

Department of Mines, India.

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# REPORT

OF THE

## CHIEF INSPECTOR OF MINES IN INDIA

Under the Indian Mines Act (VIII of 1901)

FOR THE

YEAR ENDING 31st DECEMBER

# 1907

BY

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*Chief Inspector of Mines in India.*



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## CONTENTS.

	PAGE.
<b>INTRODUCTION.</b>	
Relates to administration of the Act . . . . .	1
Other Mining Statistical publications . . . . .	1
Collection of Mineral Statistics . . . . .	1
New procedure . . . . .	1
Statistics in Native States not included . . . . .	2
Scheme of Report . . . . .	2
<b>SECTION I.—PERSONS EMPLOYED.</b>	
Fluctuations in numbers . . . . .	2
Increase compared with preceding year . . . . .	2
Industry extending . . . . .	2
Training of Indian labour . . . . .	2
Supervision must be more efficient . . . . .	2
<b>SECTION II.—OUTPUT OF MINERAL.</b>	
Increases . . . . .	2
Coal, remarks on statistics . . . . .	2
India, largest coal producing dependency of the British Empire . . . . .	2
Activity of Bengal coal trade . . . . .	3
Mica, output same as that of preceding year . . . . .	3
Manganese, increase in output . . . . .	3
"    deposits in the Central Provinces . . . . .	3
"    mines in the Central Provinces, labour at the . . . . .	3
"    "    "    "    advance in wages . . . . .	4
Gems, increase in output . . . . .	4
"    Native owned ruby mines in Burma excluded from the scope of the Act . . . . .	4
Gold, output of, at Dharwar gold-fields . . . . .	4
"    Dharwar gold-fields, sanitary arrangements . . . . .	4
"    Wader village broken up . . . . .	4
Limestone output lower . . . . .	4
Copper mine in the Central Provinces not yet producing . . . . .	4
Tin, production of . . . . .	4
Chromite, production of . . . . .	4
<b>SECTION III.—ACCIDENTS.</b>	
General remarks . . . . .	4
Increase . . . . .	4
Death rates . . . . .	4
Explosions of fire-damp . . . . .	5
Explosions at Borra colliery . . . . .	5
"    "    Dishargarh colliery . . . . .	5
"    "    Laikdih . . . . .	5
Falls of roof and sides . . . . .	6
Accident at Chota Dhemolliery . . . . .	6
"    "    Khas' Jharla . . . . .	6
"    "    Central Kurkend colliery . . . . .	6
"    "    Bhaga colliery . . . . .	6
"    "    Chirki mica mine . . . . .	7
"    "    Miragpur manganese mine . . . . .	7
"    "    New Surataur colliery . . . . .	7
"    "    Kuordih colliery . . . . .	7
Shaft accidents . . . . .	7
Accident at Benahir colliery . . . . .	8
"    "    Rajhar . . . . .	8
"    "    Jamadoba . . . . .	8
"    "    Begunia . . . . .	9
"    "    Mudidih . . . . .	9
"    "    Bamundiha colliery . . . . .	9
Explosives . . . . .	9



CONTENTS.

iii

	Page.
Table No. 6, regulations for conduct of examinations for certificates . . . . .	53
„ No. 7, list of certificate holders . . . . .	55
„ No. 8, „ „ Mining Universities . . . . .	60
„ No. 9, „ „ Inspection Circles . . . . .	61
„ No. 10, notification regarding grant of the Edward medal . . . . .	62
<b>APPENDIX IV.</b>	
Additions to the Act . . . . .	64
<b>APPENDIX V.</b>	
List of coal mines . . . . .	71

FROM

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TO

THE SECRETARY TO THE GOVERNMENT OF INDIA,  
DEPARTMENT OF COMMERCE AND INDUSTRY.

*Dated Calcutta, 1st June 1908.*

SIR,

I have the honour to submit the report upon the inspection of mines in British India for the year ending 31st December 1907.

#### EXPLANATORY INTRODUCTION.

My services having been lent to the Government of India by the Imperial Government, I took charge as Chief Inspector of Mines in India only on 8th January this year. This is therefore a report of work associated with my predecessor Mr. W. H. Pickering, who gave over charge of the Department on 4th September 1907 and returned to England to resume the responsibility of the important inspection district of Yorkshire and Lincolnshire.

Though I have been but a few months in India, the time has been long enough for me to be assured that Mr. Pickering was held in the highest esteem wherever his duties carried him, and he has left the impress of his work and his methods of careful organisation on every hand.

During the four months' interregnum, the Department was in charge of Mr. James Grundy, who has on more than one occasion officiated in this capacity, and whose long services with the Government of India will have terminated before this report is in print.

To prevent misconception, it seems necessary to explain that this is a report relating entirely to the administration of the Indian Mines Act, 1901, and is not a complete statistical review of Indian mining and analogous industries.

No official publication embodying such statistics is at present issued for India, but a review of the mineral production of India was published in 1905 by the Director of the Geological Survey of India for the six years ending 31st December 1903. In future this will appear as a Quinquennial Review. Some statistics relating to mines and minerals appear in the "Financial and Commercial Statistics of British India" published annually by the Director-General of Commercial Intelligence and appear about 12 months after the year to which they relate; and statistics of output of minerals beginning with the year 1904 are also given in the "Records of the Geological Survey of India." Figures for Mysore, where most of the Indian gold is raised, are given in the Report of the Chief Inspector of that Native State, and mineral statistics may also be found in the administrative reports of the various presidencies, provinces and states of India.

This year, for the first time, the Chief Inspector of Mines has been responsible for the collection of the returns for mines under the Act. This will, it is believed, make the statistics of the mines regulated by the Indian Mines Act, 1901, complete and trustworthy and allow a much earlier issue of this report than hitherto.

In some of the Mines Department reports previous to the year 1904 a few statistical tables relating to mines in Native States, and to workings not regulated by the Act, were given, but as it is not possible to obtain accurate figures in time for the date prescribed for the issue of this report, they have been again omitted.

It should be remembered in reading the statistics that there must be a considerable output from quarries which are under 20 feet deep; and, owing to the exclusion of such places from the scope of the Mines Act, these figures should not be regarded as a complete index to the productive mineral wealth of the country.

The report is divided into five sections, *viz.* :—

Section	I.—Persons employed.
”	II.—Output of mineral.
”	III.—Accidents.
”	IV.—Prosecution, discipline and additions to the Act.
”	V.—General Remarks.

### Section I.—Persons employed.

During the year 1907 the average number of persons working in and about mines regulated by the Indian Mines Act, was 151,983, of whom 98,824 worked underground and 53,159 on the surface; 96,769 of the persons were adult males, 49,116 adult females and 6,098 children under 12 years of age. Compared with the preceding year an increase of 18 per cent. or of 23,317 workers is shown.

The ratio of increase is slightly greater than in the preceding year and exhibits a very satisfactory state of progress. The figures undoubtedly would have been much larger, had the supply of labour been equal to the demand.

There is every sign that the industry is extending, and the labour difficulty will probably soon become acute.

It apparently takes very little to frighten the native worker away from the mine, and it will become increasingly important for mine managers to study the prejudices and customs of those under their charge.

The material at hand is very unformed; labour is not applied to the best advantage; the miner in his working place tears off the coal by sheer force, whereas he might be trained to considerably increase his output by the exercise of skill.

As has been repeatedly pointed out, the industry is still in its infancy, and it requires no great prophetic power to discern that if success is not to lag behind the energy put into the undertakings, supervision must not only be more constant, but also more efficient

### Section II.—Output of mineral.

A glance at the tables given in Appendix II will show that there has been a large increase in the output of coal and manganese raised from mines regulated by the Indian Mines Act and a slight decrease in mica, gems and salt. The percentage of increase are :—Coal 15·51, manganese ore 47.

#### COAL.

The continued increase of coal must be very gratifying to those associated with the commercial aspects of the industry; nearly  $1\frac{1}{2}$  million tons more than the preceding year having been raised.

The output was 10,526,468 tons as compared with 9,112,663 in 1906, an increase of 15·51 per cent. Of this 9,993,348 tons or 94·93 per cent. were raised in Bengal, exceeding the output of the preceding year by 1,375,528 tons.

Reference to table 8 in Appendix II will show that the remarkable expansion of the output has enabled India to easily maintain her position at the head of

the coal producing dependencies of the British Empire. If the output from Native States is added India's lead is still more striking.

A comparison with last year's figures will show that the principal increase comes from the Jharia coal-field where the output has gone up over one million tons; and that of Burdwan over 200,000 tons. Pench Valley in the Central Provinces has more than doubled its output, while Burma, which was more or less in the experimental stage, has ceased to produce any coal.

The coal trade of Bengal continued extremely active during the year and as the demand for coal was greater than the supply, high prices were maintained. Many complaints have been made of the difficulty of despatching the output, owing to the irregular and inadequate supply of wagons.

#### MICA.

The output of mica remains practically the same as last year; although Hazaribagh has materially increased its output, that of Madras has fallen to an equal amount.

#### MANGANESE ORE.

This valuable commodity shows another substantial and gratifying increase, having risen from 436,442 tons in 1906 to 642,082 tons last year. Of this amount over 496,000 tons come from the Central Provinces, which has increased its output by 170,000 tons. The known manganese deposits of this part of India are found in what is called the Nagpur-Balaghat area, comprising the districts of Chhindwara, Nagpur, Bhandara and Balaghat. This tract of country contains some 3,500 square miles. Although the area is surrounded on three sides, and will in the near future be completely surrounded by main railway lines, few of the mines are provided with direct access to these lines, and some of them are as much as 35 miles distant from them. This drawback has been to some extent mitigated by the enterprise of one of the Mining Companies working within the field. This Company has laid down two narrow gauge tram lines starting from different points on the main line to the south and penetrating to distances of 12 and 30 miles, respectively, within the mining area.

The ore of manganese which is mined in the Central Provinces consists of an intimate mixture of braunite and psilomelane. It is steel grey in colour of fine grain and usually very hard and tough. This latter property is a very valuable one as the mineral has to endure a lengthy transport and many changes of bulk before reaching its destination. Chemically the ore is one of the richest and purest mined in the world. The percentage of manganese varies from 50 to 55 whilst the phosphorous content is low.

The mining of manganese ore in the Central Provinces was first undertaken in the year 1899, when operations were commenced in the Nagpur district. In the following year 35,356 tons of ore were raised, and with the opening out of other deposits in the Bhandara, Balaghat and Chhindwara districts a practically continuous expansion of output has resulted.

The bulk of the ore which up to date has been mined in the field is of the kind known as "boulder ore". This forms the capping of most of the ore beds and has been derived from the disintegration of the bed *in situ*.

The slopes of the hills containing ore beds are covered by enormous deposits of this nature, varying in thickness from a few to as many as twenty feet.

As a rule the boulders vary from the size of a cricket ball to that of a man's head, but in some cases as at Chickla masses of from 50 to 70 tons weight are found. The majority of the small producers are working on this class of deposit.

From ten to fifteen thousand coolies are employed in the Central Provinces manganese mines. There is no scarcity of labour, but owing to the large number of recently opened manganese and coal mines, and the commencement of work upon a large irrigation project, the rates of wages have advanced fully fifty per cent. within recent years.

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For a complete account of the mineralogy and geology of the Central Provinces ores reference may be made to a very able and comprehensive paper on "Manganese in India" by Mr. L. L. Fermor, Transactions, Mining and Geological Institute of India, Vol. I, Pt. 2.

#### GEMS.

The output of gems from Burma has decreased from 324,410 carats in 1906 to 296,125. The output is entirely from the Mogok mines of the Burma Ruby Mines, Limited. This is the only Company working on a large scale, but there are very numerous mines and washings in the Mogok district worked by Burmans who have hereditary rights. The native worked mines are excluded from the scope of the Indian Mines Act.

#### GOLD.

In last year's report there was no output to record, but in 1907 4,017 ounces of gold were mined in the Dharwar gold fields.

Work was also carried on in the Nilgiris and Anantapur districts but no ore was crushed during the year.

During the year my predecessor met Messrs. John Taylor & Sons' (Dharwar) Committee at Kabulayatkatti and discussed with them matters affecting the general welfare of the goldfield. The sanitary arrangements of the villages within the boundaries of the mines were considered to be quite satisfactory. They are supervised by a medical officer who has a qualified assistant and a staff of sanitary inspectors. Every hut is visited daily and the lines are kept scrupulously clean by sweepers employed by the mine owners.

The Wader village just outside the lines was, however, in a most deplorable condition as regards sanitation. This was viewed with grave concern by the Committee; but since that time the encampment has fortunately been broken up.

#### OTHER MINERALS.

A considerable increase in limestone is shown while the output of salt has slightly lowered.

The copper mines in the Central Provinces have not yet reached the producing stage.

Burma has produced 272 cwts. of tin and Baluchistan has worked 771,206 cwts. of chromite during 1907.

### Section III.—Accidents.

#### GENERAL REMARKS.

During the year 1907, at mines regulated by the Indian Mines Act, 1901, there were 105 fatal accidents involving the loss of 122 lives, being an increase of 16 over last year's figure. The reason of the increase is due, as stated in last year's report, to the expansion and activity of the mining industry and to the increasingly difficult and dangerous conditions of mining work.

Of the persons killed 109 were males and 13 females. In addition to these deaths, fatal accidents to 12 persons who were not employed at the mines were reported. A list of these appears in Appendix I and reasons are given for their exclusion from the statistical tables.

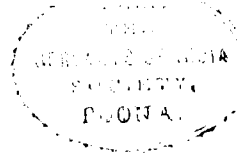
The deaths occurring in each mineral working were as follows:—89 in coal; 13 in mica; 4 in manganese; 12 in gold; 3 in ruby; and 1 in salt mines.

Of the persons killed 5 lost their lives by explosions of fire-damp; 57 by falls of roof and side; 21 in shafts; 11 by explosives; 10 by haulage; 6 by other accidents below ground, and 9 on the surface.

The death-rate per 1,000 persons employed works out to .80, being a decrease compared with the figure of .82 for the preceding year which is very satisfactory.

Each fatal accident is briefly described in Appendix I but the following additional remarks and explanations are necessary.





## EXPLOSIONS OF FIRE-DAMP.

Happily, India has so far escaped any great calamity from explosions of fire-damp, but during the year there were three accidents which resulted in the death of five persons. They each happened on a Monday morning, and all might have been avoided by care and forethought.

As was pointed out last year, explosive gas is certain to be far more troublesome in the near future when the workings will have reached a greater depth from the surface; and no pains must be spared to make those whose duty it is to examine the mine and safeguard the lives of the workpeople familiar with the properties of this subtle foe.

Some of the coals undoubtedly produce fine dust, and, with the improved ventilating currents, and increased speed of the newer methods of haulage, this factor will have to be taken into consideration.

In many mines with unworked pillars, the galleries cover a large area, and in these, away from the direct current of air, dust may steadily settle and await the time when some concussion, caused either by a blown out shot or slight explosion of fire-damp, may arouse this latent power and repeat the experiences which have been gathered at such a tremendous cost in older mining countries.

The details of the three explosions which occurred are as follows:—No. 1 in the list—This happened at No. 6 Pit, at the New Beerbhoom Coal Company's Borrea mine in No. 4 seam. The manager states that fire-damp had never previously been seen in this pit. However, the two men on going to their working place in a six feet square gallery found some fire-damp with their naked lights near the coal face and it exploded, with fatal results in one case.

A properly directed current of air would have prevented such a result.

No. 2 in the list took place at No. 5 Pit at the Equitable Coal Company's Dishargarh coal mine in the Dishargarh seam. The place had not been worked for thirteen hours, and the evidence seems to show that it had not been properly examined in the meantime. Deceased was working in a gallery, and although the seam is 13 feet thick, owing to a length of floor coal being left on, his working place was only 5 feet high.

Owing to the fact that the face of the coal was 28 feet beyond the current of fresh air, there was nothing to remove any accumulation of gas that might occur. Apparently the first time the deceased had occasion to lift his open lamp near the roof some fire-damp exploded and burnt him with fatal results.

The officials examine the mine with safety lamps, and it is always difficult to disprove a statement that any particular part of a mine was so examined.

As the Inspector investigating the accident pointed out, the sirdars should be compelled to leave some mark in each working place which will show that they have actually visited it.

No. 3 in the list happened at the Bengal Coal Company's Laikdih mine in the Laikdih seam. About 6-30 that morning two shots of dynamite were fired in the roof in a rise gallery at the junction of two roads. As a result, a few feet of the bratticing which directed the air current was broken down. Before this was repaired, fire-damp evidently collected near the roof higher up the gallery at a point where some roof coal 12 inches thick had been left on. At 9-30 A.M. three men went to work at this roof coal, and it is more than probable that one of them placed a naked light so near the roof that it ignited the gas, resulting in an explosion which ultimately caused their deaths.

This is a mine in which safety lamps of a good type are used throughout the whole of the workings; the lock of the lamp however is an ordinary screw which is never very effective and easily lends itself to being tampered with.

There is no actual proof as to how the gas ignited in this case, but very little doubt really exists that one of the men exposed the flame by taking off the lamp bottom. One lamp was found with a loose screw, and another without any screw-lock whatever.

Safety lamps become such only in name unless they are carefully used; and in all cases, before being taken into the workings, they should be examined by some one appointed for the purpose.

Where the necessity of using bratticing is recognised, it should also appeal to an official that when this bratticing has become deranged, it is of special

importance to carefully examine the place afterwards. Forty feet of brattice was blown down by the explosion, and there were present in this case all the elements of a very serious disaster.

#### FALLS OF ROOF AND SIDE.

Accidents from this cause resulted in the death of 57 persons, an increase of 6 upon the previous year; 36 of the deaths occurring in coal mines.

Twenty-nine of the deaths were from falls of roof, and twenty-eight from falls of side.

No. 4 in the list.—This took place at Babu R. B. Chatterji's Chota Dhemu coal mine, and was due to lack of proper supervision. Deceased was loading coal in his working place beneath some roof coal which was overhanging for  $5\frac{1}{2}$  feet, when the latter fell upon him: his left leg was so badly mutilated, and he was otherwise so bruised, that he died the same day. The sirdar appears to have told a mistry to set any props that might be required, but gave no definite instructions about either supporting or getting down the roof in this place. His inspection should have shown him the necessity of having the roof coal taken down, and he ought to have given instructions accordingly.

No. 28 in the list happened at the Khas Jharia Colliery Company's Khas Jharia mine in a seam which is 26 feet thick. Deceased was ordered to cut down some roof coal and had apparently been at work for three hours when some of it came away suddenly and injured him so severely that he died in a few minutes.

The place was so high that he had to stand upon a stool, and doubtless he was not able to perceive any signs of fracture or detect any movement in time to get out of danger.

The fall was unusual in that it assumed the shape of an inverted basin about 8 feet diameter at the base, and 2 feet 9 inches high. These "potholes" as they are often called in English mining are most difficult to discover, even by careful sounding.

If the roof coal has to be taken down, it would be much safer to do so before the floor coal is taken up, when the miners would not only have something firm to stand upon, but could more easily see what they are doing.

No. 29 in the list happened at the Central Kurkend Coal Company's Central Kurkend mine, and is a case where a miner worked contrary to orders, and by so doing was the cause of his wife being killed.

This man had left his proper working place, and, according to the sirdar in charge, had gone beyond a fence and was getting coal off another pillar. The sirdar says he ordered him to come to the proper side of the fence, as he noticed a slip in the roof running along the side of the gallery.

The man did not obey, and before the sirdar had gone many yards away, some roof coal measuring, in an irregular shape, 13 feet long by 12 feet wide and 4 feet thick, fell out up to the slip and injured the man and unfortunately killed the woman.

If the sirdar did know of the slip, and especially as the man was breaking the rules by being beyond a fence, he ought to have insisted upon the man at once withdrawing.

Supervision can never be very effective without discipline, and the sooner those officials who are brought most closely into contact with the worker appreciate this the better.

No. 30 in the list occurred at the Jharia Colliery Company's Bhaga mine.

The pillars were being extracted in a 24 feet seam, and some powder shots had brought down a quantity of coal from the corner of one pillar. The deceased men were supposed to be filling out this coal. After the accident it was found that a large quantity of coal had fallen from a pillar at the opposite side of the gallery to that from which the coal was blown down, and two of the five men working were caught by it and killed.

It is possible that the former pillar was somewhat crushed by weight, and perhaps the blasting may have further shaken the coal; but the most probable solution is that the deceased men were trying to get down some coal from the wrong pillar, and it came away suddenly and caught them. When visited by an official at 2 P.M., all was in order and the accident happened at 3 o'clock.

As soon as it was known, the place was visited by the officials, but the bodies had already been removed from under the coal by the other workmen. A lamp however was found beneath the new fall.

The evidence in this case is most difficult to obtain. Of the three surviving men, one was not close at hand at the moment and immediately he knew of the accident he went out of the mine with the two women who assisted them.

Another man disappeared altogether, and the third, who either could not or would not give any clear explanation of the occurrence, died two days later from excessive drinking.

No. 31 in the list happened at the Acme Mica Company's Chirki mine, Kodarma. The mine had originally been worked by shafts, but some new owners were opening it out as a quarry. Thirty-four feet down the quarry a trench was excavated 9 feet wide at the top. While ten men were at work in the trench, a mass of material from the quarry side some 20 feet above the trench suddenly fell upon them. Five were got out alive, but the other five were unfortunately suffocated. Altogether about 2,000 cubic feet of material, consisting of soft red gravel and soft decomposed granite came away—the fall measuring 25 feet long.

One of the owners was standing by and saw the material slide off and shouted out to warn the men, but they had not time to get out of the trench.

The side of the quarry was nearly vertical and to this the fall is due. It ought to have been sloped back in steps.

This was pointed out to the owners, who immediately recognised the necessity of it and agreed at once to have it done.

No. 34 in the list happened at the Central India Mining Company's Miragpur manganese mine. The deceased man had been set to work near the top of one side of a cutting but had taken it upon himself to work on the boulders at the opposite side where he could more easily get some ore.

He had been prising off some ore from the slightly overhanging side of the cutting which was only 7 feet high when about 2 feet of the upper portion fell over and killed him on the spot.

This upper portion consisted of a thin ridge which had been left at the edge of the cutting for the purposes of measurement; it ought not to have been left in a dangerous condition.

No. 45 in the list happened at Messrs. J. L. Banerji & Co.'s New Surataur coal mine and was the distinct result of one of the many cases of pillar robbing. The deceased was found beneath a large piece of coal, measuring 14 feet by 14 feet by 2 feet 6 inches, which had come off the side of a pillar. His pick was by him. He had on another occasion been fined for being at this particular place which was fenced off. He was so seriously bruised by the fall that he died in the mine.

No. 47 in the list happened at the Kuordih Coal Company's Kuordih mine. Two young men were at work as miners for the first time in this mine, and it seems doubtful that they had had any previous experience of coal-mining. They were at the time actually not at work in the place intended, if the contractor's sirdar can be relied on.

They had undercut some coal as far as a joint and one of them was wedging it down. Owing to several joints a piece about 1 ton in weight probably came away more quickly than they anticipated and in falling it struck the unfortunate man and nearly tore his arm off.

The arm was amputated at the Asansol Hospital but the man appears to have been removed to his home, two days' journey by road, before he had sufficient strength, and he died on the way. The men had been at work six hours when the accident happened. With proper supervision it would be impossible for men to work for hours in the wrong part of the mine.

#### SHAFT ACCIDENTS.

The number of accidents in shafts last year was 21 or one more than the previous year. The number is too great; but the addition of only one is not unsatisfactory when it is remembered that much more coal is being drawn from shafts than formerly.

Winding ropes require the greatest care and attention, possibly more so than any part of mining equipment.

Only ropes specially made for the purpose should be used for winding and whenever a defect is discovered, it should be remedied without delay. Recapping should take place at stated intervals, three or four times a year, even if the rope appears in first class condition. It affords an opportunity for seeing the internal condition of the rope; it renews that part of the apparatus which is subjected to the greatest strain and it also alters the position of the rope upon the winding pulleys where stresses are set up and wear takes place which are calculated to shorten the life of the rope.

I would utter a word of warning to all concerned in providing ropes for winding shafts. A length cut off a rope ordered and manufactured for the purposes of haulage is not only a very unsatisfactory proceeding, but involves great risk, and those responsible for such a practice may have the truth brought home to them in a very unpalatable way.

In No. 52 in the list a  $\frac{3}{4}$  inch crucible steel rope was used as a winding rope in a bucket pit with an ascending and descending rope. On this occasion the full bucket had just reached the surface when the rope broke and the bucket dropped to the bottom of the shaft. The deceased had come to the pit bottom during the absence of the onsetter and signalled the empty bucket down; unfortunately the full one came down and fell upon him and killed him.

Examination of this rope disclosed the fact that it had fractured just within the cap where there was evidence of some corrosion and undoubtedly two days previously three broken wires had been detected. The management however thought it was perfectly safe for the load which was only 12 cwts. at the most, and had decided to recap it on the following Sunday.

These ropes were not used for raising or lowering persons or the responsibility upon the officials would have been very great, but in any case a grave error of judgment was committed.

In No. 54 in the list which took place at the Bengal Coal Company's Rajhara mine a pump was being refixed at the bottom of one of the pits. Yar Mahomed was the fitter in charge of the work. To save himself the trouble of walking down the incline he detained coolies and ordered them to lower him by means of a winch. The winch had been taken to the pit to be used there after necessary repairs were made to it. It was not fixed and the rope on the barrel had been used for haulage. It was badly worn and seriously corroded internally. A very casual examination would have shown that it was unfit for use. This man was accustomed to examine ropes and machinery at the colliery but nevertheless he was foolish enough to trust himself on this very unsafe rope worked by an unfixed winch which had no catch and was out of repair.

He was safely lowered but when he was being drawn up the rope broke about 15 feet from the top of the shaft and he fell to the bottom striking the pump khalasi. Both men were killed on the spot. The rope was  $\frac{7}{8}$  inch diameter and had been originally used for haulage. It had been on the winch a long time without being used. It had become badly corroded and it was not intended to be used at all. A new galvanised wire rope was provided at the pit so that persons could be raised or lowered with coolies. It seems extraordinary that a man who was an experienced fitter should have trusted his life on a rope, which was obviously unsafe, to save himself the trouble of walking a few hundred yards.

No. 56 in the list which happened at the Indian Collieries Syndicate's Jamadoba mine is a case where a pump was being raised in a shaft partly filled with water by means of two ropes each attached to a winch and the lifting power obtained by means of pulley blocks.

The blocks were attached to the ropes by means of clamps, which required moving as the ropes were hauled in.

Before a clamp was taken off to readjust the position of the blocks, another clamp was firmly fixed to hold the rope tight and maintain the weight.

At the time of the accident, the deceased, who was a fitter, was altering the clamps upon one rope and had apparently not satisfied himself that the second pair which would then carry the weight were tight. While doing this the rope slipped through the second pair and so threw the weight of the pump and three ranges of pipes 275 feet long upon the other rope.

The strain was too great for it and the weakest point of the connection being a hook, this broke and the whole of the weight rapidly slipped away—

the pump dropping to the bottom of the shaft some 50 feet below. Unfortunately the deceased being close to the edge of the shaft was caught by the rope near to him and dragged into the pit and killed.

In operations of this kind where heavy weights have to be lifted by two separate sets of tackle which require adjustment, one set alone must be capable of sustaining the weight, for to attempt to do otherwise is to court disaster as in this case.

No. 57 in the list is an illustration of the unnecessary risks men will run in the performance of their work.

Deceased had released a small pulley from the top cross beam of the head gear by standing at the junction of two diagonal iron cross ties. He was about to come down when he slipped and fell into the shaft below and was drowned.

If a ladder had been used instead of attempting an acrobatic performance, the accident would not have happened.

The manager in this case attributed the occurrence very largely to the fact that it was Thursday, which was an unlucky day.

No. 68 in the list is of interest as showing the necessity for special rules for sinking pits. A few men were working in the bottom of a sinking pit, 230 feet deep, when two or more stones fell from the sides and from such a height that they killed one man and injured another. This shaft was entirely unlined and the rules were not infringed, as under General Rule 2(g), the shaft was examined once a week. By a coincidence the shaft was stated to have been examined just before the accident, and even after it, the officials state that they could not discover where the stones had come from.

Every sinking pit should be examined at the very least once a day and when without lining the examination should be very thorough.

No. 69 in the list illustrates a type of accident which I have already seen repeated since I arrived in this country. A cage holding nine men and women was being lowered from the pit bank level at the surface when in passing the ground landing, 24 feet below, it caught at one end against the edge of the landing where there was only 2½" of clearance and tilted up. One man fell out to the bottom of the shaft 300 feet below and was killed.

In this case the conductors were wire rope with two to each cage and on the outside of the cage only.

Provision should be made for having some form of rigid guides past all landings of this kind.

#### EXPLOSIVES.

There were 11 deaths due to explosives during the year, two only being in sinking pits. In one of these, No. 72 in the list, the accident was due to striking a cartridge of dynamite in dressing the sides of the shaft.

The cartridge may have been left at the bottom of a hole, having failed to detonate when the remainder of the charge had exploded or it may have been the only cartridge put into a certain hole which misfired. Several holes were fired at one time and it was admitted that there were seven misfires and then two misfires in refiring the seven. With proper care and materials this wholesale misfiring should not occur.

At a mica mine, No. 75 in the list, three men were sitting in a shed on the surface where they had about 6 lbs. of country powder in an open iron vessel.

They were smoking and it is hardly surprising that the powder exploded and they were all injured, one so seriously that he died two days afterwards.

Proper closed boxes were to be provided after this occurrence.

#### ACCIDENTS BY WATER.

No. 82 in the list happened at the Sitarampur Coal Company's Narsamuda mine and is unusual from the fact that a boy and girl were scalded so severely by hot water in the mine that they both died on the following day.

These children were employed bailing out water from a working place in a gallery during the night time and were working alone.

About half past six o'clock in the morning as the sirdar was approaching a steam pump he heard a scream, and on reaching the place found both the

children in a shallow sump into which the pump exhausted. The boy had fallen in first and the girl after in trying to get him out. It appears that they had been idling and hearing the sirdar coming were anxious to get out of his way; they went past the pump and a bamboo fence and unfortunately fell into the hot water.

The pump attendant was just returning to the pump, having been clearing mud away from the suction pipe.

It is very undesirable for young children to be set to work by themselves in a mine, and they certainly should not be employed in this way during the night time.

No. 83 in the list happened at the New Manbhium Coal Company's Ganzlatar mine. It was a type of accident that has undoubtedly occurred before and will most certainly happen again unless mine owners take some common sense precautions.

It is only necessary to walk along the outcrops of some of the coal seams near a river bed to gather what will happen in the rainy season. In this case three men quite unauthorized went into an incline on a Sunday night to fill dust as they knew there were empty tubs available. The survivor said it was raining hard and they might as well be in the mine as anywhere. They had worked for some time and then gone to sleep. They were rudely awakened by feeling water about them and found themselves in the dark. One man reached the bottom of a shaft and his shouts attracted the attention of the manager, who had been sent for as the river running close to the inclines was rising at a rapid rate. Before the man was drawn up the water had risen 9 feet in the pit. He did not know where his companions had gone to; and they were unfortunately both drowned.

The Katre river runs within some 50 feet of the first incline, the two being separated by a narrow bund 10 feet high, made of soft earth. As the water in the river rose it undermined the bund and also worked around the end of it and rushed down the inclines.

It was extremely fortunate that no more persons were in the mine at the time.

Discipline must be a very uncertain quantity when men can wander into a mine like this without any one knowing anything about it.

In last year's report my predecessor drew the attention of coal owners to the danger of mines becoming water-logged. Apart from the danger to life, they are not only a source of loss to the owner involving a sacrifice of coal and heavy pumping charges, but, where the water is allowed to remain, they become a standing menace to any workings to the dip.

A sketch of the place of accident is given at the end of the Report.

#### SUFFOCATION BY GASES.

There were two accidents due to this cause during the year. One happened at a coal mine in Baluchistan, No. 84 in the list. Four men were working in a level within some 20 feet of old workings which had been pierced a day or two previously.

They began to feel faint and their lights went out. The man in charge ordered them to go away and they seem to have stampeded. One of them fell as the road was rising at an angle of 45° and before he could recover himself he became unconscious. When the other men recovered somewhat they went back but found their fellow workman was dead.

The men were apparently working out of the air current and doubtless some carbon dioxide gas slowly issued from the old works and filled up the low place in which they were working.

It is the old story of insufficient ventilation or the current of air not directed to where it was required.

The other case occurred while sinking a staple pit in the Standard Coal Company's Benahir mine, Jharia, No. 85 in the list. This pit was being sunk from one seam to another, and it had actually penetrated the coal in the lower seam.

No one had been down the shaft during the day and a sinker named Gope was lowered at 11 o'clock at night. As soon as he landed at the bottom his light went out. He shouted up for the lamp to be drawn out and relighted: this was done. The sirdar in charge of the gang made several attempts to

send a light down, but each time the light went out. It then seems to have occurred to him to call down to the man. He got no answer, but thinks he heard him breathing hard. He next came out of the mine and called the manager. The manager soon arrived and sent a light down once more. Although the pit was 34 feet deep, the light was extinguished when it had descended only 10 feet.

Water was thrown down for about an hour, then a descent could be made. Of course the poor man was dead.

It is strange that it did not occur to anyone in authority that carbon dioxide gas is formed in mines, especially in badly ventilated mines, and that its specific gravity causes it to flow to the lowest point.

This gas was doubtless steadily pouring into this pit when no one was there and nothing to cause the slightest current of air.

It may also have come from the seam at the bottom.

An official of some kind should have been the first to descend when a fresh shift of men was going in.

It is never safe to descend an unventilated pit without first trying it with a light, and a sinking pit like any other part of a mine should be efficiently ventilated.

This was an inexcusable loss of life.

#### HAULAGE ACCIDENTS.

There were ten deaths due to underground haulage accidents, one less than last year.

No. 89 in the list is another case of a person being in a main haulage road while the train was in motion. Four women were sitting at a junction in the road, when the assistant manager passed by. He says he told them as he always did, in such circumstances, to go away. Apparently they did not do so. A train of 4 tubs, two of them holding ashes for ballast, was being lowered down this road which dips at a rate of 1 in 12, when the coupling broke and allowed three of them to run amain.

They went at a rapid rate for some 375 feet, then became derailed and upset and caught one of the women killing her on the spot. The tub which broke and caused the runaway is made entirely of steel and consists of an underframe made of  $\frac{3}{16}$ " plate supporting a body which carries about 13 cwts. of coal. The coupling chain and hook is attached to the upper end of the steel frame by means of a plate with two rivets.

An examination of the edges of the broken plate showed that the material had become very coarsely crystalline and brittle, probably owing to the jarring which it had sustained while in daily use.

This method of attaching the coupling chain to the tub is most unsuitable. In this particular case the frame was weakened by two old rivet holes previously used for a different style of attachment. The type is being abandoned.

Greater familiarity with methods of underground haulage both on the part of officials and workpeople should obviate many of the accidents under this heading.

#### SURFACE ACCIDENTS.

There were nine deaths from surface accidents, being the same number as in the previous year.

In No. 99 in the list, some coolies had been lifting a mast with a hand crane and had stopped for food. One of them sat upon the crane handle and doubtless moved backwards and forwards.

At any rate the pawl slipped upon the ratchet and the weight caused the handle to revolve: in doing so it struck the man on the head and killed him.

The ratchet was found to be worn and quite unfit to be relied upon. A pipe, it seems, was usually used as a sprag but no one had put it in. A fitter who left the men shortly before ought to have seen that it was in.

No. 101 in the list, is a story that must have been told many times in the history of Indian coal mining. I venture to hope that the time has come

when such a description may cease to be chronicled and shall become a relic of the barbarous past.

It happened at Messrs. Agabeg Brothers' Jogta coal mine where No. 14 seam was being worked 30 feet in thickness. Here the coal was worked according to the usual custom, being cut up into pillars by galleries driven at right angles to each other. The roof above the seam is 4 feet thick of hard but jointy stone and above that rotten stone and earth. Both the coal and strata were broken up by partings, facings and joints. Some of the galleries were 20 feet wide and 30 feet high.

The sequence of events seems to have been as follows:—The high pillars were full of breaks and partings; very frequently coal broke away from them and was filled up and sent out of the mine. At other times the pillars became so dangerous that parts had to be pulled off and taken away. So the galleries became wider and the pillars thinner and less and less support was given to the roof.

The roof would then become strained and would slip at the joints, putting still more pressure upon the ever weakening pillars. On the day of the accident, warnings like this to a very serious degree had been given for some three hours but no one seems quite to have known what was about to happen. Two officials had just come out of the mine about 4 o'clock in the afternoon when no workpeople were in the mine, and as they reached the mouth of the incline a blast nearly carried them away. An area of surface ground measuring some 316 feet by 262 feet suddenly collapsed and carried with it four buildings.

In one were six men and two boys; all got out but one boy, and unfortunately his loss was not mentioned to the assistant manager who was at hand until next day. In another a girl 12 years old was lying ill. Both these children were killed.

The managing proprietor and the manager were both absent on this day, and the officials who were at the mine did not appear to have grasped what was the absolute consequence of their methods of working.

#### Section IV.—Prosecutions and additions to the Act.

##### (a) ADDITIONS TO THE ACT.

During the past year three important rules were added to the Act by Notification No. 10014-100, dated 4th December 1907. They were issued for the purpose of safeguarding railways. Under these rules the Owner, Agent or Manager of any mine is compelled to give notice whenever he intends to extend his mine workings either beneath the railway itself or any point within 50 yards of it.

Other Notifications No. 3952-36, dated 10th May 1907, and No. 7861-36, dated 19th September 1907, refer to a form for the Annual Return which has to be furnished to the Chief Inspector of Mines and to the District Magistrate, and the form which shall be used in notifying accidents, respectively. Copies of these Notifications will be found in Appendix IV.

##### (b) PROSECUTIONS.

In the report for last year only one prosecution was recorded and the judgment delivered in the case was printed in the Appendix for reference. An appeal was lodged, and the case heard by the Judge of Burdwan after the inspection report was printed. The appeal was dismissed.

In 1907 there were two prosecutions and both for failing to give notice of accidents, a fatal accident in one case and a serious accident which ultimately terminated fatally in the other. In the latter the manager of a coal mine was convicted under Section 22 (2) (b) of the Mines Act and fined 10 rupees.

In the former the manager of a mica mine was convicted under the same section of the Mines Act and fined 40 rupees.



## Section V.—General Remarks.

### UNDERGROUND FIRES AT CHARANPUR AND BANBAHAL COLLIERIES.

On the 29th March 1907 a serious fire, fortunately unattended by loss of life, broke out in the old workings of Messrs. Apcar & Co.'s Charanpur mine, Raniganj coalfield. The mine has been long established and more than 100 acres of the Sibpur seam (here 18 feet thick) have been cut up into rectangular pillars. There are 15 shafts, all connected underground, and their depth varies from 50 to 300 feet. The present chief working area covers about 45 acres and is served by Apcar and No. 18 pits. It is separated from the rest of the mine by an igneous dyke 40 feet in thickness. Four connections had been made through the dyke. The positions of the pits and dykes and the arrangement of the ventilation are shown on the plan given at the end of the report.

The fire originated in the old area at a point about 200 feet from the dyke. It is supposed to have been caused by the accidental ignition of a pile of tramway sleepers. The flames spread so rapidly that it was not possible to deal with the outbreak by other means than isolation. Pits Nos. 17, 19, and 21 became upcasts and vomited forth flames for several days to a height of 150 feet. It was at once recognized that the old area was doomed and efforts were concentrated upon the prevention of the spread of the flames to the new or Apcar pit area. After two days of very hard labour, temporary dams of sand and brick, 10 feet thick, were erected in the four openings through the dyke (a sketch of one of the dams is given at the end of the report). All men were then withdrawn from the pits, and the work of checking the fire by stopping the air inlets commenced. Some of the shafts were plugged up by throwing down earth from the surface, whilst others were scaffolded over so as to act as safety valves in the event of an air blast caused by a collapse of roof. Two days later a heavy fall took place and the air blast demolished the scaffolds, but failed to blow out the dams in the dyke openings. After the replacement of the scaffolds the work of reinforcing the temporary dams was commenced from the Apcar pit side. This was done with firebrick and cement in sections, 5 feet thick. By the 10th of April permanent dams ten feet thick were completed, and on the following day the shafts in the old area were completely sealed by filling or by scaffolds. About a week after this a thermometer lowered through one of the scaffolds registered a temperature of 205° F. A month later it had fallen to 154° F., and since then there has been a gradual fall of temperature, the reading in March 1908 being under 100° F.

This serious fire will not have occurred in vain, if some of the lessons taught by it are learnt by the managers and colliery owners in India, and proper steps are taken to remedy the dangers.

An underground fire may be caused by spontaneous combustion; by the careless handling of lights; by electrical appliances; by shot firing; or by gas or dust explosions. The liability of fires originating from these causes will increase as the workings become more extensive. Fires are certain to occur and the question "how are they to be isolated or put out?" is a very pertinent one. The fact that the workings at Charanpur were divided into four main districts by dykes enabled the fire to be conquered. Without these natural damming places, the most strenuous efforts would not have saved Apcar pit.

At the same time it was most unfortunate that these natural barriers should not have been taken advantage of to more completely divide the mine.

A glance at the plan will show that these dykes were pierced in too many places, and the openings were much too large. The risk, the time and the expense would all have been lessened had the workings been laid out upon a more scientific plan.

In considering the inherent dangers of Indian coal-mining, it is necessary to clear our minds of any prejudices due to experience in other countries. The Indian conditions are very different from those which obtain in other coal-fields. The fire dangers only need to be considered in this report. The extraordinarily strong roof over the seams allows wide galleries to be driven to the full height of the very thick seams, and the practice has been to cut very

large coal areas into pillars by such galleries. If the pillars crush out or are burnt out, the roof will not fall until a very large area is unsupported. When the fall takes place, an air-blast is inevitable. Except in a few isolated mines, it has not been the practice to divide the workings into districts by leaving ribs of coal. In such conditions, the only damming places would be in the galleries, perhaps 20 feet high and 15 feet wide. A dam of such an area, unless of enormous thickness, would burst under the impact of an air-blast. In any case it would be impracticable to make gas-tight dams in such large galleries in a hurry. Therefore, the only alternative in the case of fire in many Indian collieries would be to stop the pit tops or fill up the shafts. The conditions at the tops of many shafts make fixing scaffolds very difficult, and filling the pits with earth is a very slow process where the insets are say 20 feet high. Shafts are very numerous and interconnected over large areas, in many cases there being no boundary ribs between mines worked by different owners. Thus, a fire might involve the closing of a group of collieries; and the closing might be permanent if falls extended to the surface. Fire will spread with marvellous rapidity in Indian coal mines because the small local falls of roof which do much to check the spread of fires in other countries are absent. When falls occur in a fire area they will produce air-blasts which will shoot burning gases in all directions, and extend the fire to distant workings. Fortunately provisions against these dangers can easily be made by dividing the areas into districts and panels with ribs of coal between each district and panel. All the galleries cut through the ribs should be small, say not more than 8 feet wide and 8 feet high, and dams should be put in them as soon as coal working in the district or panel is finished.

The principal lessons to be learnt from the fire may be summarised :—

- (1) The importance of working coal in panels or districts which can be readily isolated from the rest of the mine.
- (2) Pit insets to be made of a reasonably small size. Some are 20 feet high and 15 feet wide.
- (3) The galleries to be made lower and narrower at places where ventilating stoppings are likely to be required.
- (4) The strict prohibition of the use of torches or the lighting of fires underground.

Other important considerations are :—

- (1) Managers being prepared to reverse the air-current at short notice.
- (2) The advisability of increased supervision during the night shift.

This fire emphatically drew attention to the fact that none of the appliances, tools and materials required when fighting fire, gas, or water in collieries are kept at any of the mines in the Raniganj and Jharia coalfields, and that little reliance can be placed upon native subordinate officials in times of difficulty and danger. Coal-mining in Bengal is rapidly extending and becoming more strenuous. To elaborate the great increase in the dangers due to this would be to expound the obvious. The dangers are patent to every intelligent observer. If each colliery kept appliances it is certain they would in most instances be incomplete and not in order when required. The cheapest and most efficient plan would be to establish rescue stations at suitable centres in the coalfields where the appliances could be kept and where the managers could meet from time to time to learn their use. This would also help to establish that *esprit-de-corps* which induces managers at home to offer their services to neighbouring collieries in times of serious accidents.

The most suitable places for the stations would be Sanctoria, Charanpur, Jharia, and Sijua where the mining instructor gives his lectures. Store-rooms could be built near the lecture-rooms.

The account of this fire would be very incomplete, if mention were not made of the part played by the officers of this Department while efforts were being made to save the mine.

Mr. Simpson, the Inspector of Mines in charge of No. 3 Circle, was very quickly on the ground after the outbreak, and the operations which were so effective in preventing the total loss of the mine, were very largely due to his initiative. Mr. Pickering arrived at the mine two days later and immediately

threw himself very heartily into the work, treating it as though he was personally responsible for the success of the operations. Both these officers remained at the mine until the 12th April. Mr. Grundy and Mr. Adams were also there for a few days, each rendering all the assistance in his power.

It must be remembered that there were at one time as many as 200 men in the mine putting in the temporary dams.

Another fire which occurred at Babu Jagannath Marwari's Bunbehal mine, Raniganj coalfield unlike that just described, was neither due to the same causes nor so destructive to property.

The seam here is 14 feet thick and is worked by means of five shafts and one incline: two of the shafts, to the dip, are water-logged.

On Saturday the 13th July 1907 smoke was first seen on the surface issuing from the fracture of a subsidence, and three hours later smoke was visible in the air issuing from No. 3 Pit and incline. The next day large volumes of smoke poured from the fracture and from No. 1 shaft. Steps were then taken to close down the mine and fill the fractures. Nos. 1, 2, and 3 Pits and the incline were filled with earth so as to cover the galleries, and water from neighbouring tanks was lead through trenches into No. 6 Pit and into a fracture. By the 16th the smoke had ceased issuing from all the openings except from one cavity in the fracture. On the previous day a considerable area had subsided.

It appears that the pillars of coal had been weakened to such an extent that a creep quickly set in. There must also have been a considerable amount of dust accumulated in the old workings. Under the action of the creep and the admission of air through cavities caused by subsidence, coal which had been undergoing slow chemical decomposition, generating heat, received a stimulus by the addition of oxygen, and spontaneous combustion resulted.

Water was allowed to fill up the mine and put out the fire and also prevent further subsidence.

Cases have occurred during the year where subsidences have again been the means of allowing large quantities of water to get into mines, to the imminent danger not only of the mine immediately concerned, but also mines to the dip of it.

As was pointed out in the report last year, the water in the outcrop mines is likely to become a serious danger and difficulty when the deeper mines are worked.

Either large barriers of coal will have to be permanently left or expensive pumping plants maintained. The matter is sufficiently serious to engage the attention of mine owners in Bengal and I would urge them to take it into consideration.

#### SAFETY LAMPS.

In connection with the use of safety-lamps the following Circular was sent out during the year to most of the principal collieries. It will repay careful perusal:—

(1) A serious explosion of fire-damp recently happened in an Indian colliery causing the deaths of several miners. Safety lamps were the only lights allowed or used, and it is probable that the gas was fired by a lamp which had been illegally unlocked or by the flame passing through a gauze which had been carelessly allowed to be fouled with oil. This accident, which would have become a serious disaster if the place in which it occurred had been dry instead of being very wet, has again drawn attention to the fact that at most Indian collieries the arrangements for the locking and examination of safety lamps (when used) are far from satisfactory. I, therefore, wish to make the following suggestions for your consideration.

(2) *Locking*.—The old fashioned screw locks generally used are very inefficient. They are frequently out of order, and, at the best, the lamps fitted with them can be readily opened with an easily improvised key. A very simple and effective method of locking lamps is by means of lead rivets upon which a letter or other device can be impressed when the lamp is locked. Such a method is now largely used in England, and it has the great merit of preventing the opening of the lamps by any unauthorised person without detection.

(3) *Examination of safety lamps.*—In addition to the examination by the lamp-man who delivers the lamps to the miners, it is desirable that the lamps should be examined by some qualified person before they are taken into the mine to ascertain whether they are securely locked and in a fit condition for use. The officials when making inspections of the mine during working hours should also know the condition of the safety lamps.

(4) *Cleaning lamps.*—The lamps should be cleaned and stored in a place where oil is not likely to come in contact with the gauzes.

(5) It is desirable that a few safety lamps should be kept constantly fit for use in an emergency, even at mines where open lights are allowed.

#### MINING EDUCATION IN INDIA.

Continued progress has been made in mining education in Bengal. The Mining Instructor, Mr. W. T. Griffiths, commenced the regular course of lectures in the coalfields in November. Four centres were fixed as before, two in the Raniganj and two in the Jharia coalfields.

The names of 353 students are upon the registers and the average attendance at each lecture to the end of the year was about 30.

Many of the holders of certificates of competency under the Indian Mines Act have attended these lectures and doubtless their numbers will increase.

Information relating to the lectures will be found in Appendix III, Table No. 5.

The number of students taking the Mining Course at Sibpur College under Professor Robertson during the session 1907-08 was thirteen, of whom five will sit for the Diploma examination in April 1908. These students all attended the camp of Mine Surveying and Practical Mining, which was pitched at Gaurangdi during November and December 1907. A good sign is the demand in the coalfields for passed students, which is considerably greater than the supply. All those who obtain diplomas this year have positions with good prospects assured to them, and those too who may fail to secure the diploma have been spoken for.

The new practical mining laboratory is now under way. The Professor of Mining, in consideration of the conditions of mining in Bengal, has designed the practical laboratory work with a special view to coal, particularly washing, briquetting and coking, in which lines there is no doubt it will be most profitable for the students to specialise. Meanwhile they will assist in the erection of the laboratory, and the fitting of such machinery as has arrived.

In last year's report mention was made that elementary education in the mining districts is in a very backward state. In the Giridih coal-field a serious attempt has been made for many years to educate the children.

In a presidential address which I had the honour of delivering a short time ago to an Institute of Mining Engineers, I ventured to sketch the conditions of an ideal colliery. Amongst these conditions I predicted that boys, after passing the elementary school, would be drafted into classes for technical education and as part of their instruction would be allowed the use of the colliery shops with electrically driven machinery. At the same time they would be receiving a small salary, and the best boys would rise most quickly to the best paid positions.

I am glad to acknowledge that I have found this condition of things existing in India. The school I visited at Giridih was an object lesson of what can be done for the native by native teachers, and is extremely encouraging for the future.

#### MINING AND GEOLOGICAL INSTITUTE OF INDIA.

This Institute again made good progress during the year. The total membership of all classes at the end of the year 1906 was 173, and at the end of 1907 it was 224, being an increase of 51 members. The Government prize for the best paper written during the year was awarded to Messrs. W. H. Pickering and R. R. Simpson for a paper entitled "Fighting a colliery fire," which was a description of the methods employed by the authors in putting out a

serious underground fire which occurred at a large colliery in the Asansol District.

The maps which have been made for the members of the Raniganj Map Committee have been printed and sent out to individual members of the Committee in order that they may put down information upon them.

The annual dinner, which took place during the annual meeting of the Institute at Calcutta, was attended by His Honour the Lieutenant-Governor of Bengal as principal guest, and was altogether a large and successful gathering.

The Institute is still young and those who are responsible for its management must see that methods are adopted which will make only for its welfare.

There have been several excellent papers read to the members during the year, but their value is considerably lessened by inadequate discussion. The chief value of a paper lies in the contributions which it draws from the members; and even the youngest may have had experience which will add to the sum of knowledge. If the Institute is to live this must be borne in mind.

#### MINING BOARD OF BENGAL.

Only one meeting of the Mining Board was held during the year. At that meeting the Board approved of the draft rules framed under Section 20 (2) (v) of the Indian Mines Act for the protection of Railways on lands in the vicinity of mines, and suggested a simple code of rules for regulating the working of mines other than coal mines.

A meeting fixed for November was postponed on account of the sudden death of the chairman.

#### BOARD OF EXAMINERS.

During the year 1907 the Board was constituted as in the previous year; Mr. Heslop however acted for six months in the place of Mr. Turnbull on leave.

The Board held 16 meetings during the year; Mr. Pickering being President for the first 13, and Mr. Grundy was appointed and acted as such at the last 3 meetings.

For Service Certificates, there were 88 applications, and certificates were granted in 90 instances. The increase is due to there being some cases which had not been disposed of in the previous year.

Certificates of Competency were granted to 28 applicants who were possessed of English Certificates of a similar class.

The examination which was held at the end of January 1907 was conducted by the local Examining Board, the members of which were the same as on the previous occasion. Forty-six candidates appeared, and 28 obtained Certificates of Competency.

Another examination was held on 2nd December 1907 and was conducted by Messrs. E. C. Agabeg and R. J. Browne (non-official members) and Mr. G. F. Adams (official member) who acted as Secretary. Sixty-two candidates appeared at this examination, of whom 31 obtained Certificates of Competency.

#### THE EDWARD MEDAL.

In Appendix III, Table No. 10, will be found a reprint from the "Gazette of India" of the 21st December 1907, containing the intelligence that His Majesty the King-Emperor desires to recognise and distinguish the many heroic acts performed by miners and quarrymen who endanger their own lives in saving or endeavouring to save the lives of others from perils in mines or quarries.

Only those intimately connected with mining operations know the risks which encompass the worker underground.

Perils by fire, water, deadly gases and the dreaded explosion of fire-damp repeatedly find their heroes; whose deeds in the darkness of the mine so often remain unchronicled and unacknowledged.

His Majesty's thoughtfulness in providing this new decoration has met with the greatest enthusiasm wherever mining is carried on.

The first "Edward Medal" was bestowed upon a man with whom I am personally acquainted, a Deputy in a Yorkshire Colliery.

Brave deeds have been done in Indian mines, and the coveted decoration may some day adorn the neck of the native miner.

**OFFICIAL DUTIES.**

There was no change in the personnel of the staff during the year, and a list of the inspection circles will be found in Appendix III, Table No. 9.

The work of the Inspectors by no means diminishes but on the contrary extends with the expansion of the mining industry. A very large portion of their time is taken up with enquiries under the Land Acquisition (Mines) Act, and these enquiries increase year by year.

I have the honour to be,

SIR,

Your most obedient servant,

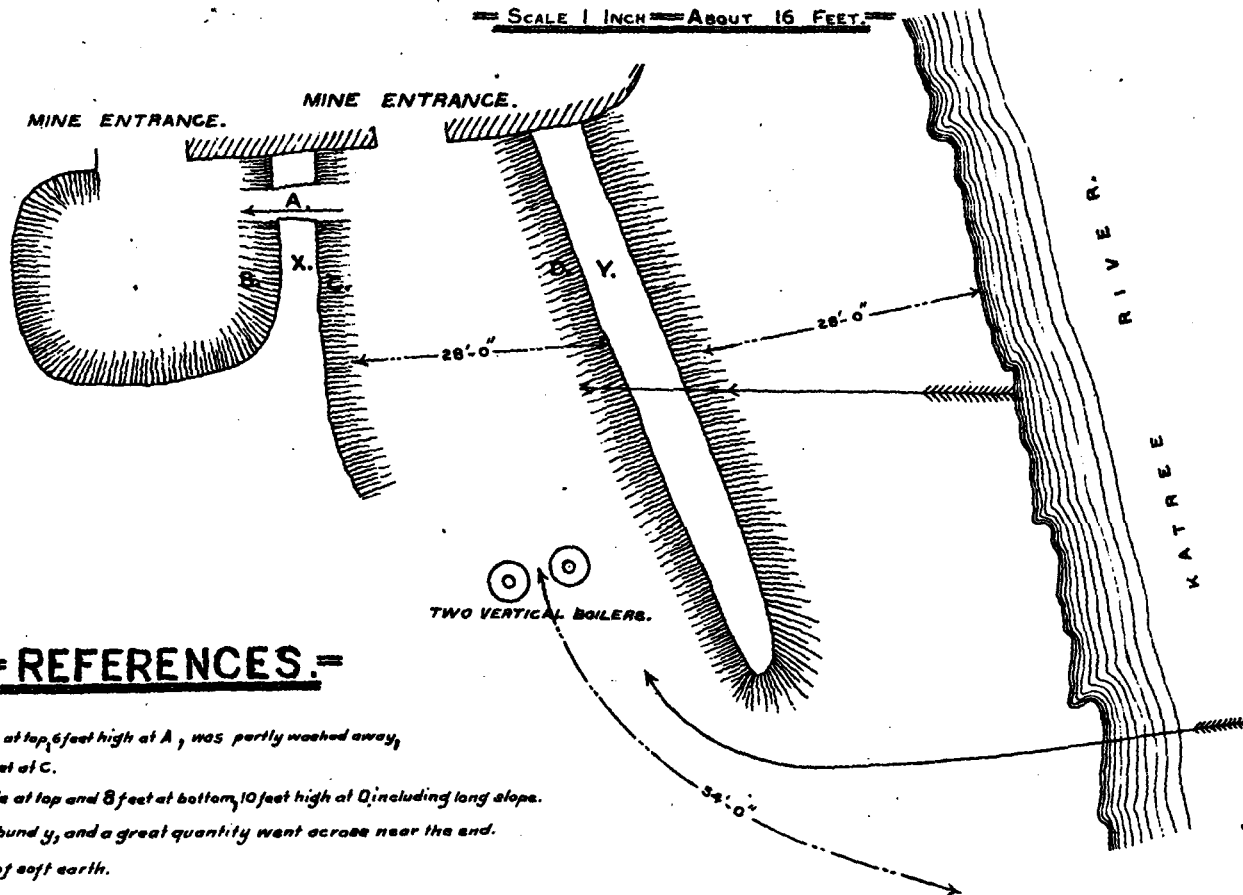
J. R. R. WILSON,

*Chief Inspector of Mines in India.*

# = FLOODING OF THE GAZLITAN MINE. =

BY WHICH 2 MEN WERE DROWNED ON THE 5<sup>TH</sup> AUGUST 1907.

= SCALE 1 INCH = ABOUT 16 FEET. =



## = REFERENCES. =

- X... Bund about 8 feet wide at top, 6 feet high at A, was partly washed away, 12 feet high at B, and 16 feet at C.
- Y... Bund about 4 feet wide at top and 8 feet at bottom, 10 feet high at Q including long slope. The water undermined bund Y, and a great quantity went across near the end. The bunds were made of soft earth.
- The arrows show the way the water went to the mine.....

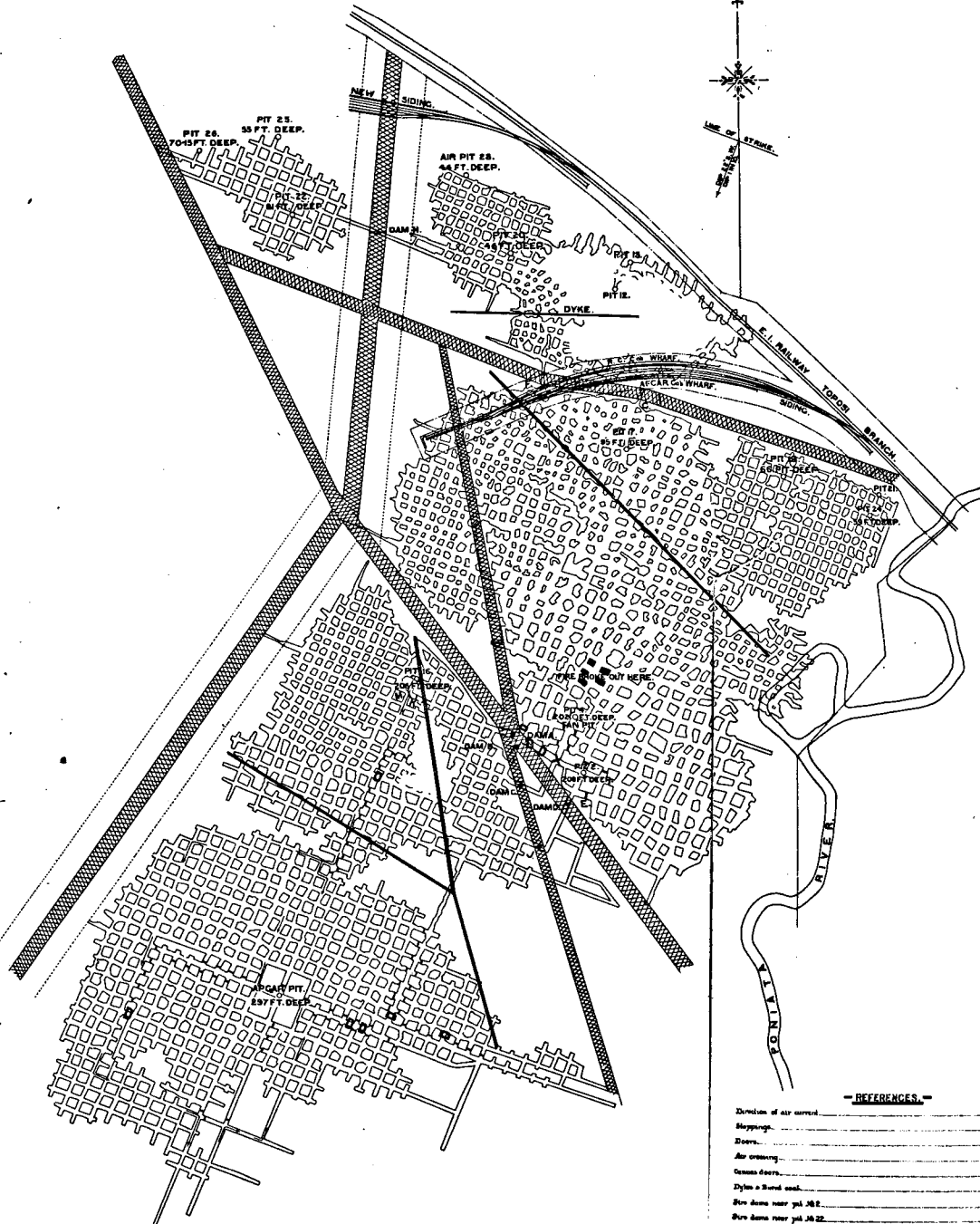
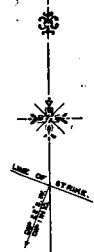
P. C. MANDAL.  
Lead Draftsman

# CHARANPUR COLLIERY

## SHOWING THE POSITIONS OF THE FIRE DAMS

### AND THE COURSE OF THE VENTILATION.

SCALE OF FEET.



REFERENCES.

Direction of air current	—	1
Stoppings	—	2
Doors	—	3
Air crossing	—	4
Grass doors	—	5
Dyke & Road wall	—	6
Fire dams near pit 25	—	7
Fire dams near pit 26	—	8
Stoppings near pit 27	—	9
Cutting through Dyke North of pit 28	—	10
New Stoppings near pit 29	—	11

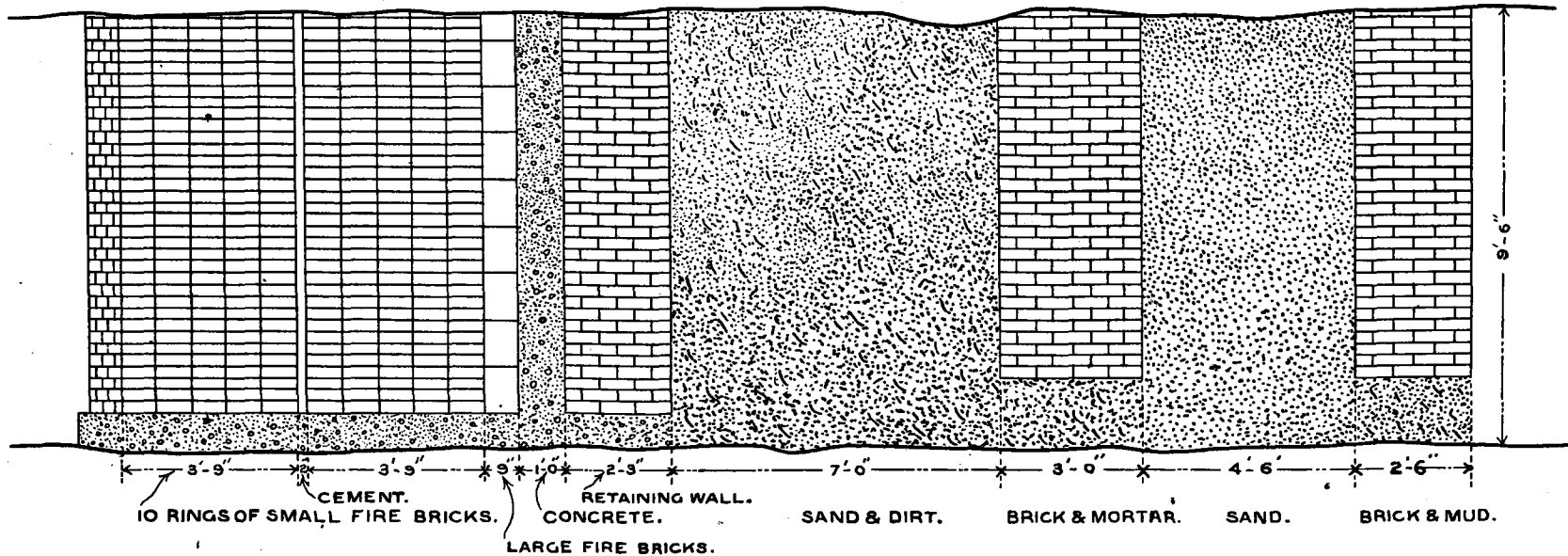
P. C. MANDAL.



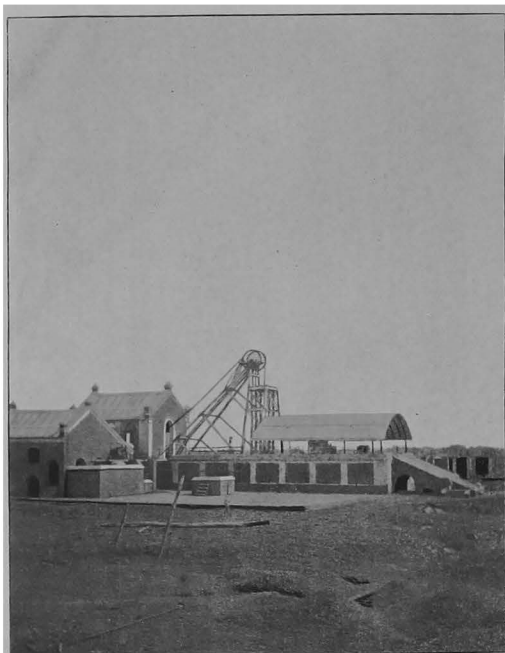
# CHARANPUR COLLIERY.

## SECTION OF FIRE DAM C.

= SCALE 1 INCH = 3 FEET. =



# CHARANPUR COLLIERY.



No. 17 Pit before the fire.



Pits Nos. 17, 19, & 21 during the progress of the fire.



No. 17 Pit during the progress of the fire.

## APPENDIX I.

## Fatal Accidents, 1907.

Serial number.	Date and hour of accident.	Name and situation of mine.	Name of owner.	Name, sex, age, and occupation of person killed.	Name of mineral worked.	Cause of accident and remarks.
<b>EXPLOSIONS OF FIRE-DAMP—(5 deaths).</b>						
1	29th April, 2 P.M.	Borrea Mine, Sitarampur P. O., Burdwan, Bengal.	New Beerbhun Coal Co., Ltd.	Bistu Roy, (m.), 25, Coal-cutter.	Coal	The deceased and his mate were going to their ordinary working place, which was about 20' beyond a dyke, when close to their destination some fire-damp exploded and burnt them both, from the effects of which Bistu died eleven days later. See Report, page 5. Inspection and inquiry made.
2	20th May, 5 A.M.	Dishargarh Mine, Dishargarh P. O., Burdwan, Bengal.	Equitable Coal Co., Ltd.	Nursing Majhi, (m.), 30, Coal-cutter.	Coal	Whilst working at the face of a level, the deceased lifted his naked light up towards the roof and ignited a little fire-damp which burnt him so severely that he died six days later. See Report, page 5. Inspection and inquiry made.
3	15th July, 9-30 A.M.	Laikidh Mine, Barakar P. O., Manbhun, Bengal.	Bengal Coal Co., Ltd.	Sitaram Bauri, (m.), 28, Goyaram Bauri, (m.), 27, Dapu Bauri, (m.), 30, Coal-cutters.	Coal	Four men went to work at the roof of a rise gallery where a little fire-damp had accumulated during the time some sheeting that directed the air had been broken down by falling stones. In some unascertained way the fire-damp was ignited and the men were burnt by the explosion. Sitaram and Dapu died the next day and Goyaram the day after. The fourth man recovered. See Report, page 5. Inspection and inquiry made.
<b>FALLS OF ROOF AND SIDE—(57 deaths).</b>						
<i>(a) Falls of roof—(29 deaths).</i>						
4	7th January, 11-30 A.M.	Chota Dhemu Mine, Dishargarh P. O., Burdwan, Bengal.	Rai Ram Bandhu Chatterji, Bahadur.	Rameswar Bauri, (m.), 45, Coal-cutter.	Coal	The deceased was loading coal in his working place, under overhanging roof coal, when a large quantity of the roof coal fell on his left leg fracturing it badly. He died from the injuries received on the same day. See Report, page 6. Inspection and inquiry made.
5	17th February, 4-30 P.M.	Koorwa Mine, Chakai P. O., Monghyr, Bengal.	D. C. Biswas & Co.	Chhatka Manjhi, (m.), 35, Coolie.	Mica	Killed by a fall of roof.
6	19th February, 11 A.M.	Namdang Mine, Margherita P. O., Lakhimpur, Eastern Bengal and Assam.	Assam Railways and Trading Co., Ltd.	Bhagirathi, (m.), 30, Coal-cutter.	Coal	A "bump" occurred dislodging some roof coal which struck deceased on the head causing fatal injuries.
7	26th February, 3-45 A.M.	Shampur Mine, Nirsachatti P. O., Manbhun, Bengal.	Shampur Coal Co., Ltd.	Bhadru Mahato, (m.), 28, Chaitan Harri, (m.), 31, Coal-cutters.	Coal	The two deceased went, apparently without orders, to cut some roof coal in an old gallery when a large quantity of the coal fell on them and killed them outright. Inspection and inquiry made.

APPENDIX I—*contd.*Fatal Accidents, 1907—*contd.*

Serial number.	Date and hour of accident.	Name and situation of mine.	Name of owner.	Name, sex, age, and occupation of person killed.	Name of mineral worked.	Cause of accident and remarks.
<b>FALLS OF ROOF AND SIDE—<i>contd.</i></b>						
<b>(a) Falls of roof—<i>contd.</i></b>						
8	26th February, 1-30 P.M.	Khuldia Mine, Giridih P. O., Hazaribagh, Bengal.	Bengal Coal Co., Ld.	Churki Ghatvarin, (f.), 26, <i>Coal-carrier.</i>	Coal	Whilst loading coal in a working place, a piece of roof stone fell and knocked down a prop which struck the deceased and injured her internally so seriously that she died within two hours. Inspection and inquiry made.
9	28th February, 2 P.M.	Namdang Mine, Margherita P. O., Lakhimpur, Eastern Bengal and Assam.	Assam Railways and Trading Co., Ld.	Mangal, (m.), 25, <i>Coal-cutter.</i>	Coal	Deceased was reducing a pillar when a "bump" occurred and a piece of coal burst out from the pillar from a "slip" striking him and causing fatal injuries.
10	3rd March, 2 A.M.	Kustore Mine, Kusunda P. O., Manbhurn, Bengal.	Raniganj Coal Association, Ld.	Peary Chamain, (f.), 22, <i>Coal-carrier.</i>	Coal	A fall took place in a gallery situated between two pillars which were being got and in the goaf. The fall extended to just beyond the fence which was fencing off the goaf from the workpeople. Deceased's body was recovered at the fence. She was probably sleeping at the time. Inspection and inquiry made.
11	20th April, 5 P.M.	Khudia Mine, Nirsachatti P. O., Manbhurn, Bengal.	S. B. Chatterji	Pana Bauri, (m.), 16, <i>Water-bailer.</i>	Coal	The deceased was found dead under a large fall of roof stone at the end face of a gallery that was fenced off. Inspection and inquiry made.
12	18th May, Midday.	East Ledo Mine, Margherita P. O., Lakhimpur, Eastern Bengal and Assam.	Assam Railways and Trading Co., Ld.	Kali Kahar, (m.), 25, <i>Filler.</i>	Coal	Whilst filling coal into a basket some roof coal fell on him injuring him so severely that he died two days later.
13	20th May, 3-30 P.M.	Takrai Mine, Khost P. O., Sibi, Baluchistan.	North-Western Railway.	Hari Ram, (m.), 19, <i>Mine mate.</i>	Coal	The deceased went and lay down in an unsecured place in the goaf when a piece of shale, 20lb. in weight, fell on him from the roof causing concussion of the brain from which he died the next day.
14	13th June, 3 P.M.	Baromashia Mine, Bamdah P. O., Monghyr, Bengal.	Hazarimal Marwari.	Anund Rana, (m.), 45, Rasika Mauzy, (m.), 40, <i>Miners.</i>	Mica	Killed by a fall of roof while working without permission in an abandoned working.
15	15th June, 11 A.M.	Dandot Mine, Dandot P. O., Jhelum, Panjab.	Government of India.	Hasham Ali, (m.), 22, <i>Miner.</i>	Coal	Whilst he was executing some repairs, a fall of roof took place injuring him so seriously that he died on the 7th July.
16	2nd July, 9 A.M.	East Ledo Mine, Margherita P. O., Lakhimpur, Eastern Bengal and Assam.	Assam Railways and Trading Co., Ld.	Ram Charan Napit, (m.), 33, <i>Filler.</i>	Coal	A piece of roof coal struck him on the head and fractured his skull. He died the following day.
17	4th July, 10 A.M.	Namdang Mine, Margherita P. O., Lakhimpur, Eastern Bengal and Assam.	Assam Railways and Trading Co., Ld.	Monglu, (m.), 27, <i>Filler.</i>	Coal	The deceased was picking coal while a narrow heading was being cut in soft coal, when the heading suddenly collapsed, burying the man completely and suffocating him.
18	5th July, 2 P.M.	Aldih Mine, Sitarampur P. O., Burdwan, Bengal.	Aldih Coal Co., Ld.	Bhogta Majhi, (m.), 35, <i>Coal-cutter.</i>	Coal	Killed by a fall of roof stone whilst robbing coal in a fenced off gallery. Inspection and inquiry made.

## APPENDIX I—contd.

## Fatal Accidents, 1907—contd.

Serial number.	Date and hour of accident.	Name and situation of mine.	Name of owner.	Name, sex, age, and occupation of person killed.	Name of mineral worked.	Cause of accident and remarks.
<b>FALLS OF ROOF AND SIDE—contd.</b>						
<b>(a) Falls of roof—contd.</b>						
19	8th July, 10 A.M.	Borrea Mine, Sitarampur P. O., Burdwan, Bengal.	New Beerbhun Coal Co., Ltd.	Jadu Majhi, (m.), 15, Coal-cutter.	Coal	As he was going to his working place some roof stone fell, a portion of which struck him on the lower part of the body and injured him so seriously, internally, that he died in about an hour's time. Inspection and inquiry made.
20	2nd August, 7-30 A.M.	Kabulayatkatti Mine, Kabulayatkatti P. O., Dharwar, Bombay.	Dharwar Reefs Co., Ltd.	Nanjunda, (m.), 35, Hand-drill coolie.	Gold	Whilst deceased and three others were clearing the end of a level preparatory to boring, some loose earth fell and struck him, causing injuries through the effects of which he died shortly afterwards.
21	14th August, 2-45 P.M.	Kabulayatkatti Mine, Kabulayatkatti P. O., Dharwar, Bombay.	Dharwar Reefs Co., Ltd.	Marapen, (m.), 25, Kavery, (m.), 25 Hand-drill coolies.	Gold	The deceased were drilling in a stope when a portion of the roof fell and crushed them.
22	28th September, 11 A.M.	Jogta Mine, Sijua P. O., Manbhun, Bengal.	Agabeg Bros.	Suku Majhain, (f.), 18, Coal-carrier.	Coal	A piece of coal fell from the roof on to her leg while filling her basket. Blood poisoning supervened and she died on the 2nd October.
23	1st October, Between 9 and 10 A.M.	East Kurkend Mine, Kusunda P. O., Manbhun, Bengal.	Marine Coal Co., Ltd.	Kanna Majhi, (m.), 18, Coal-carrier.	Coal	His leg was broken by a piece of roof stone falling on it. Died from its effects on the 3rd October.
24	4th October, 2 P.M.	Upper Ledo Mine, Margherita P. O., Lakhimpur, Eastern Bengal and Assam.	Assam Rail- ways and Trading Co., Ltd.	Bhabrini, (f.), 22, Filler.	Coal	A big "bump" occurred dislodging about 20 tons of fine coal which completely buried the deceased, and suffocated her to death.
25	30th October, 2 P.M.	Kenwadih Mine, Jharia P. O., Manbhun, Bengal.	East Indian Coal Co., Ltd.	Thakur Mahto, (m.), 25, Miner.	Coal	He was standing on a trestle in one gallery cutting roof coal into the mouth of another gallery, when a large mass of roof coal fell, knocking over the trestle and injuring him so seriously that he died on reaching the surface. Inspection and inquiry made.
26	30th October, 5 A.M.	Bhaga Mine, Jharia P. O., Manbhun, Bengal.	Jharia Colliery Co., Ltd.	Koka Majhi, (m.), 22, Miner.	Coal	The deceased was working with other miners digging floor coal, when a piece of coal of about 3 feet square and 1 foot thick fell out of the roof and on him. Inspection and inquiry made.
27	18th November, 5 P.M.	Charnock Mine, Asansol P. O., Burdwan, Bengal.	Charnock Col- lieries, Ltd.	Mangal Santal, (m.), 18, Miner.	Coal	Killed by a large block of top coal whilst taking out bottom coal.
28	3rd December, 5 P.M.	Khas Jharia Mine, Jharia P. O., Manbhun, Bengal.	Khas Jharia Colliery Co., Ltd.	Robi Mullick, (m.), 24, Coal-cutter.	Coal	He was standing on a stool ripping up into some roof coal, when a large piece fell on him injuring him so severely that he died within a few minutes. See Report, page 6. Inspection and inquiry made.

APPENDIX I—*contd.*Fatal Accidents, 1907—*contd.*

Serial number.	Date and hour of accident.	Name and situation of mine.	Name of owner.	Name, sex, age, and occupation of person killed.	Name of mineral worked.	Cause of accident and remarks.
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FALLS OF ROOF AND SIDE—*contd.*(a) Falls of roof—*concl'd.*

29	7th December, 4-30 P.M.	Central Kurkend Mine, Kusunda P. O., Manbhurn, Bengal.	Central Kur- kend Coal Co., Ltd.	Charki Kolo, ( <i>f.</i> ), 21, Coal-carrier.	Coal	Killed by a fall of roof coal. <i>See Report, page 6.</i> Inspection and inquiry made.
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## (b) Falls of side—(28 deaths.)

30	4th January, 3 P.M.	Bhaga Mine, Jharia P. O., Manbhurn, Bengal.	Jharia Colliery Co., Ltd.	Podo Mullick, ( <i>m.</i> ), 30, Bepin Bauri, ( <i>m.</i> ), 36, <i>Miners.</i>	Coal	These men were loading coal, which had been "dropped" from a pillar, which was being got. It is uncertain whether they were killed by more coal suddenly falling, or by coal which was found, fallen from the pillar opposite. If from the latter, they were probably robbing it. <i>See Report, page 6.</i> Inspection and inquiry made.
31	24th January, 5 P.M.	Chirki Mine, Kodarma P. O., Hazariabagh, Bengal.	The Acme Mica Co. (E. M., and W. T. Floyd).	Muruth Gope, ( <i>m.</i> ), 30, <i>Sirdar.</i> Tuckri Teli, ( <i>m.</i> ), 16, Lillu Teli, ( <i>m.</i> ), 28, Bhyru Gope, ( <i>m.</i> ), 20, Jhurri Manjhi, ( <i>m.</i> ), 30, <i>Coolies.</i>	Mica	Ten men were working in a narrow trench in the bottom of a quarry, when a fall occurred from the side burying them in the trench. Five were got out alive and the remaining five dead, probably suffocated. <i>See Report, page 7.</i> Inspection and inquiry made.
32	7th April, 6 A.M.	Jharia Khas Mine, Jharia P. O., Marbhurn, Bengal.	Standard Coal Co., Ltd.	Chumto Dhobi, ( <i>m.</i> ), 30, <i>Miner.</i>	Coal	He was filling coal with others at a pillar which had been "dropped," and after taking coal to the surface, for some reason of his own appears to have gone down another road, over a fence. The overman heard some coal "working" and shouted out "run, run." Deceased ran up towards the others, but the coal fell on him killing him instantly. Inspection and inquiry made.
33	23rd April, 10-30 A.M.	Tikak Mine, Margherita P. O., Lakhimpur, Eastern Bengal and Assam.	Assam Rail- ways and Trading Co., Ltd.	Arjoon, ( <i>m.</i> ), 24, <i>Filler.</i>	Coal	Killed by a lump of coal that fell on him while clearing rubbish.
34	1st May, 8-30 A.M.	Miragpur Mine, Kamptee P. O., Nagpur, Central Provinces.	Central India Mining Co., Ltd.	Sukia, ( <i>m.</i> ), 35, <i>Miner.</i>	Manganese	The deceased was working with a crowbar in a slightly overhanging cutting of thinly bedded ore 7 feet high, when about two feet of the upper portion fell over and killed him on the spot. <i>See Report, page 7.</i> Inspection and inquiry made.
35	7th May, 6-30 P.M.	Binadikatta Mine, Shamdi P. O., Burdwan, Bengal.	Bidhu Bhusan Sarkar.	Kamini Baurini, ( <i>f.</i> ), 22, <i>Earth-carrier.</i>	Coal	Killed by a fall of side while picking coal for her own use. Inspection and inquiry made.

APPENDIX I—*contd.*Fatal Accidents, 1907—*contd.*

Serial number.	Date and hour of accident.	Name and situation of mine.	Name of owner.	Name, sex, age, and occupation of person killed.	Name of mineral worked.	Cause of accident and remarks.
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FALLS OF ROOF AND SIDE—*contd.*(b) Falls of side—*contd.*

36	7th June, 11-45 P.M.	Gopalichak Mine, Jharia P. O., Manbhum, Bengal.	Gopalichak Coal Co., Ltd.	Fateh Majhi, (m.), 32, Miner.	Coal	The deceased and another man were found buried under a fall 18' x 15' x 3' which occurred on a tram-line level. Their tubs were found alongside empty. It was not their proper working place. They probably intended robbing coal. The injured man was taken away by his relatives. Inspection and inquiry made.
37	7th July, 6-30 A.M.	Choitodih Mine, Katragarh P. O., Jharia, Bengal.	Lutchipur Coal Co., Ltd.	Ratu Chamar, (m.), 30, Miner.	Coal	The deceased was working in an abandoned face of a gallery though warned to desist, when a piece of coal 3' x 2' x 1' fell from a height of about 9' injuring him and a girl. He died shortly afterwards from the effects of the injuries. Inspection and inquiry made.
38	19th July, 4-15 P.M.	Red Hill Mine, Mogok P. O., Ruby Mines District, Burma.	Burma Ruby Mines, Ltd.	Mi Kong, (m.), 40, Soupa, (m.), 17, Coolies.	Ruby	Several coolies were sloping down a bank of earth when the ground slipped from under them, Mi Kong lost his footing, rolled over, and was immediately buried and suffocated. Soupa stepped clear, but some fresh earth threw him down the bank and fractured his skull.
39	24th August, 7-30 P.M.	Faridpur Mine, Charanpur P. O., Burdwan, Bengal.	Poniati Coal Co.	Pocha Bauri, (m.), 20, Coal-cutter.	Coal	Killed whilst robbing a pillar in old workings, by about 80 maunds of coal falling on him. Inspection and inquiry made.
40	29th August, 7 P.M.	Taroktan Mine, Mogok P. O., Ruby Mines District, Burma.	Burma Ruby Mines, Ltd.	Low See, (m.), 28, Coolie.	Ruby	Whilst pushing trucks from the working face, a piece of rock broke off and fell on him fracturing his skull.
41	26th September, 5 A.M.	Brahmanbarari Mine, Jharia P. O., Manbhum, Bengal.	East Indian Coal Co., Ltd.	Garu Bauri, (m.), 21, Coal-cutter.	Coal	Whilst robbing a pillar in some old workings, a portion of its corner fell on him killing him on the spot. Inspection and inquiry made.
42	5th October, 12-30 P.M.	Hosur Mine, Kabulayatkatti P. O., Dharwar, Bombay.	Hosur Gold Mines of Dharwar, Ltd.	Yellishurur Goorappah, (m.), ? Surface Con- tractor.	Gold	Injured by a fall of side. Died later.
43	15th October, 5 P.M.	Mysore Mine, Kabulayatkatti P. O., Dharwar, Bombay.	Mysore Gold Mining Co., Ltd.	Mysore Chelviah, (m.), 32, Blaster Maistry.	Gold	Injured by a fall of side after blasting operation. Died the next day from the effects of the injuries received.
44	18th October, 6 o'clock.	Kabulayatkatti Mine, Kabulayatkatti P. O., Dharwar, Bombay.	Dharwar Reefs Co., Ltd.	Thirumalai, (m.), 45, Maistry.	Gold	After blasting operations loose rock from the face was being pinched out when a large piece fell on him causing severe injuries from the effects of which he died.

## APPENDIX I—contd.

## Fatal Accidents, 1907—contd.

Serial number.	Date and hour of accident.	Name and situation of mine.	Name of owner.	Name, sex, age, and occupation of person killed.	Name of mineral worked.	Cause of accident and remarks.
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## FALLS OF ROOF AND SIDE—contd.

## (b) Falls of side—contd.

45	23rd October, 12-30 P.M.	New Surataur Mine, Jharia P. O., Manbhum, Bengal.	J. L. Banerji & Co.	Hingla Bauri, (m.), 35, Miner.	Coal	He was found severely injured under a large fall of coal from the side of a pillar in a fenced off place. He died about an hour later. See Report, page 7. Inspection and inquiry made.
46	18th November, 8-30 A.M.	Gowangotha Mine, Kamptee P. O., Nagpur, Central Provinces.	Jessop & Co., Ld.	Holu Gond, (m.), 23, Labourer.	Manganese	He came alone in the early morning and began prizing out loose portions of manganese from the vein with a crowbar. While he was filling these into a basket, a slab of impure ore which had been loosened by his work rolled over and crushed him to death. Inspection and inquiry made.
47	21st November, 3 P.M.	Kuordih Mine, Kalipahari P. O., Burdwan, Bengal.	Kuordih Coal Co., Ld.	Dharam Majhi, (m.), 19, Coal-cutter.	Coal	He failed to stand clear when his mate was wedging down a piece of under-cut coal weighing about a ton. The falling coal struck him and nearly tore off his arm. He died subsequent to the amputation of his arm. See Report, page 7. Inspection and inquiry made.
48	27th November, 10 A.M.	Kosamba Mine, Kamptee P. O., Nagpur, Central Provinces.	Central India Mining Co., Ld.	Denai Kole, (m.), 45, Miner.	Manganese	He was removing débris from an open cutting in loose earth, about 7 feet deep, when a boulder, weighing about half a ton, fell on him and inflicted injuries from which he died two days later. Inspection and inquiry made.
49	2nd December, 3 P.M.	Dewanjote Mine, Tisri P. O., Giridih, Bengal.	F. F. Chrestien & Co.	Kaghu Gope, (m.), 30, Coolie.	Mica	A fall of side took place while earth was being taken from the top to open out the mine, which struck him on the head and fractured his skull.
50	6th December, 5 P.M.	Sudriadih Mine, Nowagarh P. O., Manbhum, Bengal.	Sudriadih Coal Co., Ld.	Beliah Beldar, (f.), 12, Earth-carrier.	Coal	She was sitting with two other women in a new incline when some earth and soft coal 4' x 4' x 2' fell and buried and suffocated her. Inspection and inquiry made.
51	24th December, 1 P.M.	Bhalgora Mine, Jharia P. O., Manbhum, Bengal.	Bhalgora Coal Co., Ld.	Mistri Majhi, (m.), 26, Miner.	Coal	While engaged in extracting pillars, a large piece of roof coal came away and fell on him, causing such severe injuries that he died the same evening. Inspection and inquiry made.

## IN SHAFTS—(21 deaths).

## Ropes and chains breaking—(1 death).

52	24th May, 2-30 P.M.	Benahir Mine, Jharia P. O., Manbhum, Bengal.	Standard Coal Co., Ld.	Dhona Majhi, (m.), 30, Miner.	Coal	As a full bucket reached the top of a pit the rope broke and the bucket fell on him as he was standing at the pit bottom. He died three days later from the effects of the injuries received. See Report, page 8. Inspection and inquiry made.
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## APPENDIX I—contd.

## Fatal Accidents, 1907—contd.

Serial number.	Date and hour of accident.	Name and situation of mine.	Name of owner.	Name, sex, age, and occupation of person killed.	Name of mineral worked.	Cause of accident and remarks.
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## IN SHAFTS—contd.

## Whilst ascending and descending by machinery—(3 deaths).

53	9th February, 5-30 P.M.	Muddih Mine, Katrasgarh P. O., Manbhum, Bengal.	Reliance Coal Co., Ltd.	Thakuri Gope, (m.), 31, <i>Sinker.</i>	Coal	The deceased and another man had been raised to the surface and while the trolley was being pushed underneath, he fell out of the bucket. No one actually saw him fall. He may have been trying to get on to the rim preparatory to getting off. Inspection and inquiry made.
54	17th May, 3 P.M.	Rajhara Mine, Rajhara P. O., Palamau, Bengal.	Bengal Coal Co., Ltd.	Yar Mahomed, (m.), 30, <i>Fitter.</i> Kumar Singh, (m.), 32, <i>Pump khalassi.</i>	Coal	The fitter was being raised up a shaft 100' deep, by means of a crab winch. He was within 15' of the surface when the rope broke and he fell to the bottom of the shaft and was killed. He fell upon the pump khalassi and killed him. The rope was badly worn and corroded internally. See Report, page 8. Inspection and inquiry made.

## Falling into the shaft from the surface—(3 deaths).

55	21st March, 12-15 A.M.	Shampur Mine, Nirsachatti P. O., Manbhum, Bengal.	Shampur Coal Co., Ltd.	Behari Bauri, (m.), 20, <i>Banksman.</i>	Coal	Deceased appears to have fallen down the pit whilst working with the fence-gate removed, contrary to orders. Inspection and inquiry made.
56	9th August, 2-40 P.M.	Jamadoba Mine, Jharia P. O., Manbhum, Bengal.	Indian Collieries Syndicate, Ltd.	Babu Lal Roy, (m.), 30, <i>Fitter.</i>	Coal	The deceased was fastening a clamp for some pulley blocks during the raising of a pump when a hook of one of the winches broke and he was carried over the pit by the rope and killed. See Report, page 8. Inspection and inquiry made.
57	14th November, 4 P.M.	Begunia Mine, Barakar P. O., Budwan, Bengal.	N. L. Gorain and others.	Bistu Bauri, (m.), 40, <i>Engine khalassi.</i>	Coal	While unfastening a small 10' pulley from the top of the pit head gear, about 30' high, his feet slipped off the cross-iron tie rod on which he was standing and he fell down the pit into about 70' of water and was drowned. See Report, page 9. Inspection and inquiry made.

## Falling from part of the way down—(7 deaths).

58	7th January, 4-30 P.M.	Bullhari Mine, Jharia P. O., Manbhum, Bengal.	Bullhari Coal Concern.	Domarku Lihu, (m.), 35, <i>Sinking Sirdar.</i>	Coal	The deceased had his foot on the hook whilst being drawn up a pit by means of a gin when apparently his foot slipped and he fell from nearly three-quarters of the way up and was killed instantly. Inspection and inquiry made.
59	19th March, 5 P.M.	Heratar Mine, Tisri P. O., Hazariabagh, Bengal.	F. F. Chrestien & Co.	Jungli Rai, (m.), 60, <i>Coolie.</i>	Mica	The deceased was climbing a ladder to come out of the mine when his foot slipped and he fell to the bottom. He died two hours later.
60	29th May, 10 A.M.	North Kustore Mine, Kusunda P. O., Manbhum, Bengal.	Kusunda and Nayadi Col- lieries, Ltd.	Behari Gope, (m.), 25, <i>Pump khalassi.</i>	Coal	He suddenly from some unexplained cause fell into the sump through a 6'-10" x 4'-12" opening in the staging at the pit bottom. Inspection and inquiry made.

## APPENDIX I—contd.

## Fatal Accidents, 1907—contd.

Serial number.	Date and hour of accident.	Name and situation of mine.	Name of owner.	Name, sex, age, and occupation of person killed.	Name of mineral worked.	Cause of accident and remarks.
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## IN SHAFTS—contd.

## Falling from part of the way down—contd.

61	27th June, 9-45 A.M.	Sodapur Mine, Sitarampur P. O., Burdwan, Bengal.	Bengal Coal Co., Ltd.	Rakhal Majhi, (m.), 35, Coal-cutter.	Coal	The deceased and four others were descending a pit in a cage when it collided with the ascending cage. The consequent shock and tilting of the cage caused him to fall out and to the bottom of the pit, a depth of about 194 feet, where he was found quite dead. Inspection and inquiry made.
62	26th July, 6 A.M.	Anantapur Mine, Morriston P. O., Anantapur, Madras.	Anantapur Gold Field, Ltd.	Swamy, (m.), 36, Hand jumper maistry.	Gold	The deceased slipped and fell while climbing a ladder and fractured his skull.
63	5th August, 10-30 P.M.	Pretoria Mine, Charanpur P. O., Burdwan, Bengal.	Sibpur Coal Co., Ltd.	Mohan Kora, (m.), 40, Pumpman.	Coal	The deceased and three women were descending a shaft when the man fell to the bottom and was killed instantly. Inspection and inquiry made.
64	1st September, 4 A.M.	Chinchuria Mine, Asansol P. O., Burdwan, Bengal.	New Beerbhun Coal Co., Ltd.	Ram Charan Singh, (m.), 32, Sinkers.	Coal	He was being lowered in the kibble and thinking that he had almost reached the bottom of the shaft, jumped out, falling a distance of about 20 feet. The injuries received were so serious that he died from their effects on the 15th September. Inspection and inquiry made.

## Things falling from the surface—(2 deaths).

65	8th March, 2-30 P.M.	Sanctoria Mine, Dishargarh P. O., Burdwan, Bengal.	Bengal Coal Co., Ltd.	Chaitn Singh, (m.), 25, Stone-cutter.	Coal	The deceased with two others were working in an upcast shaft and were down about 300 feet from the surface. He leaned forward from the cage to see if they were in the proper place when something fell down the pit on to his head and fractured his skull, from the effect of which he died almost immediately. Inspection and inquiry made.
66	7th May, 7-30 P.M.	Sitalpur Mine, Sitarampur P. O., Burdwan, Bengal.	Bengal Coal Co., Ltd.	Lakhu Bauri, (m.), 20, On-setter.	Coal	Whilst the deceased and another man were pulling an empty tram from the pit cage at the pit bottom, a piece of coal fell down the pit, evidently from the loaded tram which had just been hauled up, and struck him on his head fracturing his skull. He died the next day. Inspection and inquiry made.

## Things falling from part of the way down—(2 deaths).

67	19th March, 11 P.M.	Chinchuria Mine, Charanpur P. O., Burdwan, Bengal.	Baraboni Coal Concern, Ltd.	Meghnad Bauri, (m.), 21, Coolie.	Coal	Deceased was sending up the pit in a basket stones which had previously been loosened, when probably owing to careless hooking two of the hooks attaching the rope to the basket became detached and the basket tilting threw the contents on to his head. He died an hour later. Investigation and inquiry made.
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APPENDIX I—*contd.*Fatal Accidents, 1907—*contd.*

Serial number.	Date and hour of accident.	Name and situation of mine.	Name of owner.	Name, sex, age, and occupation of person killed.	Name of mineral worked.	Cause of accident and remarks.
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IN SHAFTS—*contd.*Things falling from part of the way down—*contd.*

68	30th December, 10 A.M.	Mudidih Mine, Sijua P. O., Manbhum, Bengal.	Reliance Coal Co., Ltd.	Thanu Bhuia, (m.), 30, Sinker.	Coal	While some men were working at the bottom of a sinking shaft two or more small stones fell out of the side of the shaft, one of them killing Thanu and injuring another. See Report, page 9. Inspection and inquiry made.
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## Miscellaneous—(3 deaths).

69	18th February, 10 P.M.	Bamundiha Mine, Sitarampur P. O., Burdwan, Bengal.	Damuda Coal Co., Ltd.	Choto Majhi, (m.), 24, Coal-cutter.	Coal	The deceased and eight others were being lowered into a pit in a cage when a corner of the cage got caught at a landing, 24 feet below the top landing. The opposite end tilted downwards and caused him to fall out and down the pit over 300 feet. See Report, page 9. Inspection and inquiry made.
70	14th March, 2-30 P.M.	Panchgatchia Mine, Sitarampur P. O., Burdwan, Bengal.	Lutchipur Coal Co., Ltd.	Khobilasay Pasin, (f.), 22, Bailor.	Coal	The deceased was wrongly going across the pit-bottom while the cages were in motion and the descending cage fell on her and killed her instantly. Inspection and inquiry made.
71	8th May, 4-30 P.M.	Sendra Mine, Katrasgarh P. O., Manbhum, Bengal.	Rai Srinath Pal Bahadur.	Jonab Sheik, (m.), 22, Khalassi.	Coal	He was in the pit on the pump platform and was tightening a nut. The wrench slipped, and he fell down 9 feet into 8 feet of water and was drowned. Inspection and inquiry made.

## BY EXPLOSIVES—(11 deaths).

72	1st February, 12-30 P.M.	Brahmanbarari Mine, Jharua P. O., Manbhum, Bengal.	East Indian Coal Co., Ltd.	Sudabally Meah, (m.), 30, Sinker.	Coal	While eleven men were dressing the sides in a pit-bottom an explosion of dynamite occurred injuring two men, one of whom (the deceased) died the following night. See Report, page 9. Inspection and inquiry made.
73	26th February, 12 Noon.	Surataur Mine, Jharua P. O., Manbhum, Bengal.	K. B. Seal	Lal Moni Dhoba, (m.), 25, Head Sinker.	Coal	He had gone down a sinking shaft to fire four shots. Two fuses were two feet long, and two three feet long. By mistake he fired the two short fuses first. He had some difficulty in lighting the 3rd fuse, and the 1st fuse went off when he was being brought up and when he was only 6 feet from the bottom. He was thrown to the bottom of the pit and injured by the three other shots to such an extent that he died in four hours. Inspection and inquiry made.
74	6th March, between 9 and 10 A.M.	Harayah Mine, Kodarma P. O., Hazaribagh, Bengal.	F. F. Chrestien & Co.	Ramdala, (m.), 13½, Coolie.	Mica	The deceased was trimming an open lamp close to a box of gunpowder when a spark fell on the powder and caused an explosion. He was burnt so severely that he died on the 13th March.
75	21st May, 2-30 P.M.	Bhandawas Mine, Sanwar P. O., Ajmer, Rajputana.	R. B. Seth Sobhagmal Dhudha.	Gomanath, (m.), 35, Coolie.	Mica	Gunpowder was being handled in a shed on the surface when it exploded. Three men were burnt and Gomanath so seriously that he died two days afterwards. See Report, page 9. Inspection and inquiry made.

APPENDIX I—*contd.*Fatal Accidents, 1907—*contd.*

Serial number.	Date and hour of accident.	Name and situation of mine.	Name of owner.	Name, sex, age, and occupation of person killed.	Name of mineral worked.	Cause of accident and remarks.
<b>BY EXPLOSIVES—<i>contd.</i></b>						
76	16th August, 4 A.M.	Anantapur Mine, Morrison P. O., Anantapur, Madras.	Anantapur Gold Field, Ld.	Appiah, (m.), 46, Narasigadu, (m.), 25, <i>Coolies.</i>	Gold	During the temporary absence of the blaster, the deceased hammered at a rock which contained a "socket" that had missed fire. It exploded just then and injured them so severely that they died from the effects.
77	6th September, 2-30 A.M.	Dharwar Mine, Kabulayatkatti P. O., Dharwar, Bombay.	Dharwar Gold Mines, Ld.	Solomon, (m.), 40, <i>Maistry.</i>	Gold	The deceased and another man began drilling after the blaster had reported that all the holes previously set had fired. One, however, had missed fire and this exploded injuring both severely. Solomon died from the effects the same day.
78	11th September, 9 A.M.	Hosur Mine, Kabulayatkatti P. O., Dharwar, Bombay.	Hosur Gold Mines of Dharwar, Ld.	Daval Saib, (m.), 12, <i>Surface coolie.</i>	Gold	While blasting operations were in progress every one near by was ordered away, but deceased who was about 300 feet away behind the stores rushed out to see the explosives and was struck on the head by a piece of stone. He died half an hour later.
79	22nd October, 5 A.M.	Barkui Mine, Pench Valley P. O., Chhindwara, Central Provinces.	Pench Valley Coal Co., Ld.	Raghubir Noghana, (m.), 42, <i>Hewer.</i>	Coal	Against the sirdar's orders the deceased returned to his working place within a few minutes of the lighting of the fuse of a shot. He thought that a miss-fire had taken place, but no sooner had he reached the face than the shot exploded and he was killed on the spot. Inspection and inquiry made.
80	21st November, 12-30 P.M.	Chandametta Mine, Pench Valley P. O., Chhindwara, Central Provinces.	Pench Valley Coal Co., Ld.	Narbadi Noghani, (f.), 30, <i>Coal-carrier.</i>	Coal	A shot was fired in a bord just on the point of holing into the cross-cut; the deceased was filling coal and was struck on the head by the flying coal. The shot firer claimed to have warned every one. Inspection and inquiry made.
81	28th December, 4 A.M.	Jawatari Mine, Nawadah P. O., Gaya, Bengal.	Kanhaya Lal	Motia Mushar, (m.), 25, <i>Miner.</i>	Mica	He was coming out of the pit after charging a bore hole when the charge fired and a piece of stone struck him on the chest killing him.
<b>IRRUPTIONS OF WATER OR FALLING INTO WATER—(4 deaths).</b>						
82	9th April, 6-30 A.M.	Narsamuda Mine, Asansol P. O., Burdwan, Bengal.	Sitar a m p u r Coal Co., Ld.	Jogesar Bauri, (m.), 12, Ragha Baurini, (f.), 15, <i>Water-bailers.</i>	Coal	The deceased were bailing water during the night, and it appears they left off work and rambled into a gallery where a pumping engine was working and exhausting into a shallow sump full of hot water. The boy fell into this sump and the girl went in to get him out. Both were scalded and died some hours later. <i>See Report, page 9.</i> Inspection and inquiry made.
83	5th August, between 3 and 5 A.M.	Ganzlatar Mine, Katrargarh P. O., Manbhum, Bengal.	New Manbhum Coal Co., Ld.	Mottia Gope, (m.), 24, <i>Tramming coolie.</i> Suckai Gope, (m.), 35, <i>Dust-screener.</i>	Coal	Drowned by the overflowing of an adjacent river into the mine where the two deceased and another man were working unknown to anyone. <i>See Report, page 10.</i> Inspection and inquiry made.

APPENDIX I—*contd.*Fatal Accidents, 1907—*contd.*

Serial number.	Date and hour of accident.	Name and situation of mine.	Name of owner.	Name, sex, age, and occupation of person killed.	Name of mineral worked.	Cause of accident and remarks.
<b>SUFFOCATION BY GASES—(2 deaths).</b>						
84	12th June, 3 P.M.	Sor Range Mine, Quetta P. O., Pishin, Baluchistan.	Khan Bahadur B. D. Patel, C.I.E.	Fateh Mahomed, (m.), 30, Coolie.	Coal	While he was working along with another man in a level close to some old workings which had been holed into a day or two previously, some carbon dioxide gas accumulated and put out their lights. The men ran towards the place from where fresh air was coming, but the deceased stumbled and fell and evidently was overcome by the gas and suffocated. <i>See Report, page 10.</i>
85	15th September, 11 P.M.	Benahir Mine, Jharia P. O., Manbhurn, Bengal.	Standard Coal Co., Ltd.	Roshan Gope, (m.), 30, Sinker.	Coal	Deceased descended before his mates on a Sunday night after the pit had been idle all day, and was suffocated by carbonic acid gas at the pit bottom. <i>See Report, page 10.</i> Inspection and inquiry made.
<b>HAULAGE—(10 deaths).</b>						
86	4th February, 10 A.M.	Bhalgora Mine, Jharia P. O., Manbhurn, Bengal.	Bhalgora Coal Co., Ltd.	Jiban Bauri, (m.), 28, Surface Hookman.	Coal	The deceased got caught through his own carelessness between a train of seven full tubs which was being lowered down to the wharf and another train of empty tubs which was standing on another tramway, and was injured so severely that he died 6 hours afterwards. Inspection and inquiry made.
87	26th February, 7 A.M.	Rampur Mine, Kalipahari P. O., Burdwan, Bengal.	S. T. Creet and Co.	Sobu Bauri, (m.), 25, Bottom Hookman.	Coal	He with three other men was attempting to lift a derailed coal wagon on to the line when the wagon overturned and crushed him against a coal pillar. He died on the 6th March from the effects of the injury. Inspection and inquiry made.
88	18th April, 10 A.M.	Chandametta Mine, Pench Valley P. O., Chhindwara, Central Provinces.	Pench Valley Coal Co., Ltd.	Nattu Kori, (m.), 24, Coal-cutter.	Coal	A train of tubs ran over him while he was in their way without a light and fractured his leg. Septic poisoning supervened. He died 3 or 4 days later. Inspection and inquiry made.
89	29th April, 11-45 A.M.	Ghusik Mine, Kalipahari P. O., Burdwan, Bengal.	S. T. Creet and Co.	Gorabini Baurini, (f.), 40, Coal-carrier.	Coal	Owing to the shearing of that portion of the frame of a coal tub to which the draw-hook was attached three tubs ran amain. The deceased was sitting near the crossing into a siding 375' down the plane. The tubs became derailed at the points, and she was struck by them and killed on the spot. The connection which broke was of weak construction and design. <i>See Report, page 11.</i> Inspection and inquiry made.

APPENDIX I—*contd.*Fatal Accidents, 1907—*contd.*

Serial number.	Date and hour of accident.	Name and situation of mine.	Name of owner.	Name, sex, age, and occupation of person killed.	Name of mineral worked.	Cause of accident and remarks.
<b>HAULAGE—<i>contd.</i></b>						
90	16th May, 10 A.M.	Kankani Mine, Sijua P. O., Manbhun, Bengal.	Eastern Coal Co., Ltd.	Munuku Tewari, (m.), 26, <i>Pit Munshi.</i>	Coal	The deceased was going down an incline when a train of eight empty tubs ran down amain, overtook him, knocked him down and killed him instantly. Inspection and inquiry made.
91	10th July, 11 A.M.	West Ledo Mine, Margherita P. O., Lakhimpur, Eastern Bengal and Assam.	Assam Rail- ways & Trad- ing Co., Ltd.	Budram Mura, (m.), 30, <i>Rope-rider.</i>	Coal	Killed by being run over by tubs.
92	27th September, 9 P.M.	Namjang Mine, Margherita P. O., Lakhimpur, Eastern Bengal and Assam.	Assam Rail- ways & Trad- ing Co., Ltd.	Duku Bhumiz, (m.), 20, <i>Brakesman.</i>	Coal	The deceased omitted to place the stop-block in position and was run over by a loaded tub. He died about five hours after the accident.
93	27th September, 3 A.M.	Baraboni Mine, Asansol P. O., Burdwan, Bengal.	Ghnsic and Muslia Col- lieries, Ltd.	Betal Bauri, (m.), 30, Jegoshi Bauri, (m.), 26, <i>Stone-cutters.</i>	Coal	While the two deceased were asleep at a curve on the dip haulage plane, the haulage rope broke and nine empty wagons ran amain. They became derailed at the curve and ran over the men causing injuries from which they died shortly after. Inspection and inquiry made.
94	3rd October, 11-30 P.M.	Central Kurkend Mine, Kusunda P. O., Manbhun, Bengal.	Central Kurkend Coal Co., Ltd.	Kisson Majhi, (m.), 30, <i>Coal-carrier.</i>	Coal	Eight empty tubs got loose and ran amain and collided with the deceased and broke his leg. Blood poisoning supervened and he died on the 9th October. Inquiry held.
<b>SUNDRIES UNDERGROUND—(3 deaths).</b>						
95	17th February, 1 P.M.	Dishargarh Mine, Dishargarh P. O., Burdwan, Bengal.	Equitable Coal Co., Ltd.	Baron Teli, (m.), 14, <i>Fitter's coolie.</i>	Coal	The deceased whilst waiting in the dark while the fitter went for lights (their lights having become extinguished) wandered into some adjacent old workings that were fenced off and hot and partly filled with vapour. He died soon after being found. Probably from exhaustion and fright. Inspection and inquiry made.
96	20th March, 2-45 P.M.	Mayo Mine, Khewra P. O., Jhelum, Panjab.	Government of India.	Hussan Bibi, (f.), 70, <i>Carrier.</i>	Salt	She slipped while walking up the travelling way and a loaded truck which was following her came up just then and pushed her a distance of about 19 ft. injuring her so severely that she died the next day.
97	1st July, 3 P.M.	Kabulayatkatti Mine, Kabulayatkatti P. O., Dharwar, Bombay.	Dharwar Reefs Co., Ltd.	Periathumby, (m.), 30, <i>Blaster's assistant.</i>	Gold	Deceased had climbed a ladder in the stope to a height of about 35', carrying clay for the blaster, when he slipped and fell. He was injured so seriously that he died a short while after.

APPENDIX I—*contd.*Fatal Accidents, 1907—*contd.*

Serial number.	Date and hour of accident.	Name and situation of mine.	Name of owner.	Name, sex, age, and occupation of person killed.	Name of mineral worked.	Cause of accident and remarks.
<b>ABOVE GROUND.</b>						
<b>By surface machinery—(2 deaths).</b>						
98	7th June, 3-30 A.M.	Chowrasi Mine, Dishargarh P. O., Burdwan, Bengal.	Equitable Coal Co., Ltd.	Baneshwar Mullick, (m.), 35, Wagon- trimmer.	Coal	The deceased was leaning forward clearing off the coal from the "balance plate" which it had failed to deliver into the wagon, when it swung up and flung him backwards into the wagon. He died almost immediately. Inspection and inquiry made.
99	16th November, 11 A.M.	Gopalchak Mine, Jharia P. O., Manbhurn, Bengal.	Gopalchak Coal Co., Ltd.	Fagu Rajwar, (m.), 22, Surface Coolie.	Coal	He was sitting eating his food on the handle of a hand-crane when the pawl suddenly slipped and the handle struck him on the head. Inspection and inquiry made. See Report, page 11.
<b>On surface railways and tramways belonging to the mine—(1 death).</b>						
100	1st October, 3-30 A.M.	Steam tramway on the Tumsur-Katangi Road.	Central India Mining Co., Ltd.	Lakhan, (m.), 17, Locomotive Oiler.	Manganese	The man was apparently asleep on the platform of an intermediate brake wagon and fell off on to the truck while the train was in motion and a truck passed over both thighs. He died about five hours later.
<b>Miscellaneous on surface—(6 deaths).</b>						
101	16th February, 4 P.M.	Jogta Mine, Sijua P. O., Manbhurn, Bengal.	Agabeg Bros.	Bhatni Barhin, (f.), 12, <i>nil</i> , Bhiku Passi, (m.), 14, Coal-carrier.	Coal	An area, measuring 315' x 262', suddenly subsided, after giving warnings, unfortunately unheeded, for about three hours. Six men and two boys went down with one hut. All were got out alive except Bhiku. The girl went down with another hut, in which she was lying ill. See Report, page 11. Inspection and inquiry made.
102	26th April, 1 A.M.	Mahalichuah Mine, Giridih P. O., Hazaribagh, Bengal.	E. Myers.	Abdul Meah, (m.), 36, Timberman.	Coal	While running to get out of the way of some earth that was subsiding over an old mine he fell over some stones and injured himself so severely that he died later on. Inspection and inquiry made.
103	5th June, 10 A.M.	Sudreadih Mine, Nowagarh P. O., Manbhurn, Bengal.	Sudreadih Coal Co., Ltd.	Jalpi Meah, (m.), 18, Fireman.	Coal	In order to repair a gauge-glass leak, he attempted to shut the lower cock by striking it, instead of getting up to it to turn it. In striking he broke the gauge-glass and a piece of the glass entered his arm. He died from hæmorrhage and shock four hours later. Inspector and inquiry made.
104	23rd and 24th December Between 10 P.M. and 2 A.M.	Dishargarh Mine, Dishargarh P. O., Burdwan, Bengal.	Equitable Coal Co., Ltd.	Hello Sheik, (m.), 26, Engineman.	Coal	Cause unknown, but apparently fell down a hole 18' wide in which a large fly-wheel worked. The hole was fenced except a little at one side, and the deceased was found about 9 feet from the wheel quite dead. Inspection and inquiry made.
105	30th December, 11-30 A.M.	Madhabpur Mine, Raniganj P. O., Burdwan, Bengal.	Imperial Coal Co., Ltd.	Kartik Akorea, (m.), 22, Coolie.	Coal	Deceased and two other coolies were breaking down old brick walls when a portion fell on the top of him killing him. Inspection and inquiry made.

## APPENDIX I—contd.

## Fatal Accidents, 1907—contd.

Serial number.	Date and hour of accident.	Name and situation of mine.	Name of owner.	Name, sex, age, and occupation of person killed.	Name of mineral worked.	Reason for exclusion.	Cause of accident and remarks.
<b>DEATHS NOT INCLUDED IN THE STATISTICS—(12 deaths).</b>							
1	9th February, 9 A.M.	On broad gauge main line opposite Jogitand wharf.	East Indian Railway Co.	Nemia Jolin, (f.), 50.	Coal	Not employed.	The deceased who was said to be very deaf was walking alongside the railway line and attempted to cross just when the engine came near her and was run over.
2	4th May, 12-30 P.M.	Phularibad Mine, Jharla P. O., Manbhum, Bengal.	Khas Jharla Coal Co.	Brihaspati Bhuia, (m.), 8.	Coal	Not employed.	While shunting was in progress the boy attempted to cross the railway lines and his left leg was run over. He died on the 24th May.
3	11th July ?	Mosila Mine, Asansol P. O., Burdwan, Bengal.	Ghusic and Musila Collieries, Ld.	Jadu Kurmi, (m.), 30, <i>Coolie</i> .	Coal	Cause of accident not known.	Found drowned. Probably went to bathe and fell in.
4	26th July, 7 A.M.	Kustore Mine, Kusunda P. O., Manbhum, Bengal.	Raniganj Coal Association, Ld.	Bhattu Meah, (m.), 12.	Coal	Not employed.	Run over and killed by an engine and train of wagons. Inspection and enquiry made.
5	17th August, 6 A.M.	Baraboni Mine, Asansol P. O., Burdwan, Bengal.	Baraboni Coal Concern, Ld.	Niroda Domin, (f.), 13.	Coal	Not employed.	Whilst she was sleeping near the winding engine, a wooden plug, used for the drain cock which had been stolen, blew out, and she was scalded so severely by the escaping steam that she died two days later. Inspection and inquiry made.
6	22nd September, 9-30 A.M.	Kuordih Mine, Kalpahari P. O., Burdwan, Bengal.	Kuordih Coal Co., Ld.	Moti Bauri, (m.), 2.	Coal	Not employed.	Run over by a tub whilst playing on the line. He died some days later. Inspection and inquiry made.
7	5th November, 8 A.M.	Gararia Mine, Kusunda P. O., Manbhum, Bengal.	Ramji Bechar Das.	Sohadaria Kurmini, (f.), 22.	Coal	Not employed.	She was found drowned in an old incline where there was upwards of 7 feet of water. Inspection and inquiry made.
8	10th November, 7 A.M.	Napara Mine, Asansol P. O., Burdwan, Bengal.	Banwari Lal Mukherji.	Santosh Kumar Raha, (m.), 30, <i>Cashier</i> .	Coal	Not an accident.	The deceased committed suicide by jumping down the shaft. The shaft was fenced. Inspection and inquiry made.
9	16th November, 9-30 A.M.	Jamuria Mine, Nandi P. O., Burdwan, Bengal.	Equitable Coal Co., Ld.	Mohendry Kora, (f.), 8.	Coal	Not employed.	She went down the incline with her mother and was standing at the bottom when a loaded tub ran down and struck and killed her. Inspection and inquiry made.
10	22nd November, 6-30 P.M.	Jairamdanga Mine, Asansol P. O., Burdwan, Bengal.	New Beerbhum Coal Co., Ld.	Foodni, (f.), 28.	Coal	Not employed.	Fell through a partial gap in the fencing of an air-shaft. Inspection and inquiry made.
11	25th December, 2-15 A.M.	Bhuggutdih Mine, Dhanbaid P. O., Manbhum, Bengal.	Bengal-Nagpur Coal Co., Ld.	Bhabi Rai, (f.), 45, <i>Coal-carrier</i> . Sonna Rai, (m.), 8.	Coal	Not a mine accident.	They were sleeping in a hut which caught fire and presumably could not open the door before they were burnt or suffocated. Inspection and inquiry made.



## APPENDIX II.

Table No. 1.

Indian Mines Act, 1901, Numbers of Mines and Workers, year 1907.

PROVINCE.	District and Mineral field.	Number of mines under the scope of the Act.	NUMBER OF MINES.		NUMBER OF MINES INSPECTED DURING THE YEAR.		AVERAGE NUMBER OF PERSONS EMPLOYED DAILY IN AND ABOUT THE MINES.							Grand Total below and above ground.	
			Worked by steam.	Not worked by steam.	Once.	Twice or more.	BELOW GROUND.				ABOVE GROUND.				
							Adult males.	Adult females.	Children (under 12).	Total below ground.	Adult males.	Adult females.	Children (under 12).		Total above ground.
<b>A.—COAL.</b>															
Bengal	Hazaribagh, Giridih	8	5	3	5	1	8,212	1,929	35	4,576	1,907	1,049	96	3,052	7,628
	Manbhum, { Jharua	184	102	82	45	26	15,534	13,078	506	32,118	11,605	5,510	1,097	18,212	50,330
	{ Raniganj.	42	22	20	4	2	2,600	1,048	23	3,671	1,207	711	20	1,938	5,609
	Bankura	1	...	1	...	...	20	17	...	37	8	5	...	8	45
	Bandwan	190	119	11	57	42	14,699	6,069	256	21,024	6,561	4,047	288	10,896	31,920
	Sonthal Parganas, Raniganj	2	...	2	...	...	18	5	...	23	...	...	...	...	23
	Sonthal Parganas, Rajmahal.	3	...	3	...	...	2	8	...	31	8	4	...	12	43
Palamanu, Daltonganj	2	1	1	...	1	259	142	33	434	232	30	7	269	703	
	<b>TOTAL</b>	<b>372</b>	<b>249</b>	<b>123</b>	<b>112</b>	<b>72</b>	<b>39,355</b>	<b>21,696</b>	<b>853</b>	<b>61,914</b>	<b>21,523</b>	<b>11,356</b>	<b>1,508</b>	<b>34,387</b>	<b>96,301</b>
Central Provinces.	Chhindwara, Pench Valley.	3	3	...	3	...	257	128	...	385	91	25	10	126	511
	Narsinghpur, Mohpani.	1	1	...	...	1	416	137	...	553	356	70	...	426	979
	Chanda, Ballarpur	1	1	...	...	1	220	...	...	220	109	...	...	109	329
	<b>TOTAL</b>	<b>5</b>	<b>5</b>	...	<b>3</b>	<b>2</b>	<b>893</b>	<b>265</b>	...	<b>1,158</b>	<b>556</b>	<b>95</b>	<b>10</b>	<b>661</b>	<b>1,819</b>
Panjab	Jhelum	14	1	13	...	...	1,000	...	6	1,006	599	...	14	613	1,619
	Shahpur	4	...	4	...	...	33	...	...	33	26	...	2	59	92
	Mianwali	1	...	1	...	...	80	...	...	80	33	1	2	36	116
	<b>TOTAL</b>	<b>19</b>	<b>1</b>	<b>18</b>	...	...	<b>1,113</b>	...	<b>6</b>	<b>1,119</b>	<b>658</b>	<b>1</b>	<b>16</b>	<b>675</b>	<b>1,794</b>
Eastern Bengal and Assam.	Lakbimpur	5	5	...	...	...	752	362	...	1,114	372	211	19	602	1,716
	Sibsagar, Dihnu Valley.	1	...	1	...	...	8	...	...	8	4	3	...	7	15
	<b>TOTAL</b>	<b>6</b>	<b>5</b>	<b>1</b>	...	...	<b>760</b>	<b>362</b>	...	<b>1,122</b>	<b>376</b>	<b>214</b>	<b>19</b>	<b>609</b>	<b>1,731</b>
Baluchistan	Sibi, Khoat	1	1	...	...	...	446	...	...	446	245	...	15	260	706
	Onetta, Sor Range	5	...	5	...	...	181	...	...	181	23	...	...	23	154
	Kalat, Mach and Digari.	5	...	5	...	...	139	...	2	141	27	...	4	31	172
	Loralai, Loralai	1	...	1	...	...	9	...	...	9	3	...	...	3	12
	<b>TOTAL</b>	<b>12</b>	<b>1</b>	<b>11</b>	...	...	<b>725</b>	...	<b>2</b>	<b>727</b>	<b>298</b>	...	<b>19</b>	<b>317</b>	<b>1,044</b>
	<b>GRAND TOTAL (COAL).</b>	<b>414</b>	<b>261</b>	<b>153</b>	<b>115</b>	<b>74</b>	<b>42,856</b>	<b>22,323</b>	<b>861</b>	<b>66,040</b>	<b>23,411</b>	<b>11,666</b>	<b>1,572</b>	<b>36,649</b>	<b>102,689</b>
<b>B.—MICA.</b>															
Bengal	Monghyr	34	...	34	...	...	176	111	...	287	78	77	10	165	452
	Hazaribagh	268	...	268	2	...	3,563	1,170	173	4,906	1,161	1,428	1,251	3,840	8,745
	Gaya	34	...	34	...	...	693	349	22	1,064	206	103	112	421	1,485
	<b>TOTAL</b>	<b>336</b>	...	<b>336</b>	<b>2</b>	...	<b>4,432</b>	<b>1,630</b>	<b>195</b>	<b>6,257</b>	<b>1,445</b>	<b>1,608</b>	<b>1,373</b>	<b>4,426</b>	<b>10,693</b>
Madras	Nellore	128	...	128	36	...	2,387	1,963	227	4,577	718	879	947	2,544	7,121
	Nilgiris	2	...	2	...	...	29	...	2	31	2	...	...	2	33
	<b>TOTAL</b>	<b>130</b>	...	<b>130</b>	<b>36</b>	...	<b>2,416</b>	<b>1,963</b>	<b>229</b>	<b>4,608</b>	<b>720</b>	<b>879</b>	<b>947</b>	<b>2,546</b>	<b>7,154</b>
Rajputana	Ajmer-Merwara	6	...	6	1	...	47	16	6	69	55	19	3	77	146
	<b>GRAND TOTAL (MICA).</b>	<b>472</b>	...	<b>472</b>	<b>39</b>	...	<b>6,895</b>	<b>3,609</b>	<b>430</b>	<b>10,934</b>	<b>2,220</b>	<b>2,506</b>	<b>2,323</b>	<b>7,049</b>	<b>17,983</b>

## APPENDIX II—contd.

Table No. 1—contd.

Indian Mines Act, 1901, Numbers of Mines and Workers, year 1907.

PROVINCE.	District and Mineral field.	Number of mines under the scope of the Act.	NUMBER OF MINES		NUMBER OF MINES INSPECTED DURING THE YEAR.		AVERAGE NUMBER OF PERSONS EMPLOYED DAILY IN AND ABOUT THE MINES.								Grand Total below and above ground.
			Worked by steam.	Not worked by steam.	Once.	Twice or more.	BELOW GROUND.				ABOVE GROUND.				
							Adult males.	Adult females.	Children (under 12).	Total below ground.	Adult males.	Adult females.	Children (under 12).	Total above ground.	
<b>C.—MANGANESE.</b>															
Central Provinces	Nagpur . . . . .	23	2	21	13	...	2,299	185	90	3,574	200	141	9	850	3,924
	Bhandara . . . . .	11	...	11	5	...	1,138	719	3	1,859	249	122	...	371	2,230
	Balaghat . . . . .	13	...	13	...	1	1,407	822	46	2,275	224	112	52	388	2,663
	Chhindwara . . . . .	3	...	3	...	...	93	70	1	164	113	139	...	252	416
	TOTAL	50	2	48	18	1	4,937	2,795	140	7,872	786	514	61	1,361	9,233
Madras	Vizagapatam . . . . .	43	4	44	2	...	4,703	2,199	212	7,113	735	508	63	1,306	8,419
Bombay	Panch Mahals . . . . .	1	...	1	...	...	826	193	80	1,099	...	...	...	...	1,099
	GRAND TOTAL (MANGANESE).	99	6	93	20	1	10,466	5,186	432	16,034	1,521	1,022	124	2,667	18,751
<b>D.—LIMESTONE.</b>															
Central Provinces	Jabalpur, Katni . . . . .	20	1	19	20	...	747	1,185	75	2,007	423	511	52	966	2,993
Punjab	Hooshiarpur . . . . .	1	...	1	...	...	20	...	...	20	40	...	...	40	60
	GRAND TOTAL (LIMESTONE).	21	1	20	20	...	767	1,185	75	2,027	463	511	52	1,026	3,053
<b>E.—SALT.</b>															
Panjab	Shahpur . . . . .	1	...	1	...	...	26	30	...	56	17	...	...	17	73
	Jhelum . . . . .	2	...	2	...	...	367	339	52	758	46	...	...	46	804
	Mianwali . . . . .	1	...	1	...	...	53	...	...	53	...	...	...	...	53
	GRAND TOTAL (SALT)	4	...	4	...	...	446	369	52	867	63	...	...	63	930
<b>F.—GEMS.</b>															
Burma	Mogok (Rubies, etc.) . . . . .	6	...	6	...	...	91	...	...	91	2,097	...	...	2,097	2,183
<b>G.—SLATE.</b>															
Bengal	Monghyr . . . . .	5	...	5	5	...	162	97	...	259	80	46	...	126	385
Punjab	Gurgaon . . . . .	3	...	3	...	...	51	...	19	70	199	...	17	216	286
	GRAND TOTAL (SLATE).	8	...	8	5	...	213	97	19	329	279	46	17	342	671
<b>H.—GOLD.</b>															
Bombay	Dharwar . . . . .	10	...	10	4	1	1,550	...	...	1,550	1,072	297	124	1,493	3,043
Madras	Nilgiris . . . . .	1	...	1	...	...	31	...	...	31	59	...	...	59	84
	Anantapur . . . . .	1	...	1	...	...	197	...	...	197	104	19	7	130	327
	TOTAL	2	...	2	...	...	228	...	...	228	157	19	7	183	411
	GRAND TOTAL (GOLD).	12	...	12	4	1	1,778	...	...	1,778	1,229	316	131	1,676	3,454

APPENDIX II—*contd.*Table No. 1—*concl'd.*

Indian Mines Act, 1901, Numbers of Mines and Workers, year 1907.

PROVINCE.	District and Mineral field.	Number of mines under the scope of the Act.	NUMBER OF MINES.		NUMBER OF MINES INSPECTED DURING THE YEAR.		AVERAGE NUMBER OF PERSONS EMPLOYED DAILY IN AND ABOUT THE MINES.								
			Worked by steam.	Not worked by steam.	Once.	Twice or more.	BELOW GROUND.				ABOVE GROUND.				Grand Total below and above ground.
							Adult males.	Adult females.	Children (under 12).	Total below ground.	Adult males.	Adult females.	Children (under 12).	Total above ground.	
<b>I.—IRON ORE</b>															
Central Provinces	Jabalpur . . . . .	1	...	1	...	...	12	40	10	62	2	4	...	6	68
Bengal	Singhbhum . . . . .	3	...	3	...	...	...	...	...	200	100	...	300	300	
	<b>GRAND TOTAL (IRON ORE)</b>	<b>4</b>	...	<b>4</b>	...	...	<b>12</b>	<b>40</b>	<b>10</b>	<b>62</b>	<b>202</b>	<b>104</b>	...	<b>306</b>	<b>368</b>
<b>J.—MAGNESITE.</b>															
Madras	Salem . . . . .	1	...	1	...	...	23	41	...	64	...	...	...	...	64
<b>K.—CHROMITE.</b>															
Baluchistan	Quetta-Peshin . . . . .	4	1	3	...	...	28	...	...	28	34	...	...	34	62
<b>L.—COPPER.</b>															
Central Provinces	Jabalpur . . . . .	1	1	...	...	...	46	...	...	6	10	37	...	47	93
Bengal	Singhbhum . . . . .	1	1	...	...	...	60	...	...	60	150	50	...	200	260
	<b>GRAND TOTAL (COPPER)</b>	<b>2</b>	<b>2</b>	...	...	...	<b>106</b>	...	...	<b>106</b>	<b>160</b>	<b>87</b>	...	<b>247</b>	<b>353</b>
<b>M.—JADE.</b>															
Burma	Myitkyina . . . . .	3	...	3	...	...	406	...	...	406	950	...	...	950	1,356
<b>N.—LEAD.</b>															
Central Provinces	Jabalpur . . . . .	1	...	1	...	...	8	...	...	8	4	8	...	12	20
<b>O.—TIN.</b>															
Burma	Mergui . . . . .	6	...	6	...	...	...	...	...	...	41	...	...	41	41
	<b>GRAND TOTAL (ALL MINES).</b>	<b>1,057</b>	<b>271</b>	<b>786</b>	<b>203</b>	<b>76</b>	<b>64,095</b>	<b>32,850</b>	<b>1,879</b>	<b>98,824</b>	<b>32,674</b>	<b>16,266</b>	<b>4,219</b>	<b>53,159</b>	<b>151,986</b>

## APPENDIX II—contd.

Table No. 2.

Classified statement of fatal and serious accidents in and about mines regulated by the Indian Mines Act, 1901, during the year 1907.

PROVINCE.	District and Mineral field.	Total average number of persons employed daily.	Total output.	Number of separate fatal accidents.	NUMBER OF DEATHS.			Number of serious non-fatal accidents.	NUMBER OF PERSONS SERIOUSLY INJURED.			DEATH-RATE PER 1,000 PERSONS EMPLOYED.					
					Below ground.	Above ground.	Total deaths.		Below ground.	Above ground.	Total number of persons injured.	Below ground.	Above ground.	Below and above ground.			
<b>A.—COAL.</b>																	
			Tons.														
Bengal	Hazaribagh, Giridih	7,628	750,374	2	1	1	3	25	19	6	25	21	32	26			
	Manbhum, { Jharua	50,330	5,173,135	32	31	4	35	27	20	11	31	96	21	69			
	Manbhum, { Bamiganj	5,609	474,339	4	7	...	7	1	2	...	2	190	...	124			
	Bankura, " "	45	6,254	...	...	...	...	...	...	...	...	...	...	...			
	Burdwan, " "	31,920	3,499,482	26	25	3	28	25	20	5	25	118	27	87			
	Sonthal Parganas, " "	23	1,624	...	...	...	...	...	...	...	...	...	...	...			
	" " Rajmahal	43	257	...	...	...	...	...	...	...	...	...	...	...			
	Palamu, Daltonganj	703	81,873	1	2	...	2	...	...	...	...	460	...	284			
	TOTAL	96,301	9,993,348	65	66	8	74	78	61	22	83	106	23	76			
Central Provinces	Chhindwara, Pench Valley	511	74,663	3	3	...	3	2	2	...	2	779	...	587			
	Narsainpur, Mohpani	979	41,322	...	...	...	...	...	...	...	...	...	...	...			
	Chanda, Ballarpur	329	18,103	...	...	...	...	...	...	...	...	...	...	...			
	TOTAL	1,819	134,088	3	3	...	3	2	2	...	2	259	...	164			
Panjab	Jhelum	1,619	47,298	1	1	...	1	4	3	1	4	99	...	61			
	Shahpur	59	12,686	...	...	...	...	...	...	...	...	...	...	...			
	Mianwali	116	765	...	...	...	...	...	...	...	...	...	...	...			
	TOTAL	1,794	60,749	1	1	...	1	4	3	1	4	99	...	55			
Eastern Bengal and Assam.	Lakhimpur	1,716	295,695	9	9	...	9	3	3	...	3	807	...	524			
	Sibsagar, Dikhu Valley	15	100	...	...	...	...	...	...	...	...	...	...	...			
	TOTAL	1,731	295,795	9	9	...	9	3	3	...	3	802	...	519			
Baluchistan	Sibi, Khost	708	29,378	1	1	...	1	2	2	...	2	224	...	141			
	Quetta, Sor Range	154	7,517	1	1	...	1	...	...	...	...	763	...	649			
	Kalat, Mach and Digari	173	5,393	...	...	...	...	...	...	...	...	...	...	...			
	Loralai, Loralai	12	200	...	...	...	...	...	...	...	...	...	...	...			
	TOTAL	1,044	42,488	2	2	...	2	2	2	...	2	275	...	191			
	GRAND TOTAL (COAL)	102,689	10,526,468	80	81	8	89	89	71	23	94	122	21	86			
<b>B.—MICA.</b>																	
			Cwt.														
Bengal	Monghyr	452	731	2	3	...	3	...	...	...	...	1045	...	663			
	Hazaribagh	8,746	22,212	4	8	...	8	...	...	...	...	163	...	91			
	Gaya	1,485	5,636	1	1	...	1	...	...	...	...	98	...	67			
	TOTAL	10,683	28,579	7	12	...	12	...	...	...	...	191	...	112			
Madras	Nellore	7,121	15,645	...	...	...	...	2	4	...	4	...	...	...			
	Nilgiris	33	...	...	...	...	...	...	...	...	...	...	...	...			
	TOTAL	7,154	15,645	...	...	...	...	2	4	...	4	...	...	...			
Rajputana	Ajmer-Merwara	146	695	1	1	...	1	...	...	...	...	1449	...	684			
	GRAND TOTAL (MICA)	17,983	44,919	8	13	...	13	2	4	...	4	118	...	72			
<b>C.—MANGANESE ORE.</b>																	
			Tons.														
Central Provinces	Nagpur	3,924	181,875	4	3	1	4	9	1	8	9	88	285	101			
	Bhandara	2,230	141,188	...	...	...	...	...	...	...	...	...	...	...			
	Balaghat	2,663	161,047	...	...	...	...	...	...	...	...	...	...	...			
	Chhindwara	416	12,468	...	...	...	...	...	...	...	...	...	...	...			
	TOTAL	9,233	496,573	4	3	1	4	9	1	8	9	38	73	43			
Madras	Vizagapatam	8,419	125,820	...	...	...	...	1	...	1	...	...	...	...			
Bombay	Balgaum	...	...	...	...	...	...	...	...	...	...	...	...	...			
	Feroch Mahals	1,099	19,689	...	...	...	...	...	...	...	...	...	...	...			
	TOTAL	1,099	19,689	...	...	...	...	...	...	...	...	...	...	...			
	GRAND TOTAL (MANGANESE)	18,751	642,082	4	3	1	4	10	1	9	10	18	37	21			

## APPENDIX II—contd.

Table No. 2—concl'd.

Classified statement of fatal and serious accidents in and about mines regulated by the Indian Mines Act, 1901, during the year 1907.

PROVINCE.	District and Mineral fields.	Total average number of persons employed daily.	Total output.	NUMBER OF DEATHS.			Number of serious non-fatal accidents.	NUMBER OF PERSONS SERIOUSLY INJURED.			DEATH-RATES PER 1,000 PERSONS EMPLOYED.				
				Number of separate fatal accidents.	Below ground.	Above ground.		Total deaths.	Below ground.	Above ground.	Total number of persons injured.	Below ground.	Above ground.	Below and above-ground.	
<b>D.—LIMESTONE.</b>															
Central Provinces	Jabalpur, Katni	2,998	Tons. 72,022	...	...	...	2	1	1	2	...	...	...		
Panjab	Hoshiarpur	60	1,200	...	...	...	...	...	...	...	...	...	...		
GRAND TOTAL (LIMESTONE)		3,058	73,222	...	...	...	2	1	1	2	...	...	...		
<b>E.—SALT.</b>															
Panjab	Shahpur	73	6,492	...	...	...	...	...	...	...	...	...	...		
	Jhelum	804	84,462	1	1	...	3	2	1	3	131	...	124		
	Mianwali	53	10,749	...	...	...	...	...	...	...	...	...	...		
GRAND TOTAL (SALT)		930	101,703	...	1	...	3	2	1	3	115	...	107		
<b>F.—GEMS.</b>															
Burma	Mogok (Rubies, etc.)	2,188	Carats. 296,125	2	3	...	3	1	4	5	32.96	...	1.36		
<b>G.—SLATE.</b>															
Bengal	Monghyr	385	Tons. 2,286	...	...	...	5	1	4	5	...	...	...		
Panjab	Gurgaon	286	2,684	...	...	...	1	...	1	1	...	...	...		
GRAND TOTAL (SLATE)		671	4,970	...	...	...	6	1	5	6	...	...	...		
<b>H.—GOLD.</b>															
Bombay	Dharwar	3,043	Oz. 4,017	8	9	...	9	4	4	...	4	5.80	2.95		
Madras	Nilgiris	84	...	...	...	...	...	...	...	...	...	...	...		
	Anantapur	327	...	2	3	...	3	...	...	...	15.22	...	9.17		
TOTAL		411	4,017	2	3	...	3	...	...	...	13.15	...	7.29		
GRAND TOTAL (GOLD)		3,454	4,017	10	12	...	12	4	4	...	4	6.74	3.47		
<b>I.—IRON ORE.</b>															
Central Provinces	Jabalpur	68	Tons. 400	...	...	...	...	...	...	...	...	...	...		
Bengal	Singhbhum	300	1,136	...	...	...	...	...	...	...	...	...	...		
GRAND TOTAL (IRON ORE)		368	1,536	...	...	...	...	...	...	...	...	...	...		
<b>J.—MAGNESITE.</b>															
Madras	Salem	64	186	...	...	...	...	...	...	...	...	...	...		
<b>K.—CHROMITE.</b>															
Baluchistan	Quetta-Peshin	62	Cwt. 771,206	...	...	...	...	...	...	...	...	...	...		
<b>L.—COPPER.</b>															
Central Provinces	Jabalpur	93	...	...	...	...	...	...	...	...	...	...	...		
Bengal	Singhbhum	260	...	...	...	...	...	...	...	...	...	...	...		
TOTAL (COPPER)		353	...	...	...	...	...	...	...	...	...	...	...		
<b>M.—JADE.</b>															
Burma	Myitkyina	1,356	Cwt. 3,591	...	...	...	...	...	...	...	...	...	...		
<b>N.—LEAD.</b>															
Central Provinces	Jabalpur	20	...	...	...	...	...	...	...	...	...	...	...		
<b>O.—TIN.</b>															
Burma	Mergui	41	Cwt. 273	...	...	...	...	...	...	...	...	...	...		
GRAND TOTAL (ALL MINERALS)		151,983	Tons. 11,350,167 Carats. 296,125 Cwt. 819,988 Oz. 4,017	105	113	9	122	121	85	43	128	1.14	1.16	.80	

APPENDIX II—*contd.*

Table No. 3.

The following table is a summary of the average number of persons working daily in and about mines regulated by the Indian Mines Act, 1901, during the year 1907.

PROVINCE.	AVERAGE NUMBER OF PERSONS WORKING DAILY IN AND ABOUT MINES GETTING						
	Coal.	Mica.	Manganese.	Limestone.	Salt.	Other minerals.	Total persons.
Bengal . . . . .	96,301	10,683	...	...	...	945	107,929
Central Provinces . . . . .	1,819	...	9,233	2,993	...	181	14,226
Madras . . . . .	...	7,154	8,419	...	...	475	16,048
Eastern Bengal and Assam . . . . .	1,731	...	...	...	...	...	1,731
Baluchistan . . . . .	1,044	...	...	...	...	62	1,106
Panjab . . . . .	1,794	...	...	60	930	286	3,070
Burma . . . . .	...	...	...	...	...	3,585	3,585
Bombay . . . . .	...	...	1,099	...	...	3,043	4,142
Rajputana . . . . .	...	146	...	...	...	...	146
Total 1907 . . . . .	102,689	17,983	12,751	3,053	930	8,577	151,983
Total in preceding year . . . . .	90,159	15,984	11,273	1,901	1,170	8,179	128,666
Difference . . . . .	+12,530	+1,999	+7,478	+1,152	-240	+398	+23,317

Table No. 4.

## QUANTITY OF MINERAL RAISED.

The following short summary shows the output of the principal minerals from mines regulated by the Indian Mines Act, 1901, for the year 1907.

PROVINCE.	Coal.	Manganese Ore.	Mica.	Limestone.	Salt.
	Statute Tons.	Statute Tons.	Statute Cwts.	Statute Tons.	Statute Tons.
Bengal . . . . .	9,993,348	...	28,579	...	...
Central Provinces . . . . .	134,088	496,573	...	72,022	...
Madras . . . . .	...	125,820	15,645	...	...
Eastern Bengal and Assam . . . . .	295,795	...	...	...	...
Baluchistan . . . . .	42,488	...	...	...	...
Panjab . . . . .	60,74	...	...	1,200	101,703
Rajputana . . . . .	...	...	695	...	...
Bombay . . . . .	...	19,689	...	...	...
Burma . . . . .	...	...	...	...	...
Total in 1907 . . . . .	10,526,468	642,082	44,919	73,222	101,703
Total in preceding year . . . . .	9,112,663	436,442	50,438	48,836	118,023
Difference . . . . .	+1,413,805	+205,640	-5,519	+24,386	-16,320

## APPENDIX II—contd.

Table No. 5.

The following table shows the average number of persons working daily in and about mines regulated by the Indian Mines Act, 1901, during the years 1906 and 1907.

## ALL MINES UNDER THE ACT.

Description of workers.	Year 1906.	Year 1907.	Difference.
	Below ground.	Below ground.	Below ground.
Adult Males . . . . .	53,817	64,095	+ 10,278
Adult Females . . . . .	24,921	32,850	+ 7,929
Children under 12 . . . . .	1,420	1,879	+ 459
<b>TOTAL BELOW GROUND . . . . .</b>	<b>80,158</b>	<b>98,824</b>	<b>+ 18,666</b>
	Above ground.	Above ground.	Above ground.
Adult Males . . . . .	29,236	32,674	+ 3,438
Adult Females . . . . .	14,661	16,266	+ 1,605
Children under 12 . . . . .	4,611	4,219	- 392
<b>TOTAL ABOVE GROUND . . . . .</b>	<b>48,508</b>	<b>53,159</b>	<b>+ 4,651</b>
<b>TOTAL BELOW AND ABOVE GROUND . . . . .</b>	<b>128,666</b>	<b>151,983</b>	<b>+ 23,317</b>

## ALL COAL-MINES UNDER THE ACT.

Description of workers.	Year 1906.	Year 1907.	Difference.
	Below ground.	Below ground.	Below ground.
Adult Males . . . . .	40,352	42,856	+ 2,504
Adult Females . . . . .	19,121	22,323	+ 3,202
Children under 12 . . . . .	865	861	- 4
<b>TOTAL BELOW GROUND . . . . .</b>	<b>60,338</b>	<b>66,040</b>	<b>+ 5,702</b>
	Above ground.	Above ground.	Above ground.
Adult Males . . . . .	18,846	23,411	+ 4,565
Adult Females . . . . .	9,422	11,666	+ 2,244
Children under 12 . . . . .	1,553	1,572	+ 19
<b>TOTAL ABOVE GROUND . . . . .</b>	<b>29,821</b>	<b>36,649</b>	<b>+ 6,828</b>
<b>TOTAL BELOW AND ABOVE-GROUND . . . . .</b>	<b>90,159</b>	<b>102,689</b>	<b>+ 12,530</b>

Table No. 6.

The following table shows the fluctuations in the output of the principal minerals raised from mines classed under the Indian Mines Act, 1901. The other minerals raised are gems, slate, gold, iron ore, magnesite, chromite, tin and jade.

Year.	Coal.	Manganese Ore.	Mica.	Limest'one.	Salt.
	Tons.	Tons.	Cwts.	Tons.	Tons.
1899 . . . . .	4,622,242	87,126	10,860	1,177	78,754
1900 . . . . .	5,452,408	92,458	18,320	...	79,996
1901 . . . . .	6,251,522	162,057	19,900	28,000	91,242
1902 . . . . .	6,790,507	144,037	21,360	30,091	87,361
1903 . . . . .	6,812,725	171,223	20,100	35,238	90,667
1904 . . . . .	7,561,333	188,733	21,320	50,847	107,413
1905 . . . . .	7,770,471	204,194	25,548	93,170	94,078
1906 . . . . .	9,112,663	436,442	50,438	48,836	118,023
1907 . . . . .	10,526,468	642,082	44,919	73,222	101,703

## APPENDIX II—contd.

Table No. 7.

The following table shows the amount of coal raised, the average number of persons working daily and the death-rates during the years 1899 to 1907 in respect of coal mines under the Indian Mines Act, 1901.

YEAR.	Amount of coal raised.	Average number of persons working daily below and above ground.	Number of deaths below and above ground.	DEATH-RATES.	
				Per 1,000,000 tons raised.	Per 1,000 persons working daily below and above ground.
1899 . . .	4,622,242	65,795	73	15.79	1.11
1900 . . .	5,452,408	80,003	52	9.53	.64
1901 . . .	6,251,522	85,361	58	9.28	.67
1902 . . .	6,790,507	89,503	59	8.69	.66
1903 . . .	6,812,725	79,561	67	9.83	.84
1904 . . .	7,561,388	82,002	55	7.27	.67
1905 . . .	7,770,471	79,506	58	7.46	.72
1906 . . .	9,112,663	90,159	80	8.78	.89
1907 . . .	10,526,468	102,689	89	8.45	.86

Table No. 8.

Statement showing the output of coal, the number of persons employed and the number of tons of coal raised per person employed in and about the coal mines of the principal coal-producing countries of the world.

YEAR.	Countries.	Tons of coal raised.	Persons employed.	Tons raised per person employed.
1906	United Kingdom . . .	251,067,628	867,152	289
1905	United States . . .	384,593,643	626,315	614
"	Germany . . .	171,017,283	548,277	311
"	Austria . . .	34,710,381	119,261	291
"	France . . .	34,652,229	175,104	197
"	Belgium . . .	21,775,280	134,747	161
"	Nova Scotia . . .	5,050,420	10,780	468
"	British Columbia . . .	1,384,812	4,407	314
"	Australia . . .	7,495,956	14,019	534
"	Natal . . .	1,129,407	5,650	199
"	Transvaal . . .	2,606,799	8,988	290
"	Japan . . .	11,356,543	78,477	144
1903	Russia . . .	17,581,324	105,774	166
	Totals and average . . .	944,426,205	2,698,951	349
1907	British India . . .	10,526,468	102,689	102



APPENDIX II—*contd.*

Table No. 9.

Fatal accidents and deaths in mines regulated by the Indian Mines Act, 1901, during the year 1907, classified according to the mineral worked.

MINERAL.	PROVINCE AND MINERAL AREA.	Number of separate fatal accidents.	NUMBER OF DEATHS.								TOTAL BELOW AND ABOVE GROUND.
			BELOW GROUND.				ABOVE GROUND.				
			Adult males.	Adult females.	Children (under 12).	TOTAL.	Adult males.	Adult females.	Children (under 12).	TOTAL.	
COAL . . . . .	Baluchistan . . . . .	2	2	...	...	2	...	...	...	2	2
	Bengal {	Daltongunge . . . . .	1	2	...	...	2	...	...	...	2
		Giridih . . . . .	2	...	1	...	1	1	...	...	1
		Jharria . . . . .	36	34	4	...	38	3	1	...	4
		Baniganj . . . . .	26	21	4	...	25	3	...	...	3
	TOTAL (BENGAL) . . . . .	65	57	9	...	66	7	1	...	8	74
	Central Provinces . . . . .	3	2	1	...	3	...	...	...	...	3
	Eastern Bengal and Assam . . . . .	9	8	1	...	9	...	...	...	...	9
Panjab . . . . .	1	1	...	...	1	...	...	...	...	1	
TOTAL COAL . . . . .	80	70	11	...	81	7	1	...	8	89	
MICA . . . . .	Ajmer-Merwara . . . . .	1	1	...	...	1	...	...	...	...	1
	Bengal . . . . .	7	12	...	...	12	...	...	...	...	12
	TOTAL MICA . . . . .	8	13	...	...	13	...	...	...	...	13
MANGANESE . . . . .	Central Provinces . . . . .	4	3	...	...	3	1	...	...	1	4
GEMS . . . . .	Burma . . . . .	2	3	...	...	3	...	...	...	...	3
GOLD . . . . .	Bombay . . . . .	8	9	...	...	9	...	...	...	...	9
	Madras . . . . .	2	3	...	...	3	...	...	...	...	3
	TOTAL GOLD . . . . .	10	12	...	...	12	...	...	...	...	12
SALT . . . . .	Panjab . . . . .	1	...	1	...	1	...	...	...	...	1
GRAND TOTAL, ALL MINERALS . . . . .		105	101	12	...	118	8	1	...	9	122

## APPENDIX II—contd.

Table No. 10.

Fatal accidents and deaths classified according to causes.

CAUSES OF ACCIDENTS.	1907.				
	Number of separate accidents.	DEATHS.			
		Adult males.	Adult females.	Children (under 12).	TOTAL.
<b>BELOW GROUND.</b>					
Explosions of fire-damp. . . . .	3	5	...	...	5
<b>Falls in Mines.</b>					
Falls of roof . . . . .	26	24	5	...	29
" " side . . . . .	22	26	2	...	28
<b>TOTAL</b> . . . . .	<b>48</b>	<b>50</b>	<b>7</b>	<b>...</b>	<b>57</b>
<b>In Shafts.</b>					
Ropes and chains breaking . . . . .	1	1	...	...	1
Whilst ascending or descending by machinery . . . . .	2	3	...	...	3
Falling into the shaft from the surface . . . . .	3	3	...	...	3
Falling from part of the way down . . . . .	7	7	...	...	7
Things falling from the surface . . . . .	2	2	...	...	2
Things falling from part of the way down . . . . .	2	2	...	...	2
Miscellaneous . . . . .	3	2	1	...	3
<b>TOTAL</b> . . . . .	<b>20</b>	<b>20</b>	<b>1</b>	<b>...</b>	<b>21</b>
<b>Miscellaneous below ground.</b>					
Suffocation by gases . . . . .	2	2	...	...	2
By explosives . . . . .	10	10	1	...	11
Irruptions of water or falling into water . . . . .	2	3	1	...	4
Haulage . . . . .	9	9	1	...	10
Sundries underground . . . . .	3	2	1	...	3
<b>TOTAL</b> . . . . .	<b>26</b>	<b>26</b>	<b>4</b>	<b>...</b>	<b>30</b>
<b>TOTAL BELOW GROUND</b> . . . . .	<b>97</b>	<b>101</b>	<b>12</b>	<b>...</b>	<b>113</b>
<b>ABOVE GROUND.</b>					
By surface machinery . . . . .	2	2	...	...	2
On surface railways and tramways . . . . .	1	1	...	...	1
Miscellaneous on surface . . . . .	5	5	1	...	6
<b>TOTAL ABOVE GROUND</b> . . . . .	<b>8</b>	<b>8</b>	<b>1</b>	<b>...</b>	<b>9</b>
<b>TOTAL BELOW AND ABOVE GROUND</b> . . . . .	<b>105</b>	<b>109</b>	<b>13</b>	<b>...</b>	<b>122</b>

## APPENDIX II—contd.

Table No. 11.

## ACCIDENTS, 1907.

Classified according to cause and mineral worked.

MINERAL WORKED.	Number of separate fatal accidents.	NUMBER OF PERSONS KILLED.											DEATH RATE PER 1,000 PERSONS EMPLOYED.		
		Explosions of fire-damp.	Falls of roof.	Falls of side.	In shafts.	Explosives.	Suffocation by gases.	Eruptions of water or falling into water.	Haulage.	Miscellaneous below ground.	Surface.	Total deaths.	Below ground.	Above ground.	Below and above ground.
Coal . . . . .	80	5	23	13	19	4	2	4	10	1	8	89	1.22	.21	.86
Mica . . . . .	8	..	3	6	1	3	..	..	..	..	..	13	1.18	..	.72
Manganese . . . . .	4	..	..	3	..	..	..	..	..	..	1	4	.18	.37	.21
Gems . . . . .	2	..	..	3	..	..	..	..	..	..	..	3	32.96	..	1.36
Gold . . . . .	10	..	3	3	1	4	..	..	..	1	..	12	6.74	..	3.47
Salt . . . . .	1	..	..	..	..	..	..	..	..	1	..	1	1.15	..	1.07
Total, 1907 . . . . .	105	5	29	28	21	11	2	4	10	3	9	122	1.14	.16	.80
Total, preceding year.	84	4	24	27	20	4	4	..	11	3	9	106	1.21	.19	.82
Difference . . . . .	21	1	5	1	1	7	-2	-4	-1	..	..	16	-.7	-.3	-.2

Table No. 12.

Statement of Prosecutions instituted under the Indian Mines Act (VIII of 1901) during the year ending 31st December 1907.

PROVINCE.	District.	Number of prosecutions.	Number of persons prosecuted.	Number convicted.	REMARKS.
Central Provinces . . . . .	Chhindwara . . . . .	1	1	1	Under section 22 (2) (b) of the Indian Mines Act, 1901. Ditto.
Bengal . . . . .	Monghyr . . . . .	1	1	1	

## APPENDIX II—contd.

Table No. 13.

Number of Inspections by District and other Officers, 1907.

District and Mineral area.	NUMBER OF MINES INSPECTED.		
	Once.	Twice.	More than twice.
<b>COAL.</b>			
Bengal—			
Burdwan	4	...	...
Palamau, Daltonganj	1	...	...
Sonthal Parganas, Rajmahal	...	...	...
Hazariabagh—Giridih	1	...	...
Manbhurn—Jharua	3	...	...
	9	...	...
Eastern Bengal and Assam—Lakhimpur	1	...	...
Baluchistan	1	1	...
	11	1	...
<b>MICA.</b>			
Bengal—Hazariabagh	2	...	...
Madras—Nellore	6	1	4
	8	1	4
<b>MANGANESE.</b>			
Central Provinces			
Balaghat	...	...	1
Bhandara	2	...	...
Nagpur	...	1	...
Chhindwara	1	...	...
	3	1	1
Madras—Vizagapatam	1	...	...
Bombay—Panch Mahals	...	1	...
	4	2	1
<b>LIMESTONE.</b>			
Central Provinces	12	...	...
<b>GEMS.</b>			
Burma—Ruby Mines District	7	...	...
<b>IRON ORE.</b>			
Bengal—Singhbhum	3	...	...
	45	4	5
<b>GRAND TOTAL</b>			

## APPENDIX II—contd.

Table No. 14.

Mines opened and closed during the year ending 31st December 1907.

Provinces.	District.	Number of mines opened.	Number of mines closed.
<b>A.—COAL</b>			
BENGAL . . . . .	Hazaribagh-Giridih . . . . .	2	1
	Manbhum, Jharia . . . . .	49	4
	„ Raniganj . . . . .	14	1
	Burdwan „ . . . . .	8	2
	Santhal Parganas . . . . .	...	2
	Palamau, Daltonganj . . . . .	1	...
TOTAL . . . . .		74	10
PANJAB . . . . .	Mianwali . . . . .	...	1
	Jhelum . . . . .	8	2
TOTAL . . . . .		8	3
CENTRAL PROVINCES . . . . .	Chhindwara . . . . .	2	...
BALUCHISTAN . . . . .	Kalat . . . . .	1	...
TOTAL (COAL) . . . . .		85	13
<b>B.—MICA.</b>			
BENGAL . . . . .	Monghyr . . . . .	...	...
	Hazaribagh . . . . .	27	11
TOTAL . . . . .		27	11
MADRAS . . . . .	Nellore . . . . .	25	17
RAJPUTANA . . . . .	Ajmer-Merwara . . . . .	1	2
TOTAL (MICA) . . . . .		53	30

## APPENDIX II—concl'd.

Table No. 14—concl'd.

Province.	District.	Number of mines opened.	Number of mines closed.
<b>C.—MANGANESE ORE.</b>			
MADRAS . . . . .	Vizagapatam . . . . .	21	10
BOMBAY . . . . .	Panch Mahals . . . . .	1	...
CENTRAL PROVINCES . . . . .	Nagpur . . . . .	2	2
	Balaghat . . . . .	1	1
	Bhandara . . . . .	1	...
TOTAL . . . . .		4	3
TOTAL (MANGANESE) . . . . .		26	13
<b>D.—LIMESTONE.</b>			
CENTRAL PROVINCES . . . . .	Jabalpur . . . . .	6	
<b>E.—LEAD.</b>			
BENGAL . . . . .	Sambalpur . . . . .	1	1
<b>F.—GOLD.</b>			
MADRAS . . . . .	Nilgiris . . . . .	...	1
BOMBAY . . . . .	Dharwar . . . . .	6	2
TOTAL (GOLD) . . . . .		6	3
<b>G.—IRON.</b>			
CENTRAL PROVINCES . . . . .	Jabalpur . . . . .	1	1
<b>H.—SLATE.</b>			
PANJAB . . . . .	Gurgaon . . . . .	1	...
<b>I.—CHROMITE.</b>			
BALUCHISTAN . . . . .	Quetta-Peshin . . . . .	4	1

## APPENDIX III.

Table No. 1.

Inspections and enquiries made under Section 5 of the Land Acquisition (Mines) Act, 1885, during the year ending 31st December 1907.

Registered number.	Name of mine and description of land acquired.	Name of the owner of the mine.	Date of gazetted declaration.	Name of Inspector making the enquiry.
57	Bhowra Coal Mine— Bhowra Branch and siding, Midnapur-Jharia extension of the Bengal-Nagpur Railway.	Eastern Coal Co., Ltd.	27th April 1907 . . .	G. F. Adams.
64	Sudamdih Coal Mine— Pathardih link of the Bengal-Nagpur Railway.	Empire Coal Co., Ltd.	.....	Ditto.
65	Puddugora Coal Mine— Bengal-Nagpur Railway Company's Station Mohoda.	Bengal Coal Co., Ltd.	4th March 1907 . . .	Ditto.
68	Gobindpur Coal Mine— Katras-Khanudih extension of the Jharia Branch of the East Indian Railway.	Gobindpur Coal Syndicate.	12th April 1907 . . .	Ditto.
69	Banksimulla Coal Mine— Banskimulla siding, Toposi-Baraboni Branch of the East Indian Railway.	Bengal Coal Co., Ltd.	13th May 1907 . . .	R. R. Simpson.
70	Bhowra Coal Mine— Bhowra Branch, Jharia connection line of the Bengal-Nagpur Railway.	Eastern Coal Co., Ltd.	9th July 1907 . . .	G. F. Adams.
71	Bhaga Coal Mine— Bhaga Branch of the East Indian Railway and the Bhaga assisted siding.	Jharia Colliery Co., Ltd.	12th September 1907 . . .	Ditto.
72	Baraboni and Jairamdanga Coal Mines— Bhaskajuri siding of the East Indian Railway.	New Beerbhum Coal Co., Ltd.	15th July 1907 . . .	R. R. Simpson.
75	Kuordih Coal Mine— East Indian Railway Company's main line.	Kuordih Coal Co., Ltd.	.....	W. T. Griffiths.
76	Tetturia Coal Mine— Katrasgarh-Khanudih extension of the Ikra Branch of the East Indian Railway.	West Tetturia Collieries Co.	10th October 1907 . . .	G. F. Adams.
77	Kustore Coal Mine— Bhaga Branch of the Bengal-Nagpur Railway and assisted sidings.	Raniganj Coal Association, Ltd.	6th January 1908 . . .	Ditto.
78	Bagdiggi Coal Mine— Damuda Branch of the East Indian Railway.	C. J. Smith . . .	26th February 1908 . . .	Ditto.
80	Jealgora Coal Mine— Jealgora siding off the Damuda Branch of the East Indian Railway.	East Indian Coal Co., Ltd.	17th March 1908 . . .	Ditto.
81	Lower Kusunda Coal Mine— North Kustore siding off the Damuda Branch of the East Indian Railway.	Kusunda and Nayadi Collieries, Ltd.	.....	Ditto.
82	Hathgarooye Coal Mine— Sitarampur-Ikra Branch of the East Indian Railway.	Lutchipur Coal Co., Ltd.	14th January 1908 . . .	James Grundy.
83	Kally Than Surataur Coal Mine— Surataur assisted siding of the East Indian Railway.	K. B. Seal . . .	.....	G. F. Adams.
84	Mudidih Coal Mine— Sijua siding of the East Indian Railway.	Reliance Coal Co., Ltd.	.....	Ditto.
85	Nuni Coal Mine— No. 8 Pit and Nuni siding of the East Indian Railway.	Baraboni Coal Concern, Ltd.	29th April 1908 . . .	James Grundy.
86	Jobs Coal Mine— East Indian Railway Company's siding between Raniganj and Kalipahari.	Eastern Coal Co., Ltd.	9th March 1908 . . .	R. R. Simpson.

## APPENDIX III—contd.

Table No. 2.

Inspections and enquiries made under Section 11 of the Land Acquisition (Mines) Act 1885, during the year ending 31st December 1907.

Registered number.	Name of mine and description of land acquired.	Name of the owner of the mine.	Date of declaration.	Name of Inspector making the enquiry.
4	Benahir Coal Mine— Surataur siding of the East Indian Railway.	Standard Coal Co., Ltd.	11th April 1908	G. F. Adams.
5	Dheriajoba Coal Mine— Jharia-Katras Branch and Damuda Branch of the East Indian Railway.	Jharia Coal Syndicate, Ltd.	.....	Ditto.
9	Alkusa Coal Mine— Damuda Branch of the East Indian Railway and certain assisted sidings.	Raniganj Coal Association, Ltd.	5th February 1908	Ditto.
12	Kusunda and Nayadi Coal Mine— Kustore siding and the Damuda Branch of the East Indian Railway.	Kusunda and Nayadi Collieries, Ltd.	.....	Ditto.
13	Bhuskajuri Coal Mine— Bhuskajuri siding of the East Indian Railway.	Bhuskajuri Coal Co., Ltd.	.....	James Grundy.
18	Bhuggudih Coal Mine— Assisted siding of the East Indian Railway.	Bengal-Nagpur Coal Co., Ltd.	.....	G. F. Adams.
23	Surataur (Kadmogora) Coal Mine— Surataur siding of the East Indian Railway.	P. K. Roy	.....	Ditto.
24	Sijua Coal Mine— East Indian Railway Company's siding	Sijua Coal Co., Ltd.	2nd December 1907	Ditto.
34	Salanpur Coal Mine— Salanpur Branch of the East Indian Railway.	Borrea Coal Co., Ltd.	.....	James Grundy.
35	Bagdiggi Coal Mine— Damuda Branch of the East Indian Railway and assisted siding.	C. J. Smith	.....	G. F. Adams.
73	Raghunathbatty Coal Mine— Ikra Branch of the East Indian Railway.	Sudhi Coal Co., Ltd.	.....	James Grundy.
74	Mugma Coal Mine— Pandra Branch, Jharia Branch of the East Indian Railway.	J. C. Dutt	23rd January 1908	Ditto.
78	Bagdiggi Coal Mine— Damuda Branch of the East Indian Railway.	C. J. Smith	26th February 1908	Ditto.
79	Lover Kusunda Coal Mine— North Kusunda siding, Damuda Branch of the East Indian Railway.	Kusunda and Nayadi Collieries, Ltd.	.....	G. F. Adams.
84	Mudidih Coal Mine— Sijua siding of the East Indian Railway.	Reliance Coal Co., Ltd.	13th May 1908	Ditto.
88	Ekra Khas Coal Mine— Extension of Ekra Khas siding of the East Indian Railway.	Maharaja M. C. Nandi	.....	Ditto.
89	Encroachment on land acquired for the Jimagora Branch of the East Indian Railway.	By Gova Petha & Co. and the East Barari Coal Co.	10th March 1908	Ditto.
90	South Baraboni Coal Mine— Ikra Branch of the East Indian Railway.	South Baraboni Coal Co.	25th April 1908	R. R. Simpson.



## APPENDIX III—contd.

Table No. 3.

List of plans of abandoned and discontinued mines received during the year 1907.

Registered number.	Name and situation of mine.	Name and number of seam.	Name of mineral worked.	Name of owner.	Date of abandonment or discontinuance.
23	Bdruchak Mine, Sijua P. O., Manbhum, Bengal.	No. 15 Top Seam .	Coal . . .	Sijua Coal Co., Ltd. .	March 1905.
24	Kessabganj Mine, Kalipahari P. O., Burdwan, Bengal.	Dobalia or Lower Kalipahari Seam.	Do. . . .	G. M. Agreeable Coal Co.	March 1905.
25	New Baraboni Mine, Charanpur P. O., Burdwan, Bengal.	Baraboni Lower Seam.	Do . . . .	New Baraboni Coal Co.	November 1905.
26	New Nandi Mine, Nandi P. O., Burdwan, Bengal.	Nandi Seam . . .	Do. . . .	Sasi Bhusan Mukherji	28th February 1907.
27	No. 1 East Ara Mine, Katha Colliery, Abbottabad, Panjab.	Not named nor numbered.	Do . . . .	Panjab Coal Co. . .	December 1906.
28	Nalli Mine, Katha P. O., Shahpur, Panjab.	Not named nor numbered.	Do. . . .	Malik Mohan Singh.	January 1907.
29	Pits Nos. 2 and 5, Ghusik Mine, Kalipahari P. O., Burdwan, Bengal.	Ghusik Seam . . .	Do. . . .	Baliram and Co. . .	1895.
29A	Pits Nos. 1 and 2, Srikistapur Mine, Kalipahari P. O., Burdwan, Bengal.	Ghusik Seam . . .	Do. . . .	Ditto . . . .	Pit No 1, about 1898. Pit No. 2, about 1905.
30	Incline No. 1, Napara Mine, Asansol P. O., Burdwan, Bengal.	Napara Top Seam .	Do. . . .	Maharaja M. C. Nandi	1905.
31	Jairamdanga Mine, Asansol P. O., Burdwan, Bengal.	Jairamdanga Upper Seam.	Do. . . .	New Beerbhum Coal Co., Ltd.	June 1903.
32	Pits Nos. 3, 34, 35, and 37, Dhadka Mine, Asansol P. O., Burdwan, Bengal.	Dhadka Seam . . .	Do. . . .	Ditto . . . .	June 1903.
33	Inclines Nos. 4 and 5, Kustore Mine, Kusunda P. O., Manbhum, Bengal.	No. 15 Seam . . .	Do. . . .	Raniganj Coal Asso- ciation, Ltd.	2nd August 1907.
34	Inclines Nos. 6, 6 and 9, Gararia Mine, Kusunda P. O., Manbhum, Bengal.	No. 9 Seam . . .	Do. . . .	Tribhuban Das Howji	14th September 1907.
35	Open quarry, Katras Mine, Katrasgarh P. O., Manbhum, Bengal.	No. 14 Seam . . .	Do. . . .	Katras Jharis Coal Co., Ltd.	September 1907.

Table No. 4.

## MINING COURSE AT THE SIBPUR CIVIL ENGINEERING COLLEGE.

Students are admitted to the special mining course who have passed the Sub-Overseer examination (requiring two years' work at the College), or an equivalent examination at some other technical college. The diploma is granted to successful students after a further two years which includes the special mining course, a detailed syllabus of which is appended.

The course of training undergone by the mining students also includes Mathematics, Physics, Chemistry, Surveying, Drawing, Engineering, and Workshops (practical). Detailed syllabuses of these courses are to be found in the College Calendar (Apprentice class).

A Bachelor of Engineering (Calcutta University) Degree in Mining is also under contemplation, the course to run parallel with the Bachelor of Engineering Degree courses in Civil, Mechanical, and Electrical Engineering.

The number of students taking the Mining Course at Sibpur College during the Session 1907-08 was thirteen, of whom five will sit for the Diploma examination in April 1908. These students all attended the Camp of Mine Surveying and Practical Mining, which was pitched at Gaurangdi during November and December 1907. A good sign is the demand in the coal-fields for passed students, which is considerably greater than the supply. All those who obtain diplomas this year have positions with good prospects assured to them, and those too who may fail to secure the diploma have been spoken for.

The new practical mining laboratory is now under way. The Professor of Mining, in consideration of the conditions of mining in Bengal, has designed the practical laboratory work with a special view to coal, — particularly washing, briquetting, and coking,—in which lines there is no doubt it will be most profitable for the students to specialise. Meanwhile they will assist in the erection of the laboratory, and the fitting of such machinery as has arrived.

## DETAILED MINES SYLLABUS.

## COURSE I.

*Geology applied to Mining.*—(One lecture per week.)

Stratified and unstratified rocks. Faults, foldings, etc. Work done by rivers and glaciers. Rock-forming minerals. Introduction to study of fossils. Principal rock formations and descriptive outline of corresponding fossils. Special reference to the geology of India. Mountain and river systems. Metamorphic rocks. Dravidian and Aryan groups. Coal-bearing formations. Laterite formation.

Geological maps and sections. Methods employed in their construction. Field geology.

*Mining Engineering.*—(Two lectures per week.)

Boring by hand and power machines. Lining boreholes. Speeds and costs of various methods of boring compared.

Sinking through alluvial ground. Bogey, dumping-chain, folding-doors. Shaft-walling. Sinking and walling simultaneously. Tubbing a shaft. Sinking through sands and gravel and watery strata. Piling method. Iron Drum and Kind-Chaudron methods. Freezing processes. Tiger's method.

Mechanical haulage. Jig bank. Direct haulage. Main and tail rope. Endless rope. Modes of application of power. Size of engine required for given work. Tensioning the rope.

Hoisting. Wood, steel, and rope guides. Safety cages and appliances. Koeps and Whiting systems. Rope-capping and cage couplings. Winding ropes. Safety factor.

Mining legislation with reference to shafts, hauling, winding, timbering, shot-firing, inspection of working places, and mine plans.

*Coal mining.*—(One lecture per week.)

Methods of working coal. Development of bord-and-pillar working. Main distinctions between longwall and bord-and-pillar workings. Thrust and creep. Shaft pillars. Haulage roads and their protection. "Whole" and "broken" working. Timbering of ditto. General remarks on removal of pillars. Timber withdrawal. Longwall working. Timbering and packwalls. Thick coal-working. South Staffordshire method. Indian and American methods. Special instances. Single and double stall working. Steep seam workings. Rearer workings of North Staffordshire.

Shot-firing. Coal-cutting by machinery. Different types of machines and their uses.

Working under the sea or large bodies of water. Surface subsidence.

Coal-mine plans and sections. Connecting surface and under-ground surveys.

*Metal Mining.*—(One lecture per week.)

Description of veins, pockets, shoots, chimneys. Lenticular masses.

Prospecting for minerals. Alluvial mining and open working. Ore beds and deep leads.

Dredging for gold. Overhand and underhand stopping. Working a thick mineral vein. Timbering of metal mines. Square-set timbering. Shaft-timbering.

Hand and power drilling. Pneumatic and electric drills. Blasting. Metal mine plans.

APPENDIX III—*concl.*Table No. 4—*concl.*

## COURSE II.

*Descriptive Mineralogy.*—(One lecture per week.)

Important minerals and ores. Fuels and allied materials. Methods of determination of minerals. External characteristics. Specific gravity. Forms of minerals. Systems of crystals and examples. Blowpipe assay. Scale of fusibility. Tests on borax, microcosmic salt and charcoal. Tests with nitrate of cobalt.

Special reference to ores of iron, antimony, baryta, zinc, tin, mercury, copper, lead, manganese, gold, and silver.

*Mining Engineering.*—(One lecture per week.)

Drainage of mines. Adit levels. Water-buckets. Lift and force pumps. Surface arrangements for draining a sinking pit. Cornish and Hathorne-Davy pumps. Direct-acting steam pumps. Pulsometer. Centrifugal pumps. Hydraulic pumps. Auxiliary pumps for feeding up to the main pump.

Approaching old workings. Dams.

Ventilation. Stoppings, doors, regulators, air-crossings. Practical work in plan ventilation. Dumb drifts. Capell, Waddle, and Guibal fans. General reference to types of fans. Water-gauge and anemometer. Treatment of gob-fires.

Power-application in a mine. Relative merits of steam, water, compressed air, electricity, and oil as sources of applied power.

Indian Mines Acts, and legislation germane to mining.

*Coal Mining.*—(One lecture per week.)

Description of gases found in mines. Fire-damp. Colliery explosions. Spraying apparatus. Principles and construction of safety lamps. Types of safety lamps. "Caps" on safety lamp flame. Instruments for detecting fire-damp:—opal spectacles, Liveing's and Ansell's indicators, alcohol lamp, hydrogen lamp, Beard-Mackie lamp. Treatment of persons overcome by foul air.

Surface arrangements at a colliery. How they are made automatic as far as possible. Sorting and screening. Tipplers, creepers. Coal-washing,—types of machines. Coking—types of ovens. Recovery of bye-products.

*Metal Mining.*—(One lecture per week.)

Ore-dressing. Concentration by means of water. Blake crusher. Dodge crusher. Gyratory crushers. Huntington mill. Stamp batteries. Materials required for running a stamp battery. Classification of pulverisers. Arrastra. Amalgamating pans. Jigs, and jig-products. Magnetic separation. Roasting for magnetism. Pneumatic separation. Less important methods of concentration.

Fine sand and slime concentrators. Vanners, pumping or jerking tables; film-sizing tables. Prospector's cradle. Treatment of refractory ores, sands, and slimes. Cyanide and chlorination treatment.

## PRACTICAL MINING AND MINE SURVEYING.

Students are required to spend six weeks in camp, each year of the course, in a mining district, of which about three weeks will be devoted to the surveying of an actual working mine, the remainder of the time being spent in visiting and inspecting the workings and equipment of mines in the vicinity. The surveying will consist of a plan of the mine, with surface connections, and one or more sections along a haulage road. The plan and sections, and the notes on mine equipment made during camp, will form the basis of the "Attested drawings and designs" required from the Degree students.

## ATTESTED DRAWINGS AND DESIGNS.

(1) Plan of mine workings, based on survey done in camp, suited for an output of 1,500 tons per day, showing surface buildings, railways, waterways, etc., and pillars left for their protection; showing also doors, regulators, stoppings, etc., for ventilation purposes. On a scale not smaller than 100 ft. to the inch.

(2) Section of a haulage road, showing new formation level for purposes of installing mechanical haulage.

(3) Section of upcast shaft, showing fan-drift, fan-house, and fan.

(4) Vertical section of downcast shaft, showing pumps, steam-pipes, cages.

(5) Plan of downcast shaft.

(6) General plan of surface arrangements, showing position of tipplers, screens, coke-ovens, boilers, engines, etc.

(7) Section of portion of shaft, to show walling curb and brick work and wedging curb with tubing.

APPENDIX III—*contd.*

Table No. 5.

## MINING INSTRUCTION IN BENGAL.

*Preliminary.*—The scheme of instruction is designed to afford facilities for persons employed in Coal-mines to be trained in the Principles of Mining.

The following centres have been established and Sub-Committees appointed :—

## RANIGANJ DISTRICT.

<i>Sanctoria Centre.</i>	<i>Charanpur Centre.</i>
Mr. Jas. Grundy.	Mr. Jas. Grundy.
” Wm. Miller.	” R. Mitchell.
” G. F. Scott.	” E. M. Patterson.
” W. McFarlane.	” A. Russell.

## JHARIA DISTRICT.

<i>Jharia Centre.</i>	<i>Sijua Centre.</i>
Mr. G. F. Adams.	Mr. G. F. Adams.
” J. J. Turnbull.	” H. C. Veasey.
” Geo. Miller.	” E. H. Bennertz.
” A. Gregory.	” W. J. Wood.

The Mining Instructor will visit each centre once a week.

The course of instruction, consisting of about 25 lectures, will commence in November 1907 and continue to the beginning of the rainy season, 1908.

An examination will be held at the end of the course.

A candidate who passes the examination will receive a certificate recording his success. A prize of books will be given by Mr. Grundy to the candidate who obtains the highest number of marks. No candidate, however, will be permitted to sit for examination unless he has attended seventy-five per cent. of the lectures.

## SYLLABUS OF THE COURSE OF INSTRUCTION.

The course will treat principally of the more practical operations in actual mining, with special reference to India, and the principles underlying such operations will be thoroughly discussed.

Special attention will be paid to the various methods of working thick seams.

*Geology.*—General structure of the crust of the earth: Definitions and descriptions of fault, dyke, outcrop, dip, strike, unconformity, etc., composition and properties of coal; special reference to the coal measures in India: Importance of recording results of observations.

*Exploration.*—Advantages of borings; driving through faults, washouts; dykes, etc.; methods of maintaining the direction and gradient of such drivages.

*Boring and Winning.*—Different systems of boring; choice of methods; cost of boring. Winning coal by inclines, adits, shafts, shafts and crosscut.

*Sinking.*—Site of Colliery; position of shafts; excavation and shape; blasting with use of safety fuse and electric battery; explosives and detonators, their safe storing and handling; lining the shafts and scaffolding; sinking pit, banking arrangements, bows, water-barrels, bull chain and hook, etc. Special difficulties in sinking and how to deal with them.

*Opening out and methods of working.*—Shafts pillars; arching or supporting the pit bottom; quarrying; pillar and stall; double road stall; long wall.

*Thick coal.*—Methods of working in South Staffordshire and Warwickshire, in Upper Silesia and France; methods of working thick seams by long wall, by inclined slices, and by horizontal slices, also the Rabatage System.

*Timbering and Supporting.*—Fixing of props and double timber; chocks or cogs; special methods of timbering to withstand pressure from the roof, sides and floor; securing dangerous holes in the roof due to heavy falls; use of iron or steel girders; stowing and packing; arching.

*Gases met with in coal mines.*—Their experimental preparation by chemicals and illustration of their physical and physiological properties; methods of detecting; explosion and gob fires.

*Ventilation.*—Natural and artificial methods; coursing the air; use of stoppings, brattices, doors, airbridges, regulators, etc.; measuring the quantity of air, use of thermometer, barometer, water-gauge, anemometer; the friction of air in mines and the elementary theory of splitting.

*Safety lamps.*—Theory of the safety lamp, Sir Humphrey Davy's Experiment; the Davy lamp, the Clanny and Thomas and Williams lamps, the Marsaut and Mueseler lamps; fire-damp detectors.

*Mechanical Engineering of Collieries.*—Winding engines, discussion of the different types, calculation of the dimensions of cylinders, length of stroke, diameter of drum, etc.;

APPENDIX III—*contd.*Table No. 5—*concl'd.*

strength of winding ropes and chains, detaching hooks, capping winding ropes, care and examination of ropes.

*Pumping.*—Importance of a good system ; measurement of quantities of water ; lifting and forcing pumps ; pumps for sinking ; temporary and permanent pumps ; calculation of dimensions ; of pumps to perform a given duty, etc., strength of pipes, methods of supporting ; different types of joints.

*Hauling.*—Tramways, tubs and wagons ; conveyance by self-acting inclines ; single-rope haulage ; main and tail ; endless rope ; endless chain ; calculations concerning inclines, sizes of haulage engines, ropes, etc. ; signalling ; capping of haulage ropes.

*Surface arrangements.*—Boilers, Cornish, Lancashire, and water-tube types ; boiler fittings, injectors, and steam-pipes, etc. ; boiler explosions, incrustation, corrosion, and priming ; calculations on boilers ; Heap steads : arrangement of roads around pit bank ; simple screening and sizing.

*Transmission of power* by steam, compressed air, and electricity ; discussing the relative merits of each system.

*Coke.*—Its production and composition ; different types of ovens ; recovery of bye-products.

Table No. 6.

## DEPARTMENT OF MINES IN INDIA.

*Regulations made by the Board of Examiners under Rule 30 of the rules applying to coal-mines made under Section 20 of the Indian Mines Act, 1901, for the conduct of examinations for manager's certificates of competency.*

- (1) No member of the Board of Examiners shall act as a local examiner, except in emergent cases.
- (2) When possible one or more members of the Board of Examiners shall attend every examination on at least one of the days.
- (3) So far as is practicable, the local examiners shall be:—
  - (a) An Inspector of Mines, who shall be Secretary to the local examiners.
  - (b) Two Mining Engineers or Colliery Managers who must be the holders of first class certificates. Provided that a Mining Professor may be appointed instead of one of the Mining Engineers or Managers.
- (4) The remuneration of each local examiner shall be ₹150 for each examination, and a capitation fee of ₹2 for each first class candidate and ₹1 for each second class candidate examined, and travelling expenses and halting allowances on the first class scale under Civil Service Regulations ; but an Inspector of Mines, acting as a local examiner, shall not be entitled to any fee or remuneration whatsoever, beyond the travelling expenses and halting allowances due to him in his official capacity.
- (5) The subjects for examination shall be:—
  - (a) *Arithmetic and handwriting.*
  - (b) *Practical and theoretical coal-mining*, including surface and underground arrangements, sinking, timbering, ventilation, gases met with in coal mines, a knowledge of plans, surveying and levelling, and of the various instruments used in mining. Questions may also be asked upon geology, sanitation, hydraulics, explosives, safety lamps and similar subjects. The candidates may also be required to show how to arrange the ventilation and haulage of a mine on a given plan.
  - (c) *Practical mechanics*, including steam, steam-engines, steam-boilers, pumps and strength of materials ; and questions may be asked upon electricity and compressed air as applied to coal mining.
  - (d) *The Indian Mines Act, 1901*, and rules made under the Act.
- (6) The examinations shall be both written and oral, and the subjects and conditions shall be the same for candidates for both classes of certificates ; but the examination questions shall be made suitable for each class of certificate.

APPENDIX III—*contd.*Table No. 6—*concl'd.*

(7) The following shall be the maximum number of marks given for each subject :—

SUBJECT.	FIRST CLASS.			SECOND CLASS.		
	Papers.	Viva voce.	Total.	Papers.	Viva voce.	Total.
(a) Arithmetic and handwriting . . . . .	50	...	50	50	...	50
(b) Mining . . . . .	160	60	220	140	80	220
(c) Mechanics . . . . .	110	40	150	100	50	150
(d) Indian Mines Act . . . . .	60	20	80	50	30	80
TOTAL . . . . .	380	120	500	340	160	500

(8) No candidate who fails to obtain 66 per cent. of the total number of marks, or 33 per cent. in either of the subjects of mining or mechanics, shall be passed by the examiners, and if a candidate fails to obtain 33 per cent. of the marks given for either of the subjects of Arithmetic and Handwriting or the Indian Mines Act, any marks he may have obtained in such subjects shall not be included when the total is determined.

(9) Before each examination each candidate shall declare whether he presents himself for a first or second class certificate. No candidate for a second class certificate shall be eligible at that examination for a first class certificate, but a candidate for a first class certificate, who does not reach the necessary standard, may, nevertheless, at the discretion of the local examiners, be recommended to the Board of Examiners for a second class certificate, if, in their opinion, he has done sufficiently well to deserve it.

(10) The Secretary to the local examiners shall report, by registered post, the result of the examination, giving the number of marks obtained by each candidate in each subject, to the President of the Board of Examiners within one month of the close of the examination.

(11) The questions which the local examiners intend to put in the examination papers shall be submitted in draft to the Board of Examiners, for approval, at least six weeks before the date of the examination.

(12) At least one examination shall be held annually in the Bengal coalfields; and in other parts of India examinations will be held whenever, in the opinion of the Board of Examiners the number of candidates in a coal-mining centre justifies the holding of an examination.

APPENDIX III—*contd.*

Table No. 7.

## List of holders of certificates as Managers of Coal Mines in British India.

(a) Certificates granted to holders of English certificates of competency.

## FIRST CLASS.

NAME.	No. of Indian certificate.	Date of Indian certificate.	No. of English certificate.	Date of English certificate.
Murdoch, Adam . . . . .	63	21st January 1907 . . . . .	2792	12th June 1906.
Martin, William Marshall . . . . .	64	27th March 1907 . . . . .	2237	16th June 1903.
Ward, Alex. Houstonne . . . . .	65	Ditto . . . . .	258	11th July 1890.
Murray, Thomas Chapman . . . . .	66	Ditto . . . . .	2793	12th June 1906.
Piggford, Thomas Charles . . . . .	67	Ditto . . . . .	1425	25th July 1898.
Combey, William . . . . .	68	25th April 1907 . . . . .	2564	22nd February 1905.
Heron, Robert . . . . .	69	Ditto . . . . .	2884	31st December 1906.
Ward, Percie Overton . . . . .	70	Ditto . . . . .	2033	26th May 1902.
Watson, Claude Leslie . . . . .	71	6th May 1907 . . . . .	1666	23rd February 1900.
Stewart, John H. . . . .	72	27th March 1907 . . . . .	640	8th June 1893.
Wardlaw, John B. . . . .	73	3rd July 1907 . . . . .	2537	29th December 1904.
Chapman, Joseph . . . . .	74	Ditto . . . . .	2518	Ditto.
Somerville, Lawrence Reid . . . . .	75	12th August 1907 . . . . .	2655	5th June 1905.
Mackay, Angus . . . . .	76	Ditto . . . . .	2641	Ditto.
Pitt, George Norman Ackroyd . . . . .	77	Ditto . . . . .	1556	30th August 1899.
Lawrie, William . . . . .	78	Ditto . . . . .	2887	31st December 1906.
Kirk, Stewart . . . . .	79	Ditto . . . . .	2338	13th January 1904.
Thomas, Josiah . . . . .	80	30th August 1907 . . . . .	2395	30th May 1904.
Davies, Richard Stanley . . . . .	81	Ditto . . . . .	2107	22nd September 1902.
Oates, Robert J. W. . . . .	82	Ditto . . . . .	134	28th March 1889.
Emmerson, George . . . . .	83	Ditto . . . . .	2278	12th September 1903.
Knox, John . . . . .	84	Ditto . . . . .	1871	19th June 1901.
Marshall, John Joseph . . . . .	85	7th November 1907 . . . . .	2317	8th January 1904.
Jardine, Walter . . . . .	86	Ditto . . . . .	2785	12th June 1906.
Darby, Alexander Whyte . . . . .	87	Ditto . . . . .	2986	14th June 1907.

## SECOND CLASS.

Felton, Samuel . . . . .	8	3rd July 1907 . . . . .	5154	13th May 1904.
Sutton, Georges . . . . .	9	Ditto . . . . .	2366	23rd January 1895.
Fellows, Alfred Edward . . . . .	10	12th August 1907 . . . . .	4484	9th May 1902.

APPENDIX III—*contd.*Table No. 7—*contd.*List of holders of certificates as Managers of Coal Mines in British India—*contd.*

(b) Certificates of service.

## FIRST CLASS.

NAME.	No. of certificate.	Date of certificate.	REMARKS.
Panchan, Narayan . . . . .	101	8th January 1907.	
Dwane, Francis Cecil . . . . .	102	Ditto.	
Marwari, Ram Chandra . . . . .	103	15th January 1907.	
Mukerji, Charu Chandra . . . . .	104	Ditto.	
Biswas, Purna Chandra . . . . .	105	Ditto.	
Dutt, Sourindra Nath . . . . .	106	Ditto.	
Walji, Lira . . . . .	107	Ditto.	
Nathu, Sheth Haridas . . . . .	108	Ditto.	
Chandra, Ram Ram . . . . .	109	Ditto.	
Bunarjee, Jogo Bundhoo . . . . .	110	22nd January 1907.	
Mukerjee, Bunwari Lal . . . . .	111	Ditto.	
Chuckerbutty, Rajoni Prokash . . . . .	112	Ditto.	
Chowdhuri, Neelmoni . . . . .	113	Ditto.	
Banerjee, Harihor . . . . .	114	Ditto.	
Ghosh, Anantá Lall . . . . .	115	Ditto.	
Maltby, Francis Blough . . . . .	116	30th January 1907.	
Wood, Arthur Whiffen . . . . .	117	Ditto.	
Lane, Arthur . . . . .	118	27th March 1907.	
Akhai, Mulji . . . . .	119	25th April 1907.	
Mukerji, Harish Chandra . . . . .	120	6th May 1907.	
Read, Harry Crible . . . . .	121	Ditto.	
Martin, Henry Aloysius . . . . .	122	12th August 1907.	
Mukherjee, Lal Chand . . . . .	123	Ditto.	
Oswald, Thomas Clark . . . . .	124	26th November 1907.	

## SECOND CLASS.

Relia, Meghji Bhimji . . . . .	85	7th January 1907.	
Pal, Basanta Kumar . . . . .	86	8th January 1907.	
Biddle, Charles John . . . . .	87	Ditto.	
Dutt, Sarat Chander . . . . .	88	Ditto.	
Ambler, Taaffe Charles . . . . .	89	Ditto.	
Lardner, Frederick Charles . . . . .	90	Ditto.	
Lardner, John Albert . . . . .	91	Ditto.	
Lardner, James Adolphus (Junior) . . . . .	92	Ditto.	
Stacey, George . . . . .	93	Ditto.	



APPENDIX III—*contd.*Table No. 7—*contd.*List of holders of certificates as Managers of Coal Mines in British India—*contd.*(b) Certificates of service—*contd.*

## SECOND CLASS.

NAME.	No. of certificate.	Date of certificate.	REMARKS.
Dash, Botto Kristo . . . . .	4	15th January 1907.	
Mitchel-Jones, Arthur Hood . . . . .	95	Ditto.	
Dass, Natabar . . . . .	96	Ditto.	
Howji, Doolabhji . . . . .	97	Ditto.	
Banerjee, Tripura Charan . . . . .	98	Ditto.	
Mawjee, Bira . . . . .	99	Ditto.	
Bosu, Sachindra Nath . . . . .	100	Ditto.	
Chakravatty, Indra Narayan . . . . .	101	Ditto.	
Panja, Kali Prasanna . . . . .	102	22nd January 1907.	
Mukerjee, Beni Madhub . . . . .	103	Ditto.	
Chuckerbutty, Nil Madhub . . . . .	104	Ditto.	
Topadar, Pratap Chander . . . . .	105	Ditto.	
Roy, Durga Dass . . . . .	106	Ditto.	
Bose, Annada Prashad . . . . .	107	Ditto.	
Ghose, Jasada Dulal . . . . .	108	Ditto.	
Chatterjee, Rishi Kesh . . . . .	109	Ditto.	
Hazra, Pramatha Nath . . . . .	110	Ditto.	
Bhattacharjee, Kanti Chandra . . . . .	111	Ditto.	
Chatterjee, Kedar Nath . . . . .	112	Ditto.	
Chatterjee, Radhakrishna . . . . .	113	30th January 1907.	
Whiffen, Walter Osborne . . . . .	114	Ditto.	
Ghosal, Saroda Prasad . . . . .	115	Ditto.	
Mukerjee, Girindra Narayan . . . . .	116	Ditto.	
Roy, Sambhu Nath . . . . .	117	Ditto.	
Sen, Preo Nath . . . . .	118	Ditto.	
Ghosh, Preo Nath . . . . .	119	Ditto.	
Sarkar, Surendra Nath . . . . .	120	31st January 1907.	
Gokal, Mawji . . . . .	121	Ditto.	
Mukherjee, Rajoni Kanto . . . . .	122	30th January 1907.	
Mukherjee, Promotho Nath . . . . .	123	Ditto.	
Roy, Gosto Behary . . . . .	124	27th March 1907.	
Roy, Prasanna Kumar . . . . .	125	Ditto.	
Rai, Sasi Bhushan . . . . .	126	25th April 1907.	
Dossa, Gangji . . . . .	127	Ditto.	

APPENDIX III—*contd.*Table No. 7—*contd.*List of holders of certificates as Managers of Coal Mines in British India—*contd.*(b) Certificates of service—*concl'd.*

## SECOND CLASS.

NAME.	No. of certificate.	Date of certificate.	REMARKS.
Tah, Sarat Chandra . . . . .	128	25th April 1907.	
Ghosal, Hari Prasanna . . . . .	129	6th May 1907.	
Williams, James Emmanuel . . . . .	130	Ditto.	
Din, Ahmed . . . . .	131	Ditto.	
Biddle, Leonard Alexander . . . . .	132	Ditto.	
Cooper, Albert James . . . . .	133	Ditto.	
Hancox, Samuel . . . . .	134	Ditto.	
Wright, George . . . . .	135	Ditto.	
Robertson, Ivanhoe George Charley . . . . .	136	Ditto.	
Amir Ali . . . . .	137	Ditto.	
Singh, Karam . . . . .	138	Ditto.	
Barnes, William . . . . .	139	Ditto.	
Jerome, William Augustus . . . . .	140	Ditto.	
Rai, Hokoomat . . . . .	141	Ditto.	
Woodall, Samuel . . . . .	142	Ditto.	
Hughes, William . . . . .	143	Ditto.	
Allah Ditta . . . . .	144	Ditto.	
Loving, Osmond Davis . . . . .	145	Ditto.	
Smith, Duncan Walter Charles . . . . .	146	Ditto.	
Plant, Joseph . . . . .	147	Ditto.	
Simpson, Stanley Nevil . . . . .	148	Ditto.	
Das, Lakhmi . . . . .	149	Ditto.	
Mohamed Hassan . . . . .	150	Ditto.	
Mitra, Annoda Prosad . . . . .	151	3rd July 1907.	
Bose, Kumude Nath . . . . .	152	12th August 1907.	
Ghose, Fanindra Nath . . . . .	153	Ditto.	
Mukerjee, Harish Chandra . . . . .	154	Ditto.	
Mukerjee, Poorendra Nath . . . . .	155	Ditto.	
Chand, Malik Mehar . . . . .	156	Ditto.	
Roy, Rohini Kumar . . . . .	157	Ditto.	
Griffiths, James . . . . .	158	30th August 1907.	
Roya, Mohendra Narayan . . . . .	159	Ditto.	
Haloo, Ramji . . . . .	160	7th November 1907.	

APPENDIX III—*contd.*Table No. 7—*concl'd.*List of holders of certificates as Managers of Coal Mines in British India—*concl'd.*

(c) Certificates of competency.

## FIRST CLASS.

NAME.	No. of certificate.	Date of certificate.	REMARKS.
Pennefather, Alfred Fredrick . . . . .	1	27th March 1907.	
Scott, George Duncan . . . . .	2	Ditto.	
Bapty, George Frederic William . . . . .	3	Ditto.	
Warde, Ivan Alexis Townsend . . . . .	4	Ditto.	
Calland, Richard . . . . .	5	Ditto.	
Wilkinson, John Bertram . . . . .	6	Ditto.	
Murphy, John W. . . . .	7	Ditto.	
Cooper, Albert James . . . . .	8	Ditto.	
Loughran, Herbert W. . . . .	9	Ditto.	
Hodgkinson, Thomas Gerald . . . . .	10	Ditto.	
Topham, William Henry . . . . .	11	Ditto.	
Bennertz, Theodore Hubert . . . . .	12	Ditto.	
Roberts, Frank Anthony . . . . .	13	Ditto.	
Bull, Alfred Collins . . . . .	14	Ditto.	
Sam, Eleazer Gregory Seth . . . . .	15	Ditto.	
Thornton, John William . . . . .	16	Ditto.	
Pal, Basanto Kumar . . . . .	17	Ditto.	
Blair, David . . . . .	18	Ditto.	

## SECOND CLASS.

Adamson, Harry . . . . .	1	27th March 1907.	
D'Souza, Joseph Donald . . . . .	2	Ditto.	
Oliver, James Arthur . . . . .	3	Ditto.	
Frizoni, Raphael Luke . . . . .	4	Ditto.	
Cooper, Frank . . . . .	5	Ditto.	
Rooke, Reginald George . . . . .	6	Ditto.	
Myers, Harold Ernest . . . . .	7	Ditto.	
Forbes, Charles Alexander . . . . .	8	Ditto.	
Bennett, William Henry . . . . .	9	Ditto.	
Spencer, Alfred James . . . . .	10	Ditto.	

APPENDIX III—*contd.*

Table No. 8.

List of Universities and Colleges in England and India approved by the Governor-General in Council for the purposes of Rules 32 and 33 of the Indian Mines Act, 1901.

Name of Institution and Degree or Diploma.	Date.
University of Birmingham in respect of its Degree of B.Sc. in Mining and Diploma in Mining.	11th June 1904.
University College of Bristol in respect of its Senior Diploma in Mining.	16th September 1904.
University of Cambridge in respect of its Diploma in Mining Engineering.	6th June 1905.
University of Durham in respect of its Degree of B.Sc. in Mining	21st December 1903.
Durham College of Science in respect of its Diploma in Mining	29th June 1904.
University of Glasgow in respect of its Degree and Diploma in Mining.	28th September 1904.
Glasgow and West of Scotland Technical College in respect of its Diploma in Mining.	28th June 1904.
University of Leeds in respect of its Degree of B.Sc. in Mining and Diploma in Mining.	21st November 1904.
University of London in respect of its B.Sc. Degree in Mining for Internal Students, subject to the Degree being endorsed by the University with a certificate of four months' practical experience in a mine.	9th June 1905.
Royal School of Mines in respect of its Associateship in Mining	24th March 1904.
University of Oxford in respect of its Diploma B. (for Colliery Engineers) in Scientific Engineering and Mining Subjects.	11th February 1905.
University College of Sheffield in respect of its Diploma in Mining.	15th July 1904.
University College of South Wales and Monmouthshire in respect of its Diploma in Mining.	19th April 1904.
Wigan Mining and Technical College in respect of its Diploma in Mining.	26th August 1904.
Civil Engineering College, Sibpur, in respect of its Diploma in Mining.	22nd February 1907.

## APPENDIX III—contd.

Table No. 9.

## List of Inspection Circles.

No. 1 Circle.	No. 2 Circle.	No. 3 Circle.
<p>(a) All mines in the districts of Palamanu, Gaya, Monghyr, Singhbhum, Darjeeling, Ranchi and Sambalpur, and all mines other than coal mines in the district of Hazaribagh, and all mines in the district of Manbhum, which are situated west of a line drawn from Adra Junction at mile 175 of the Bengal-Nagpur Railway to Gobindpur at mile 169 on the Grand Trunk Road and continued across the district in each direction.</p>	<p>(a) All mines in the districts of Burdwan and Bankura to the west of a line drawn from mile 131 on the East Indian Railway main line near Asansol to mile 141 on the Ondal loop near Gaurangdi, and continued across the districts in each direction; and all mines in the district of Manbhum east of a line drawn from Adra Junction at mile 175 on the Bengal-Nagpur Railway to Gobindpur at mile 169 on the Grand Trunk Road, and continued in each direction across the district, and all coal mines in the district of Hazaribagh.</p>	<p>(a) All mines in the districts of Burdwan and Bankura to the east of a line drawn from mile 131 on the East Indian Railway main line near Asansol to mile 141 on the Ondal loop near Gaurangdi, and continued across the districts in each direction, and all mines in the districts of the Sonthal Parganas and Birbhum.</p>
<p>(b) All mines in Assam.</p>	<p>(b) All mines in Baluchistan.</p>	<p>(b) All mines in the Presidency of Bombay.</p>
<p>(c) All mines in Burma.</p>	<p>(c) All mines in the United Provinces.</p>	<p>(c) All mines in the Central Provinces.</p>
	<p>(d) All mines in the Panjab.</p>	<p>(e) All mines in the Presidency of Madras.</p>
	<p>(e) All mines in Ajmer-Merwara</p>	

APPENDIX III—*contd.*

## Table No. 10.

No. 10724—10740-246.

GOVERNMENT OF INDIA.

## DEPARTMENT OF COMMERCE AND INDUSTRY.

## GEOLOGY AND MINERALS.

## RESOLUTION.

*Dated Calcutta, the 18th December 1907.*

THE following Royal Warrant is published for general information :—

WHITEHALL, *October 17, 1907.*

The King has been pleased to issue a Warrant under His Majesty's Royal Sign Manual to the following effect :—

Edward, R. & I.

Edward the Seventh, by the Grace of God, of the United Kingdom of Great Britain and Ireland and of the British Dominions beyond the Seas, King, Defender of the Faith, Emperor of India, to all to whom these Presents shall come, Greeting!

Whereas We are desirous of distinguishing by some mark of Our Royal Favour the many heroic acts performed by Miners and Quarrymen and others who endanger their own lives in saving or endeavouring to save the lives of others from perils in Mines or Quarries within Our Dominions and in territories under Our Protection or Jurisdiction, We do by these presents for Us, Our Heirs, and Successors institute and create a new Medal to be awarded for such acts of gallantry.

*Firstly.*—It is ordained that the Medal shall be of two classes which shall be designated and styled "The Edward Medal of the First Class" and "The Edward Medal of the Second Class."

*Secondly.*—It is ordained that the Edward Medal of the First Class shall consist of a circular Medal of Silver with Our Effigy on the obverse, and on the reverse a design representing the rescue of a miner with the inscription "for courage."

*Thirdly.*—It is ordained that the Edward Medal of the Second Class shall consist of a Circular Medal of Bronze of a similar design.

*Fourthly.*—It is ordained that the Medals shall only be awarded to those of Our Faithful Subjects and others who, in saving or endeavouring to save the lives of others from perils in Mines and Quarries within Our Dominions and in territories under Our Protection or Jurisdiction, have endangered their own lives, and that such award shall be made only on a recommendation to Us by Our Principal Secretary of State for the Home Department.

*Fifthly.*—It is ordained that the names of those upon whom We may be pleased to confer either of these Decorations shall be published in the *London Gazette*, and that a Register thereof shall be kept in the Office of Our Principal Secretary of State for the Home Department.

*Sixthly.*—It is ordained that each Medal shall be suspended from the left breast and the riband, of an inch and three-eighths in width, shall be dark blue with a narrow yellow stripe on either side: Provided that when the Medal is awarded to a woman it shall be worn on the left shoulder, suspended from a riband of the same width and colour, fashioned into a bow.

APPENDIX III—*concl'd.*Table No. 10—*concl'd.*

*Seventhly.*—It is ordained that any act of gallantry which is worthy of recognition by the award of the Edward Medal, but is performed by one upon whom the Decoration has already been conferred may, on a recommendation to Us by Our Principal Secretary of State for the Home Department, be recorded by a Bar attached to the riband by which the Medal is suspended; and for every such additional act an additional Bar may be added.

*Eighthly.*—In order to make such provision as shall effectually preserve pure these most honourable Decorations it is ordained that if any person, on whom either of such Decorations is conferred be guilty of any crime or disgraceful conduct which, in Our judgment disqualifies him for the same, his name shall, by an especial Warrant under Our Royal Sign Manual, be forthwith erased from the Register of those upon whom the said Decoration shall have been conferred and his Medal shall be forfeited. And every person to whom the said medal is given shall before receiving the same, enter into an agreement to return the same, if his name shall be so erased as aforesaid under this regulation. It is hereby further declared that We, Our Heirs and Successors, shall be the sole judges of the circumstances demanding such forfeiture. Moreover, We shall at all times have power to regrant a Medal to any person whose Medal may at any time have been forfeited.

Given at Our Court at *Saint James's*, the thirteenth day of *July*, one thousand nine hundred and seven, in the seventh year of Our Reign.

By His Majesty's Command,

H. J. GLADSTONE.

ORDERED that the paper be published in the Supplement to the *Gazette of India*, and that copies be forwarded to the Local Governments and Administrations noted in the margin, to the Finance and Foreign Departments, the Railway Board, the Chief Inspector of Mines in India and the Indian Mining Association, for information.

The Secretary to the Government of Madras, Revenue Department.	
" " " " " Bombay " "	
" Chief Secretary to the Government of Bengal.	
" " " " " the United Provinces.	
" " " " " the Panjab.	
" Revenue Secretary " " Burma.	
" Chief Secretary " " Eastern Bengal and Assam.	
" Honourable the Chief Commissioner, Central Provinces.	
" Honourable the Resident at Mysore and Chief Commissioner of Coorg.	
" Chief Commissioner of Ajmer-Merwara.	
" Honourable the Agent to the Governor-General and Chief Commissioner, North-West Frontier Province.	
" Agent to the Governor-General in Baluchistan.	

W. L. HARVEY,

*Secretary to the Government of India.*

## APPENDIX IV.

## ADDITIONS TO THE ACT.

No. 3952—36.

GOVERNMENT OF INDIA.

DEPARTMENT OF COMMERCE AND INDUSTRY.

GEOLOGY AND MINERALS.

NOTIFICATION.

*Simla, the 10th May 1907.*

In exercise of the power conferred by section 20 of the Indian Mines Act, 1901 (VIII of 1901), the Governor General in Council is pleased to make the following rule for application to all mines in British India in supersession of the Rule published with the Notification of the Government of India in the Department of Revenue and Agriculture, No. 3842—36-15, dated the 8th December 1904.

## RULE.

*Form of Annual Return.*

The following form shall be correctly filled up in duplicate by the managing agent, or if there is no managing agent, by the owner, agent or manager of a Mine, and one copy forwarded to the Chief Inspector of Mines and the other to the District Magistrate not later than the 1st February in each year.

## I.

*Year ending on the 31st December 190 .*

1. Name of Mine.	} Owner. Managing Agent. Agent. Manager. Assistant or Under Manager.
2. Date of opening.	
3. Date of closing.	
4. Nature of moving power.	
5. Situation of Mine. } District. Province.	
6. Name and postal address of	





## APPENDIX IV—contd.

## IV.

*Accidents and inspections.*

No. of SEPARATE ACCIDENTS REPORTED DURING THE YEAR.			No. of PERSONS.		No. of prosecutions under the Act, with the section under which the prosecution was instituted.	No. of persons convicted under the Act, with the sections under which the convictions were obtained.	No. of INSPECTIONS.		
Fatal.	Serious.	Total.	Killed.	Seriously injured.			By District Officers.	By Mines Inspector.	Total.
1	2	3	4	5	6	7	8	9	10

\* It is optional to supply the information required by columns 8, 9 and 10. They will be filled in by the Mines Department when left blank by Mine Agents or Owners.

Signature of Managing  
Agent, Owner, Agent,  
or Manager. }

190

## NOTES AND INSTRUCTIONS.

(1) Failure to forward a correct return to the Chief Inspector of Mines not later than the 1st February in each year, will render the managing agent, owner, agent, or manager liable on conviction to a penalty which may extend to Rs. 500.

(2) It will greatly facilitate the preparation of the statistics if the return is despatched as soon as possible at the close of the year.

(i) The output should be given—

(a) in troy ounces in the case of gold ;

(b) in carats in the case of gem-stones ;

APPENDIX IV—*contd.*

- (c) in cwts.,—or in cwts. and lbs. where the circumstances require greater particularisation in order to give an accurate estimate of small outputs,—in the case of alum, amber, asbestos, chromite, corundum (not being gem corundum), graphite, jadestone, mica, steatite and tin ore; and
- (d) in tons, in the case of clays, coal, coke, iron-ore, limestone, magnesite, manganese-ore, other unspecified metalliferous ores, salt and slate.
- (4) The total amount of mineral raised during the year must be given including, in the case of coal mines, the colliery consumption and the coal made into coke.
- (5) The value of the mineral given should be based on the actual or estimated wholesale price of the mineral at the pit's mouth. In the case of coal sold into wagons at the colliery the cost of loading should be deducted from the selling price.
- (6) In the case of mica mines a "plot" is to be regarded as a "pit" for the purposes of statements Nos. II and III and the figures to be entered in columns 4 and 5 of statement No. III relate to the quantity and value of marketable mica consigned.
- (7) The average number of persons employed daily should be obtained by dividing the aggregate number of daily attendances (permanent and temporary) by the number of working days.
- (8) Every person of or above the age of twelve years should be entered as an adult.

B. ROBERTSON,

*Offg. Secretary to the Government of India.*

No. 3953—3966-36

Copy forwarded in continuation of letter No. 8497—8507-92-Geology and Minerals, dated 26th October 1906, to—

The Secretary to the Government of Madras, Revenue Department,  
 The Secretary to the Government of Bombay, Revenue Department,  
 The Chief Secretary to the Government of Bengal,  
 The Chief Secretary to the Government of the United Provinces,  
 The Chief Secretary to the Government of the Panjab,  
 The Revenue Secretary to the Government of Burma,  
 The Chief Secretary to the Government of Eastern Bengal and Assam,  
 The Hon'ble the Chief Commissioner of the Central Provinces,  
 The Hon'ble the Resident in Mysore and the Chief Commissioner of Coorg,  
 The Chief Commissioner of Ajmer-Merwara,  
 The Hon'ble the Agent to the Governor General and Chief Commissioner, North-West Frontier Province.

A copy is forwarded to the Foreign Department, for information and communication to the Agent to the Governor General in Baluchistan in continuation of the endorsement from this Department, No. 8508—92, dated the 26th October 1906.

A copy is also forwarded to the <sup>Chief Inspector of Mines in India</sup> Director General of Commercial Intelligence for information.

By order,

M. M. S. GUBBAY,

*Offg. Under Secretary to the Government of India*

APPENDIX IV—*contd.*

No. 7861—36.

GOVERNMENT OF INDIA.

## DEPARTMENT OF COMMERCE AND INDUSTRY.

## GEOLOGY AND MINERALS.

## NOTIFICATION.

*Simla, the 19th September 1907.*

In exercise of the power conferred by section 20 of the Indian Mines Act, 1901 (VIII of 1901), the Governor General in Council is pleased to make, in supersession of the rules published with Notifications Nos. 3352-45-32, and 3938-35, dated the 27th December 1901, and 23rd May 1906, respectively, the following rules for application to all mines in British India :—

1.—When an accident occurs in or about a mine causing loss of life or serious\* bodily injury, or when an accidental explosion occurs in a mine, the owner, agent or manager of the mine shall give notice of the accident to the Chief Inspector of Mines by despatching to the Magistrate of the district or to the Sub-divisional Magistrate, for transmission to the Chief Inspector of Mines, a notice in the form set forth below, within 24 hours of the occurrence of such accident :—

No.

## NOTICE OF ACCIDENT.

*Indian Mines Act, 1901.*

From—

To—The Chief Inspector of Mines, through the <sup>District</sup> <sub>Sub-divisional</sub> Magistrate of*Dated**190*

SIR,

I have the honour to furnish the following particulars of a <sup>fatal</sup> <sub>serious</sub> <sup>accident</sup> <sub>an accidental explosion</sub> which has occurred at the Mine :—

Situation of the Mine.	
1. (Village, Station, District, Province) .	
2. Mineral worked . . . . .	
3. Name and postal address of owner .	

\* NOTE.—An injury is said to be serious which involves or will in all probability involve the loss of, or permanent injury to any limb, or to the sight or hearing, or fracture of any limb, or enforced absence from work for 20 days, or which is declared by any medical officer to be serious. (Circular No. 42-70-6, dated 4th September 1902, of the Government of India in the Department of Revenue and Agriculture.)

APPENDIX IV—*contd.*

4. Name and sex of persons.		Age.	Occupation.
Killed.	Injured.		
5. Date and hour of accident . . . . .			
6. Place of accident . . . . .			
7. Cause and description of accident . . . . .			
8. Classification of accident ( <i>see</i> rule 2) . . . . .			
9. Nature of injury, and if fatal, cause of death . . . . .			

I have the honour to be,

SIR,

Your most obedient servant,

Owner,

Agent,

Manager.

2. For the purposes of entry No. 8 in the form of notice prescribed by rule 1, one or other of the following terms shall be used, namely :—

- (1) Explosions of fire-damp; (2) falls of roof; (3) falls of side; (4) in shafts (overwinding); (5) in shafts (ropes and chains breaking); (6) in shafts (whilst ascending or descending by machinery); (7) in shafts (falling into the shaft from the surface); (8) in shafts (falling from part of the way down); (9) in shafts (things falling from the surface); (10) in shafts (things falling from part of the way down); (11) in shafts (miscellaneous); (12) suffocation by gases; (13) by explosives; (14) irruptions of water or falling into water; (15) haulage; (16) by underground machinery; (17) sundries underground; (18) by surface machinery; (19) surface boilers or pipes bursting; (20) on surface railways or tramways belonging to the mine; (21) miscellaneous on surface.

3. When any person dies from the result of an injury already reported as serious under rule 1, the owner, agent or manager of the mine shall send notice, within 24 hours of his being informed of the death, to the Chief Inspector of Mines, through the Magistrate of the district or the Sub-divisional Magistrate.

4. When a mine, seam or vein has been abandoned for more than one month, or the working thereof discontinued for more than two months, the owner of the mine, seam or vein shall, within seven days after the expiry of such period, send notice to the Chief Inspector of Mines specifying the name and situation of the mine, the name of the owner and the date and cause of abandonment or discontinuance.

5. When a mine, seam or vein is re-opened after abandonment or discontinuance, the owner shall send notice to the Chief Inspector of Mines within one month after the date of re-opening.

6. When a change occurs in the name of a mine, or of an owner or agent of a mine notice of the change shall be sent by the owner, agent or manager, to the Chief Inspector of Mines within one month after such change.

B. ROBERTSON,

*Offg. Secretary to the Government of India,*

APPENDIX IV—*concl'd.*

Nos. 7862—7877-36.

## Copy forwarded to—

The Secretary to the Government of Madras, Revenue Department.  
 The Secretary to the Government of Bombay, Revenue Department.  
 The Chief Secretary to the Government of Bengal.  
 The Chief Secretary to the Government of the Panjab.  
 The Revenue Secretary to the Government of Burma.  
 The Chief Secretary to the Government of Eastern Bengal and Assam.  
 The Honourable the Chief Commissioner, Central Provinces.  
 The Honourable the Resident and Chief Commissioner of Coorg.  
 The Chief Commissioner of Ajmer-Merwara.  
 The Honourable the Agent to the Governor-General and Chief Commissioner, North-West Frontier Province.  
 The Honourable the Agent to the Governor-General in Baluchistan.

A copy is forwarded to the Foreign Department, for information.

A copy is also forwarded to the Finance Department,  
Chief Inspector of Mines,  
Railway Board, for information.  
 Secretary, Indian Mining Association.

By order, etc.,

M. M. S. GUBBAY,

*Offg. Under Secretary to the Government of India.*

No. 10014—100.

GOVERNMENT OF INDIA.

DEPARTMENT OF COMMERCE AND INDUSTRY.

GEOLOGY AND MINERALS.

## NOTIFICATION.

*Calcutta, the 4th December 1907.*

In exercise of the power conferred by section 20 (2) (v) of the Indian Mines Act, 1901 (VIII of 1901), the Governor General in Council is pleased to make the following rules for application to all mines in British India :—

*Rules.*

(I) If the owner, agent or manager of any mine intends to extend any mining operation under his control at or to any point within fifty yards of any railway subject to the provisions of the Indian Railways Act, 1890, he shall give the Chief Inspector of Mines and the Railway Administration concerned notice in writing of his intention so to do 60 days before the commencement of such extension.

APPENDIX IV—*contd.*

(II) If the operations in respect of which notice is given under rule I are not commenced within twelve months from the expiry of the period of 60 days therein referred to, the notice shall be held to have expired and a fresh notice shall be given by the owner, agent or manager of the mine under rule I.

(III) The notice to be given under rule I shall specify the position of the working of the mine in relation to the railway in question, the manner in which it is proposed to carry out the intended new operations, the limits to which it is proposed to carry the said operations, and whether the operations are actually in progress,—and shall include a plan showing the existing and the intended mining operations in so far as they affect the railway in question.

W. L. HARVEY,

*Secretary to the Government of India.*

Nos. 10015—10031-100.

\* The Governments of Madras, Bombay and Burma, Revenue Department.  
 The Governments of Bengal, the United Provinces, the Panjab and Eastern Bengal and Assam.  
 The Hon'ble the Chief Commissioner, Central Provinces.  
 " " Ajuer-Merwara.  
 " the Resident in Mysore and Chief Commissioner, Coorg.  
 " the Agent to the Governor-General and Chief Commissioner, North-West Frontier Province.  
 The Hon'ble the Agent to the Governor-General in Baluchistan.

A copy is forwarded to the Local Governments and Administrations, noted in the margin,\* and to the Foreign Department for information.

A copy is also forwarded to the Finance Department.  
Chief Inspector of Mines in India.  
Railway Board.  
Secretary, Indian Mining Association.

By order, etc.,

M. M. S. GUBBAY,

*Under-Secretary to the Government of India.*

**APPENDIX V.**

**List of Coal Mines worked under the Indian Mines Act, 1901, in British India.**

Serial number.	Name of Owner or Company arranged in alphabetical order, and postal address.	Name of Mine and number of separate Mines as defined by Rule 27.	Situation of Mine.	Name of Manager, and No. and Class of his Certificate, Authorization or Permit.	Name of Assistant Manager and No. and Class of his Certificate.	Name and address of Managing Agent.	Date of establishment of Special Rules.	PERSONS EMPLOYED		REMARKS.
								Below ground.	Above ground.	
<b>Bengal—Jharia Coalfield (No. 1 Inspection Circle).</b>										
1	Agabeg Bios. (See column No. 7).	Jogta (4 mines).	Jogta, Sijua, E. I. R.	Wilfred Hullock, <i>1st class service No. 45. Authorization, No. 189, to act as manager of more than one mine.</i>	...	...	...	534	195	
2	Agarwala, Jagannath Ramjus Jharia P. O.	Khas Jharia	Khas Jharia, Jharia, E. I. R.	O. S. Lethorn, <i>2nd class service, No. 47.</i>	...	...	...	38	33	
3	Agarwala, Lachmi Narayan Jharia P. O.	Godhur	Godhur, Kusunda, E. I. R.	...	...	...	...	...	...	
4	Agarwala, Ramjus Jharia P. O.	Chandrabad (2 mines).	Chandrabad, Jharia, E. I. R.	Rup Lal Agarwala, <i>Permit No. 119. Authorization, No. 182, to act as manager of more than one mine.</i>	...	...	...	...	25	
5		Futtehpur	Futtehpur, Jharia, E. I. R.	O. S. Lethorn, <i>2nd class service, No. 47.</i>	...	...	...	44	22	
6	A. dih Coal Co. Ltd. (See column No. 7).	Bhutgoria	Bhutgoria, Jharia, E. I. R.	D. Bone, <i>1st class service, No. 5. Authorization, No. 187, to act as manager of more than one mine.</i>	...	MacNeill & Co., 2, Clive Ghat Street, Calcutta, or Post Box No. 15.	...	420	195	
7	Angarpatra Colliery Co. (Virgi Akhal & others). Katrasgarh P. O.	Angarpatra	Angarpatra, Katrasgarh, E. I. R.	Purshotam Bhimji, <i>1st class service, No. 65.</i>	...	...	...	153	17	
8		Kantaphari	Kantapahari, Katrasgarh, E. I. R.		...	...	...			
9	Angarpatra (South) Coal Co. (Bejoy Krishna Banerji & Son) 22, Nayanchand Dutt Street, Calcutta.	Kantapahari	Kantapahari, Katrasgarh, E. I. R.	J. K. Chowdhuri	...	...	...	81	17	
10	Auckland Coal Co., Ltd. (See column No. 7).	Nudkhurki (East)	Nudkhurki	...	...	Lyall, Marshall & Co., 25, Mangoe Lane, Calcutta, or Post Box No. 6.	...	...	...	W. V. Hannaford, Agent
11	Bagchi, R. N. Jharia P. O.	Dobari (5 mines).	Dobari, Jharia, E. I. R.	Trivanga Chakravarty, <i>2nd class service, No. 36. Authorization, No. 186, to act as manager of more than one mine.</i>	...	...	...	60	68	



12		Bagdiggi	Bagdiggi, Jharis, E. I. R.	Keshab Chandra Sarkar, 2nd class service, No. 25.	...	...	...	...
13	Bagdiggi-Kujama Collieries, Ld. (See column No. 7).	Kujama	Kujama, Jharis, E. I. R.	Jnanendra Nath Mukherji, 1st class service, No. 91.	M. L. Laik and Banerji, 7, Swallow Lane, Calcutta.	...	...	...
14		Kujama (South)		Surendra Nath Bose				
15	Banerji & Co., Harish Chandra Katrasgarh P. O.	Chandore	Chandore, Sijus, E. I. R.	Krishna Chandra Ghosal, Permit, No. 92.	...	...	26	6
16	Banerji, Bepin Behari, Katrasgarh P. O.	Kesalpur (New)	Kesalpur, Katrasgarh, E. I. R.	Rajendra Nath Biswas, Permit, No. 128.	...	...	40	23
17	Banerji's Coal Concern, J. L. (See column No. 7).	Surataur (New)	Jharis Khas, Jharis, E. I. R.	Girendra Narayan Mukherji, 2nd class service, No. 116.	M. L. Laik and Banerji, 7, Swallow Lane, Calcutta.	...	92	21
18	Bansdeopur Coal Co. (P. H. Crest) Kusunda P. O.	Bansdeopur	Bansdeopur, Kusunda, E. I. R.	G. H. Creet, 1st class service, No. 43.	...	...	207	240
19	Bansjora Coal Co. (See column No. 7).	Bansjora (5 mines)	Bansjora, Sijus, E. I. R.	G. F. W. Bapty, 1st class competency, No. 3. Authorization, No. 163, to act as manager of more than one mine.	McLeod & Co., 81, Dalhousie Square, South, Calcutta, or Post Box No. 78.	...	132	114
20	Barakar Coal Co., Ld. (See column No. 7).	Loyabadi (10 mines)	Loyabadi, Kusunda, E. I. R.	E. S. Benierts, 1st class service, No. 21. Authorization, No. 39, to act as manager of more than one mine.	Bird & Co., 101-1, Clive Street, Calcutta, or Post Box No. 46.	...	820	640
21	Barakar (North) Coal Co. Jharis P. O.	Lodna	Lodna, Jharis, E. I. R.	Joy Krishna Mitter, 1st class service, No. 40.	...	...	410	161
22	Barari (East) Coal Co. (Tricunji Jiban Dasa), 25, Pollock Street, Calcutta.	Jinagora	Jinagora, Jharis, E. I. R.	Govardhan Dass Manishanker, 1st class service, No. 76. Authorization, No. 45, to act as manager of more than one mine.	...	...	145	16
23		Parbad	Parbad, Jharis, E. I. R.	...	...	...	24	6
24	Barwabera Coal Co., (Kheti Bhusan Mukherji) Jharis P. O.	Barwabera (New)	Barwabera	Ram Hari Chatterji	...	...	...	...
25	Beebhuna (New) Coal Co., Ld. (See column No. 7).	Bansakola (3 mines)	Bansakola, Jharis, E. I. R.	Josiah Thomas, 1st class competency, No. 80, in lieu of English certificate. Authorization, No. 120, to act as manager of more than one mine.	Balmer, Lawrie & Co., 103, Clive Street, Calcutta, or Post Box No. 4.	...	204	106

APPENDIX V—contd.

List of Coal Mines worked under the Indian Mines Act, 1901, in British India—contd.

Serial number.	Name of Owner or Company arranged in alphabetical order, and postal address.	Name of Mine and number of separate Mines as defined by Rule 27.	Situation of Mine.	Name of Manager, and No. and Class of his Certificate, Authorisation or Permit.	Name of Assistant Manager and No. and Class of his Certificate.	Name and address of Managing Agent.	Date of establishment of Special Rules.	PERSONS EMPLOYED		REMARKS.
								Below ground.	Above ground.	
<b>Bengal—Jharia Coalfield (No. 1 Inspection Circle)—contd.</b>										
25	Bengal Bhatdih Coal Co., Ltd. (See column No. 7).	Bhatdih (8 mines).	Murulidih, Katrasgarh, E. I. R.	H. M. Bull, <i>1st class service, No. 33. Authorisation, No. 59, to act as manager of more than one mine.</i>	...	Bengal Coal Co., Ltd., 5, Fairlie Place, Calcutta, or Post Box No. 117.	...	74	51	
27	Bengal (Central) Coal Co., Ltd. (See column No. 7).	Kantapabari (West)	Kantapabari, Katrasgarh, E. I. R.	Meghji Bhimji Belia	...	..	...	71	5	
28	Bengal Coal Co., Ltd., 5, Fairlie Place, Calcutta, or Post Box No. 117.	Murulidih	Murulidih, Katrasgarh, E. I. R.	H. M. Bull, <i>1st class service, No. 33. Authorisation, No. 59, to act as manager of more than one mine.</i>	...	See column No. 2.	...	404	350	
29		Puddugora	Puddugora, Katrasgarh, E. I. R.	A. M. Thaddeus, <i>1st class service, No. 7.</i>	...		...	...	...	...
30	Bengal Iron & Steel Co., Ltd. (See column No. 7).	Noonoodih	Noonoodih, Jharia, E. I. R.	J. H. Stewart, <i>1st class competency, No. 73, in lieu of English certificate.</i>	...	Martin & Co., 6 & 7, Clive Street, Calcutta, or Post Box No. 28.	...	246	109	
31	Bengal Nagpur Coal Co., Ltd. (See column No. 7).	Bhuggutdih (4 mines).	Bhuggutdih, Jharia, E. I. R.	W. O. Mitchell, <i>1st class service, No. 8. Authorisation, No. 108, to act as manager of more than one mine.</i>	...	Andrew Yule & Co., 7, Clive Row, Calcutta, or Post Box No. 150.	...	526	170	
32	Bhalgora Coal Co., Ltd. (See column No. 7).	Bhalgora	Bhalgora, Jharia, E. I. R.	J. Parker, <i>1st class competency, No. 99, in lieu of English certificate.</i>	...	Sircar, Barnard & Co., 2, New China Bazar Street, Calcutta, or Post Box No. 288.	...	502	260	R. Barnard, Superintending Engineer.
33		Simlabahal	Simlabahal, Jharia, E. I. R.	D. A. Anderson, <i>1st class competency, No. 97, in lieu of English certificate.</i>	...		...	...	...	...
34	Bhattacharji, U. C. Sijua P. O.	Pandedih	Pandedih, Sijua, E. I. R.	W. C. Bhattacharji	...	...	...	14	3	
35	Bhulanbarari Coal Co., Ltd. (See column No. 7).	Bhulanbarari (6 mines).	Bhulanbarari, Jharia, E. I. R.	J. A. Oliver, <i>1st class competency, No. 18. Authorisation, No. 23, to act as manager of more than one mine.</i>	...	F. W. Heilgers & Co., 136, Canning Street, Calcutta, or Post Box No. 185.	...	495	388	

35	Biswas, P. K. Katrasgarh P. O.	Ramkanali	Ramkanali, Katrasgarh, E. I. R.	...	...	...	...	...	
37	Borrea Coal Co., Ltd. (See column No. 7).	Bhagaband (5 mines).	Bhagaband, Jharis, E. I. R.	S. H. Seddon, <i>1st class service, No. 79. Authorization, No. 106, to act as manager of more than one mine.</i>	...	F. W. Heikens & Co., 186, Canning Street, Calcutta, or Post Box No. 185.	616	308	
38	Bose, J. N. 20, Baranasi Ghose's Street, Calcutta.	Angarpatra	Angarpatra, Katrasgarh, E. I. R.	Rajani Kanto Mukherji, <i>2nd class service, No. 192. Authorization, No. 95, to act as manager of more than one mine.</i>	...	...	103	44	
39		Kantapahari	Kantapahari, Katrasgarh E. I. R.	...	...	...	...	...	
40		Kesalpur	Kesalpur, Katrasgarh, E. I. R.	Purna Chandra Burmon, <i>2nd class service, No. 73.</i>	...	...	...	32	21
41	Bose, Satish Chandra Nowagarh P. O.	Bamongarh	Bamongarh	Bani Dhar Chatteraj	...	...	...	36	26
42	B. R. & N. Coal Co. Jharis P. O.	Joyrampur	Joyrampur, Jharis, E. I. R.	Bira Majji, <i>2nd class service, No. 99.</i>	Roja Valgee	...	...	48	25
43	Budruchak Coal Mining Co., Ltd. (See column No. 7).	Budruchak (6 mines).	Budruchak, Sijus, E. I. R.	J. W. Nielsen, <i>1st class service, No. 29. Authorization, No. 151, to act as manager of more than one mine.</i>	...	Arathoon, Ltd., Vansittart Row, Calcutta, or Post Box No. 217.	153	133	
44	Bullhari Coal Co. (Suth Ranchhodas Jiwandas). Jharis P. O.	Bullhari	Bullhari, Jharis, E. I. R.	Seth Haridas Naithu, <i>1st class service, No. 108.</i>	...	...	...	171	115
45	Bullhari Coa Concern (Khora Bamji). Jharis P. O.	Bullhari	Bullhari, Jharis, E. I. R.	Mulji Akhoy, <i>1st class service, No. 119.</i>	Nogha Teja	...	...	97	59
46	Burragarh, Coal Co., Ltd. (See column No. 7).	Burragarh	Burragarh, Jharis, E. I. R.	J. B. Wardlaw, <i>1st class competency, No. 73, in lieu of English certificate.</i>	...	Sircar, Bernard & Co., 2, New China Bazar Street, Calcutta, or Post Box No. 288.	445	188	
47	Busserya Coal Co., Ltd. (See column No. 7).	Busserya	Busserya, Kusunda, E. I. R.	Butto Kristo Dash, <i>2nd class service, No. 94.</i>	...	Bhola Nath Dash & Co., Lalbagan, Chandernagore P. O.	198	111	
48	Chakrabarty, Krishnajibon 40, Clive Street, Calcutta.	Jinagora	Jinagora, Jharis, E. I. R.	Upendra Nath Chakreri, <i>Permit, No. 82.</i>	...	...	...	14	11
49	Chandore Coal Co. (P. K. Roy & others). Katrasgarh P. O.	Chandore (2 mines).	Chandore, Katrasgarh, E. I. R.	Dhon Kristo Mazumdar, <i>Permit, No. 126.</i>	...	...	...	58	10

APPENDIX V—contd.

List of Coal Mines worked under the Indian Mines Act, 1901, in British India—contd.

Serial number	Name of Owner or Company arranged in alphabetical order, and postal address.	Name of Mine and number of separate Mines as defined by Rule 27.	Situation of Mine.	Name of Manager, and No. and Class of his Certificate, Authorization or Permit.	Name of Assistant Manager and No. and Class of his Certificate.	Name and address of Managing Agent.	Date of establishment of Special Rules.	PERSONS EMPLOYED		REMARKS.
								Below ground.	Above ground.	
<b>Bengal—Jharia Coalfield (No. 1 Inspection Circle)—contd.</b>										
50	Chandra, Girish Chandra Katrasgarh P. O.	Ramkanali (2 mines).	Ramkanali, Katrasgarh, E. I. R.	Nagendra Nath Dass, Permit, No. 46.	...	...	...	24	6	
51	Chandra, Haresmal Ram Katrasgarh P. O.	Tettulia (2 mines).	Tettulia, Katrasgarh, E. I. R.	Jogadamba Prasad Lalai, 2nd class service, No. 53. Authorization, No. 32, to act as manager of more than one mine.	...	...	...	180	80	
52	Chatterji, Singh & Co. (Rajendra Nath Chatterji & Gour Mohan Singh). Nowagarh P. O.	Borora	Borora	Ramesh Chandra Das Gupta.	...	...	...	3	2	
53	Choudhuri, Satya Tarun Sijua P. O.	Pandedih	Pandedih, Sijua, E. I. R.	Manmatha Nath Mukherji, Permit, No. 101.	...	...	...	50	16	
54	Choni Lal Coal Co. Kusunda P. O.	Bulliar	Bulliar, Kusunda, E. I. R.	Ram Chandra Marwari, 1st class service, No. 103. Authorization, No. 29, to act as manager of more than one mine.	...	...	...	101	40	
55	Chotto Lal Kutchi Sijua P. O.	Pandedih	Pandedih, Sijua, E. I. R.	...	...	...	...	...	...	
56	C. M. & Co. (Chimanlal Mangaldas Keshan Lal Parekh). Nowagarh P. O.	Kendwadih	Kendwadih	Bhachand Naku Doshi	...	...	...	28	40	
57		Koradih	.....	Bepin B. Sircar, 2nd class service, No. 78.	...	...	...	55	24	
58	Das, L. H. Jharia P. O.	Kujama	Kujama, Jharia, E. I. R.	Lira Walji, 1st class service, No. 107.	...	...	...	130	110	
59		Paudeybera	Kujama, Jharia, E. I. R.		...	...	...	65	34	
60	Das, R. B. Kusunda P. O.	Gararia	Gararia, Kusunda, E. I. R.	Ashutosh Dutta, Authorization, No. 10, to manage the mine temporarily.	...	...	...	50	34	

61	Dherajoba Coal Co. (S. B. Bose), Kusunda P. O.	Dherajoba	Dherajoba, Kusunda, E. I. R.	Khudi Ram Banerji, Permit, No. 134.	...	...	28	9
62	Dobari Coal Co. (S. B. Banerji & B. K. Sabana). (See column No. 7).	Dobari	Dobari, Jharis, E. I. R.	Natabar Dass, 2nd class service, No. 68. Authority, No. 137, to act as manager of more than one mine.	...	Woomesh Chander Banerji, 88, Chuna-pukur Lane, Calcutta.	10	5
63		Ganhudi	Ganhudi				45	20
64	Doss, Ganji & Khunji Jharis P. O.	Futtehpur	Futtehpur, Jharis, E. I. R.	Ganji Doss, 2nd class service, No. 127.	...	...	17	11
65	Dumra Coal Co. Nowagarh P. O.	Finalgoria	Finalgoria	Ram Recha Singh, Permit, No. 131.	...	...	18	13
66	Dutt, B. L. Katrasgarh P. O.	Ramkanali	Ramkanali, Katrasgarh, E. I. R.	Bihari Lall Dutt, 1st class service, No. 70.	...	...	18	8
67	East Indian Coal Co., Ltd. (See column No. 7).	Brahmanbarari & Bhulanbarari.	Brahmanbarari & Bhulanbarari, Jharis, E. I. R.	H. G. Fleury, 1st class service, No. 35.	E. Miller	...	1,288	905
68		Bullhari and Khara.	Bullhari & Khairs, Kusunda, E. I. R.	R. G. M. Bathgate, 1st class competency, No. 8, in lieu of English certificate.	...	Jardine, Skinner & Co., 4, Clive Row, Calcutta, or Post Box No. 51.	480	149
69		Kendwadih	Kendwadih, Kusunda, E. I. R.	...	...	...	696	396
70		Sutikdih	Sutikdih	H. G. Fleury, 1st class service No. 35.	...	...	135	46
71	Eastern Coal Co., Ltd. (See column No. 7).	Bhowra (3 mines).	Bhowra, Jharis, E. I. R.	R. J. Browne, 1st class competency, No. 17, in lieu of English certificate. Authorization, No. 171, to act as manager of more than one mine.	...	...	742	126
72		Kankani	Kankani, Sijas, E. I. R.	A. B. Crole, 1st class competency, No. 49, in lieu of English certificate.	...	Mackinnon, Mackenzie & Co., 16, Strand, Calcutta, or Post Box No. 163.	522	548
73		Pootki (2 mines).	Pootki, Jharis, E. I. R.	R. J. Browne, 1st class competency, No. 17, in lieu of English certificate. Authorization, No. 171, to act as manager of more than one mine.	...	...	...	...
74	Empire Coal Co., Ltd. (See column No. 7).	Sudaandih	Sudaandih, Jharis, E. I. R.	T. Thompson, 1st class service, No. 57.	...	Williamson, Mager & Co., 4, Mangoe Lane, Calcutta, or Post Box No. 177.	72	104

J. J. Turnbull, Agent.

APPENDIX V—contd.

List of Coal Mines worked under the Indian Mines Act, 1901, in British India—contd.

Serial number.	Name of Owner or Company arranged in alphabetical order, and postal address.	Name of Mine and number of separate Mines as defined by Rule 27.	Situation of Mine.	Name of Manager and No. and Class of his Certificate, Authorization or Permit.	Name of Assistant Manager and No. and Class of his Certificate.	Name and address of Managing Agent.	Date of establishment of Special Rules.	PERSONS EMPLOYED		REMARKS.
								Below ground.	Above ground.	
<b>Bengal—Jharia Coalfield (No. 1 Inspection Circle)—contd.</b>										
75	Equitable Coal Co., Ltd. (See column No. 7).	Hariladih .	Hariladih, Jharia, E. I. R.	D. Bone, 1st class services, No. 9. Authorization, No. 127, to act as manager of more than one mine.	...	MacNeill & Co., 2, Clive Ghat Street, Calcutta, or Post Box No. 15.	...	270	67	
76	Ghansham Das Coal Co. Nowagarh P. O.	Pinalgoria .	Pinalgoria . . . . .	Rambaran Roy, Permit, No. 134.	...	.....	...	12	15	
77	Ghela Panchan & Co. Jharia P. O.	Joyrampur .	Joyrampur, Jharia, E. I. R. (Lower).	Narendra Nath Bose, Permit, No. 117.	...	.....	...	56	24	
78	Ghosal, Chatterji & Co. Sijua P. O.	Khas Paredih .	Khas Paredih . . . . .	Moheswar Ghosal, Permit, No. 139.	...	.....	...	31	9	
79	Ghosh, Akshaya Kumar Katrasgarh P. O.	Dharmuband .	Dharmuband . . . . .	Bhola Nath Misra Permit, No. 114.	...	.....	...	14	10	
80	Gobindpur Coal Co., Ltd., Katrasgarh P. O.	Gobindpur .	Gobindpur, Katrasgarh, E. I. R.	Geo. St. J. D. Wills, 1st class services, No. 69. Authorization, No. 83, to act as manager of more than one mine.	...	F. W. Heilgers & Co., 136, Canning Street, Calcutta, or Post Box No. 185.	...	86	110	
81	Gobindpur (South) Collieries, Ltd. (See column No. 7).	Gobindpur .	Gobindpur, Katrasgarh, E. I. R. (South).	Jagabandhu Banerji, 1st class services, No. 110.	...	M. L. Leik & Banerji, 7, Swallow Lane, Calcutta.	...	136	34	Formerly owned by R. B. Singh.
82	Gopalichak Coal Co., Ltd. (See column No. 7).	Gopalichak .	Gopalichak, Jharia, E. I. R. (2 mines).	M. J. Adamson, 1st class services, No. 51. Authorization, No. 155, to act as manager of more than one mine.	...	McLeod & Co., 31, Dalhousie Square, South, Calcutta, or Post Box No. 78.	...	460	280	
83		Gopalichak (West) .	Kurkend, Kusunda, E. I. R. (3 mines).					...	295	69
84	Gorsin, N. L., and others Jharia P. O.	Jairamdih .	.....	Bansraj Sikdar, Permit, No. 89.	...	.. . . .	...	35	13	
85	Gorsin, Ram Ranu 12, Kalakar Street, Calcutta.	Kendwadih .	Kendwadih, Jharia, E. I. R.	Bhola Nath Ghosh, Permit, No. 115.	...	.....	...	31	14	
86	G. P. C. & Co. (Gova Petha) Jharia P. O.	Jinagora .	Jinagora, Jharia, E. I. R.	Gova Petha . . . . .	...	.....	...	80	30	

87	Hariladih Coal Co., Ld. (See column No. 7).	Burragarh .	Burragarh Jharis, E. I. R.	Geo. Miller, <i>1st class competency, No. 57, in lieu of English certificate.</i>	...	MacNeill & Co., 2, Clive Ghat Street, Calcutta, or Post Box No. 15.	...	...	...	Figures included in that of Kendwadih.
88		Kendwadih .	Kendwadih, Jharis, E. I. R.	D. Bone, <i>1st class service, No. 9. Authorization, No. 127, to act as manager of more than one mine.</i>	...	...	272	81	Includes figures for Burragarh.	
89	Hockly, W. A. Jharis P. O.	Ramkanali .	Ramkanali, Katrasgarh, E. I. R.	E. Lightle, <i>Permit, No. 25.</i>	...	.....	...	...	...	...
90	Howji, Tribhuban Dass Kusunda P. O.	Gararia .	Gararia, Kusunda, E. I. R.	Dollabji Howji, <i>2nd class service, No. 97.</i>	Ramji Furushuttam.	.....	...	91	70	...
91	Huntodih Coal Co., Ld. (See column No. 7).	Huntodih (9 mines).	Huntodih, Katrasgarh, E. I. R.	A. G. Hailca, <i>1st class service, No. 61. Authorizations, Nos. 102 and 109, to act as manager of more than one mine.</i>	...	Shaw, Wallace Co., 20, Strand Road, Calcutta, or Post Box No. 70.	...	108	161	...
92	Indian Collieries Syndicate, Ld. (See column No. 7).	Jamadoba .	Jamadoba, Jharis, E. I. R.	E. H. Dundas, <i>1st class competency, No. 38, in lieu of English certificate.</i>	B. Fleming	Kilburn & Co., 4, Fairlie Place, Calcutta, or Post Box No. 61.	...	1,845	487	...
98	Jharis Coal Association (S. K. Mukherji) Sijua P. O.	Pandedih .	Pandedih, Sijua, E. I. R.	Jamini Nath Bhattacharji, <i>Permit, No. 98.</i>	...	.....	...	...	...	...
94	Jharis Coal Syndicate (See column No. 7).	Emampahari .	Kujama, Jharis, E. I. R.	Sashi Bhusan Mukherji, <i>Permit, No. 110.</i>	...	Surendra Nath Sen, Kolla Bose's Lane, Ramkrishnapur, Howrah P. O.	...	28	14	...
95	Jharis Coal Syndicate, Ld. (See column No. 7).	Dherisajoba .	Dherisajoba, Kusunda, E. I. R.	F. Miller, <i>1st class competency, No. 29, in lieu of English certificate.</i>	...	Jardine, Skinner & Co., 4, Clive Row, Calcutta.	...	190	55	...
96	Jharis Colliery Co., Ld. (See column No. 7).	Bhaga .	Bhaga, Jharis, E. I. R.	W. A. Hockly, <i>1st class service, No. 39.</i>	T. Simpson	Hoare, Miller & Co., 38, Strand Road, Calcutta, or Post Box No. 63.	...	202	117	...
97	Jharis (East) Coal Co., Ld.	Jharis (East) or Goluckdih.	Goluckdih, Jharis, E. I. R.	E. A. Whyta, <i>1st class service, No. 74.</i>	...	Shaw, Wallace & Co., 20, Strand Road, Calcutta, or Post Box No. 70.	...	170	44	Previously owned by the Great Eastern Coal Co.
98	Jharis Katras Coal Co. (Bihari Lal Trigunait) Katrasgarh P. O.	Brarobara .	Brarobara, Katrasgarh, E. I. R.	Frankishore Trigunait, <i>Permit, No. 140.</i>	...	.....	...	15	20	...
99	Jharis (South) Coal Co. Bhujadih P. O.	Kandra (Upper)	Upper Kandra .	Valamji Nensi .	...	.....	...	...	...	...

APPENDIX V—contd.

List of Coal Mines worked under the Indian Mines Act, 1901, in British India—contd.

Serial number	Name of Owner or Company arranged in alphabetical order and postal address.	Name of Mine and number of separate Mines as defined by Rule 27.	Situation of Mine.	Name of Manager and No. and Class of his Certificate, Authorization or Permit.	Name of Assistant Manager and No. and Class of his Certificate.	Name and address of Managing Agent.	Date of establishment of Spools Rules.	PERSONS EMPLOYED		REMARKS.
								Below ground.	Above ground.	
<b>Bengal—Jharia Coalfield (No. 1 Inspection Circle)—contd.</b>										
100	John and Arratoon Kusunda P. O.	Ramgarh	Tetturia Ramgarh.	Ashutosh Ghosh	...	.....	...	8	5	
101	Joyrampur Coal Co. Jharia P. O.	Joyrampur	Joyrampur, Jharia, E. I. R.	Ramji Halo, 2nd class service, No. 160.	...	.....	...	100	30	
102	Joyrampur Coal Concern (J. K. Mukherji) 53, Chunapukur Lane, Calcutta.	Joyrampur	Joyrampur, Jharia, E. I. R.	Puranjan Mukherji Permit, No 53.	...	.....	...	35	26	
103	Jumoni Coal Co. Ltd. (See column No. 7).	Madhuband (6 mines).	Madhuband, Katrasgarh, E. I. R.	L. St. J. Kelly, 1st class service, No. 42. Authorization, No. 99, to act as manager of more than one mine.	...	Bird & Co., 101-1, Clive Street, Calcutta, or Post Box No. 46.	...	339	265	H. C. Vasey, Agent.
104	Kabiraj, R. C. Sijua P. O.	Pandedih	Pandedih, Katrasgarh, E. I. R.	.....	...	.....	...	...	...	
105	Kanga & Co. Kusunda P. O.	Alkusa	Alkusa, Kusunda, E. I. R.	Ananta Ram Bhor, 2nd class competency, No. 26.	...	.....	...	175	109	
106		Kiaka	Kiaka, Kusunda, E. I. R.		...	.....				
107	Katras Oriental Coal Syndicate Katrasgarh P. O.	Pandedih	Pandedih, Katrasgarh, E. I. R.	Bepin Behari Roy, Permit, No. 71.	...	.....	...	16	11	
108	Kendwadih Coal Co. Gajadhar Marwari, Nogendra Nath Mandal and Mukundaram Rai Nowagarh P. O.	Kendwadih	Kendwadih, Jharia, E. I. R.	Mukunda Lal Mondal, 2nd class service, No. 77.	...	.....	...	18	19	
109	Kesurgurah Coal Co. (See column No. 7).	Kesurgurah	.....	Kumuda Nath Bose, 2nd class service, No. 158.	...	M. L. Laik & Banerji, 7, Swallow Lane, Calcutta.	...	60	30	
110	Khaira Coal Syndicate, Ltd. (See column No. 7).	Khaira	Khaita, Kusunda, E. I. R.	F. Miller, 1st class competency, No. 29, in lieu of English certificate.	...	Jardine, Skinner & Co., 4, Clive Street, Calcutta, or Post Box No. 51.	...	180	40	
111		Kurkend	Kurkend, Kusunda, E. I. R.		...	.....				
112	Khan Brothers (See column No. 7).	Kujama	Kujama, Jharia, E. I. R.	Abass Khan	...	Dr. G. N. Khan, 33, Canning Street, Calcutta.	...	29	76	
113	Khan, Rahim Feroz Katrasgarh P. O.	Tundu	Tundu, Katrasgarh, E. I. R.	Rauf Khan, Permit, No. 33.	...	.....	...	46	22	



114	Khandesh, Berar and Gujrat Coal Concern (Bastamji Ardesir Mascadam.) Jharia P. O.	Chandrabad (2 mines).	Jharia, Jharia, E. I. R.	Nowroji Nusservanji Ghandi.	...	.....	...	55	10	
115	Khas Jharia Coal Co. Jharia P. O.	Phularibad	Khas Jharia, Jharia, E. I. R.	Jnanendra Nath Mukherji, <i>1st class service, No. 91.</i>	...	.....	...	108	44	
116	Khas Jharia Colliery Co. (See column No. 7).	Khas Jharia	Khas Jharia, Jharia, E. I. R.	John Wilson, <i>1st class competency, No. in lieu of English certificate.</i>	...	F. W. Heilgers & Co., 136, Canning Street, Calcutta, or Post Box No. 185.	...	300	160	G. M. Darby, Agent.
117	Khengarji Triku & Co. Jharia P. O.	Joyrampur	Joyrampur, Jharia, E. I. R.	Mawji Rudra, <i>Permit, No. 96.</i>	...	.....	...	48	19	
118	Khimji Moorji & Co. Jharia P. O.	Joyrampur	Joyrampur, Jharia, E. I. R.	Gowamul Khimji, <i>Permit, No. 112.</i>	...	.....	...	50	25	
119	Khora Ramji Kutchi Jharia P. O.	Jharia Khas	Jharia Khas, Jharia, E. I. R.	...	...	.....	...	77	40	
120	Koondoo, Sunda Charan & Sambhu Babu's Lane, Calcutta.	Kesalpur	Kesalpur, Katrasgarh, E. I. R.	Charu Chandra Banerji, <i>Permit, No. 72.</i>	...	.....	...	29	20	
121	Kor, Sri Hari Jaydebkundli P. O., Birbhum.	Dobari	Dobari, Jharia, E. I. R.	Dhon Hari Kor	...	.....	...	27	12	
122	Kujama (North) Coal Co. Jharia P. O.	Kujama	Kujama, Jharia, E. I. R.	...	...	.....	...	72	48	Lately Sainthia Coal Company's Muburiband Colliery.
123	Kurkend (Central) Coal Co., Ltd. (See column No. 7).	Kurkend	Kurkend, Kusunda, E. I. R.	D. A. Whyte, <i>1st class service, No. 45.</i>	...	Anderson, Wright & Co., 22, Strand Road, Calcutta, or Post Box No. 140.	...	338	325	
124	Kurkend Coal Co. (P. C. Roy and others) Kusunda P. O.	Kurkend	Kurkend, Kusunda, E. I. R.	Indra Narayan Chandra, <i>1st class service, No. 89. Authorization, No. 185, to act as manager of more than one mine.</i>	...	.....	...	120	40	
125	Kusunda and Nayadi Collieries, Ltd. (See column No. 7).	Kusunda and Nayadi.	Kusunda, Kusunda, E. I. R.	C. L. Phillips, <i>1st class service, No. 100.</i>	G. John, <i>1st class service, No. 44.</i>	Martin & Co., 6 and 7, Clive Street, Calcutta, or Post Box No. 28.	...	1,604	680	
126	Lakorka Coal Co., Ltd. (See column No. 7).	Lakorka	Lakorka, Katrasgarh, E. I. R.	Lalit Mohan Chowdhuri, <i>1st class service, No. 53.</i>	...	M. L. Laik and Banerji, 7, Swallow Lane, Calcutta.	...	311	251	
127	Lall, Daroga Katrasgarh P. O.	Belanjabad	Belanjabad	Ram Ranjan Sikdar	...	.....	...	6	15	

APPENDIX V—contd.

List of Coal Mines worked under the Indian Mines Act, 1901, in British India—contd.

Serial number.	Name of Owner or Company arranged in alphabetical order, and postal address.	Name of Mine and number of separate Mines as defined by Rule 27.	Situation of Mine.	Name of Manager and No. and Class of his Certificate, Authorization or Permit.	Name of Assistant Manager and No. and Class of his Certificate.	Name and address of Managing Agent.	Date of establishment of special Rules.	PERSONS EMPLOYED		REMARKS.
								Below ground.	Above ground.	
<b>Bengal—Jharia Coalfield (No. 1 Inspection Circle)—contd.</b>										
128	Lodna Colliery Co., Ltd. (See column No. 7).	Chasnalla . . .	Chasnalla, Jharia, E. I. R.	T. C. Murray, <i>1st class service, No. 66.</i>	...	Turner, Morrison & Co., 6, Lyons Range, Calcutta, or Post Box No. 68.	...	52	198	
129		Lodna (5 mines).	Lodna, Jharia, E. I. R.	H. J. Chambers, <i>1st class competency, No. 10, in lieu of English certificate.</i>	...		...	1,087	817	
130		Madhuband . . .	Madhuband . . . . .		...		...	...		
131	Lutchipur Coal Co., Ltd. (See column No. 7).	Choitodih . . .	Choitodih, Katrasgarh, E. I. R.	T. C. Barker, <i>1st class service, No. 67. Authorization, No. 40, to act as manager of more than one mine.</i>	...	Bird & Co., 101-1, Clive Street, Calcutta, or Post Box No. 46.	...	284	450	H. C. Veasey, General Manager.
132	Mahato, Baidya Nath . . . Katrasgarh P. O.	Bahirdih . . .	.....	Dawrika Prasad Lala, <i>Permit, No. 87.</i>	...	.....	...	...	...	
133	Manbhun (New) Coal Co., Ltd. (See column No. 7).	Ganzlatau . . .	Ganzlatau, Sijua, E. I. R.	T. C. Piggford, <i>1st class competency, No. 67, in lieu of English certificate. Authorization, No. 148, to act as manager of more than one mine.</i>	...	Octavius Steel & Co., 14, Old Court House Street, Calcutta, or Post Box No. 55.	...	168	110	
134	Marine Coal Co., Ltd. (See column No. 7).	Kurkend (East) . . .	Kurkend, Kusunda, E. I. R.	R. F. Augier, <i>1st class service, No. 26.</i>	...	McLeod & Co., 31, Dalhousie Square, South, Calcutta, or Post Box No. 78.	...	55	110	(Lately owned by the East Kurkend Coal Company.
135	Motiram Coal Co. Kusunda P. O.	Kurkend . . .	Kurkend, Kusunda, E. J. R.	Ram Chandra Marwari, <i>1st class service, No. 108. Authorization, No. 39, to act as manager of more than one mine.</i>	...	.....	...	170	80	
136	Mucheridih Coal Syndicate (See column No. 7).	Mucheridih . . .	Mucheridih . . . . .	W. H. Topham, <i>1st class competency, No. 11. Authorization, No. 118, to act as manager of more than one mine.</i>	...	Bagram & Co., 14½ Clive Street, Calcutta.	...	125	121	

137	Mukherji & Co., K. L. . Katrasgarh P. O.	Tettulia . . .	Tettulia, Katrasgarh, E. I. R. .	Pooln Behari Mitra, <i>1st class service, No. 56.</i>	...	.....	...	..	...	
138	Mukherji & Co., S. K. Sijua P. O.	Pandedih . . .	Pandedih, Sijua, E. I. R. .	Nanda Lal Mukherji .	...	.....	...	52	13	
139	Muttigurra Coal Co., Ld. (See column No. 7).	Muttigurra . . .	Muttigurra . . . . .	F. E. Foster, <i>1st class service, No. 47.</i>	...	Octavius Steel & Co., 14 Old Court House Street, Calcutta, or Box No. 55.	...	...	...	
140	Nandi, Maharaja Manindra Chandra, Cossimbazar P. O., Murshidabad.	Ekra Khas . . .	Ekra, Kusunda, E. I. R. .	Basanto Kumar Roy, <i>1st class service, No. 88.</i>	...	.....	...	400	62	Monmotho Nath Roy, General Manager.
141	Nauji, Khanji & Sanji Jharis P. O.	Kujama . . . . .	Kujama, Jharis, E. I. R. .	Valji Kheta, <i>2nd class service, No. 76.</i>	...	.....	...	88	...	
142	National Coal Co. (Bachha Kinkur Chattoraj) Katrasgarh P. O.	Chandore . . .	Chandore, Sijua, E. I. R. .	Upendra Nath Nandi, <i>Permit, No. 131.</i>	...	.....	...	15	4	
143	North-West Coal Co., Ld. (See column No. 7).	Ena . . . . . (3 mines).	Ena, Jharis, E. I. B. . . .	W. C. Heysham, <i>1st class service, No. 79. A u t h o r i z a t i o n, No. 101, to act as manager of more than one mine.</i>	...	Andrew, Yule & Co., 7, Clive Row, Calcutta, or Post Box No. 150.	...	130	80	
144	Nowagarh Coal Co., Ld. (See column No. 7).	Katras (13 mines).	Katras, Katrasgarh, E. I. R. .	T. K. Fleischer, <i>1st class service, No. 10, Authorization, No. 35, to act as manager of more than one mine.</i>	...	Bird & Co., 101-1, Clive Street, Calcutta, or Post Box No. 46.	...	640	437	H. C. Veasey, General Manager.
145	Nudkharuki Coal Co. (See column No. 7).	Nudkharuki (14 mines).	Nudkharuki . . . . .	Gopal Chandra Bhutta- charji, <i>1st class service, No. 77. A u t h o r i z a - t i o n, No. 165, to act as manager of more than one mine.</i>	...	Shragers, Ld., 7, Swallow Lane, Calcutta.	...	96	26	
146	Pain, B. L. Katrasgarh P. O.	Chandore . . .	Chandore Sijua, E. I. R. .	Narendra Nath Roy, <i>Permit, No. 8.</i>	...	...	...	35	24	
147	Pandaknali Coal Co., Ld. (See column No. 7).	Pandakanali (3 mines).	Pandakanali . . . . .	B. S. Field, <i>1st class competency, No. 92, in lieu of English certi- ficate. A u t h o r i z a - t i o n, No. 176, to act as manager of more than one mine.</i>	...	Bird & Co., 101-1, Clive Street, Calcutta, or Post Box No. 46.	...	...	...	E. S. Bennertz, Agent.
148	Pandedih Coal Syndicate (Bojrangbali Singh, Mit Nanayan Singh & Munshi Lal Mistry) Katrasgarh P. O.	Pandedih . . .	Pandedih, Sijua, E. I. R. .	Raghu Nath Lal	...	...	...	18	5	

APPENDIX V—contd.

List of Coal Mines worked under the Indian Mines Act, 1901, in British India—contd.

Serial number.	Name of Owner or Company arranged in alphabetical order and postal address.	Name of Mine and number of separate Mines as defined by Rule 27.	Situation of Mine.	Name of Manager and No. and Class of his Certificate, Authorization or Permit.	Name of Assistant Manager and No. and Class of his Certificate.	Name and address of Managing Agent.	Date of establishment of Special Rules.	PERSONS EMPLOYED		REMARKS.
								Below ground.	Above ground.	
<b>Bengal—Jharia Coalfield (No. 1 Inspection Circle)—contd.</b>										
149	Pandeybera Colliery Co. (Daya Sankar Shamji) Jharia P. O.	Pandeybera	Kujama, Jharia, E. I. R.	Daya Sankar Shamji, 2nd class service, No. 19.	...	...	...	51	37	
150	Parasea Collieries, Ltd. (See column No. 7).	Nichitpur	Nichitpur	F. L. Cork, 1st class service, No. 30.	...	Shaw, Wallace & Co., 20, Strand Road, Calcutta, or Post Box No. 70.	...	...	...	
151	Parelgaria Coal Co. (Kamolram Marwari) Kusunda P. O.	Parelgaria	Damra	Kishory Mohan Chatterji.	...	...	...	20	26	
152	Patel & Co. Kusunda P. O.	Kusunda	Kusunda, Kusunda, E. I. R.	Keshob Chandra Mitter, 2nd class service, No. 60.	...	...	...	70	56	
153	Phularitand Coal Co., (See column No. 7).	Phularitand (4 mines).	Phularitand	Rhys Davies, 1st class competency, No. 42, in lieu of English certificate. Authorization, No. 177, to act as manager of more than one mine.	...	N. C. Sircar & Sons, 5, Clive Ghat Street, Calcutta, or Post Box No. 285.	...	102	20	CO
154	Pipratand Coal Co., Ltd. (See column No. 7).	Pipratand	Pipratand	John Marshall, 1st class competency, No. 85, in lieu of English certificate.	...	Williamson, Magor & Co., 4, Mango Lane, Calcutta, or Post Box No. 177.	...	63	46	
155	Premji and Devshi Hamir Jharia P. O.	Durgapur	Durgapur, Jharia, E. I. R.	Devasi Hamir, 2nd class service, No. 1. Authorization, No. 178, to act as manager of more than one mine.	...	...	...	90	70	
156		Futtehpur	Futtehpur, Jharia, E. I. R.		...	...	...	...	...	...
157	Baba and Son, Sasi Bhusan (See column No. 7).	Godhur (4 mines).	Godhur, Kusunda, E. I. R.	Purna Chunder Biswas 1st class service, No. 105. Authorization, No. 87, to act as manager of more than one mine.	...	...	...	151	59	Lately owned by Mylne & Co.
158	Ranidih Coal Co. (Sasi Bhusan Chatterji.) (See column No. 7).	Ranidih (4 mines).	Ranidih, Katrasgarh, E. I. R.	H. O. Hailes. Permit, No. 116. Authorization, No. 174, to act as manager of more than one mine.	...	S. Chatterji & Sons, 50, Nandaram Sen's Street, Calcutta.	...	...	...	

159		Kustore No. 1, District (Workings at Ganbudi and North of Alkusa.)		S. Kirk, 1st class competency, No. 79, in lieu of English certificate.	...	.....	...	226	135
160	Baniganj Coal Association, Ltd. (See column No. 7).	Kustore No. 2, District (Workings North of Kustore and South of Alkusa.)	Kiske, Kusunda, E. I. R.	J. B. Wilkinson, 1st class competency, No. 6, Authorization, No. 114, to act as manager of more than one mine.	...	Kilburn & Co., 4, Fairlie Place, Calcutta, or Post Box No. 61.	...	14	142
161		Kustore No. 3 District (15 and 16 seams.)		R. F. Campbell, 1st class competency, No. 56, in lieu of English certificate.	...	.....	...	168	135
162	Reliance Coal Co., Ltd. (See column No. 7).	Mudidih (8 mines).	Mudidih, Sijua, E. I. R.	A. A. V. Sam, 1st class service, No. 48. Authorization, No. 41, to act as manager of more than one mine.	...	Bird & Co., 101-1, Clive Street, Calcutta, or Post Box No. 46.	...	750	396
168	R. M. R. Coal Concern Jharia P. O.	Joyrampur	Joyrampur, Jharia, E. I. R.	Mavji Gokal, 2nd class service, No. 121.	...	.....	...	70	27
164	Roy, J. K. Kusunda P. O.	Kusunda	Kusunda, Kusunda, E. I. R.	D. W. C. Smith, 2nd class service, No. 146.	...	.....	...	60	40
165	Roy, Moheswar & Srikontho Kusunda P. O.	Gararia	Gararia, Kusunda, E. I. R.	Brojo Kishore Sen, Permit, No. 35.	...	.....	...	43	53
166		Gansadih	Gansadih	Indra Narayn Chandra, 1st class service, No. 89. Authorization, No. 185, to act as manager of more than one mine.	...	.....	...	70	30
167	Roy, F. C. Katrasgarh P. O.	Bamkanali	Bamkanali, Katrasgarh, E. I. R.	Gosto Behari Mozumdar, Permit, No. 132.	...	.....	...	55	14
168		Surataur	Jharia Khas, Jharia, E. I. R.	Pran Krishna Mozumdar, 2nd class service, No. 60.	...	.....	...	46	46
169	Sanker, T. R. Kusunda P. O.	Gararia	Gararia, Kusunda, E. I. R.	Chuni Lal	...	.....	...	...	...
170	Seal, K. B. Jharia P. O.	Surataur	Jharia Khas, Jharia, E. I. R.	Ananta Lal Mukherji	Hari Prafulla Mukherji, 2nd class competency, No. 17.	.....	...	165	44
171	Selectad Coal Co. (Kalisuji Shamji). (See column No. 7).	Kusunda	Kusunda, Kusunda, E. I. R.	Deoram Pureshotam Vankani, 2nd class service, No. 30.	...	Kanji Monji & Co., 210, Harrison Road, Calcutta.	...	99	38

APPENDIX V—contd.

List of Coal Mines worked under the Indian Mines Act, 1901, in British India—contd.

Serial number.	Name of Owner or Company arranged in alphabetical order and postal address.	Name of Mine and number of separate Mines as defined by Rule 27.	Situation of Mine.	Name of Manager and No. and Class of his Certificate, Authorisation or Permit.	Name of Assistant Manager and No. and Class of his Certificate.	Name and address of Managing Agent.	Date of establishment of Special Rules.	PERSONS EMPLOYED		REMARKS.
								Below ground.	Above ground.	
<b>Bengal—Jharia Coalfield (No. 1 Inspection Circle)—contd.</b>										
172	Sendra Coal Co., Ltd. (See column No. 7).	Sendra (2 mines).	Sendra, Sijua, E. I. B.	N. Miller, 1st class services, No. 50. Authorisation, No. 141, to act as manager of more than one mine.	...	F. W. Heilgers & Co., 136, Canning Street, Calcutta, or Post Box No. 185.	...	137	88	
73	Sijua Coal Co., Ltd. (See column No. 7).	Sijua (17 mines).	Sijua, Sijua, E. I. B.	Joseph Miller, 1st class services, No. 50. Authorisation, No. 157, to act as manager of more than one mine.	...	Balmer, Lawrie & Co., 109, Clive Street, Calcutta, or Post Box No. 4.	...	311	562	
174	Singh & Co., Atma Nowgarh P. O.	Khalsa	Bodora	.....	...	.....	..	30	10	
175	Singh, Bir Khatragarh F. O.	Kesalpur (Imperial) (3 mines).	Kesalpur, Khatragarh, E. I. B.	Ramantar Singh, Permit, No. 120. Authorisation, No. 188, to act as manager of more than one mine.	...	.....	...	...	...	
176	Singh, Gour Mohan, Baroragarh, Nawagarh P. O.	Mandra Khas	Mandra	Ramesh Chandra Das Gupta. Permit No. 111.	...	.....	...	...	...	
177	Singh, Jit Narayan and Mit Narayan, Khatragarh P. O.	Mandra	Mandra	Sahid Khan	...	.....	...	...	...	
178	Singh, Jorabar Sijua P. O.	Pandedih	Pandedih, Sijua, E. I. B.	.....	...	.....	...	...	...	
179	Sinidih Coal Co., Ltd. (See column No. 7).	Sinidih (3 mines).	Sinidih	John White, 1st class competency, No. 31, in lieu of English certificate. Authorisation, No. 180, to act as manager of more than one mine.	...	Williamson, Magor & Co., 4, Mangoe Lane, Calcutta, or Post Box No. 177.	...	134	235	
180	Sinidih Coal Concern (See column No. 7).	Sinidih	Sinidih	Noni Dhon Bhattacharji	...	Dr. G. N. Khan, 33, Canning Street, Calcutta.	...	50	50	

181	Sircar, R. B. Kusunda P. O.	Kurkend	Kurkend, Kusunda, E. I. R.	Mathura Nath Ghosh, 2nd class service, No. 8.	...	.....	...			
182	Smith, C. J. (See column No. 7).	Bagdiggi (3 mines)	Bagdiggi, Jharia, E. I. R.	J. W. Murphy, 1st class competency, No. 7. Authorization, No. 150, to act as mana- ger of more than one mine.	..	Heave, Miller & Co., 38 Strand Road, Cal- cutta, or Post Box No. 63.	...	551	181	
183	Sowardih Coal Co. (N. L. Gorain and others) Jharia P. O.	Sowardih	Sowardih, Jharia, E. I. R.	Hari Prosanna Ghose	...	.....	...	152	125	
184	Srimani, J. N. Katrasgarh P. O.	Angarpatra	Angarpatra, Sijua, E. I. R.	Rakhal Das Mukherji, 2nd class service, No. 76.	...	.....	...	110	85	
185		Kantapahari	Kantapahari, Sijua, E. I. R.	Sasi Bhusan Banerji. Permit, No. 58.	...	.....	...	80	20	
186	Standard Coal Co., Ltd. (See column No. 7).	Benahir	Benahir, Jharia, E. I. R.	G. M. Darby, 1st class service, No. 1.	S. B. Banerji	F. W. Heilgers & Co., 136, Canning Street, Calcutta, or Post Box No. 185.	...	400	250	
187		Hariladih	Hariladih, Jharia, E. I. R.	N. Miller, 1st class service, No. 50. Authorization, No. 14, to act as manager of more than one mine.	..		.....	...	135	95
188		Jharia Khas	Jharia Khas, Jharia E. I. R.	Walter Jardine, 1st class competency, No. 86, in lieu of English certificate.	..		.....	...	425	230
189	Sudamdih Coal Co., Ltd. Jharia P. O.	Sudamdih	Sowardih, Jharia, E. I. R.	W. T. S. Gibson	...	N. C. Sircar & Sons, 5, Clive Ghat Street, Cal- cutta, or Post Box No. 285.	...	87	51	
190	Sudamdih Coal Co., Ltd. Kusunda P. O.	Kurkend	Kurkend, Kusunda, E. I. R.	John Knox, 1st class competency, No. 54, in lieu of English certi- ficate.	..	.....	...	220	78	Lately owned by the Jewel Coal Co.,
191	Sudriadih Coal Co., Ltd. Nowagarh P. O.	Sudriadih	Sudriadih, Katrasgarh, E. I. R.	W. Combey, 1st class competency, No. 68, in lieu of English certi- ficate.	...	Shaw, Wallace & Co., 20, Strand Road, Cal- cutta, or Post Box No. 70.	...	110	135	
192	Tandabari Coal Syndicate Sijua P. O.	Tandabari (4 mines).	Tandabari	Ras Behari Basu, Per- mit, No. 96.	...	.....	...	72	91	
193	Tentulia Colliery Co. Katrasgarh P. O.	Tentulia (6 mines).	Tentulia	Gosta Behary Roy, 2nd class service, No. 124. Authorization, No. 161, to act as manager of more than one mine.	...	D. N. Ghosh & Bros., North Bantra, Howrah.	...	106	50	E. M. Patterson, Man- aging Director.

APPENDIX V—contd.

List of Coal Mines worked under the Indian Mines Act, 1901, in British India—contd.

Serial number.	Name of Owner or Company arranged in alphabetical order and postal address.	Name of Mine and number of separate Mines as defined by Rule 27.	Situation of Mine.	Name of Manager and No. and Class of his Certificate, Authorization or Permit.	Name of Assistant Manager and No. and Class of his Certificate.	Name and address of Managing Agent.	Date of establishment of Special Rules.	Persons		REMARKS.
								Below ground.	Above ground.	
<b>Bengal—Jharia Coalfield (No. 1 Inspection Circle)—concl'd.</b>										
194	Tetturia (New) Coal Co., Ltd. Katrasgarh P. O.	Tetturia (6 mines).	Tetturia, Katrasgarh, E. I. R.	Geo. Emmerson, 1st class competency, No. 83, in lieu of English certificate. Authorization, No. 162, to act as manager of more than one mine.	...	Shaw, Wallace & Co., 20, Strand Road, Calcutta, or Post Box No. 70	...	737	188	
195	Tetturia (West) Collieries, Ltd. (C. M. Carapet) Katrasgarh P. O.	Tetturia	Tetturia, Katrasgarh, E. I. R.	R. S. Ashcroft, Authorization, No. 4, to manage the mine temporarily.	...	.....	...	112	102	
196	Titilmuri Coal Co., Ltd. Sijua P. O.	Titilmuri (3 mines).	Titilmuri, Sijua, E. I. R.	E. G. Seth Sam, 1st class service, No. 75. Authorization, No. 42, to act as manager of more than one mine.	...	.....	...	400	185	C. H. Armstrong, Managing Director.
197	Trigunait, Bhubaneswar Sijua P. O.	Pandedih	Pandedih, Sijua, E. I. R.	Sasi Bhusan Ghosh, 2nd class service, No. 52.	...	.....	...	..	...	Figures included in M. Trigunait's Angarpatra and Kantapahari collieries.
198	Trigunait, Brojo Bhusan Katrasgarh P. O.	Chandore	Chandore, Sijua, E. I. R.	Sasi Bhusan Ghose, Permit, No. 93.	...	.....	...	71	41	
199		Ramkanali	Ramkanali, Katrasgarh, E. I. R.	Bissawar Roy, Permit, No. 107.	...	.....	...	33	22	
200	Trigunait Brothers Coal Co. Katrasgarh P. O.	Angarpatra	Angarpatra, Sijua, E. I. R.	Mukunda Lall Misra, 2nd class service, No. 163.	Sitikontha Kabiraj.	.....	...	196	115	
201	Trigunait, Mukteswar Katrasgarh P. O.	Chandore	Chandore, Sijua, E. I. R.	Sasi Bhusan Ghosh, 2nd class service, No. 52.	...	.....	...	154	91	Includes figures for B. Trigunait's Pandedih Colliery.
202		Kantapahari	Kantapahari, Sijua, E. I. R.		...	.....	...	44	4	
203	Trigunait, Sudarsan Katrasgarh P. O.	Chandore	Chandore, Sijua, E. I. R.	Sorbeswar Chatterji, Permit, No. 100. Authorization, No. 47, to act as manager of more than one mine.	...	.....	...	8	2	
204		Pandedih	Pandedih, Sijua, E. I. R.		...	.....	...	8	2	

CC  
CC



205	Union Coal Co., Ltd. (See column No. 7).	Angarpatra (6 mines.)	Angarpatra Sijua, E. I. R.	R. Purdy, 1st class service, No. 93, in lieu of English certificate. Authorization, No. 189, to act as manager of more than one mine.	...	Williamson, Magor & Co., 4, Mangoe Lane, Calcutta, or Post Box No. 177.	...	140	40	
206	Verakotah Syndicate, Ltd. Jharua P. O.	Verakotah	Verakotah, Jharua, E. I. R.	H. J. L. Belletti, 1st class service, No. 3.	...	H. J. L. Belletti, Jharua	...	...	...	
207	Vithalram Coal Co. (See column No. 7).	Bodra	Bodora	Narotam Hari Shunkar, Ojha, Permit, No. 156.	...	Dr. G. N. Khan, 88, Can- ning Street, Calcutta.	...	...	...	
208	Vurma Coal Co. Bankipur P. O., Patna.	Pinalgoria	Pinalgoria	Sankar Singh, Permit, No. 59.	...	Jamuna Prasad and Jata- ram Lal, Katragah P. O.	...	8	10	
209	Western India Coal Trading Co. Nowgari P. O.	Western India	Nudkharuki	.....	...	K. Desai & Co., Nadiad P. O., B. E. & C. I. R.	...	62	43	Isakoro, Agent.
<b>Bengal—Raniganj Coalfield (No. 2 Inspection Circle).</b>										
1	Abdul Karim & Bros. Barakar P. O.	Kapasara (10 Bighas plot.)	Kapasara, Mugma, E. I. R.	Gnpat Nath Misair, Permit, No. 141.	...	.....	...	29	11	
2		Kapasara (15 Bighas plot.)	Kapasara, Mugma, E. I. R.	Ahmed Yusuf, Permit, No. 142.	...	.....	...	...	...	
3	Adam Joosah & Co. Barakar P. O.	Kapasara	Kapasara, Mugma, E. I. R.	Ashutosh Misra, Permit, No. 104.	...	.....	...	15	5	
4	Ahmed Yusuf Barakar P. O.	Egarcoor	Egarcoor, Mugma or Barakar, E. I. R.	Trimbakial Umiashanker Dholakia.	...	.....	...	12	3	
5	Aldih Coal Co., Ltd. (See column No. 7.)	Aldih (3 mines.)	Aldih, Sitarampur, E. I. R.	W. M. Martin, 1st class competency, No. 64, in lieu of English certi- ficate. Authorization, No. 128, to act as manager of more than one mine.	...	MacNeill & Co., 1/2, Olive Ghat Street, Calcutta, or Post Box No. 15.	...	707	157	W. Miller, Superin- tendent.
6	Annapurna Coal Co. (Ram Baidhu Maji and Laebmi Narayan Marwari) Kulti P. O.	Birsingpur	Birsingpur	Gouri Sankar Roy Chowdhury, 2nd class service, No. 73.	...	.....	...	17	26	
7	Banerji, Bidhu Sekhar Salanpur P. O.	Sabanpur (3 mines.)	Sabanpur	Gobordhan Banerji, Permit, No. 97. Au- thorization, No. 160, to act as manager of more than one mine.	...	.....	...	21	14	
8	Baraboni Coal Concern, Ltd. (See column No. 7.)	Chinchuria	Chinchuria, Baraboni or Asansol, E. I. R.	Pulin Behari Mitra, 1st class service, No. 56. Authorization, No. 144 to act as manager of more than one mine	...	N. C. Sircar & Sons, 5, Olive Ghat Street, Calcutta, or Post Box No. 285.	...	221	277	W. Burt, Superin- tending Engineer.
9		Nuni	Nuni, Sitarampur or Asansol, E. I. R.	.....	...		...	146	112	

APPENDIX V—contd.

List of Coal Mines worked under the Indian Mines Act, 1901, in British India—contd.

Serial number	Name of Owner or Company arranged in alphabetical order, and postal address.	Name of Mine and number of separate Mines as defined by Rule 27.	Situation of Mine.	Name of Manager, and No. and Class of his Certificate, Authorisation or Permit.	Name of Assistant Manager and No. and Class of his Certificate.	Name and address of Managing Agent.	Date of establishment of Special Rules.	PERSONS EMPLOYED		REMARKS.
								Below ground.	Above ground.	
<b>Bengal—Raniganj Coalfield (No. 2 Inspection Circle)—contd.</b>										
10	Baraboni Coal Concern, Ltd. (See column No. 7.)	Sudih . . .	Sudih . . . . .	Purna Chandra Ganguli, 2nd class service, No. 49.	...	N. C. Sircar & Sons, 5, Clive Ghat Street, Calcutta, or Post Box No. 285.	...	284	105	
11	Barakar Brick and Tile Syndicate, Barakar P. O.	Garphalbari	Garphalbari, Mugma, E. I. R.	G. Shearer,* 2nd class service, No. 10.	...	.....	...	33	4	* Also Managing Director.
12	} Barakar Coal Co. Ltd. (See column No. 7.)	Alipur . . .	Alipur . . . . .	F. A. Roberts, 1st class competency, No. 13.	...	} Bird & Co., 101-1, Clive Street, Calcutta, or Post Box No. 46	...	46	69	
13		Kumardubi (2 mines.)	.....	W. F. Seton-Burn, 1st class service, No. 125. Authorization, No. 158, to act as manager of more than one mine.	...					
14	Barakar Coal Syndicate (See column No. 7.)	Jograd . . .	Jograd . . . . .	Kamikhya Nath Ghatak, 2nd class service, No. 18.	...	K. L. Mukherji & Co., 29, Pollock Street, Calcutta.	...	...	...	
15	Barakar (West) Coal Co. Barakar P. O.	Mugma . . .	Mugma, Mugma, E. I. R.	Ram Gopal Dey, Permit, No. 137.	...	.....	...	...	...	
16	} Beerbhumi (New) Coal Co., Ltd. (See column No. 7.)	Belroi . . .	Belroi, Sitarampur, W. I. R.	Amos Lowe, 1st class service, No. 81.	...	} Balmer, Lawrie & Co., 103, Clive Street, Calcutta, or Post Box No. 4.	...	155	132	} S. Heatop, Superintendent.
17		Borra . . .	Borra, Kulti, E. I. R.	J. G. Maughan, 1st class service, No. 13.	...					
18	}	Chanah . . .	Chanah, Barakar, E. I. R.	} W. Forster, 1st class service, No. 12.	} J Hyde	}	...	1,009	524	}
19		Dumarkunda	Dumarkunda, Barakar, E. I. R.							
20		Hatnal . . .	Sanctoria, Barakar, E. I. R.							
21		Laikdih . . .	Laikdih, Barakar, E. I. R.							

22	Bengal Coal Co., Ltd. 5, Failla Place, Calcutta, or Post Box No. 117.	Sanctoria (2 mines.)	Sanctoria, Barakar, E. I. R.	P. H. Ashcroft, <i>1st class service, No. 11. Authorization, No. 145, to act as manager of more than one mine.</i>	...	See column No. 2	...	606	265	G. F. Scott, Chief Mining Engineer.	
23		Sitalpur	Sitalpur, Barakar, E. I. R.	A. J. Cooper, <i>1st class competency, No. 8.</i>	..	...	...	493	93		
24		Solepur	Sodepur, Sitarampur or Barakar, E. I. R.	E. S. Davis, <i>1st class competency, No. 81 in lieu of English certificate.</i>	L. A. Biddle	..	...	1,63	619		
25	Bengal Imperial Coal Co. Barakar P. O.	Mugma	Mugma, Mugma, E. I. R.	Jadunath Chackerbutty	...	.....	...	...	...		
26		Bengal Iron and Steel Co., Ltd. (See column No. 7.)	Kendwa	Kendwa, Barakar or Kulti, E. I. R.	A. H. M. Pston, <i>1st class competency, No. 39, in lieu of English certificate. Authorization, No. 139, to act as manager of more than one mine.</i>	...	Martin & Co., 6 and 7, Clive Street, Calcutta, or Post Box No. 23.	...	69		13
27			Ramnagar	Ramnagar, Barakar or Kulti, E. I. R.	...	...		...	202		32
28	Bengal Nagpur Coal Co., Ltd. (See column No. 7.)	Gangutia	Gangutia, Barakar, E. I. R.	H. M. Daley, <i>1st class service, No. 28. Authorization, No. 90, to act as manager of more than one mine.</i>	...	Andrew Yule & Co., 7, Clive Row, Calcutta, or Post Box No. 150.	...	941	63		
29	Bengal Oriental Coal Co. Barakar P. O.	Kapasara	Kapasara, Mugma, E. I. R.	Mugat Ram Nagar, <i>Permit, No. 130. Authorization, No. 55, to act as manager of more than one mine.</i>	...	.....	...	30	10		
30	Bhattacharji & Co., U. C. Barakar P. O.	Egarcoor	Egarcoor, Mugma, E. I. R.	Ramanath Dass	...	.....	...	112	17		
31	Bhattacharji, Jagadishwar, Dawn Upendra Nath, & Kobi, Behari Lal, Barakar P. O.	Egarcoor	Egarcoor, Mugma, E. I. R.	.....	...	.....	...	...	...		
32	Birsingpur Coal Co. (Abhoya Charan Banerji), Nizalchati P. O.	Birsingpur	Birsingpur	Ram Nayas Kanji, <i>Permit, No. 122.</i>	...	.....	...	17	16		
33	Bonjamari Coal Co. Charanpur P. O.	Bonjamari	Bonjamari, Baraboni or Asansol, E. I. R.	Ram Chandra Mukherji, <i>Permit, No. 89.</i>	...	.....	...	17	16		
34	Borna Coal Co., Ltd. (See column No. 7.)	Salanpur	Salanpur, Salanpur or Sitarampur, E. I. R.	John Gilmour, <i>1st class competency, No. 11, in lieu of English certificate.</i>	...	F. W. Heiglers & Co., 136, Canning Street, Calcutta, or Post Box No. 185.	...	514	65	J. Macintosh, Superintendent.	

APPENDIX V—contd.

List of Coal Mines worked under the Indian Mines Act, 1901, in British India—contd.

Serial number.	Name of Owner or Company arranged in alphabetical order, and postal address.	Name of Mine and number of separate Mines as defined by Rule 27.	Situation of Mine.	Name of Manager, and No. and Class of his Certificate, Authorization or Permit.	Name of Assistant Manager and No. and Class of his Certificate.	Name and address of Managing Agent.	Date of establishment of Special Rules.	PERSONS EMPLOYED		REMARKS.		
								Below ground.	Above ground.			
<b>Bengal—Raniganj Coalfield (No. 2 Inspection Circle—contd.)</b>												
35	Brindabonpur Coal Co. (Horo-gobindo Goswamy, and Kanniram Marwari.)	Brindabonpur	Brindabonpur	Hariish Chaudra Roy	...	.....	...	...	...			
36	Mugma P. O. Burn & Co., Ltd. Raniganj P. O.	Egarcoor	Egarcoor, Mugma, E. I. R.	Pramatha Nath Missir, Permit, No. 101.	...	Burn & Co., 7, Hastings Street, Calcutta, or Post Box No. 191.	...	19	12			
37	Charnock Collieries, Ltd. (See column No. 7.)	Charnock (5 mines).	Sarakdih	J. W. Thornton, 1st class competency, No. 16. Authorization, No. 159, to act as manager of more than one mine.	...	Societa Coloniale di Trieste, 134, Canning Street, or Post Box No. 132, Calcutta.	...	...	...			
38	Chatterji Colliery Co. (A. C. Chatterji). 12/4 & 12/5, Pataldanga Street, Calcutta.	Mouthdih	Mouthdih, Sitarampur, E. I. R.	Kedar Nath Chatterji, 2nd class service, No. 112.	...	.....	...	...	40			
39	Chatterji, Ram Bandhu Dishargari P. O.	Chota Dhemo	Chota Dhemo, Sitarampur, E. I. R.	Rhishi Kesh Ghosh, Permit, No. 44.	...	.....	...	58	11			
40	Chatterji, Shashi Bhusan 46A, Strand Road, Calcutta.	Khudia	Shampur, Mugma, E. I. R.	.....	...	.....	...	45	35			
41	Chhaganlal Nagar Barakar P. O.	Egarcoor	Egarcoor, Mugma, E. I. R.	Ramji Vishram Chanda, Permit, No. 99.	...	.....	...	13	5			
42	Chirkunda (New) Coal Co. (Jugal Kisor Marwari & others.)	Egarcoor	Egarcoor, Mugma, E. I. R.	Hariish Chandra Roy, Permit, No. 105.	...	.....	...	48	36			
43	Chota Dhemo Coal Co. (See column No. 7.)	Chota Dhemo	Chota Dhemo, Sitarampur, E. I. R.	Aswini Kumar Dutta, 2nd class competency, No. 12.	...	M. L. Laik and Banerji, 7, Swallow Lane, Calcutta.	...	24	39			
44	Damra Coal Co., Ltd. (See column No. 7.)	Nuni	Nuni, Sitarampur or Asansol, E. I. R.	Devendra Nath Chakravarty.	...		...	...	...	...		
45	Damra Coal Co., Ltd. (See column No. 7.)	Bamundiha	Bamundiha, Sitarampur, E. I. R.	C. H. McCale, 1st class competency, No. 50, in lieu of English certificate. Authorisation, No. 121, to act as manager of more than one mine.	J. Delmas	Balmer, Lawrie & Co., 103, Clive Street, Calcutta, or Post Box No. 4.	...	200	78			
46		Burra Dhemo	Burra Dhemo				...	...	...	...	...	...
47		Gopalpur	Gopalpur, Sitarampur, E. I. R.				...	...	...	...	250	90
48		Lutchipur	Lutchipur, Sitarampur, E. I. R.				...					

49	Dutt, Jádab Chandra Barakar P. O.	Mugma	Mugma, Mugma, E. I. R.	Madhab Chandra Dutta	...	...	15	13	
50	Dutt Kabra Coal Co. Barakar P. O.	Begunia	Begunia, Barakar, E. I. R.	Nagendra Nath Banerji, <i>Permit, No. 86.</i>	...	...	47	5	
51		Egarcoor	Egarcoor, Mugma, E. I. R.	Hom Chand Juggiban Mehta.	...	...	23	14	
52	Dutt, Prasanno Coomar Sitarampur P. O.	Bamundiha	Bamundiha, Sitarampur, E. I. R.	Hari Charan Dutt, <i>1st class service, No. 24. Authorization, No. 80, to act as manager of more than one mine.</i>	...	...	14	11	
53	East Indian Coal Co., Ltd. (See column No. 7.)	Agoo	Agoo, Mugma, E. I. R.	Koilas Chandra Banerji, <i>2nd class service, No. 3.</i>	Jardine, Skinner & Co., 4, Clive Row, Calcutta, or Post Box No. 51.	...	30	17	J. J. Turnbull, General Manager.
54	Equitable Coal Co., Ltd. (See column No. 7.)	Chowrasi	Chowrasi, Barakar, E. I. R.	Adam Murdoch, <i>1st class competency, No. 63, in lieu of English certificate.</i>	McNeill & Co., 1/2, Clive Ghat Street, Calcutta, or Post Box No. 15.	...	852	154	W. Miller, Superin- tendent.
55		Dishargarh	Dishargarh, Barakar, E. I. R.	R. C. Barrowman, <i>1st class competency, No. 24, in lieu of English certificate.</i>		...	1,480	330	
56	Fatka Coal Co. (M. L. Laik; M. G. Chandra and others.) Nirshachati P. O.	Fatka or Pandedih,	Pandedih, Mugma, E. I. R.	Pravakar Chatterji, <i>2nd class competency, No. 19.</i>	...	...	54	9	
57	Friends Coal Co. (Indra Bhushan Mukherji and Jagabandhu Roy). Nirshachati P. O.	Bandarchooa	Bandarchooa	Srinath Banerji, <i>Permit, No. 92.</i>	...	...	..	...	
58	Ganguly, Janendra Nath Sitarampur P. O.	Sudibi	Sudibi, Sitarampur, E. I. R.	Bibhuti Bhusan Ganguli	...	...	...	...	
59	Ganguly, Sircar, Roy & Co. Sandi P. O. Fiz Sitarampur	Khoirabad	Khoirabad	Debendra Nath Ganguli	...	...	...	...	
60	Ghose, Kunja Behari Kulti, Burdwan.	Ketherdih	.....	.....	...	...	30	5	
61		Palasia	Palasia	Kunja Behari Ghose	...	...	..	...	
62	Gorain, Nanda Lal and others Barakar P. O.	Begunia	Begunia, Barakar, E. I. R.	Rajendra Lal Sarkar	...	...	52	9	
63	Jafar Yusuf Barakar P. O.	Kapasara	Kapasara, Mugma, E. I. R.	Sarbeswar Sen, <i>Permit, No. 106.</i>	...	...	...	...	

APPENDIX V—contd.

List of Coal Mines worked under the Indian Mines Act, 1901, in British India—contd.

Serial number.	Name of Owner or Company, arranged in alphabetical order and postal address.	Name of Mine and number of separate Mines as defined by Rule 27.	Situation of Mine.	Name of Manager, and No. and Class of his Certificate, Authorization or Permit.	Name of Assistant Manager and No. and Class of his Certificate.	Name and address of Managing Agent.	Date of establishment of Special Rules.	PERSONS EMPLOYED		REMARKS.
								Below ground.	Above ground.	
<b>Bengal—Raniganj Coalfield (No. 2 Inspection Circle)—contd.</b>										
64	J. N. Coal Co. (Prasad Bagbunundun and Brothers). (See column No. 7.)	Furra Dhemo	Burra Dhemo	.....	.....	Ramesur Flour Mill, 39, Hugul Kuria Gulli, Calcutta.	.....	.....	.....	
65	Kalyaneswari Coal Co. Mugna P. O.	Kapsara	Kapsara	Mugna, E. I. R.	Jyotirmoy Konar	.....	.....	.....	.....	
66	Laik, M. L. 7, Swallow Lane, Calcutta.	Hatnol	Hatnol	.....	Baidya Nath Acharjia, 2nd class service, No. 22.	.....	.....	9	19	
67	Lalla, Luchman Prosad Chirkunda P. O.	Kalimati	Kalimati, Barakar or Mugna, E. I. R.	.....	Luchman Prosad Lalla, Permit, No. 133.	.....	.....	30	5	
68	Lutchipur Coal Co., Ltd. (See column No. 7.)	Lutchipur	Lutchipur, Sitarampur, E. I. R.	.....	G. O. Reuks, 1st class service, No. 53.	Bird & Co., 101-1, Clive Street, Calcutta, or Post Box No. 46.	.....	91	126	E. C. Agabeg, General Manager.
69		Panchgatchia	Panchgatchia, Sitarampur, E. I. R.	.....	E. L. Barnett, 1st class service, No. 99.		.....	340	410	
70	MacNeill and Co. 1/2 Clive Ghat St., Calcutta, or Post Box No. 15	Bejdih (4 mines.)	Bejdih	.....	F. Brimlow 1st class competency, No. 100, in lieu of English certificate. Authorization, No. 201, to act as manager of more than one mine.	.....	.....	.....	.....	W. Miller, Agent.
71	Mambhim (New) Coal Co., Ltd. (See column No. 7.)	Dhundabad	Dhundabad, Sitarampur, E. I. R.	.....	W. L. Amis, 2nd class service, No. 45.	.....	.....	263	99	
72	Martin, Thomas Nirshachati P. O.	Badjna	Badjna	.....	W. O. Whiffen, 2nd class service, No. 112.	.....	.....	3	25	
73	Miers, Mangobinda and Roy, Rama Nath, Sandi P. O. Vid Sitarampur.	Pahargora	Pahargora	.....	Mangobinda Miers Permit, No. 125.	.....	.....	.....	.....	
74	Miers, Shama Charan Sandi P. O. Vid Sitarampur.	Mahanpur (3 mines.)	Mahanpur	.....	Shama Charan Miers, Permit, No. 103. Authorization, No. 179, to act as manager of more than one mine.	.....	.....	.....	.....	

75	Mugma Coal Association (H. M. Banerji), Barakar P. O.	Mugma	Mugma, Mugma, E. I. R.	Jugal Kishore Mukherji, Permit, No. 135.	...	...	...	80	26	
76	Mukherji, Baman Dass Dishargarh P. O.	Chota Dheone	Chota Dheone, Sitarampur, E. I. R.	Hari Pado Mukherji, 1st class service, No. 55.	...	...	...	162	79	
77	Mukherji, Tinkari, 9/1, Sircar's Lane, Calcutta.	Dhadrkadi	Dhadrkadi	Hrishikesh Chatterji, Permit, No. 84.	...	J. L. Banerji & Co., 14, Clive Street, Calcutta.	...	...	...	
78	Mukherji, Umesh Chandra Asansol P. O.	Borachak	Borachak, Borachak, E. I. R.	Raj Ballav Mukherji, 2nd class service, No. 34.	...	...	...	88	43	
79	Nandi, Maharaja Manindra Chandra, Cossimbazar P. O., Murshidabad.	Begunia	Begunia, Barakar, E. I. R.	...	...	...	...	...	...	}
80		Begunia Khas	Begunia, Barakar, E. I. R.		...	...	...	153	48	
81	Nodiha Coal Co., Ltd. Dishargarh P. O.	Nodiha	Nodiha	A. F. Pennefather, 2nd class service, No. 15, also 1st class com- petency, No. 1.	...	McNeill & Co., 1/2, Clive Ghat Street, Calcutta, or Post Box No. 15.	...	69	30	W. Miller, Superinten- dent.
82	Parekh, Kasu Lal Barakar P. O.	Rajpura	Rajpura, Mugma or Barakar, E. I. R.	Kasu Lal Parekh	...	...	...	...	...	
83	Parekh, Keshob Lal Nirshachati P. O.	Sindri	Sindri	Dakhineswar Ghosal, Permit, No. 136.	...	...	...	43	16	
84	Patel, Hati Bhai Barakar P. O.	Rajpura	Rajpura, Mugma or Barakar, E. I. R.	Hati Bhai Patel Permit, No. 66.	...	...	...	...	...	
85	Patel, Lallu Bhai Chirkunda P. O.	Rajpura	Rajpura, Mugma or Barakar, E. I. R.	Lallu Bhai Patel Permit, No. 65.	...	...	...	8	12	
86	Patlabari Coal Syndicate (Mulji Jetha & Chuni Lal).	Patlabari	Patlabari	Mahendra Narayan Raya.	...	...	...	235	11	
87	Roy, Bonowari Lal Barakar P. O.	Kalimati	Kalimati, Barakar or Mugma, E. I. R.	Bonowari Lal Roy, Permit, No. 108.	...	...	...	20	6	
88	Roy, Jugal Kishore Asansol P. O.	Palashdiha	Palashdiha, Asansol, E. I. R.	D. W. C. Smith, 2nd class service, No. 146.	...	...	...	97	40	
89	Roy, Bohini Kumar Barakar P. O.	Kalimati	Kalimati, Barakar or Mugma, E. I. R.	Robini Kumar Roy, 2nd class service, No. 157.	...	...	...	7	16	
90	Royal Bengal Coal Co. (Nalambini Dass) Barakar, E. I. R.	Kusumkanali	Kapasara, Mugma, E. I. R.	Dukha Haran Mukherji, 2nd class service, No. 21.	...	...	...	100	50	
91	Saltore Coal Co., Ltd. (See column No. 7.)	Saltore (8 mines.)	Saltore	Geo. Dixon, 1st class competency, No. 46, in lieu of English certificate. Author- ization, No. 116, to act as manager of more than one mine.	...	Bird & Co., 101-1, Clive Street, Calcutta, or Post Box No. 46.	...	33	253	

APPENDIX V—contd.

List of Coal Mines worked under the Indian Mines Act, 1901, in British India—contd.

Serial number	Name of Owner or Company arranged in alphabetical order, and postal address.	Name of Mine and number of separate Mines as defined by Rule 27.	Situation of Mine.	Name of Manager, and No. and Class of his Certificate, Authorization or Permit.	Name of Assistant Manager and No. and Class of his Certificate.	Name and address of Managing Agent.	Date of establishment of Special Rules.	PERSONS EMPLOYED		REMARKS.
								Below ground.	Above Ground.	
<b>Bengal—Raniganj Coalfield (No. 2 Inspection Circle)—concl'd.</b>										
92	Seal, Aghore Nath Nirshachati P. O.	Sangamahal	Sangamahal, Mugma, E. I. R.	...	...	.....	...	100	17	
93	Shampur Coal Co., Ltd. (See column No. 7.)	Bamundiha	Bamundiha, Sitarampur, E. I. R.	A. W. Wood, 1st class service, No. 117. Authorization, No. 169, to act as manager of more than one mine.	...	George Henderson & Co., 100, Clive Street, Calcutta, or Post Box No. 237.	...	360	352	Figures included in that of Sundarchak.
94		Shampur	Shampur, Mugma, E. I. R.							
95		Sundarchak	Sundarchak, Sitarampur, E. I. R.					...	...	88
96	Shungamahal Collieries, Ltd. (See column No. 7.)	Sangamahal	Sangamahal, Mugma, E. I. R.	G. D. Scott, 1st class competency, No. 2.	...	Colonial Trading Co. of Trieste, Ltd., 134, Canning Street, Calcutta, or Post Box No. 132.	...	...	...	
97	Sircar & Sons, N. C. 5, Clive Ghat Street, Calcutta, or Post Box No. 285.	Khoodka	Khoodka	Sachindranath Bose, 2nd class service, No. 100.	...	.....	...	44	12	
98	Sircar, Bidhu Bhusan Samdi P. O.	Binadikatta	Binadikatta, Sitarampur, E. I. R.	Bidhu Bhusan Sircar, Permit, No. 109.	...	.....	...	11	28	
99	Sitarampur Coal Co., Ltd. (See column No. 7.)	Narsamuda	Narsamuda, Asansol or Borachak, E. I. R.	W. V. Hannaford, 1st class service, No. 22.	...	Lyall, Marshall & Co., 25, Mangoe Lane, Calcutta, or Post Box No. 6.	...	350	290	
100	Sudhi Coal Co., Ltd. (See column No. 7.)	Raghnathbatty	Raghnathbatty, Sitarampur, E. I. R.	L. A. Jacobs, 1st class competency, No. 37, in lieu of English certificate. Authorization, No. 134, to act as manager of more than one mine.	...	McLeod & Co., 31, Dalhousie Square, South, Calcutta, or Post Box No. 78.	...	...	...	Figures included in that of Sudhi.
101		Sudhi	Sudhi, Sitarampur, E. I. R.					...	...	341
102	Suitable Coal Co. (Chagan Lull Nagar) Barakar P. O.	Egarcoor	Egarcoor, Mugma or Barakar, E. I. R.	Mugat Ram Nagar, Permit, No. 38. Authorization, No. 56, to act as manager of more than one mine.	...	.....	...	22	8	



**Bengal—Raniganj Coalfield (No. 3 Inspection Circle).**

1	Adaji Coal Co., Ltd. (See column No. 7)	Nandi (2 mines).	Nandi, Jamuria or Raniganj, E. I. R.	Robert Mitchell, <i>1st class service, No. 2. Authorisation, No. 131, to act as manager of more than one mine.</i>	...	Andrew Yule & Co., 7, Clive Row, Calcutta, or Post Box No. 150.	...	460	276	
2	Apcar & Co. 18, Radha Bazar, Calcutta.	Charanpur	Domohani, Baraboni or Asansol, E. I. R.	E. M. Patterson, <i>1st class service, No. 4.</i>	...	See column No. 2	...	224	247	F. J. Agabeg, General Manager.
3	Bagchi, Purna Chandra Kalipahari P. O.	Mosila	Mosila, Kalipahari, E. I. R.	...	...	Tansook Roy, Ram Kumar, 12, Mallick Street, Bara Bazar, Calcutta.	...	...	3	
4	Baliram Coal Co. Kalipahari P. O.	Ghusik	Ghusik, Kalipahari, E. I. R.	Ananta Lall Ghosh, <i>1st class service, No. 115. Authorisation, No. 38, to act as manager of more than one mine.</i>	...	.....	...	175	80	
5		Srikistopur or Mosila.	Kalipahari, Kalipahari, E. I. R.	...	...	.....	...	70	45	
6	Bamundiha Coal Concern Kalipahari P. O.	Chattapathar	Chattapathar, Kalipahari, E. I. R.	Lucken Chandra Mittra, <i>2nd class service, No. 31.</i>	Radha Bullov Chuckerbutty.	Dwarka Nath Khettry, 89, Cross Street, Calcutta.	...	68	87	
7	Banerji Collieries (Ludra Nath Banerji), Chowkidanga P. O.	Jotejanaki	Jotejanaki, Toposi or Raniganj, E. I. R.	Pramatha Nath Hazra, <i>2nd class service, No. 110. Authorisation, No. 156, to act as manager of more than one mine.</i>	Ram Pada Hazra.	.....	...	91	44	
8		Kenda								
9	Banerji, Hariher Kalipahari P. O.	Ghusik (West)	Ghusik, Kalipahari, E. I. R.	Surendra Nath Mukherji, <i>2nd class service, No. 161.</i>	Kani Lall Adikheri.	.....	...	105	25	
10	Banerji, Kashi Bihash Raniganj P. O.	Jamnakauali	Jamnakanali, Raniganj, E. I. R.	Protap Chandra Topadar, <i>2nd class service, No. 108.</i>	...	.....	...	...	...	
11	Banerji, Raghu Nath and others Mejia P. O., <i>old</i> Raniganj.	Kalikapur	Kalikapur, Raniganj, E. I. R.	Lal Bihari Kumbhakar, <i>Permit, No. 80.</i>	...	.....	...	37	8	
12	Paukura Coal Co. (H. H. Banerji and R. C. Mukherji), Kalipahari P. O.	Dobalia	Kalipahari, Kalipahari, E. I. R.	Surendra Nath Mukherji, <i>2nd class service, No. 161.</i>	...	.....	...	21	12	Harihar Banerji, General Manager.
13	Baraboni Coal Association Charanpur P. O.	Baraboni	Baraboni, Asansol or Baraboni, E. I. R.	James Brown, <i>1st class competency, No. 102, in lieu of English certificate.</i>	...	N. C. Sircar & Sons, 5 Clive Ghat Street, Calcutta, or Post Box No. 285.	...	61	25	Formerly owned by Burns & Co.

APPENDIX V—contd.

List of Coal Mines worked under the Indian Mines Act, 1901, in British India—contd.

Serial number.	Name of Owner or Company arranged in alphabetical order, and postal address.	Name of Mine and number of separate Mines as defined by Rule 27.	Situation of Mine.	Name of Manager and No. and Class of his Certificate, Authorization or Permit.	Name of Assistant Manager and No. and Class of his Certificate.	Name and address of Managing Agent.	Date of establishment of Special Rules.	PERSONS EMPLOYED.		REMARKS.
								Below ground.	Above ground.	
<b>Bengal—Raniganj Coalfield (No. 3 Inspection Circle)—contd.</b>										
14	Baraboni Coal Concern, Ltd. (See column No. 7).	Baraboni	Baraboni, Asansol or Baraboni, E. I. R.	James Brown, 1st class competency, No. 102, in lieu of English certificate.	...	N. C. Sircar & Sons, 5, Clive Ghat Street, Calcutta or Post Box No. 285.	...	118	61	W. Burt, Superintending Engineer.
15		Haripur	Haripur, Toposi or Raniganj, E. I. R.	Sorut Chandra Dutt, 2nd class service, No. 88.	...		...	98	18	
16		Nimcha	Nimcha, Raniganj, E. I. R.	Suresh Chandra Sarkar, 2nd class service, No. 66.	...		...	91	104	
17	Baraboni (New) Coal Co. (Kunja Behari Pal Chowdhuri and others), Charanpur P. O.	Baraboni (New)	Baraboni, Asansol or Baraboni, E. I. R.	Debendra Nath Bhattacharji.	...	.....	...	...	...	
18	Baraboni (South) Coal Co. (Kunja Behari Pal Chowdhuri), Charanpur P. O.	Baraboni (South)	Baraboni, Asansol or Baraboni, E. I. R.	F. C. Lardner, 2nd class service, No. 90. Authorization, No. 110, to act as manager of more than one mine.	...	.....	...	49	21	
19	Baraboni (West) Coal Co. Charanpur P. O.	Napara (South)	Baraboni, Asansol or Baraboni, E. I. R.	...	...	.....	...	...	...	
20	Barakar Coal Co. Ltd. (See column No. 7).	Jamgram	Jamgram, Gaurangdi, E. I. R.	...	...	Bird & Co., 101/1, Clive Street, Calcutta, or Post Box No. 46.	...	815	350	E. C. Agabeg, Superintendent.
21		Kantapahari	Kantapahari, Gaurangdi, E. I. R.	E. G. Nash, 2nd class competency, No. 28.	...		...	322	126	
22	Basanti Oakdene Coal Co. (See column No. 7).	Basantipur	Mamudpur, Toposi or Raniganj, E. I. R.	G. Stacey, 2nd class service, No. 93. Authorization, No. 9, to act as temporary manager of more than one mine.	...	Stanley Oakes & Co., 5, Mangoe Lane, Calcutta.	...	78	49	
23		Mouza								

24	Beebhum (New) Coal Co., Ltd. (See column No. 7).	Baraboni	Baraboni, Asansol or Baraboni, E. I. R.	A. Russell, 1st class competency, No. 54, in lieu of English certificate. Authorization, No. 67, to act as manager of more than one mine.	...	...	890	382	Contains figures for Jairamdanga as well.	
25		Chinchuria (7 mines)	Chinchuria, Baraboni or Asansol, E. I. R.	Charles Lea, 1st class competency, No. 58, in lieu of English certificate. Authorization, No. 118, to act as manager of more than one mine.	...	Balmer, Lawrie & Co., 108, Clive Street, Calcutta, or Post Box No. 4.	142	116		S. Heslop, General Manager.
26		Jairamdanga (2 mines)	Jairamdanga, Asansol or Baraboni, E. I. R.	A. Russell, 1st class competency, No. 54, in lieu of English certificate. Authorization, No. 67, to act as manager of more than one mine.	...	.....	...	...		
27	Bengal Coal Co., Ltd., 5, Fairlie Place, Calcutta, or Post Box No. 117.	Banksimulla (2 mines)	Banksimulla, Asansol, E. I. R.	T. Chrystle, 1st class competency, No. 25, in lieu of English certificate. Authorization, No. 138, to act as manager of more than one mine.	H. R. Fox, 1st class service, No. 92.	.....	61	175	G. F. Scott, Chief Mining Engineer.	
28		Damudapur	Damudapur, Raniganj or Ikra, E. I. R.	F. T. Marley, 1st class competency, No. 40, in lieu of English certificate.	.....	.....	429	298		
29		Raniganj	Egara, Raniganj, E. I. R.	B. L. Brodhurst, 1st class competency, No. 38, in lieu of English certificate.	.....	.....	305	180		
30	Bhagirathi Coal Co., Kalipahari P. O.	Bhutdoba	Kalipahari, Kalipahari, E. I. R.	Khetra Nath Dey Permit, No. 143.	Fran Gobinda Sirkar.	.....	75	47	E. C. Agabeg, General Manager.	
31	Bhattacharji, Shasi Bhusan Chora P. O.	Haripur	Haripur, Toposi or Raniganj, E. I. R.	Nil Madhab Chakrabarti, 2nd class service, No. 104.	.....	.....	65	9		
32	Bhukajuri Coal Co., Ltd. (See column No. 7).	Bhukajuri (2 mines)	Bhukajuri, Asansol or Baraboni, E. I. R.	H. C. Read, 1st class service, No. 121. Authorization, No. 129, to act as manager of more than one mine.	Gregory Sam	Bird & Co., 101-1, Clive Street, Calcutta, or Post Box No. 46.	246	192		
33	Bilbera Coal Co., Ltd. (See column No. 7).	Babisole (3 mines)	Babisole	T. Samson, 1st class competency, No. 94, in lieu of English certificate. Authorization, No. 127, to act as manager of more than one mine.	.....	N. C. Sircar & Sons, 5, Clive Ghat Street, Calcutta, or Post Box No. 285.	...	...		

APPENDIX V—contd.

List of Coal Mines worked under the Indian Mines Act, 1901, in British India—contd.

Serial number.	Name of Owner or Company arranged in alphabetical order, and postal address.	Name of Mine and number of separate Mines as defined by Rule 27.	Situation of Mine.	Name of Manager and No. and Class of his Certificate, Authorization or Permit.	Name of Assistant Manager and No. and Class of his Certificate.	Name and address of Managing Agent.	Date of establishment of Special Rules.	PERSONS EMPLOYED		REMARKS.
								Below ground.	Above ground.	
<b>Bengal—Raniganj Coalfield (No. 3 Inspection Circle)—contd.</b>										
34	British India Coal Co., Ltd. (See column No. 7).	Napara (8 mines)	Napara, Baraboni or Asansol, E. I. R.	L. R. Somerville, 1st class competency, No. 76, in lieu of English certificate.	...	Williamson, Magor & Co., 4, Mangoe Lane, Calcutta, or Post Box No. 177.	...	77	100	Formerly owned by P. N. Bose.
35	Burdwan Coal Co. (G. E. and B. T. Sircar) Kalipahari P. O.	Mosila	Mosila, Kalipahari, E. I. R.	Pronoda Chandra Mukherji, Permit, No. 40.	...	.....	...	39	22	
36	Burdwan (New) Coal Co. Kalipahari P. O.	Mosila	Mosila, Kalipahari, E. I. R.	Purna Chandra Bagchi, 2nd class service, No. 51.	...	.....	...	17	10	
37	Burn & Co. The Potteries, Raniganj P. O.	Pottery (3 mines).	Raniganj, Raniganj, E. I. R.	Sharada Prasad Ghosal, 2nd class service, No. 115. Authorization, No. 173, to act as manager of more than one mine.	...	Burn & Co., 7, Hastings Street, Calcutta, or Post Box No. 191.	..	87	51	
38	Chatterji, Pran Kishen Chowkidanga P. O.	Jotejanaki (2 mines).	Jotejanaki, Toposi or Raniganj, E. I. R.	Karali Prasad Chatterji	...	.....	...	72	22	
39	Chelode Coal Co. (See column No. 7).	Chelode	Kuordib, Kalipahari, E. I. R.	W. Barnard, 2nd class service, No. 69, and 1st class competency, No. 26.	...	Sircar, Barnard & Co., 2, New China Barar Street, Calcutta, or Post Box No. 286.	...	...	...	
40	Cooverji Bhoja Kalipahari P. O.	Mosila	Mosila, Kalipahari, E. I. R.	Khimji Dhunji, Permit, No. 7.	...	.....	...	26	10	
41	Damra Coal Co., Ltd. (See column No. 7).	Damra (Old) (9 mines).	Damra, Kalipahari, E. I. R.	Sasi Bhuvan Patra, 2nd class service, No. 33. Authorization, No. 164, to act as manager of more than one mine.	...	M. L. Laik and Banerji, 7, Swallow Lane, Calcutta.	...	90	18	
42		Kanchka (2 mines).		Ghusik, Kalipahari, E. I. R.	...	.....	...	...	...	
43		Napara		Napara, Baraboni or Asansol, E. I. R.	Gopinath Chatterji, 2nd class service, No. 12.	...	.....	...	117	
44	Daw, Peary Lal 2, Dhurmahatta Street, Calcutta.	Lakshmiganj	Dobrasa, Toposi or Raniganj, E. I. R.	Ananda Prasad Roy.	...	.....	...	46	37	
45	Dhadka Coal Co. (Seth Gopal Das Trikumji), 25, Pollock Street, Calcutta.	Dhadka	Dhadka, Asansol, E. I. R.	....	...	.....	...	62	54	

46	Dutt, Hem Chandra Sitarampur P. O.	Kajra	Kajra, Raniganj, E. I. R.	Hem Chandra Dutt, <i>1st class service, No. 24. Authorization, No. 80, to act as manager of more than one mine.</i>	...	.....	...	11	32	
47	Eastern Coal Co., Ltd. (See column No. 7.)	Bankola	Bankola, Ukhra or Raniganj, E. I. R.	A. H. Ward, <i>1st class competency, No. 65, in lieu of English certificate.</i>	...	Mackinnon, Mackenzie & Co., 16, Strand Road, Calcutta, or Post Box No. 168.	...	296	186	W. Miller, Superintendent.
48		Jobs or Jotemotuk	Jobs, Raniganj, E. I. R.	W. Angier, <i>1st class service, No. 66.</i>	...		...	227	52	
49	Equitable Coal Co., Ltd. (See column No. 7.)	Jamuria	Jamuria, Jamuria, Asansol or Raniganj, E. I. R.	A. Murdoch, <i>1st class competency, No. 63, in lieu of English certificate.</i>	...	MacNeill & Co., 2, Clive Ghat Street, Calcutta, or Post Box No. 15.	...	759	182	W. Miller, Superintendent.
50		Satpukuria	Satpukuria, Asansol, E. I. R.	J. DeSouza, <i>2nd class competency, No. 2.</i>	...		...	86	11	
51	Faridpur Coal Co. (Soeli Bhusan Mukherji), 6, Fakir Ch. Chuckerbutty's Lane, Beadon Square P. O., Calcutta.	Faridpur	Charanpur, Baraboni or Asansol, E. I. R.	Kantay Ch. Bhattacharji, <i>2nd class service, No. 111.</i>	Surendra Nath Mukherji.	Tansookroy Ramnath, 12, Mullick Street, Calcutta.	...	80	26	
52	Ghusik and Muslia Collieries, Ltd. (Crest & Co., S. T.), Kalipahari P. O.	Baraboni	Baraboni, Baraboni or Asansol, E. I. R.	M. A. Creet, <i>Authorization, No. 16, to manage the mine temporarily.</i>	...	Martin & Co., 6 & 7, Clive Street, Calcutta, or Post Box No. 23.	...	190	99	S. T. Creet, General Manager.
53		Ghusik (3 mines)	Ghusik, Kalipahari, E. I. R.	A. T. Creet, <i>1st class service, No. 36. Authorization, No. 63, to act as manager of more than one mine.</i>	P. J. Peters and L. A. Creet.		...	285	200	
54		Muslia	.....	E. D. Onraiet, <i>1st class service, No. 20.</i>	...		...	...	...	
55	Ghusik Coal Co. (Hem Ch. Ghosh), Kalipahari P. O.	Ghusik	Ghusik, Kalipahari, E. I. R.	G. W. Ogilvie, <i>Permit, No. 157.</i>	...	.....	...	27	15	
56	G. M. Agreable Coal Co. Kalipahari P. O.	Kesabganj	Kesabganj, Kalipahari, E. I. R.	Gosto Behary Dutt, <i>Permit, No. 32.</i>	...	.....	...	16	7	
57	Hariladh Coal Co., Ltd. (See column No. 7.)	Akhalpur (6 mines)	Akhalpur, Jamuria, or Raniganj, E. I. R.	H. Heron, <i>1st class competency, No. 69, in lieu of English certificate. Authorizations, Nos. 72 and 107, to act as manager of more than one mine.</i>	...	MacNeill & Co., 2, Clive Ghat Street, Calcutta, or Post Box No. 15.	...	185	100	W. Miller, Superintendent.

List of Coal Mines worked under the Indian Mines Act, 1901, in British India—*contd.*

Serial number.	Name of Owner or Company arranged in alphabetical order, and postal address.	Name of Mine and number of separate Mines as defined by Rule 27.	Situation of Mine.	Name of Manager and No. and Class of his Certificate, Authorization or Permit	Name of Assistant Manager and No. and Class of his Certificate.	Name and address of Managing Agent.	Date of establishment of Special Rules.	PERSONS EMPLOYED		REMARKS.
								Below ground.	Above ground.	
<b>Bengal—Raniganj Coalfield (No. 3 Inspection Circle)—<i>contd.</i></b>										
58	Imperial Coal Co., Ltd. (See column No. 7.)	Madhubpur (2 mines).	Madhubpur . . . . .	T. Samson, <i>1st class competency, No. 94, in lieu of English certificate. Authorization, No. 167, to act as manager of more than one mine.</i>	...	N. C. Sircar & Sons, 5, Clive Ghat Street, Calcutta, or Post Box No. 285.	...	...	30	
59	Jagannath Coal Co. (Jagannath Marwari), Raniganj P. O.	Ragunathchak (2 mines).	Ragunathchak, Raniganj, E. I. R.	Chakar Chandra Pal, <i>2nd class service, No. 28. Authorization, No. 118, to act as manager of more than one mine.</i>	...	.....	...	45	27	
60	Katrae-Jharua Coal Co., Ltd. (See column No. 7.)	Sibpur (4 mines).	Sibpur, Raniganj or Asansol, E. I. R.	P. S. Keolan, <i>1st class service, No 34. Authorization, No. 115, to act as manager of more than one mine.</i>	A. T. Spencer and P. Sydney.	Andrew Yule & Co., 7, Clive Row, Calcutta, or Post Box No. 160.	...	521	132	
61	Kaviraj, Ram Lal Gaurangdi P. O.	Sultanpur . . . . .	Sultanpur, Churulia, E. I. R.	Ram Lal Kaviraj . . . . .	...	.....	...	19	6	
62	Kenda (Central) Coal Co. (J. A. Millar), Chowkidanga P. O.	Kenda . . . . .	Kenda, Toposi or Raniganj, E. I. R.	J. A. Millar, <i>1st class service, No. 14.</i>	Hosain Bux . . . . .	.....	...	21	26	
63	Kenda (New) Coal Co., Ltd. Chora P. O.	Kenda (8 mines).	Kenda, Toposi or Raniganj, E. I. R.	Kali Das Chatterji, <i>2nd class service, No. 65. Authorization, No. 122, to act as manager of more than one mine.</i>	..	.....	...	25	112	S. Heslop, Superintendent.
64	Kenda (South) Coal Co. (J. G. Martin), Chowkidanga P. O.	Banskuri . . . . .	Toposi or Raniganj, E. I. R.	J. C. Martin, <i>2nd class service, No. 64.</i>	...	.....	...	28	60	
65	Kuordih Coal Co., Ltd. (See column No. 7.)	Kuordih (4 mines).	Kuordih, Kalipahari, E. I. R.	W. Barnard, <i>2nd class service, No. 69, and 1st class competency, No. 26.</i>	..	Sircar, Barnard & Co., 2, New China Bazar Street, Calcutta, or Post Box No. 286.	...	141	86	R. Barnard, Superintending Engineer.
66	Kuordih (East) Coal Co., Ltd. (See column No. 7.)	Kuordih (East)	Kuordih, Kalipahari, E. I. R.							

67	Leik, Mukundo Lall 7, Swallow Lane, Calcutta.	Haripur	Haripur, Toposi or Raniganj, E. I. R.	Jogendra Nath Chatterji, 2nd class service, No. 50.	...	...	...	68	20
68	Maha, D. & R. Raniganj P. O.	Banskuri	Banskuri, Raniganj, E. I. R.	.....	...	.....	...	...	...
69		Jamehari	Jamehari, Raniganj, E. I. R.	.....	Rishi Kesh Mukherji.	.....	...	104	129
70		Seorsol	Seorsol, Raniganj, E. I. R.	Sita Nath Dutta, 1st class service, No. 93.	...	.....	...	193	73
71	Marwari, Fulchand Chowkidanga P. O.	Kenda	Toposi or Raniganj, E. I. R.	.....	...	.....	...	...	...
72	Marwari, Ganspat Ram Kalipahari P. O.	Kessabganj	Kessabganj, Kalipahari, E. I. R.	Shew Karan Marwari, 2nd class service, No. 6.	...	.....	...	90	43
73	Marwari, Jaganuath Raniganj P. O.	Bunbehal	Bunbehal, Ukhra or Raniganj, E. I. R.	Umprosd Mukherji, 2nd class service, No. 27.	...	.....	...	27	14
74		Dobrana	Dobrana, Toposi or Raniganj, E. I. R.	.....	...	.....	...	...	...
75	Marwari, Ram Bilas Kalipahari P. O.	Kessabganj	Kessabganj, Kalipahari, E. I. R.	Ram Bilas Marwari, 2nd class service, No. 55.	...	.....	...	22	19
76	Meyer Coal Co. (See column No. 7.)	Jubilee	Kalipahari, Kalipahari, E. I. R.	Basanto Kumar Dutta, 2nd class service, No. 70. Authoriza- tion, No. 142, to act as manager of more than one mine.	Babu Lal Tanti. Muhabir Pro- sad Dass.	.....	...	62	11
77		Nichinta	Nichinta, Kalipahari, E. I. R.	.....	.....	.....	...	52	10
78		Nunispool	Kalipahari, Kalipahari, E. I. R.	.....	.....	Meyer Brothers, 23, Pollock Street, Calcutta.	.....	...	...
79	Micto Coal Co., Ltd. (See column No. 7.)	Nimcha	Nimcha, Raniganj, E. I. R.	.....	Girindra Nath Sarcaa.	.....	...	34	8
80		Nandi	Nandi, Jamuria or Raniganj, E. I. R.	C. Tweedie 2nd class competency, No. 14. Authoriza- tion, No. 140, to act as manager of more than one mine.	.....	.....	...	80	29
81		Shekpur	Shekpur, Raniganj, E. I. R.	.....	.....	.....	...	...	...
82	Sibpur	Sibpur, Jamuria or Raniganj, E. I. R.	.....	.....	.....	...	...	...	
83	Mukherji, Baman Dass. Kalipahari P. O.	Ghusik (New)	Ghusik, Kalipahari, E. I. R.	.....	.....	.....	...	32	22
84	Mukherji, Hora Lal 15-4, Wellington Street, Calcutta.	Kenda	Kenda, Toposi or Raniganj, E. I. R.	Hriahi Kesh Ghosh E. I. R.	...	.....	...	...	7

APPENDIX V—contd.

List of Coal Mines worked under the Indian Mines Act, 1901, in British India—contd.

Serial number.	Name of Owner or Company arranged in alphabetical order, and postal address.	Name of Mine, and number of separate Mines as defined by Rule 27.	Situation of Mine.	Name of Manager, and No. and Class of his Certificate, Authorization or Permit.	Name of Assistant Manager, and No. and class of his Certificate.	Name and address of Managing Agent.	Date of establishment of Special Rules.	PERSONS EMPLOYED		REMARKS.
								Below ground.	Above ground.	
<b>Bengal—Raniganj Coalfield (No. 3 Inspection Circle)—contd.</b>										
85	Mukherji, Romesh Chandra . . . . . Kalipahari P. O.	Ghusik . . . . .	Ghusik, Kalipahari, E. I. R.	Radha Krishna Chatterji, 2nd class service, No. 113.	...	.....	...	85	21	
86	Mukherji, Soshi Bhusan . . . . . 6, Fakir Chand Chuckerbutty's Lane, Beadon Square P. O., Calcutta.	Nandi (New)	Nandi, Jamuria or Raniganj, E. I. R.	Kanti Chandra Bhattacharji, 2nd class service, No. 111.	...	Tansook Roy Ramnath, 12, Mullick Street, Calcutta.	..	...	...	
87	Mundulpur Coal Co., Ltd. . . . . (See column No. 7.)	Mundulpur . . . . .	Mundulpur . . . . .	A. Gillespie, 1st class competency, No. 98, in lieu of English certificate.	..	MacNeill & Co., 1-2, Clive Ghat Street, Calcutta, or Post Box No. 15.	...	...	..	W. Miller, Agent.
88	Nandi Coal Association (Siba Frossed and others) Nandi P. O.	Nandi . . . . .	Nandi, Jamuria or Raniganj, E. I. R.	Suchand Ghosh, 2nd class service, No. 44.	Pasupati Chatterji & Monindro Kinkor Nyak.	.....	...	118	48	
89	Nandi, Maharaja Manindra Chandra, Cossimbazar P. O., Murahidabad.	Napara . . . . .	Napara, Baraboni or Asansol, E. I. R.	Kali Prasanna Panja, 2nd class service, No. 102.	...	.....	...	110	82	Monmotho Nath Roy, General Manager.
90		Vanora Khas (9 mines).	Vanora, Baraboni or Asansol E. I. R.	Rajoni Prokash Chakrabarty, 1st class service, No. 112. Authorization, No. 81, to act as manager of more than one mine.	...	.....	...	104	88	
91	Niga Valley Coal Co. . . . . (Soshi Bhuson Mukherji.) 6, Fakir Chand Chuckerbutty's Lane, Beadon Square P. O., Calcutta.	Niga Valley (5 mines).	Kalipahari, Kalipahari, E. I. R.	Jasoda Dulal Ghosh, 2nd class service, No. 108. Authorization, No. 82, to act as manager of more than one mine.	Boni Madhab Mukherji.	Tansook Roy Ramnath, 12, Mullick Street, Calcutta.	...	35	28	
92	Nodia Coal Co. (Abhoy Kumar Rai Chowdhuri) Ukhra P. O.	Nodia . . . . .	Nodia, Ukhra or Raniganj, E. I. R.	Bepin Behary Sircar, 2nd class service, No. 78.	...	.....	...	14	...	
93	Ondal Coal Co., Ltd. See Column No. 7.)	Bowlah . . . . .	Bowlah . . . . .	W. Lawrie, 1st class competency, No. 78, in lieu of English certificate. Authorization, No. 128, to act as manager of more than one mine.	...	F. W. Heilgers & Co., 136, Canning Street, Calcutta, or Post Box No. 185.	...	251	139	J. Macintosh, General Manager.
94		Chora . . . . .	Chora, Toposi or Raniganj, E. I. R.							



95		Sunpur	Sunpur, Toposi or Raniganj, E. I. R.	C. C. Angier, <i>1st class service, No. 46.</i>	...	...	27	60		
96	Phularitand Coal Co., Ltd. (See column No. 7.)	Banali	Banali	Lal Chand Mukherji, <i>1st class service, No. 123.</i>	Nani Lal Goswami.	N. C. Sircar & Sons, 5, Clive Ghat Street, Calcutta, or Post Box No. 285.	...	83	34	R. Barnard, Superintending Engineer.
97		Damra (New)	Damra, Kalipahari, E. I. R.	Kanderpa Mohan Mozumdar, <i>2nd class competency, No. 21.</i>			...	51	27	
98	Poniat Coal Concern (U. C. Roy & Co.—A. C. Ghosh). Charanpur P. O.	Faridpur	Domohani, Asansol, E. I. R.	Umesh Chandra Rai, <i>2nd class service, No. 54.</i>	Jagad Bhuvan Rai Choudhuri.	Laik & Banerji, 7, Swallow Lane, Calcutta.	...	104	61	Formerly owned by Apcar & Co.
99	Raniganj Coal Association, Ltd. (See column No. 7.)	Toposi (2 mines)	Toposi, Toposi or Raniganj, E. I. R.	Thos. Thomson, <i>1st class service, No. 57. Authorization, No. 156, to act as manager of more than one mine.</i>	...	Kilburn & Co., 4, Fairlie Place, Calcutta, or Post Box No. 61.	...	119	96	
100	Reliance Coal Co., Ltd. (See column No. 7.)	Charanpur (6 mines.)	Domohani, Asansol, E. I. R.	P. Scott, <i>1st class service, No. 73. Authorization, No. 48, to act as manager of more than one mine.</i>	R. G. Rooke, <i>2nd class competency, Nos. 6 and 27.</i>	Bird & Co., 101-1, Clive Street, Calcutta, or Post Box No. 46.	...	355	165	
101	Sadhu, Ram Chandra Charanpur P. O.	Palssthal	Jamtara, Jamtara, E. I. R.	Nriya Gopal Sadhu	Tin Kari Rai.	.....	...	12	6	
102	Sahana & Co. (R. K. Sahana) Chowkidanga P. O.	Sonachora	Sonachora, Toposi or Raniganj, E. I. R.	Nishanath Rai Choudhuri, <i>Permit, No. 53.</i>	...	.....	...	35	36	
103	Samla and Kendra Syndicate (See column No. 7.)	Kendra	Kendra	C. C. Angier, <i>1st class service, No. 46. Authorization, No. 197, to act as manager of more than one mine.</i>	...	Martin & Co., 6 & 7, Clive Street, Calcutta, or Post Box No. 23.	...	...	...	
104		Samla	Samla	...	...	...	...	...	...	...
105	Sathpukuria and Asansol Collieries, Ltd. (See column 7.)	Aradanga or Banbistapur.	Banbistapur, Asansol, E. I. R.	H. T. C., Martin, <i>1st class service, No. 5.</i>	...	Martin & Co., 6 and 7, Clive Street, Calcutta, or Post Box No. 23.	...	75	12	
106	Sibpur Coal Co., Ltd. (See column No. 7.)	Pretoria	Sibpur, Jamuria, Asansol or Raniganj, E. I. R.	P. S. Keelan, <i>1st class service, No. 34. Authorization, No. 118, to act as manager of more than one mine.</i>	...	Andrew Yule & Co., 7, Clive Row, Calcutta, or Post Box No. 150.	...	333	36	
107	Singaran Coal Syndicate, Ltd. (See column No. 7.)	Jotejanaki (3 mines.)	Jotejanaki, Toposi, E. I. R.	T. C. Figgford, <i>1st class competency, No. 67, in lieu of English certificate. Authorization, No. 129, to act as manager of more than one mine.</i>	...	MacLeod & Co., 31, Dal-housie Square, Calcutta, or Post Box No. 78.	...	84	54	
108	Singh & Co., K. D. Kalipahari P. O.	Kalipahari	Kalipahari, Kalipahari, E. I. R.	Bam Din Lalla, <i>Permit, No. 127.</i>	...	.....	...	50	30	

APPENDIX V—contd.

List of Coal Mines worked under the Indian Mines Act, 1901, in British India—contd.

Serial number.	Name of Owner or Company arranged in alphabetical order, and postal address.	Name of Mine and number of separate Mines as defined by Rule 27.	Situation of Mine.	Name of Manager and No. and Class of his Certificate, Authorization or Permit.	Name of Assistant Manager and No. and Class of his Certificate.	Name and address of Managing Agent.	Date of establishment of Special Scales.	PERSONS EMPLOYED		REMARKS.
								Below ground.	Above ground.	
<b>Bengal—Raniganj Coalfield (No. 3 Inspection Circle)—concl'd.</b>										
109	Singh, Naba Rong Kalipahari P. O.	Bhutdoba	Bhutdoba, Kalipahari, E. I. R.	Esan Ch. Sircar . . . . . <i>Permit, No. 146.</i>	Ishvosh Chandra Ghosal.	.....	...	80	20	
110	Singh, Ram Narayan Asansol P. O.	Banbistopur	Banbistopur, Asansol, E. I. R.	Baikunto Nath Chowdhuri.	...	.....	...	48	9	
111	Sircar, Banwari Lal Chowkidanga P. O.	Dobrasa	Dobrasa, Toposi or Raniganj, E. I. R.	Banwari Lal Sircar . . . . .	...	.....	...	...	...	
112	Sudamdih Coal Co. Ltd. (See column No. 7).	Sarthakpur	Sarthakpur, Toposi or Raniganj, E. I. R.	Devendra Narain Roy, <i>2nd class service, No. 49.</i>	..	N.C. Sircar & Sons, 5, Clive Ghat Street, Calcutta, or Post Box No. 285.	...	42	57	
113	Tareni Coal Co. (S. C. Bhatta.) Chora P. O.	Haripur	Haripur, Toposi or Raniganj, E. I. R.	Nilmadab Chuckerbutty, <i>2nd class service, No. 104.</i>	...	.....	...	65	9	
114	Toposi (Old) Coal Co. Chowkidanga P. O.	Purandip	Purandip, Toposi or Raniganj, E. I. R.	Fauindra Nath Ghosh, <i>2nd class service, No. 153.</i>	...	.....	...	79	36	
<b>Bengal—Giridih Coalfield (No. 2 Inspection Circle).</b>										
1	Bayra Coal Association (Myers, E.) Giridih P. O.	Lakharua or Bayr	Lakharua, Giridih, E. I. R.	E. Myers, <i>1st class service, No. 27. Authorization, No. 196, to act as manager of more than one mine.</i>	...	.....	...	81	42	
2		Mohalichua	Mohalichua, Giridih, E. I. R.		...	.....	...	68	33	
3		Sikdardih	Sikdardih, Giridih, E. I. R.		...	.....	...	..	...	
4	Bengal Coal Co., Ltd. 5, Fairlie Place, Calcutta, or Post Box No. 117.	Kuldiha (4 mines).	Kuldiha, Giridih, E. I. R.	G. N. A. Pitt, <i>1st class competency, No. 77, in lieu of English certificate. Authorization, No. 149, to act as manager of more than one mine.</i>	...	.....	...	558	432	G. F. Scott, Chief Mining Engineer.

5	Budheadih Coal Co. (Sundermull) Gadi Shirampur P.O., Giridih.	Budheadih (2 mines.)	Budheadih, Giridih, E. I. R.	Sarbananda Lall, 2nd class service, No. 84. Authorization, No. 133, to act as manager of more than one mine.	...	.....	...	123	23	
6	East Indian Railway Co., 105, Clive Street, Calcutta, or Post Box No. 225.	Kurhurbari	Kurhurbari, Giridih, E. I. R.	Thos. Adamson, 1st class competency, No. 14, in lieu of English certificate.	A. Wright, 1st class service, No. 16.	.....	14th June 1905	3,878	2,471	T. H. Ward, Superintendent.
7		Serampur	Serampur, Giridih, E. I. R.	G. C. Lathbury, 1st class competency, No. 13, in lieu of English certificate.	G. C. Lesch, 1st class competency, No. 16, in lieu of English certificate.					
8	Tah & Co., Rakhil Das	Kabribad (3 mines.)	Kabribad, Giridih, E. I. R.	Sarat Chander Tah, 2nd class service, No. 123. Authorization, No. 65, to act as manager of more than one mine.	...	.....	...	54	23	
<b>Bengal—Rajmahal Coalfield (No. 3 Inspection Circle).</b>										
1	De, Girish Chandra	Domanpur	Domanpur, Rampurhat, E. I. R.	.....	...	.....	...	...	...	
2		Sarsabad	Sarsabad, Rampurhat, E. I. R.	.....	...	.....	...	...	...	
3	De, Ramani Kanto Basikpur, Dumka P. O.	Domanpur Balki	Balki, Rampurhat, E. I. R.	Ramani Kanto De	...	.....	...	5	...	
4		Ghatchora	Asaubani, Rampurhat, E. I. R.	.....	...	.....	...	2	...	
5	De, Soshi Bhusan Basikpur Dumka P. O.	Bargo	Bargo, Rampurhat, E. I. R.	Soshi Bhusan De	...	.....	...	16	...	
<b>Bengal—Daltonganj Coalfield (No. 1 Inspection Circle).</b>										
1	Bengal Coal Co., Ltd. 5, Fairlie Place, Calcutta, or Post Box No. 117.	Rajhara (5 mines.)	Rajhara, Daltonganj, E. I. R.	J. N. A. Devine, 1st class service, No. 71. Authorization, No. 170, to act as manager of more than one mine.	H. G. Piggford	.....	...	364	234	G. F. Scott, Chief Mining Engineer.
2	Redford, W. T. Dehri-on-Sone.	Singra (3 mines.)	Singra	.....	...	.....	...	70	35	

APPENDIX V—contd.

List of Coal Mines worked under the Indian Mines Act, 1901, in British India—contd.

Serial number.	Name of Owner or Company arranged in alphabetical order, and postal address.	Name of Mine and number of separate Mines as defined by Rule 27.	Situation of Mine.	Name of Manager and No. and Class of his Certificate, Authorization or Permit.	Name of Assistant Manager and No. and Class of his Certificate.	Name and address of Managing Agent.	Date of establishment of Special Rules.	PERSONS EMPLOYED		REMARKS.
								Below ground.	Above ground.	
<b>Central Provinces—(No. 3 Inspection Circle).</b>										
1	Coverji Bhoja . . . . . 19, Pollock Street, Calcutta.	Jattachhapper . . . . .	Jattachhapper, Chhindwara	Ananta Ram Hiralel, Permit, No. 123.	...	.....	...	...	...	
2	Government of India . . . . . Nagpur, C. P.	Ballarpur . . . . .	Ballarpur, Warora, G. I. P.	R. Wordsworth, 1st class competency, No. 22, in lieu of English certificate.	T. P. Yeoman, 1st class competency, No. 19, in lieu of English certificate.	.....	...	220	109	Chief Engineer, Central Provinces, Agent.
3	Great Indian Peninsula Railway Bombay P. O.	Mohpani . . . . .	Mohpani, Gadarwada, G. I. P.	F. L. G. Simpson, 1st class competency, No. 22, in lieu of English certificate.	O. T. Edwards	.....	...	553	426	
4	Pench Valley Coal Co., Ltd. (See column No. 7).	Barkui . . . . .	Barkui, Chhindwara, B.N.R.	R. Fenwick Jr., 1st class competency, No. 21, in lieu of English certificate. Authori- zation, No. 153, to act as manager of more than one mine.	Joseph Ry- lance, 2nd class competency, No. 1, in lieu of English certificate.	Shaw, Wallace & Co., 20, Strand Road, Cal- cutta. Post Box, No. 70.	...	85	51	F. I. L. Ditmas, General Manager.
5		Buteria . . . . .	Buteria, Chhindwara, B. N. R.				...	5	5	
6		Chandametia . . . . .	Chandametia, Chhindwara, B. N. R.				...	285	70	
<b>British Baluchistan (No. 2 Inspection Circle).</b>										
1	Alibhoy Bros. . . . . Quetta F. O.	Sor Range . . . . .	Sor Range, Quetta, N. W. R.	Alibhoy . . . . .	...	.....	...	8	2	
2	Aagharali & Co., Abdulla Loralai F. O.	Davispur . . . . .	Thadri, Loralai . . . . .	Jawandamull . . . . .	...	.....	...	9	3	Bhogingh Duki, Agent
3	Esaaji & Sons . . . . . Quetta, P. O.	Sor Range . . . . .	Sor Range, Quetta, N. W. R.	...	...	Ismail . . . . .	...	6	1	
4	Ferozshah, Shiawakehaw Quetta F. O.	Digari . . . . .	Digari, Quetta, N. W. R.	...	...	.....	...	...	...	
5		Sor Range . . . . .	Sor Range, Quetta, N. W. R.	Saleh . . . . .	...	.....	...	...	...	
6	Hossein Ali & Co. . . . . Quetta F. O.	Sor Range . . . . .	Sor Range, Quetta, N. W. R.	Hossein Ali . . . . .	...	.....	...	...	...	

7	Khan, Bahawal Quetta F. O.	Bhor	Kalet dist.	...	Abdul Khan	.....	...	3	...		
8		Digari	Digari, Quetta, N. W. B.	...		.....	...	5	1		
9	North-Western Railway Lahore P. O.	Khost	Khost, Khost, N. W. B.	Arthur Mort, <i>1st class competency, No. 28, in lieu of Eng- lish certificate.</i>	W. C. Clements	.....	...	443	260		
10	Patel, K. B. Burjorji D. Quetta F. O.	Mach	Mach, Bolan, N. W. B.	B. D. Patel	...	Bishan Dass	...	96	16		
11		Sor Range	Sor Range, Quetta, N. W. B.	...	...	Hari Chand, Sor Range near Hanna.	...	62	10		
12	Sorabji & Co. Quetta P. O.	Digari	Digari, Quetta, N. W. B.	Mano	...	Gillaram	...	25	6		
13		Leze	Digari, Quetta, N. W. B.	...	...		...	12	8		
14		Sor Range	Sor Range, Quetta, N. W. B.	...	...	.....	...	...	...		
<b>Burma (No. 1 Inspection Circle).</b>											
	Burma Mines Development and Agency, Ltd. West Meati Road, Mandalay P. O.	Thitshauk	Kalewa, Upper Chindwin	E. Kirkpatrick	...	.....	...	...	...		
<b>Eastern Bengal and Assam (No. 1 Inspection Circle).</b>											
1	Assam Railways and Trading Co., Ltd. Margherita, F. O.	Ledo Valley (East)		G. Bull, <i>1st class ser- vice, No. 83. Autho- rization, No. 147, to act as manager of more than one mine.</i>	...	.....	...	374	153		
2		Ledo Valley (West)			...	.....	...				
3		Ledo Valley (Upper).			Makum, Margherita, D. S. B.	...	.....	...	169	100	
4		Tirap				...	.....	...	14	2	
5		Namdang				T. Rushton, <i>1st class service, No. 84. Authorization, No. 146, to act as mana- ger of more than one mine.</i>	...	.....	...	284	169
6		Tikak					...	.....	...	273	178
7	Maolong Coal Co.	Maolong	Ishamati, Sylhet	...	...	.....	...	...			

G. E. Harris, Agent  
and  
General  
Manager.

APPENDIX V—*contd.*

List of Coal Mines worked under the Indian Mines Act, 1901, in British India—*concl'd.*

Serial number.	Name of Owner or Company arranged in alphabetical order, and postal address.	Name of Mine and number of separate Mines as defined by Rule 27.	Situation of Mine.	Name of Manager and No. and Class of his Certificate, Authorization or Permit.	Name of Assistant Manager and No. and Class of his Certificate.	Name and address of Managing Agent.	Date of establishment of Special Rules.	PERSONS EMPLOYED		REMARKS.
								Below ground.	Above ground.	
<b>Panjab—(No. 2 Inspection Circle).</b>										
1	Chand, Lakmi . . . . . Ara P. O.	Chbeja . . . . .	Ara, Jhelum . . . . .	Fakir Chand Permit, No. 159.	...	.....	...	14	6	
2	Dass, Bhagwan and Ram Kalabagh P. O.	Katha . . . . .	Katha, Dandot, N. W. R.	Radha Kishan . . . . .	...	Radha Kishan . . . . .	...	...	...	
3		Samowala . . . . .	Tajuwala . . . . .	...	...	.....	...	18	20	
4		Tajuwala . . . . .		...	...	.....	...			
5		Thakkar Kot . . . . .		...	...	.....	...			
6	Dass, Ganesh Gujrat, P. O.	Dher . . . . .	Manihala, Jhelum . . . . .	Dost Ali Shah Permit, No. 89.	...	.....	...			...
7	Dass, Isban, Pind Dadan Khan, P. O.	Rodianwali . . . . .	Sidhandi, Jhelum . . . . .	Golam Ali . . . . .	...	.....	...	16	6	
8	Dass, Thakur . . . . .	Gamraia . . . . .	—Jhelum . . . . .	...	...	.....	...	12	...	
9	Lal & Co. Kushan . . . . .	Kotianwali . . . . .	—Jhelum . . . . .	Mahomed Husain . . . . .	...	.....	...	25	1	
10	Nath, Bhola Dalwal P. O.	Chatterwal . . . . .	Dalwal, Jhelum . . . . .	...	...	.....	...	11	3	
11		Wahgroowali . . . . .	—Jhelum . . . . .	Bhola Nath Permit, No. 90.	...	.....	...	7	...	
12	North-Western Railway Co., Lahore P. O.	Dandot . . . . .	Dandot, Khewra, N. W. R.	D. Thomson, 1st class competency, No. 60, in lieu of English certificate.	...	.....	...	690	888	
13	Panjab Coal Co. (Lakmi and Deva Singh) Abbottabad P. O.	Chiti Dand . . . . .	Mukrach, <i>vid</i> Golpur, N.W. R.	Kirpa Ram, 2nd class service, No. 82.	...	.....	...	183	209	E. L. Hope, Superintendent.
14	Ram & Sons, R. S. Rocha Abbottabad P. O.	Chota Tajuwala . . . . .	Tajuwala . . . . .	Uttam Singh . . . . .	...	.....	...	15	6	
15		Narianwala . . . . .	Narianwala . . . . .	Faquir Chand . . . . .	...	.....	...	15	3	
16	Singh & Co., R. B. Anup Lahore P. O.	Makarwal . . . . .	Mianwali . . . . .	S. K. Taylor . . . . .	Khudabux . . . . .	Lukelman Singh . . . . .	...	80	96	

## APPENDIX V—contd.

Index to List of Coal Mines worked under the Indian Mines Act, 1901,  
in British India.

Name of Mine.	Name of Owner or Company.	Serial No. in list.
<b>Bengal—Jharia Coalfield (No. 1 Inspection Circle).</b>		
Alkusa . . . . .	Kanga & Co. . . . .	105
	Angarpatra Colliery Co. . . . .	7
	Bose, J. N. . . . .	38
Angarpatra . . . . .	Srimani, J. N. . . . .	185
	Trigunait Bros. Coal Co. . . . .	206
	Union Coal Co., Ltd. . . . .	205
Bagdiggi . . . . .	Bagdiggi-Kujama Collieries, Ltd. . . . .	12
	Smith, C. J. . . . .	182
Bahardih . . . . .	Mahato, Baidya Nath . . . . .	132
Bamongarh . . . . .	Bose, Satish Chandra . . . . .	41
Bansdeopur . . . . .	Bansdeopur Coal Co. . . . .	18
Bansjora . . . . .	Bansjora Coal Co. . . . .	19
Banstackola . . . . .	New Beerblum Coal Co., Ltd. . . . .	25
Barwabera (New) . . . . .	Barwabera Coal Co. . . . .	24
Belanjabad . . . . .	Lall, Daroga . . . . .	127
Benahir . . . . .	Standard Coal Co., Ltd. . . . .	186
Bhaga . . . . .	Jharia Colliery Co., Ltd. . . . .	96
Bhagaband . . . . .	Borrea Coal Co., Ltd. . . . .	37
Bhalgora . . . . .	Bhalgora Coal Co., Ltd. . . . .	32
Bhatdih . . . . .	Bengal Bhatdih Coal Co., Ltd. . . . .	28
Bhowra . . . . .	East Indian Coal Co., Ltd. . . . .	71
Bhugutdih . . . . .	Bengal Nagpur Coal Co., Ltd. . . . .	31
Bhulanbarari . . . . .	Bhulanbarari Coal Co., Ltd. . . . .	35
	East Indian Coal Co., Ltd. . . . .	67
Bhutgoria . . . . .	Aldih Coal Co., Ltd. . . . .	6
Bodora . . . . .	Withalram Coal Co. . . . .	207
Borora . . . . .	Chatterji, Singh & Co. . . . .	52
Brahmanbarari . . . . .	East Indian Coal Co., Ltd. . . . .	67
Braroabara . . . . .	Jharia-Katras Coal Co. . . . .	98
Bdruchak . . . . .	Bdruchak Coal Mining Co., Ltd. . . . .	43
	Bulliar Coal Co. . . . .	44
	Bulliar Coal Concern . . . . .	45
Bulliar . . . . .	Chuni Lal Coal Co. . . . .	54
	East Indian Coal Co., Ltd. . . . .	68
Burragarh . . . . .	Burragarh Coal Co. . . . .	46
	Hariladh Coal Co., Ltd. . . . .	87
Busserya . . . . .	Busserya Coal Co. Ltd. . . . .	47
	Banerji & Co., Harish Chandra . . . . .	15
Chandore . . . . .	Chandore Coal Co. (P. K. Roy and others) . . . . .	49
	National Coal Co. (R. K. Chatteraj) . . . . .	142

APPENDIX V—*contd.*

Name of Mine.	Name of Owner or Company.	Serial No. in list.
<b>Bengal—Jharia Coalfield (No. 1 Inspection Circle)—<i>contd.</i></b>		
	Pain, B. L.	146
Chandore . . . . .	Trigunait, Brojo Bhusan . . . . .	198
	Trigunait, Mukteswar . . . . .	201
	Trigunait, Sudarsan . . . . .	203
	Agarwala, Ramjus . . . . .	4
Chandrabad . . . . .	Khandesh, Berar and Gujrat Coal Concern (Rastamji Ardesir Macadam) . . . . .	114
Chasnalla . . . . .	Lodna Colliery Co., Ltd. . . . .	128
Choitodih . . . . .	Lutchipur Coal Co., Ltd. . . . .	121
Dharmuband . . . . .	Ghosh, Akshaya Kumar . . . . .	79
Dheriajoba . . . . .	Dheriajoba Coal Co. . . . .	61
	Jharia Coal Syndicate, Ltd. . . . .	95
Dobari . . . . .	Bagchi, R. N. . . . .	11
	Dobari Coal Co. (S. B. Banerji and R. K. Sahana) . . . . .	62
	Kor, Sri Hari . . . . .	121
Durgapur . . . . .	Premji and Devshi Hamir . . . . .	165
Ekra Khas . . . . .	Nandi, Maharaja Manindra Chandra . . . . .	140
Emampahari . . . . .	Jharia Coal Syndicate . . . . .	94
Ena . . . . .	North-West Coal Co., Ltd. . . . .	143
Futtehpur . . . . .	Agarwala, Ramjus . . . . .	5
	Dosa, Ganji and Khunji . . . . .	64
	Premji and Devshi Hamir . . . . .	156
Ganhudih . . . . .	Dobari Coal Co. (S. B. Banerji and R. K. Sahana) . . . . .	63
Gansadih . . . . .	Roy, P. C. . . . .	166
Ganzlatan . . . . .	New Manbhun Coal Co., Ltd. . . . .	133
Gararia . . . . .	Das, R. B. . . . .	60
	Howji, Tribhuban Dass . . . . .	90
	Roy, Moheswar and Srikontho . . . . .	166
	Sanker, T. R. . . . .	169
Gobindpur . . . . .	Gobindpur Coal Co., Ltd. . . . .	80
	South Gobindpur Collieries, Ltd. . . . .	81
Godhur . . . . .	Agarwala, Lachmi Narayan . . . . .	3
	Raha and Son, Sasi Bhusan . . . . .	157
Goluckdih . . . . .	East Jharia Coal Co., Ltd. . . . .	97
Gopalichak . . . . .	Gopalichak Coal Co., Ltd. . . . .	82
Gopalichak (West) . . . . .		83
Hariladih . . . . .	Equitable Coal Co., Ltd. . . . .	75
	Standard Coal Co., Ltd. . . . .	167
Huntodih . . . . .	Huntodih Coal Co., Ltd. . . . .	91
Jairamdih . . . . .	Gorain, N. L. and others . . . . .	84
Jamadoba . . . . .	Indian Collieries Syndicate, Ltd. . . . .	92
Jharia (East) . . . . .	East Jharia Coal Co., Ltd. . . . .	97
Jharia Khas . . . . .	Khora Kamii Kutchi . . . . .	119
	Standard Coal Co., Ltd. . . . .	168



APPENDIX V—*contd.*

Name of Mine.	Name of Owner or Company.	Serial No. in list.
<b>Bengal—Jharia Coalfield (No. 1 Inspection Circle)—<i>contd.</i></b>		
Jinagora . . . . .	Chakrabarty, Krishnajiban . . . . .	43
	East Barari Coal Co. (Tricumji Jiban Dass) . . . . .	22
	G. P. C. & Co. (Gova Petha) . . . . .	86
Jogta . . . . .	Agabeg Brothers . . . . .	1
	B. R. & N. Coal Co. . . . .	42
Joyrampur . . . . .	Joyrampur Coal Co. . . . .	101
	Joyrampur Coal Concern (J. K. Mukherji) . . . . .	102
	Khengarji Triku & Co. . . . .	117
	Khimji Moorji & Co. . . . .	118
Joyrampur (Lower) . . . . .	R. M. R. Coal Concern . . . . .	183
	Ghela Panchan & Co. . . . .	77
Kandra (Upper) . . . . .	South Jharia Coal Co. . . . .	99
Kankani . . . . .	Eastern Coal Co., Ltd. . . . .	72
	Angarpatra Colliery Co. . . . .	8
Kantapahari . . . . .	Bose, J. N. . . . .	39
	South Angarpatra Coal Co. (B. K. Banerji & Son) . . . . .	9
	Srimani, J. N. . . . .	185
	Trigunait Mukteswar . . . . .	202
Kantapahari (West) . . . . .	Central Bengal Coal Co., Ltd. . . . .	27
Katras . . . . .	Nowagarh Coal Co., Ltd. . . . .	144
	C. M. & Co. (Chimanlal Mangaldas & Keshan Lal Parekh) . . . . .	56
Kendwadiah . . . . .	East Indian Coal Co., Ltd. . . . .	69
	Gorsia, Ram Ranu . . . . .	85
	Hariladiah Coal Co., Ltd. . . . .	88
	Kendwadiah Coal Co. (Gajadhar Marwari and others) . . . . .	108
Kesalpur . . . . .	Bose, J. N. . . . .	40
	Koondoo, Sunda Charan . . . . .	120
Kesalpur (Imperial) . . . . .	Singh, Bir . . . . .	175
Kesalpur (New) . . . . .	Banerji, Bepin Behari . . . . .	16
Kessurgurah . . . . .	Kessurgurah Coal Co. . . . .	109
	East Indian Coal Co., Ltd. . . . .	69
Khaira . . . . .	Khaira Coal Syndicate, Ltd. . . . .	110
	Singh & Co., Atma . . . . .	174
Khalsa . . . . .	Agarwala, Jagannath Ramjus . . . . .	2
	Khas Jharia Colliery Co. . . . .	116
Khas Paredih . . . . .	Ghosal, Chatterji & Co. . . . .	78
Kisha . . . . .	Kanga & Co. . . . .	106
Koradih . . . . .	C. M. & Co. (Chimanlal Mangaldas and Keshan Lal Parekh) . . . . .	57
	Bagdiggi-Kujama Collieries, Ltd. . . . .	13
Kujama . . . . .	Das, L. H. . . . .	58
	Khan Brothers . . . . .	112
	Nanji, Khanji and Sanji . . . . .	141
	North Kujama Coal Co. . . . .	122

## APPENDIX V—contd.

Name of Mine.	Name of Owner or Company.	Serial No. in list.
<b>Bengal—Jharia Coalfield (No. 1 Inspection Circle)—contd.</b>		
Kujama (South)	Bagdiggi-Kujama Collieries, Ltd.	14
	Central Kurkend Coal Co., Ltd.	123
	Khaira Coal Syndicate, Ltd.	111
	Kurkend Coal Co. (P. C. Roy and others)	124
Kurkend	Motiram Coal Co.	135
	Selected Coal Co. (Kalianji Shamji)	171
	Sircar, B. B.	181
	Sudamdih Coal Co., Ltd.	190
Kurkend (East)	Marine Coal Co., Ltd.	194
Kustore	Raniganj Coal Association, Ltd.	159, 160 & 161
	Kusunda and Nayadi Collieries, Ltd.	125
Kusunda	Patel & Co.	162
	Roy, J. K.	164
Lakorka	Lakorka Coal Co., Ltd.	126
Lodna	Lodna Colliery Co., Ltd.	121
	North Barakar Coal Co.	21
Loyabad	Barakar Coal Co., Ltd.	20
Madhuband	Jumoni Coal Co., Ltd.	103
	Lodna Colliery Co., Ltd.	130
Mandra	Singh, Jit Narayan and Mit Narayan	177
Mandra Khas	Singh, Gour Mohan	176
Mucheridih	Mucheridih Coal Syndicate	136
Mudidih	Reliance Coal Co., Ltd.	162
Muralidih	Bengal Coal Co., Ltd.	28
Muttigurra	Muttigurra Coal Co., Ltd.	139
Nayadi	Kusunda and Nayadi Collieries, Ltd.	125
Nichitpur	Parasea Collieries, Ltd.	150
Noonoodih	Bengal Iron and Steel Co., Ltd.	30
Nudkharuki	Nudkharuki Coal Co.	145
Nudkharuki (East)	Auckland Coal Co., Ltd.	10
Pandakanali	Pandakanali Coal Co., Ltd.	147
	Bhattacharji, U. C.	34
	Choudhuri, Satya Taran	53
	Chuttu Lal Kutchi	55
	Jharia Coal Association (S. K. Mukherji)	93
	Kabiraj, R. C.	104
	Katras Oriental Coal Syndicate	107
Pandedih	Mukherji & Co., S. K.	138
	Pandedih Coal Syndicate (Bajrangbali Singh & others)	148
	Singh, Jonabar	178
	Trigunait, Bhubaneswar	197
	Trigunait, Sudarsan	204

APPENDIX V—*contd.*

Name of Mine.	Name of Owner or Company.	Serial No. in list.
<b>Bengal—Jharia Coalfield (No. 1 Inspection Circle)—<i>conold.</i></b>		
Pandeybera . . . . .	Das, L. H. . . . .	59
	Pandeybera Colliery Co. . . . .	149
Parbad . . . . .	East Barari Coal Co. (Tricumji Jiban Dass) . . . . .	23
Parelgaria . . . . .	Parelgaria Coal Co. . . . .	151
Phularibad . . . . .	Khas Jharia Coal Co. . . . .	115
Phularitand . . . . .	Phularitand Coal Co., Ltd. . . . .	153
	Dumra Coal Co. . . . .	65
Pinalgoria . . . . .	Ghansham Das Coal Co. . . . .	76
	Vurma Coal Co. . . . .	208
Pipratand . . . . .	Pipratand Coal Co., Ltd. . . . .	154
Pootki . . . . .	Eastern Coal Co., Ltd. . . . .	73
Puddugora . . . . .	Bengal Coal Co., Ltd. . . . .	29
Ramgarh . . . . .	John & Arratoon . . . . .	100
	Biswas, P. K. . . . .	36
	Chandra, Girish Chandra . . . . .	50
	Dutt, B. L. . . . .	66
Ramkanali . . . . .	Hockly, W. A. . . . .	89
	Roy, P. C. . . . .	187
	Trigunait, Brojo Bhusan . . . . .	199
Ranidih . . . . .	Ranidih Coal Co. (S. B. Chatterji) . . . . .	153
Sendra . . . . .	Sendra Coal Co., Ltd. . . . .	173
Sijua . . . . .	Sijua Coal Co., Ltd. . . . .	173
Simlabahal . . . . .	Bhalgora Coal Co., Ltd. . . . .	33
	Sinidih Coal Co., Ltd. . . . .	179
Sinidih . . . . .	Sinidih Coal Concern . . . . .	180
Sowardih . . . . .	Sowardih Coal Co. (N. L. Gorain & others) . . . . .	183
	Empire Coal Co., Ltd. . . . .	74
Sudamdih . . . . .	Sudamdih Coal Co., Ltd. . . . .	189
Sudriadih . . . . .	Sudriadih Coal Co., Ltd. . . . .	191
	Roy, P. C. . . . .	168
Surataur . . . . .	Seal, K. B. . . . .	170
Surataur (New) . . . . .	Banerji's Coal Concern, J. L. . . . .	17
Sutikdih . . . . .	East Indian Coal Co., Ltd. . . . .	70
Tandabari . . . . .	Tandabari Coal Syndicate . . . . .	193
Tentulia . . . . .	Tentulia Colliery Co. . . . .	193
	Chandra, Haresmal Ram . . . . .	51
Tettulia . . . . .	Mukherji & Co., K. L. . . . .	137
	New Tetturia Coal Co., Ltd. . . . .	194
Tetturia . . . . .	West Tetturia Collieries, Ltd. . . . .	195
Titalmuri . . . . .	Titalmuri Coal Co., Ltd. . . . .	196
Tundu . . . . .	Khan, Rahim Feroz . . . . .	113
Verakotah . . . . .	Verakotah Syndicate, Ltd. . . . .	206
Western India . . . . .	Western India Coal Trading Co. . . . .	209

## APPENDIX V—contd.

Name of Mine.	Name of Owner or Company.	Serial No. in list.
<b>Bengal—Raniganj Coalfield (No. 2 Inspection Circle).</b>		
Agoo . . . . .	East Indian Coal Co., Ltd.	53
Aldih . . . . .	Aldih Coal Co., Ltd.	5
Alipur . . . . .	Barakar Coal Co., Ltd.	12
Badjna . . . . .	Martin, Thomas	72
Bamundiha . . . . .	Damuda Coal Co., Ltd.	46
	Dutt, Prasanno Coomar	62
	Shampur Coal Co., Ltd.	93
Bandarchooa . . . . .	Friends Coal Co. (I. B. Mukherji & J. Roy)	57
Begunia . . . . .	Dutt Kabra Coal Co.	50
	Gorain, Nanda Lall & others	62
	Nandi, Maharaja Manindra Chandra	79
Begunia Khas . . . . .	Nandi, Maharaja Manindra Chandra	80
Bejdih . . . . .	MacNeill & Co.	70
Belrai . . . . .	New Beerbhun Coal Co., Ltd.	16
Binadikatta . . . . .	Sircar, Bidhu Bhusun	98
Birsingpur . . . . .	Annapurna Coal Co. (R. B. Maji and L. N. Marwari)	6
	Birsingpur Coal Co. (A. C. Banerji)	32
Bonjamari . . . . .	Bonjamari Coal Co.	33
Borachak . . . . .	Mukherji, Umesh Chandra	78
Borrea . . . . .	New Beerbhun Coal Co., Ltd.	17
Brindabonpur . . . . .	Brindabonpur Coal Co. (H. Goswamy and K. Marwari)	35
Burra Dhemu . . . . .	Damuda Coal Co., Ltd.	46
	J. N. Coal Co. (P. Raghunundan & Bros.)	64
Chanch . . . . .	New Beerbhun Coal Co., Ltd.	18
Charnock . . . . .	Charnock Collieries, Ltd.	37
Chinchuria . . . . .	Baraboni Coal Concern, Ltd.	8
Chota Dhemu . . . . .	Chatterji, Ram Bandhu	39
	Chota Dhemu Coal Co.	43
	Mukherji, Baman Das	76
Chowraai . . . . .	Equitable Coal Co., Ltd.	54
Dhadksdi . . . . .	Mukherji, Tinkari	77
Dhundabad . . . . .	New Manbhun Coal Co., Ltd.	71
Dishargarh . . . . .	Equitable Coal Co., Ltd.	55
Dumarkunda . . . . .	New Beerbhun Coal Co., Ltd.	19
	Aha,ed Yusuf.	4
	Bhattacharji & Co., U. C.	30
	Bhattacharji, Jagadishwar and others	31
	Burn & Co., Ltd.	36
	Chhaganlal Nagar	41
	Dutt Kabra Coal Co.	51
Egarcoor . . . . .	New Chirkunda Coal Co. (J. K. Marwari & others)	42
	Suitable Coal Co. (C. L. Nagar)	102
	Fatka Coal Co. (M. L. Laik and others)	56
Fatka or Pandedih . . . . .		

APPENDIX V—*contd.*

Name of Mine.	Name of Owner or Company.	Serial No. in list.
<b>Bengal—Baniganj Coalfield (No. 2 Inspection Circle)—<i>contd.</i></b>		
Gangutia . . . . .	Bengal Nagpur Coal Co., Ltd. . . . .	28
Garphalbari . . . . .	Barakar Brick and Tile Syndicate . . . . .	11
Gopalpur . . . . .	Damuda Coal Co., Ltd. . . . .	47
Hatnol . . . . .	Laik, M. L. . . . .	66
	New Beerbhun Coal Co., Ltd. . . . .	20
Jograd . . . . .	Barakar Coal Syndicate . . . . .	14
Kalimati . . . . .	Lalla, Luchman Prosad . . . . .	67
	Roy, Bonowari Lal . . . . .	87
	Roy, Rohini Kumar . . . . .	89
Kapasara . . . . .	Abdul Karim & Brothers . . . . .	1, 2
	Adam Joosah & Co. . . . .	3
	Bengal Oriental Coal Co. . . . .	29
	Jafar Yusuf . . . . .	63
Kendwa . . . . .	Kalyaneswari Coal Co. . . . .	65
	Bengal Iron and Steel Co., Ltd. . . . .	26
Ketherdih . . . . .	Ghose, Kunja Behari . . . . .	60
Khoirabad . . . . .	Ganguly, Sircar, Roy & Co. . . . .	59
Khudia . . . . .	Chatterji, Shashi Bhusan . . . . .	40
Khudka . . . . .	Sircar and Sons, N. C. . . . .	97
Kumardubi . . . . .	Barakar Coal Co., Ltd. . . . .	13
Kusumkanali . . . . .	Royal Bengal Coal Co. . . . .	90
Laikdih . . . . .	New Beerbhun Coal Co., Ltd. . . . .	21
	Damuda Coal Co., Ltd. . . . .	48
Lutchipur . . . . .	Lutchipur Coal Co., Ltd. . . . .	68
	Misra, Shama Charan . . . . .	74
Mahanpur . . . . .	Chatterji Colliery Co. (A. C. Chatterji) . . . . .	38
Mouthdih . . . . .	Bengal Imperial Coal Co. . . . .	25
	Dutt, Jadab Chandra . . . . .	49
	Mugma Coal Association (H. M. Banerji) . . . . .	75
	West Barakar Coal Co. . . . .	16
Narsamuda . . . . .	Sitarampur Coal Co., Ltd. . . . .	99
Nodiha . . . . .	Nodiha Coal Co., Ltd. . . . .	81
	Baraboni Coal Concern, Ltd. . . . .	9
Nuni . . . . .	Damra Coal Co., Ltd. . . . .	44
	Misra, Mangobinda and Roy, Rama Nath . . . . .	73
Pahargora . . . . .	Roy, Jugal Kishore . . . . .	88
Palashdiha . . . . .	Ghose, Kunja Behari . . . . .	61
Palasia . . . . .	Lutchipur Coal Co., Ltd. . . . .	69
Panchgatchia . . . . .	Fatka Coal Co. (M. L. Laik and others) . . . . .	56
Pandedih or Fatka . . . . .	Patlabari Coal Syndicate (Mulji Jetha and Chuni Lal) . . . . .	86
Patlabari . . . . .	Sudhi Coal Co., Ltd. . . . .	100
Raghunathbatty . . . . .	Parekh, Kasu Lal . . . . .	82
	Patel, Hati Bhai . . . . .	84
	Patel, Lallu Bhai . . . . .	85

## APPENDIX V—contd.

Name of Mine.	Name of Owner or Company.	Serial No. in list.
<b>Bengal—Raniganj (No. 2 Inspection Circle)—concl'd.</b>		
Ramnagar . . . . .	Bengal Iron and Steel Co., Ltd. . . . .	27
Sabanpur . . . . .	Banerji, Bidhu Sekhar . . . . .	7
Salanpur . . . . .	Borrea Coal Co., Ltd. . . . .	34
Saltore . . . . .	Saltore Coal Co., Ltd. . . . .	91
Sanctoria . . . . .	Bengal Coal Co., Ltd. . . . .	22
Sangamahal. . . . .	Seal, Aghore Nath . . . . .	92
	Shungamahal Collieries, Ltd. . . . .	96
Shampur . . . . .	Shampur Coal Co., Ltd. . . . .	94
Sindri . . . . .	Parekh, Keshob Lal . . . . .	83
Sitalpur . . . . .	Bengal Coal Co., Ltd. . . . .	23
Sodepur . . . . .		24
Sudih . . . . .	Baraboni Coal Concern . . . . .	10
Sudihi . . . . .	Ganguly, Janendra Nath . . . . .	58
	Sudihi Coal Co., Ltd. . . . .	101
Sundarchak . . . . .	Shampur Coal Co., Ltd. . . . .	95
<b>Bengal—Raniganj Coalfield (No. 3 Inspection Circle).</b>		
Akhalpur . . . . .	Hariladih Coal Co., Ltd. . . . .	57
Aradanga or Banbistapur . . . . .	Sathpukuria and Asansol Collieries, Ltd. . . . .	105
Babisole . . . . .	Bilbera Coal Co., Ltd. . . . .	33
Banali . . . . .	Phularitand Coal Co., Ltd. . . . .	96
Banbistapur or Aradanga . . . . .	Sathpukuria and Asansol Collieries, Ltd. . . . .	105
Banbistapur . . . . .	Singh, Ram Narayan . . . . .	110
Bankola . . . . .	Eastern Coal Co., Ltd. . . . .	47
Banksimulla . . . . .	Bengal Coal Co., Ltd. . . . .	27
Banskuri . . . . .	Maha, D. and R. . . . .	68
	South Kenda Coal Co. (J. C. Martin) . . . . .	64
Baraboni . . . . .	Baraboni Coal Association . . . . .	13
	Baraboni Coal Concern, Ltd. . . . .	14
	Ghusik and Muslia Collieries, Ltd. . . . .	52
	New Beerbhun Coal Co., Ltd. . . . .	24
Baraboni (New) . . . . .	New Baraboni Coal Co. (K. B. Pal Chowdhuri and others) . . . . .	17
Baraboni (South) . . . . .	South Baraboni Coal Co. (K. B. Pal Chowdhuri) . . . . .	18
Basantipur . . . . .	Basanti Oskdene Coal Co. . . . .	22
Bhuskajuri . . . . .	Bhuskajuri Coal Co., Ltd. . . . .	32
Bhutloba . . . . .	Bhagirathi Coal Co. . . . .	30
	Singh, Naba Rong . . . . .	109
Bowlah . . . . .	Ondal Coal Co., Ltd. . . . .	93
Bunceha . . . . .	Marwari, Jagannath . . . . .	73
Charanpur . . . . .	Apcar & Co. . . . .	2
	Reliance Coal Co., Ltd. . . . .	100
Chattapathar . . . . .	Bamundha Coal Concern . . . . .	6
Chelode . . . . .	Chelode Coal Co. . . . .	39

## APPENDIX V—contd.

Name of Mine.	Name of Owner or Company.	Serial No. in list.
<b>Bengal—Raniganj Coalfield (No. 3 Inspection Circle)—contd.</b>		
Chinchuria . . . . .	New Beerbhun Coal Co., Ltd. . . . .	25
Chora . . . . .	Ondal Coal Co., Ltd. . . . .	94
Damra (New) . . . . .	Phularitand Coal Co., Ltd. . . . .	97
Damra (Old) . . . . .	Damra Coal Co., Ltd. . . . .	41
Damudapur . . . . .	Bengal Coal Co., Ltd. . . . .	28
Dhadka . . . . .	Dhadka Coal Co. . . . .	45
Dobalia . . . . .	Bankura Coal Co. (H. H. Banerji and R. C. Mukherji)	12
Dobrana . . . . .	Marwari, Jagannath . . . . .	74
	Sircar, Banwari Lal . . . . .	111
Faridpur . . . . .	Faridpur Coal Co. (S. B. Mukherji) . . . . .	51
	Poniati Coal Concern (U. C. Roy and A. C. Ghosh)	96
Ghusik . . . . .	Baliram Coal Co. . . . .	4
	Ghusik and Muslia Collieries, Ltd. . . . .	53
	Ghusik Coal Co. (H. C. Ghosh) . . . . .	55
Ghusik (New) . . . . .	Mukherji, Romesh Chandra . . . . .	85
	Mukherji, Buman Dass . . . . .	83
Ghusik (West) . . . . .	Banerji, Hatihar . . . . .	9
	Baraboni Coal Concern, Ltd. . . . .	15
	Bhattacharji, Shosi Bhusan . . . . .	31
Haripur . . . . .	Laik, Mukundo Lall . . . . .	67
	Tareni Coal Co. (S. C. Bhatta) . . . . .	113
Jairamdanga . . . . .	New Beerbhun Coal Co., Ltd. . . . .	26
Jamehari . . . . .	Malia, D. and R. . . . .	69
Jamgram . . . . .	Barakar Coal Co., Ltd. . . . .	20
Jamunakanali . . . . .	Banerji, Kashi Bilash . . . . .	10
Jamuria . . . . .	Equitable Coal Co., Ltd. . . . .	49
Joba or Jotemotuk . . . . .	Eastern Coal Co., Ltd. . . . .	48
	Banerji Collieries (Indra Nath Banerji) . . . . .	7
Jotejanaki . . . . .	Chatterji, Pran Kishen . . . . .	38
	Singaran Coal Syndicate, Ltd. . . . .	107
Jotemotuk or Joba . . . . .	Eastern Coal Co., Ltd. . . . .	48
Jubilee . . . . .	Meyer Coal Co. . . . .	76
Kajra . . . . .	Dutt, Hem Chandra . . . . .	30
Kalikapur . . . . .	Banerji, Raghu Nath and others . . . . .	11
Kalipahari . . . . .	Singh and Co., K. D. . . . .	108
Kanchka . . . . .	Damra Coal Co., Ltd. . . . .	42
Kantapahari . . . . .	Barakar Coal Co., Ltd. . . . .	21
	Banerji Collieries (Indra Nath Banerji) . . . . .	8
	Central Kendu Coal Co. (J. A. Miller) . . . . .	62
Kenda . . . . .	Marwari, Fulchand . . . . .	71
	Mukherji, Hera Lal . . . . .	84
	New Kenda Coal Co., Ltd. . . . .	63

APPENDIX V—*contd.*

Name of Mine.	Name of Owner or Company.	Serial No. in list.
<b>Bengal—Raniganj Coalfield (No. 3 Inspection Circle)—<i>contd.</i></b>		
Kendra . . . . .	Samla and Kendra Syndicate . . . . .	108
Kessabganj . . . . .	G. M. Agreeable Coal Co. . . . .	56
	Marwari, Ganapat Ram . . . . .	72
Kuordih . . . . .	Marwari, Ram Bilas . . . . .	75
	Kuordih Coal Co., Ltd. . . . .	85
Kuordih (East) . . . . .	East Kuordih Coal Co., Ltd. . . . .	66
Lakshmiganj . . . . .	Daw, Peary Lal . . . . .	44
Madhubpur . . . . .	Imperial Coal Co., Ltd. . . . .	58
Mosila . . . . .	Bagchi, Purna Chandra . . . . .	3
	Burdwan Coal Co. . . . .	35
	Cooverji Bhoja . . . . .	40
Mosila or Srikistopur . . . . .	New Burdwan Coal Co. . . . .	36
	Baliram Coal Co. . . . .	5
Mouzra . . . . .	Basanti Oakdene Coal Co. . . . .	23
Mundulpur . . . . .	Mundulpur Coal Co., Ltd. . . . .	87
Muslia . . . . .	Ghusik and Muslia Collieries, Ltd. . . . .	54
Nandi . . . . .	Adjai Coal Co., Ltd. . . . .	1
	Minto Coal Co., Ltd. . . . .	80
	Nandi Coal Association . . . . .	88
Nandi (New) . . . . .	Nandi Coal Association . . . . .	88
	Mukherji, Sheshi Bhusan . . . . .	83
Napara . . . . .	British India Coal Co., Ltd. . . . .	34
	Damra Coal Co., Ltd. . . . .	43
	Nandi, Maharaja Manindra Chandra . . . . .	89
Napara (South) . . . . .	West Baraboni Coal Co. . . . .	19
Nichinta . . . . .	Meyer Coal Co. . . . .	77
Niga Valley . . . . .	Niga Valley Coal Co. . . . .	91
Nimcha . . . . .	Baraboni Coal Concern, Ltd. . . . .	16
	Meyer Coal Co. . . . .	79
Nodia . . . . .	Nodia Coal Co. (A. K. Rai Chowdhuri) . . . . .	92
Nuniapool . . . . .	Meyer Coal Co. . . . .	78
Palasthal . . . . .	Sadhu, Ram Chandra . . . . .	101
Pottery . . . . .	Barn & Co. . . . .	37
Pretoria . . . . .	Sibpur Coal Co., Ltd. . . . .	106
Purandip . . . . .	Old Toposi Coal Co. . . . .	114
Raghunathobak . . . . .	Jagannath Coal Co. (J. Marwari) . . . . .	59
Raniganj . . . . .	Bengal Coal Co., Ltd. . . . .	29
Samla . . . . .	Samla and Kendra Syndicate . . . . .	104
Sarthakpur . . . . .	Sudamdih Coal Co., Ltd. . . . .	112
Satpukuria . . . . .	Equitable Coal Co., Ltd. . . . .	50
Searsol . . . . .	Malia, D. and R. . . . .	70
Shekpur . . . . .	Minto Coal Co., Ltd. . . . .	81
Sibpur . . . . .	Katras-Jheria Coal Co., Ltd. . . . .	60
	Minto Coal Co., Ltd. . . . .	82



APPENDIX V—*contd.*

Name of Mine.	Name of Owner or Company.	Serial No. in list.
<b>Bengal—Raniganj Coalfield (No. 3 Inspection Circle)—<i>conold.</i></b>		
Lonahora . . . . .	Sahana & Co. . . . .	102
Rikistipur or Mosila . . . . .	Baliram Coal Co. . . . .	5
Ultanpur . . . . .	Kaviraj, Ram Lall . . . . .	61
Unpur . . . . .	Ondal Coal Co., Ltd. . . . .	95
Toposi . . . . .	Raniganj Coal Association, Ltd. . . . .	99
Fanora Khas . . . . .	Nandi, Maharaja Manindra Chandra . . . . .	90
<b>Bengal—Giridi Coalfield (No. 2 Inspection Circle).</b>		
Bayra or Lakharia . . . . .	Bayra Coal Association . . . . .	1
Budheadih . . . . .	Budheadih Coal Co. (Sundermull) . . . . .	5
Kabrihad . . . . .	Ta h & Co., Rakkhal Das . . . . .	8
Kuldiha . . . . .	Bengal Coal Co., Ltd. . . . .	4
Karhurbari . . . . .	East Indian Railway Co. . . . .	6
Lakharia or Bayra . . . . .	} Bayra Coal Association . . . . .	1
Mohalichua . . . . .		2
Serampur . . . . .	East Indian Railway Co. . . . .	7
Sikdardih . . . . .	Bayra Coal Association . . . . .	3
<b>Bengal—Rajmahal Coalfield (No. 3 Inspection Circle).</b>		
Bargo . . . . .	De, Soshi Bhusan . . . . .	5
Domanpur . . . . .	De, Girish Chandra . . . . .	1
Domanpur Balki . . . . .	} De, Ramani Kanto . . . . .	3
Ghatehora . . . . .		4
Sarasabad . . . . .	De, Girish Chandra . . . . .	2
<b>Bengal—Daltonganj Coalfield (No. 1 Inspection Circle).</b>		
Rajhara . . . . .	Bengal Coal Co., Ltd. . . . .	1
Singra . . . . .	Radford, W. T. . . . .	2
<b>Central Provinces (No. 3 Inspection Circle).</b>		
Ballarpur . . . . .	Government of India . . . . .	2
Barkui . . . . .	} Pench Valley Coal Co., Ltd. . . . .	4
Buteria . . . . .		5
Chandametta . . . . .		6
Jattachhapper . . . . .	Cooverji Bhoja . . . . .	1
Mohpani . . . . .	Great Indian Peninsula Railway . . . . .	3
<b>British Baluchistan (No. 2 Inspection Circle).</b>		
Bhor . . . . .	Khan, Bahawal . . . . .	7
Davispur . . . . .	Asgharali & Co., Abdulla . . . . .	2
Digavi . . . . .	} Ferozshah, Shiawakshaw . . . . .	4
		8
Khost . . . . .	} Khan, Bahawal . . . . .	12
		Sorabji & Co. . . . .
	North-Western Railway . . . . .	

## APPENDIX V—concl'd.

Name of Mine.	Name of Owner or Company.	Serial No. in list.
<b>British Baluchistan (No. 2 Inspection Circle)—concl'd.</b>		
Leze . . . . .	Sorabji & Co. . . . .	13
Mach . . . . .	Patel, K. B. B. D. . . . .	10
Sor Range . . . . .	Alibhoy Brothers . . . . .	1
	Essaji & Sons . . . . .	3
	Ferozshah, Shiawakshaw . . . . .	5
	Hossein Ali & Co. . . . .	6
	Patel, K. B. B. D. . . . .	11
	Sorabji & Co. . . . .	14
<b>Burma (No. 1 Inspection Circle).</b>		
Thitchauk . . . . .	Burma Mines Development and Agency, Ltd. . . . .	1
<b>Eastern Bengal and Assam (No. 1 Inspection Circle).</b>		
Ledo Valley (East) . . . . .	Assam Railways and Trading Co., Ltd. . . . .	1
Ledo Valley (Upper) . . . . .		3
Ledo Valley (West) . . . . .		2
Maolong . . . . .	Maolong Coal Co. . . . .	7
Namdang . . . . .	Assam Railways and Trading Co., Ltd. . . . .	5
Tikak . . . . .		6
Tirap . . . . .		4
<b>Punjab (No. 2 Inspection Circle).</b>		
Chatterwal . . . . .	Nath, Bhola . . . . .	10
Chhaja . . . . .	Chand, Lakhmi . . . . .	1
Chiti Dand . . . . .	Punjab Coal Co. . . . .	13
Chota Tajuwala . . . . .	Ram & Sons, R. S. Rocha . . . . .	14
Dandot . . . . .	North-Western Railway Co. . . . .	12
Dher . . . . .	Dass, Ganesh . . . . .	6
Gamwala . . . . .	Dass, Thakur . . . . .	8
Katha . . . . .	Dass, Bhagwan and Ram . . . . .	2
Kotianwali . . . . .	Lal & Co., Kushan . . . . .	9
Makarwal . . . . .	Singh & Co., R. B. Anup . . . . .	16
Narianwala . . . . .	Ram & Sons, R. S. Rocha . . . . .	15
Rodianwali . . . . .	Dass, Ishan . . . . .	7
Samewala . . . . .	Dass, Bhagwan and Ram . . . . .	3
Tajuwala . . . . .		4
Thakkar Kot . . . . .		5
Wahgroowali . . . . .	Nath, Bhola . . . . .	11

Department of Mines, India.

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REPORT

OF THE

CHIEF INSPECTOR OF MINES IN INDIA

Under the Indian Mines Act (VIII of 1901)

FOR THE

YEAR ENDING 31st DECEMBER,

1907

BY

J. R. R. WILSON, M. I. C. E., F. G. S.,

*Chief Inspector of Mines in India.*



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SUPERINTENDENT GOVERNMENT PRINTING, INDIA

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