the oleander bordered river, we started preliminary operations next day. I usually went off by myself to reconnoitre the valleys, and came across, in one such valley, a cliff bearing petroleum shale, under which were two Arabs burning the stone to make lime. Another time I met a solitary Bedouin who did not know any English, of course, so I foolishly spoke to him in French. Now, to understand what follows it is necessary to say that when the French took over the Syrian Mandate great opposition

was met with from the Arabs, who had thought that the city of Damascus was to be theirs with the Emir Feisal as King of Syria. Consequently the French were greatly hated by the Hedjaz, the Arabs and the Bedouin, and I, by speaking to this man in French, had probably made him think that all our party were French, too. The incident of the survey from the mosque roof at Irbid also rankled in their hearts, I heard afterwards, but whatever the reason, on December 14th, at 7 a.m., when the whole camp was peacefully sleeping, it being a Sunday morning, seventy or so mounted Bedouin surrounded the camp, marched into the tents and took away the rifles and ammunition as a preliminary measure to prevent reprisals, and ordered the whole party to parade outside in whatever clothes they could hurriedly fling on.

When all were collected a guard was placed over them with loaded rifles, whilst the remainder proceeded to ransack the tents. Instruments caught their eyes first, and from them the lenses were unscrewed, where possible, to be used, I imagine, for burning glasses. All plans were piled up in a heap outside, together with the tents, and set fire to, whilst clothes, boots, shirts, etc., were appropriated to their own use. This having been done my party was ordered to march over a steep hill for several miles to the Bedouin village, and there all British and Egyptians were thrust into a small evil-smelling house and locked in, a guard being mounted outside. Hanby was the only person there who understood Arabic, and he was loud in his protestations to the Sheikh that the party was a British one and not French as they imagined. Only bad language was received in reply, and a consultation was held amongst the Bedouin as to what was to be done with the prisoners.

For some time it was a toss up whether shooting was to be the fate, but better counsels prevailed, I suppose. For food only sour milk and a few dates were given, and

sleep was taken on the bare floor. Whilst all this was going on the stationmaster at Mekarín, a Syrian, had hidden terrified in his quarters, but as soon as the party had left he had the sense to send an urgent telegram to Haifa informing the authorities there of what had happened. Prompt measures were at once taken. An aeroplane was sent up with hastily written leaflets informing the Arabs that the party was English, ordering their immediate release, and threatening reprisals if any harm befell them. At the same time urgent representations were made to the Hedjaz authorities informing them that they were held to blame for what had happened. After prolonged negotiations the party were released and had to march, many barefooted, and all in very sketchy garments, to Mekarín station, where a special train carried them to Haifa; spies were sent out to try and recover some of the instruments and to find out who had instigated this outrage. It was traced to the Hedjaz Commander at Irbid, the same man who had been so affable and obliging to Somerset and me. Truly the Arab is one of the most untrustworthy individuals in the world, and will wear a smile whilst contemplating stabbing one in the back.

After this little contretemps I went down to Cairo again to make a full report on the matter to the Powers there. In the lounge at Shephard's Hotel I was greeted by some ribald young subalterns as the "only officer in the British Army still at war." However, I am glad to be able to state that the men who had lost their Army pay-books, and in them most of their savings, were all compensated, as were also we officers, the money coming out of the monthly subsidy given to the Hedjaz Army.

Returning again to Haifa I spent a merry Christmas with General Greene of the 5th Cavalry Corps and his staff, and, after the festivities incidental to Christmas were over, it was decided to continue the survey, but this

time on the safe, or west, side of the Jordan, that river not to be crossed until things had quietened down. This order meant another visit to Cairo to purchase new instruments to replace those stolen, and there I met for the last time my Aleppo Chief, Colonel Howell, also Colonel Leechman, Colonel Newcombe and Colonel Lawrence, all names that will be for always identified with the Palestine campaign.

In January, 1920, my party moved out to Beisan, and its composition had been augmented, Major Somerset accompanied it as Political Officer, Captain Hanby and Captain Sworder as surveyors, ten British Sappers, some Arabs, a quartermaster-sergeant and an escort of six Sowars of the Bengal Lancers. For transport we had two Ford cars, a captured Benz car, and six horses with their attendants. Unprecedented cold was experienced in the Jordan valley that January, and we would get up to find the hills white with snow and had to have a charcoal fire in the mess, which we shared with Captain Crosbie, the Military Governor. During February we surveyed about twelve miles of line and fixed the site of the bridge over the Jordan river. At that time there was excellent woodcock and snipe shooting in the valley, and Somerset kept the mess supplied. He would occasionally wander off for a day or two and forgather with the Bedouin, sleeping in one of their black tents and living on their food.

When we had reached the Jordan, we sat down and waited for permission to cross over and continue into the mountains and the desert beyond, but this permission never came and we had to return to Haifa. Whilst there we were informed that serious trouble had broken out at Beisan, that the Indian Cavalry had been in action, and that some officers had been killed. I went there immediately to find out about this, and was in time to see a great friend of mine, Lieutenant Lawler, A.D.C. to

General Greene, brought in dead and put in the train for Haifa, where he was buried.

The Valley was now unsafe for any but a large armed force, and surveying was out of the question. My party and I then went right back to Gaza, to survey a line from that town to the sea and another across to Beersheba. During our stay in Gaza General Allenby paid a visit to the town, and I was introduced to him and sat next to him in a large marquee whilst he addressed, through an interpreter, the notables of the town. Afterwards I drove him round the place in the Benz car which, incidentally, had both front springs broken. A day or two later I received a letter from General Blakeney, in Cairo, informing me that three civilians had been sent out to Palestine by the Anglo-Persian Oil Company with the approval of the War Office to join my survey party as oil experts in the Jordan Valley. I think the true state of affairs there had never been represented to the General, but I obeyed orders and returned to Haifa with the intention of moving the whole camp to Beisan. But in this I was overruled by the General in Haifa, so leaving the camp behind I took these civilians to Beisan and showed them what had been done and where the railway would eventually be built, and with that they had to be satisfied, and with me returned to Haifa.

Taking a week's leave now I, with Somerset, went in a Rolls-Royce tender, which had been handed over to me for use, to Tiberias and stayed there. Exploring the lake in a sailing boat we visited Capernaum, Magdala and some monasteries, and nearly succeeded also in setting fire to the hotel when the electric lamps fused. Hutchinson and his men of the Central India Horse were then at Semakh, and amused themselves by dressing up as Bedouins, taking a donkey and trying to ascertain what was the trouble amongst the natives, but without success.

There being nothing whatever for me to do now that the survey had perforce to be abandoned, I sent in a request to be demobilized, and after a short stay at Nazareth, the order came and I departed for Kantara. On arrival I had an acute attack of what is known as "Gippy stomach," and remained in hospital over a week. It was a bad finish to my Army career. The camp was full of officers about to go home, amongst them many from Russia and the Black Sea Force. That pipe line survey upon which I was engaged in 1920 has since been taken in hand, and only the other day I read in the newspapers (*Morning Post*, 15/7/33) of the wonderful work that was being done across the desert, but I think I may reasonably claim to be the first officer in charge of it, and under conditions very much worse, I imagine, than those under which it is being carried out now.

Recovering from my stomach complaint I, with many others, went to Alexandria and there boarded H.M. Transport *Teutonic* for England. So packed was this ship with all ranks and nursing sisters, that we all slept in hammocks below decks. At Malta I and several others hired a car for the day and explored the island, for though I had been there before I had only seen Valetta. At Gibraltar our already packed ship was still tighter packed by the addition of a naval storekeeper named Rabbit, with a lot of little Rabbits, to whom our Captain, infuriated at the delay in getting them aboard, shouted, "Tie them all together," much to Mr. Rabbit's disgust. No further incident occurred and we steamed into the Mersey at Liverpool.

I found myself in charge of a large party of men and officers going to Purfleet, the demobilization camp. Here, on May 30th, 1920, I finished my Army career, being granted the rank of Major if I cared to use it, and told that I could wear my uniform for a month longer and no more.

Returning to London, I called upon Major Cunningham at the War Office, that same officer whom I had met on my arrival from Ceylon, in 1915. He remembered me, and was graciously pleased to say, "Well, I think you have not done so badly," and shook hands and wished me luck in the future.

Well, I had joined the Royal Engineers as a simple Sapper on December 6th, 1915, had seen fifty-four months practically continuous service in France, Palestine, Syria, Arabia and Anatolia, and in three years had risen through all the ranks to that of Major. I had had the good fortune to have seen much of the Near East, travelled from Konia in Anatolia to Akaba on the Red Sea, and from Nisibin in Mesopotamia to Beyrout in Syria, and I do not think that many officers have had the luck to have seen so much of the country as I have, and so ends another important chapter of my life, and I shall proceed now to relate my post-war experiences in the order in which they occurred.

CHAPTER XVI

THE GOLD COAST AND ASHANTI

I SHALL have to make a confession here, and that is that having been more or less continuously abroad for nearly twenty years at this date (1920), I had no great love for my native country. I did not like the ultra-civilization of it, the constant noise in the streets of London, the hurry and bustle of the citizens of that great city, all intent on making money and thinking of little else.

Neither did I like the feeling of being confined to one street or road in the country, where a step over the hedge into a field would land me, perhaps, into a police court for trespassing. I longed for the wide open spaces of the world that I was used to, where I could roam about at my own sweet will armed with a rifle or gun, and shoot what and where I pleased, where obsequious natives were at my beck and call to carry out my slightest wish, and where the wearing of a collar and coat were not *de rigueur* except on very exceptionable occasions. I longed, too, for the society of men of my own stamp who had made their homes in the wilder places of the earth and who were, to me, closer than brothers. How is it possible to explain one's feelings to the stay-at-home Englishman, content to go to his office daily at a fixed hour, return in the evening to potter about his garden in the summer, or play bridge with his friends in winter? He does not know the utter joy of living a carefree life in the jungles of India, the forests of South America, the wide treeless spaces of China, or the bush of Australia, where there are no "houses both sides of the street," or "hedges both

sides of the lane," and he is free to roam where his fancy takes him. So that whenever I had, perforce, to return to my Homeland, I made the earliest possible endeavour to get out of it again, as my readers will no doubt have gathered from this book, as far as it has yet gone.

Having finally discarded my well-worn uniform and become a civilian again, I thought that a short trip to the Continent might not be amiss, and to that end I obtained a passport and travelled to Italy. Seeing something of that delightful country at Venice, Milan, Turin, and other places, I returned to Switzerland and stayed for a short time at Lausanne, and then went on to Paris, a city that I have always looked upon as the only one in Europe in which I would like to make my home. For I had acquired a good knowledge of the French language in the War, and could converse with the citizens (and may I say also with the citizenesses) with fluency, and I felt much more at home in that city than in London.

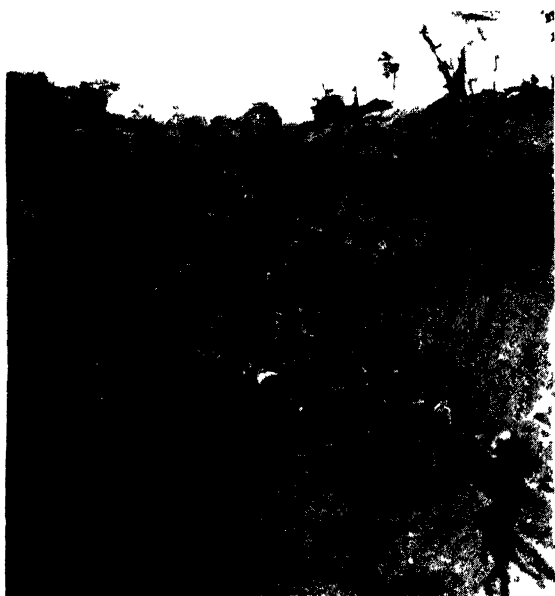
Returning reluctantly to England, I replied to another advertisement in the *Engineer* (a good friend to me) for a District Engineer for railway construction in the Gold Coast Colony, the advertisers being my previous employers in Ceylon, the Crown Agents for the Colonies. Being duly summoned for an interview, I was ordered to see the Medical Adviser, Sir John Rose Bradford, and passing his strict examination with flying colours, was told that I should have to sail on September 3rd to take up my appointment in the "White Man's Grave." In the interval I stayed partly in Norwich, but mostly in London, and visited one or two theatres, but the sight of all those immaculate young men in the chorus dancing and pirouetting about and evidently thoroughly pleased with themselves so disgusted me that theatres have never since appealed to my tastes, and I never visit them. Of course, I have no doubt that many of these young men had done their duty in the War, and that being so, I



THE HARBOUR AT SCONDIL



SCONDIL TOWN NATIVE QUARTER



HUMAN ANIS IN A RAILWAY CUTTING



IRLI TRUNKS IN COOMASSIE N.W. STATION
(Note steps cut for using jack)

could not understand their mentality in returning to the artificial life of the stage when countries like Australia or Canada were shouting for them to come out and open up those thousands of acres of fertile land lying ready for them. Every man to his taste, however, and a stage career is not mine.

The remainder of my time in England was employed in getting civilian uniforms made, collecting other kit, and then joining the Elder Dempster steamer *Windhoek* at Tilbury Docks. I left England again for twelve months only this time, as the climate of West Africa was supposed to be too deadly for any longer continuous sojourn there. Occupying a cabin with a doctor from one of the gold mines, I was soon enlightened by him as to what to expect, and on his advice I started a practice which I have never since dropped when abroad, and that was to take five grains of quinine every night, as a prophylactic against malaria.

As we proceeded southwards it became steadily hotter and hotter, until at Freetown, Sierra Leone, I felt that I had got back into my proper sphere once more, i.e. the tropics. Our ship lay so far out that I did not go ashore, but in any case I was told that there was little to see, and I obtained a very good photograph from the deck. On September 17th we reached Secondee, the first port of entry to the Gold Coast Colony, and here I got off. Getting off, however, was a difficult matter. There was no harbour there then, and disembarkation of passengers was effected in surf boats paddled by Kroo boys. A heavy surf and large rollers are a feature of the coast here, and in order to get into the surf boats passengers three or four at a time are lowered over the side in a "mammy," or bosun's chair, by the ship's winch. If carefully done there is little discomfort, but if the lowering takes place at the same time as the surf boat is rising on the swell, then the passenger is lucky to get off with no broken

bones. All went well with me, however, as it usually does, and I was landed high and dry on the beach and set foot in West Africa for the first time. An Agent of the Chief Resident Engineer at Coomassie met me and another engineer, and informed us that he had fixed up rooms for us in the only hotel, but that the food being so bad the General Manager had asked us to take our meals with him. Whilst the baggage was being unloaded I took a look round the town and was not much impressed with it. It appeared to me that the British, having been over a hundred years in occupation of that coast, might have done something for the comfort of the natives for one thing. I visited the native quarters first, and most of their houses appeared to be constructed of flattened-out four-gallon paraffin oil tins, both as to sides and roofs, and must have been as hot as a furnace inside.

The whole town, European and native alike, presented a vista of corrugated iron and ramshackle buildings, the streets being thrown down without any idea of town planning or ornamentation. The station was mostly of wood and as forlorn as the rest. I am not very squeamish, but that hotel really was the utmost limit of what discomfort can be. Bare of furniture, whitewashed, and with an unprotected corrugated iron roof, one almost had to sleep in a sun helmet, so hot was it, and I spent as much of my time as I could in the Club whilst waiting for the arrival of my new Chief from Coomassie.

The usual calls on officials had to be made, and I was astonished to hear that most of the natives spoke English after a fashion. For instance, at one house at which I called the boy informed me that "Master no lib sa." I took this to mean that he was dead, and went on to the next house. I received the same reply here, too, and wondered if they were *all* dead. At the third house, however, the answer to my question was varied into "Master lib for die sa," and I then discovered that the last one's master was dead

and the other two had gone to his funeral. Going to see the General Manager, I found that he lived close to me in Norfolk, and on the occasion when I had been driving a steam roller in his village I had been invited, dirty clothes and all, to lunch with his father. Again, his deputy had been a pupil just after me on the railway at Melton Constable. I seemed to have fallen amongst friends, especially as the Club Secretary had been at the Grammar School in Norwich also. A second-class passenger on the *Windhoek*, and getting off for service on the railways, was the Quartermaster-Sergeant-Major of the 268th Company R.E. at Bordon, who had gone with me to serve in France in 1916. Curious coincidences, but more were to follow.

Secondee is the terminus of the main line running from the coast to Coomassie, the capital of Ashanti, 167 miles away due north. The so-called harbour is rapidly silting up, and only barges drawing six feet of water can get alongside the wharf, upon which were steam cranes installed for unloading them into railway wagons. The principal exports from the Gold Coast and Ashanti are cocoa, gold, mahogany and other timber, manganese ore and palm oil. The imports are motor cars, Manchester goods, paraffin oil, locomotives, rails and steel sleepers, machinery for the mines, coal in large quantities and many other goods. The town, as to the European Reservation, is picturesquely built on several low gravel hills of a reddish colour, whilst the native quarters are on the low ground near the shore.

Fort Orange, an old Dutch building, dominates the town, and is used as a lighthouse, signal station and gaol. The natives varied from the humble loin-clothed coolie to the clerk clad in the latest fashion clothes from Savile Row, with patent leather shoes, gloves, stick and bowler. The women varied as much as the men, some wearing nothing but a string of beads above their waists, others in

European clothes and hats trying to look comfortable and unconcerned in high-heeled shoes and silk stockings. If the native only knew how much nicer he or she looks in their own garments there would not be so much aping of their European masters as there is in West Africa. In common with all African natives, with few exceptions, they have the most excellent set of teeth, which they seize every opportunity of cleaning. For this purpose a special stick is cut from the bush and frayed at the end ; with this they are to be seen constantly rubbing their gums and teeth and no dentrifice is used. Sanitary duties, laundry work, boot repairing, etc., are all done by prisoners at a reasonable charge.

The climate I found to be excessively trying and very humid, and one is in a profuse perspiration all day and generally all night, too.

When the Chief Resident Engineer arrived he decided that I was to be in charge of construction and the other District Engineer to go on survey work. By this choice I got much the best end of the stick, because surveying in that dense impenetrable bush must have been very trying indeed, especially as the topography looked difficult, and there were no large rivers to give one an indication of the drainage, a very essential fact to know in railway location. At 6.30 next morning Colonel Graham and myself started off in his coach to cover the 167 miles to Coomassie, the journey taking no less than 11½ hours, mainly on account of the many small stations, at which long halts were made. Except at the stations the line ran through dense forest and never varied in this particular for the whole 167 miles. Tarkwa was the first important station, and here were the gold mines of that name.

Many Europeans met the train, and hundreds of natives, the latter out of pure curiosity, the former mainly on business. A branch line, 15 miles long, went off here

to the west to Prestea, where was another gold mine. Passing other gold mining stations, notably Abosso and Abbontiakoon, we crossed the boundary, the Ofin river, 100 miles from the coast at Dunkwa, and were now in Ashanti. At Obuassi station were the headquarters of that very flourishing concern the Ashanti Gold Mining Corporation, and many Europeans were employed there. Bekwai came next before Coomassie, notable only because its Chief remained loyal to us during the Ashanti Rebellion of 1900 and materially helped Governor Hodgson to escape.

Reaching Coomassie just as it was getting dark at 6 p.m. nothing much could be seen of it, and we drove in the ubiquitous Ford car to the old Basle Mission House, where Colonel Graham had established his headquarters.

Coomassie, where I was destined to reside for the next twelve months, is a very pretty town, the main feature being the walled and loopholed fort inside which is the residence of the Chief Commissioner for Ashanti. Fronting it is a large grass-covered recreation ground of which more anon. Other Europeans, not employed by Government, lived over their banks, shops and places of business in the town, whilst the Government officials resided in well-built double-stoned bungalows on the Reservation, a hill a mile or so away from the town. Near the fort were the lines of the Gold Coast Regiment, the officers' quarters and mess, the gaol, the Government offices, and the European and native hospitals, and doctors' and nurses' quarters. The native quarter was situated out of sight below the hill. The ubiquitous "Flame of the Forest" tree lined the main roads, and when in flower added great beauty to the place.

The Government were then building a new railway from Coomassie south-eastwards to connect up with the line from Tafo to Accra, the administrative capital, and

my duties were to take over charge of eighty miles of this new work from the present District Engineer, who was leaving as he could not hit it off with Colonel Graham. I found that he, a man of 62, was living in great discomfort in a bush hut in the garden of the Mission, and that the Storekeeper Accountant had a similar dwelling near him.

There appeared to be plenty of room in the building itself, and my opinion of the Chief dropped considerably when I saw the uncomfortable way in which he allowed his men to live. For the next week or so I travelled with Weir over the works and met the Assistant Engineers who would be under me. I was much surprised to see how little work had been done, and that in patches all over the place. Not a rail had been laid or a bridge started, and large cuttings close to the new Coomassie station were still untouched, so that materials for new bridges would have to be very expensively transported to the sites by lorry and not by rail. I determined to remedy all this at once and set to work with feverish energy. So much so, that after a long day on the line I would spend up to one o'clock in the morning in the drawing office making plans of bridges and culverts. We had no draughtsman and every bridge built was designed by me. I had excellent Assistant Engineers, all chafing for something to do, and for the next few months they were very fully occupied, as were the Foremen and Inspectors of Works. Williams, my late Sergeant-Major, started with the plate-laying, and I soon found that, excellent though he had been as a Quartermaster, he knew little about laying rails and he was given a storekeeper's job instead.

In the intervals of work, I found time to make my duty calls upon the Chief Commissioner, the Mess, and upon other officials, including the Provincial Medical Officer. In him I found another old Norvicensian, and

later on when playing tennis at the M.O.H.'s bungalow I met a forest officer from India who had been in the Mounted Rifles with me there. So there were five men I had known previously, and I wondered why the Gold Coast should have been selected as our rendezvous. The Provincial Medical Officer, by the way, was elder brother to the man I had met in the boarding house in St. George's Terrace, Perth, Western Australia. The world is not so very large after all. On Sundays we played tennis, either on our hard court at the Mission or at other people's bungalows, but it was soon discovered from Harper, the P.M.O., that I was a cricketer of sorts, and I was, thereafter, roped in to play the game every Saturday and Sunday afternoon. The last time I had played cricket was so long ago that I could not remember it, but in spite of that my old skill as a left-handed bowler came back to me, and on occasion my slogging would be of use to my side.

The matches we played were: Officials *v.* Non-Officials, Old Coasters *v.* Young Coasters, Married *v.* Single, and occasionally a team led by Cozens Hardy, the General Manager, would come up from Secondee for a match. I eventually became so keen that I brought all my assistants in on several week-ends and was thus able to raise quite a good eleven against all comers.

I had gone out to the Gold Coast as a District Engineer at a salary of £800 per annum with certain allowances. At the end of three months Colonel Graham decided to reorganize the staff, and I found myself one of three others promoted to Engineer-in-Charge, my salary being raised to £1,050 plus the allowances. I used to travel about on a Triumph motor bicycle with side-car, but later on I bought myself a Dodge car, and this I could use to carry one or two assistants as well as myself. Those were very strenuous days indeed, out in a burning sun all day and hard office work at night, but the line progressed, bridges

were built with great speed, the rails kept up to them supplying materials, and far ahead contractors were clearing the right of way, grubbing up enormous tree roots, and generally preparing to let the iron horse gallop over tracks where he had never been seen or heard of before.

It is not to be supposed that even I, who have always had an iron constitution and never indulged in liquor, could stand this strain long in such a climate without being ill, and ill I was on several occasions with malaria, septic sores, boils and other things inseparable from the Tropics, and Harper the P.M.O. and his devoted nurses would haul me into hospital and fix me up.

Christmas that year all we railway officers dined together in the Mission House at Coomassie, the General Manager joining us, and afterwards he, Colonel Graham and I adjourned to the Chief Commissioner's house to finish up a very enjoyable evening. That night I was informed that on Colonel Graham's departure on leave in March I was to be Acting Chief Resident Engineer for those six months he would be away, though there were two men senior to me who should have been preferred.

I was at this time a *persona grata* with the C.O., Colonel Rose of the Regiment, and his twenty or so officers, and I spent a good deal of time at the Mess. In addition the Colonel lent me a vacant bungalow on the Reservation, and I moved into it at once, driving daily to the works and office in the Dodge.

Before Colonel Graham went on leave he took me with him over the whole of the new works, 123 miles of construction and 167 miles of realignment of the existing railway, preparatory to handing them over to my charge. Now, in order to understand the tragedy which follows it is necessary to make the position quite clear. Colonel Graham had a European Office Assistant who dealt with all correspondence, accounts, etc., the native clerks not

being capable of understanding these duties. The Engineer-in-Charge at the Tafo end of the line was an experienced man and to be thoroughly trusted in his dealing with the Greek, Italian and other Contractors, and could be safely left to see that no over-expenditure was incurred in his division. Contractors were paid by the Engineer-in-Charge, the cheque for the amount due being signed by him and countersigned by the Storekeeper Accountant. This was the same procedure on my division.

The vouchers, when paid, were first sent to the Chief Railway Accountant in Secondee and audited, after which they were sent to the C.R.E. at Coomassie, so that by this procedure the money had been paid to the Contractors before the C.R.E. ever saw the vouchers or could check the expenditure. This pernicious system, or rather lack of any system at all, was open to great abuse, in that a dishonest Engineer, were he so minded, could compound with a Contractor to pay him very much more than was his due and pocket the proceeds, holding up the vouchers for as long as he liked. When Colonel Graham went on leave in March he took with him his office assistant, the reliable Engineer at Tafo having gone a month or so before, and been replaced with a new man from England.

Previous to my taking over charge, however, one incident occurred in Coomassie which threw a gloom over the whole place. One of my assistants had come in on his motor bicycle about 5 p.m. to see me, and on his return he was run over by a very heavy motor lorry laden with bags of cocoa beans, and driven by a native. Taken to hospital with all speed, I went to see him, but found him completely unconscious and badly injured, so much so that he died that night and was, at my request, given a military funeral the next evening. The sequel to this was that his mother in England wrote to me and

requested that his body should be sent home to be buried in the family vault, and this was done after an interval of a year.

Colonel Graham went on leave and I remained in sole charge of all those miles of work. In inspecting the farther end of the construction I would go by car when the roads and bridges were in a good condition to the foot of the Kwahu Escarpment. A long and tedious climb over rocks brought me to the top of this cliff, then I had a three miles' walk and a corresponding descent on the other side, where a car would meet me and take me to the works. When it was impossible on account of the rains to go by car, I had to go by train to Secondee, catch a steamer there to Accra, and travel up that line to Tafo, and as steamers only ran once a fortnight this visit involved that amount of absence from my headquarters. Consequently I had to trust my representative at that end to be honest, and I was not empowered to alter the system of contractors' payments in my acting capacity.

So things went on, hard work, spells in hospital, late nights making plans, correspondence with the General Manager, difficulties with the incompetent native clerks, and still worse trouble with drunken Assistant Engineers, as well as all my own work as Engineer-in-Charge of eighty miles of work to look after. I made many visits to the works of realignment on the existing line, but my Engineer-in-Charge there was thoroughly honest and reliable and gave me no anxiety. The only relief I had was on Sundays, either playing cricket with the regimental band in attendance, trips to the sacred lake Busumtwe, and once into the Northern Territories at Ejura.

I had little time to accept the many invitations to dinners and dances which were showered upon me. Some week-ends I spent with the General Manager of the mines at Tarkwa, and Cozens Hardy always put me up

in Secoundee. During my regime as Acting Chief Engineer, and whilst I was in hospital, a London film outfit came to Coomassie and asked my permission to make a film of the railway. I arranged for them to have an open truck placed in front of an engine, and in the care of my second in command they took some films of bridges, etc. On their return they took a "still" of me sitting in a group of nurses and two doctors, and I thought no more about the matter.

Our labour at Coomassie was imported from the North, some from French territory, and all these men and women had to pass the doctors before being handed over to me for distribution to the works, and I had to see that they were properly fed, housed and clothed. A word of the natives amongst whom I dwelt may be of interest. The history of Ashanti has revealed the extremely warlike nature of the inhabitants, and they have always given a very good account of themselves in the past in many fierce battles against British and other foes. They had a properly organized army under a Commander-in-Chief, and excelled at bush fighting. As late as 1900 they broke out in rebellion, besieged the Fort for six weeks, and could be quelled by nothing less than two thousand British soldiers and many thousand native levies under Sir James Willcocks. Now, however, they have apparently lost all those qualities, and have developed into a lazy gin-drinking, money-grubbing people content to loaf about their villages and make their women work for them.

They are not recruited into the West African Regiments, but had they been so they would, I think, have given a very good account of themselves in the East African campaign against the German Askaris. Their King Prempeh was exiled to the Seychelles Islands before 1900, and the Golden Stool, their emblem of sovereignty and a great fetish, had been buried. It was, however,

accidentally discovered during the making of a new road in 1921.

About ten new bungalows for the railway staff were also being built, so that it will be seen that my hands were full and I had little time for any amusements.

Towards the end of my first year the Governor of the Gold Coast, Sir Frederick Guggisberg, paid a visit to Coomassie, and a special train was arranged to take him over the new line. Dining with him that evening, in company with Lady Guggisberg (Decima Moore), he was pleased to compliment me on the great progress the line had made since I took over charge. In that year twenty-five miles of line had been laid and twenty bridges built at my end, whilst fifteen miles of line and many culverts had been done at the other end. Clearing of the enormous trees was practically completed right through, so I had every reason to be satisfied with the progress made when Colonel Graham returned, which he did in September.

In September, 1921, I went home thoroughly worn out with the work and climate in Ashanti, prepared to take a long rest of four months preparatory to spending another twelve months there. I had every reason to feel that I deserved it. My first duty was to report my arrival to the Crown Agents, after which General Guggisberg sent for me and told me that a film called *The White Man's Grave* was being produced at the Alhambra Theatre and he would be much obliged if I would go and see it and make a report upon it, as he strongly objected to the title. Accordingly I went and saw the producer, explaining to him my mission. I saw also the Director who had visited me in hospital. Giving me the best seat in the house free, I saw all my work of the last twelve months reproduced on the screen, and though the "house" was not full by any means, those people that were there seemed to appreciate thoroughly the difficulties of railway construction with untrained natives, as explained on the

captions. Unfortunately great stress was laid on the unhealthiness of the climate, and the film opened with a view of the cemetery at Coomassie, the orchestra playing the "Land of Hope and Glory" to add to the cheerfulness. I sent in as favourable a report as I could, but the film was withdrawn a week or so after, though if the title had been changed it might have had a longer run.

Taking a house in Lee Bay, North Devon, and buying a car I toured all that part of England and spent that Christmas with my sister in Norwich, the first with my relatives since 1908, after which I returned to another little cottage I had taken at Pentewan, near St. Austell, in Cornwall. Here I played golf every day and got the postmistress to make me her celebrated Cornish pasties to eat on the links and save the trouble of going home for lunch. And it was then, whilst in the midst of my enjoyment, that the blow fell, in the form of a letter from Colonel Graham informing me, in so many words, that he did not require my services any longer, and giving no explanation whatever. Cozens Hardy happened to be in England at that time and I met him in London. He appeared to be as much bewildered as I was, but together we went to St. James' and saw Sir Frederick Guggisberg. From him I learnt that the estimate for clearing the forest had been greatly exceeded, and that the Secretary of State for the Colonies had ordered an enquiry to be held in the matter. This news effectively spoilt the remainder of my leave, and I was puzzling my brain to try and discover if I were to blame. Returning to Exeter, where my brother was playing in *Sinbad the Sailor*, I became very ill and had to return to Norwich to be nursed by my mother and sister.

Again I saw the Governor, who told me that he had always been thoroughly satisfied with my work and that he thought everything could be explained. Returning with this assurance to West Africa I was instructed to

proceed to Accra, and arriving there stayed with my friend the Coomassie P.M.O., who had been transferred to that place.

All the pay vouchers signed by the Engineer-in-Charge at Tafo were passed over to me for examination, and not one of them had been through my hands before. Consequently, I was astounded to read of the amounts this man had paid to the Contractors for felling trees, and I saw at once that my only defence could be the system under which money could be paid out by my subordinate without any reference to me.

Everyone in Accra who talked to me about the matter sympathized with me, many saying they hoped I should win against Graham in the forthcoming enquiry. Some said that he was jealous of the progress I had made and my popularity with everyone in Coomassie, but whatever they said, there was the fact that a large sum of money had been expended and that I was technically responsible. Returning to Secondee I travelled up to Coomassie, but saw none of my former Assistants, whom I suppose had been instructed not to see me. Yet I had promoted two of them to District Engineer's rank, had appointed two more at the Crown Agent's Office in London on my return home, and all had something for which to thank me during my regime as Chief Resident Engineer.

The enquiry was duly held by the Chief of the Survey Department assisted by an accountant, and no railway man was on the board, as Colonel Graham had objected to Cozens Hardy as being a personal friend of mine. Moreover, a number of witnesses were examined in my absence, and I never saw any copies of their evidence and had no means of knowing what they had said. When my turn came I was told that I had been badly let down by my Engineer-in-Charge at Tafo. I was told also that my zeal and energy had outrun my discretion, and that

it was impossible for any one man to have effectively supervised all the work I had put in hand. With that I returned to Secondee and awaited the Governor's decision.

The Chief Engineer of the open line was also in trouble. A concrete retaining wall he had built for the loading of ore had overturned, killing one man and severely damaging a new steam crane belonging to the mines. So an enquiry was held in his case also.

Whilst waiting in Secondee, I spent a week-end at Tarquah, and had a ground nut soup lunch made in the native style, and very delicious it was.

When H.E. the Governor arrived the Chief Engineer was ushered into the Presence by Cozens Hardy and received the sentence of being reduced to the rank of District Engineer. As he was on the pensioned staff this was a serious loss to him. Then my turn came, and I remember well the Governor putting his arm on my shoulder and telling me that he had no alternative but to dismiss me, at the same time saying that he thoroughly appreciated that I was being made the scapegoat for a most pernicious system of accounting, and that he had already given orders for the whole system to be changed. This was a poor consolation to me, however, and saying "Good-bye" to him, I left the Presence with a feeling that my engineering career was now finished, that it was a mistake to be enthusiastic and work too hard, and that it is the cautious, careful plodder who succeeds, and I made up my mind then that never again would I work so hard for any Government or private concern. In consideration for all the good work I had done my salary was paid right up to the time I should arrive in England and a first class passage was given to me. But in my then state to remain in Secondee and wait for the mail ship was intolerable, so I boarded the first cargo steamer leaving the harbour that day, a Dutch ship named the

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Drechtstroom, bound for Amsterdam, and turned my back on that country which I thought then, and still think, had treated me so badly. In the year of my first tour there I had risen from District Engineer at £800 a year to Acting Chief Resident Engineer at £1,450 per annum, the most I had ever earned, and I had some consolation in knowing that I had left a few monuments behind me in the shape of fifteen or twenty bridges which will remain when I and Graham are dust. Guggisberg is dead, but against him I have nothing to say.

My ship called at Monrovia, the capital of the negro Republic of Liberia, at Dakar, and Conakry in French Senegambia, and at Santa Cruz de la Teneriffe, in the Canary, or Fortunate Islands, where I got off, but not without experiencing some trouble with the Spanish authorities about my passport, which was not *viséd* for that place. Spending a delightful week in Teneriffe I embarked on the Yeoward Line's *Aguila*, carrying a cargo of bananas and tomatoes and eighty of the most peculiar passengers with whom I have ever travelled. Most of these people were on a "cruise," at that time not nearly so popular as they are now, and all came from the North of England, so that I heard more about the wool trade of Bradford and the cotton trade of Manchester than it has ever been my lot to hear before or since.

In St. George's Channel that May we ran into a blanket of fog and remained hove to for three days, during which time the siren kept up its melancholy hooting. The *Egypt* was sunk in collision off Ushant, and our Captain could only tell his whereabouts by the samples of sea bottom brought up in the tallow of his deep sea lead. However, we picked up the Liverpool pilot and steamed up the Mersey, all passengers being allowed to land on arrival except myself, the stranger in their midst, my passport being carefully examined before I was allowed to leave the ship.



AN ASHANTI COTTON TENT



POLICE CORPORAL AND WILL COMASSIE



WHERE STANLEY FOUND LIVINGSTON UJIJI 1872



THE RAILWAY DERAILED

CHAPTER XVII

ENGLAND AND TANGANYIKA

OF my feelings, when I returned again to England after such a short absence, it is difficult to write. The absolutely unexpected blow to my professional career and to my pride was so overwhelming that for a time I seriously thought of ending my life.

The Governor, on bidding me farewell in Seccondee, had said, "You must grit your teeth and bear up," a thing very easy to be said, but most difficult indeed to carry out. Here was I, forty-four and a half years of age, with all the bottom knocked out of my life. I saw little prospect of getting any further employment with that accusation of extravagance hanging over my head, and yet, all the time I felt convinced in my own mind that I was not to blame for the overspending of that money. I put myself in Graham's place and asked myself what he or, indeed, anyone else could have done to prevent a dishonest Engineer from swindling his employers under the system of payments then in force on the construction. My leaving Certificate from the General Manager stated that the cause for leaving was "Extravagance in payments for tree felling," but I had made none of these payments myself and under the system had not been able to see what my Engineer-in-Charge was paying until I got back from my leave. However, it is no good harping upon the subject. I had been made the scapegoat of a rotten system and had to grin and bear it.

I went down to Norfolk again and remained there for months, seeing nobody and doing nothing except send in

letters to the Crown Agents asking for another appointment, only to receive the stereotyped reply that my application had been noted and would be considered with others if, and when, a vacancy occurred. With this I had to be content. Even my great standby, the *Engineer*, failed me. Everyone was out to economize in those days, little railway work was being done abroad, and for those few appointments which I saw advertised, my age precluded my being successful. I was glad, however, to notice that in most of them service in some branch or other of His Majesty's Forces in the late War was a *sine qua non* for success.

The harbour at Takoradi on the Gold Coast had been started that year of 1922, and for a time I thought that the Hon. Angus McDonnell, partner in the firm of Messrs. Stewart and McDonnell, the contractors, would have offered me a job, but it fell through, though both the Governor and the General Manager recommended me for it.

Nothing of any moment occurred that year of 1922 worth recording here, and 1923 opened with no better prospects. During the summer I went and stayed at Winchelsea and played golf at Rye, and for a time lived upon an old sailing ship fitted with auxiliary Diesel engines lying in the river at Brundall, in Norfolk. I had few friends in England, and the men I knew there were all engaged in their businesses, so that my life was an exceedingly lonely one and I began to lose all hope.

In September of 1923, I received a letter from the Under-Secretary of State, Colonial Office, in which it was stated, amongst other things: "In your anxiety to accelerate the work, however, you increased the pace of construction to such an extent that the volume of work became too great both for the construction staff to carry out and also for you to control efficiently on the financial side"; and again: "another cause may also have been that

at the time you were employed as Acting Chief Resident Engineer a divided system of control over Railway Construction existed in the Gold Coast. Your keenness and energy and your capabilities as an Engineer were recognised by all concerned," etc. It was some consolation to read that my abilities were recognised and that the system was seen to have been at fault. Knowing that a copy of this letter must have been sent to the Crown Agents, I applied to them again for an appointment in the Tanganyika Territory, which at that time was advertised, and on this occasion was successful. True, the salary was only £500 a year with certain allowances, but I could not afford to turn my nose up at it.

Being interviewed by the General Manager of the Tanganyika Railways, I was informed that I was to be sent out there to rebuild a large steel cantilever bridge which had been blown up by the retreating Germans during the War in East Africa, and that the steel-work was being built by the Horseley Bridge Company at Dudley, and I had better go and inspect it before it was shipped out. All plans were furnished to me by the Crown Agents, and fortified with these I went to Birmingham. Next day I met the Crown Agents District Inspector and, after a good lunch with members of the firm, inspected the steel work which was erected in their yard.

In November, I sailed from Tilbury in the British India ship *Neuralia* for Dar-es-Salaam. As usual with those ships no stop was made until Port Said was reached, and we had a fine passage the whole way. At Port Said I renewed my acquaintance with Mr. Mouchli, of Simon Artz, and had a look round some of the old places I had known so well in the War.

Port Sudan, half-way down the Red Sea, had become a new port of call for steamers, and from it all the cotton produced in the Sudan is shipped. It is a sandy, treeless

waste with a burning sun and a poor water supply. After Aden, instead of going straight on, as I had previously done, we made a sharp right-handed turn and, rounding Cape Guardafui, followed the African coast southwards for five days, until we reached the harbour at Kilindini, the port of entry to Kenya Colony and the Uganda Protectorate. Here great works were in progress, a long concrete wall being erected for the wharf, enormous double-storeyed goods sheds, sidings, electric cranes, etc. Messrs. Paulings were the contractors, and amongst the engineers engaged I found an old friend who had been in the 114th Railway Company in France with me.

The ship staying three days, I was able to go round the works, lunch and dine with my friend and his Chief, Colonel Newell, and get my first impressions of East Africa. The outstanding feature of Mombasa is the ancient Portuguese Fort commanding the old harbour and now being used as a gaol. Standing well over a hundred feet high it is surrounded on three sides by a moat, waterless, however, in which are the municipal gardens. Mombasa itself is an island, and connection to the mainland is by ferry boats, and for the railway by a long steel bridge. Excellent golf links of nine holes are constructed alongside the entrance to the harbour. Tudor House, a country inn two or three miles out, is the resort *par excellence* in the evenings, and here boating and swimming facilities are provided, and also a most succulent drink made of coco-nut milk and gin, called "Madafu," which is always prepared in large quantities when news is received of the expected arrival of a tourist steamer.

Our next call was at Tanga, where the harbour facilities were bad and none of us went ashore. At Zanzibar we stayed a few hours at night. This is one of the oldest settlements in East Africa, and has practically the monopoly of cloves which grow all over the island. The streets are so narrow that a car can only just squeeze

through, foot passengers having to stand in doorways to let it pass. The Sultan lives in a not very imposing palace and is the ruler of the place, though there is a British Resident who watches over him. The wreck of H.M.S. *Pegasus*, which was caught napping by the *Königsberg* in the War, was there as a reminder of that disaster to British arms. Forty miles due south from Zanzibar we picked up a pilot and entered the narrow twisting entrance to the beautiful land-locked harbour of Dar-es-Salaam, the Haven of Peace, and I had nearly circum-navigated Africa. At the harbour entrance is the ruin of a German floating dock which had been sunk to impede shipping, and had since been dragged on one side.

From the sea the magnificent new Government House, painted white and of Moorish style architecture, is an outstanding feature, whilst the many red-roofed houses showing fitfully amongst the thousands of waving coco-nut palms made up a fairyland of beauty very different from what one had been used to on the West Coast. Across the harbour were the barracks, officers' quarters and mess of the 6th Battalion the King's African Rifles, and farther on still the Government Dockyard. The harbour extended several miles inland, and in it were several wrecked ships, mostly German, which had come to an untimely end during hostilities.

Landing, I was taken by an employe of the railway to the Burger Hotel, in Acacia Avenue, the main business street of the town, and told to report to the Chief Engineer next morning. Taking a rickshaw that evening I was pulled round the European residential quarters near the sea, and passing Government House came to the large European hospital on the sea front. What amazed me most was that along this front, the most suitable site one would imagine to build residences, the Germans had allowed the natives and Indians to put their cemeteries, and even, farther along, a crematorium for the Hindoos.

Consequently, most of the European houses are built away from the sea and are much hotter than they need be. The native quarter is well away from the sea, and though constructed in neat lines the houses are many of them of the same old four-gallon paraffin oil tins as in Secondee, but have thatched roofs. A few motor cars appeared in the streets, but as, at that time, there was no road leading out into the country from Dar-es-Salaam their use was confined to driving along the sea front as far as Oyster Bay, seven miles out, when the occupants either bathed or sat in the car gazing out to sea until dark at 6.15, when they returned home to have the usual "sundowner," dinner and bed.

The language spoken by the natives in Tanganyika is mostly *Kiswahili*, and I found that I was required to learn this and pass an examination in it later. I already knew Hindustani and French well, had a working knowledge of Spanish and Cantonese, and now found that a fifth tongue was to be added to my vocabulary. Without it, I realized that I should not be much good to my employers, so I bought the necessary books and began in my spare time to study it.

Calling upon the Chief Engineer next morning I found him to be a real old English gentleman of the best type, and took a great liking to him at once. After a long conversation he referred me to the District Engineer, a very different specimen, who arranged to go up with me to Ngerengere station, a hundred miles away on the line, to inspect the bridge that was to be rebuilt. Arrived there, we trolleyed the few miles to the bridge, passing *en route* another one that required strengthening. The larger bridge, the Lukonde, was over hundred yards long. It was in a terrible mess when I first saw it, but had been in a much worse one when originally destroyed. The Germans had put a train in the middle of the main span and left it there. From a station about eight miles away



THE DESTRUCTION OF WAR — A RAILWAY VIADUCT BLOWN UP



FIRST STEPS TO REBUILD LI KONDI VIADUCT

they had released another train which, running down the steep grade by momentum, had hit the standing one, with the consequence that both trains and the bridge were precipitated into the gorge below. Much of the rolling stock, very much damaged, had been hauled up and repaired, whilst some tinkering had been going on at the bridge spasmodically for several years, but when I saw it first it was unsafe for even a trolley to pass over. In the meanwhile trains were running round it on a diversion.

As the material for the Lukonde bridge had not arrived from England I decided to start work on the other one and pitched my tent on the top of a rock cutting overlooking the line. There was no water in the vicinity, so my supply and that of my Indian workmen was brought by train and poured into an iron tank fixed low down on the side of the line. The Indians lived at the bottom of the cutting nearer the bridge. The first night I slept in that tent I heard noises as of something lapping the water in my tank, and getting up, it being a bright moonlight night, saw two lions, their fore paws on the edge of the tank, drinking away as if the water had been specially put there for them. I had only a single-barrelled Greener rifle then, and would not take the risk of shooting at them, though my cook and boy, who were shivering with fright, begged me to do so. There was not much sleep for any of us after that, and the next day I had a thorn "boma," or fence, put round all the tents and bush huts of the servants. The next night it rained heavily and I heard no untoward occurrence, but my boy in bringing in my early tea said that there had been a lion walking round my tent during the night. Sure enough there were its "pugs," or footmarks, in the mud close to the front flaps, which I had not closed, and never did thereafter on account of the heat. This was a startling introduction to the fauna of East Africa with a vengeance,

but when work started on the bridge and the noise of riveting continued from 7 a.m. to 3.30 p.m. the lions did not return, though they had not minded the trains in the least.

Christmas was now upon us, and I spent it with an Eurasian Permanent Way Inspector and his English wife at Ngerengere, three other men from the Rosehaugh Sisal Plantation being there also. The small child of my host had her Christmas tree, the temperature outside being about 95° in the shade. Whilst the rains were on I lived above the station at Ngerengere, trolleying every day to the work, but in March I moved to the Lukonde bridge and pitched my two tents on a high hill overlooking the works. I had at that time eighteen Indian fitters, but these men wanted so much pay and food in addition, that I decided to dispense with all except the Mohammedan blacksmith and carry out the reconstruction with Africans only.

A Scotch bridge erector from a large firm in Glasgow now came out from England and built his camp on the other side of the gorge to me. Neither he nor I knew anything of the language, and there are two words in it very much alike but with a completely opposite meaning. *Funga* means to fix a thing, and *Fungua* means to let it go, and the muddles we got into with these two words would have been amusing if they might not, perhaps, have led to a serious accident. However, the natives had the good sense to know what was meant and did not let go a rope when they were meant to tighten it. We had no winches, pulley blocks, jacks, or any necessary tool, and hardly any timber for packings, everything had to be improvised, and made the job last much longer than it should have done. From beginning to end we had endless trouble with the labour. They did not like the food the Government supplied to them and they did not like having to wait a month for their wages, they missed

also their women, and I soon learnt that little work can be got out of an African unless he has his woman with him. For bread, my foreman and I had to stop the mail train and buy it at a shilling a loaf from the restaurant car proprietor, a Greek, for milk we used "Ideal," and for meat, chickens which we kept ourselves.

But somehow our chickens never seemed to lay any eggs, and these had to be bought at twenty for a shilling and take one's chance how many were bad. A leopard entered my fowl house one night and killed every chicken, and thereafter I made an armoured house for them of concrete.

For the first few months the roaring of lions kept me awake. The roaring of a lion in the bush is an awe-inspiring sound, and generally comes from the male. In this way his position can be more or less located, but the female, who does most of the hunting, makes no noise, but lies in wait for the game which her lord and master is driving towards her. After a time, I became used to hearing lions and ceased to have any sleepless nights on that account. But I had many on account of the bridge, and often—lions or no lions—would get up at midnight and with a hurricane lantern walk down to it in my pyjamas and see that everything was all right. These visits generally occurred when a high wind was blowing and I had some doubts of some particular tackle being able to withstand the strain.

I managed to shoot a few bush pig, which the natives, being Mohammedan, would not even bring into camp, and now and then an impala or a hartebeeste. When this occurred great were the rejoicings of the natives, and they would fight like wild beasts for the meat, generally eating it nearly raw.

The work went on, sometimes fast when there was plenty of labour, and sometimes came to a dead stop, but in the autumn of that year, 1924, the steel-work had all

been erected and bolted, the putting in of over 25,000 rivets still remaining to be done.

At Christmas that year I went by train to Kigoma, on Lake Tanganyika, and stayed there two nights in the only hotel, kept, as nearly all of them are, by a Greek. Kigoma is the port for the Belgian Congo on the other side of the lake, and Ujiji, five miles to the north, and which I visited, is the place where Stanley found Livingstone in 1871, the tree under which they met having a suitably inscribed stone underneath it. Halting at Tabora on the way back I stayed with the Superintendent of Police, a fellow passenger on the way out, and met at his house another Norwich school boy in the Superintendent of Education.

In March of 1925 the bridge was ready for opening, and at that time I was in hospital at Dar-es-Salaam with a bad illness, but I insisted on being allowed to join the special train taking up the Acting Chief Engineer to test the bridge preparatory to its opening.

The Chief Engineer had gone home on leave, and the Senior District Engineer was acting for him. This man had been in the employ of the Germans before the War and for a long time during the War. The bridge successfully withstood the most exacting tests and was shortly after opened for traffic, whilst I returned for another week to the hospital. On my discharge I was ordered to proceed to Tabora as Engineer-in-Charge of the construction of the new line from that town to Mwanza, on Lake Victoria Nyanza. At first I lived over the station at Tabora, as the work began there, but when the rails had got as far as eight miles out I went and lived in a delightful little country bungalow belonging to a Greek, who let me have it free of charge.

Tabora, next to Dar-es-Salaam, is the biggest town in Tanganyika, being on the slave trail from Kigoma to Bagamoyo, the old Arab capital. The natives in this

district are the Wanyamwezi, amongst the best of the tribes in East Africa. At Tabora there is a good hotel, kept, of course, by the ubiquitous Greek, a club, two golf courses, and the 2nd Battalion of the King's African Rifles ; so that there was always plenty to do there and much entertaining. I used to give week-end parties to some of the officers in my country bungalow, and two of them had a pit dug near a spring and sat up all night on several occasions hoping for a lion, but without success. To get about my work I had a small Drewry rail car, the engine being a B.S.A. motor cycle one. This went very well for a time, but the constant pounding over the rail joints soon wore holes in the steel tyres and I had to give it up. Then I got a Vauxhall car mounted upon railway wheels, and such was the speed I could get upon it that, being only equipped with the cardan shaft brake, it would not pull up inside two miles, so I had to know where I was. The car was used by General Smuts in the War and was therefore of a rather old pattern. Before I went home on leave I had three more tractors, but all on their last legs. These were a Renault, which gave out with broken back-axle bearings, a Ford with which no one could do anything, and a Siemens Halske which, being German, I handed over to the contractor for his use.

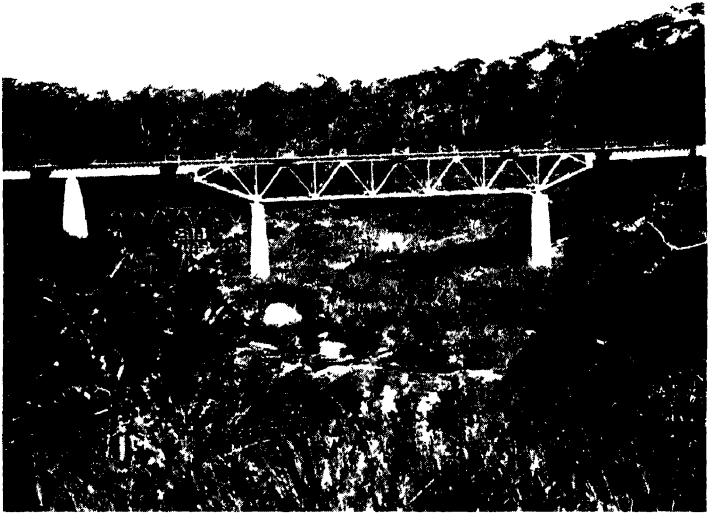
As the rail head advanced so did my camp follow it, and I soon found myself twenty miles away from Tabora and living in a tsetse fly-infested district where no domesticated animal could survive. I bought four young English pigs in Tabora, intending to fatten them up for Christmas, but one and all died after being bitten, although I kept them in a house covered with mosquito netting.

I obtained some excellent shooting on this line, which was completely unspoiled by sportsmen from Tabora. On one occasion I was successful in killing three kongoni,

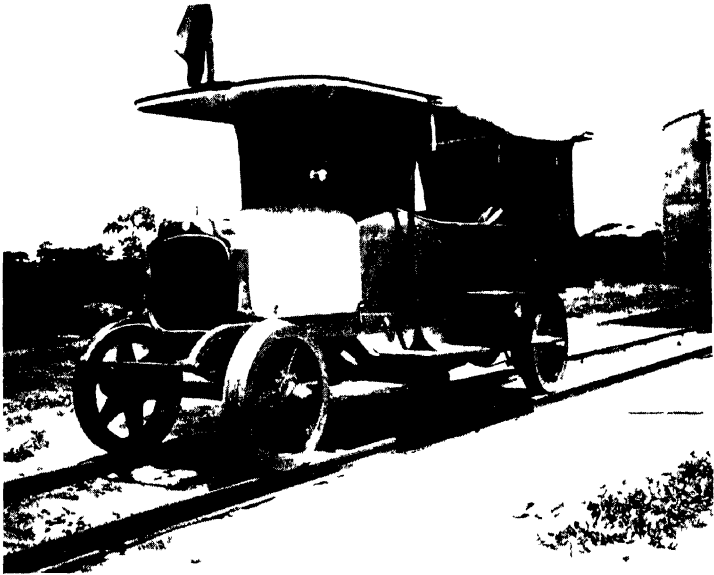
or hartebeeste, with three shots in as many minutes. As I was alone in the Vauxhall I had to hurry to the nearest gang of men to carry them to the line side. I hope my readers will not accuse me of butchery, because it was not so. I had several Europeans under me who had had no *nyama*, or meat, for weeks ; the natives also work much better when fed with meat, and I can assure them that every scrap of those three animals was eaten including the entrails, whilst the skins made sandals for the coolies working on the ballast. But after shooting a zebra late one evening, I made a vow that I would never shoot another, for though the natives will eat the flesh, it is very much like shooting a horse, and besides the skin is of no earthly use to anybody. Eland, impala, a wild dog, duck, partridge, snakes, and wart hogs amongst other things fell to my rifle or gun, and I kept myself and others supplied with meat, but I could not get a lion.

When I moved my camp forty miles away from Tabora to Ipala the lion were so bad that I was provided with a portable corrugated iron hut as a protection from them, though I do not believe that a lion, unless an old one, will ever attack a European just for the love of it. They are amongst the most timid of the African big game, and are just as much frightened of a human being as we of them. I remained on very friendly terms with the Colonel and officers of the K.A.R., and spent many happy evenings in their mess, whilst one or two of them would visit me nearly every week-end.

His Excellency the new Governor of Tanganyika paid a visit to Tabora, and as is usual in Government House or when travelling, His Excellency has a visitors' book put out in a prominent place in which callers write their names. H.E., dressed in worn khaki, was sitting on a third-class seat on Tabora platform talking to me about the line, and though the stand for the book was put out the book was not on it. Whilst we were talking the



THE TURONDI VIADUCT COMPLETED



VAUXHALL TRACTOR USED BY AUTHOR ON TLABORAMWANZA LINE



A SWAHILI PORTER IN HIS SUNDAY BEST
(1 av 208 a month)



NLAR DAR LS SALAAM

Colonel of the K.A.R., minus coat, came up to me and said, "When are they going to put that damned book out." I got up, and feeling most embarrassed, said, "This is His Excellency the Governor, Colonel." Whereupon the latter, blushing furiously, muttered some excuse and fairly fled to his home.

Christmas, 1925, came round as it inevitably will, and I spent mine with my old school mate and the postmaster and his wife in my camp at Ipala, managing to get a turkey to replace the dead pigs and a Crosse & Blackwell tinned plum pudding to follow it. After dinner the Vauxhall took us a joy ride into Tabora in an incredibly short time, and after a few drinks at the Mess we returned to camp and bed.

Shortly after Christmas the rains started and continued practically every day until April. The whole country was under water, and for a month I could not get to see my contractor, though his camp was only four miles away. No bridge work was possible, and much of the new embankments were washed away. Rails and sleepers which were being replaced on the main line by new ones from England were sent to us, but the supply was very irregular and we were often waiting weeks for them, in the meanwhile all work being stopped.

In March, 1926, I moved my camp to Bukene, fifty-five miles away from Tabora, and here I had got clear of the fly-infested bush and was on a wide open plain where countless herds of cattle roamed and the euphorbia tree-surrounded native villages dotted the landscape. Here with my gun in the evenings I would shoot quail, partridge, rabbits, bustard, plovers, and an occasional snipe, whilst a mile or so away was a swamp upon which thousands of duck fed at nights, and, until they got wary, I had many a good bag of them.

That March I suffered by theft the loss of all my original testimonials, and though the District Officer

from Nzega, European and several native detectives came and stayed with me they were never found. As they were in a despatch case the thief may have thought there was money there, as he could have had no possible use for any letters.

It was at Bukene that I very nearly lost my life. Going to bed one evening, having first thoroughly searched the bedclothes, under the pillow, etc., as had become my habit after Assam, I got into bed and a few minutes after felt a violent sting on the broad part of my thigh. Jumping out of bed and shaking my pyjamas a huge scorpion fell onto the floor, and, though suffering agonies, I managed to kill it with the heel of my slipper. After half an hour or so the pain spread all over my body, and I must have fainted with the agony of it, because I found myself lying on the bed and my cook and boy standing over me and asking what was the matter. When told that a scorpion had bitten me they went out into the bush and picked some leaves and roots, these they boiled up in the kitchen and plastered the place bitten with this decoction, affording me some relief, but for twenty-four hours I lay like one dead, I believe. The nearest doctor was fifty-five miles away and could not have reached me under half a day. This is the only time that I have ever been bitten by anything dangerous except perhaps mosquitos.

We had only one accident on the line during construction. It was usual for both our engines to go into Tabora for "wash out" on Saturdays and return on Sunday evenings ready for work. As there were then no signalling or block system arrangements the Traffic Superintendent at Tabora, an old friend from Ceylon, used to send one engine and train away and at an interval of twenty minutes despatch the other. On this occasion the leading train broke down and, as it was quite dark, the second train ran into it and one woman, who was, quite wrongly, sitting on the engine tender, fell off and

was run over and killed. I was brought to the scene of the accident at 3 a.m. and held an enquiry into the matter, being satisfied that the driver of the second engine had been drunk and had not kept a proper look out. Subsequently, the police confirmed my views and put both drivers up for trial. I gave expert evidence at the Court, but the Magistrate took a lenient view and sentenced them to four months each. His Excellency, however, took a still more lenient view and pardoned them both, laying the blame on the system of allowing one train to be in the same section as another at the same time.

After another inspection of the line by His Excellency and Lady Cameron, when we all dined together on the station platform at Bukene, my leave became due. I had then been thirty months in Africa, and no European can stay longer than that without leave. I was due ninety days' leave plus ninety days' return leave, and the time necessarily taken on the voyage out and back, in all eight months, all on full pay and passages paid both ways. Handing over charge to my successor, an Assistant Engineer who had been under me in Ashanti, curiously enough, I left Bukene in my own special train, and changing at Tabora arrived at Dar-es-Salaam. My Chief, who had returned from leave, lent me his house and made me an honorary member of the Club, so that I could while away the hours until my ship arrived.

On May 23rd, 1926, I sailed in the ill-fated Union Castle liner *Guildford Castle*. That was a cheery voyage indeed and one of the most enjoyable I have ever had. Plenty of young people of both sexes who had joined the ship in London and were going round Africa in her, helped us older passengers to forget the heat and worries of Africa and take part in the many games and sports on board which they instituted. As an experienced traveller I was in request to show these young things the sights of Zanzibar, Tanga and Mombasa, and, at Aden, two taxis were

necessary to take us all up to the Tanks. At Port Sudan some horse racing was got up for the benefit of our passengers and those of other ships. It had rained in the morning, or else the course which was of sand had been watered, because, once a horse obtained the lead, no other had any chance of winning because both they and their riders would be blinded by showers of wet sand kicked up by the leader's hooves. The inhabitants were all very serious about it, but to me it seemed cruelty to animals to make them race in that heat and in such heavy sand. One of the lady passengers insisted on being taken out into the desert to a native village, as she wanted some photographs of the Sudanese. Marching into one of the huts I soon saw from the appearance of the occupants that it was a soldiers' brothel, but nothing would please this girl but that I must stand between two of the women to be photographed. I did not, of course, enlighten her as to the place in which she had been. Suez and Port Said were just the same, and we proceeded to Genoa, where I, with several others, landed.

Visiting the Campo Santo again after seventeen years, I found it to be rapidly filling up, and then catching the Rome Express I proceeded to Paris, where I made a stay of a week. On arrival in London I found it cold and raining, stayed one night at the Grosvenor Hotel, and went straight back to Paris next morning, staying there another week and then went home to Norwich. Here I bought a touring 12 h.p. Austin five-seater and in this did 10,000 miles during the four months I was in England.

Taking a country rectory in Norfolk for a time I had some of my Tanganyika friends to stay with me and also some passengers from the ship. That was the year of the great coal strike in England, and I found myself driving to the nearest station and bringing back half a hundredweight to enable my cook to give me and my

guests any food. Had I been in England at the beginning of that year I might have proved useful in driving a locomotive on the railways, but that strike was over when I arrived.

My sister accompanied me on a delightful tour to the Shakespeare country, the Wye Valley, and the Lakes, and I began to think that, after all, England had some charms peculiarly its own. Susan stayed with me during her holidays, she being now a schoolmistress in Kent, and though I asked her to go back with me to Africa she preferred England.

At the end of October, when it began to get cold, I sold the car for £200 and returned to Paris and then went on to Marseilles, where I joined the B.I. ship *Modasa* on December 4th and started my return voyage to Tanganyika.

CHAPTER XVIII

ENGLAND AND TANGANYIKA (*concluded*)

A MISTRAL was raging in the Gulf of Lions, making it very cold in Marseilles, and blowing with such force that the ship was with great difficulty got away from the quay side. On board I found a Police Superintendent who had been with me on the *Neuralia*, and his wife, and several Tanganyika passengers returning from leave, but the majority, as usual, were for Kenya and Uganda. The general atmosphere on a ship outward bound is usually very different to that on one coming home ; on the latter it is said that the passengers have plenty of money but no clothes, and the reverse on the former. However that may be, the *Modasa* was blessed with a dull lot, and they only woke up when crossing the Line.

One solitary German had had the courage to take passage on a British ship for the purpose, he told me, of studying the English at close quarters. The Germans had by this time been allowed to return to Tanganyika, and shiploads of them arrived weekly, much to the delight of the natives, who had found them much better masters than the British. Our solitary German proved to be a very good fellow, entering into all the sports and taking the rather rough treatment meted out to him at the ceremony of crossing the Line with great good humour. He had been an airman in the War, and had no doubt given a good account of himself. Amongst the passengers, also, was a French girl married to an Engineer upon the Railways, and she never tired of telling us " I go to join my 'usband in the ' bushes.' "

For the first time in many voyages I had Christmas on board a ship. The officers did everything they could think of for the enjoyment of the children, of which we had many, and the delight of the little ones with the Christmas tree and presents was worth going a long way to see.

Arrived all well at Dar-es-Salaam, I received orders to proceed to Mwanza, on Lake Victoria Nyanza, to take charge of the new railway from that end. Spending New Year's Day in Dar-es-Salaam, where His Excellency graced the festival at the New Africa Hotel with his presence, I set off for Tabora, arriving there to find that the whole country was flooded again, trains stopped and everything generally disorganized. After waiting ten days in Tabora, during which time I stayed at the Railway Hotel and played golf daily, the line was sufficiently repaired to get a train sixty miles out, but there were still 190 miles to negotiate. Waiting at a river side until the waters had subsided, I proceeded on foot, engaging a number of Wanyamwezi porters for the safari (march) to Shinyanga, where I stayed with the District Officer.

Had I only known it at the time, my tent was pitched on ground containing diamonds, these being discovered some year or so later by an enterprising prospector from South Africa. The rest of the journey was a nightmare of mud, broken-down lorries with Indian drivers, and camping in spirillum tick-infested rest houses, but all journeys come to an end, and we reached Mwanza at last. I ordered my Indian driver to take me to the house of the Provincial Commissioner, whom I knew, as I wanted that official to give me a house. Jumping out of the lorry, which came to a stand on a little hill, I was horrified to see it running backwards out of control, and eventually it ran into a ditch and turned turtle, all my baggage, guns, crockery, boy and his wife being underneath it. The boy had to go to hospital for a week, his

wife escaped unhurt, and the driver got a month in gaol for not having efficient brakes. This I looked upon as a bad omen, and so, later, it proved to be. When in Paris on my way out I had purchased some beautiful glass ware for my table, and also, in England, a very nice dinner service. When I moved into my bungalow I naturally unpacked all this stuff and ranged it along some shelves. The first night rats got on these shelves and broke quite a lot of the glass. I ought to have known better than to bring any good stuff to Africa, for if it is not the rats, it is the servants who break everything, and nothing but wrought iron utensils are safe with either.

My advent in Mwanza was not popular, I found, not from any personal reasons, but the European inhabitants did not want their beautiful town spoilt by a railway coming into it, and there is no doubt that it is a beautiful place, though with a reputation for being unhealthy. The outstanding feature of the district is the rock. Huge boulders weighing many hundreds of tons are piled on top of each other higgledy piggledy all over the landscape, as if some giant had been playing with them and thrown them down. The rocks took the most fantastic shapes, one in particular being called the "Bismarck" rock on account of its striking resemblance to that statesman. Amongst them were many caves and crevices in which rock rabbits lived and the leopards which preyed on them.

On the top of the highest rocks the grey black-faced monkey known as a "langur" in India made his home. The Lake itself, of fresh water, has a shore line of over 2,000 miles, but is comparatively shallow, being not more than 300 feet deep in the deepest part. Dotted all over it, are islands, the largest being Kiserewe, but all have the same fantastic rocks forming their main feature. The shores of the Lake are bordered with dense clumps of papyrus grass in which crocodile and hippopotami lurk and no bathing is possible. In the town itself the streets

are bordered with mango and coco-nut palm trees, and the grass is really green all the year round. In front of the gaol, in a large open space is a giant mango tree and from a branch of this tree, the Germans, when in occupation of Tanganyika, held public executions. A day or so before the event, drums would be beaten in every surrounding village summoning the inhabitants to attend. In this way, all knew from the evidence of their eyes that justice had been vindicated. With us, however, execution by hanging is done inside the gaols and the natives are much inclined to doubt that the hanging of a murderer has ever taken place and believe that he is only imprisoned for the rest of his life.

European bungalows are all closed in with a net of very fine mesh to keep out the Lake flies which swarm during certain seasons of the year. On the Lake, ply the native sailing dhows carrying rice, cotton and passengers to the various ports, and also the steamers owned by the Kenya and Uganda Railways which make circular tours of the Lake, the journey taking fourteen days. Curiously enough, with such a splendid playground, none of the Europeans had a sailing boat or a motor launch with which to amuse themselves in the evenings.

Work had started on the new railway when I arrived and I lost no time in going out to see what had been done. I found that for three miles the line had been located through rock such as I have described, but though no blasting had yet been started the contractor, with true Greek cunning, had finished all the earth embankments between the rock cuttings. A contractor loves rock work, because he sees an excellent profit in it. Having seen the work, I sent an urgent telegram to my Chief, saying that I proposed to alter the alignment so as to avoid the rock, and pending a reply instructed the contractor who, by the way, was the same man I had had at Tabora, to stop all work. With that he came practically crying to me

and asked me what his labour and sub-contractors were to do meanwhile. In due course a reply came saying that the second in command was coming up to inspect and nothing was to be done until he arrived.

In the meanwhile I prepared a plan of a new alignment in which, though the line would have been a little longer, thousands of pounds would have been saved. When the official came up and had seen the earthwork embankments and had a long talk with the Greek, he reported that the works had gone too far to make any change in alignment and accordingly the rock cuttings were started. I had my way, however, in one particular and that was that I insisted that the line in the town should not go through any rock, as it had been arranged to do, and I laid out a new line involving only minor earthworks which was accepted and built. Had my alignment been accepted on the main rock work, the contractor and his partner would not have made the profit they are credited with having made. On these Government owned and built lines in the Colonies, there is apparently no one above the General Manager who can say one word in a technical sense, as to the excessive cost of works carried out by them. With my experience in West Africa, I was all out to keep the cost of the line down, but was overruled. There is a good deal more behind all that I have written, but I confine myself to what I have already said.

I had bought from a Norfolk friend in Mwanza, a box-body Overland car with which I visited the works and also used for going out duck shooting at Mabuki forty miles away at week-ends, being accompanied by three officers of the detachment of K.A.R., stationed in Mwanza, and I lived in their Mess for a few weeks whilst waiting for a Government lorry to take me to Tabora.

My next move was to Dodoma, half-way between Dar-es-Salaam and Tabora where I was to run a survey from

that station towards Lake Nyassa for a proposed railway, and here I came across my old friend, Captain Hornby, from Amman in Trans-Jordania employed in a similar manner. Having brought my Overland with me, I used it in the evenings for shooting with my Inspector. I would drive with the windscreen wide open, and often we bagged six or eight partridges running ahead in the wheel tracks with one shot. I also got quail, bustard and small deer with the 12-bore and all were very welcome, when chickens otherwise formed the only meat diet. We were a large party of Europeans in that survey all working independently of each other, but sending in our field books nightly to the draughtsman for the plans to be made.

Paying a short visit to Tabora again, I stayed with my friend Eccles the District Engineer there, and was in time to see an exciting lion hunt in the town. During the night a lioness had been sneaking round his house and next morning he saw the claw marks on the kitchen door. At eight o'clock a native rushed up to say there were two lions roaming about the streets of the town. Eccles went off at once and I followed with his wife in the car. Driving up to an immense crowd, we were in time to see Eccles shoot one and the other rushed at a European named Willis, knocked him down, and stood over him preparatory to finishing him off. Without hesitating, Eccles walked right up to it and gave it five shots, one after the other, thus saving Willis' life. But in spite of this heroic deed he got neither of the skins, because two Police officers claimed to have drawn "first blood" and the Commissioner awarded them the skins.

After six months of the survey and I had reached nearly to Iringa, I was transferred to the Head Office in Dar-es-Salaam and thereafter I led the life of the city gentleman I have mentioned in these pages more than once, and attended office from 9.30 to 12 and from 2 to

4.30 daily, making drawings most of the time. My salary of £820 a year included £100 allowance in lieu of a house, so having lived most of my life in the bush, I decided to pitch my camp a few miles out on the sea beach, using the car to get into town daily. The only objection to this way of living was that there was no water anywhere near my camp. To get over this difficulty I would carry eighteen empty four-gallon petrol tins in the box-body and these would be filled ready for me to take back to my camp at 12 o'clock. When the rains started, however, the road became impassable and I then went and lived with the Chief Mechanical Engineer of the Railway, whom I had known in Ceylon. At week-ends I often stayed with a West Australian at Ngerengere, a man who came out to the Colony in 1922 with practically nothing and made a small amount of money by mining mica. With this he bought 700 acres of land at 6d. an acre and planted cotton. Prices ruling high, he made good profits, and when I left him in 1931 he had 3,000 acres of land under sisal and expected to make a modest fortune. He was one of those men, now rarely seen, who liked really hard work even in the tropics, he was an excellent man with his labour (the main thing) and he lived on the barest necessities of life.

Whilst living in Dar-es-Salaam, I, who have always been a keen amateur photographer, took up cinematography as a hobby. Everything necessary for this amusement was procurable in the town, the exposed films, however, having to be sent to Nairobi for development. Many were the films I took, some good, but the majority indifferent, and I soon discovered that this is purely a rich man's hobby and not for a Railway Engineer earning £800 or so per annum. As time went on I took better films, however, but the African lighting is very different to that in the temperate zones, for, whereas one would

think that a shorter exposure is necessary there, the contrary is really the case.

Trips to Bagamoyo, the ancient East African capital, to Morogoro, Ngerengere and Kigoma, also the salt mines at Uvinza, all furnished pictures for my new hobby.

In August, 1928, nearly all the Construction Engineers left the service of the Railway, as owing to the drop in prices and the general world-wide depression, new works were completely stopped. On the night of the day I left, I gave a public show of my pictures in the upstairs verandah of the New Africa Hotel charging 2s. 6d. entrance, and such was the crush that many, all Europeans, had to be turned away. Twenty-eight pounds were my takings that night. Next morning I received a telephone message from His Excellency to go and see him about my films, but, most unfortunately, I had made arrangements to go to Tabora by the early train and this being explained to His Excellency, he kindly said that he would see me in Tabora. My intention was to take films of Mwanza on the Lake. Arrived there, I met a friend in the Veterinary Service who was taking a month's leave to go and see H.R.H. the Prince of Wales in Nairobi. I had sold my Overland in Dar-es-Salaam for £70, but my friend said that there was room in his Rugby, so I agreed to accompany him. Before leaving, I returned to Tabora and stayed in the K.A.R. Mess for a week and during that time I gave a show to His Excellency the Governor and Lady Cameron and to the Members of the Parliamentary Commission then visiting Tanganyika.

I also made £30 at the Railway Hotel where I showed my films to a mixed audience of white men and Indians. Returning to Mwanza where there was no electricity, I could not give a show there, so loading up the car on the steamer *Wintfred*, my friend and I departed for Bukoba on the west shore and the real start of the journey. On the steamer I had given another show of

my films and also of one I had hired, called the "Isle of Love." Amongst my audience were three grey-bearded members of the White Fathers Mission, and these three had appropriated the front seats. The "Isle of Love" cannot be called exactly a film suitable for a girls' school; at the end of the first reel I noticed a certain amount of uneasiness amongst the patriarchs, but at the end of the second they thanked me very much and retired to bed.

At Bukoba we had to unload the car on to the sloping hatchways of a lighter and had great difficulty in getting it off that onto the broken-down pier. A box-body car, I may explain here for the benefit of those of my readers who have not seen one, is an ordinary touring chassis upon which is built a rectangular wooden box, generally panelled with aluminium, about 4 feet long by 3 feet 8 inches wide and perhaps 1 foot 8 inches deep stretching from the "dash" to the rear springs. A partition forming the back-rest for the two front seats is put in at a convenient distance, both this and the seats being removable. Overhead is a three-ply wood canopy, sun-proof, and from the sides roll-up green or khaki canvas blinds are fixed, so that, when halting at night, these blinds are let down and fixed by tabs to the body sides the whole forming a room in which a bath and bed can be placed and meals taken when wet.

Motoring in Africa is not cheap by any means; the farther we got away from a coast port the more expensive petrol, for instance, became. At Mwanza this vital essential cost 2s. 11½d. a gallon whilst at Nairobi 3s. 6d. was charged, and if one fails at some small village for fuel oil, the Indian shopkeepers take advantage of the fact and I have been charged 5s. a gallon. So that we took good care to have amongst our "impedimenta" two cans of petrol, four one-quart tins of lubricating oil and two petrol tins of water, almost as necessary as petrol in that hot climate and on black cotton roads. None of the roads are

metalled and in the event of rain the motorist may be held up for days with his car wheels down to their axles in black slimy mud. We had a black cotton soil swamp to negotiate ; it was greasy after only a slight shower, but by putting chains on all four wheels we got over it, the two servants assisting the engine by pushing.

Several times we had to resort to the "African self-starter," which to my uninitiated readers, is the name given to perhaps twenty or so coolies running the car along with the clutch out, and when a sufficient speed is reached, suddenly letting the clutch in, usually when in second speed, when, if the gods are good, the engine will fire. Crossing the boundary at the Kagera river on a pontoon we were in the Uganda Protectorate and a marked improvement in the road surface was at once noticed. Here we could get up speed to fifty miles an hour with no thought of holes in the road or trees across it, or any other obstacles so common in Tanganyika. Sleeping in the Government Rest House at Masaka that night we pushed on over beautiful roads and through many villages to Kampala, the commercial capital of Uganda. We had passed very little other motor traffic (there are no horses in Uganda) but many native ladies dressed in long white robes with bright red sashes, heads clean shaven and carrying gaily coloured parasols.

The men nearly all had bicycles and trade in that article must be flourishing in Uganda. After a three days' stay in Kampala we were poled across a long papyrus swamp on a raft and then crossed an arm of the Victoria Nyanza on a petrol-driven ferry to reach Jinja on the far side of the Lake. Jinja has a refreshing appearance with its green parklike lands, well laid-out gardens and above all, the Ripon Falls, giving birth to the Nile. Speke discovered these in July, 1862, and when I gaze upon that obelisk erected to his memory in Kensington Gardens, I visualize in my mind's eye what

his delight must have been when he gazed down from those grassy cliffs at that great rush of water and realized what he had discovered. I wish I had been there with him.

At Tororo, we left Uganda and entered Kenya Colony, this fact being abundantly evidenced by the state of the roads, which were disgraceful, to put it mildly. Our speed dropped to 20, 15, 10 miles an hour and then we were bumped about as if we were in a T.B.D. in a gale. At Timboroa, we reached an elevation of 9,000 feet above sea level, and though practically on the Equator it was bitterly cold. Fine views over the El Dama Ravine and the Great Rift Valley are seen from the Railway station. Staying at a little country inn at Molo one night, we reached Nakuru next day, and here another car was purchased as my friend's had been badly overloaded and the tyres were giving a lot of trouble. Proceeding thereafter in company we put up at the Bell Inn at Naivasha and reached Nairobi next day, October 28th, 1928.

The town was *en fête* and gaily decorated with flags for H.R.H. and no one seemed to be bothering himself with work. I stayed with some friends of mine at Kabete, seven miles out, where they had recently bought a coffee plantation. Nairobi is a dusty dirty town and no credit to the Town Council or whatever body is supposed to look after it. The natives are bumptious and very offensive to Europeans, especially ladies, and are typical of the British Colonial Administration where the native is pampered, spoilt and over educated, so that he is too proud to work, wears European clothes, and becomes a waster and no good to himself or his country. The Germans had a better way of dealing with them and I do not suppose that when I first went to Tanganyika, there were a better managed lot of natives in the world, but they were sadly deteriorating when I left.

The Prince of Wales duly arrived and carried out all

the duties assigned to him. He entered into the spirit of life in Kenya and appeared to thoroughly enjoy himself during his stay. I got some excellent films of the "baraza" he held on Government House grounds, being indebted to an old Ceylon acquaintance, the Commissioner of Police, for being able to take my place with the Press photographers. As soon as the films had been developed and I had shown them to my friends, I left on the long journey back to Dar-es-Salaam, this time alone, my friend having decided to go back to Mwanza, his station, by steamer.

This was a long but most interesting journey, taking me through the great Game Reserve beyond Ngong, where fresh tracks of elephant, lion, buffalo, giraffe, eland and other animals crossed the roads, through five miles of blinding white dust, two feet thick, which so smothered my boy and myself that no one could tell which was the black man and which the white, past the branch line at Rajiado to Lake Magadi where the soda comes from, and so to Longido, the boundary, never having seen another car or European. Sleeping in the car here, I passed the boundary at Longido and was in Tanganyika again, a short run on a good road lying midway between Mount Meru and Kilimanjaro, bringing me to Moshi, the terminus of the railway from Tanga. Kilimanjaro (the mountain of spirits) is the highest in Africa (19,324 feet) with perpetual snow on its two peaks.

It is a fairly easy climb to the summit and has been accomplished many times. Following the railway, I slept in the car again at Lembeni, passed through many miles of sisal plantations, Greek owned, and halted at Korogwe, with a damaged differential. I took the whole of the back axle to pieces next morning in the hotel yard and found several teeth in the driving pinion broken, but, no spare being available, continued on the fifty-mile

journey to Tanga at a slow speed, reaching there in the evening. Two days in the garage of Mr. Tobler put it right again and I had to go back to Korogwe to get to Dar-es-Salaam. I had bought a lamp for my projector which could work off the car battery, so I gave two shows at Korogwe and proceeded to Handeni where I stayed with an old friend from Nzega, John Ransome the D.O. From Morogoro no road existed to Dar-es-Salaam then, but years ago there had been some sort of track before motor cars were heard of. With a friend, Nicholls, whom I picked up at Morogoro, we decided to try to reach the coast. Taking ropes, planks etc. in the car for emergencies, we set off and up to Ngerengere experienced little trouble ; beyond there, however, we plunged into long grass and followed a faintly outlined native track. No bridges existed over the streams, now dry, and we usually "rushed" them, but at the Ruvu River, a swiftly running stream, a raft had to be made of five canoes tied together, then a platform made of bush sticks to carry the car. All went well and climbing up the steep bank on the far side we pushed on through grass, down steep gullies and up the other side, until, when within three miles of Dar-es-Salaam, we came upon the *pucca* road and our troubles ended.

I had forfeited my return passage to England from the Government by not taking advantage of it within two months of my leaving the service, but so fond had I become of Africa that I did not want to say good-bye to it.

I gave two shows in Dar-es-Salaam, the money then received paying a good deal of my expenses on the journey, and then I thought I would start mining mica. With Nicholls we returned over the same bush tracks to Mikesse, where he had a bush hut and started prospecting together. Plenty of mica is to be found anywhere in that district, but only small stuff, commanding no price.

Nicholls had to leave me and I stayed on all alone in a very out-of-the-way part of the bush and carried on mining until after Christmas, which I spent marooned in the bush with only my servant, having a tin of bully beef and some biscuits for my dinner. Seeing that there was no money to be made in mica, I determined to drive to Mombasa and see if I could either find work there or go Home. Going over the old trail via Morogoro, Turiani, Handeni, Korogwe and Tanga, I started on a road, new to me, running along the coast to Mombasa. On the way we ran into millions of locusts and so thick were they that we had to stop, close the side curtains and wait until they had passed. The sky was black with them, and in their track not a leaf or blade of grass was left.

As it was getting dusk one evening I nearly ran over a lion playing in the dust of the road, and not liking the prospect of being followed, I drew up at a village and halted for the night. A lion seems to be fascinated by the red tail-lamp, and I have been followed by them for many miles though I only knew of it when the driver of a following lorry told me. Next morning we crossed Kilindini Harbour on a steam ferry and arrived in Mombasa.

After a fortnight's hunting round nothing in the shape of work turned up, so I took a ticket on a Dutch steamer for Amsterdam, paying the full amount of the fare. The ship being late, I went to see the Vacuum Oil Company's representative as they were building a big installation in Mombasa. The Engineer, an American, offered me a job of setting out the works, looking after Indian riveters, etc. I accepted it and cancelled my passage, thereby losing half my money. For the month I stayed with the Vacuum Oil Company, I have never had to work so hard in my life. From 7 a.m. every morning until five in the evening, outside all day in a

blazing sun, soon took it out of me. So hot was it in my boarding house, too, that at ten every evening, I would take a mattress and pillows, put them in my car and drive to the golf links on the sea coast and sleep there quite peacefully until 6 a.m., when I returned to my room to dress. I gave one or two cinematograph shows on the roof of the Palace Hotel and decided that the V.O.C. required too much from me for the pay they gave me and left.

Again I paid the second half of my passage ticket and decided to go Home, but in the boarding house was a young fellow from Moshi who asked me to become his partner in a farm he had up there; so we departed in company, my half-passages money still remaining with the shipping company, who wondered perhaps if I had gone mad, cancelling my passage twice.

Off we set to Voi, following the Kenya and Uganda Railway all the way. Arrived at Moshi, I made a few enquiries from my friend the Superintendent of Police there about this young fellow, and found that the rent for his farm had not been paid for some years and that he was in a bad way, financially. Of course I should have found this out before, but he was not known in Mombasa. I decided to have nothing more to do with him and left him in the Mawenzi Hotel, my boy and I proceeding back to Morogoro, where I hoped to get work on the new road being built between there and Dar-es-Salaam. This was in April, 1929, and the rains had been on some time. Reaching within a few miles of Turiani my back axle broke. What to do I did not know, but a good Samaritan turned up in the person of a German cotton planter and he put me up in his house. It was not possible to get a new axle for a long time and no lorries were running to Morogoro, as the road was flooded; so I was marooned here for over a month, the car being dragged in twelve miles to the German's house. For

eighteen days, too, I lived with the Fathers of the Holy Ghost in their Mission, the head being an Irishman, and to them and my German friend I shall ever be grateful for the kindnesses they bestowed on me at that time.

At the end of May, the road had sufficiently dried up for me to go by an Indian's lorry to Morogoro, but my car remained behind, still waiting for the axle. Reaching Morogoro I went on by train to Ngerengere and stayed with my West Australian friend for a few days. Later, in Morogoro three jobs were offered me all at one time. These were (1) to be a Superintendent of Labour; (2) to be an engineer in a cotton ginning mill; and (3) as an engineer in the P.W.D. on the new road. The latter job was offered me by the Engineer in Morogoro who had been a Lieutenant in the Royal Engineers in Haifa. Accepting this latter job, I travelled seventy miles down that apology for a road to Mwaba where I was to build a fairly large steel bridge over the Ngerengere river. Not until July was my car repaired and driven to my camp by an Indian, and when I saw it, I did not recognise it, all the paint had gone, it looked worn out and ran very badly. However, I soon had it all to pieces, cleaned everything and repainted it with Robbialac and it then looked and ran like new.

After a time I was promoted and given charge not only of the bridge, over which a foreman was placed, but the whole 75 miles of road from the Ruvu to Morogoro. Here the car came in very useful, especially as I was paid an allowance of 1s. a mile for using it. To feed my men, a native hunter was posted in my camp, his duties being to go out and shoot deer to provide them with meat. One evening I was taking a walk unarmed a short way from my camp, when a lion crossed the road 35 yards away from me. Running back for my rifle and calling this native, we followed the animal into the bush and I

was lucky enough to see it broadside and glaring at me. Getting in a heart shot with my first cartridge the hunter got so excited that he must needs fire at it too, but by that time it was dead and carried by the natives in triumph to my camp. Thus I had shot both a tiger and a lion, though the latter had taken me six years or so to bag. My sleep at night was greatly disturbed by the noise of elephants bathing in the river and pulling down trees in order to eat the topmost branches. I could not afford the licence to shoot an elephant, however, and in any case there were none carrying large ivory. The licence required to shoot one's first elephant by a resident in Tanganyika costs £35 and for the second elephant £55, so that only rich Americans can now indulge in the sport.

On one occasion, when driving a Chevrolet one-ton lorry with my cook and boy, I turned a corner in the road and nearly ran into five of these beasts ; three full grown and two totos (babies). I had no rifle with me so could not shoot and claim self-defence, so we sat there in the lorry and watched them slowly amble off into the bush.

Those were the first elephants I had seen outside the Zoo, and I was surprised to see how well their colour blended with the surroundings. One of them carried huge tusks which would have probably paid me for the licence which I could perhaps have obtained afterwards. Besides elephants, that curious laughing noise made by lemurs kept me on the qui vive at nights and when I fired my pistol at them in the darkness they laughed more than ever, knowing that I could not see them. That spot on the Ngerengere river was a big game hunters' paradise and many an animal did I bag by going out early in the morning by car and waiting for them to come up from the river or waterholes. I also shot quantities of guinea fowl which made a very welcome change from the everlasting chicken which forms the staple article of the meat course in Africa. The mango

fly proved a nuisance at the river ; a sharp bite would be felt anywhere on one's anatomy and then the pain would pass off ; two or three days afterwards the egg which had been thus deposited in one's body would turn into a maggot. By gently squeezing the sore place this yellow insect with a black head would be ejected and a brushing of iodine afterwards would take away any infection.

Jiggers in the toes were common, but there is no one, not even a doctor, who can remove them so deftly as one's servant. If they are left in, the toes may be lost and permanent lameness ensue. Snakes infested this place, too, and on one occasion I heard a great hullabaloo amongst the natives employed on the bridge ; on my arrival I saw a python leisurely crossing the road.

With a "jembe," or native hoe, I managed to nearly sever its head from its body, but I had to jump out of the way quickly to avoid the terrible writhing coils. All the time it was being skinned it continued to writhe about with the contraction of its muscles. When measured, it proved to be 19 feet 6 inches long, and I gave the skin to a lady in Morogoro and I suppose it still graces her drawing-room wall. In case any of my readers happen to meet a python when strolling about and they are seized by it, the thing to do is to snap a dry stick with as loud a noise as possible, the snake may be deceived by this into thinking that he has broken your ribs, which is his objective, before beginning to swallow you whole, and thus may let go its hold. I have killed many kinds of snakes all over the world, but on examination of the head of this one I was surprised to see that it had a tongue almost exactly like a human being's and that the teeth were movable, all lying back on the jaws, so that once a victim is gripped these act like barbs, and there is no getting away from it.

The bridge being completed, together with the road, my work came to an end and I decided that this time I would go Home and leave my beloved Africa, where I had spent seven and a half years of my life, or including West Africa, nearly ten years. So in April, 1931, I went over to Zanzibar and stayed there for a few days to take films and then embarked on the Union Castle ship, *Grantully Castle*, for perhaps my last sea voyage.

Of Africa, I can only say with Major A. R. Dugmore in his *Wonderland of Big Game*, "To anyone who has once tasted of the joys of Africa, the call to return grows stronger as each year passes. The glorious sunshine, the delicious coolness of the nights in the higher parts, the varied scenery of bold mountains, of golden plains, of luxuriant forests, of lakes and rivers, and perhaps most wonderful of all, the abundance of wild animals, combine together to give to the country a fascination which is irresistible to those who love the great outdoors."

CHAPTER XIX

CONCLUSION

AS I never willingly go the long way round through the Bay of Biscay, I left the *Grantully Castle* at Marseilles, the jumping-off point of many of my voyages, and stayed at the Hotel de Genève near the Bourse. After taking a film of points of interest in the town, I went by tramway to Aix-en-Provence for the same purpose and then to Avignon, where I halted two nights. From the broken end of the Pont St Benézet I obtained some good pictures of the Old Palace of the Popes and of the Rhône, and wondered then if I should be doing the right thing if I jumped off and ended it all. At Lyons, I again broke my homeward journey and also at Paris, where I never, under any circumstances, if I can help it stay less than twenty-four hours.

Crossing from Calais to Dover, I saw an unusual sight in mid-Channel and that was a whale disporting himself in the water but too far off to enable me to get a film of him. In France, the trees were breaking out into leaf and the sun was shining that May day, but, in mid-Channel, it became cold and foggy and England seemed to possess quite a different aspect with its bare trees and shivering people. In Norwich again, I finished up, somewhat tired of my labours, during thirty-one years in tropical and sub-tropical lands, enduring as I had done, heat and cold, hunger and thirst, drought and rain (such rain!), sickness and health, good times and bad times, war and peace, and was at liberty to take stock of myself and reflect upon those things which I had done

and had not done, and I came to the conclusion that I had made a complete mess of my life. The reader, if he has had the patience to get thus far with my book, will have gathered that I had been given to taking sudden and ill-considered decisions, acting usually solely on impulse. Thus, my decision to go to Assam against older and wiser counsels was a mistake, my marriage was a mistake, and resigning my appointment in India was the greatest mistake of all. Had I had patience and hung on to that appointment promotion would surely have come to me, but no, the wanderlust was in my blood and the constant desire to see more of the world and my restlessness, led me to all the other countries mentioned in this book. Ashanti was both the zenith of my career in the matter of position and pay, and the nadir of my fortunes when it was stated that I was unable to effectively control expenditure.

I have to thank God for much, however, for where I have seen some men permanently invalidated from climatic causes, and others die, some by their own hands, from the effects of worry, disease, loneliness and other causes incidental to bearing the White Man's Burden, I have never had any serious illness, and have been blessed with an iron constitution, which even the malaria of India, the yellow fever of South America, the smallpox of China or the dysentery and blackwater of East and West Africa have not succeeded in undermining. Truly, when one comes to look back on it all I have come safely through many dangers inseparable from countries where wild animals and poisonous snakes abound, where the deadly miasma from swamps is breathed into one's lungs nightly, where a chill is taken much easier and has more deadly effects than in Europe, whilst even in the War I was preserved from the fate of hundreds of thousands of better men than myself.

No one can deprive me of my memories, and looking

back through the mists of those thirty-one years I see that tea house and machinery I put up in Assam, the ten miles of line I built through the jungles of the Central Provinces of India, and the bridges and stations I erected in Colombia. Trains are running at this moment, no doubt, over the lines and bridges I helped to construct in the province of Kwangtung in South China, whilst there is talk of building that strategical North to South railway in Australia, perhaps following those pegs I drove in there.

From Bairnsdale to Orbost in Victoria, train-loads of wool are passing through Bruthen, where I lived, and in Ceylon the electric cranes I erected are loading and unloading merchandise into or out of the goods sheds I built, whilst the jaded Colombo business man returns to the bosom of his family in his country villa at Bambalapitya, Dehiwela or Mount Lavinia from the Fort Station erected by me. The sea wall at Haifa until quite recently carried the luxurious express trains of the Palestine Railway with their loads of tourists for the Holy Land, being now submerged in the reclamation work for the new harbour there, and I have no doubt that traces of that little but useful railway I located from Jerusalem to the front line at Sinjil are still visible, whilst the Eastern expresses of the Baghdad railway roar through the tunnels of the Amanus and Taurus mountains which had my protective hand and eye upon them when still in an unfinished and dangerous state.

Even now I see in my paper thousands of men are engaged in laying that oil pipe line across the Arabian desert, perhaps making for that one spot on the Jordan river which I selected, long ago, as the only possible bridge site for many miles, when such a large undertaking was first mooted. Those concrete bridges I designed and built with the sweat of my brow in Ashanti will endure

when I and the devoted men who assisted me are dust, and the giant trees rolled out to the side of the line to make way for the all-conquering iron horse will bear silent witness for many years to the unjust treatment meted out to me then by a thankless Colonial Government. The map of Tanganyika has the marks of my hand broadly imprinted upon it in the shape of the Lukonde Viaduct, over which every traveller going westwards from the coast must pass, whilst those going to Lake Victoria Nyanza cannot help but see the bridges, culverts and stations I built up to Shinyanga, and the rock cuttings at Mwanza which I did my best to avoid.

From the Ruvu river to Morogoro the new road westwards connecting up the capital with the interior was located and built by me, and the East African motorist when undertaking a journey there must pass over the steel bridge over the Ngerengere river which, with much anxiety, I built. These, then, are some of my achievements in the world of engineering, and I can look back on all of them and know that the work has been well done and will not fail.

Again, I can look back on the long lonely evenings in my various camps, when by the light of a hurricane oil lamp I have read and re-read the works of my beloved Charles Dickens and have forgotten the "cares that infest the day" in the joy of wondering what escapade old Pickwick would be up to next, or what further hypocrisies Seth Pecksniff, the architect, would inflict on Martin Chuzzlewit, the buzzing and biting of thousands of mosquitoes, the village tom-toms, or the roar of lions, not being able to divert me from the enjoyment of the ambitions of Wilkins Micawber to become a judge, whilst the troubles of Mark and Martin in Eden woke a responsive echo in my breast. With my volumes of Dickens, *Blackwoods* and the *Geographic* magazines and the *Daily*

Mail Overseas Edition, I have whiled away many a weary hour in sampans on the Chinese rivers, in lonely camps in South America and in Tanganyika, and for months at a time I have only had them for company.

Whilst I have been for many years in those outlandish countries, what has happened in the civilized world outside? Queen Victoria has died, King Edward has reigned and died and King George V is the third monarch to reign while I have been away. Motor cars, aeroplanes, wireless, silent and talking pictures, automatic traffic signals and cross-words have all been sprung upon me suddenly when home on leave, whilst the independence and self-assertiveness of Woman has been one of the marvels of the age. Motor buses, and covered ones at that, have completely ousted the open horse buses of 1900, the year I left England, whilst politics, of which I know nothing, have now become a well-paid profession where before they were honorary.

The Boer War, the Ashanti Rebellion and the Boxer uprising were all in progress when I left and war with Germany then seemed an impossibility. I have missed all the great Exhibitions, Mafeking night and the rejoicings at the signing of the Armistice in 1918, and I have come back to a different England, a stranger in a strange land. Either the climate has changed or the people have become more effeminate, because it is rare nowadays to see an open touring car, while in 1920 very few closed cars were on the roads, and buses are often hermetically sealed even on the hottest days. Horses have now almost disappeared from the roads, whilst the roads themselves are of the surface of a billiards table and almost impossible for horses to travel on, so slippery are they. The dole has been instituted during my absence, and the number of unemployed, which in 1900 was a negligible quantity, is now counted in millions and nothing apparently is being done to

remedy the great loss of revenue thus caused to the State.

With all these changes for good or for bad, the one thing that strikes the exile more than anything else on his return to the Homeland is the NOISE, the nerve-racking, never-ending noise of the streets, of the wireless, of the jazz bands and other things, and I cannot help but wonder what effect all this noise has on the people who perforce have to listen to it daily year in year out until a merciful death supervenes. With all the wonderful things that have been invented by man since 1900 it would seem that he has not yet been able to produce a noiseless gear change for automobiles, though there is a fortune waiting for the man that can do so, as well as the thanks of millions of His Majesty's subjects who are rapidly becoming deaf for want of such an invention.

I am informed that millions of pounds are spent annually on the education and hygiene of the man-in-the-street, and yet when sitting near the Round Pond in Kensington Gardens recently my ears were assailed by the most dreadful of accents from a crowd of children playing there, and I could see no difference in them to those of the children of thirty years ago, whilst a walk any day down the Edgware Road will show one plenty of undersized and deformed men and women which shows to me a marked degeneration in the race not noticeable before. I suppose living as I have done for so many years abroad, where every Englishman is a selected man, has had to pass a strict medical examination and has no deformities of limbs, has made me more observant of these defects; and as for white children, the number I have come in contact with or seen abroad can be counted as less than one hundred all told.

So despite all the modern luxuries of living and travel, despite all the cheap amusements, good food and the

hundred and one things that make up present-day life, I would a thousand times rather be back in the jungles of India, the forests of South America, the rice fields of China, the bush in Australia or the wide game-infested park-like lands of East Africa, where I am free to roam, gun in hand, whither my fancy takes me, where income tax is unknown, where I am not forced to wear the conventional collar and tie every day of my life, and where plenty of work, combined with plenty of play, conduce to a healthy long life, whilst a few faithful black or yellow servants minister to my simple wants with efficiency and do not ask me for an "afternoon off to go to the pictures."

Though I have seen much of the world, much more remains to be seen, and that germ of wanderlust is still very active inside my body, and will not, by any manner of means, die. Perhaps, before I am too old to travel, the good God above me will permit me once more to set out on my travels and see something of those places I have missed, but in the meanwhile I can only close this, my *Odyssey*, with the words of Lamartine, who writes: *Il n'y a d'homme complet, que celui qui a beaucoup voyagé, qui a changé vingt fois la forme de sa pensée et de sa vie.*"

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