

THE ROARING JOURNEY



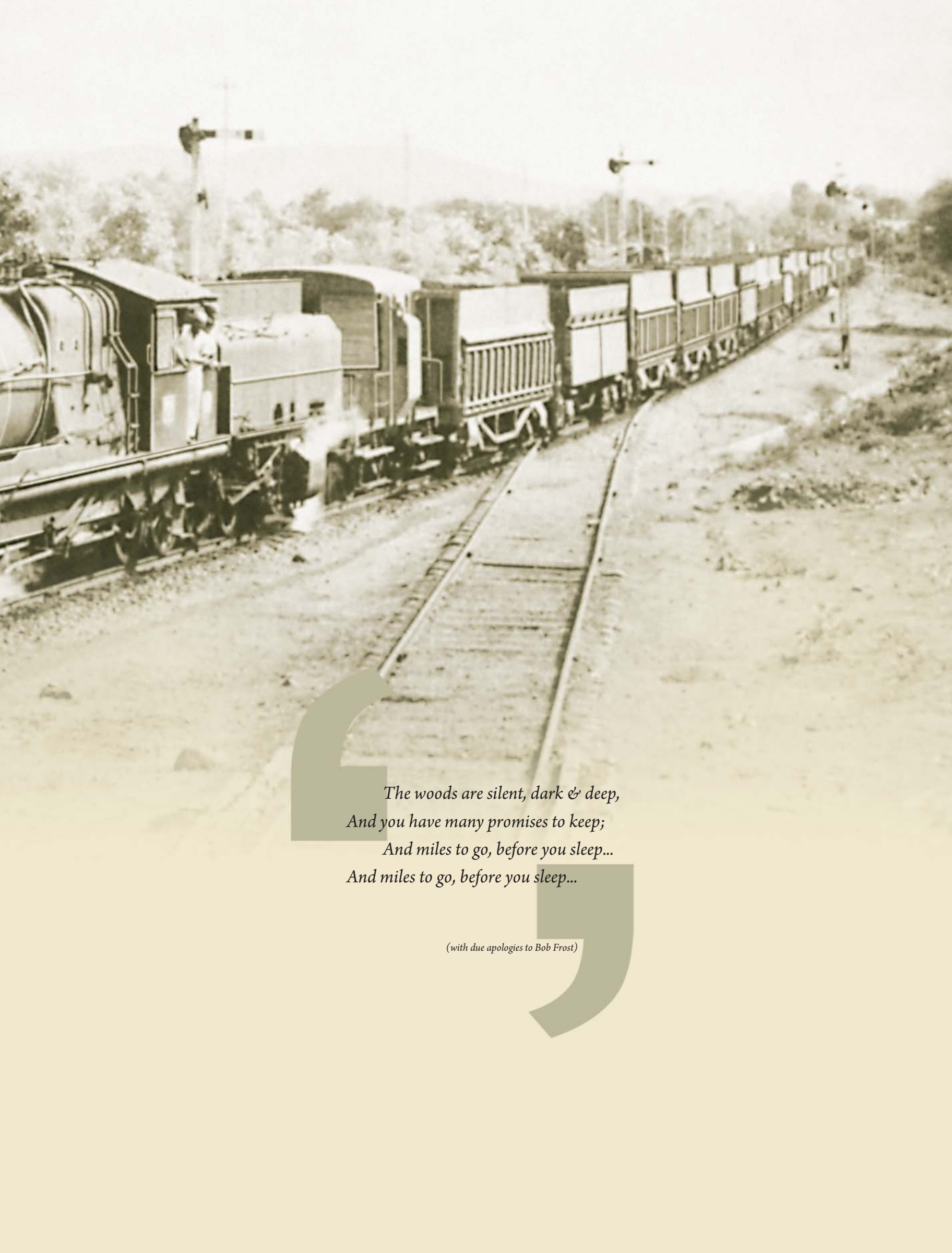
NAGPORE CHUTTESGURH RAILWAY
TO
SOUTH EAST CENTRAL RAILWAY

N S KasturiRangan
Saibal Bose



*The Bengal Nagpur Railway class N Garratt in first and final form, with piston valves.
Indian Railways No. 38818 leaves Kusumkasa loop in 1970, with a 2400 tonne ore train bound
for Bhilai steelworks.*

A. E. Durrant



*The woods are silent, dark & deep,
And you have many promises to keep;
And miles to go, before you sleep...
And miles to go, before you sleep...*

(with due apologies to Bob Frost)

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*An old man, going a lone highway,
Came, at the evening, cold and gray,
To a chasm, vast, and deep, and wide,
Through which was flowing a sullen tide.
The old man crossed in the twilight dim;
The sullen stream had no fears for him;
But he turned, when safe on the other side,
And built a bridge to span the tide.*

*"Old man," said a fellow pilgrim, near,
"You are wasting strength with building here;
Your journey will end with the ending day;
You never again shall pass this way;
You have crossed the chasm, deep and wide -
Why build you the bridge at the eventide?"*

*The builder lifted his old gray head:
"In the path I have come," he said,
"There followeth after me today
A youth, whose feet must pass this way.
This chasm, that has been naught to me,
To that dark-haired youth may a pitfall be.
He, too, must cross in the twilight dim;
Good friend, I am building the bridge for him."*

ACKNOWLEDGEMENTS

N S KasturiRangan



Once again, while writing an account of a railway's past, we are deeply grateful for the contributions of many railway cognoscenti, who have made this narrative a wonderful and fulfilling experience. Quite a few aficionados of railway history and denizens of Bilaspur have contributed their mite to this project. It is them, for whom the railway moves and these pages celebrate their indefatigable spirit over the years. We rejoice our awesome association and the bonhomie that is omnipresent in these lands. Please know that we really do appreciate you very much.

Whenever a General Manager desires to co-author a book, it is his secretary who goes into Alcubierre drive (a.k.a. warp speed, as in *Star Trek*) to boldly go where no man has gone before and seek out strange "old world" photographs from collectors. And scrounge the archives for interesting facts, fables and figurations that have been hidden from ourselves by old man Time, himself. This is as much his *vade mecum*, as it is ours. Thank you Amlan Tirkey, for your earnestness and labour. We are also indebted to Manish Awasthy, the head Public Relations for arranging to publish our diaries that became the first manuscript for the dissertation.

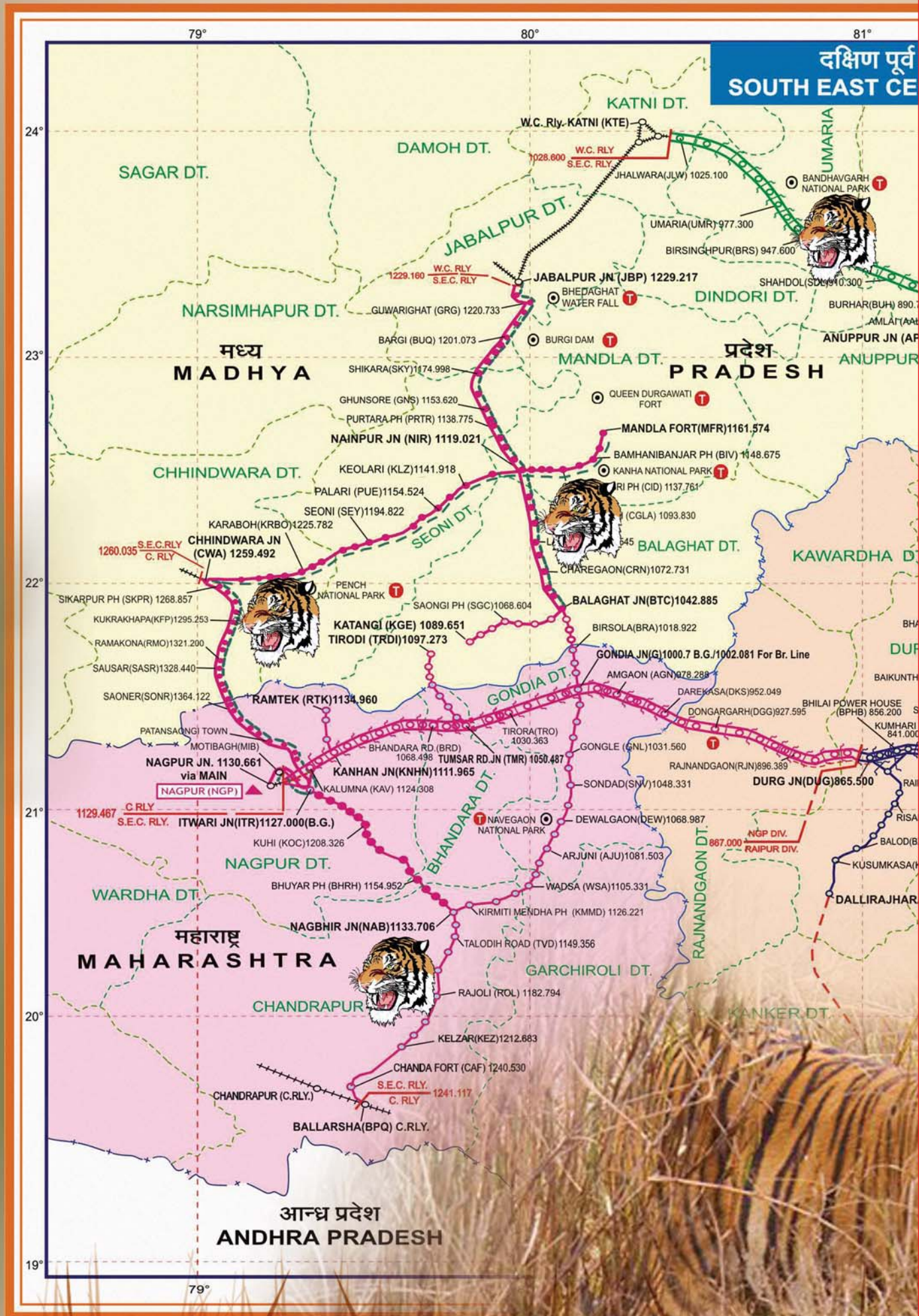
Often, the authors express gratitude towards their families for support and encouragement. However here, it was different. Exiled by the powers that be, to the heart of Kipling's jungles, the authors could find ample lonely hours of ennui to develop a fellowship of thoughts, unhindered by the hustle and bustle of concrete jungles. And when the pen was put to paper, these thoughts developed a charm of their own. They danced and sang, and like the fire-flies in a forest at night, they lit up the way for the eyes of those who read. They built bridges that connect the past to the present. And became boats to ferry us to the distant horizons of the future.

Then when a historically inclined General Manager discovered a veritable story-teller in his Chief Safety Officer (this opus being his fourth book), the oeuvre in its present form was a foretold conclusion. Even then, our gratitude is due to our designer, D.D. Sharma and his quintessential team for the designing and artwork spanning a hundred pages.

Last but not the least, we thank the mandarin of railway history, Ratan Raj Bhandari, whose research and treatise on Bengal Nagpur Railway forms the backbone of this book. As a matter of fact, most of these versos and rectos are tightly woven around his disquisition: "*March to the New Millennium*".



Saibal Bose



मध्य रेलवे
CENTRAL RAILWAY

उ.प्र.
U.P.



01.04.2010 से प्रभावी / WITH EFFECT FROM 01.04.2010

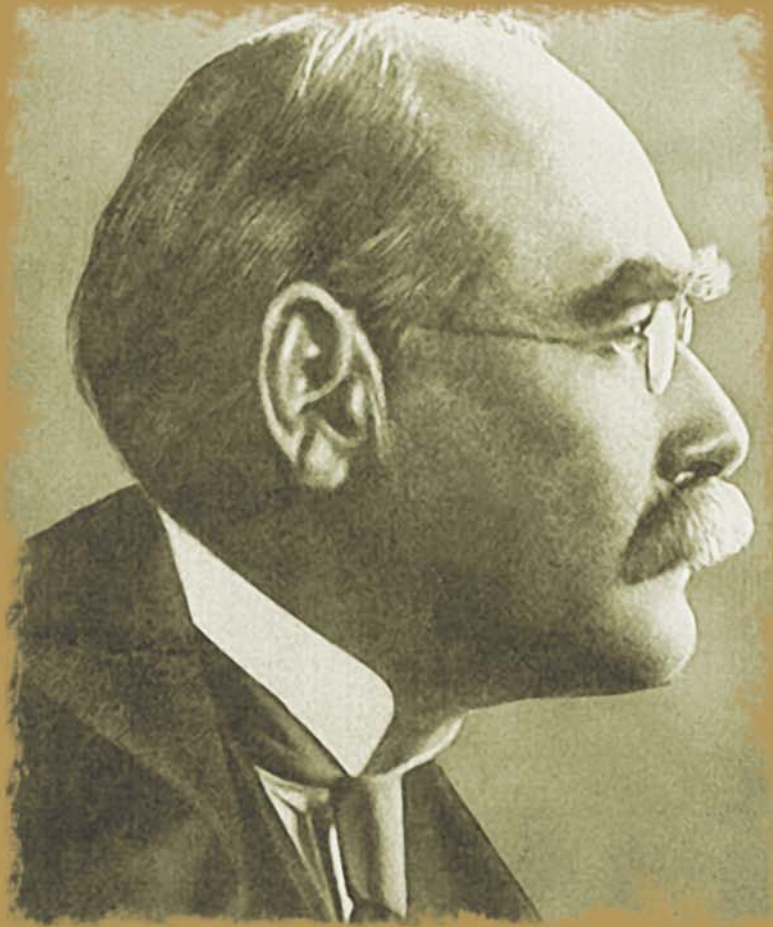
संकेत / LEGEND

B.G. SINGLE LINE.
B.G. DOUBLE LINE.
B.G. TRIPLE LINE.
B.G. NEW LINE UNDER CONSTRUCTION.
B.G. DOUBLING UNDER CONSTRUCTION.
B.G. TRIPLE LINE UNDER CONSTRUCTION.
N.G. SINGLE LINE.
N.G. TO B.G. UNDER GAUGE CONVERSION.
B.G. ELECTRIFIED SINGLE LINE / DOUBLE LINE.
ZONAL RAILWAY HEAD QUARTERS.
DIVISIONAL HEAD QUARTERS.
IBS ON SINGLE LINE / DOUBLE LINE
TOURIST PLACES
OTHER RAILWAY.
DISTRICT BOUNDARY.
STATE BOUNDARY.

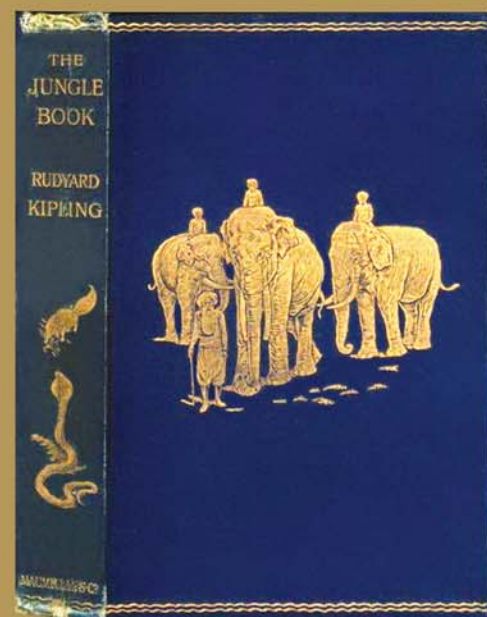
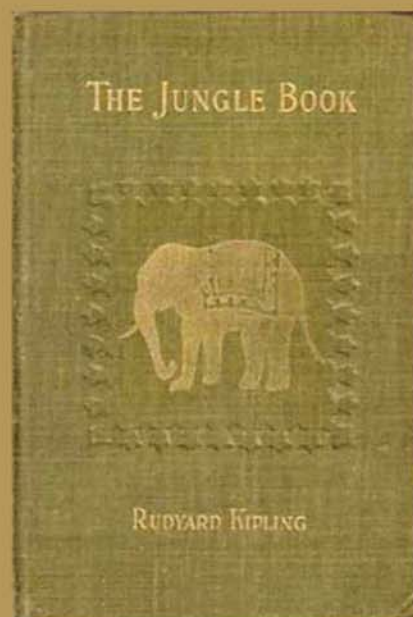


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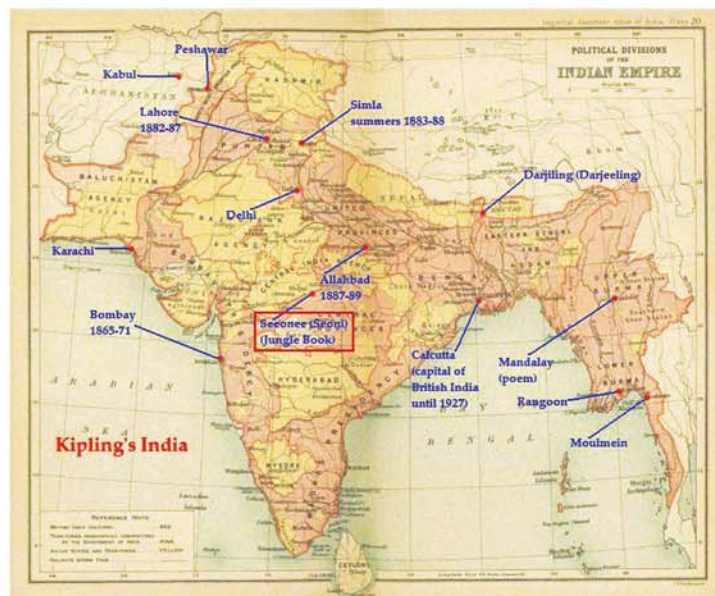
JOSEPH RUDYARD KIPLING



Seonee (as called by Kipling), the city, has a population of a few hundred thousands. It was founded in 1774 and has 37% forest cover. The narrow-gauge Chhindwara-Nainpur South East Central Railway passes through Seoni connecting Jabalpur, Nainpur, Chhindwara, and Nagpur. Seoni is also famous for exporting cherimoya (the fruit of the tree *Annona Reticulata*) all over India.

The River Weinganga source is located beneath the village Partapur, and includes spots like Pench Tiger Reserve within a stone's throw and is named after the Pench river, which flows from north to south through the Reserve, and is located in the southern reaches of the Satpura hill ranges in the Seoni and Chhindwara districts in the Madhya Pradesh state of India. The terrain is undulating, with most of the area covered by small hill ranges, steeply sloping on the sides. As the prey concentration is high along the Pench river, tigers usually inhabit this belt. Leopards, though, generally operate in the peripheral areas but are occasionally seen in deep forests also.

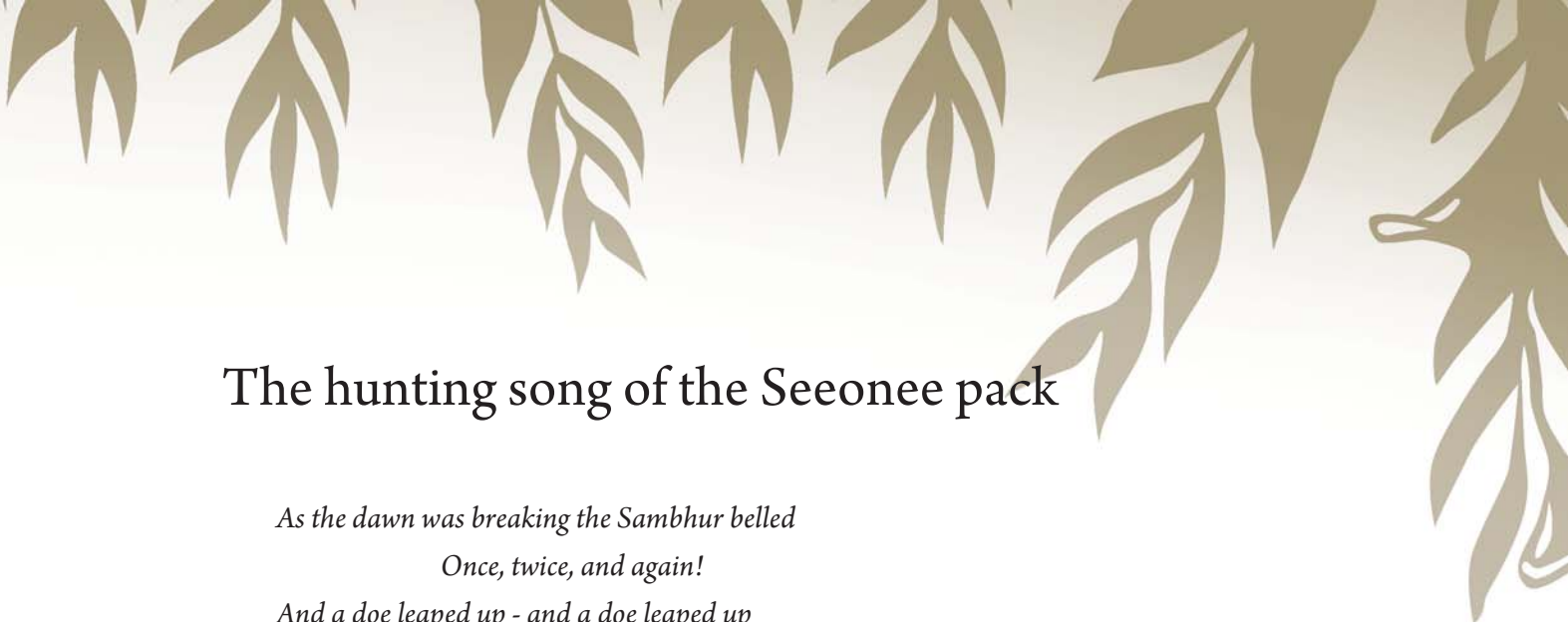
The Tiger Reserve is situated in an area that holds a significant place in the natural history of Central Provinces of British India. The description of its natural beauty, richness in flora and fauna has appeared in numerous wildlife books dating back to the 17th century. Books written in the 19th and early 20th century by famous naturalists like Captain J. Forsyth and Rudyard Kipling's Jungle Book explicitly present the detailed panorama of nature's abundance in this tract.





Moowgli (the young lad cub in Kipling's *Jungle Book*) was raised by the Seeonee wolves pack. The *Jungle Book* (1894) is a collection of stories by British Nobel laureate Rudyard Kipling, is thought to have been set in Pench National Park, Seoni District. The stories were first published in magazines in 1893-4. The original publications contain illustrations, some by Rudyard's father, John Lockwood Kipling. The tales in the book (and also those in *The Second Jungle Book* which followed in 1895, and which includes five further stories about Moowgli) are fables, using animals in an anthropomorphic manner to give moral lessons. The verses of *The Law of the Jungle*, for example, lay down rules for the safety of individuals, families and communities. Kipling put in them nearly everything he knew or "heard or dreamed about the Indian jungle".





The hunting song of the Seeonee pack

As the dawn was breaking the Sambhur belled

Once, twice, and again!

And a doe leaped up - and a doe leaped up

From the pond in the wood where the wild deer sup.

This I, scouting alone, beheld,

Once, twice, and again!

As the dawn was breaking the Sambhur belled

Once, twice, and again!

And a wolf stole back - and a wolf stole back

To carry the word to the waiting Pack;

And we sought and we found and we bayed on his track

Once, twice, and again!

As the dawn was breaking the Wolf-pack yelled

Once, twice, and again!

Feet in the jungle that leave no mark!

Eyes that can see in the dark - the dark!

Tongue - give tongue to it! Hark! O Hark!

Once, twice, and again!

His spots are the joy of the Leopard: his horns are the Buffalo's pride -

Be clean, for the strength of the hunter is known by the gloss of his hide.

If ye find that the Bullock can toss you, or the heavy-browed Sambhur can gore;

Ye need not stop work to inform us; we knew it ten seasons before.

Oppress not the cubs of the stranger, but hail them as Sister and Brother,

For though they are little and fussy, it may be the Bear is their mother.

"There is none like to me!" says the Cub in the pride of his earliest kill;

But the Jungle is large and the Cub he is small. Let him think and be still.



THE BEGINNING

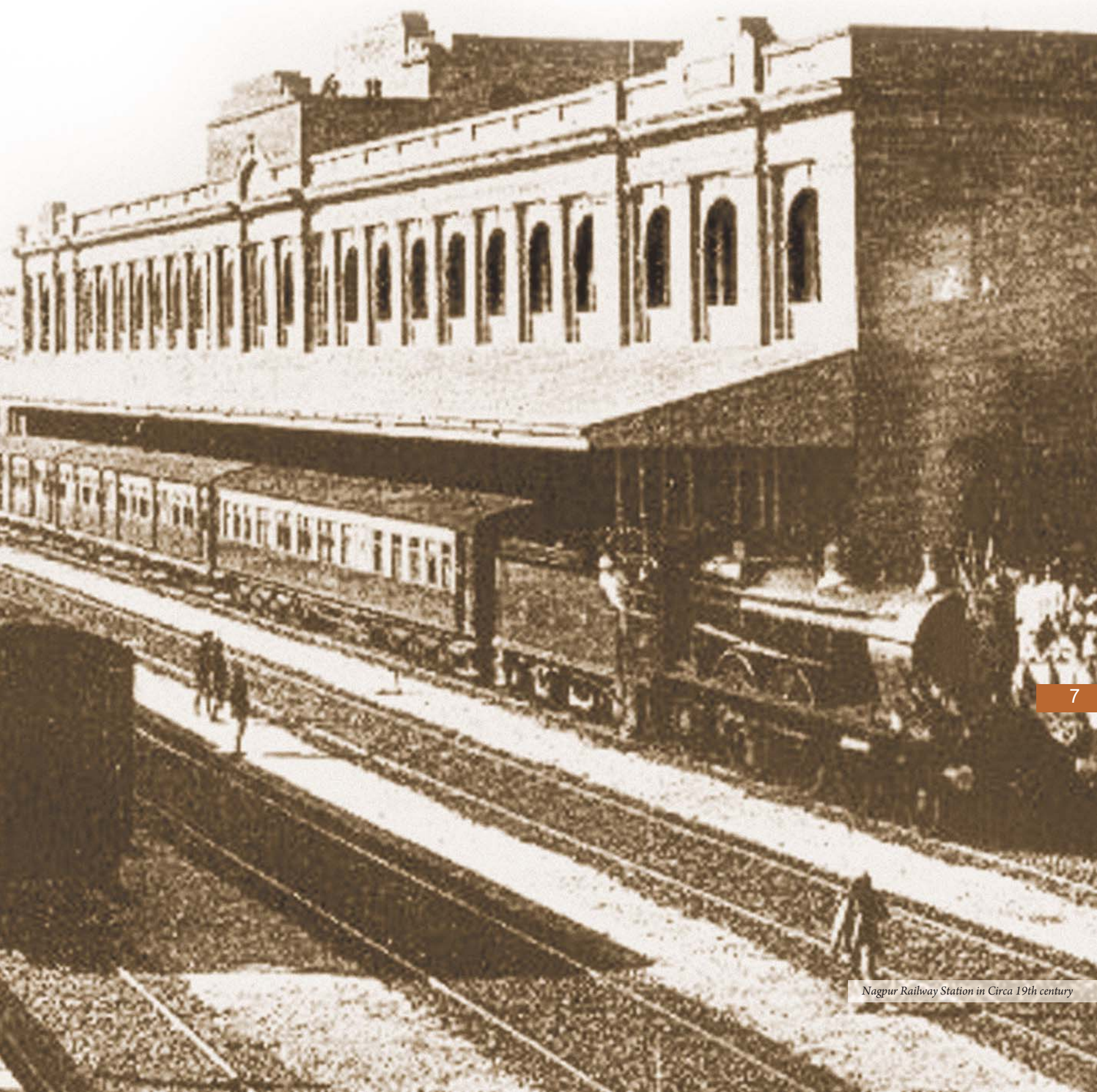


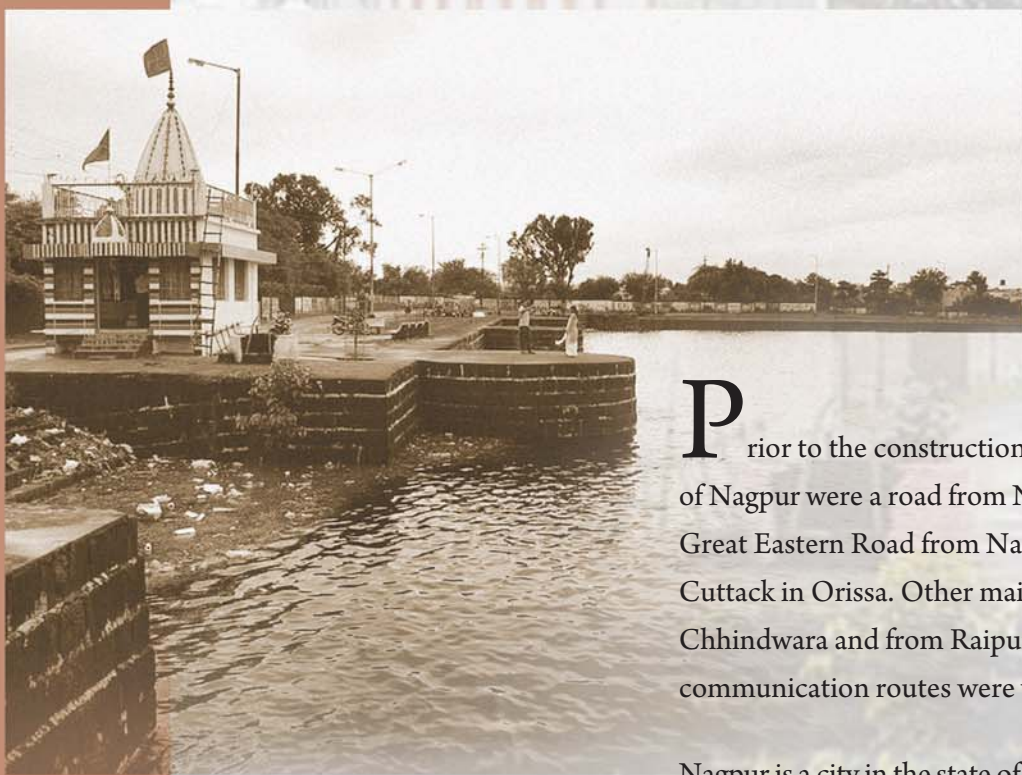
Seal of Nagpur city

...at the City of Oranges

*Nagpore Chuttesgurh Railway
to
Bengal Nagpur Railway*







Lake Sonagaon Temple

Prior to the construction of railways, the main trunk routes east of Nagpur were a road from Nagpur to Jabalpur through Seoni and the Great Eastern Road from Nagpur to Raipur, Sambalpur and on to Cuttack in Orissa. Other main roads were those from Nagpur to Chhindwara and from Raipur through Dhamtari to Jagdalpur. The communication routes were very very limited.

Nagpur is a city in the state of Maharashtra, with a population of around 2 million and is also famous throughout the country as "Orange City" for being a major trade centre of oranges that are cultivated in the region. Nagpur lies precisely at the centre of the country with one of the six Zero Mile Markers located here indicating the geographical centre of India. Nagpur district is essentially located in the Deccan Plateau of the Indian Peninsula and has a mean altitude of 310 meters above sea level. The underlying rock strata are covered with alluvial deposits resulting from the flood plain of the Kanhan River. In some places these give rise to granular sandy soil. In low lying areas which are poorly drained, the soil is alluvial clay with poor permeability characteristics. In the eastern part of city crystalline metamorphic rocks such as gneiss, schist and granites are found, while in the northern part yellowish sand stones and clays of the lower Gondwana formations are found.

Nagpur city is dotted with natural and man-made lakes with Ambazari lake being the largest. Other natural lakes include Gorewada lake and Telangkhedi lake. Sonagaon lake along with Gandhisagar lake are man-made lakes created by cities historical rulers. Nag river, Pilli nadi along with nallas form the natural drainage pattern for the city. Nagpur is known for its greenery, and was judged as the cleanest and second greenest in India after Chandigarh. The Nag River, a tributary of the Kanhan River, flows in a serpentine path and is therefore named "Nag",

the Marathi word for Cobra. According to Dr. B. R. Ambedkar, people of Nagpur belong to nag dynasty who were followers of the Buddha. And hence, the river and city is named as Nagpur. While others says that the river flows through the old city of Nagpur and hence the city is named after this river. The seal of Nagpur Municipal Corporation depicts a cobra in the water of a river.

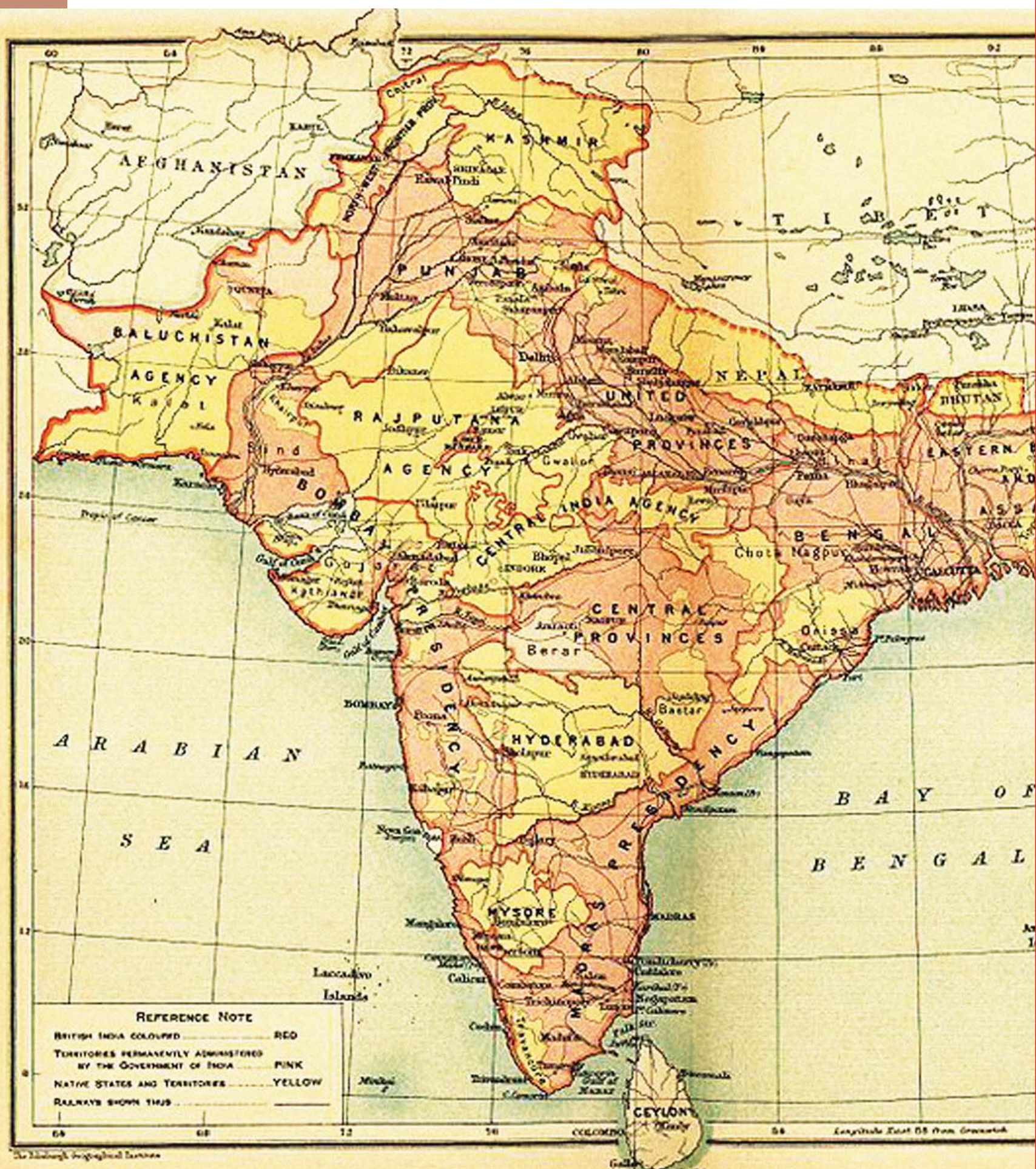
The present city was founded in the early 18th century by Bhakt Buland, a Gond prince of the kingdom of Deogad in the Chhindwara district. Seeing the advantage of civilized life in Delhi, he started to build Nagpur as his new capital. His successor Chand Sultan continued the work. On Chand Sultan's death in 1739, disputes regarding succession arose and Raghuji Bhonsle, the Maratha governor of Berar, helped to restore the elder son to the throne. As the dissensions continued, Raghuji Bhonsle again intervened in 1743, and the control of Nagpur slowly passed on from the Gonds to the Marathas. It became the capital of the Bhonsles.

With the Bhonsle dynasty came the vast class of cultivators in Vidarbha. Raghuji's successors lost some territories to the Peshwas of Pune and the Nizam of Hyderabad. In 1803, Bhonsles (along with their allies Scindias [Shinde] of Gwalior) at Assaye and Argaon (Argaum). In 1811 Pindaris attacked Nagpur. Bhonsles again lost to the British in 1817 and Nagpur came under British influence. In 1853 Raghuji III died without an heir to his kingdom. As a result, the city lapsed into British control under Lord Dalhousie's Doctrine of Lapse. {This policy was one of the reasons which led to the Indian War of Independence in 1857}.

In 1861, Nagpur became the capital of the Central Provinces and Berar. The advent of the Great Indian Peninsula Railway (GIPR) in 1867 spurred its development as a trade centre. Grain riots in the city of Nagpur had begun in 1869. Though there was no famine in Nagpur, the prices of grain were very high due to famine in the adjoining Jabalpur Division (north of the province) and some parts in the North Eastern parts around Rajnandgaon and Raipur. Although large-scale relief was offered under “work for pay” schemes throughout the famine-stricken regions in accordance with the Provisional Famine Code of 1883 (promulgated soon after the submission of the report of the first Indian Famine Commission in 1880), the mortality, both from starvation and accompanying epidemics, was very high: approximately 1 million people are thought to have died as a result of the famine.



Nagpur, circa 1895.

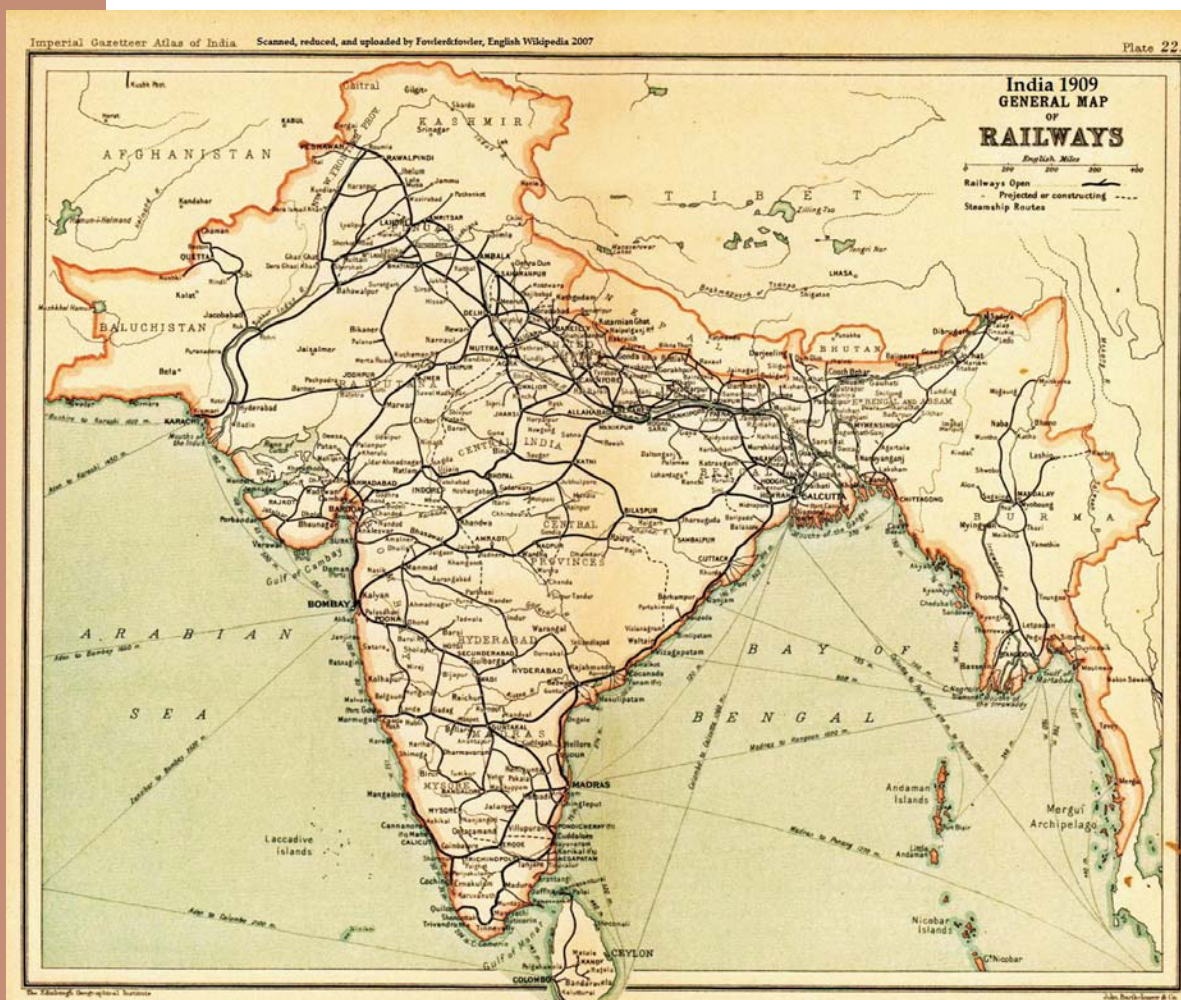


Map of the British Indian Empire (1909), showing the different provinces and native states. The Central Provinces and Berar was especially hard-hit by the famine in 1869.



The development of the Central Provinces had been urged as back as in 1863 by Sir Richard Temple, the then Chief Commissioner of the isolated and fertile, but undeveloped country. In 1870 Mr. Morris, afterwards Sir John Morris, who

Further, the necessity of great and rapid extension of the railway system was urged by the Famine Commissioners, who estimated that at least 5,000 miles were still necessary for the protection of the country from famine. It was held by the Government of the time that a limit was necessary on the capital borrowed annually; and it was clear that the limit fixed was not high enough to allow of such progress in railway construction as was desirable.



Famine Commissioners observed that, *"there would be manifest advantages in giving free scope to the extension of railways by private enterprise if it were possible; and, though the original form of guarantee has been condemned, it may not be impossible to find some substitute which shall be free from its defects, and may secure the investment of capital in these undertakings without involving the Government in financial or other liabilities of an objectionable nature"*.

The Provincial Government of Central Provinces on the recommendations of the Famine Commission constructed Nagpur - Chhattisgarh State Railway. This line was the forerunner of the present South Eastern Railway. Construction of this line began in 1878 and completed in 1882.

Sometime in 1872, a limitation was imposed upon the Government of India by which it could not spend more than £ 2,500,000 a year out of borrowed capital on productive public works. This meant a slow growth of railways, if the State alone was to construct them.



Trolley inspection, 1897

The Famine Commissioners laid great emphasis upon the importance of extending the railways in order to protect the people from the ravages of famine. It was expected from the Government *"to continue to provide the country, within prudent but sufficiently wide limits, with extended railway communications and irrigation works, which are the best, and often the only, means of securing protection from the extreme effects of drought and famine"*.

The Government of India was concerned with the gravity of the famine and the importance of extending the railways in providing relief to the masses. But obviously this could not be done without enlarging the limit of the Government expenditure on public works or enlisting private enterprise in some shape or other for construction of rail-lines. There were still some more reasons which influenced the opinion of the Government of India in switching over from state built and managed lines to Company built and managed lines. Lord Cromer, an important member of the Viceroy's Council expressed that, *"if profits were left to fructify in the pockets of the people, they would be more advantageously employed than if they were paid to the State, with a great chance of their being swallowed up in unproductive expenditure"*.

H.M. Jagtiani, author of the book *"The role of the State in the provision of railways"* seeks in vain for any serious reason which should have necessitated a change in the policy which had been forwarded by Lord Lawrence in 1869: *"it could have been equally well achieved by enlarging the powers of the Government of India. The relative merits of the problem of direct State and company operations were not sufficiently well considered. The change was brought about under a sort of vague and ill-defined reasoning, sometimes taking the form of a belief that under this mixed system there would be a healthy emulation, at others, that the responsibilities of the State should be minimised. The gravest of the defects of the move of the Government was that it was a policy of drift without any definite arrangement or system."*



Sir Richard Temple

Sir Richard Temple, 1st Baronet, GCSI, CIE, PC (8 March 1826 – 15 March 1902) was an administrator in British India and a British politician.

After being educated at Rugby and the East India Company College at Haileybury, Temple joined the Bengal Civil Service. He served as Chief Commissioner for the Central Provinces until 1867.

He was made lieutenant-governor of Bengal Presidency in 1874, and did admirable work during the famine of 1874, importing half a million tons of rice from Burma to substantially bring relief to the starving. The British government dogmatically committed to a laissez-faire economic policy, castigated Temple for interfering in the workings of the market. He was appointed by the Viceroy as a plenipotentiary famine delegate to Madras during the famine of 1877 there. Seeing this appointment as an opportunity to "retrieve his reputation for extravagance in the last famine", Temple implemented relief policies that made the starvation of millions inevitable.

He had kept a careful journal of his parliamentary experiences, intended for posthumous publication. Some of the information in these pages are from his reminiscences. He died at Hampstead on the 15th of March 1902. He was twice married, and left a daughter and three sons, all of the latter distinguishing themselves in the public service.







The Government of India finally decided to take action as suggested by the Famine Commission to again allow private companies to construct Railway lines. Three companies were formed – The Bengal Central Railway in 1881, Bengal and North Western Railway and the Rohilkhand and Kumaon Railway in 1882, without any guarantee. The Government, however, could not induce any more takers for construction of rail-lines without guarantee. A modified system was, therefore, worked out to induce private capital giving a guarantee though not that much attractive as was with the old companies. Three new guaranteed companies were formed—Southern Maratha in 1882, the Indian Midland Railway in 1885 and the Bengal Nagpur Railway in 1887. The guarantee to the Indian Midland and Bengal Nagpur Railway Companies was 4% and the Secretary of State was entitled to three fourth of the surplus profit in excess of all interest charges. The lines constructed by these three newly guaranteed companies were declared to be the property of the State, who had the right to determine the contracts at the end of 25 years after their respective dates or at subsequent intervals of 10 years, on repaying at par the capital provided by the Companies. Bengal Nagpur Railway Company was the last major guaranteed Company, a good 28 years younger to EIR and GIPR Companies.

Meanwhile, pressed by the Civil Administration of the Central Provinces and by those of the adjacent and even more remote territory, Chota Nagpur, the Government of India gave attention in increasing degree to the demands of these provinces. In the vice-royalty of Lord Ripon, the pressure of the local authorities began to bear fruit. To quote Sir John Morris, *"There is one fact apart altogether from the question of financial success, which I deem it my duty to lay clearly before the Government, and that is, the calamity which would overwhelm the land-locked country of Chhattisgarh should in any year a total failure of the rice crop, following on one or two bad seasons, occur over the whole area—without the railway, no means of transport would exist"*.

The pressure from the Civil Governors of the Central Provinces and of Chota Nagpur had effect on the higher authorities in 1870s, but the outside public knew little or nothing of the matter until the fall in



exchange rate (rupee v/s pound sterling) and the necessity for some counteracting influence compelled attention. Mr. Valentine Ball's book, "Jungle life in India," published in 1876, threw light for the general public on the possibility of railway connection between the Central Provinces and Calcutta, and drew popular attention to the general subject up to that time buried in blue books and papers in the Government Secretariat. It was about 1877 that agitation for connection between the Central Provinces and the East side of India began outside the circle of the Government itself.

First surveys for a railway connecting Nagpur with the rich agricultural area of Chhattisgarh were made in 1871. The Provincial Government decided to build a rail line on metre gauge alignment after being impressed by the success of the Imperial State owned Rajputana-Malwa Railway. Provincial Government owned railway in the title of 'Nagpur Chhattisgarh Railway' was formed to construct and run a rail-line from Nagpur to Raipur. First sod was cut on 9th May 1878 for the Nagpur-Dongargarh section, where survey had been completed early. Survey for Dongargarh-Rajnandgaon was commenced in September 1880.

Construction activity was at a good pace. The first portion of Nagpur-Tumsar (53 miles) was opened for traffic in April 1880. The complete line from Nagpur to Rajnandgaon was opened for traffic before the close of 1882.

The Nagpur Chhattisgarh Railway (NCR) line was constructed with rails weighing 40 lbs. per yard laid on creosoted pine, sal and teak wood sleepers. The principal engineering features of this line were: -

- A tunnel of 755 feet length known as Durrakussa tunnel about 10 miles west of Dongargarh (present day picture above).

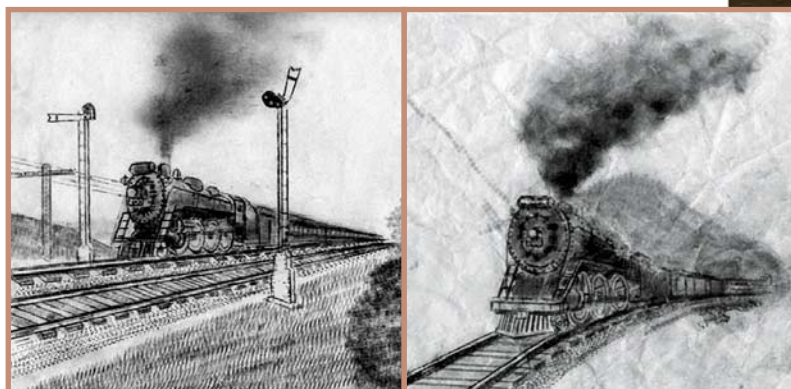


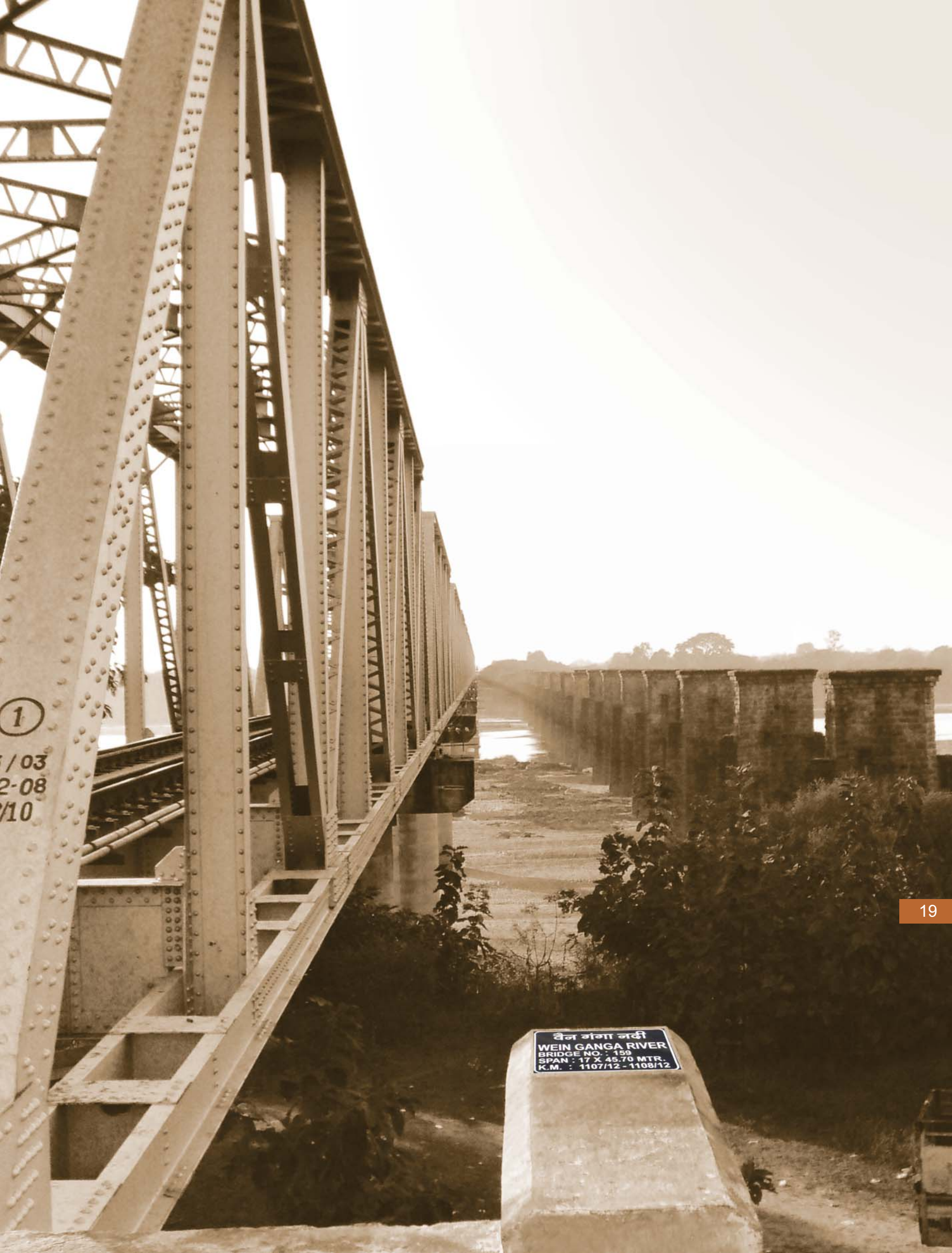
- A bridge of 9 spans of 150 feet each on Weinganga river 53 miles east of Nagpur (the picture on the right shows the bridge alongwith the old piers of the original bridge).

Locomotive Workshops were established at Motibagh, Nagpur. This workshop assembled locomotives and built carriages and wagons on imported underframe. At Dongargarh, an engine shed to house six locomotives was built. In 1887, before its conversion into broad gauge, Nagpur Chhattisgarh Railway had 27 metre gauge steam locomotives working on its system. Details of these locomotives are tabulated below:

ISR	NCR	Class	Type	CW	Cyls	Makers	Date
26.55	1-2	B	0-4-4T	42	11x18	NW	1874
272-9	3-10	Small F	0-6-0	42	13x20	N	1879
289-94	11-16	Small F	0-6-0	42	13x20	N	1880
594	17	Big F	0-6-0	42	14x20	D	1884
595-8	18-21	Big F	0-6-0	42	14x20	D	1884
521-6	22-7	O	4-4-0	53	14x20	D	1883

CW= Diameter of Coupled Wheels in inches, Cyls= 2 Cylinders,
Diameter in inches x Stroke in inches .





①
/03
2-08
/10

वेन गंगा नदी
WEIN GANGA RIVER
BRIDGE NO. : 159
SPAN : 17 X 45.70 MTR.
K.M. : 1107/12 - 1108/12

The construction of a new bridge over the Kanhan River suitable also for the broad gauge line commenced in 1884. This bridge, 6 spans of 170 feet and 2 spans of 60 feet each, one at each end, was completed in 1887, in time for the Bengal Nagpur Railway's takeover of this metre gauge line and its subsequent conversion to broad gauge. Pending the conversion of line to broad gauge, the bridge was tested and passed for metre gauge traffic in July 1887.

The financial results of Nagpur Chhattisgarh Railway for the two calendar years 1885 and 1886, just before it was handed over to Bengal Nagpur Railway company are tabulated below:

Sl. No.		Item	1885
1.	Mileage open	149	149
2.	Train-miles run	397,262	367,071
3.	Gross Earnings(Rs.)	14,14,889	14,24,521
4.	Working Expenses(Rs.)	9,21,315	8,90,492
5.	Operating Ratio ($4 \div 3 \times 100$)	65.12	62.51
6.	Profit (3-4)(Rs.)	4,93,574	5,34,029
7.	Total Capital Outlay(Rs.)	1,00,63,026	1,18,25,689
8.	Percentage Profit ($6 \div 7$)	4.58%	4.52%

This indicates that the financial status of the State owned and State managed metre gauge line was sound, even in its infancy.

Nagpur, the Headquarters of Chhattisgarh State Railway from 1878 to 1887, continued to serve for offices of Agent and Chief Engineer of Bengal Nagpur Railway from 1887 to 1895. It was only at the close of the nineteenth century that the offices were shifted to Calcutta.

Nagpur Railway Workshop, the premier shops of Chhattisgarh State Railway also became the premier shops for Bengal Nagpur Railway. Locomotives were assembled at Nagpur from the imported kits, repaired and in many cases modified here. It was only in 1905 that the main activity was shifted to Kharagpur and Nagpur workshop went through another change this time from a workshop dealing with broad gauge stock to a workshop dealing with narrow gauge stock of Satpura Lines.



Kanhan Bridge with the structure of the old metre gauge system alongside (now being used as a road).



In 1888, an amusing anecdote was published in 'The Indian Engineer', about Frederick Dibblee shooting some cows thinking they were bears. This happened near Bilaspur while doing this survey. It gives some idea of the group of people who travelled with Frederick Dibblee when he was doing his surveys.



BENGAL NAGPUR RAILWAY



BENGAL NAGPUR RAILWAY COMPANY was formed in 1887 under the supervision and with the support of the Secretary of State for India for the purpose of carrying out a contract, by which the Company was to take over the then existing Nagpur Chhattisgarh Railway from Nagpur to Rajnandgaon (149 miles), convert it to broad gauge and extend the system by a route to be selected to join the East Indian Railway at Asansol, 132 miles from Calcutta and also to construct a branch 161 mile long northwards from Bilaspur to Umaria coal mines to join the then existing line between Umaria and Katni, a station on the Jabalpur branch of the East Indian Railway. The contract contemplated that the Umaria-Katni line would also be handed over to the Company.

As was inevitable, much discussion took place on the point of route. The Commissioner of Chota Nagpur desired that his beautiful, fertile and practically isolated, province should be traversed through by rail-lines. On their part, the commercial community of Calcutta desired the shortest route to be chosen. Ultimately the route shortest to Asansol was determined on. It was foreseen that the line would be the base of many developments and such it has proved to be. Something of the original difficulties of selection may be inferred from the fact that starting from Asansol as a base it took the engineers three whole months to construct passages for carts through the jungle to the site of Saranda tunnel.

It was in an administrative report reported that:

"By the construction of the main line of this Railway, a new direct route will be opened up between Calcutta and Bombay, effecting a saving in distance of about 120 miles. This, however, is not considered the chief advantage likely to result from the proposed Railway, for its greatest value and the source from which its largest receipts are looked for will be the opening out of an immense territory in the Central Provinces which has hitherto been inaccessible to external trade, and the providing of an outlet for the produce of great wheat and seed producing country of Chhattisgarh to the two ports, Calcutta and Bombay. The branch to Umaria possesses a double value in being a connection between the main line and a valuable coal field, and also in affording by the line thence to Katni, communication with the East Indian and Great Indian Peninsula and Indian Midland railway systems, which will prove of inestimable importance in placing the produce of Chhattisgarh within reach of Central and North-West India".

On 9th March 1887, an Indenture was made between the Secretary of State in Council of India and the Bengal Nagpur Railway Company Limited (BNR). The general conditions of the main contract that came into effect from 1st April 1887, could be sub-grouped as below: -

- Conversion of 149 miles of Nagpur-Chhattisgarh Railway from Nagpur to Rajnandgaon.
- Construction of 480 miles of new line on broad gauge alignment from Rajnandgaon to Asansol.
- Construction of 161 miles of new line on broad gauge alignment from Bilaspur to Umaria to join Katni-Umaria State Railway (36 miles).

To quote from Railway Gazette of May 1913:

"From one point of view the State drove a pretty good bargain for itself in getting Rs. 70,229 per mile for the original Nagpur Chhattisgarh State Railway, a light tramway which cost the Company Rs. 60 thousand per mile to convert into broad gauge, while the broad gauge throughout, cost under the Company management, only Rs. 78,528 to build. If, however, we look at the financial results of the undertaking, we must recognize the courage of the Government of India and acknowledge their foresight. From the beginning of the period of the contract in March 1887, until December 1904, the undertaking had cost the Government of India about Rs. 1,600,000 in respect of deficiency between net results and the sum of the accumulated interests. It was not until 1905 that the undertaking was able to earn a surplus over its interest charges. It owed the Government Rs. 570,000 on January 1, 1912, but this book debt is by this time fully repaid. If, therefore, the railway is regarded simply as an individual investment by the State without reference to what the railway has done for trade, and for the protection of the people of India, and for revenue derived by the Government from land brought into cultivation, and from the betterment and increase of the population, the construction of the main line was, at least, a bold experiment. The indirect gain to the State has been enormous. From 1905 onwards, the system has been profitable."

The conversion of the entire open section of Nagpur-Chhattisgarh Railway from metre gauge to broad gauge was completed and opened for traffic on 27th November, 1888. By a slight realignment, 3.5-mile long Tumsar diversion was abandoned.

And now before proceeding to the new construction by BNR, let us begin with the preliminary surveys:

Reconnaissance for a line from Bilaspur to a point near Sitarampur (now this point is the well known Asansol) on East Indian Railway, was completed in 1881-82. The entire survey was completed in only one

working season by engaging five survey parties under the directions of Mr. W.H. Parker, Superintending Engineer. Earlier survey reports for the section Rajnandgaon-Bilaspur were accepted in toto. Three alternative routes were examined to locate a line of about 367-mile length.



Elephant shunting a train on the Bengal-Nagpur Railway

To quote from the Administrative Report of 1882-83:

"The country is very undulating throughout. The greater portion of the located line is through forest and from the 135th to 165th mile the location work was very difficult through the hills and spurs of the Saranda ridge, south of Koel branch of Brahmin river. It was contemplated that this line will shorten the through route from Bombay to Calcutta by about 123 miles and will open up the northern parts of Raipur, Bilaspur, Sambalpur and Singhbhum districts and the district of Manbhum. For the construction, cheap labour and abundant timber was available. The alignment also possessed the incalculable advantage of having coal procurable from its terminus near Sitarampur."

Bilaspur-Etawa Provincial State Railway survey was ordered in September 1882 and construction was ordered in September 1884. Earthwork began in December 1884. The line was sanctioned as a famine protection line projected between Bilaspur and Etawa on the Indian Midland line.

A BNR P class pouring over its own reflection at Bhillai (1970). How times change.



A 37-mile long line commencing from Katni, 171 miles from Allahabad on the Jabalpur line of EIR, to Umaria in Rewah State was constructed in advance of the rest, in order to place the Umaria Collieries in connection with the Railway system. Second hand rails from East Indian Railway were used. Earthwork was heavy, there being much rock-cutting but bridgework was light. The only noteworthy bridge is on Mahanadi - 4 spans of 100 feet, one of 80 feet and one land span of 40 feet. Katni-Umaria section was opened for traffic on 2-11-1886. Bengal Nagpur Railway took over the management of Katni-Umaria line on the 1st April 1888 and used the survey reports of this State Railway for further construction of Umaria-Bilaspur branch line.

1888 and 1889 were the most active years in the history of the Bengal Nagpur Railway. For the main line from Rajnandgaon to Asansol as well as for the branch line, construction activity was in full swing as will appear from the Administration Report of 1888-89:



Second Firemen wetting the coal for increasing the fuel efficiency

"The section from Rajnandgaon to Raipur was opened for traffic on 4th December, 1888. The section from Raipur to Bilaspur was opened to goods traffic on 10th January and for passenger traffic on 14th February 1889, thus increasing the total B.G. line worked by BNR to 293 miles. In addition to it, rails have been laid and construction trains are working over them for a distance of 195 miles. Construction work is now in progress over the whole of the system as detailed below:

MAIN LINE:

Nagpur to Bilaspur- Opened for traffic

Bilaspur to Raigarh- Earthwork practically completed. Bridges nearly complete except those over the Hasdeo (5 spans of 200 feet girders) and Mand (9 spans of 100 feet girders)

Raigarh to Sogra- Good progress with earthwork and masonry at the Ib river bridge (9 spans of 150 feet girders), well foundations are progressing satisfactorily.

Sogra to Monarpur- Earthwork is well advanced. At the Brahmini river, the bridge (9 spans of 150 girders) is progressing.

Monarpur to Goilkera-Great difficulty is being experienced in getting labour to stay in the Saranda jungle.

Goilkera to Purulia- Earthwork practically complete. Masonry of all bridges except the Subarnarekha are nearly finished.

Purulia to Asansol- Rails laid, line ready for inspection.

BRANCH LINE:

Umaria to Pendra - Earthwork, bridges etc. well advanced.

Pendra to Bilaspur - Earthwork practically completed."

One year later, at the close of the official year 1889-90, the state of work on various sections were:

MAIN LINE:

Nagpur to Raigarh- Opened for traffic.

Raigarh to Sambalpur -This section is complete except for the Road Ib bridge.

Sambalpur Road to Goilkera- Earthwork far advanced. All the piers of Goilkera Brahmini river Bridge well advanced, would be complete before rains of 1890.

Goilkera to Chakradharpur- Lines ready to open for traffic. Saranda tunnel progressing well.

Chakradharpur to Asansol- Lines opened for public traffic.

BRANCH LINE:

Bilaspur to Khodri- Work almost finished. Tunnels three quarters completed.

Khodri to Umaria - Earthwork completed, plate laying in progress.

Umaria to Katni- Line opened for traffic.



Steam, Water and Bridge



Rail Laying



WG Class Loco : an old work horse of BSP division

CURVE NO : 43A
KM. = 800/26 TO 799/26 DN
DEGREE = 7 (LH)
S.E. = 25mm. V = mm.
TRANS / LENGTH = (45 + 45) M
TOTAL LENGTH = 330 M

100

Bhanwartonk Tunnel on the Bilaspur-Katni Section



The main line for BNR from Nagpur to Asansol was opened through for goods traffic on the 1st February 1891. By 31st March 1891 the passenger services commenced providing an efficient means of transportation to the people of Central Provinces and Berar.

Mr. Wynne had an exceptionally bright career. He became Agent and Chief Engineer of BNR after 13 years of service only. He remained Agent for 18 years, served the Railway Board as Member for 3 years, as President (or Chairman, Railway Board in the present context) for 7 years. And then again as Managing Director of BNR for 15 years and ultimately Chairman, BNR for another 10 years. Thus, Mr. Wynne, the man at the helm of the affairs of BNR served it for 53 years.

Two more persons had played vital roles in the shaping of BNR. They were Sir Samuel Hoare, the first Chairman of the Board of Directors of Bengal Nagpur Railway Company, who served as Chairman for about three decades and Mr. Robert Miller, the first Managing Director of the BNR Company, who served as Managing Director for twenty four years and later also as a Director on the Board. These two gentlemen had earlier formed a company in the title of Messrs. Hoare, Miller & Co. at Calcutta and played a minor role to influence the Government of India for reintroducing the guarantee system for railway companies.

Neither BNR nor East Coast Railway used large contract system. Usually petty contractors supervised departmentally, carried out the construction job for these railways. BNR had proportionately a fewer number of European establishment. Usually one European for over 5 miles of route mile was the norm; in 1890, an authorised European establishment of 63 for 318 miles of construction.



Sir Trevredyn Rashleigh Wynne

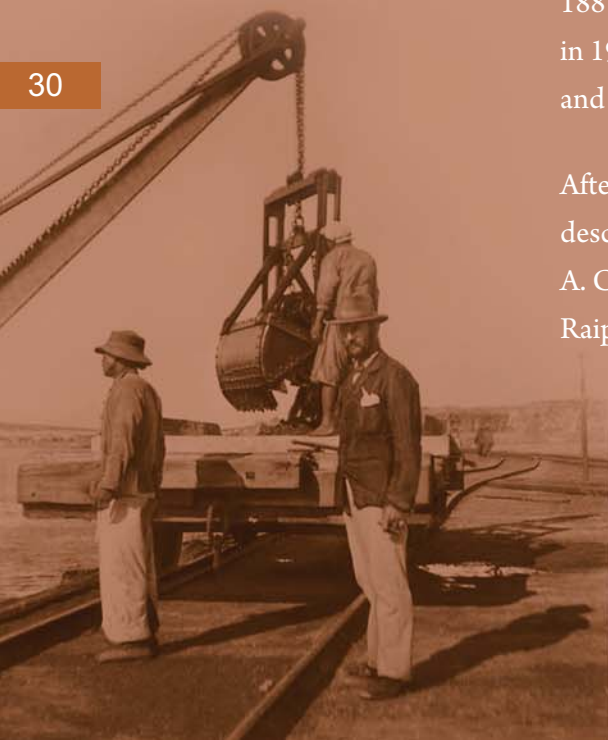
And now is the time to pay tributes to the people who built rail lines at such Godspeed. Amongst all the railway persons of BNR, the most remembered one is Sir T.R. Wynne, K.C.S.I., K.C.I.E.

Trevredyn Rashleigh Wynne was one of the fifty young engineers turned out from the Royal Engineering College, Cooper's Hill and appointed by the Public Works Department of India in 1874. These fifty engineers sailed for India in October 1874 from Southampton.

Wynne resigned Government Service in 1887 to take up the appointment of Agent and Chief Engineer, Bengal Nagpur Railway Company, a position which he held until 1905, save that during the years 1902-4 he was employed by a Syndicate as Manager of a large Railway and Mining Enterprise in China. In January 1905, Sir T.R. Wynne was appointed a Member of the newly constituted Railway Board and three years later its President on retirement of Sir F.R. Upcott. On 2nd May 1914, Sir T.R. Wynne resigned the Presidency of the Railway Board to take up the appointment of Government Director of Indian Railway Companies in London. At the close of the year 1914-15, Sir T. R. Wynne resigned and became the Managing Director of his old 'Bengal Nagpur Railway Company'.

Sir T. R. Wynne's tenure as Agent and Chief Engineer of BNR from 1887 to 1905 is full of laurels. Starting from scratch in 1887, the lines in 1905 stretched to 1966 miles with a capital outlay of Rs.26 crores, and operating ratio of below 50%.

After 30 years, in 1904, the fate of fifty engineers of 1874 batch was described by one of them, namely, A. C. Newcombe, who also participated in a survey of Vizianagaram - Raipur Railway in 1902, thus:



"Of the fifty young engineers, appointed in 1874 from Cooper's Hill College, ten left the service for various reasons after a few years in India, eleven died (and among these were some of the most zealous and efficient), and some reached their time of retirement after having suffered much in health. On the whole, it may be said that only about half satisfactorily reached the end of their Indian career".

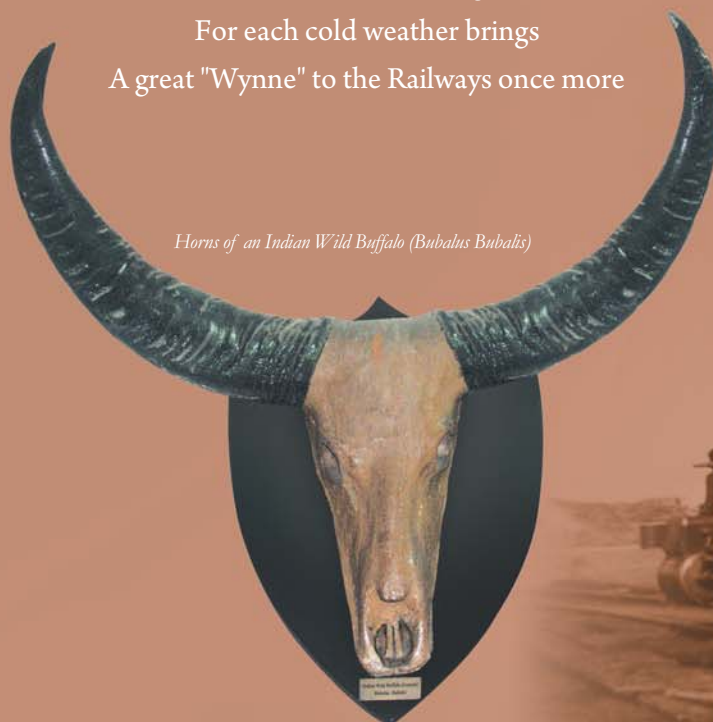
Sir Wynne had an exceptionally bright career. He became Agent and Chief Engineer of BNR after 13 years of service only. He remained Agent for 18 years, served the Railway Board as Member for 3 years, as President (or Chairman, Railway Board in the present context) for 7 years. And then again as Managing Director of BNR for 15 years and ultimately Chairman, BNR for another 10 years. Thus, Sir Wynne was the man at the helm of affairs of BNR for 53 years. A good track record!

Two limericks published in the BNR house magazine of March 1929 as salutes to Sir Trev', extol his contributions.

——
There's a line called the Bengal-Nagpore
Constructed in days of long yore
By the worthy Sir Trev'
Whop made the wheels rev'
Till it earned every month half a crore

——
There's a line called the Bangal-Nagpore.
Which has suffered sad losses galore.
Yet a "Carroll" it sings
For each cold weather brings
A great "Wynne" to the Railways once more

Horns of an Indian Wild Buffalo (Bubalus Bubalis)





Administrative Building, Motibagh, NG Railway Workshop, Nagpur



MOTIBAGH WORKSHOP NAGPUR





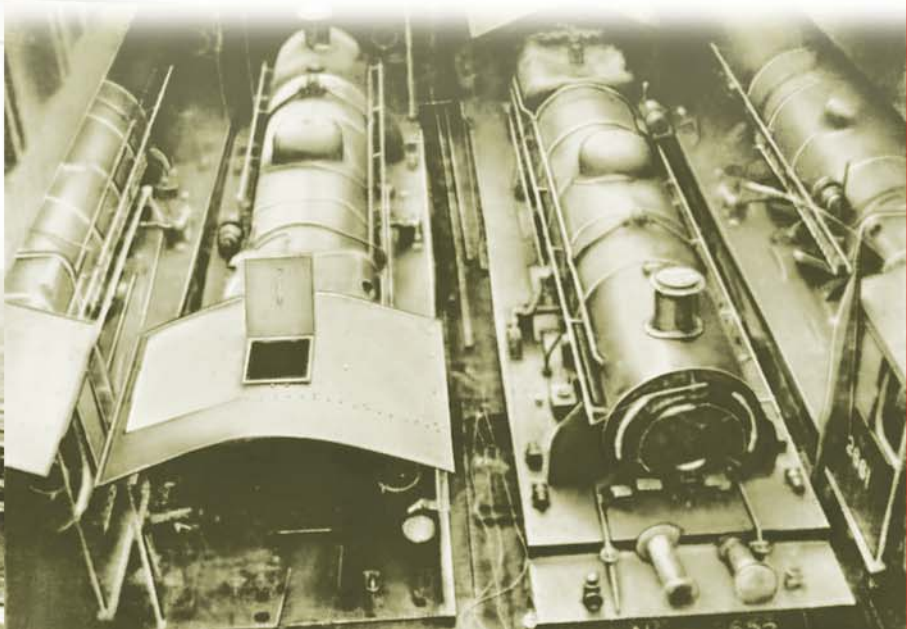
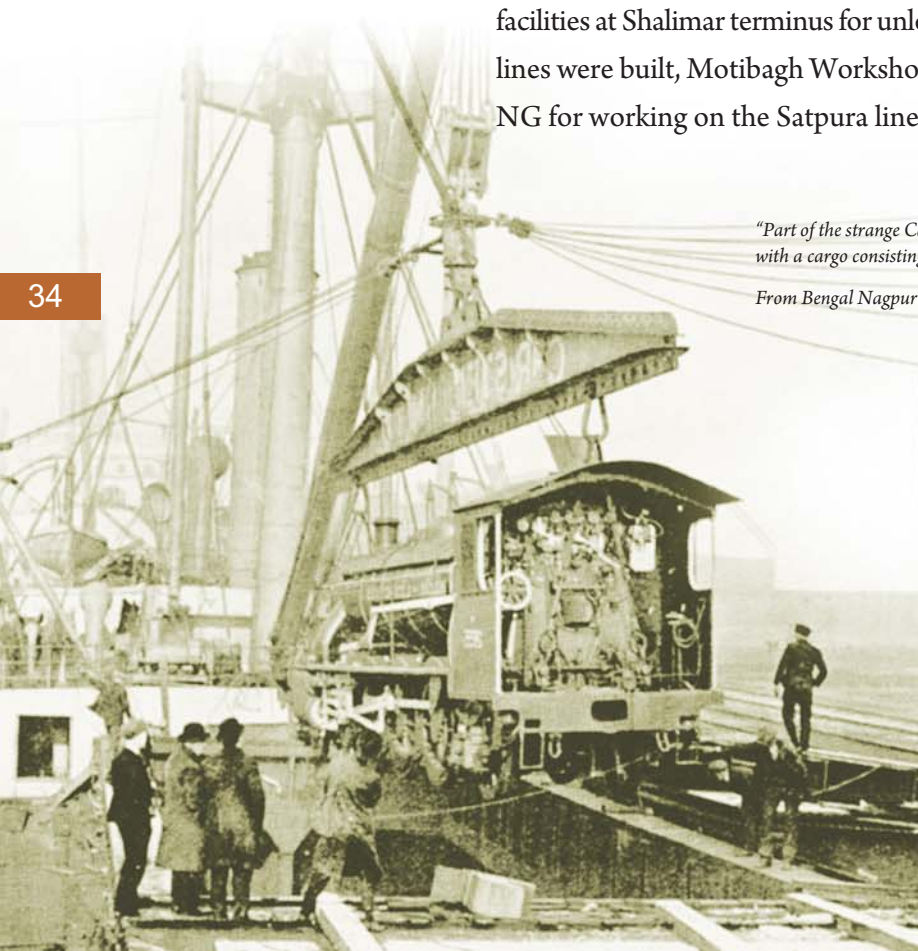
The Visit of the Agent...to the Railway Workshops in 1890

This workshop was originally set up by the Nagpur Chattisgarh Railway in 1879 to service its metre gauge stock. It was later taken over by the Bengal Nagpur Railway in 1887. When conversion of the Nagpur - Rajnandgaon MG line to BG was completed in 1888, the workshop was altered to cater to BG stock requirements in the area. From 1887 to 1908, Motibagh Workshop was the prime workshop facility of the Bengal Nagpur Railway.

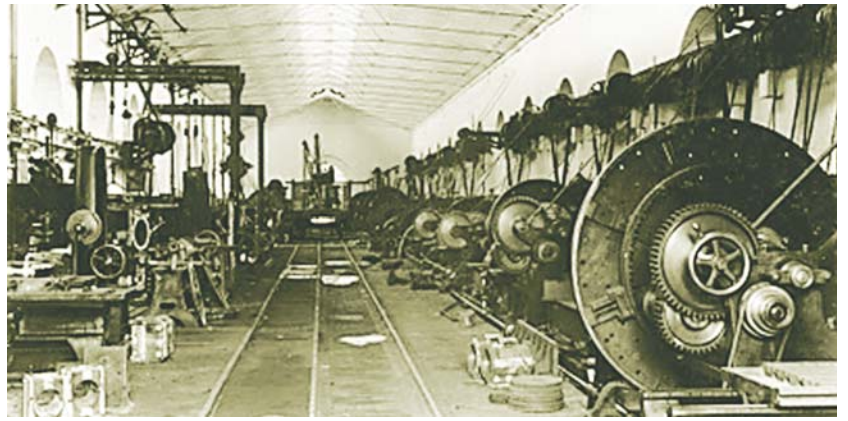
The Nagpur Chattisgarh Railway company would get locomotive kits at port of Mumbai and then ship them to Motibagh via the GIPR route from Bombay to Nagpur. These locomotives would then be assembled and commissioned at the Motibagh Workshop. BNR used a similar system in the initial years of its formation. After the Nagpur - Asansol BG line was completed; the locomotive kits would be brought in to the Damodar rail head by river. At a makeshift workshop there, the shell was assembled and wheeled so that it could be moved on its own wheels. This skeleton would then be moved to Motibagh via the BNR route for full assembly and commissioning. This practice continued till the extension of the Nagpur - Asansol line to Howrah and completion of facilities at Shalimar terminus for unloading ships. When the NG Satpura lines were built, Motibagh Workshop regauged two BG locomotives to NG for working on the Satpura lines.

"Part of the strange Cargo of the Norwegian steamer, 'Belpamela', which sailed from Liverpool for India in February with a cargo consisting of 16 engines (each weighing 90 tons), 9 tenders, a seaplane carrier and a light ship."

From Bengal Nagpur Railway Magazine - Vol. XIV No. 4, April 1930



Turning Shop - 1897

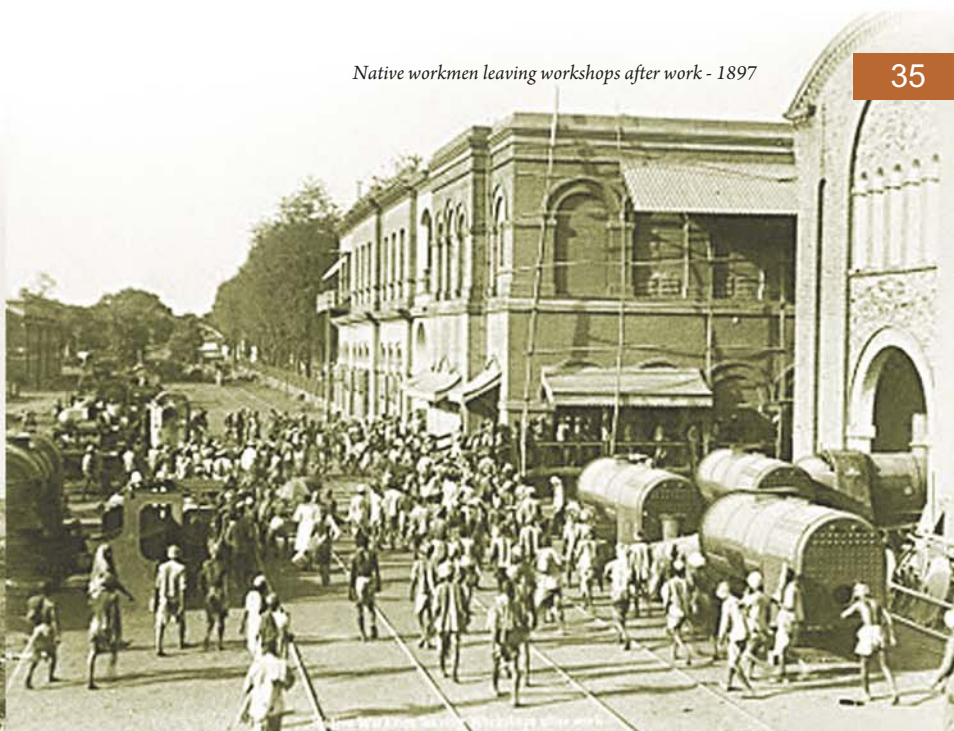


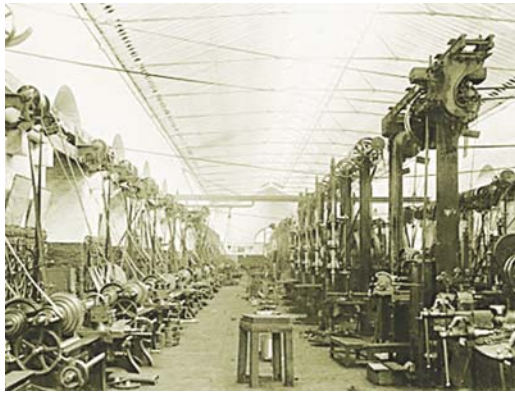
The importance of Motibagh diminished soon after establishment of the Kharagpur Workshop in 1904 as BNR decided to shift all BG work to Kharagpur and Motibagh continued to handle only the NG locomotives and stock. However, Motibagh is known to have done some BG work intermittently since then. The workshop still has BG-NG dual gauge gauntleted track leading inside.

Today, Motibagh Workshop overhauls NG locomotives and rolling stock, even from several other lines. Geographically Narrow Gauge Workshop/Nagpur is situated on the South side of the Kamptee Road (National Highway No.7), nearly 3 KMs from Nagpur Railway station, extending over an area of 67580 sq.m. with a covered area of 15438 sq.m and approachable by rail and road links. Primarily, the workshop was engaged with the periodical overhauling of NG Rolling stock consisting of steam locos, coaches and wagons of entire undivided South Eastern Railway (eastwhile BNR) as there was no other NG Workshop in this railway. Due to withdrawal of steam locomotives from service, the workshop switched over to the POH of Diesel Hydraulic locomotives. This workshop has also re-constructed 84 complete NG coaches from November 1989 to December 1995 and has a unique distinction of exporting 18 NG coaches to Nepal Transport Corporation in the year 1995.

Native workmen leaving workshops after work - 1897

Steel foundry -1897



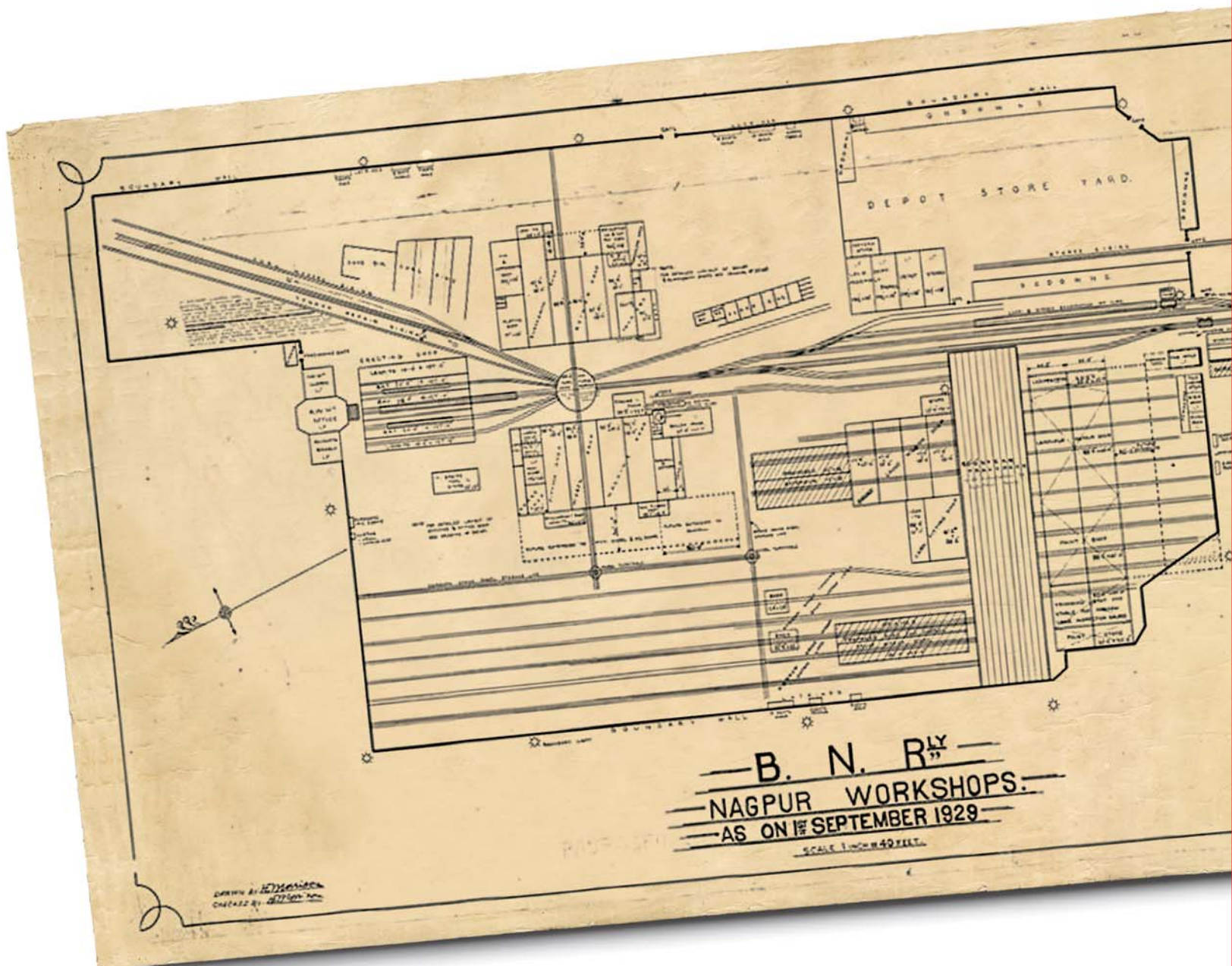


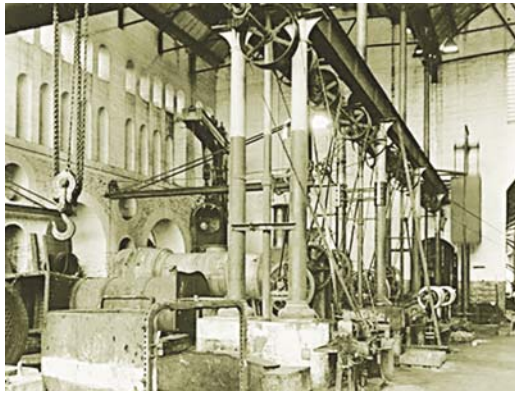
Rows of turning machines, typical railway workshops



Point, Crossing and Signal Shop - 1897

The receipt and dispatch of raw materials as well as rolling stock components is through use of Broad Gauge wagons. The gauntleted gauge was also useful when these shops undertook POH of all B.G. Coaling Cranes for utilizing the spare capacity that was generated after the introduction of Labour Incentive Scheme in these shops during the year 1965. The workshop had been provided with a turn-table in between the then Erecting, Stripping and Boiler shops, which caters for movement in all directions, as required for various operations. This unique layout is typical of this workshop. One traversor of 100-tonnes capacity had also been provided which facilitates movement of coaching, goods stock





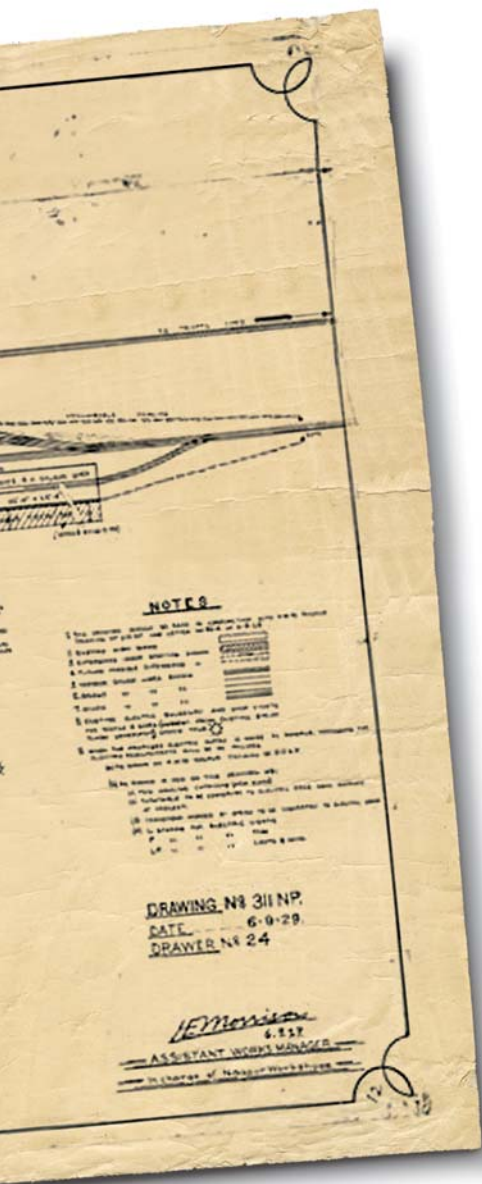
Boiler Shop - 1897



Iron Foundry - interior view - 1897

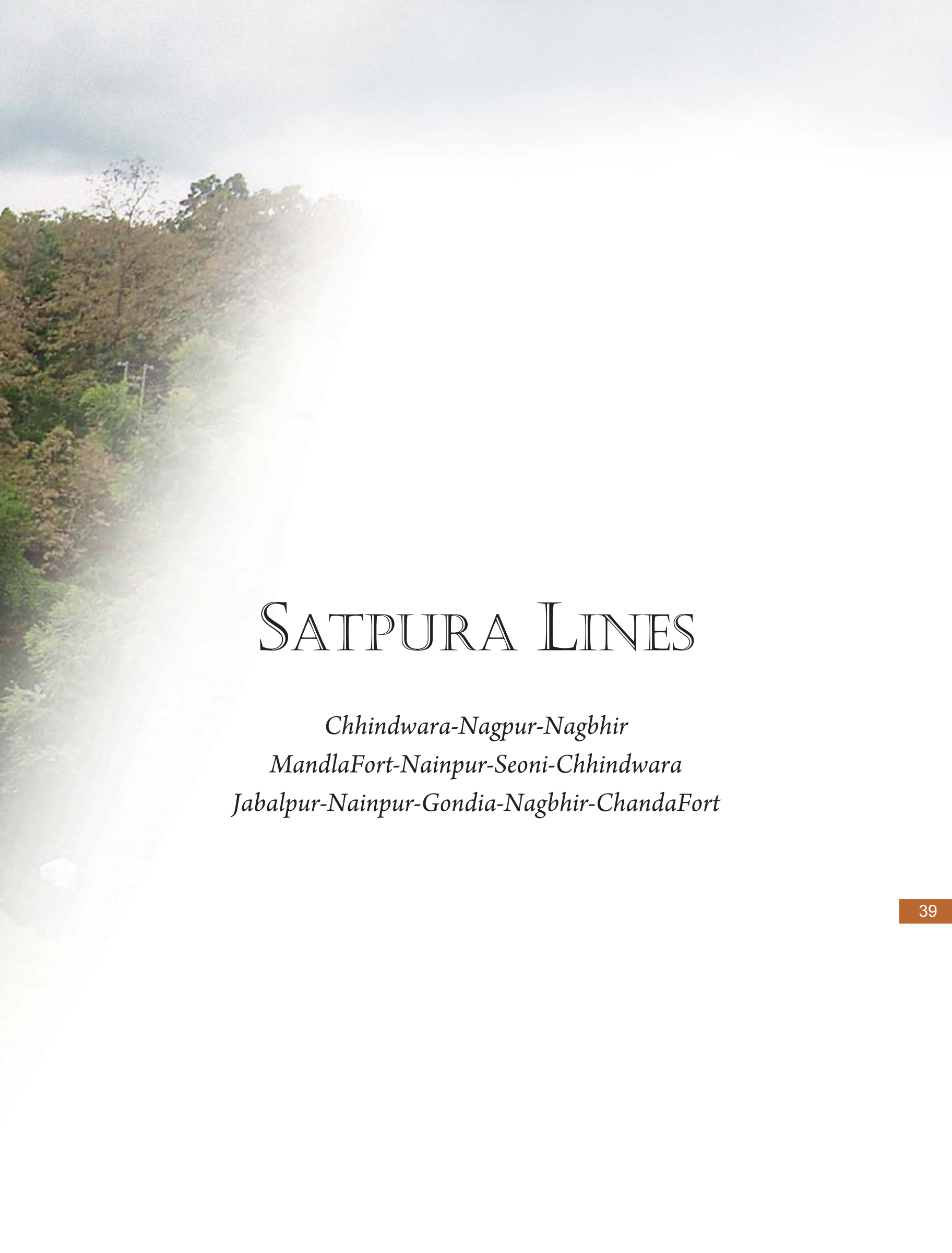
and wheel-sets from one section to another area. This workshop catered to the maintenance needs of rolling stock operating on different sections of the Narrow Gauge Satpura Lines, which were laid and opened from 1903 to 1922 as under:

S.No.	Section	Years of execution
i	Gondia-Jabalpur	1902-1905
ii	Gondia Chanda Fort	1908-1916
iii	Nainpur-Mandla Fort	1909
iv	Nagpur- Nainpur	1904,1907-1913
v	Chhindwara- Barkuhi-Parasia.	1906,1907-1922
vi	Saoner-Khapa	1911



The workshop is proud to be the owner of the century old heritage machines, which are still operational and are contributing to the outturn.





SATPURA LINES

Chhindwara-Nagpur-Nagbhir

MandlaFort-Nainpur-Seoni-Chhindwara

Jabalpur-Nainpur-Gondia-Nagbhir-ChandaFort

Satpura is a range of hills in the centre of India. The name originally belonged only to the hills, which divide the Narmada and Tapti valleys and styled as the Satpura or 'seven sons' of the Vindhyan mountains. The term Satpura is however, customarily applied to the whole range and the Satpura region applies to the range as well as territories around it in the district of Mandla, Balaghat, Seoni, Chhindwara and Betul.

Portions of the Satpura plateau consist of a rugged mass of hills hurled together by volcanic action. But the greater part is undulating table lands, a succession of bare stony ridges and narrow fertile valleys, into which the soil has been deposited by drainage. In a few level tracts, there are extensive areas of productive land scattered over the plateau, isolated flat-topped hills rise abruptly from the plain. The scenery of the northern and southern hills, as observed from the roads, which traverse them, is of remarkable beauty.



Satpura Express

The Satpura hills have formed in the past, a refuge for aboriginal tribes driven out of the plains by the advance of Aryan civilization. Only from the later half of nineteenth century, travel in Satpura region has been rendered safe and easy, by the construction of metalled roads and the narrow gauge railway.

Satpura Railway was a combination of three lines knows as:

- Jabalpur - Gondia extension via. Nainpur including a branch to Mandla fort, a branch from Nainpur to Parasia via Seoni and Chhindwara and a branch to Katangi from Balaghat.
- Nagpur - Chhindwara extension.
- Gondia - Chanda extension via Nagbhir and further extension from Nagbhir to Nagpur.

In 1897-98, a reconnaissance survey was carried out for a 2 ft. gauge line from Gondia, on the BNR's main line to Jabalpur with branches to the west covering a length of about 220 miles. This survey was done on behalf of Government of India and at their expenses. Detailed surveys

were carried out in 1898-99 and also in 1899-1900. This project comprised of the following four sections:

i) Main line from Gondia to Jabalpur	-	143.43 miles
ii) Branch from Nainpur to Mandla	-	21.75 miles
iii) Branch from Nainpur to Seoni	-	47.13 miles
iv) Extension from Seoni to Chhindwara	-	40.36 miles
Total	-	252.67 miles

The total cost of these lines on 2 ft. 6 in. gauge alignment as decided later, was estimated as Rs.81.33 lakhs, being at the average rate of Rs.32,182 per mile including the rolling stock.



A Hindu tea stall on Gondia Railway Station platform, 1932

During 1903 a survey, as a measure of famine relief work, setting out and demarcation of land for Gondia - Chanda railway line were carried out. Re-survey of Gondia - Chanda line with a branch from Nagbhir to Nagpur, 212 miles, on the 2 ft. 6 in. gauge was completed in 1905.

The scope of Bengal Nagpur Railway was greatly enhanced by the historic contract dated 23rd January 1902, which provided for a line (2 ft. 6 in. gauge) from Gondia to Jabalpur with branches from Nainpur to Mandla, Nainpur to Seoni and Chhindwara.

Construction commenced in 1902. The first portion Gondia - Nainpur (73 miles) was opened for traffic on 13th April 1903, the line was extended up to Jabalpur in 1905.

The line was built as an integral part of Bengal Nagpur Railway. The permanent way consisted of 41 lb. flat-footed steel rails on salwood sleepers, the ruling gradient 1 in 80 and the sharpest curve of 409 feet radius.

Nainpur became the focal point of Satpura lines. Nainpur to Chhindwara section was opened for traffic in 1904. This route passed through Seoni town, the Headquarters of Seoni District of Jabalpur Division of Central Provinces. Seoni is also midway on the Nagpur-Jabalpur trunk road. Extension from Chhindwara to Pench Valley coalfields was completed in 1906-07. Another branch (27 miles) from Nainpur to Mandla was completed in 1909.



A passenger locomotive



Mandla Fort Station



A freight locomotive

Gondia-Chanda-Extension (148.65 miles) with a branch from Nagbhir to Nagpur (63.75 miles) was sanctioned in 1904, work was started in November 1905 and it was opened for traffic in November 1908. Gondia-Nagbhir-Nagpur line was opened at a colourful ceremony on 9th November 1908, the Commissioner of the Central Provinces presided and the Agent, Traffic Manager and other officers of the Bengal Nagpur Railway were present together with representatives of the commercial and agricultural communities in Bengal and the Central Provinces and the Press.

Mr. Manson, the Agent of BNR in his speech delivered on the 9th November 1908, on the occasion of the opening of Gondia-Chanda branch described the policy of his railway with regard to light railways thus:

"These 2 ft. 6 in. gauge lines as now made by the BNR with 40 lb. rails and rolling stock designed for 6 ton axle loads, permit of bogie vehicles carrying a load of 16 tons, can deal with very large amount of traffic indeed. I am glad to think that the 2 ft. 6 in. gauge extensions are likely to continue, and we are within the next couple of months going to open an extension from Nainpur to Mandla, 26 miles in length, and I hope before many years are over, sanction will be accorded to construct an extension of this line to Bilaspur, a distance of 153 miles or so opening up the Banjar Valley. I am



The 2'6" beauty meandering along the ghat

also glad to think that, in all probability, sanction will be accorded to another very important extension of this 2 ft. 6 in. gauge system viz., the construction of the Nagpur-Chhindwara line on which I hope work will commence early next year i.e. 1909-10".

Work on Nagbhir-Chanda extension commenced in October 1906, but on account of shortage of funds and large sums required by the main line for new rolling stock, it was found necessary in May 1907 to partially close down the construction of Chanda section and only proceeding slowly with the first 30 miles from Nagbhir towards Chanda.

Nagbhir - Rajoli (30 miles) was opened on 01.12.1910 while the extension to Chanda was completed on 01.04.1913.

BNR had faith in the utility and financial success of light railways. With the opening up of the Satpura Hills and economic progress of the region, the utility of this light railways diminished. A century later, these lines cater exclusively for passenger traffic, the freight business being attended to by an excellent network of roads. Increasing demands of logistics have now made way for gauge conversion of Satpura Lines to broad gauge.



Nainpur Railway Station - 1914



Nagpur-Chhindwara extension was opened for traffic in 1913. With this, the biggest network of narrow gauge lines in the Indian sub-continent was completed. Its length exceeded 640 miles.

The "Satpura Lines" Project was initiated by Sir T.R. Wynne and actively pursued by his successor. BNR defined the objects of light railway thus:

- The opening out of the agricultural and mineral resources of large and important areas hitherto practically cut off from all communication with other parts of India.



The prestigious NG Satpura Express with steam tank locomotive standing at Junction of NG-BG station Gondia, 1963. Only a few tank locomotives ever worked on the Satpura Lines.

- To facilitate people settling on rich tracts of land now waste, but capable of supporting a large population.
- To provide means of protecting the inhabitants in times of famine.



Narrow Gauge Satpura Lines Loco No ZE 8 in steam



Karaboh Station



Steam loco shed, Nainpur. Deserted in present day.

BNR chose most economic but safe and utilitarian type of rolling stock for Satpura Lines. A 1908 brochure describes the rolling stock thus:

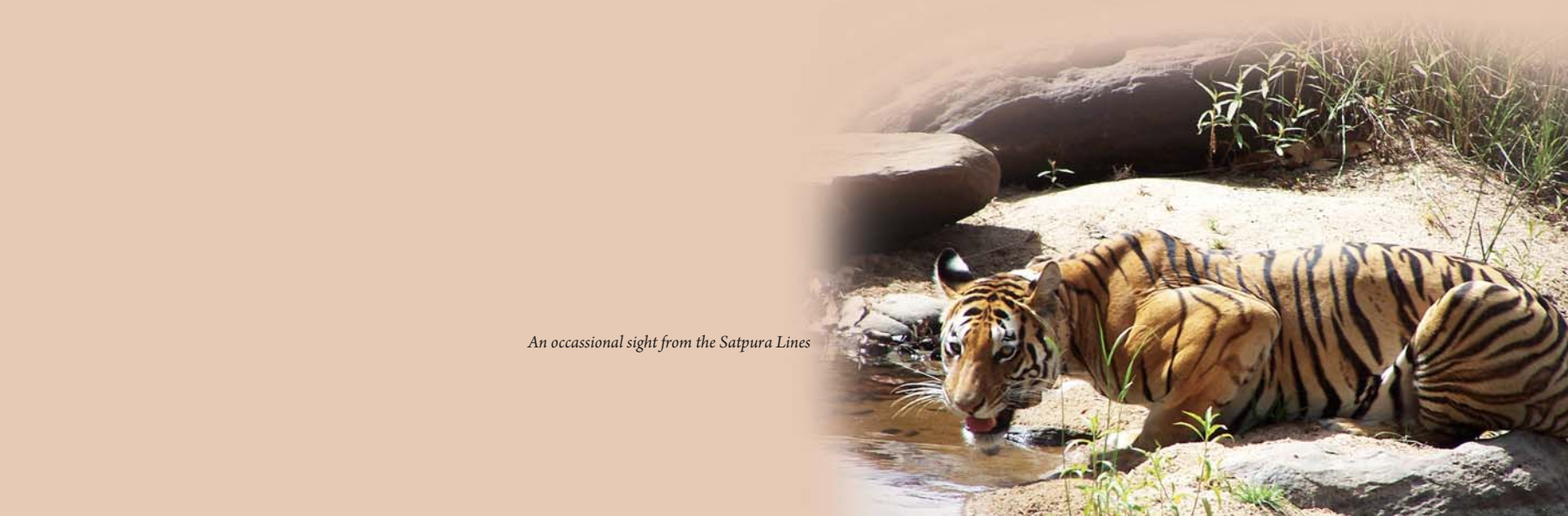
"All the rolling stock is built on four-wheel bogies, and is fully vacuum braked. Considering the limitation of gauge, it compares not unfavourably with much of the metre gauge stock that is at present running in this country. The locomotive equipment consists of nine six wheel coupled tender engines. The coupled wheels are preceded by a four-wheel bogie, while the weight of the firebox and back framing is carried on a trailing bissel truck. The diameter of the coupled wheels is 3 ft. 6 in. and the cylinders, placed outside the frame, measure 14.5 in. in diameter and have a piston stroke of 18 in. The working boiler pressure is 160 lbs. per square inch; the grate area is 17.5 square feet and the total heating surface 1,039 square feet.

The tender is carried on six wheels and has a capacity for 1,700 gallons of water and 3 tons of coal. The total weight of the engine and tender in working order is 51 tons 12 cwts., the total length over buffers 49 ft. 4 in. and the tractive force at 90 percent cylinder pressure 12,974 lbs. The coaching stock is all of the very best type, embodying recent practice and calls for special attention. All the passenger carriages are fully vacuum braked, lighted with Pintsch's incandescent gas, and passenger communication apparatus operating on the vacuum brake is provided. The underframe of all classes of the coaching stock are 29 ft. 6 in. long with centres of bogies spaced 20 ft. apart, the bogie wheelbase being 4 ft. 9 in. and the length of the carriages, in each case, 32 ft. 10.5 in. over buffers. The first and second-class composite carriages, four in number, are replete with every convenience for comfortable travel. Each carriage has accommodation for twelve first class and twelve-second class passengers. The ceilings are of millboard painted white, and pleasing effect has been secured by the introduction of strips of metal worked into various geometrical designs. In addition to the four first and second class composite coaches, there are in use eighteen third class bogie carriages with a seating capacity for 42 passengers each; seven bogie composite



A common sight from the Satpura Lines

intermediate and third class with a capacity for 16 and 21 passengers respectively; six composite postal, luggage and brake vans; eight composite third class luggage; and two horse-boxes with a capacity for 4 horses and eight attendants. The entire goods stock is carried on bogies and is also fully vacuum-braked. The underframe is 29 ft. 6 in. long with 20 ft. 9 in. between the centres of bogies, the latter having a 4 ft. 3 in. wheelbase. The tare weight is about 6 tons each with carrying capacity of 18 tons each giving a ratio of 1 to 3, a formidable position when compared with other stocks."



An occasional sight from the Satpura Lines

The Wainganga Bridge of Satpura Lines needs special mention. The narrow-gauge bridge (14 spans of 100 ft. each and 6 spans of 170 ft. each) over the Wainganga near Warsa is interesting because it utilised girders (6 spans of 170 ft. each) removed from the Kanhan broad-gauge bridge, which had to be strengthened as the narrow-gauge track concentrates the load more at the centre of the cross girder. A girder erecting plant, belonging to the company was used, consisting of 4 steel masts; 2 to each girder of the span united in 'Pairs' at their upper ends by cross girders carrying a trolley from which was slung the lifting block attached to the girders.

Tumsar Road-Katangi Light Railway was built on 2 ft. 0 in. gauge to facilitate transport of manganese ore deposits in the then Central Provinces, Government of India purchased this line from Central India Mining Company and made it over to BNR for working it as a part of their undertaking with effect from 01.04.1916. It used to take off from Tumsar Road, a station on BNR's main line (near Nagpur) and used to run up to Katangi, a station on 2 ft. 6 in. gauge Satpura Line of BNR. The length of the line was 47.5 miles. Edward Harran in his book "The Ways of our Light Railways" published in 1910 mentions:

"The permanent way consists of 18 lb. steel rails laid on wooden sleepers spaced two feet apart and is partially ballasted. The locomotive stock used for working the traffic consists of 30 h.p. four wheel coupled and 50 h.p. six wheel coupled engines, these as also a portion of the wagon stock in which the ore is transported from the mines having been supplied by Messrs. Orenstein and Arthur Koppel".



Self propelled (Petrol Engine Driven) Ambulance Car built in 1930



A patient being taken inside the Ambulance Car for treatment



A narrow gauge dining car



Dining Saloon in use

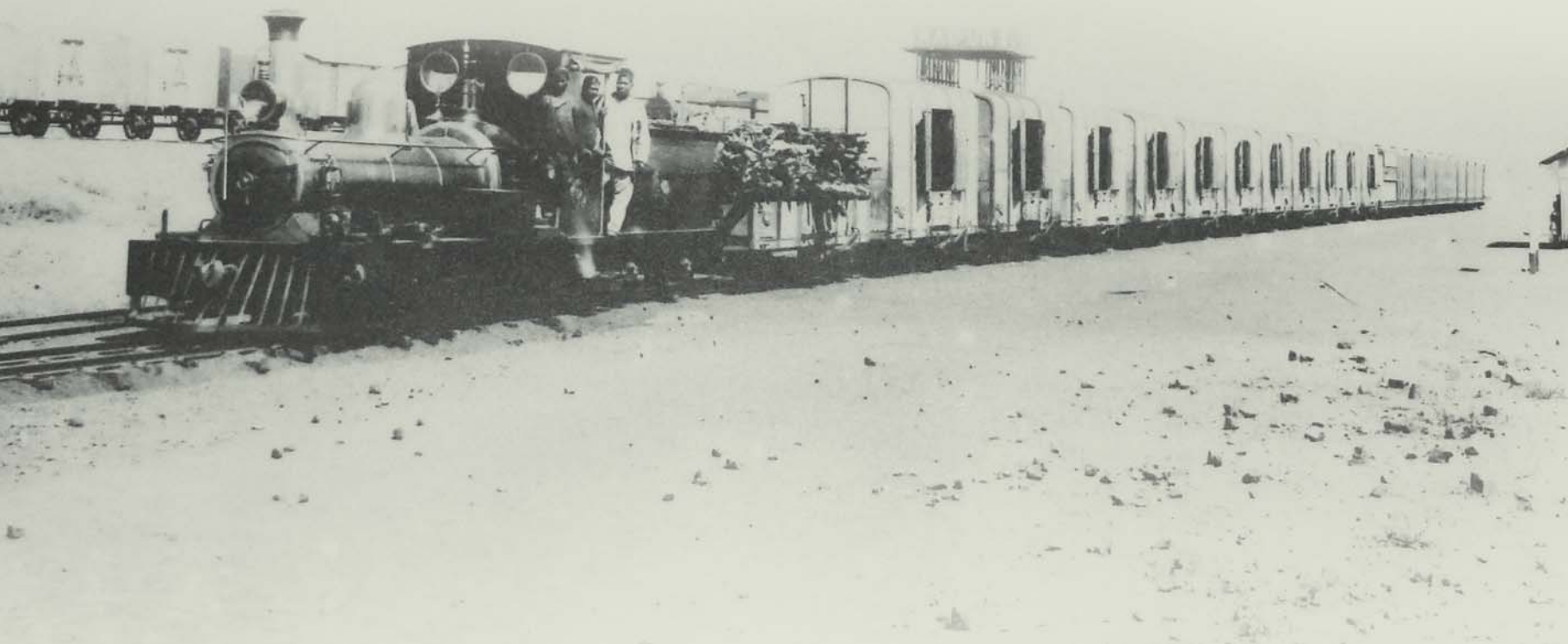


A narrow gauge train approaching Nainpur

In 1929, 28.63 miles of this line was converted to broad gauge commencing from the broad gauge junction of Tumsar Road and up to Tirodi. The remaining portion of the line was dismantled in 1934-36. The conversion of 242 Kms. Gondia-Chanda Fort narrow gauge line to broad gauge was sanctioned in 1992 and the work was started in the same year. The first phase between Gondia and Wadsa (104 Kms.) was opened for passenger traffic in Sept. 94. In the second phase, Wadsa to Nagbhir (28 Kms.) was opened after two years. In the third phase, section between Nagbhir to Chanda Fort (110 Km) has been completed. The extension of the converted section up to Babupet/Balharshah on Wardha-Balharshah broad gauge line of the Central Railway is in progress.



Railway Institute Nainpur : This building was constructed in the year: 1922. All Indoor game facilities were provided. Even now the building is in a sound condition.

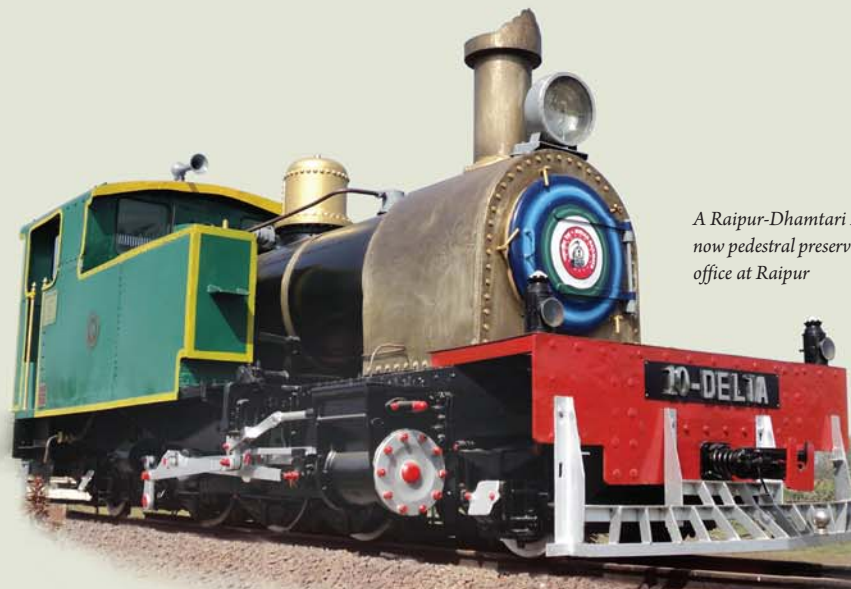


RD Class locomotive No.010 built by M/s. Nasmyth Wilson & Company Ltd. Manchester in 1929, hauling the goods train in Raipur – Dhamtari Section. One such locomotive No. 690 was pedestal preserved outside the BNR Headquarters at Garden Reach (Nasmyth Wilson, 1929 make)

RAIPUR-DHAMTARI-RAJIM

Branch Line

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A Raipur-Dhamtari Railway steam loco is now pedestral preserved in front of new DRM office at Raipur

Raipur founded in the ninth century was a part of the ancient Haihaivansi Kingdom, ruled for a long time by a younger branch of Ratanpur Kingdom. In 1741, the Maratha General, Bhaskar Pant, while on his way to attack Bengal, took Ratanpur and thus Raipur came under Maratha influence as a part of Nagpur Kingdom. In 1853, Nagpur Kingdom including Chhattisgarh became British territory by lapse. Raipur was made a separate district of Central Provinces in 1861. Raipur functioned as Headquarters of Chhattisgarh since 1818 and grew into a leading commercial town. Its importance increased further with the opening of Bengal Nagpur Railway's line in 1888.

Dhamtari and Rajim towns are situated on Mahanadi River. They were the focal points on the trade routes to Bastar and Kanker States.

During 1891-92, a survey was made for a branch line 44 miles long from Raipur to Dhamtari. The proposal appeared promising as it could eventually form a portion of the proposed connection between BNR and East Coast Railway. However, this broad gauge project to connect Dhamtari was shelved. BNR then submitted to the Government of India a revised scheme for a steam tramway on 2 ft. 6 in. gauge instead of broad gauge railway from Raipur to Dhamtari, with a branch to Rajim, on the left bank of the river Mahanadi.

Government of India, vide a resolution dated 17th April 1896, sanctioned construction of the Raipur-Dhamtari branch on the 2 ft. 6 in. gauge, as an integral part of the Bengal Nagpur Railway and directed that the required capital of £65,000 sterling will be raised by debentures with those shortly to be raised for the Sini-Cuttack-Calcutta extensions. In July 1896, the Board asked the Agent to send detailed proposals together with indents for the materials required 'as early as practicable'.

Raipur-Dhamtari branch was the first narrow gauge line of BNR. In a letter dated 2nd September 1896, addressed to the Agents of BB & CI and EI Railways and Managers of Morvi and Eastern Bengal State Railways, Mr. T.R. Wynne, Agent of BNR requested:

"We are constructing a 2 ft. 6 in. gauge railway in the Central Provinces and as we have not constructed any line of this gauge before in these parts, I am deputing Mr. A.S. Allen our District Engineer to visit the various 2 ft. 6 in.



Bengal Nagpur Railway's (BNR) 2-6-2 non superheated locomotives worked exclusively on the Raipur - Dhamtari Railway and later came to be known as RD class engines. Later engines in this series were fitted with Stirling superheaters and Lentz valve gear.

gauge railways in working order in India with a view to ascertaining the latest practice in force in construction of those lines. I should, therefore, be very much obliged if you would afford assistance to Mr. Allen to inspect your line and allow him to be supplied with any information he may require".

Mr. Allen visited Morvi Railway and Gaekwad's Dabhoi Railway in September 1896 and submitted his recommendations as below: -

- Permanent way- 30 lb. steel flange rails of a similar section to that of the Gaekwad's Dabhoi Railway, 24 feet long, spiked to half round sal or teak sleepers 4 ft. 6 in. x 9 in., nine to each rail.
- Ballast - The section of the ballast should be six feet wide at the top and 1ft. 3in. from rail to formation level, side slope to be one to one.
- Formation- This should be 12 feet wide on banks and 15 feet wide in cuttings.
- Platforms- Earth platform 15 ft. wide and 400 feet long topped with 6 in. of moorum.
- Signals- Ordinary semaphore signals worked by hand, opposite each pair of switches in the loop to act as home signal only.
- Locomotives- At first four locos would be sufficient to work the traffic. These should be 6 wheel-coupled types with 6 wheel tenders as used on the Morvi railway. Any renewals or increase of stock should be on the lines of the new Morvi railway i.e. leading bogie engines. The latter cost about Rs.16, 500/- as against Rs.12, 000/- for the former.
- Coaching vehicles- At first one inspection saloon, four upper class carriages and twenty lower class carriages, all to be double bogie carriages, would be sufficient.
- Goods vehicles - Four wheeler wagons recommended.

Locomotive number 9 of Raipur Dhamtari Railway(RDR) of Bengal Nagpur Railway(BNR) built by Naysmyth, Wilson & Co. in 1929 was fitted with Stirling superheaters and Lentz Poppet valve gear. Earlier examples were without superheating. Note the headlight that was missing in the non-superheated example seen earlier.





Narrow gauge steam train approaching Dhamtari

Raipur and Chhattisgarh were in a grip of a severe famine in 1896. The Commissioner of Chhattisgarh in a letter dated 30th September addressed Agent of BNR thus:

"My dear Wynne,

I write to let you know that as there has been still a good deal of scarcity in the district we shall be very glad to hear of your starting the Dhamtari Tramway work. I hope that you will not mind having it put in hand a little earlier than you might perhaps otherwise have done, in view of the fact that the labour, which it would make available, would be a boon to the people. It is probable that owing to the present cheapness of labour, tenders would be given for the earthwork at favourable rates, if the work is soon undertaken. I can't say that this cheapness of labour is not likely to continue or even to become more marked. It is not on that ground but with a view to getting your assistance in the provision of labour for the distressed that I address you about the business."

Work on Raipur-Dhamtari line commenced in October 1896. Mr. A.S. Allen, Esq., District Engineer, Raipur-Dhamtari line was instructed that – *"As the work on the Raipur-Dhamtari line will be of the nature of a famine relief work, you should endeavour as far as possible to carry out the work by very petty local contractors. The object being to secure that the money paid goes as far as possible to the people actually working and not into the hands of a middleman who is not feeling in any way the prevailing scarcity. I think you will probably find that the headmen of villages near which the line passes will in most cases be willing to take up work in conjunction with their own villagers and this is the class of contractor you should favour most."*

The first four locomotives to work in Raipur-Dhamtari-Rajim branch were neat 2-6-2 tender locos built by Manning Wardle of Leeds. They were numbered 1 to 4. Underframe for early coaches and wagons were supplied by the Leeds Forge Company while the bodies were built in the Nagpur Shops of BNR.

In 1926, BNR purchased two 2-6-2 tender locos from Hunslet Engineering Company followed by a purchase of six similar locos from Nasmyth Wilson Company. These were known as 'RD' class of locomotives. Increased freight traffic had resulted in these engines being replaced at Raipur by 'CC' locomotives. With effect from 1st October 1987, all services on these sections are being run with diesel traction.



Nasmyth Wilson loco now preserved at SER (BNR) Head Quarters, Garden Reach. Built in 1929.



Maker's plate of Nasmyth Wilson & Co, Manchester, United Kingdom fitted in steam locomotives used in this section



Group photograph of staff and supervisor of NG Steam loco shed, Raipur around 1960

The old station master building and Yard master building at Charmuriya Village near Kurud, now being used as a school.



Station master building



THE RAILWAY THAT ONCE WAS...



The well in the Kurud Yard earlier being used for watering steam locos



Kurud- Sihawa Nagari Section- Kurud was a major junction in this section. A line from Kurud was diverted to Sihawa Nagari dedicated for transportation of wood. This Railway line from Kurud to Basin (Sihawa Nagari) was approximate 64 miles (102 km) known as R.F.T (Raipur Forest Tramway). The R.F.T was started by East India Company to carry the labours from Kurud to Basin for loading and unloading of wood. This section was closed in the year 1938.

The photograph shows the road which was built after dismantling old railway track connecting Kurud Junction to Sihawa Nagari



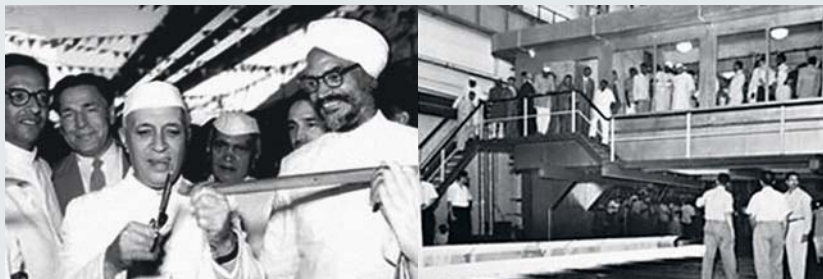
LINES FOR STEEL PLANT

Bhilai Steel Plant

For a long time the Indian peninsula was served with only two steel plants. After Independence, in the wake of rapid industrialisation, in the first Five Year Plan itself, it was decided to build three integrated Iron and Steel Plants – at Bhilai with Russian collaboration, at Rourkela with German collaboration and at Durgapur with British collaboration.

Bhilai Steel Plant was built as per 'Indo-Soviet technical and economic collaboration' agreement signed on February 2, 1955. On February 4, 1959, Dr. Rajendra Prasad, the President of Union of India, commissioned the plant. The steel plant is situated between Durg and Raipur on the South East Central Railway's main line. Originally built to produce one million tonnes of steel, the plant has been expanded to produce 4.5 million of tonnes of steel.

Pt. Nehru Inaugurating Rail Production at Bhilai steel plant on 27.10.1960





*260 m long rail panel dispatch in the year Feb-2006
from Bhilai Steel Plant*

Iron ore for the steel plant is mined at DalliRajhara mines. A new rail line 85.5 km. long from Bhilai to DalliRajhara was built and opened for traffic on 14.5.1958. Limestone is quarried at Ahiwara for the steel plant and a small 20 Km. Long line to connect Ahiwara with the steel works was built and opened for traffic on 1.4.1960. Durg-DalliRajhara line also has passenger traffic and two DEMU trains each way meet this demand.

A major steam loco shed was built at Bhilai to meet the steel plant's requirements, but little later with the sanction of Durg-Howrah electrification, it was decided to build a major electric loco shed at Bhilai. A big marshalling yard with major carriage and wagon examination and repair facilities were also established at Bhilai.



Mechanised loading of iron ore.



Iron ore deposit at DalliRajhara

Bhilai Steel Plant, 1960





Bridge No.182 on IB river, constructed in the year 1887. It has 2 X 40 plate girder and 9 X 150 feet open web girder of total length 435m well foundation. The Mahanadi reservoir is located downstream of this bridge.



THE BRIDGE

I stood on the bridge at midnight,
As the clocks were striking the hour,
And the moon rose o'er the city,
Behind the dark church tower.
Yet whenever I cross the river
On its bridge with wooden piers,
Like the odour of brine from the ocean
Comes the thought of other years.

And I think how many thousands
Of care-encumbered men,
Each bearing his burden of sorrow,
Have crossed the bridge since then.

I see the long procession
Still passing to and fro,
The young heart hot and restless,
And the old subdued and slow!

And forever and forever,
As long as the river flows,
As long as the heart has passions,
As long as life has woes.

Henry Wadsworth Longfellow



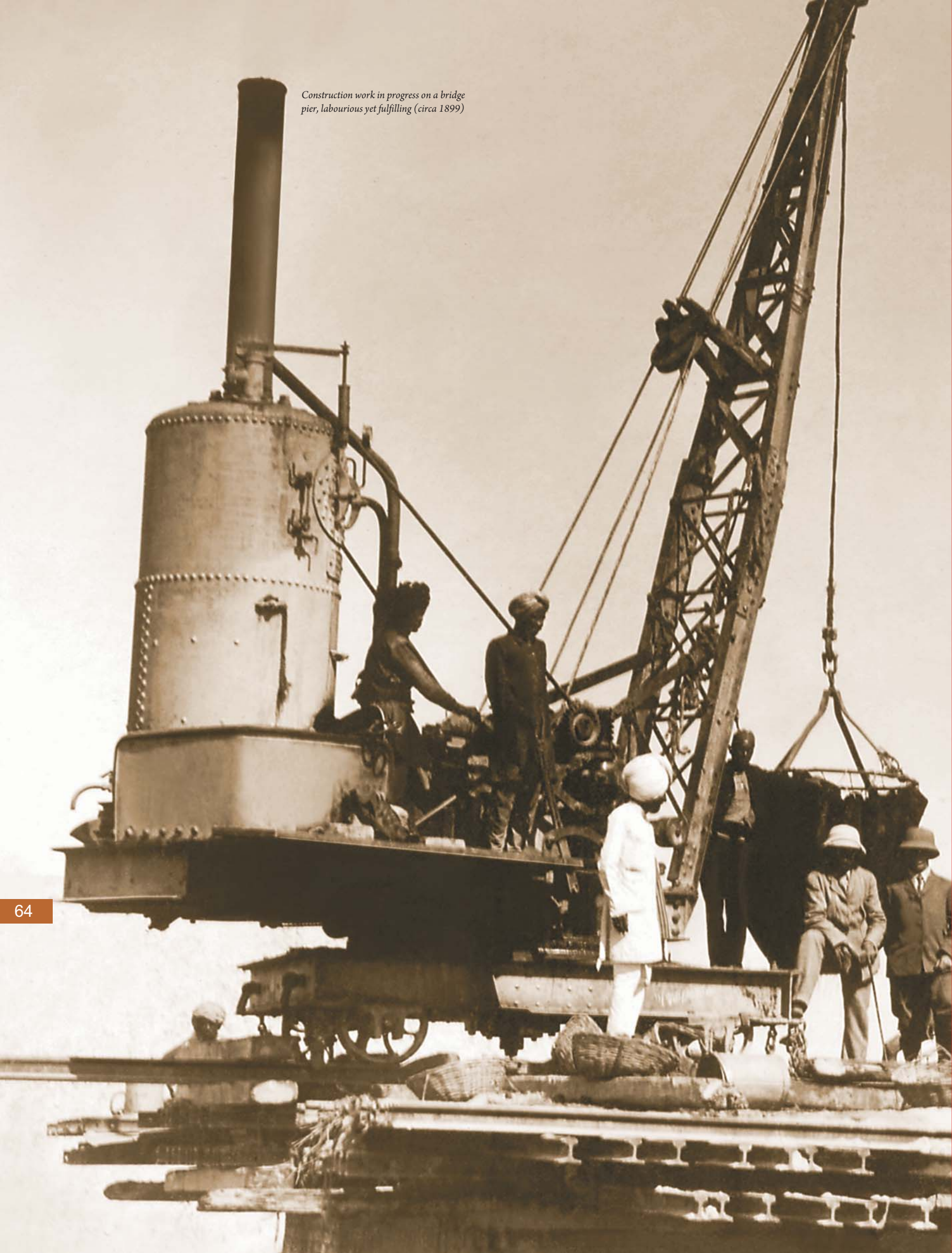
A typical bridge construction site at the turn of the century (circa 1899). The engineer's dog was part of the inspection party.

We build too many walls and not enough bridges.

Sir Isaac Newton.



Construction work in progress on a bridge pier, labourious yet fulfilling (circa 1899)





Simple bridges

Even the most primitive human communities often have had built bridges from material lying at hand. Hunters and gatherers followed favourite paths; streams needed to be crossed. A fallen tree was be dragged into position to serve as a plank. Sometimes forest tendrils had been intertwined as an elementary suspension bridge. Or rafts tied together as in a pontoon.



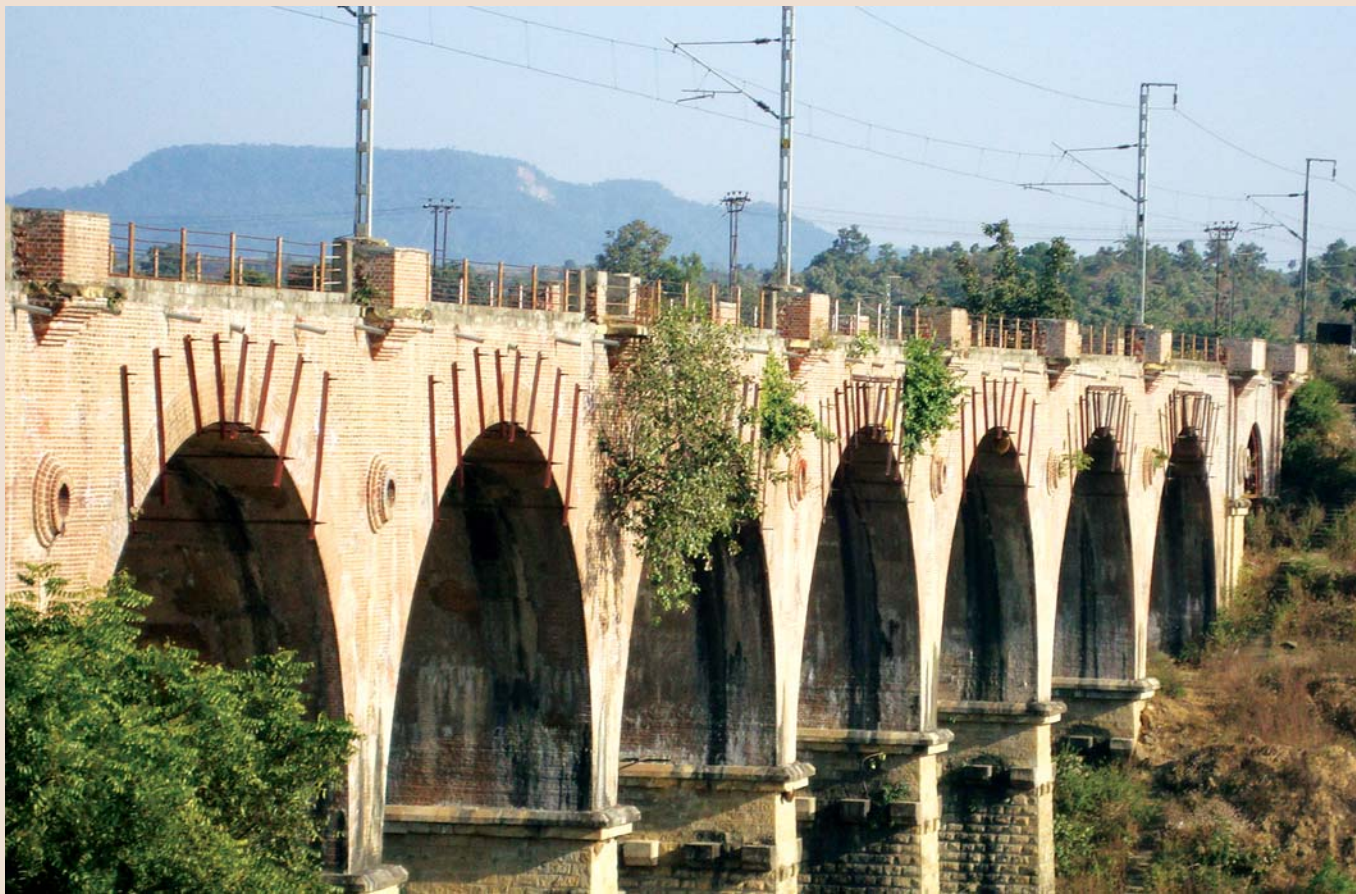
Bridge No. 153 near Karaboh Station on Pench River, was constructed during 1902- 4 (Girders' built year: 1903). Highest Flood Level ever recorded on Aug 1, 1913 was 1'6" above rail level.

The Arkadiko Bridge is one of four Mycenaean corbel arch bridges part of a former network of roads, designed to accommodate chariots, between Tiryns to Epidauros in the Peloponnese, in Greece. Dating to the Greek Bronze Age (13th century BC), it is one of the oldest arch bridges still in existence and use.

But bridges over more than a narrow crevice on the ground require an architectural device which arrived relatively late on the scene. It is with them that the story of bridges begins.

Roman bridges: 1st – 2nd century AD

The greatest bridge builders of antiquity were the ancient Romans. The Romans built arch bridges and aqueducts that could stand in conditions that would damage or destroy earlier designs. The stone arch bridge design is among the strongest and most durable. Stone is a naturally strong and enduring material for a bridge. In stone arch bridges, the stones are in compression (pressing against each other). These types



Bridge No. 99 in Manendragarh - Chirimiri section. Built in the year 1929, it has 9 spans of 60 ft. and 2 spans of 20 ft. The pier is of stone masonry (height 75 ft), crowned by an arch bridge above. Both photos show the same bridge.

of bridges are labour intensive and the cost transport of stones is high.

Some of the many substantial Roman bridges have been over ravines. An excellent flourishing example is a bridge built for Trajan in AD 105, spans the Tagus in Spain, at Alcántara. Its dual vast expansive arches, 110 feet far-reaching and 210 feet upon tip of the normal turn of the river, have been done in uncemented granite.



The Romans also used cement, which reduced the variation of strength found in natural stone. One type of cement, called pozzolana, consisted of water, lime, sand, and volcanic rock. Brick and mortar bridges were built after the Roman era, as the technology for cement was lost then later rediscovered. In India too, the Arthashastra of Kautilya mentions the construction of dams and bridges.

Ironbridge: AD 1779

In the space of a couple of months in 1779 the world's first cast iron bridge, with a singular camber of over 100 feet, is erected over the Severn River, downstream from Coalbrookdale.

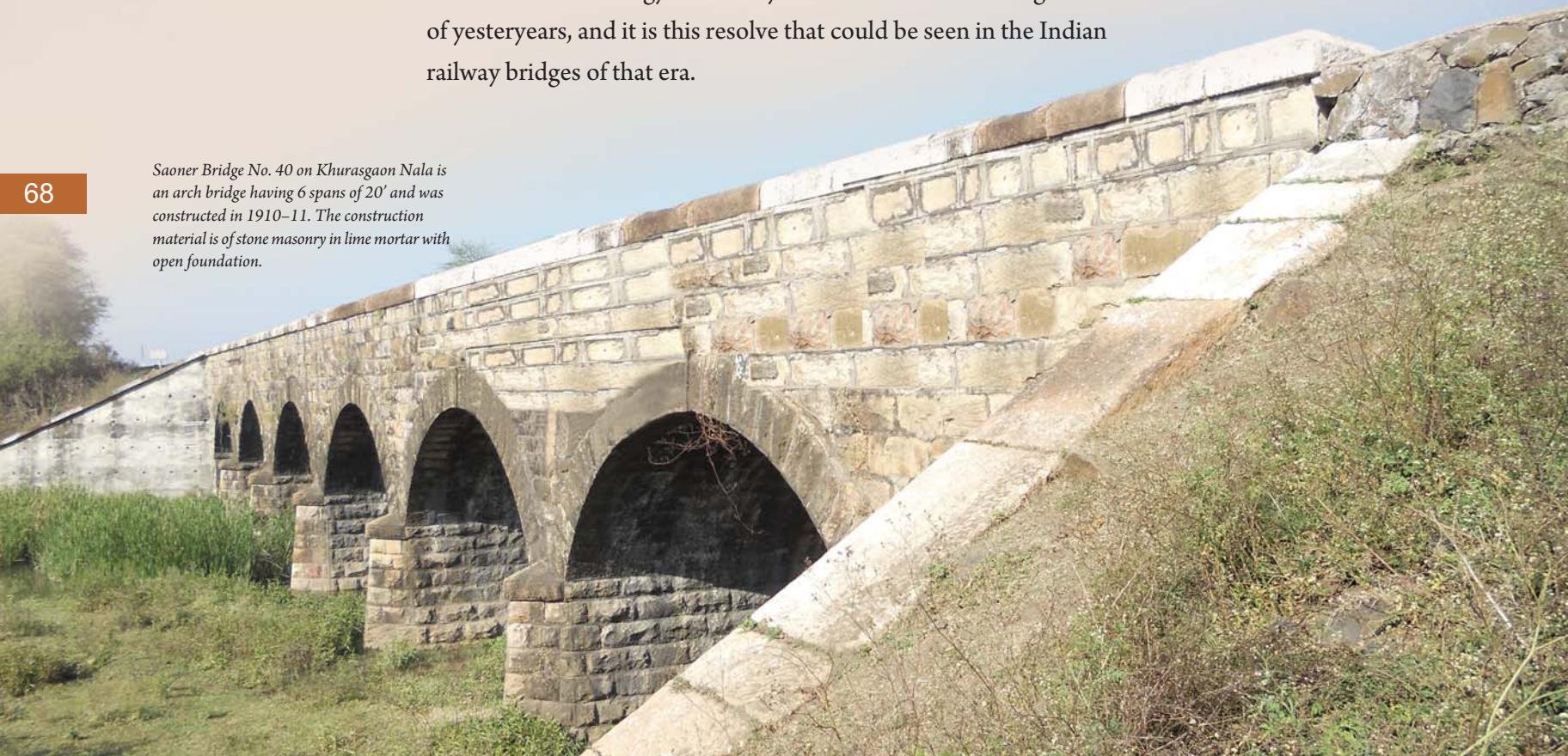
With the Industrial Revolution in the 19th century, truss systems of wrought iron were developed for larger bridges, but iron did not have the tensile strength to support large loads. With the advent of steel, which has a high tensile strength, much larger bridges were built, many using the ideas of Gustave Eiffel.

In 1927 welding pioneer Stefan Bryla designed the first welded road bridge in the world which was later built across the river Sludwia Maurzyce near Lowicz, Poland in 1929.

Railway Bridges

The collapse of the Dee Bridge in May 1847, a trussed girder design by Robert Stephenson, led to such consternation about the safety of railway bridges that a British parliamentary commission was set up to investigate the new iron technology. But it only steeled the resolve of bridge builders of yesteryears, and it is this resolve that could be seen in the Indian railway bridges of that era.

Saoner Bridge No. 40 on Khurasgaon Nala is an arch bridge having 6 spans of 20' and was constructed in 1910–11. The construction material is of stone masonry in lime mortar with open foundation.



The British in India too contributed in building bridges when they were concerned with the welfare of the natives and while constructing rail and road communication to the interiors and the frontiers. Some of the bridges in particular were spectacular and unforgettable. These were often double track bridges, carrying railway and roadway together, a specialty of British engineering. Construction was boldly innovative, especially in dealing with the problems of river flow and sediment. Though not high in aesthetics and beauty, such bridges were most ambitious and technically interesting.

The first major railway bridge was perhaps the Attock Bridge across Indus. The bridge took the Punjab Northern State Railway up to Peshawar and was a marvellous spectacle. Completed in 1883 On the design by Guilford Molesworth, it was built on two decks, the railway crossing above and the Grand Trunk Road below.

Railway bridges further developed with the Lansdowne Bridge, again over Indus at Sukkur, carrying the Indus Valley State Railway. It was designed and built by Sir Alexander Rendel, one of the greatest bridge builders of his day, in 1889. It is perhaps the ugliest bridge ever built, and was suggestively timeless to the bizarre mass of ironwork. Two enormous cantilever structures held the weight of the bridge, like a couple of dozen cranes bolted permanently together in thick meshes of struts and girders. Each was 170 feet high and the whole thing served as the longest cantilever span ever built.

Some of the Indian Railway bridges were built on wooden trestles. Some on the Kalka—Shimla line resembled Roman aqueducts, with piled rows of masonry arches.

Bridges on South East Central Railway are no different, a fair mix of the bridge building expertise of the erstwhile BNR, EIR and GIPR could be evidenced here too. These have always been a splendour to behold, themselves, as much as any other components of the railway system, like locomotives. Being inaccessible to many, bridges have never developed the fan following that would be expected of any engineering marvel.

Weinganga River Bridge No. 159 in th Gondia - Ballarshah section is the longest (665m) concrete bridge with pile foundation on SECR. The original bridge, whose piers can be still seen standing, with open foundation was built in the year 1904 with stone masonry in lime mortar.



WHEN A BRIDGE FALLS....



Hasdeo River Bridge No. 63 constructed in the year 1963 while connecting Gevra with a rail link. It has 2 X 40 feet plate girders + 10 X 100 feet open web girders.

These are the recollections of Amlan Tirkey, the then head of Mechanical Engineering of Bilaspur division, and how the divisional head, Vinay Mittal, was glad for the restoration of the Hasdeo Bridge at God speed.



On July 17, 2003, at 02.00 hours, a freight train fell from the bridge No.63 on the Hasdeo River between Gevra & Korba on to the river bed. The second girder had collapsed and the third girder was partially damaged. With the traffic disrupted in this coal belt, an estimated loss of earnings of Rs.120 million every day was the cost of lost opportunity.

One of the huge excavators was requisitioned from South Eastern Coalfields Limited but there was a problem, how to bring this giant to the river bed? A JCB (earth-mover) had to be brought to make path and eventually the debris of the 14 wagons was cleared from the river bed with the excavator.

The next challenge was to remove the third damaged girder which was still resting on the piers. It was initially decided to cut the members of the damaged girder with the help of gas cutters but at a height of 30m from ground, the wind velocity was high enough to dislodge the welder, even before he could settled down to the task. The traditional method of slewing the girder and resting it on a temporary pier could take seven days and yet nobody was willing to own the accrued losses for the delay.

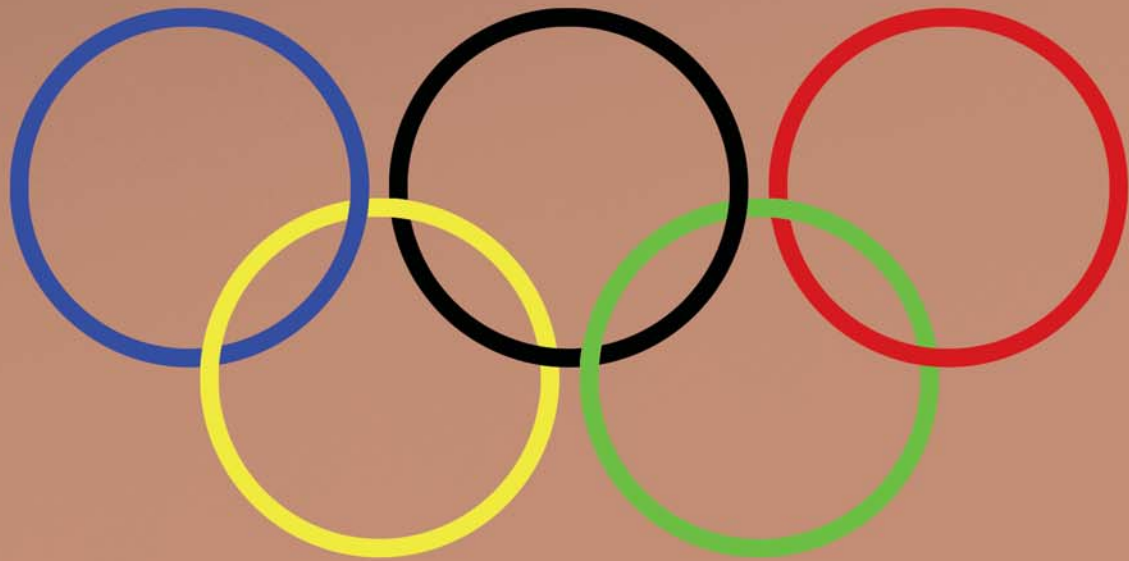
With no other ideas floating, it was decided by the site mechanical engineer (Amlan Tirkey) to slew the damage girders across the pier and then make it fall vertically on the river bed. If successful, this operation would save five days of work. If not, the line would remain suspended till a new girder could be fabricated. The excavator that was lurking below was taken further 200m upstream. Two wire ropes of 200m each was tied to each end of the girder and the to the excavator forming a triangle. When everything was in order, the signal to pull of girder was given. The girder slid smoothly over the rails and toppled on to the river bed with a thud.

The ground was now clear for the temporary foundation to be made out of CC cribs. As shown in the photograph, the 100ft span was divided into two 50ft spans. It was the breathtaking sight and every individual pushed his skills to the limits to launch the improvised girders at a brisk pace. Finally after twelve days of hard work, the rail link between Gevra and the rest of the country was established.



LESLIE WALTER CLAUDIUS

The Olympian who won medals



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The Railway School, Bilaspur in which Claudius studied





Leslie Walter Claudius was born on March 25, 1927 in Bilaspur. By playing in four consecutive Olympics from 1948 to 1960, Leslie Claudius created a world record and had won 3 hockey gold and one silver medals for which he features in the Guinness Book of World Records along with Udham Singh. In 1971 he was awarded the Padma Shree.

As a 'bamboo-legged' skinny boy, it was a daunting task for him to climb heights of glory then, when India was supreme in the game.

Claudius began playing football for the B N R Club, Calcutta. However, his career in hockey began during the 1946 Beighton Cup hockey tournament. The centre-half of BNR had fallen, injured. Claudius, a BNR footballer, was watching the game. Suddenly, much to his astonishment, found a hockey stick being thrown at him by the team's captain, Dickie Carr. Dickie Carr used to play football with him. He asked Claudius to join the game as the replacement. Believe it or not, such "cross" replacements continue even today, as can be vouchsafed by the author (Saibal Bose) who had been the President of B N R Club for five long years at the turn of this century.

He took up the stick and the challenge and got into the field. He continued for the next 10 days to play for the BNR Hockey Team. With regular coaching his natural flair for the game was heightened. Thus the bells tolled for Claudius to say goodbye to football and hello to hockey.

Claudius remembers with fondness, that during his initial years in the game, he was coached by Olympians like Joe Gallibardy, Carl Tapsel and Dickie Carr. He recollects "They even had my hockey stick cut shorter by three inches so that I could use it more effectively."

Leslie Claudius was selected within a year to play in the 1948 London Olympics. For the 21-year-old BNR railwayman, the opening ceremony of Olympic was an intoxicating experience. Claudius has produced a world record by playing in four consecutive Olympics: 1948 in London, 1952 in Helsinki, 1956 in Melbourne and 1960 in Rome.

The Indian team, including Claudius, was triumphant in the first three Olympics. But the campaign in the 1960 games in Rome was not that productive and team India had to settle for the silver medals to Pakistan's Gold.



The team photograph for Helsinki Olympics of 1952



THE METAMORPHOSIS

*South Eastern Railway
to
South East Central Railway*





Inside view of the main entrance of the new zonal building

Ministry of Railways announced the creation of 7 new Zones in the year 1998, one of which was at Bilaspur as South East Central Railway Zonal Headquarter. The new zone was inaugurated on 01.04.2003 by Shri Atal Bihari Vajpayee, the then Hon'ble Prime Minister.

Bilaspur was earlier a divisional Head quarters only and therefore very little infrastructure for operation of Zonal Head Quarter was available. As such, the existing buildings were used with minor modifications to start the working of the new Zone. Survey was carried out for locating various infrastructure facilities like Administrative Building, Quarters, Rest Houses, Parks, Club etc. and the following facilities were planned:-

- Administrative Building
- Quarters: All types of quarters from Type I to Type V
- Transit Accommodation: Transit flats of one BHK and two BHK
- Officers' Rest House and Club
- Sub Ordinate Rest House
- RPF Barracks
- Multi Disciplinary Training Center with Hostel
- Health Unit



Inside view of the zonal conference hall





Aisle between Block 'A' & 'C'



The General Manager's private entrance



- Rail Upwan along with many other parks in between clusters of quarters
- Sewage Treatment Plants etc.

The work of design and architecture was given to an eminent consultant and Architect for incorporating various ideas generated locally by local architects and various officers. As a result the Zonal infrastructure complex has come up very nicely and has become a landmark of Bilaspur city.

The Zonal Headquarter Building has been constructed as Earthquake resistant building having 6 storeys and basement. The foundation consists of through raft slab with RCC framed structure. The through raft slab reduces the risk of differential settlement by distributing the overburden loads uniformly on to the clay soil. The 30 m high building is painted externally with the Renovo plaster, an innovative building material having durability and water repellent property. It has a life of 12-15 years giving a pleasant look. To improve, natural lighting and ventilation, different blocks of the building were planned with different heights and some part of the building have been provided with glass bricks to allow sufficient natural light thus saving lot of electrical energy and making the office complex as a pleasurable working area.

The interiors of the building are designed tastefully with latest building

materials. Good quality vitrified tiles have been used as flooring in all the halls and chambers. The corridors and passages are tiled with Kota stone with mirror polish giving extremely smooth and glazy finish. The interior walls are painted with Oil Bound Distemper enhancing the grace of the flooring. The perforated false aluminum ceiling throughout the building added the flavor to the beauty. Murals and painting local and abstract art enhance beauty of building substantially.

Adopting the new concept of transparency, all the halls have been furnished with the modular furniture creating the healthy working atmosphere. This building is capable of accommodating approx 1000 staff. 106 chambers for officers all around each hall save lot of time due to vicinity between staff and officers.

A conference hall of accommodation capacity 60 delegates has been designed to suit any high level conference along with an attached state of the art dinning hall. It has been designed to suit any high level conferences with VIPs along with attached nicely decorated lunch room. The wooden wall paneling with melamine polish to the walls and conference table gives splendid look to the hall which has specially designed false ceiling. A small conference hall of 16 seats capacity has been made wall wooden paneling and melamine finish with circular central dome for lighting. This is attached to G.M. chamber. Both the conference halls are having video conferencing facility.

A staff canteen of 105 Sqm area has been provided in the Building



Newly built Type-V quarters





New Rail Club, Bilaspur

Complex with stainless steel furniture having subsidized food for the staff. Similarly, two wheeler parking of 816 Sqm area has been developed with in the campus. VVIP & VIP car parking of 420 Sq m areas each has also been developed, catering for 50 cars.

The building has been provided with lot of greenery in the form of plantation. Mexican grass landscape and high bottle palm trees all along the road have been provided with in the campus. Fire fighting arrangements and lifts etc has been provided for safety and convenience of staff.

Total of 364 Type I, II & III quarters are constructed for staff and 130 type- IV and V quarters are constructed for officers. Additionally Transit quarter of 1 BHK (8 no.) and 2 BHK (8 no.) are also constructed which are furnished to cater officers on transfer. The quarters and transits are constructed with the design different than adopted in various Railways.

For the recreation of officers, an officers club has been constructed having plinth area 784.3 m2. This is a single storey structure having sloped roof on top. This contains a big hall for functions etc. This has a Gazebo in open premises glancing beautiful fountain connected with walkways. Mexican & Indian doob grass & decorative plants have been planted for landscaping.

For the officers coming from outside, a double storeyed ORH with

Newly built Type-II quarters





New Satpura Rest House



Multi Disciplinary Training Centre, Bilaspur

kitchen and drivers' rest room has been constructed having plinth area of 638.6 m². There are 2 nos VVIP suites on First Floor & 4 no VIP rooms on Ground Floor. One dining hall and a common room have also been provided. Aluminium casemate & bay window are other features enhancing the beauty of the building. Granite flooring in corridor & vitrified floor makes very good appearance.

A Rail Upwan has been developed out of a waste undulated land full of Jungle. This Upwan is spread in 19 acres of land fenced with barbed wire fencing. It is having walkway of about 750 m. The whole land area has been developed by planting doob grass. A PVC pipe line net-work is laid below the ground & connected to treated water coming out of Sewage Treatment Plant. By this the recycled water is being used for gardening.

A Multi Disciplinary Training Centre is also developed along with Hostel facilities. This is a single storied building having built-up area of 1013.77 Sq-m. There are 4 class room, one entrance hall & one open theatre for 90 trainees. All around the building, beautiful landscaping with grass and decorative plants has been done.

Hostel facilities for trainee staff has been developed with 20 no double



Inside view of renovated ward of Central Hospital, Bilaspur





Cricket Stadium



Inside view of renovated auditorium at NE Institute



bedded rooms, 2 Special rooms on each floor having capacity of total 48 beds. A badminton court has been developed inside the court yard of building for recreation of trainee staff.

The Central Hospital was established in the year 1962 as a hundred bedded Hospital with only 3 wards (Male Medical, Male Surgical & Female Ward) & one OT. There after in the year 2003 it was declared as a Central Hospital with the creation of the New Zone. OPD was expanded in a phase wise manner in the year 2005 & 2007. High Dependency wards and cabins were commissioned in the year 2009. OT Complex with state of the art modular OT was commissioned in Jan'2010.

The Services currently available are :- 24 Hrs Casualty service with Ambulance. 2. OPD service with almost all specialty. 3. Indoor service with secondary and high secondary care. 4. Intensive Therapy Unit & High Dependency ward. 5. OT service with General OT & High tech OT. 6. Radiology department with USG & Echocardiography. 7. Pathology department with almost all modern equipment. 8. Physiotherapy department. 9. Endoscopy including upper & lower G.I. Endoscopy. 10. TMT and Holter monitoring. 11. Minimal Access Surgery. 12. Tele Medicine. 13. Kitchen Services. & 14. AC Mortuary.

The NEI auditorium at Bilaspur was recently renovated with ceramic

anti-skid tiles flooring and NOVA PAN wall paneling. Gypboard wall paneling with acoustic treatment was made above 2.4mts height. Perforated powder coated metallic ceiling was added to improve the acoustics. The old AC sheet in the roof was replaced by Galvalume roof sheet. Synchro sliding push back cushion chairs have been used to replace the existing wooden chairs. Concealed three stage lighting system has been used for interior illumination of the auditorium along with the concealed digital stereo sound system. This auditorium is first of its kind at Bilaspur as it is totally air-conditioned.

At the time of inception of zone only one football stadium was there in Bilaspur, which was used for all sports and need of new facilities was being felt by the entire sportsman and the staff. It was decided to develop facility for cricket, Boxing, kabaddi, badminton, table-tennis and power-lifting at European institute area and the facility for lawn-tennis, basketball, volleyball and ball-badminton at North East institute.

The Cricket ground was developed in the vacant space of English medium school. The ground was leveled with the help of SECL's earth moving equipment, four turf pitches were made and two practice wickets were prepared. The stadium consists of 02 dressing rooms, two dormitories and one office. The capacity of the stand is approximately 2000.



Artist impression of future Raipur Station



Frontage of the divisional office, Raipur





State-of-art skating rink



Divisional Hospital Raipur

The two clay Tennis court and one skating rink was constructed by utilising the old waste dumping ground of the budhwari bazaar.

The Badminton complex having 2 courts and modern gymnasium along-with facility for power-lifting was created at the vacant area of cricket ground. The additional 2 dormitories for player were also constructed and sitting capacity of the stadium was enhanced to 3500.

The DRM Office at Raipur is a double storied building having floor area of 6370 sq.m and total campus area of 3.4 hectares. This building has doubly charged vitrified tiles in all office wings and the frontage has aluminium composite panel and reflectosol structural glazing. Natural lighting and ventilation has been provided by wide windows so that minimum electricity is used during the day time.

Divisional Hospital Raipur is a double storied building with Indoor 50 bedded capacity and Outdoor facility with modern medical equipments and ambulance facility having total floor area of 1200 sqm. The hospital is having centralized air conditioned Operation Theater, 4 bedded ICU and Labour room and well developed circulating area with lawn & garden.

SECR may be the only new zone to have developed all facilities in such a short time span. In no way SECR is behind any well set old Zones. The stress on development of infrastructure in the formative years of SECR zone was primarily to build a conducive atmosphere for staff and officers in the new zone.





DECEPTION

Binu was twenty three when illness struck her.
Doctors and drugs
Became a greater torment than the illness itself;
Different lavelled bottles, different shaped pill boxes piled up.
After a year and a half of treatment her bones stuck out;
Then they said, "Give her a change of air"
So it was that Binu took her first train journey,
Left her parents-in-law's house for the first time since marriage.

The restrictions, the airless sequestration of the joint family
Had forced so broken a rhythm on our life together:
Our meetings furtive,
Our days a patchwork of snatched words and abortive smiles,
Today suddenly Earth seemed to be raising the whole light of the sky
To welcome us afresh as man and wife;
The expression in Binu's illness enlarged eyes
Was like a bride's first unveiled look again, in a new world.

When beggars along the railway track
Wailed at us for alms,
Binu would dig into her box for coins,
Wrap them in paper, fling them freely.
How could her happiness bear its own weight
But by making everyone happy?
It was as if we had left behind our broken domestic moorings
To sail away down a river of permanent love:

Binu's mood and charity
Could not but fill the journey with universal grace.
The thought seemed to burst again and again in her mind:
"Today my husband cares only for me:
There is no one else anywhere,
No husband's relatives before, behind or around me – "
The relief of it thrilled her bodily.

At Bilaspur station we had to change trains;
We got down hurriedly.
Six hours to fill in the waiting – room:
They seemed an age to me,
But Binu said, "Why? It's good to wait".
There seemed no limit to her delight.
The journey was a flute that made her want to dance:
Waiting, moving were made one by her happiness.
She opened the door of the waiting room and said,
"Look, look at those horse carts passing –
And can you see? That calf over there, how shiny and plump it is,
What deep love in its mother's eyes !
And next to that steep sided pond over there,
That little fenced-in house under sisu – trees,
Near the Railway line,
Is it the station master's? What a lovely place to live."

I spread out a bed roll in the waiting room.
"Binu," I said, "have rest now. Lie down and sleep."
I pulled a chair on to the platform
And began to read an English novel I had bought.
Goods train passed: passenger train –
About three hours went by.
Suddenly I heart Binu call from just inside the waiting room,
"Can you come? I want to tell you something".

There was a Hindusthani woman inside the room:
She looked me in the eyes,
Bowed, withdrew to the platform where she stood clutching a pillar.
Binu said, "She's called Rukmini.
She lives in that row of huts by the well over there;
Her husband is a station coolie.
Some years ago

There was trouble where they lived:
The zamindar was a tyrant – they had to flee.
They used to have seven bighas of land, I forget the name of their village,

It was by a river somewhere – ”
I interrupted her, said with a smile,
“The train will be here before you’ve finished Rukmini’s life story.

“Come on, it won’t hurt to cut it short.
“Yes it will,” said Binu angrily, glaring, frowning –
“Why should I cut it short?
You’re not hurrying to get to the office – what’s the fuss?
You can listen to it right through.”
So much for my English novel. Instead I listened in full
To the lengthy story of a railway coolie.
The nub was at the end, and expensive one:
The coolie’s daughter was being married; they needed
Bracelets, bangles, armlets for the dowry.
They’d cut it right down, but they’d have to spend twenty five rupees.
It was such a worry:
Rukmini was terribly cast down by it.
Could I not,
Just this once,
Relieve Rukmini of the worry?
Before we got on the train, I must give her
The whole twenty five rupees.

What an absurd business!
Whoever heard of such a thing?
The woman was probably a sweeper or something equally disgusting,
Cleaning out the waiting room daily –
To think of giving twenty five rupees to her!
I’d quickly go bankrupt if I gave away money like that.
“All right, I understand,” I said. “But I find
I only have a hundred rupee note –
No way of changing it.”
“They’ll change it for you at the ticket office” said Binu.
I answered, “All right, I’ll see what I can do,”
I called the woman, took her aside,
And then I tore into her:
“I’ll make sure you lose your job!
Going around duping passengers? I’ll soon put a stop to it.”
When she burst into tears and clung to my feet
I gave her two rupees and had done with her.

The temple light went dark, went out.
At the end of two months I was on my way home.
When I got down once again at Bilaspur to change trains,
I was alone.

In her final moments Binu had taken the dust of my feet and said,
“Whatever else in my life I shall forget,
These last two months will be marked on my brow forever –
Like the everlasting vermilion in the parting of Laksmi’s hair.
These two months have filled my soul with nectar:
That is what I remember as I bid you farewell.”

O all seeing God,
If only I could tell Binu today
That I am guilty of a dreadful omission from that two months offering –
A debt of twenty five rupees.
Even if I could give a hundred thousand rupees to Rukmini today
They could never fill that lack.
Binu never knew I had pressed deceptively into her hands
The two months that she took away with her.
At Bilaspur I enquired of everyone,
“Where is Rukmini?”
They reacted blankly:
Who was Rukmini? No one knew.
I racked my brain: “The wife of Jhamru the coolie,” I remembered.
And then they answered, “They’re no longer here.”
“Where can I find them?” I asked.
“Why should anyone know that?” said the station master, getting annoyed.
The ticket clerk smirked and said, “They went off a month ago
To Darjeeling or Khasrubag
Or may be Arakan.”
When I tried to ask if any one knew their address,
I was brushed away angrily: what business of theirs was the coolie’s address?

How could I explain? What seemed so trivial to them that day
Was for me direst necessity:
To find the one person able to rid me of my burden of deceit.
“These two months have filled my soul with nectar.”
How shall I bear the memory of Binu’s last words?
I remain here a debtor;
My lie will stay with me always.

ফাঁকি

বিনুর বয়স তেইশ তখন, রোগে ধরল তারে
ওষুধে ডাক্তারে
ব্যথির চেয়ে আধি হল বড়ো ;
নানা ছাপের জমল শিশি, নানা মাপের কৌটো হল জড়ো
বছর- দেড়েক চিকিৎসাতে করলে যখন অস্থি জরজর
তখন বললে, ‘হাওয়া বদল করো।’
এই সুযোগে বিনু এবার চাপল প্রথম রেলের গাড়ি,
বিয়ের পরে ছাড়ল প্রথম শ্বশুরবাড়ী।

নিবিড় ঘন পরিবারের আড়ালে আবড়ালে
মোদের হত দেখাশুনো ভাঙা লয়ের তালে ;
মিলন ছিল ছাড়াছাড়া -
চাপা-হাসি টুকরো-কথার নানান জোড়াতাড়ি।
আজকে হঠাৎ ধরিত্রী তার আকাশ-ভরা সকল আলো ধরে
বর-বধূরে নিলে বরণ করে।
রোগা মুখের মস্ত বড়ো দুটি চোখে
বিনুর যেন নতুন করে শুভদৃষ্টি হল নতুন লোকে।

রেল-লাইনের ওপার থেকে
কাঙাল যখন ফেরে ভিক্ষা হেঁকে
বিনু আপন বাস্তু খুলে
টাকা শিকে যা হাতে পায় তুলে
কাগজ দিয়ে মুড়ে
দেয় সে ছুঁড়ে ছুঁড়ে।
সবার দুঃখ দূর না হলে পরে
আনন্দ তার আপনারই ভার বইবে কেমন করে।
সংসারের ওই ভাঙা ঘাটের কিনার হতে
আজ আমাদের ভাসান যেন চিরপ্রেমের স্রোতে -
তাই যেন আজ দানে ধানে
ভরতে হবে সে যাত্রাটি বিশ্বের কল্যাণে।
বিনুর মনে জাগছে বারে-বার,
নিখিলে আজ একলা শুধু আমিই কেবল তার ;
কেউ কোথা নেই আর
শ্বশুর ভাসুর সামনে পিছে ডাইনে বাঁয়ে -
সেই কথাটা মনে ক’রে পুলক দিল গায়ে।

বিলাসপুরের ইন্সটেশনে বদল হবে গাড়ি ;
তাড়াতাড়ি
নামতে হল ; ছ ঘণ্টা কাল থামতে হবে যাত্রীশালায়।
মনে হল, এ এক বিষম বলাই।
বিনু বললে, ‘কেন এই তো বেশ।’
তার মনে আজ নেই যে খুশির শেষ।
পথের বাঁশি পায়ে পায়ে তারে যে আজ করেছে চঞ্চলা -
আনন্দে তাই এক হল তার পৌঁছনো আর চলা।
যাত্রীশালার দুয়ার খুলে আমায় বলে,

‘দেখো, দেখো, একাগাড়ী কেমন চলে !
আর দেখেছ ? বাছুরটি ওই, আ ম’রে যাই, চিকন নধর দেহ -
মায়ের চোখে কী সুগভীর স্নেহ !
ওই যেখানে দিঘির উঁচু পাড়ি -
সিসুগাছের তলাটিতে পাঁচিল-ঘেরা ছোট্ট বাড়ি
ওই-যে রেলের কাছে -
ইন্সটেশনের বাবু থাকে ? আহা, ওরা কেমন সুখে আছে।’

যাত্রীঘরে বিছানাটা দিলেম পেতে ;
বলে দিলেম, ‘বিনু, এবার চুপটি করে ঘুমোও আরামেতে।’
প্লাটফর্মে চেয়ার টেনে
পড়তে শুরু করে দিলেম ইংরেজি এক নভেল কিনে এনে।
গেল কত মালের গাড়ী, গেল প্যাসেঞ্জার,
ঘন্টা তিনেক হয়ে গেল পার।
এমন সময় যাত্রীঘরের দ্বারের কাছে
বাহির হয়ে বললে বিনু, ‘কথা একটা আছে।’
ঘরে ঢুকে দেখি কে এক হিন্দুস্তানি মেয়ে
আমার মুখে চেয়ে
সেলাম করে বাহির হয়ে রইল ধরে বারান্দার থাম।
বিনু বললে, ‘রুকমিণী ওর নাম।
ওই যে হোথায় কুয়োর ধারে সার-বাঁধা ঘরগুলি
ওইখানে ওর বাসা আছে, স্বামী রেলের কুলি।
তেরো-শো কোন্ সনে
দেশে ওদের আকাল হল ; স্বামী স্ত্রী দুইজনে
পালিয়ে এল জমিদারের অত্যাচারে।

সাত বিঘে ওর জমি ছিল কোন্-এক গাঁয়ে
কী-এক নদীর ধারে’-
বাধা দিয়ে আমি বললেম হেসে,
‘রুকমিণীর এই জীবন-চরিত শেষ না হতেই গাড়ি পড়বে এসে ;
আমার মতে, একটু যদি সংক্ষেপেতে সারো
অধিক ক্ষতি হবে না তায় কারো।
বাঁকিয়ে ভুরু, পাকিয়ে চক্ষু, বিনু বললে ক্ষেপে-
‘কখখনো না, বলব না সংক্ষেপে।
আপিস যাবার তাড়া তো নেই, ভাবনা কিসের তবে ?
আগাগোড়া সবটা শুনতে হবে।’
নভেল-পড়া নেশাটুকু কোথায় গেলে মিশে।
রেলের কুলির লম্বা কাহিনী সে
বিস্তারিত শুনে গেলেম আমি।
আসল কথা শেষে ছিল, সেইটে কিছু দামি।
কুলির মেয়ের বিয়ে হবে, তাই
পৈঁচে তাবিজ বাজুবন্ধ গড়িয়ে দেওয়া চাই ;
অনেক টেনেটুনে তবু পাঁচিশ টাকা খরচ হবে তারি ;
সে ভাবনাটা ভারি

রুকমিণীকে করেছে বিব্রত ।
তাই এবারের মতো
আমার 'পরে ভার
কুলি-নারীর ভাবনা ঘোচাবার ।
আজকে গাড়ি-চড়ার আগে একেবারে থোকে
পঁচিশ টাকা দিতেই হবে ওকে !

অবাক কান্ড এ কী !
এমন কথা মানুষ শুনেছে কি !
জাতে হয়ত মেথর হবে কিম্বা নেহাত ওঁচা,
যাত্রীঘরের করে ঝাড়ামোছা,
পঁচিশ টাকা দিতেই হবে তাকে !
এমন হলে দেউলে হতে ক দিন বাকি থাকে !
'আচ্ছা আচ্ছা, হবে হবে আমি দেখছি মোট
একশো টাকার আছে একটা নোট,
সেটা আবার ভাঙানো নেই !'
বিনু বললে, 'এই
ইন্সট্রিশনেই ভাবিয়ে নিলেই হবে ।'
'আচ্ছা, দেব তবে'
এই ব'লে সেই মেয়েটাকে আড়ালেতে নিয়ে গেলেম ডেকে ;
আচ্ছা করেই দিলেম তারে হেঁকে-
'কেমন তোমার নোকরি থাকে দেখব আমি !
প্যাসেঞ্জারকে ঠকিয়ে বেড়াও ! ঘোচাব নষ্টামি !'
কেঁদে যখন পড়ল পায়ে ধরে
দু টাকা তার হাতে দিয়ে দিলেম বিদায় করে ।

জীবন-দেউল আঁধার করে নিবল হঠাৎ আলো ।
ফিরে এলেন দু মাস যেই ফুরালো ।

বিলাসপুরে এবার এলেম নামি,
একলা আমি
শেষ নিমেষে নিয়ে আমার পায়ের ধূলি
বিনু আমায় বলেছিল, 'এ জীবনের যা-কিছু আর ভুলি
শেষ দুটি মাস অনন্তকাল মাথায় রবে মম
বৈকুণ্ঠে নারায়ণীর সঁখের' পরে নিতসঁদুর-সম !
এই দুটি মাস সুধায় দিলে ভরে,
বিদায় নিলেম সেই কথাটি স্মরণ করে ।'

ওগো অস্ত্রযামী,
বিনুরে আজ জানাতে চাই আমি
সেই দু মাসের অর্ধে আমার বিষম বাকি -
পঁচিশ টাকার ফাঁকি ।
দিই যদি আজ রুকমিণীকে লক্ষ টাকা
তবুও তো ভরবে না সেই ফাঁকা ।
বিনু যে সেই দু মাসটির নিয়ে গিছে আপন সাথে-
জানল না তো, ফাঁকিসুদ্ধ দিলেম তারই হাতে

বিলাসপুরে নেমে আমি শুধাই সবার কাছে,
রুকমিণী সে কোথায় আছে ?
প্রশ্ন শুনে অবাক মানে -
রুকমিণী কে তাই-বা কজন জানে !
অনেক ভেবে 'ঝামরু কুলির বউ' বললেম যেই
বললে সবে, 'এখন তারা এখানে কেউ নেই ।'

শুধাই আমি, 'কোথায় পাব তাকে ?'
ইস্টেশনের বড়োবাবু রেগে বলেন, সে খবর কে রাখে ?'
টিকিটবাবু বললে হেসে, 'তারা মাসেক আগে,
গেছে চলে দার্জিলিঙে কিম্বা খসরুবাগে,
কিম্বা আরাকানে ।'
শুধাই যত 'ঠিকানা তার কেউ কি জানে'-
তারা কেবল বিরক্ত হয়, তার ঠিকানায় কার আছে কোন কাজ !
কেমন ক'রে বোঝাই আমি - ওগো আমার আজ
সবার চেয়ে তুচ্ছ তারে সবার চেয়ে পরম প্রয়োজন;
ফাঁকির বোঝা নামাতে মোর আছে সেই একজন !
'এই দুটি মাস সুধায় দিলে ভরে'
বিনুর মুখের শেষ কথা সেই বইব কেমন ক'রে !
রয়ে গেলেম দায়ী,
মিথ্যা আমার হল চিরস্থায়ী !





BETWEEN STATIONS...

THE JOURNEY OF SOUTH EAST CENTRAL RAILWAY

4th Dec 1888
Rajnandgaon
to Raipur was
opened for
traffic.

1887
A bridge over the
Kanhah River
was completed
in 1887.

1887
The Bengal
Nagpur Railway
was formed.



14th Feb 1889
Raipur to
Bilaspur was
opened for
traffic.

6th Oct 1890
The East Coast
Railway was
inaugurated.

1st Feb 1891
The main line :
Nagpur to
Asansol was
opened.

9th Mar 1891
The Bilaspur-
Katni Branch
was opened for
traffic.

1st Oct 1892
The Saranda
tunnel was
completed and
opened for traffic

21st Aug 1893
The Kakinada-
Visakhapatnam
line was opened
for traffic.

1893 to 1896
800 miles of
East Coast
Railway line
was opened.

1893 to 1896
Largest bridges
viz. Brahmani,
Mahanadi,
Katjuri, Kuakhai
and Birupa built.

1898-99
The Sini-
Kharagpur &
Kolaghat and
Kharagpur-
Cuttack were
opened for traffic.



1913
Mohuda-
Chandrapura
(9 miles) Branch
was opened for
traffic.

1887
The Bengal
Nagpur Railway
was formed.

1913
Nagbhir-Rajoli
was opened
and extended
upto Chanda.

1913
Salur on
Vizianagaram-
Parvatipuram
section was
opened.

1915
BNR Hotel at
Ranchi was
established.

1916-17
Bankura-
Damodar River
Railway was
built by BNR.

1918
Burnpur, India's
2nd largest Iron
& Steel Plant
was established.

1913
Nagpur-
Chidwara was
opened for traffic
by
Sir T.R.Wynne.

1911 A 40 mile
branch line from
Tatanagar to
Gurumahisarani
was opened for
traffic.

1908-09
Vizianagaram-
Parvatipuram
(49 miles)
section was
opened

Nov 1908
Gondia-
Nagbhir-Nagpur
line was opened
for traffic.

1908
The Head Office
Building of BNR
was constructed
at a cost of
Rs.7, 01,995/-

1907
Extension of
Gomoh, a point
of East Indian
Railways main
line completed.

15th Nov 1907
Purulia-Ranchi
Branch was
opened for
traffic.

1905 Nainpur-
Gondia line was
extended upto
Jabalpur.

1904
Nainpur-
Chindwara
section was
opened for
traffic.

1st Jan 1899
BNR's Line to
Cuttack was
opened.

1899-1900
Kolaghat-
Howrah section
was completed.

19th April 1900
Roopnarayan
Bridge near
Kolaghat was
opened.

March 1901
A bridge on
River Mahanadi
near Cuttack
was completed.

1st Feb 1901
Kharagpur-
Midnapur
Branch line was
opened.

1901
Dhamtari line
and Rajim
Branch were
opened.

13th April 1903
The first portion
of Gondia-
Nainpur (73
miles) was
opened.



1922
BNR Hotel at
Puri was
established.

1922
Tatanagar-
Gurumahisani
line was
extended upto
Badampahar.

1924
For iron ore and
magnese ores,
Amda,
(Raj Khurswan)
commisioned

17th Jan 1924
Kharswan-
Dongaposi was
opened for
traffic.

Feb 1925
Extension to
Gua was
completed.

20th Mar 1927
72 mile
Barkakhana-
Chandil section
was opened.

1928-30
54 mile long
Anuppur –
Chirimiri section
was opened

1930
Shalimar Goods
Shed on the
bank of River
Hooghly was
operational.

1930
Parlakmedi-
Gunupur
section was
opened.

Dec 1931
Raipur-
Parvatipuram
line was
completed.

1933
Development of
Vizag Port by
Bengal Nagpur
Railway was
completed.

18th Dec 1933
Vizag Port
declared open
by His
Excellency Lord
Willington.

1st Oct 1944
BNR taken over
by Government
of India.

1955
BNR emerged
as South
Eastern
Railway.

1956
Visakhapatnam
Port was
managed by
SER till October.

14th May 1958
Bhilai-
Dallijahara line
was opened for
traffic.

4th Feb 1959
Bhilai Steel
Plant was
inaugurated.

1960
Dandakaranya-
Bolangir-
Kiriburu Railway
Project started.

1960
Ranchi-Kotshila
was converted
into BG.

1962
Foundation of
Cuttack-Paradip
line laid by
Prime Minister,
Jawarlal Nehru.

April 1963
Sambalpur-
Titlagarh line
was opened for
traffic.

July 1966
Reorganisation
of IR by
formation of five
new railways
including East
Coast

1967
Bokaro Steel
Plant was set up
with Soviet
Collaboration.





1st April, 2003
New zone (SECR) and new division (Raipur) became functional.

Sep., 2005
Gauge converted Gondia – Balaghat section was open

April, 2009
New zonal office building inaugurated.

May, 2010
Gauge converted Balaghat – Katangi section was open.



Dec., 2002
Narrow Gauge Museum was opened.



27th Oct. 2001
Raipur-Durg MEMU Passenger train was flagged off.

1st July, 2000
MEMU Passenger service introduced.

18th Nov 2000
Banspani-Joroli (10.44 Km) was opened for traffic.

2000
Foundation stone of BDR Gauge Conversion was laid.

January, 1999
Gauge converted Gondia – Balharshah section was open

1998
Bilaspur, added as the sixteenth zonal railway, by trifurcation of SER.

July 1967
SER took over Bankura Domodar River line.

Jan 1968
Panskura-Durgachak section was opened.

9th July 1973
Cuttack-Paradip line was opened for traffic.

1st June 1976
EMU train services : Panskura & Haldia introduced.

28 Feb 1977
Jharkpur-Daitari line was opened for traffic.

1st Sept 1980
Kirandul-Jagadpur line was energized.

1982
Jagadpur-Koraput section was energized.





THE JOURNEY CONTINUES...

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