

DEPARTMENT OF MINES, INDIA

*Report of the Chief Inspector
of Mines in India under the
Indian Mines Act*

*For the year ending
31st Dec. 1925.*

*By D. PENMAN, Esq., D.Sc., F.R.S.E.,
Chief Inspector of Mines in India (Offg.).*



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FROM

D. PENMAN, Esq., D.Sc., F.R.S.E.,
OFFG. CHIEF INSPECTOR OF MINES IN INDIA.

TO

THE SECRETARY TO THE GOVERNMENT OF INDIA,
DEPARTMENT OF INDUSTRIES AND LABOUR,
SIMLA.

Dated Dhanbad, the 30th June 1926.

SIR,

I have the honour to submit the report upon the inspection of mines in British India for the year ending 31st December 1925.

INTRODUCTION.

It may be explained that this report relates entirely to the administration of the Indian Mines Act. A new Indian Mines Act (No. IV of 1923) came into force on the first day of July 1924. Under this new enactment Act VIII of 1901 was repealed. The Act applies to British India only and not to the Indian States. The definition of a mine has been made more comprehensive and it now includes, subject to certain exemptions, all excavations where any operation for the purpose of searching for or obtaining minerals has been or is being carried on.

For the complete figures of production of all minerals raised from excavations of all depths in British India and the Indian States reference may be made to the statements of the "Mineral Production of India" published in the Records of the Geological Survey of India, and to the "Quinquennial Review of the Mineral Production of India" published every five years by the same Department. Mysore, where the Kolar goldfield is situated, and Hyderabad (Nizam's Dominions), have their own Departments of Mines. Detailed information of the mineral industries of those States is given in the annual reports of their respective Chief Inspectors of Mines.

Section I.—Persons employed.

During the year 1925 the daily average number of persons working in and about the mines regulated by the Indian Mines Act was 253,857

as compared with 258,217 in the previous year. This is a decrease of 4,360 persons or 1.72 per cent. Of these persons 169,554 worked below-ground and 84,303 on the surface.

One hundred and sixty-five thousand, four hundred and seventy-nine were adult males, 84,243 adult females and 4,135 children*.

The number of persons employed in coal mines was 173,140 which is 13,948 less than the number employed in 1924.

In the coalfields of Bengal and Bihar and Orissa labour generally was sufficient for requirements. Wages fell slightly. There was a slight epidemic of small-pox in the Raniganj field but on the whole the general health of the labour force employed was good. In the Asansol and Jharia mining settlements the death rates were 16.1 and 18.77 per thousand, respectively, as compared with 18.7 and 20.83 per thousand in the previous year.

At the collieries in Upper Assam owned by the Assam Railways and Trading Company, Limited, the total number of persons employed at the mines was 5,178. The total number of recruitments was 1,106 and the total number repatriated 757. Wages remained the same as in 1924. There were no strikes or epidemics.

At the Bawdwin mine in Burma labour conditions showed a general improvement. There were no strikes. The average daily labour employed was 13,524. There were no outbreaks of epidemic diseases.

In the manganese mines of the Central Provinces the labour conditions were generally satisfactory, although in some cases the supply was not quite equal to the requirements of the mineowners. Wages were slightly increased.

In the mica mines in Bihar and Orissa and in Madras labour supply was about the same as in previous years. There were no strikes and the general health of the mining communities was good.

Increased attention is being given by owners of mines to welfare work and "safety first" propaganda amongst the labour force. At several large groups of collieries in the Jharia coalfield welfare officers have been appointed to guide and advise the resident labour on health matters. Special attention is paid to housing, general cleanliness and the provision of wholesome food supplies. The prohibition of the employment of children has brought into increased prominence the necessity of providing education and facilities for recreation for the young. There is much scope for advancement in these important matters in the coalfields. Efforts are also being made to instruct underground workers as to the various dangers they may meet with in their work and how to avoid them. At some collieries "safety first" posters on similar lines to those which are common in Great Britain and America have been used.

* See page 40.

Figures showing the average output per person employed are given below:—

	TONS OF COAL PER PERSON EMPLOYED.			
	Below ground.		Above & below ground	
	1925.	1920-24.	1925.	1920-24.
	British India	181	170	115	101
Bengal & Bihar	187	177	120	104
Assam	133	144	76	89
Baluchistan	51	58	29	33
Central Provinces	11	98	77	60
Punjab	87	71	47	42

In calculating the averages in the above table it should be explained that both men and women are employed in Indian mines.

In Great Britain in 1924 the output of coal per person employed below ground was 277 tons and per person employed above and below ground was 224 tons. The lower output of the Indian miner as was pointed out in last year's report is partly due to the small extent to which labour saving appliances are used. During the last few years the number of coal-cutting machines in use in Indian mines has steadily increased, but towards the end of 1925, owing to the continued falling-off in the demand for coal, a number of machines were withdrawn.

The ratio of output per person employed above and below ground to that per person employed below ground is considerably lower than the same ratios in Great Britain and the United States of America. In Great Britain and the United States the ratios are 81 and 82, respectively, to 100 whereas in British India it is 64 to 100. This would appear to point to scope for improvement in haulage, winding, decking and surface loading facilities. At some collieries much has been done by reducing the number of openings from which coal is raised and concentrating the output at the fewest possible number of shafts or inclines. The provision of modern screening and loading plants is also receiving increased attention. These improvements must tend towards a larger output per person employed both above and below ground, as well as to a reduction of cost.

In the table on page 5 figures are given of hours worked and wages paid at a large representative mine in each important mining field in India. For comparative purposes the same mines have been selected as those given on page 5 of last year's report. In some instances, for example, in the Jharia coalfield, the Punjab and in Burma tin and

wolfram mines, there have been reductions in wages, while in the PENCH Valley coalfield, Bihar and Orissa mica, Madras manganese and Burma lead mines, there have been increases.

The Hon'ble Sir Bhupendra Mitra, Member in charge of the Department of Industries and Labour, visited the Jharia coalfields on 21st, 22nd and 23rd December 1925, for the purpose of studying labour conditions in coal mines. He was accompanied by Members of the Standing Advisory Committee of the Indian Legislature attached to the Department of Industries and Labour.

Hours worked and wages paid at a large representative mine in each mining field (1925).

Mining Field.	MINERS.		UNDERGROUND MALES OTHER THAN MINERS.		UNDERGROUND FEMALES.		SURFACE MALES.		SURFACE FEMALES.	
	Hours worked.	Weekly earnings.	Hours worked.	Weekly earnings.	Hours worked.	Weekly earnings.	Hours worked.	Weekly earnings.	Hours worked.	Weekly earnings.
Jharia Coalfield (Bihar and Orissa) .	47	Rs. A. P. 4 0 0	52	Rs. A. P. 3 9 0	48	Rs. A. P. 2 8 0	54	Rs. A. P. 3 8 0	54	Rs. A. P. 2 4 0
Raniganj Coalfield (Bengal) . .	42	3 6 0	48	3 0 0	48	1 14 0	48	2 10 0	48	1 8 0
Girdih Coalfield (Bihar and Orissa) .	48	4 8 0	48	4 8 0	48	3 0 0	48	3 0 0	48	1 14 0
Assam	48	9 0 0	48	6 0 0	...	...	48	4 8 0	48	2 10 0
Punjab	43	5 12 2	50	6 2 0	35	3 8 7	57	4 14 9	...	...
Baluchistan	48	7 8 0	48	6 8 0	...	...	60	5 0 0	...	...
Perch Valley (Central Provinces) .	36	4 8 0	48	3 0 0	48	2 4 0	48	3 0 0	48	1 14 0
Bihar and Orissa Mica	54	5 4 0	54	3 6 0	54	1 14 0	54	3 0 0	54	1 8 0
Madras Mica	42	2 6 6	42	2 3 0	42	1 5 0	42	2 6 6	42	1 5 0
Central Provinces Manganese	48	3 8 0	48	3 12 0	48	2 4 0	48	2 8 0	48	1 8 0
Madras Manganese	52	2 11 5	...	...	...	...	52	3 5 5	52	1 1 0
Burma Ruby	54	6 0 0	54	6 0 0	...	...	54	8 0 0	...	...
Madras Gold . . . . .	...	...	...	...	...	...	48	14 0 0	42	1 5 0
Bihar and Orissa Iron	44	3 4 0	...	...	38	2 4 0	44	4 5 0	38	2 0 0
Burma Lead	43	9 9 7	52	14 12 0	...	...	51	14 4 0	...	...
Burma Tin and Wolfram	36	12 0 0	...	...	...	...	42	5 0 0	...	...

Section II.—Output of Minerals.

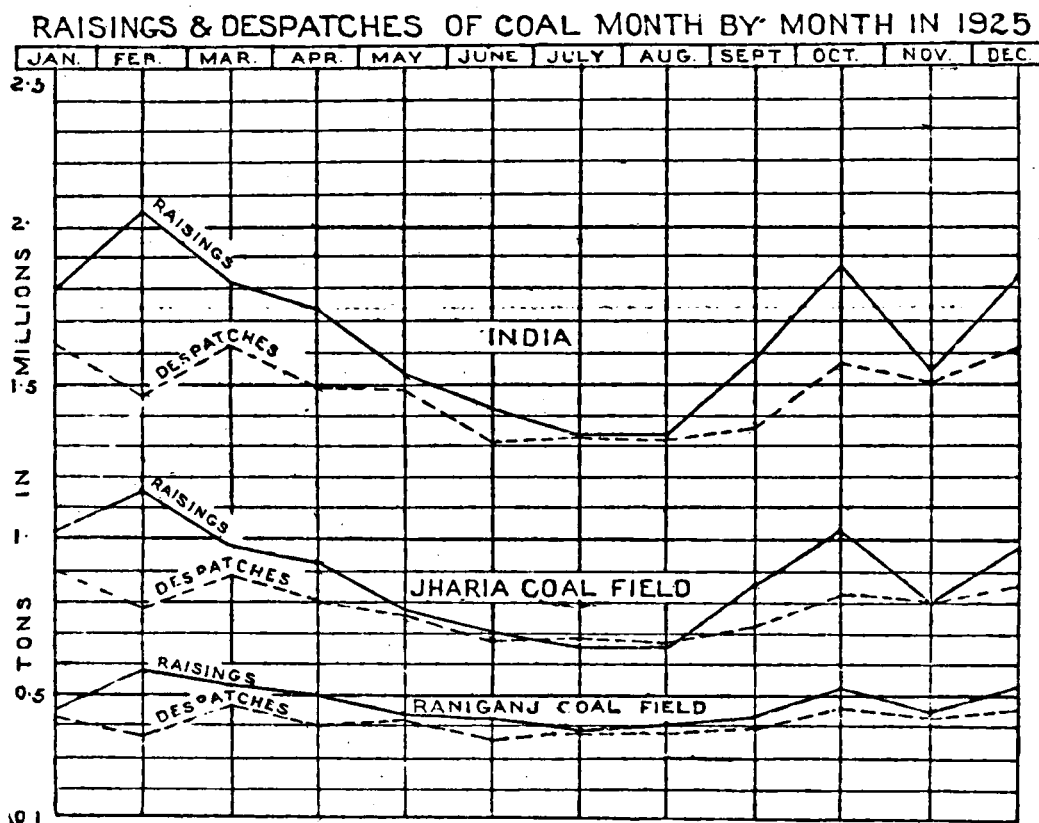
COAL.

The statement given below shows the output of coal in the various provinces in British India during the years 1924-25 :—

	Output in tons.	
	1925.	1924.
Assam	317,997	334,562
Baluchistan	22,707	29,947
Bengal	4,913,852	5,031,655
Bihar and Orissa	13,931,244	14,100,112
Burma	25	255
Central Provinces	708,554	679,081
Punjab	74,662	80,422
TOTAL	19,969,041	20,256,034

The total output in 1925 was 19,969,041 tons which is 286,993 tons or 1.42 per cent. less than in the previous year.

The opening stocks in 1925 were 2,877,595 tons and the closing stocks 2,692,385 tons. In the chart inserted below the raisings and despatches of coal are shown month by month.



The total raisings exceeded two million tons in only one month in the year, *viz.*, February, and in the monsoon months of June, July and August the output fell below one and a half million tons.

The total despatches of coal amounted to 17,495,912 tons, and 1,949,378 tons or 9.76 per cent. of the raisings were consumed on the collieries. The colliery consumption figures for 1924 were 2,314,503 tons or 11.42 per cent. of the raisings for that year.

The quantity of coal used for coking at the collieries was 708,961 tons and 55,221 tons of hard coke and 415,969 tons of soft coke were made. At a large number of collieries coal is now despatched from the collieries to coke making plants elsewhere, and this coal is included under despatches. These despatches of coal to coking plants amounted to 667,373 tons in 1925. The figures for coke given in this report relate only to coke made on the collieries. Analyses of the figures relating to the output of coal and the manufacture of coke will be found in Appendix I, Table No. 2, pages 92 to 95.

The decrease of output in Bihar and Orissa was 168,868 tons, and in Bengal 117,803 tons. There was a further increase of 29,473 tons in the Central Provinces. There was a decrease in the Punjab, Assam and Baluchistan. Figures of output for the two principal coalfields are as follows:—

	OUTPUT IN TONS.		Percentage of decrease.
	1925.	1924.	
Jharia Coalfield	10,676,883	12,845,642	1.56
Raniganj Coalfield	5,729,656	6,035,347	5.06

Indian coal made little or no headway in the export markets during the year. The Report of the Indian Coal Committee which was appointed in 1924 to enquire into and report on certain aspects of the Indian coal trade was issued in 1925. One of the recommendations of the Committee was that a Grading Board should be immediately established which would grade collieries which produce coal for export and would arrange the issue of a certificate for each consignment of coal exported. A general outline was given of a scheme for classifying all Indian coals and it was suggested that a grading list should be published by the Grading Board as soon as possible classifying the different collieries and seams and giving the analyses of the coals. The Committee expressed the opinion that the best Indian coal can compete in any markets in the East but that for such competition to be effective only the best coals should be exported and particular care should be taken not to allow overseas purchasers to be misled as regards the precise quality of coal which would be delivered. Other recommendations of the Committee referred to the wagon supply at collieries and the opinion was expressed that a regular and adequate wagon supply throughout the year was essential and that much remained to be done in this respect. It was thought that the increased use of mechanical plant and coal cutting machinery would not reduce the raising costs unless it was accompanied by an improvement in railway facilities which would permit of an increased output.

The Coal Grading Board Act was passed in September 1925; the Board itself was formed early in 1926. It remains to be seen to what extent the grading and certification of coal will further the export trade. Rebates on graded coal were anticipated and early in 1926 the rebate on export coal certified by the Coal Grading Board on railway freight to Calcutta on the East Indian and Bengal Nagpur Railways was increased from 25 to 37½ per cent. and the Calcutta Port dues on shipments of graded coal were reduced from 8 annas to 4 annas per ton. The wagon supply in the Jharia and Raniganj coalfields was good throughout the year, and as buyers were able to obtain supplies of the better qualities of coal at a comparatively low rate, many mines raising the poorer qualities found increasing difficulty in keeping open. The

tendency throughout the year was towards lower prices for both coal and coke.

The coal trade of the Central Provinces experienced its usual vicissitudes, a plentiful demand at the opening of the year rapidly diminishing as the seasonal demand from ginning and pressing factories drew to a close about March. From then onwards the Central Provinces collieries, being dependent on private industrial concerns in a limited market for orders, had either considerably to curtail their output, or shut down entirely. A monsoon unfavourable to cotton crops over a large area of the country caused a disappointing seasonal demand towards the close of the year and prospects for 1926 were extremely discouraging to the trade.

There were again several instances of underground fires due to spontaneous combustion during the year. A fire in a mine in which large quantities of coal are standing on pillars is an occurrence fraught with great peril to the mine. It may often be difficult or impossible to control the fire and in several cases the entire mine has had to be abandoned. It is to be feared that the risk of fire will increase rather than diminish in the future. Spontaneous combustion generally occurs in an area from which pillars have been partially extracted. It is probable that at no time in the history of mining in India has there been such a large quantity of coal standing in pillars. From figures collected from the mines in the Jharia coalfield alone it appears that in seams of first class quality over 120,000,000 tons of coal were standing on pillars at the end of 1925. This quantity is probably about equal to at least ten years' output of first class coal from that field on the basis of the present raisings. Much of this coal, though not all, is liable to spontaneous combustion and in some areas the risk of fire is so great during depillaring that it is only with reluctance and much trepidation that the extraction of pillars is attempted. In addition to the figures given there are also many million tons of coal in pillars in seams of second class quality. A similar condition of things obtains in the Raniganj coalfield where many underground fires have occurred. There is no doubt but that the problem of the prevention and control of underground fires in coal mines is one of the most pressing of the technical difficulties facing colliery owners. The general adoption of hydraulic stowing, it may be admitted, offers an apparent solution but under present conditions it does not appear to be an economic proposition.

The number of collieries using electric power increased from 99 to 108 and the aggregate horse power employed at collieries increased from 43,502 to 52,336. The number of coal-cutting machines in use increased from 114 to 125, of which 104 were driven by electric power and 21 by compressed air. Sixty-four machines were at work in the Jharia coalfield, 53 in the Raniganj coalfield, 2 in the Bokaro coalfield and 6 in the Central Provinces. The total area under-cut by these machines was 9,151,630 square feet, as compared with 5,631,267 and 3,230,584 square feet in 1924 and 1923, respectively. On the assumption that the thickness of coal worked averaged 9 feet the quantity of coal got by coal-cutting machines was approximately three million tons or about 15 per cent. of the total output of coal. The proportion of coal got

by machine mining in 1924 was estimated at 9 per cent., so that there appears to be a steady increase in the quantity of coal got by machines. It is possible that the present depression in the coal trade may compel the withdrawal of a certain number of machines, but it is unlikely that any set-back will be more than temporary. The designs of coal-cutting machines in use are in general satisfactory. With one type of machine, however, in several cases, the design of the contact device fitted on the machine plug socket in order to secure continuity of the earthing circuit proved defective. Fortunately the defect was detected before an accident occurred.

In Appendix I, Tables 5, 6 and 7 statistics are given of the electric plant in use at mines in the various provinces of British India and in certain mine fields.

During the year electrical plant was installed and brought into commission in thirteen additional coal mines. In two gassy coal mines, one in the Raniganj and one in the Jharia coalfield, there was a considerable increase in the horse power of electric motors installed below ground. The electrification of several important collieries is also in progress.

During the year 1,783,756 lbs. of gunpowder, 339,142 lbs. of high explosives, and 54,972 lbs. of "permitted" explosives were used at coal mines under the Act. These figures compare with 1,733,414 lbs. of gunpowder, 376,571 lbs. of high explosives and 21,474 lbs. of "permitted" explosives used in 1924. A noteworthy feature is the considerable increase in the quantity of "permitted" explosives used. An examination of the figures will show that the increase in the quantity of "permitted" explosives used is about equal to the decrease in the consumption of high explosives. It may be explained that a "permitted" explosive is an explosive which has been tested at the British Home Office Testing Station and has passed the tests prescribed for explosives and been placed on the "Permitted list." Such an explosive is very much safer to use in situations where there may be accumulations of inflammable gas or fine coal-dust than gunpowder or high explosives. Provided the same vigilance is observed in maintaining the working places free from accumulations of fire-damp and of fine coal-dust there is no doubt that the use of a "permitted" explosive instead of gunpowder or a high explosive is an additional safeguard of great value. It may be mentioned that the tests carried out by the Coal Dust Committee have shown that explosions of dust from Indian coals can readily be obtained by shots of gelignite, English compressed gunpowder, and country made gunpowder. No explosion has so far been obtained, however, with "permitted" explosives.

In Appendix I, Table 8, particulars are given of the number of mechanical ventilators in use at coal mines under the Act. There is an increase of 12 over last year's figure, the number of mechanical ventilators in use in 1925 being 68.

MICA.

The output of mica was 45,383 cwt. as compared with 40,529 cwt. in 1924. The increase was 11.98 per cent. The increased demand for block mica and splittings continued during 1925.

A method of working opencast mines which promises to yield good results has recently been introduced into some of the larger mines in the Bihar and Orissa mica field. The method consists in forming the mica-bearing rock into benches, 6 ft. to 12 ft. high and 10 ft. to 16 ft. wide. Six to eight feet from the edge of a bench, holes, 3 ft. in diameter and of a depth equal to the height of the bench, are drilled at intervals of 10 feet or so. A smaller cavity is made at the bottom of each hole to receive the charge of explosive. Each hole is charged with about 40 lbs. of country powder. The charge is properly tamped and the hole filled up to the top with debris. Generally five or six charges are exploded simultaneously. One of these charges is sufficient to dislodge up to 700 maunds (about 56,000 lbs. or 25 tons) of rock, from which anything from 30 to 70 maunds of mica have been recovered.

MANGANESE ORE.

There was again an increase (6.29 per cent.) in the output of manganese, the figures being 710,347 tons, as compared with 668,331 tons in 1924. The strong demand for manganese ore which existed in 1924 continued during the first half of 1925, but during the second half of the year the demand for lower grades ceased and also greatly declined even for the higher grades of ore. Such enquiries as were made were at prices which sellers were not prepared to accept. The general opinion was that the inactivity was due to heavy forward buying earlier in the year, and to unsettled conditions in the United Kingdom. The continental market was affected by the fall of the French exchange. The average price of manganese ore during the year was $16\frac{1}{4}d.$ per unit f.o.b. Bombay or Calcutta, $2d.$ per unit more than the price in 1924. The gain to Indian exporters was discounted, however, by the fall in sterling exchange, the average during the year being $1s. 6\frac{3}{16}d.$ per rupee as compared with $1s. 5d.$ in 1924. The average ocean freight during the year was 18s. per ton, as compared with 21s. 6d. in 1924.

With regard to foreign competition, there was an increase from the Georgian, Brazilian and Gold coast areas of about 150,000 tons over the output of 1924. This increase, however, was not considered to have affected the market for Indian ore. During 1926 it is estimated that there will be a further increase in the production of manganese ore from these three sources of about 150,000 tons, and it remains to be seen to what extent this increase will affect the Indian producer. In view, however, of the steady increase in the world production of steel, there appear, for the present, at least, to be no grounds for despondency in regard to the future of the Indian manganese industry.

ROCK-SALT.

The output of rock-salt was 125,366 tons, as compared with 159,918 tons in 1924, the decrease being 21.61 per cent.

LEAD-SILVER ORES.

The output of lead-silver ores from the Bawdwin mine in the Northern Shan States, Burma, was 321,389 tons in 1925, as compared with 287,777 tons in 1924. The increase was, therefore, 11.68 per cent.

There was a production of 46,175 tons of refined lead, 1,100 tons of anti-monial lead, and 4,831,548 ounces of refined silver. In addition 8,029 tons of copper matte and 16,810 tons of zinc concentrates were produced for shipment. The quantities of materials used for the purposes of fluxes were as follows:—

Iron ore	42,513 tons.
Limestone	32,779 tons.
Quartz rock	4,230 tons.
Iron pyrites	756 tons.

The average prices obtained were Rs. 472-9-11 per ton of refined lead and Rs. 1-14-11 per ounce of refined silver; in 1924 the prices were Rs. 458-14-2 and Rs. 2-2-0, respectively.

In the Annual Report for 1924 a brief reference was made to an occurrence of fire at the Bawdwin mine. A fuller account may be of interest. There were indeed two fires. The first fire occurred in a "rise" on December 16th, 1924. The fire was discovered early in the morning but it had got such a hold that it was impossible to put it out by means of water. Accordingly the fire area was barricaded off with sacks filled with dirt and the face of the barricades sealed with clay. The area remained sealed for twelve days when the barricades were opened. Apparently the fire had died out. Considerable damage, however, had been done by the collapse of stopes and drives due to the burning out of timber and the effect of water. Eighteen stopes out of a total of 120 were put out of commission. The fire was supposed to have been due to some one having left a candle burning near the bottom of the "rise" in which the fire started.

A second and more disastrous fire occurred on 1st February. This fire appears also to have started in a "rise" at a point about 420 feet away from the point of the origin of the first fire. At first it was difficult to locate the seat of the fire owing to the volume of smoke. Water was brought to bear on the fire but not before it had involved a large part of the workings. In spite of the water the fire continued to extend and accordingly barricades were built as before to seal off the fire area. The second fire was on the out-by side of the first fire so that in sealing off the second fire the area involved by the first fire was also sealed off. Towards the end of February the fire was well under control and the work of reclaiming the area was started. The method of reclaiming was to take out one barricade in a level or drive and move it ahead for some distance. The level was then repaired up to the new position of the barricade and the water and air pipes carried forward. This procedure was adopted throughout, the fire area being gradually reduced in extent. The cause of the second fire was supposed to have been the same as that of the first fire.

As a result of the fire there was a reduction of the output of silver, lead and zinc in the month of February, but this was counterbalanced to some extent by an increase in the amount of copper ore extracted. The fire involved nearly half the working stopes of the mine, but by the end of the year the underground conditions of output had been practically brought back to normal. The management are to be congratulated on the energy, courage and resource displayed in tackling the fire.

Owing to the vast amount of timber used in the mine the danger of fire is an ever-present risk. The arrangements made for dealing with fire, however, and the supervision are excellent. Water is laid on in every level and at several points in each level and there is an efficient telephone system in the mine. After the second fire the management put the mine on three continuous shifts daily, so that no interval should elapse between shifts and so that if an outbreak of fire occurred it would be quickly discovered. Candles are used in the stopes; they are provided with shields to reduce the risk of the candle flame setting fire to the timber.

WOLFRAM AND TIN ORES.

There was a slight increase (4.47 per cent.) in the output of wolfram. The figures were 772 tons, as compared with 739 tons in 1924. The output of tin increased from 1,627 tons in 1924 to 2,307 tons, *i.e.*, by 42 per cent. in the year under review. The price of wolfram rose from 9s. 9d. to 28s. per unit, whilst the price of tin steadily rose from £267 10s. 0d. to £287 15s. 0d. per ton.

GEMS.

The output of gems increased by 47 per cent., the figures being 149,037 carats, as compared with 101,097 carats in 1924. The quantities of each gem mined were as follows:

	Carats.	Value. Rs.
Rubies	109,998	3,40,689
Sapphires	31,508	20,616
Spinel	7,531	3,834

The best parts of the alluvial workings of the Mogok and Kathe valleys exploited by the Burma Ruby Mines Limited have now been exhausted and the residue is not sufficiently rich to pay for departmental working. Accordingly the areas have been let out to tributors who are engaged in cleaning up patches of ruby earth left in crevices and detached spots. No fresh discoveries of better ground or other minerals have been made and it is to be feared that the importance of the Mogok district as a gem-producing area will continue to decline.

GOLD.

The output of gold decreased from 3,646 ounces in 1924 to 288 ounces in 1925. The price obtained varied from Rs. 56-10-2 to Rs. 58-6-6 per fine ounce. Prospecting operations were continued in the Ghootty taluk of the Anantapur district.

COPPER ORE.

There was no output of copper ore as such in British India during the year, but 40,891 tons of ore containing copper were obtained from the Bawdwin mine. This ore has, however, been included in the output of lead-silver ore from that mine.

Development operations were continued throughout the year at the Mosaboni mine in the Singhbhum district. The ore reserves were increased by 198,320 tons, making a total of 471,500 tons. Over three miles of development work have now been completed. A suitable site for the erection of a smelter and concentrating plant has been acquired and it is hoped soon to commence the erection of the plant.

IRON ORE.

The production of iron ore was 529,376 tons, as compared with 430,805 tons in 1924, the increase being 23 per cent. These figures, however, do not include the iron ore used at the Jamshedpur steel works, supplies for which are obtained from mines in an Indian State which do not come under the operation of the Indian Mines Act.

CHROMITE ORE.

The output of chromite ore was 21,236 tons, as compared with 27,850 tons in 1924. The decrease was, therefore, 24 per cent.

BAUXITE.

There was a decrease in the production of bauxite, the figures being 443,760 cwt. in 1924 and 201,405 cwt. in 1925.

OTHER MINERALS.

There were increases in limestone, magnesite, fuller's earth and clay and decreases in steatite, apatite, slate, barytes, asbestos and ochre. From the thirty-two stone mines from which figures were obtained 810,337 tons of stone (including granite, sandstone, trap and laterite) were produced.

Section III.—Accidents.

During the year 1925 at mines regulated by the Indian Mines Act, 1923, there were 200 fatal accidents, being a decrease of 33 on the number which occurred in 1924 and a decrease of 17 on the average number in the preceding five years.

These accidents involved the loss of 233 lives or 48 less than in 1924. Of these persons 195 were males and 38 females. In two cases 4 lives, in five cases 3 and in seventeen cases 2 lives were lost. There were in addition 479 serious accidents involving injuries to 496 persons.

The causes of the fatal accidents have been classified as follows:—

	Number of fatal accidents.	Percentage of total number of fatal accidents.
Misadventure	122	61·00
Fault of deceased	39	19·50
Fault of fellow workmen	8	4·00
Fault of subordinate officials	15	7·50
Fault of management	15	7·50
Faulty material	1	0·50
TOTAL	200	100·00

There was only one explosion, and it was due to an ignition of firedamp caused by an open light. One person was killed.

There was again a decrease in the number of fatal accidents from falls of roof and sides. There were 101 such accidents, which was 8 less than in 1922, 32 less than in 1923 and 21 less than in 1924. In fifteen cases the persons killed were working illegally in places other than those which had been allotted to them; while in twenty-two cases the accidents were considered to be due to the fault either of subordinate officials or of the management. There were nine accidents involving the death of 10 persons due to falls of ground in quarries and five accidents resulting in 8 deaths caused by the collapse of the sides of open cuttings. Practically all of these accidents could have been avoided. Seven accidents causing 8 deaths occurred during the extraction of pillars in coal seams.

There were 27 fatal accidents in shafts, or three more than in the previous year. No less than ten of the accidents occurred whilst persons were riding in cages and practically all might have been avoided if the cages had been fitted with rigid gates. One of these accidents resulted in the loss of the lives of 4 persons. Cages will require to be fitted with rigid gates under the new regulations. Inspectors of Mines have been insistent during the past year on the provision of gates and at a large number of collieries gates have been and are actually in use. It is to be hoped and expected that with the general adoption of rigid cage gates this class of accident will disappear or at any rate be greatly reduced. On four occasions persons lost their lives through being caught by the descending cage whilst attempting to cross the bottom of the shaft. In each case there was a proper pass-by road which should have been used.

There were 15 fatal accidents on haulage roads, as compared with 20 in 1924, and 29 in 1923. One accident was due to the haulage rope breaking, four were due to couplings or draw-bars breaking and one to the coupling becoming detached. Two accidents were due to illegal riding on tubs. In one case the person who lost his life actually lay down and fell asleep across the rails of a haulage incline. He was run over and killed by a set of loaded tubs which was being drawn up the incline. In another case of a similar nature a man was run over and killed in a colliery surface siding whilst lying asleep across the rails. Sleeping whilst on duty is in all cases reprehensible but one would think that the delinquent would at least choose a place which was less obviously fraught with danger than a working tram line or colliery siding.

There was a decrease in the number of fatal accidents caused by explosives. Six accidents involving the lives of six persons occurred as the result of miss-fired shots. In two cases the persons who were killed had been drilling in a shot-hole, which contained a miss-fired charge of explosive, and in two other cases the accidents occurred whilst new holes were being drilled in the vicinity of the holes containing the miss-fired charges. These accidents point to the necessity of great care in dealing with miss-fired shots and of a strict observance of the rules relating to the same. Two accidents were due to the deceased not allowing themselves sufficient time to retire to places of safety after lighting the charges. In addition there were seven accidents resulting in the death of 10 persons, which were due to explosions of gunpowder in and about miners' dwellings. These accidents, since at present there are no rules under the Indian Mines Act regulating the storage and handling of explosives on the surface, have been classified as non-statistical. In two of them the

explosion occurred whilst gunpowder was being dried over a fire in a miner's dwelling. Both occurred in July, and at both of the collieries no provision had been made for drying the gunpowder during the rains. Such provision should be made at every colliery or, if not, strict rules should be enforced that miners should not be supplied with damp powder and that on no account should drying over or near a fire be attempted.

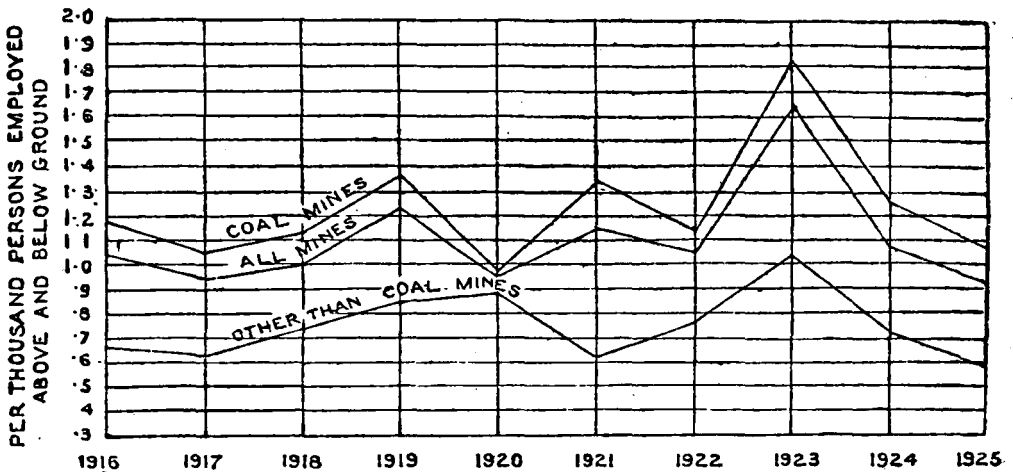
In three separate accidents three persons were killed by coal-cutting machinery.

Two accidents causing one death in each case were due to electricity. One accident involving the death of one person occurred through a collapse of the ground over which the person was walking. Under the Local Government rules the area should have been fenced off on the surface.

The death rate per thousand persons employed above and below ground was 0.92, while that of the preceding five years was 1.19. At coal mines only the rates were 1.07 and 1.30, and at mines other than coal mines 0.58 and 0.80. At all mines under the Coal Mines Act in Great Britain during the ten years ending with and including 1924 the average death rate per thousand persons employed was 0.98, as compared with 1.25 for Indian coal mines.

The chart below shows graphically the variations in the death rates during the decade 1916-1925:—

**CHART SHOWING
THE DEATH RATE FROM ACCIDENTS DURING THE
PERIOD 1916 - 1925**



The high rate in 1923 was due chiefly to the explosion which occurred at Parbelia colliery on 4th January of that year and which resulted in the loss of 74 lives.

The death rate per million tons raised at coal mines was 9·31, while that of the preceding five years was 12·95.

The improvement in the death rate of the Assam Railways and Trading Company, Limited's collieries is worthy of comment. The chief seams at these collieries are thick and very highly inclined. The working conditions are particularly hazardous. The death rate, which for the quinquennial periods 1911-15 and 1916-20 was, respectively, 5·93 and 5·51 per thousand persons employed, was for the five years 1921-25 reduced to 3·05 per thousand persons employed. During the year 1925 the death rate was 1·72 per thousand persons employed, the lowest on record. This satisfactory improvement has been due largely to the efficiency of the subordinate staff at the collieries, and the use of electric lights in working places.

Deaths occurring in each class of mine were as follows:—186 in coal mines, 11 in silver-lead mines, 8 in tin and wolfram mines, 7 in mica mines, 8 in manganese mines, 4 in iron mines, 1 in a limestone mine, 6 in stone mines, 1 in a clay mine and 1 in a copper mine.

One person lost his life by an explosion of gas, 61 persons lost their lives by falls of roof, 62 by falls of side, 33 in shafts, 19 by explosives, 3 by suffocation by gases, 15 by haulage, 15 by other accidents underground and 24 on the surface.

The number of serious accidents reported increased from 410 to 479, *i.e.*, by 17 per cent.

A list of the fatal accidents appears in Appendix II, Table I. In addition to these there were 32 other accidents causing the death of 35 persons. These also appear in Appendix II, Table I, but are listed separately, reasons being given in each case for their exclusion from the statistical table.

Each fatal accident is described briefly in Appendix II, Table I, but the following are reported at greater length. The numbers refer to the numbers in the Appendix.

FALLS OF ROOF.

No. 30.—Sutikdih Coal Company, Limited's Sutikdih coal mine.

This accident occurred in a gallery in a seam over 50 feet thick and lying at an inclination of 1 in 2 to 1 in 3. The gallery was about 20 feet wide at the place of the accident. The height was about 18 feet. The gallery had originally been driven near the floor of the seam and was being heightened. At the time of the accident a number of persons were loading a quantity of coal which was lying on the floor of the gallery. A fall of about 2 cwt. of coal from a height of about 18 feet killed two of them. The place was said to have been examined on the day of the accident three times before the occurrence by two different overmen and both of them pronounced the roof safe. The officer who enquired into the accident,

however, from the tests he made, was of the opinion that the examination of the roof had not been properly carried out. He ascribed the accident partly to the negligence of the subordinate officials and partly to the unsafe method of working.

The seam is admittedly a difficult one to work. It is criss-crossed by numerous glazed slickenslides, thick and highly inclined, and the coal is soft and friable. The method of working was, however, open to objection in that the gallery was too wide. The width of galleries in a seam of that nature should not exceed 12 feet. The removal of the coal from the floor upwards was also undesirable and greater safety would have been secured by working the coal downwards instead of upwards. The management have now introduced successfully a method of working the coal in the galleries from the roof downwards.

FALLS OF SIDE.

No. 57.—Bhulanbararee Coal Company, Limited's Bhulanbararee coal mine.

This accident took place in a thick steeply inclined seam. The coal in the area in which the accident occurred is soft and slickensided. About 10 o'clock on the morning on which the accident occurred several Santal miners came to work. They had been off work for about a fortnight and the gallery in which they had been working had been fenced during that period. The miners were met at the entrance of the incline leading to their working places by a deputy overman, who took them below ground with him. The deputy overman removed the fence from the gallery and set the miners to cut floor and side coal. He then went away but returned shortly afterwards. A few minutes later a fall of about 4 tons of side coal occurred killing the deputy overman and two other persons. The deputy overman was not the competent person appointed to make inspections. The management held that he should not have removed the fence nor have allowed the miners to enter the gallery until it had been examined and reported safe. Apparently he himself did not make a proper examination as the Inspector of Mines, No. 1 Circle, who enquired into the accident, stated in his report that if a proper examination had been made the condition of the side would have been revealed and, if the overhanging coal had been taken down before allowing any other work to be done, no accident need have occurred. On the other hand the deputy overman probably thought he was doing the best thing for the mine, and for the miners, when he opened the fence and set them to work.

As an outcome of the accident, the Chief Mining Engineer of the colliery issued written orders to the effect that the fencing-off of any working place, *as being dangerous*, should be reported at once to the manager in writing, and the place should not be re-opened as a working place without his authority in writing. The removal of such a fence should only be done by the overman, who should personally inspect the place; the sirdar should also make an independent inspection before miners were put in for coal getting.

When a working place was fenced off, owing to the shortage of men only, it could be re-opened by a sirdar, on completion of his statutory examination, but he should first receive the sanction of the overman.

No. 64.—Bhulanbararee Coal Company, Limited's Bhulanbararee coal mine.

This accident occurred in a seam about 24 feet thick. A pillar was being extracted and the direction of extraction was at right angles to the joints or cleavage planes in the coal. These cleavage planes were very pronounced, persisted from roof to floor and occurred at frequent intervals. As a consequence it was possible by the method of working to bring down large slabs of coal from the pillar. Explosives were used. In removing the pillar a certain amount of floor coal had been exposed, and at the time of the accident a gang of seven miners were working on the floor coal. Towards the end of the shift a slab of coal, 20 feet high, 20 feet broad and from a foot to eighteen inches thick, collapsed, killing three of the workmen. Fortunately the other four were loading tubs or all the seven might have been killed. The side of the pillar had been examined by a competent person at the beginning of the shift and pronounced safe.

The accident was considered to have been due to a faulty and unsafe method of working. The conditions were, however, admittedly difficult. The management afterwards agreed to try a different system of pillar extraction.

No. 74.—The Standard Coal Company, Limited's Benahir coal mine.

This accident occurred in a district in a seam, 24 feet thick, in which pillaring had only been commenced a short time before. Two pillars had been extracted and a third pillar was being split into two by driving a gallery through the middle of it. The gallery was driven next the floor and the rest of the coal was taken down as roof coal. The place of accident is shown in Plan A. The "split" had been nearly completed and only a bridge of coal, about 10 feet wide and about 3 feet thick, remained to be taken down. A gang of miners was working on this coal using ladders for the purpose. One of the ladders is shown in position in the plan. A miner was drilling a shot hole in the roof coal from the ladder when the coal shown hatched in the plan fell, killing the miner instantly and injuring two other persons who were standing close by. Not only did the part of the roof coal fall but a large strip came away from the side of the pillar. The total quantity of coal which fell was about 8 tons. At the inquiry into the accident it was found that the bridge of roof coal which still remained was loose and that there was a large quantity of coal on the side of both pillars which was also loose. The Inspector who held the inquiry was of the opinion that the accident was one which could have been and should have been avoided by the exercise of care. The bulk of the coal obtained at the colliery in which this accident occurred is got by explosives. Galleries are driven to the full height of the seam and the coal is blasted from the solid. As a result it is unavoidable that the sides of the pillars become shattered and fissured to a much greater extent than if hand-picking alone is done. The pillars are also extracted by explo-

sives. The method is economical and makes for large outputs. It is only justified, however, if special care is taken to prevent falls. Frequent inspections of the sides of pillars and of roof coal are necessary and in every case where loose coal is detected it should be immediately taken down.

No. 75.—Messrs. Central Salanpur Coal Concern's Central Salanpur coal mine.

This accident occurred in an incline cutting, 84 feet long, 32 feet deep at the deepest place and tapering from about 10 feet wide at the bottom to about 16 feet wide at the top. The material in which the cutting was being made consisted of earth and clay. The intention of the management was to build a brick arch in the cutting to form an entrance to the mine. On one side of the cutting, part of the side wall had been built, and in order to make room for an extension of this side wall the side of the cutting had been under-cut for a short distance. The total number of people working in the cutting on the day of the accident was sixteen. Work for the mid-day meal had been stopped about 12 noon. Shortly after 1 P.M. several people entered the incline cutting to rest in the shade. At 1-45 P.M. a mass of earth, 30 feet long by 10 feet deep and from 9 to 15 inches thick, fell from the side of the incline cutting and buried or partly buried seven persons. Three of these persons were killed and four seriously injured. The agent and manager of the colliery were prosecuted under Section 40 of the Indian Mines Act for contravention of General Rule 3, and fined Rs. 100 each, in default one month's simple imprisonment. In incline cuttings of the nature of that in which the accident occurred the sides should be sloped to suit the nature of the material in which the cutting is being made. In the cutting under discussion both sides should have been sloped at least one foot horizontally for every 2 feet vertically, whereas the actual slope was only about 5 feet in 30 feet, *i.e.*, 1 foot horizontally for 6 feet vertically. In addition, material of the nature of that which caused the accident should never be under-cut.

IN SHAFTS (WHILST ASCENDING OR DESCENDING).

No. 107.—The Budroochuck Coal Mining Company, Limited's Budroochuck coal mine.

Six persons were being lowered in a shaft, 324 feet deep. The descending and ascending cages collided at the mid-point in the shaft and three of them were thrown out of the cage. They fell to the bottom of the shaft and were killed. The other three persons on the cage were slightly shaken but otherwise uninjured and they shouted to the banksman that they wanted to be raised. They were accordingly brought to the surface when it was found that the cage was badly damaged. The drawings in Plan B have been made after an examination of the two cages. Each cage was filled with four bridle chains. It appeared that one of the cage chains of the ascending cage had been broken and that the cage as it was being raised had swung towards the centre of the shaft and so collided with the descending cage. The cause of the chain

breaking was not quite clear. It transpired that when the ascending cage was being raised from the shaft bottom an empty tub was half on and half off the cage. The tub appeared to have fallen off before the cage reached the protection boards. This together with the jerk due to slack chains at the instant of lifting may have broken the cage chain. In any case the cage chain must have been broken before the cages collided as otherwise it is hardly conceivable that collision would have taken place since there was about $10\frac{1}{2}$ inches clearance between the cages at mid-shaft. There were only two guides to each cage. If there had been four guides to each cage it is possible that the ascending cage even with a broken bridle chain might have been steadied clear of the descending cage in which case the accident would not have happened. From that point of view, therefore, the provision of four guides to each cage is advisable. As regards steadiness under normal circumstances, I think that at least three guides to each cage should be provided. It should be remembered that rope guides are always more or less flexible and that the number of guides necessary for steady winding under normal conditions will depend on—

- (a) the speed of winding,
- (b) the clearances between the cages themselves and between the cages and the walls of the shaft,
- (c) the method of fixing the guides,
- (d) the tension on the guides,
- (e) the depth of the shaft.

Even four guides may not give steadiness unless properly installed. I carried out a test in a shaft, 340 feet deep. Four guides were installed to each cage. At the meetings the cages could be made to touch with one pull, and with even a gentle blow swung dangerously. It was found that the guides were weighted in the pit bottom but that there was nothing to prevent the weights swinging laterally like a pendulum. This, of course, is contrary to good practice, as where weights are used to give tension the ropes should pass through an eyelet or sleeve in the shaft bottom to prevent swinging. The attention of the management was drawn to this defect and the matter was rectified.

At the shaft in which this accident occurred an additional guide to each cage was afterwards installed. The cages were not provided with gates. If they had been so fitted the lives of the three men might have been saved. Gates were afterwards fitted.

No. 112.—The Burra Dhemo Coal Company, Limited's Burra Dhemo coal mine.

This accident occurred in a shaft, 580 feet deep, and about 10 feet in diameter. The shaft was considered to be too small for two cages and a single cage with a counterbalance weight was installed. The cage was provided with four guide ropes and the balance weight with two (Plan C). The guide ropes were attached to beams at the top and bottom of the shaft. Adjustment of the tension was obtained by means of screws in the headgear.

On the morning of the 10th September eight persons were admitted to the cage at the surface although the authorised number of persons was only six. Whilst the cage was being lowered it collided with the ascending balance weight and the oscillation produced caused four of the occupants of the cage to be thrown out. They fell to the bottom of the shaft and were killed.

The enquiry into the accident revealed the fact that one of the guide ropes of the balance weight was slack, and that the slackness allowed the balance weight to swing in such a manner in the shaft as to strike the descending cage. The usual method of fixing the guide ropes at the shaft bottom was as follows:—The end of the rope was passed round a thimble and secured with clamps. Through the eye of the thimble a hooked bolt was attached. The end of the bolt was passed through a beam and secured underneath the beam by means of a cotter. In the case of the slack guide, however, the old guide rope had been cut off about three feet above the beam and the new guide rope attached to the end of the old one by three clamps. Presumably as an additional precaution, a chain joined the new guide rope to the beam. The tightening screw at the top of the guide rope had been screwed up to its limit, and the guide had been pulled through one of the clamps. It was found that the sump or bottom of the shaft was filled with debris to a height of about 3 feet above the beams. The guide clamps could not, therefore, be examined.

Criminal proceedings were instituted against the manager and the engine-wright and the banksman of the colliery. The manager was discharged and the engine-wright and banksman were punished as detailed in Section IV—“Prosecutions and additions to the Act.”

General Rule 2 (g) requires that “a competent person or persons, appointed by the owner, agent, or manager for the purpose, shall, once at least in every 24 hours, examine the state of the external parts of the machinery and of the headgear, ropes, chains, and other similar appliances of the mine which are in actual use both above ground and below ground, and shall, once at least in every week, examine the state of the shafts by which persons ascend or descend and the state of the guides and the conductors in the shafts, and shall without delay write or cause to be written a true report of the result of such examination; and every such report shall be recorded in a paged book to be kept at the mine for the purpose, and shall be signed and dated by the person who made the examination.” The Chief Mining Engineer in charge of the colliery afterwards issued a circular letter to the managers of all the collieries in his group, and I cannot do better than quote from that circular:—“The inspection appears to have been made superficially as, owing to the sump being full of debris and water, it was hardly possible for the fitter to examine the clamps or other contrivance fixing the guide at the bottom. It must be remembered that where guides are fixed in a shaft it is essential for the purpose of inspection that the sump shall be kept clear so as to allow of a proper inspection being made of the attachment at the bottom.” It is to be hoped that managers will profit by the moral of this accident and make proper arrangements for the regular examination of the guides throughout their entire length in every case where flexible guides are installed.

No. 113.—The Bhalgora Coal Company, Limited's Simlabahal coal mine.

This accident occurred in a sinking shaft from a mid-landing in the shaft in a seam about 166 feet from the bottom. The method of descending and ascending was by means of a sinking bucket. At the mid-landing no special provision had been made for landing from the bucket. On the day of the accident three persons, one of whom was deceased, descended the shaft in the bucket. It was stopped at the mid-landing and the three got out. The other two persons, one of whom was in charge of a pump at the mid-landing, went to start the pump. The deceased was in charge of a pump at the shaft bottom, and apparently when the other two had left him he had decided to descend to the bottom of the shaft alone. Accordingly he attempted to board the bucket and while doing so slipped, fell down the shaft, and was killed. When a bucket is used in a shaft in which there is a mid-landing some suitable arrangements should be made for holding the bucket to the side in order to facilitate getting into it. Afterwards a chain was provided at the mid-landing to which the bucket could be hitched.

IN SHAFTS (FALLING FROM PART OF WAY DOWN).

No. 117.—Messrs. Chunilal Tricamchand Coal Company, Limited's Bulliari coal mine.

A pump attendant was being lowered in a shaft, 240 feet deep. He was alone on the cage. Apparently when the cage was near the bottom of the shaft he either stepped or fell out of it. He landed on the cage seat, and was killed by the descending cage. The ends of the cage were fenced by loosely hanging chains, a form of fence which is no protection at all. There was no one near the shaft bottom at the time, and there was no light in the shaft bottom. Deceased himself was without a light. After the accident rigid gates were provided on the cage and lights fixed in the shaft bottom.

It is important that shaft bottoms should be adequately illuminated during working hours. Proper arrangements for lighting should also be made at shaft tops after dark.

SUFFOCATION BY GASES.

No. 130.—Burma Corporation Limited's Bawdwin lead-silver mine.

Elsewhere reference has been made to occurrences of fire at Bawdwin mine. These outbreaks were dealt with without mishap except for the accident about to be described. The method of dealing with the fire was to seal off the area with barricades constructed of bags of dirt and clay. As the fire did not involve the whole of the working places an attempt was made to continue working in those places where it was considered safe to do so. The course of the air was directed in such a way that the working places were ventilated with fresh air and the fumes from the fire were carried clear. After the end of the shift on which the accident occurred, three persons, two of whom were miners and one was a trammer, were

found to be missing. A search was made and it was found that they had attempted to ascend a "rise" through a stope in which work had been stopped because of the fire. The three persons were found in a reclining position as if they were asleep. They were brought into fresh air and artificial respiration was tried but without avail. They had been overcome by carbon monoxide gas from the fire. The three persons were not working in connection with the fire area and, along with the other workmen, had been instructed which road they should take in getting out of the mine. Moreover the road into the "rise" in which they were found had been fenced off by wooden boards. It was presumed that they had attempted to take this road in order to get out of the mine a little sooner than they would have done if they had taken the proper road. The accident illustrates the insidious nature of the gases from an underground fire. The victim is overpowered with little warning and, in a very short time is in a condition in which he is not able to escape nor has he much desire to do so. It also emphasises a point which is so often apt to be overlooked by miners, *viz.*, that a fence is put up as a definite indication that there may be danger to anyone who ventures beyond the obstruction.

HAULAGE.

No. 147.—Messrs. The Newton Chickli Collieries, Limited's Newton Chickli coal mine.

This accident occurred on a haulage incline, about 1,100 feet long. The first 300 feet of the incline consisted of a cross-measure tunnel having a gradient of 1 in $2\frac{1}{2}$ and the remainder had been driven in a coal seam with an inclination varying from 1 in 30 to 1 in 50. The incline was used as the main travelling road for the mine. The haulage engine was operated by steam and situated on the surface.

An enquiry was held under section 21 of the Indian Mines Act, 1923, into the cause and circumstances of the accident, and the following extract is given from the report:—

"On Saturday night, the 17th-18th January, a night shift of workers was employed in the mine. Their shift of work ended early in the morning and at about 8 A.M. some seven persons had assembled in the waiting room at the foot of the steep slope and were awaiting the permission of the onsetter or haulage attendant to walk up the slope to the surface. At some time during the morning, overman Munna Khan, came out of the workings, and, finding that a considerable time had elapsed since a loaded train had been hauled up, walked up the incline to the surface with the object of expediting the despatch of a train of empty tubs. Permission to travel up the incline was not ordinarily given until the onsetter had made a special signal (three bells) to the surface and received a return signal (three bells) from the surface intimating that haulage had ceased and persons might walk up the incline to the surface. On this occasion it is doubtful if the customary interchange of signals was made. * * * * *. There seems to be no doubt that the men had been kept waiting some considerable time at the foot of the slope and that they were anxious to go up as it was pay day and they wished to attend the weekly bazar.

Whilst these seven persons were ascending the haulage slope in single file a train of empty tubs came tumbling down the slope. One of the men, Abdul Goffur, was killed outright, and three others, Ganga Pasi, Badli Khan and Sahukar Kaewar, were severely injured. Of the other three, two escaped by taking refuge in No. 2 manhole, and the other man who was ahead of the others sustained no more than a slight injury to the hand. As the tubs ran down the slope they appear to have left the rails, and most of them were found jammed between roof, floor, and sides at a point on the incline below the manhole. * * * * *

The one thing on which all witnesses agreed was that the haulage rope broke whilst a train of seventeen tubs was being lowered over the top of the incline. There were said to be verbal standing orders that not more than eight empty tubs were to be lowered at one time. On this occasion there appears to have been a breakdown which caused delay and an accumulation of no less than seventeen tubs at the top of the incline. * * * there was not room for more than eight tubs on the straight portion of the line above the stop-block, so that the other nine of the seventeen tubs in the train must have been standing round the curve. When the stop-block was opened and the leading tubs of the train were pushed over the top of the slope the remainder of the tubs would follow with increasing rapidity and the rope would become slack until the last tub rounded the curve when a severe jerk would result. In this case the jerk was sufficient to break the rope at a point about $1\frac{1}{2}$ inches from the capping."

The inquiry revealed the following defects amongst others:—

- (a) The signal bell was not in working order and there was no signalling arrangement between the bottom of the steep portion of the incline and the inner end of the haulage road—a distance of about 80 feet. This was a violation of General Rule 8.
- (b) The banksman at the top of the incline had not been appointed in writing by the manager. This was a violation of Special Rule 22.
- (c) The proper number of manholes had not been provided in the incline. This was a violation of General Rule 8.

Criminal proceedings were instituted against the director and manager and the mechanical engineer of the mine, and they were convicted and punished as detailed in Section IV "Prosecutions and Additions to the Act."

BY UNDERGROUND MACHINERY.

No. 162.—The East Indian Coal Company, Limited's Bararee coal mine.

Several accidents have occurred in the use of coal-cutting machinery through persons falling upon the bar or chain and being mutilated by the cutter-picks. In the accident to be described a coal-cutting machine was being used in a gallery rising at an inclination of about 1 in 4 in a seam over 20 feet thick. The actual dip of the seam was about 1 in 12 but the gallery which was started near the floor of the seam was being driven steeply in order to get to the top of the seam.

Plan D shows the scene of the accident. The coal-cutting machine was of the type in which the cutter-picks are fixed in a revolving bar. During the operation of the coal-cutter deceased was standing at the side of it holding the haulage stay when the machine slipped backwards down the gallery for a distance of about 20 feet. He was caught by the cutting-bar and killed. The machine was held up to its work by a single back-stay. Where it is necessary to operate coal-cutting machines on highly inclined ground, the provision against the machine slipping either backwards or sideways should be adequate. Probably the best arrangement in the gallery in which this accident occurred would have been a girder or a rail placed directly across the gallery and resting at either end against a strong prop. A single stay is always apt to slip out in such circumstances.

Another accident of a similar nature occurred at the same colliery. A bar coal-cutting machine was in position for "jibbing in." At the commencement of this operation the whole of the cutting bar is exposed, and as the bar revolves the machine is gradually pulled forward so that the bar enters the coal. One of the men employed in the operation of the machine was standing at the side of the cutter bar holding the haulage post when the machine suddenly swung round, due, it is presumed, to the picks at the front end of the cutting-bar striking the floor. The haulage post was knocked out and the rapidly revolving bar struck the right leg of the man holding the post and severed it just above the ankle. He recovered, however, from his injuries. A point which arises out of this and similar accidents is that it should not be necessary for any one to stand at the side of the cutting bar or "jib" in order to hold the anchor stay. The stay should be cut into the roof and floor in such a way that it will not require to be held.

BY SURFACE MACHINERY.

No. 177.—The Indian Iron and Steel Company, Limited's Gua iron ore mine.

At this mine, iron ore is excavated on the side of a hill. The ore is conveyed to a railway siding at the foot of the hill by an aerial rope-way. An automatic fan brake is used as a means of keeping the speed of the rope-way approximately uniform. When the speed of the rope-way increases, the speed of the fan also increases and as it is moving freely in the atmosphere the braking action is greater the higher the speed of revolution. Conversely when the speed of the rope-way decreases the braking action of the fan becomes less. As a general rule the rope-way is kept running continuously during a working shift. It was, therefore, sometimes necessary to oil the machinery while it was in motion. The fan brake was surrounded by a fence which was, however, several feet from the revolving parts. Thus in order to oil the machinery the fence had to be entered. Deceased went inside the fence to lubricate the bearings of the fan when a loose cloth which he was wearing was caught in the fan wheel. He was drawn into the wheel and instantly killed.

After the accident a new fence was erected close to the wheels of the fan so as to permit of a person oiling the bearings without risk of his

being struck by the revolving parts of the machinery. All machinery attendants were compelled to wear tight fitting clothes such as short trousers and sleeveless shirts.

Where possible machinery should only be lubricated when standing still, but if it is necessary that oiling should be done while the machinery is in motion the precautions adopted after this accident should be taken.

MISCELLANEOUS ON SURFACE.

No. 192—Rai Sahib Mathura Prosad Motilal and Company's Datla Chai coal mine.

A man was walking on the surface near an incline when the ground under him collapsed. He was completely buried and his body was recovered three days afterwards at a depth of 22 feet. The area of the subsided ground measured about 28 feet in diameter, and the ground had been crossed by a cart road and foot-path. An inspection of the underground workings showed that they were near the outcrop of the seam and that the pillars had been reduced to small dimensions. The ground on the surface was not fenced as it should have been according to the rules under the Indian Mines Act, 1923, which require that where a subsidence of the surface is likely to take place and persons are likely to be endangered thereby the dangerous area must be kept fenced on the surface. It is true that the workings were old but in all cases of likelihood of collapse access to the area on the surface should be prevented by fencing. Collapse of ground is of frequent occurrence in coal-mining districts, either as the result of the legitimate extraction of pillars or irregular working, and in every case when a subsidence is to be expected the area likely to be involved on the surface should be properly fenced off so as to prevent persons inadvertently entering the same.

IGNITION OF GAS.

A peculiar and instructive incident occurred in a shaft at a colliery in the Raniganj field on 6th April 1925. The shaft had been sunk to the Dishergarh seam at a depth of about 1,000 feet from the surface. A gallery had been driven from the bottom of the shaft for a short distance in the seam. The seam is known to give off inflammable gas and gas was met with as the seam was being approached and proved. The shaft was ventilated by a small centrifugal fan placed on the surface and connected to pipes leading down the shaft and into the gallery. The fan was placed so as to exhaust air from the shaft. A new and larger column of air-pipes was in the process of being installed in the shaft. The workings were stated to have been examined before 8 A.M. on the date mentioned and reported to be clear of fire-damp. The fan had then been stopped and two persons were sent down the shaft to a point, 120 feet from the bottom, to extend the new air column. Shortly before 12 noon the attendant of the hoisting engine used for lowering the air-pipes into the shaft noticed flames coming out of the fan-exit. At that time one of the men who had been working in the shaft had been brought to the surface. By dint of much shouting and signalling the

man who was still below ground was made to understand that he should also come to the surface, which he did. These persons carried safety lamps, and no indication of gas was shown in them. The top of the shaft was sealed off with brattice cloth and planks and an iron plate placed over the fan-exit, and eventually after having been burning for nearly three hours the flame was extinguished. The pipes near the fan for a distance of about 20 feet down the shaft were heated to a red heat.

The seam, as has been noted, is liable to produce outbursts of inflammable gas and it was surmised that something of that nature had taken place and that the air-pipes had been filled when the fan was running. After the fan stopped the column of air in the pipes might have continued to upcast and so drawn off the gas from the shaft. At the time of the ignition the percentage of gas in the pipes must have been greater than the explosive limit of fire-damp as otherwise an explosion would have taken place. Instead of that the gas simply burned at or near the outlet of the fan, the percentage of air in the mixture being insufficient to permit of explosive propagation. When the fan outlet was sealed, however, there were several mild detonations.

The cause of the ignition was not known but it appeared probable that some one had thrown a lighted match or the end of a cigarette into the mouth of the fan. The use of open lights inside a fence which included the fan and pit head was prohibited.

This incident, although admittedly exceptional, points to the necessity for frequent and close examinations for fire-damp in a shaft which is being sunk to a seam rich in that gas, and the desirability of maintaining at all times an adequate current of ventilation in the shaft. It points also to the desirability of placing the fan-exit in such circumstances in a position difficult of access.

Section IV.—Prosecutions and additions to the Act.

PROSECUTIONS.

Judgment was given in the following prosecutions during the year. Unless otherwise stated "general rule" means a rule under Notification No. 864-68-20, dated the 10th March 1904, being rules for the working of coal mines.

The owner, agent and manager of D. D. Roy's Palasdiha colliery were prosecuted under general Rules 3, 7 and 19 for (a) failing to keep the roof and sides of the travelling roads and working places secure, (b) not fencing the entrances to all places which were not in actual use and (c) not properly fencing the tops of two shafts. They were found guilty and fined Rs. 50 each, or, in default each to undergo simple imprisonment for a fortnight.

The owners (three) and the manager of the Central Tentulia Coal Company's Central Tentula colliery were prosecuted under general Rules 3 and 19 for (a) failing to keep the roof and sides of travelling roads and working places secure, and (b) not properly fencing the entrances to shafts. The three owners were fined Rs. 25 each and the manager Rs. 10.

The blasting foreman of C. K. Ram Choudry's Bhandarbodi manganese mine was prosecuted under Rule 16 of Government of India (Department of Commerce and Industry), Notification No. 6436—152, dated the 2nd September 1911, for not supervising the boring of a new hole in the vicinity of a shot which had mis-fired. Carelessness on the part of a miner resulted in the explosion of the mis-fired charge, causing bodily injury to the miner. The accused was acquitted, as it was considered that he had not committed a breach of the rule.

The agent of the New Tundu Coal Company's New Tundu colliery was prosecuted under section 15 of the Indian Mines Act, 1923, read with general Rules 46 and 47, for not appointing a qualified manager within the prescribed time. A fine of Rs. 50 was imposed.

The owner of Umesh Chandra Mukherjee's Borachuck colliery was prosecuted under general Rule 47 for not appointing a qualified manager. He was fined Rs. 10.

The owner, agent and manager of N. D. Chohan's Central Nawpara colliery were prosecuted under general Rule 47 and Rule 1 (c) and under Rules 3 and 51, respectively. The owner and agent were prosecuted for not appointing a qualified manager to manage the colliery, and for not providing a second outlet to the mine. The manager was prosecuted for failing to keep the sides of a travelling road secure, and for managing more than one mine without being duly authorised. The agent and manager were fined Rs. 75 and Rs. 50, respectively, and the owner was excused as he was a minor.

The owner and manager of Baijnath Ramkumar Marwari's Central Kenda colliery were prosecuted under general Rule 3 for failing to keep the sides of a travelling road secure. The owner was fined Rs. 50, and the case against the manager was dropped as he had taken up his residence in an Indian State, and could not be extradited for an offence under the Indian Mines Act.

The agent and manager of the Central Salanpur Coal Concern's Central Salanpur colliery were prosecuted under general Rule 3 for failing to keep the sides of a working place secure. They were fined Rs. 100 each.

The agent of the New Angarpathra Coal Company's New Angarpathra colliery was prosecuted under general Rule 47 for not appointing a qualified manager. A fine of Rs. 25 was imposed.

The owner of Bhanji Natha's Central Bansjora colliery was prosecuted under general Rule 45 for employing a manager with a second class certificate of competency on a mine the average output of which exceeded 2,500 tons a month. A fine of Rs. 40 was imposed.

The owner of B. P. Singh's Kalipahari colliery was prosecuted under Rules 17 and 18 of the Bengal Government's Notification No. 4788-Com., dated the 29th August 1924, for (a) failing to keep fenced a subsided area of a colliery, and (b) failing to cause the top or entrances of every shaft and opening into the mine to be fenced by a structure of a permanent character immediately after the workings thereof had been discontinued. He was fined Rs. 75 and ordered to erect, within fifteen days, a permanent fencing to the satisfaction of the Inspector of Mines.

The owners (seven), managing agents (two) and the manager of the New Ghusick Coal Company's New Ghusick colliery were prosecuted under general Rules 1 and 3 for (a) not providing a second outlet to the mine and (b) failing to keep the roofs of all travelling roads and working places secure. In the lower court, except for three of the owners who were acquitted, all the accused were convicted and fined, but on appeal four owners were fined Rs. 200 each, the manager was fined Rs. 50 and the two managing agents were acquitted.

The agent and manager of the Coal Bunkering and Shipping Company, Limited's Lohhadeo colliery were prosecuted under general Rules 3 and 19 for (a) failing to secure the roofs and sides of all travelling roads and working places and (b) failing to fence properly the sides of the incline. The agent was fined Rs. 30 and the manager Rs. 15.

The owners (two) of the North Golukdih Colliery Company's Chandkua colliery were prosecuted under section 15 of the Indian Mines Act, 1923, read with general Rule 47, for not appointing a qualified manager. They were fined Rs. 25 each.

The owners (three) of the Central Tentulia Coal Company's Central Tentulia colliery were prosecuted under section 15 of the Indian Mines Act, 1923, read with general Rule 47, for not appointing a qualified manager. They were fined Rs. 20, Rs. 15 and Rs. 15, respectively.

The manager, engine-wright and banksman of the Burra Dhemu Coal Company, Limited's Burra Dhemu colliery were prosecuted under special Rule 27 and general Rule 2 (g), under special Rule 52 and general Rule 2 (g), and under special Rule 70, respectively. The manager was prosecuted for failure to arrange that the inspections of the guide ropes were regularly and efficiently carried out; the engine-wright for (a) failure to see that all fittings and mechanical appliances required by the Act or by any rules made under the Act, were properly fixed and maintained in safe working order, and (b) failure to examine the state of the guides and conductors in the shaft; and the banksman for allowing more than the authorised number of persons to descend at one time. The manager was acquitted, the engine-wright fined Rs. 75 and the banksman Rs. 50.

The owner of W. C. Bhattacharjee's Egarcour colliery was prosecuted under Rule 17 of the Bihar and Orissa Government's Notification No. 2608-VII-M-2-Com., dated 8th September 1924, for failing to keep fenced a subsided area of the colliery. He was fined Rs. 25.

The manager and the mechanical engineer of the Newton Chickli Collieries, Limited's Newton Chickli colliery were prosecuted under general Rule 8 and special Rule 22, and under special Rule 52, respectively. The manager was prosecuted for not providing proper means of communicating distinct and definite signals between the stopping places and ends of the main haulage road, and not providing a sufficient number of man-holes for places of refuge; and the mechanical engineer for failing to maintain in good order the signal apparatus, as the result of which a fatal accident occurred causing the death of one person and serious injury to three others. The manager was fined Rs. 200, Rs. 30 and a further amount of Rs. 20 under section 39 of the Indian Mines Act, read with section 16 of the same Act for being equally guilty with

the mechanical engineer for the violation of special Rule 52. The mechanical engineer was fined Rs. 200.

The owner and manager of W. C. Bhattacharjee's Pandedih colliery were prosecuted under general Rules 3, 19 and 22 for (a) failing to maintain the gates of two inclines in order, (b) for failing to keep the fences of inclines intact and (c) for failing to keep the necessary ambulance appliances. The owner was fined Rs. 20 and the manager Rs. 5.

The owners (four) and the manager of the Banskuri Coal Company's Banskuri colliery were prosecuted under general Rules 1, 4 and 9 for (a) employing persons in a mine in which there was no second outlet, (b) failing to have an inspection of the mine made and the report recorded regarding the condition of the working places in the mine and (c) failing to keep a plan of the workings at the mine. Two of the owners were fined Rs. 100 each, the other two Rs. 50 each and the manager Rs. 50.

The owner of J. N. Banerjee's Laikdih New colliery was prosecuted under general Rule 47 for failing to appoint a qualified manager. The proceedings were dropped as a satisfactory explanation was given by the owner.

The owner, the agent and the manager, and the overman of Rai Sahib Sunderlal's Dhao colliery were prosecuted under general Rule 3 and under general Rules 4 (a) and 4 (b), respectively; the owner, agent and manager for failing to keep the roofs and sides of all travelling roads and working places secure, and the overman for not making a daily inspection of the working places in the mine, and not making a written report of all such inspections, as the result of which an accident occurred causing the death of one person and slight injury to three others. The owner and overman were fined Rs. 500 and Rs. 100, respectively, and the manager was acquitted. The agent died before the case was taken.

The owner and manager of J. N. Banerjee's Laikdih New colliery were prosecuted under Rule 3 of Bihar and Orissa Government's Notification No. 11761-M, dated the 3rd August 1918, General Rule 19, and Rule 8 of Bihar and Orissa Government's Notification No. 2608-VII-M-2-Com., dated the 8th September 1924, for (a) not providing gates at the entrances to the underground workings, (b) failing to fence properly the edges of the quarries and (c) failing to keep the necessary ambulance appliances at the mine. They were fined Rs. 25 each.

The following prosecutions were instituted under Rule 12 of Government of India, Notification No. 864-68-20, dated 10th March 1904, for failure to submit plans of abandoned or discontinued workings of mines:—

- (a) The owners (three) and the agent of the West Ghusick colliery were fined Rs. 50 each.
- (b) The case against the owner of Central Bahiardih colliery was dropped as the whereabouts of the accused were not known.
- (c) The case against the owners (three) of the Kalythan Angarpathra colliery was withdrawn as the plan was afterwards submitted.

- (d) Of the two owners of Khas Bhelatand colliery one was fined Rs. 10 and the proceedings against the other were dropped.
- (e) The owner of Serampore colliery was fined Rs. 5.
- (f) The case against the Liquidators and Managing Agents of the Great Eastern Coal Company, Limited's Peepratand colliery was withdrawn as the plan was afterwards submitted.
- (g) Of the two owners of Belanzabad colliery, one was fined Rs. 25, and the other was acquitted.
- (h) The owner of Chandkua colliery was acquitted.
- (i) The case against the owners of Keshalpur colliery was withdrawn, as the plan was afterwards submitted.
- (j) The case against the owner of Upper Kendra colliery was withdrawn as the plan was afterwards submitted.

Twenty-three prosecutions were instituted for failure to submit annual or monthly returns within the prescribed date. In nine cases fines aggregating Rs. 165 were imposed; eleven cases were withdrawn, in five of them owing to the whereabouts of accused not being known; in two cases the accused were acquitted, and in one case the accused was discharged with a warning.

Information was received of the following prosecutions instituted by colliery officials against their subordinates:—

The Colliery Superintendent of the Assam Railways and Trading Company, Limited, prosecuted a miner of Tirap colliery under special Rules 3 and 5 for disobedience of orders and committing an act likely to endanger the safety of other persons and of the mine. He was fined Rs. 10.

The manager of the Equitable Coal Company, Limited's Dishergarh colliery prosecuted an overman under special Rules 37 and 40 for not making a daily inspection of every part of the mine in or through which persons had to work or pass, and for not causing the entrance to a portion of the mine, which was not in actual use, to be properly fenced. He was fined Rs. 5.

The manager of West Jamuria colliery prosecuted a banksman under special Rule 69 read with special Rule 23 for not thoroughly acquainting himself with, and carefully attending to, the prescribed code of shaft signals, thus causing an accident which resulted in the death of a fellow-workman. He was sentenced to undergo simple imprisonment for one month.

A blasting mate at the Central Provinces Manganese Ore Company, Limited's Balaghat manganese ore mine was prosecuted by the manager of the mine under general Rules 14 and 15, and special Rules 46, 47 and 48 for failure to report two mis-fires at the bottom of a sinking winze, and for withdrawing the fuses and detonators from the mis-fired holes. He was fined Rs. 20.

The manager of B. P. Byramji and Company's Palachauri colliery prosecuted the head trammer and three trammers under special Rule 16 for riding on tubs without the permission of the manager. An accident

occurred resulting in serious injury to one of the trammers. The head trammer was fined Rs. 40 and the three other trammers Rs. 30 each.

The manager of the Bansdeopur Coal Company, Limited's Bansdeopur colliery prosecuted two miners for failing to comply with orders. They were fined Rs. 20 each, or, in default to undergo simple imprisonment for three weeks.

ADDITIONS TO THE ACT.

Under section 46 (*I*) of the Indian Mines Act, 1923, certain mines were exempted from the operation of the Act by the Government of India, Department of Industries and Labour, in addition to those exempted under Notification No. M.-1051, dated the 26th July 1924. The notifications are reproduced in Appendix IV.

Supplementary notifications under section 30 of the Indian Mines Act, 1923, were issued by the Governments of Bihar and Orissa, Baluchistan and the Punjab, regarding enquiries in the case of accidents. The Bihar and Orissa Government notification is published in Appendix IV.

Notifications under section 18 of the Indian Mines Act, 1923, were published by the Governments of Bengal, Bihar and Orissa, Assam, Baluchistan and the Central Provinces. Under these notifications it was declared that the provisions of that section shall apply to all coal mines and to mines other than coal mines at which more than twenty persons are employed.

For the information of mine-owners it may be stated that publications of the Central Government, as apart from those of Local Governments in respect of mining legislation, are available by purchase from the Manager of the Central Publication Branch, No. 8, Hastings Street, Calcutta. Publications of Local Governments may be obtained from the following addresses:—

Bengal	The Officer-in-Charge, Bengal Secretariat Book Depôt, Calcutta.
Bihar and Orissa	The Superintendent, Government Printing, Bihar and Orissa, Gulzarbagh, Patna.
Central Provinces	The Superintendent, Government Printing, Nagpur.
Assam	Assam Secretariat Book Depôt, Shillong.
Burma	The Superintendent, Government Printing and Stationery, Burma, Juda Ezekiel Street, Rangoon, Burma.
Punjab	The Superintendent, Government Printing, Punjab, Lahore.
Baluchistan	The Assistant Revenue Commissioner in Baluchistan, Quetta.

Bombay	The Superintendent, Government Printing and Stationery, Queens Road, Bombay.
Madras	The Superintendent, Government Press, Madras.

During the year Special Rules under section 21 of the Indian Mines Act, 1901, were established at one manganese mine only. It may be explained that the establishment of such rules was held in abeyance as, in the view of the Local Governments of Bengal and Bihar and Orissa, it was contrary to law inasmuch as while section 24 of the General Clauses Act was effective to save rules actually prescribed in any place before the 1st July 1924, it would not operate to legalise the prescription under the old Act of 1901 of any other rules or the same rules in other places after that date. Managers of newly opened mines where special rules had not previously been established were requested to enforce special rules as an executive measure.

Section V.—General Remarks.

HEALTH AND SANITATION.

The Asansol Mines Board of Health held nine ordinary and two special meetings during the year. Dr. J. W. Tomb, the Chief Sanitary Officer of the Board, reported that there were 194 cases of cholera with 89 deaths and 662 cases of small-pox with 83 deaths during the year, as compared with 535 cases of cholera with 317 deaths and 75 cases of small-pox with 10 deaths during the previous year. The decrease in the number of cholera cases was due to the fact that the disease did not assume an epidemic form owing to the effective preventative methods carried out by the Board's staff. There was an epidemic of small-pox. The infection was supposed to have been introduced into Raniganj in January from Calcutta. The number of un-vaccinated children within the limits of that municipality enabled the disease to spread in epidemic form, 318 cases being recorded with 37 deaths. The general health of the mining settlement was good, the death rate being 16.1 per thousand and the infantile mortality 171.1 per thousand. These figures compare with 18.7 and 145.7 per thousand during the previous year. The Board's anti-malarial staff continued to do good work in the suppression of malaria.

The Jharia Mines Board of Health held fourteen ordinary and six special meetings during the year. Dr. G. W. Thompson was the Medical Officer of Health throughout the year. Dr. A. G. Wright was the Assistant Medical Officer of Health except for the period 8th April to 8th November when he was on leave. There were 952 cases of cholera with 364 deaths and 717 cases of small-pox with 54 deaths as compared with 1,479 cases of cholera with 578 deaths and 503 cases of small-pox with 20 deaths during the previous year. The death rate was 18.77 per thousand and the birth rate 33.64 per thousand, as compared with 20.83 and 30.27 per thousand, respectively, during the previous year. In the Board's laboratory 853 samples of food were

analysed and 431 samples were found to be more or less adulterated. Prosecutions were instituted in the worst cases.

Considerable progress was made during the year with the scheme for the supply of water to the Jharia coalfield under the scheme of the Jharia Water Board. The number of collieries for which water was available increased from about 80 with an estimated population of 36,000 persons to nearly 200 with an estimated population of over 100,000 persons.

The medical arrangements at the Bawdwin mine, Northern Burma, appear to be worthy of special mention. The Central Asiatic hospital at Namtu which is the smelting station for Bawdwin is one of the finest institutions of its kind in India. There is also a well-equipped hospital at the mine itself and first-aid stations are provided both above and below ground. The sanitation at Bawdwin mine both on the surface and underground is very good. Latrines are provided at suitable places below ground. There is an adequate supply of drinking water throughout the mine.

Statistics of rainfall have been recorded as follows:—

	1925.	1924.
<i>Jharia Coalfield—</i>		
Jealgora	43·07	53·69
Topchanchi reservoir	63·85	70·32
Dhanbad	43·43	65·15
<i>Raniganj Coalfield—</i>		
Asansol	50·30	70·75
Dishergarh	53·58	...
Kulti	48·06	...
<i>Giridih Coalfield—</i>		
Giridih	32·84	73·29

MINING EDUCATION.

The Principal of the Bengal Engineering College has reported that in the examination for the Diploma in the principles of mining held at the end of the college course in March 1925, thirteen students appeared and ten were granted diplomas. In the Junior Course twenty-nine were enrolled at the beginning of the season, twenty-four sat for examination and fifteen qualified for promotion to the Senior Course. Twenty-five students entered the preliminary or preparatory class and of these ten were promoted. The annual mining camp was pitched in November-December 1925 at Sibpur colliery, Raniganj coalfield. The usual courses of practical work were undertaken and visits of inspection were

paid to various plants and appliances of technical interest in the vicinity. The total number of students in camp was 46, of whom thirteen were special survey students.

The three-year courses of instruction were in full swing at the lecture centres at Raniganj, Sitarampur, Jharia and Sijua. The teaching staff was Mr. L. Millar, assisted by Babus Sachidananda Mukherjee and Dharendra Nath Sirkar in Bengal and Mr. Griffith Jones assisted by Babus N. N. Sen and B. K. Palit in Bihar and Orissa. The number of students enrolled was 332 of whom 125 attended the sessional examinations and 27 passed the final examination. Messrs. H. C. Read and Dr. D. Penman were the examiners. Courses of ten lectures in Hindi to overmen and sirdars were delivered at five centres in the Jharia coalfield and at one centre in the Mugma section of the Raniganj coalfield. The reduction in the number of students enrolled is probably due to the depression in the coal industry. A total of 987 students attended the lectures. These classes are becoming more and more popular as a means of preparation for the examinations for sirdars' certificates which are now being held. The lecturers were Babus A. C. Banerjee, K. K. Bose, S. N. Bhattacharjee and P. R. Chakravarty. Similar lectures in Bengali were delivered at six centres in the Raniganj coalfield, the Government of Bengal having sanctioned the same extension and improvement of the vernacular lecture courses as had already been carried out in Bihar and Orissa. The lecturers were Babus Jadu Gopal Banerjee and Durgapada Naug. In addition to the ordinary vernacular lectures special demonstrations in gas testing were given in the vernacular by the mining lecturers at the Jharia, Sitarampur and Raniganj centres.

Considerable progress was made during the year with the buildings for the Indian School of Mines at Dhanbad and it is expected that the School will be opened in November 1926. The school will be equipped and staffed for the provision of high grade instruction in mining and geology.

In the Pench Valley coalfield in the Central Provinces the average attendance at the mining classes during the year 1925-26 was eleven. Mr. G. O. Burgoyne was the lecturer in mining.

BOARD OF EXAMINERS FOR COAL MINE MANAGERS' CERTIFICATES.

Eight meetings of the Board of Examiners were held during the year. The non-official members were Messrs. J. B. Wardlaw and J. Mackie. Twelve first class certificates of competency were granted in lieu of British certificates.

At the examinations for Colliery Managers' certificates of competency held at Dhanbad on the 9th, 10th, 11th, 16th, 17th and 18th February 1925, 127 candidates sat for first class and 410 for second class certificates. Certificates of competency were granted to eleven first class and twenty-one second class candidates.

The examiners for the first class examination were Messrs. R. Heron and T. C. Murray, and for the second class examination Messrs. C. E. Ashcroft and J. T. Mackenzie. Dr. D. Penman and Mr. J. H. Lang,

Inspectors of Mines in India, acted as official examiners and Secretary and Assistant Secretary, respectively.

MINING BOARDS IN BENGAL, BIHAR AND ORISSA AND THE CENTRAL PROVINCES.

The Mining Board, Bengal, held one meeting during the year. The subjects discussed at the meeting and by correspondence were (a) draft Regulations for coal mines and mines other than coal mines; (b) draft Rules under section 30 of the Indian Mines Act, 1923; (c) amendments to section 13 of the Indian Mines Act, 1923, and to Schedule A of the rules framed under section 30 of the Indian Mines Act. The non-official members of the Board were Messrs. P. S. Keelan, C.I.E., H. M. Tarlton and Babu B. P. Mukherjee.

The Mining Board, Bihar and Orissa, held two meetings during the year. The subjects discussed at the meetings and by correspondence were (a) draft Regulations for coal mines; (b) draft Rules under section 30 of the Indian Mines Act, 1923; (c) preparation of an abstract of the Indian Mines Act, 1923. The non-official members of the Board were Messrs. R. G. M. Bathgata and A. L. Ojha.

The Central Provinces Mining Board held one meeting during the year. The subject discussed at the meeting were (a) draft Regulations for coal mines and mines other than coal mines; (b) amendments to the rules for election to the Mining Board; (c) the imposition of a protective duty on coal. The non-official members of the Board were Messrs. L. H. Bartlett, R. S. Davies and Rai Sahib Mathura Prasad.

MINING AND GEOLOGICAL INSTITUTE OF INDIA.

The total membership of the Mining and Geological Institute of India at the end of the year including subscribers was 347. In addition to the annual meeting three ordinary meetings for papers were held. By the invitation of the Central Provinces Manganese Ore Company, Limited, an excursion was made to the Bharweli mine in the Central Provinces. A visit was also paid at the invitation of Messrs. Kilburn and Company to the Tata Iron and Steel Company, Limited's Jamadoba colliery and the Raneegunge Coal Association Limited's Kustore colliery in the Jharia coalfield. In addition to the above meetings two extraordinary general meetings were held to pass an amendment to the Articles of Association in order to afford facilities for persons living in remote parts to join the Institute. The Institute sent a delegate to the Bi-Centenary Celebrations of the Academic des Science de Russie, being represented by Dr. L. Dudley Stamp.

Three parts of the Transactions were published. The Government prize for the best paper accepted for publication during the year was awarded to Dr. D. Penman and Mr. T. A. Wetherell for their joint paper on "Experiments on the Flow of Air in an Indian Colliery". The Institute gold medal was awarded to Dr. Cyril S. Fox for his paper "Notes on the Iron and Steel industry of India", the silver medal to Dr. D. Penman and Mr. T. A. Wetherell for their abovementioned paper; the bronze medal was not awarded.

**THE ASSOCIATION OF COLLIERY MANAGERS IN INDIA AND THE INDIAN
MINE MANAGERS' ASSOCIATION.**

During the year the chief subjects dealt with by the Association of Colliery Managers in India were:—(a) further discussion on the suggested legislation of the Central Provinces Government regarding the presence of a manager at every mine and incidently of permit certificates; (b) section 23 of the Indian Mines Act; (c) question of thefts and leakages of explosives in the coalfield and their prevention; (d) revival of meetings between railway representatives and colliery officials. A visit was paid to the Raneeunge Coal Association Limited's Kustore colliery on 13th March 1925.

The Indian Mine Managers' Association entered into the third year of its existence and at the end of 1925 there were 80 ordinary members and 4 associate members on its roll. Some of the business transacted during the year were:—(a) correlation of the seams on the Nichitpur-Bansjora section of the Jharia field; (b) joint meetings between the Indian Mining Federation and the Association to establish better relations between owners and managers; (c) consideration of draft Regulations for coal and other mines under the Indian Mines Act, and (d) meeting between railway officials and colliery managers for joint discussion of coal traffic problems.

AMBULANCE WORK IN THE COALFIELDS.

Classes in First-aid to the injured were held at seven centres in the Jharia coalfield and attended by 145 students of whom 99 gained St. John Ambulance First-aid certificates. The lecturers were Drs. R. S. Dutt, U. N. Roy, H. K. Chakravarty, R. Dutta, N. K. Rai Chowdhury and U. P. Chakravarty, and the examinations were conducted by Drs. Bradford, Janion, Thompson and Simpson.

Similar classes were held in seventeen centres in the Raniganj coalfield at which 368 students attended and 308 St. John Ambulance First-aid certificates were awarded. The names of the lecturers were Drs. P. C. Biswas, D. N. Tewar, J. K. Bose, B. C. Das, P. K. Mukherji, C. C. Ghosh, D. C. Vanjo, S. P. Chatterji, Nurulatta, P. N. Sen, G. B. Roy, B. Sen Gupta, S. C. Ghosh, R. R. Dey, S. K. Mitra, and B. B. Ganguli, and the examiners were Drs. N. Choudhuri, O'Connor, J. K. Bose, B. B. Banerji, N. Huq, S. P. Chatterjee, P. C. Biswas, C. C. Ghosh and P. N. Sen. The thanks of the coal mining community are due both to lecturers and examiners.

LAND ACQUISITION (MINES) ACT, 1885.

The number of original cases disposed of altogether at the end of 1925 stood at 532, sixteen of which were cases disposed of during the year. There were seventeen applications for modifications of restrictions and six complaints of violations of restrictions, all of which were dealt

with. The Act applies to Bengal and Bihar and Orissa only. In other provinces where Government owns the minerals Local Governments were advised as to the restrictions necessary in cases where mine-owners have sought permission to work minerals beneath railways, villages, etc.

AWARD OF EDWARD MEDALS.

On the 7th January 1925 an incident occurred at the Mohpani colliery belonging to the Great Indian Peninsula Railway which once again illustrates the resource and bravery which are characteristic of the miner. In the process of extracting pillars in a seam, about 6 feet thick, a large fall of roof stone, covering an area of 60 feet by 18 feet, occurred in a working place. One miner was killed and another was injured and buried by the fallen stone. A rescue party was immediately organised, the leaders of the party being Mr. James Kipling, the assistant manager of the colliery, Mr. J. Johnston, the senior overman and Nani Khan, a timber man. The rescue party had to climb over the fall under a roof which was still under weight and might have collapsed at any moment. They had to work in a confined space and had to break up and remove by pick, hammer, wedge and crowbar the large stones which held the injured man. Shortly after the rescue a second large fall of the roof took place. There was no doubt that the prompt action of the rescue party saved the life of the injured person. I have pleasure in recording that His Majesty the King Emperor has been pleased to award "The Edward Medal" to Messrs. Kipling, Johnston and Nani Khan. This is the second occasion on which the Edward medal has been awarded to miners in India.

COAL DUST COMMITTEE.

The Committee appointed by the Government of India to investigate the dangers arising from coal dust in Indian mines continued their experiments during the year. A great number of experiments were carried out at the experimental gallery at Dhanbad. The results showed that, given the necessary fineness, the dust from any of the Indian coals was capable of producing an ignition and propagation. Towards the end of the year an incline in coal was placed at the disposal of the Committee by Messrs. S. B. Raha and Sons, Owners of Godhur colliery, Jharia coalfield, and tests were carried out underground. These tests are being continued and a second report is being prepared. Dr. D. Penman was in charge of the experimental work throughout the year.

EXAMINATION AND CERTIFICATION OF UNDERGROUND SIRDARS.

During the year considerable progress was made in the examination and certification of underground sirdars. Examinations were held at a number of centres in the Jharia, Raniganj, Bokaro, Giridih, Jainty and Punjab coalfields throughout the year. The number of persons who had been examined by the end of the year was 2,346, the number of

persons who had passed 1,909 and the number of certificates issued 1,753. A tabulated statement for the different districts is given below:—

	Number examined.	Number passed.
Jharia coalfield	1,211	951
Raniganj coalfield	973	808
Bokaro coalfield	30	29
Giridih „	67	66
Jainty „	21	12
Punjab Province	44	43
TOTAL	2,346	1,909

The number of examinations for endorsement for gas testing were:—

	Examined.	Passed.
Raniganj coalfield	286	132
Jharia coalfield	22	13
Bokaro „	5	5
TOTAL	313	149

Since the end of the year examinations have been held in Assam, Central Provinces and Baluchistan. The examination of such a large number of sirdars entailed a considerable amount of work on the Department. The actual examinations were carried out by the Inspectors and colliery managers appointed as local examiners.

Cases have come to notice where managers have refused to return a sirdar's certificate for one or other reason. It may be pointed out that under Rule 64 (1) the return of an underground sirdar's certificate when the holder is no longer employed is unconditional. When the holder of a certificate leaves his employment for any reason whatever the certificate should be returned to him.

EMPLOYMENT OF CHILDREN.

Under the Indian Mines Act, 1923, the employment of children either below ground or above ground was prohibited. The Act came into force on 1st July 1924. In the year 1924, 6,381 children under 12

years of age were returned as having been employed in the mines in British India during the year. It was presumed that these children were employed during the first half of the year before the provisions of the Act came into operation. It is to be regretted, however, that this supposition was incorrect, for in the returns for 1925 the number of children employed above and below ground shows little diminution from the previous year. In 1924 the number of children under 12 years of age employed was 6,381 while during 1925, 4,135 children were returned as having been employed.

The figures relating to the employment of children are given in detail in Appendix I, Table I of this Report.

Section 26 of the Act was contravened in nearly every class of mine and in nearly every province in British India. The outstanding instances included Bengal coal mines (26 below ground and 184 above ground), Bihar and Orissa coal mines (2 below ground and 937 above ground) and Bihar and Orissa mica mines (480 below ground and 1,093 above ground). The chief exceptions were Assam coal mines, Central Provinces manganese mines and Burma limestone, gems, iron ore and lead mines, in which no children were employed either above or below ground.

An explanation was asked for in every case in which the section had been contravened. From the replies it would appear that in respect of the employment of children above ground, there was a general misinterpretation of section 26, nearly every one having taken the section to prohibit the employment of children below ground only. Section 26, read with section 3 (f) which defines a mine, is, however, perfectly clear and there was really no excuse for misinterpretation. Fortunately the children were employed in most cases on comparatively innocuous work such as shale-picking, mica splitting, conservancy work, etc.

With regard to the employment of children underground a common explanation was that the children had been employed for only a few days unknown to the management and had been dismissed as soon as they were discovered but that since they had actually been employed, though only for a short period, they had to be included in the annual returns. This was probably true since Inspectors had occasion frequently during the year to ask for the removal of children from mines.

The total number of children returned as employed below ground was 1,297. Probably more than half of that number, however, were employed in comparatively shallow surface workings or quarries and on light work, and might as correctly have been returned as working above ground.

In addition to the letter referred to asking for an explanation of the contravention of section 26, a circular letter was sent to all mine-owners drawing their attention to the requirements of the Act with respect to the employment of children.

In the Annual Report for 1924, page 33, it was pointed out that children should not be employed either below ground or on the surface. I desire to emphasise that injunction and to invite the attention of all mine-owners, agents and managers to the provisions of the Act regarding the employment of children as embodied in section 26 [read with section 3 (f)], and section 3 (c) and 3 (d). A serious view will be taken of any further contraventions of section 26 which may come to light.

OFFICIAL DUTIES, 1925.

Mr. R. R. Simpson was Chief Inspector of Mines throughout the year.

Dr. D. Penman was Officiating Inspector of Mines, No. 1 Circle, up to 17th October 1925, when he was appointed Inspector of Mines at headquarters.

Mr. J. H. Lang was Inspector of Mines, No. 2 Circle, throughout the year.

Mr. W. Kirby was Junior Inspector of Mines until 17th October when he was appointed Inspector of Mines, No. 1 Circle. He was granted leave on average pay from 18th March to 17th October.

Mr. H. M. Mitra was Electric Inspector of Mines throughout the year. He was appointed to act, in addition to his own duties, as Electric Inspector, Bihar and Orissa, from May to December.

Mr. G. S. Cameron was Junior Inspector of Mines. He was granted leave on average pay from 9th March to 9th November.

Mr. N. G. Chatterjee was Junior Inspector of Mines. He was granted leave on average pay from 2nd to 21st July.

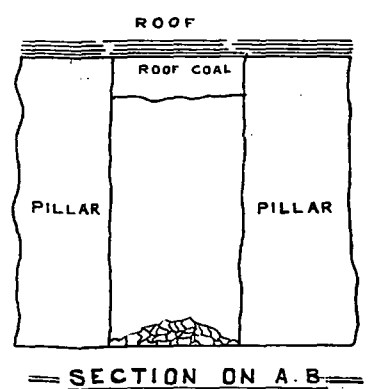
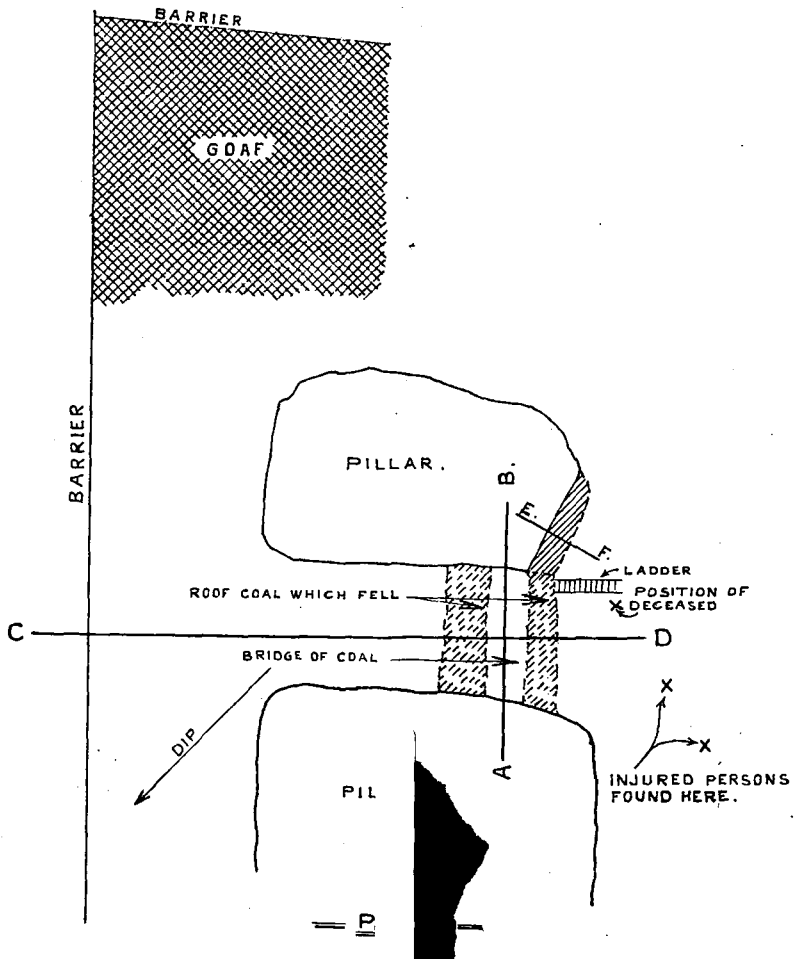
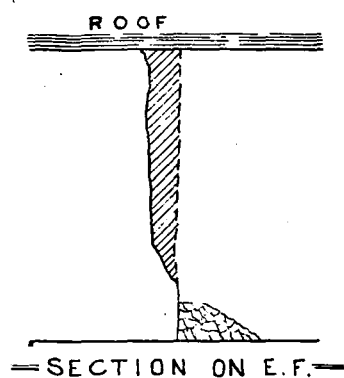
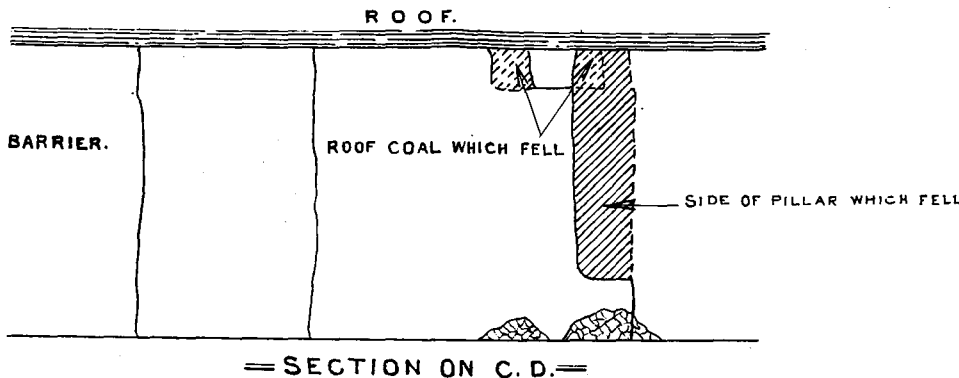
Mr. N. Barraclough was Junior Inspector of Mines throughout the year.

Messrs. J. F. Waters and H. K. Chatterjee were appointed Junior Inspectors of Mines on 17th October and 28th November, respectively.

During the year 958 mines were visited. Practically all important mines were inspected and many of them several times. 1,938 separate inspections were made. Enquiries were held in the case of nearly all the fatal accidents and certain of the serious accidents. All complaints of breaches of rules were investigated. As in other years several inspections were made on the invitation of mine-owners, superintendents or managers anxious for consultation and advice on safety matters.

In six cases of danger, not expressly provided for under the rules, orders under section 19 were issued requiring the remedy of the danger and the withdrawal from the mines of all workers not reasonably necessary for the purpose of removing the danger. The owners of twenty-one

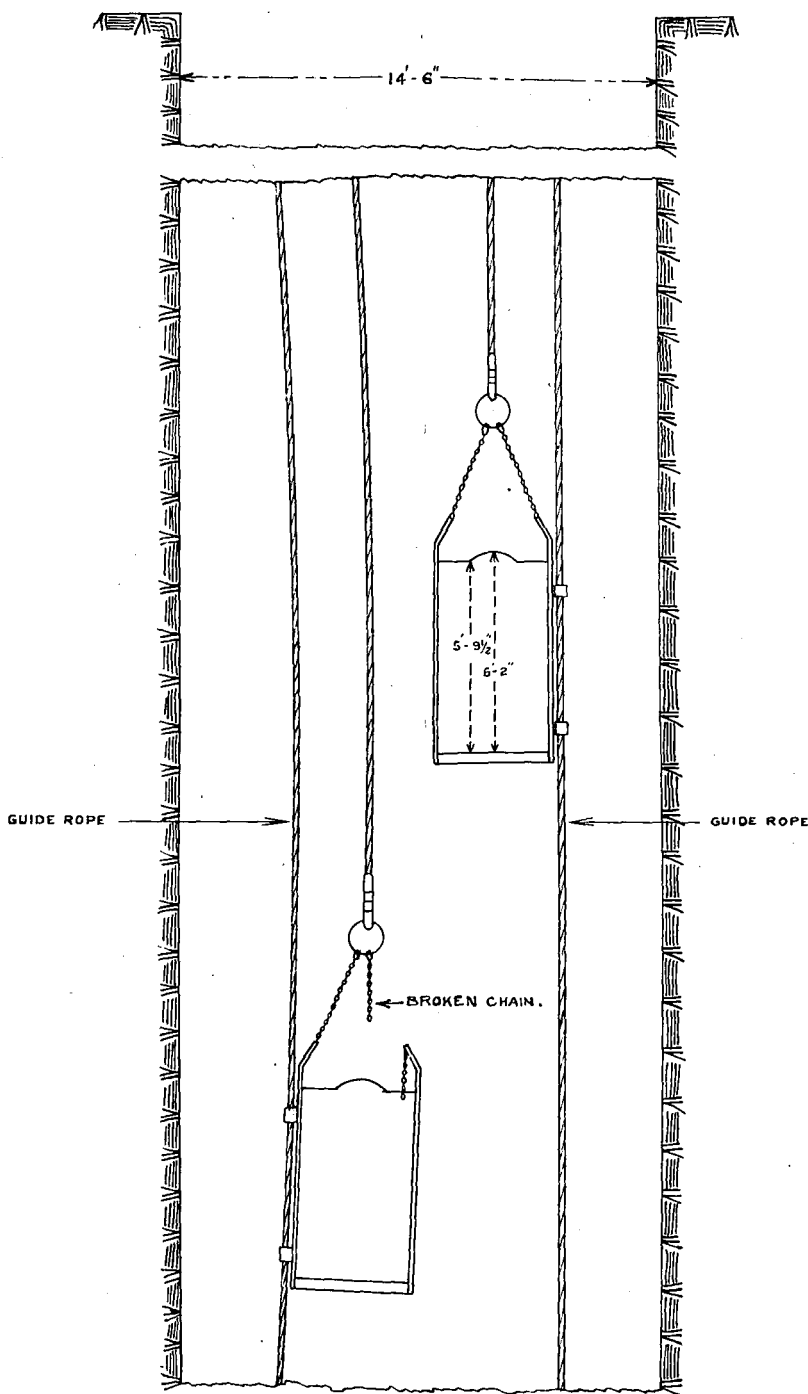
PLAN ILLUSTRATING REPORT ON FATAL ACCIDENT BY FALL OF SIDE AT THE STANDARD COAL Co. LTD's BENAHR MINE.



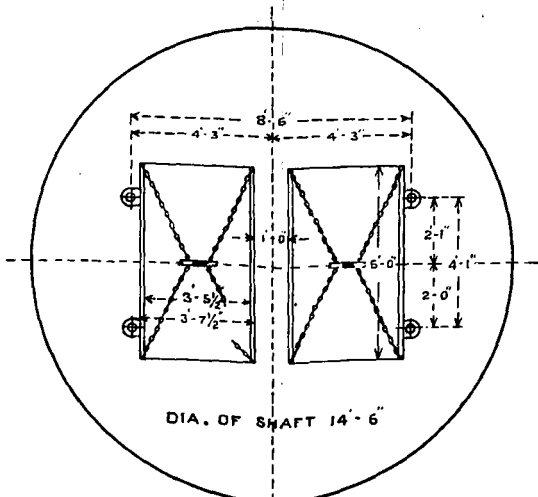
PLAN ILLUSTRATING REPORT ON FATAL ACCIDENT IN A SHAFT AT

THE BUDROOCHUCK COAL MINING Co. LTD'S BUDROOCHUCK MINE.

SCALE 1/4 INCH = 1 FOOT



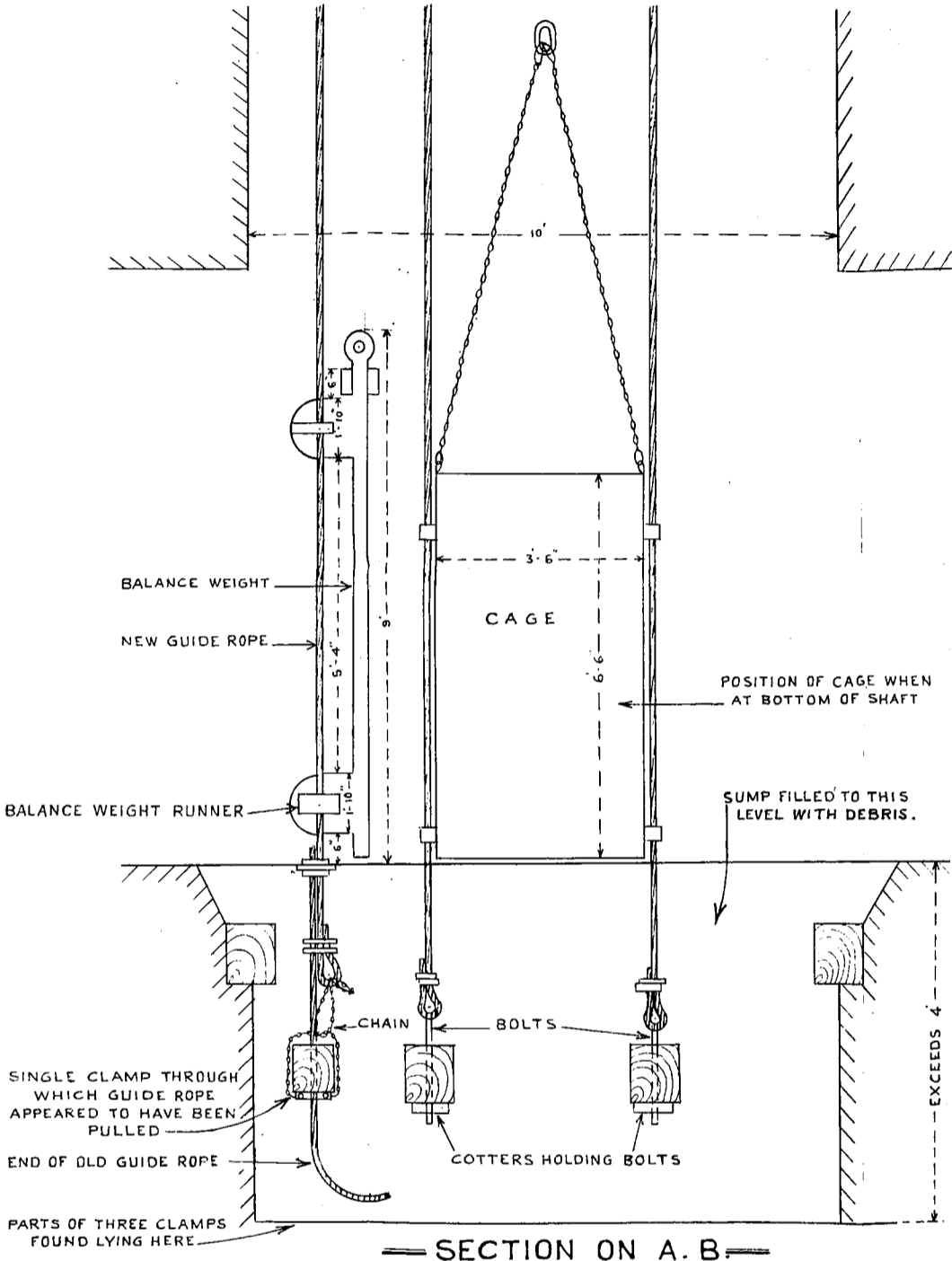
— ELEVATION IN MID SHAFT —



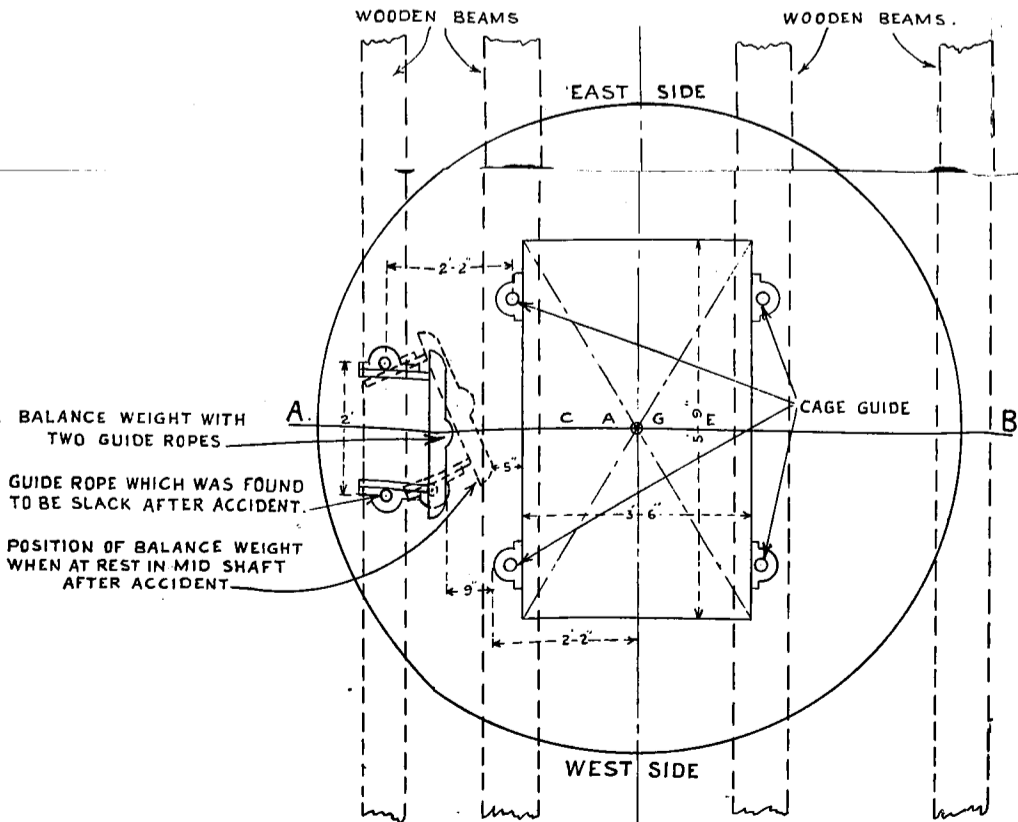
DIA. OF SHAFT 14'-6"

— PLAN —

PLAN ILLUSTRATING REPORT
 ON FATAL ACCIDENT IN A SHAFT
 AT
 THE BURRA DHEMO COAL Co. LTD'S BURRA DHEMO MINE.
 Scale 1/2 Inch = 1 foot.

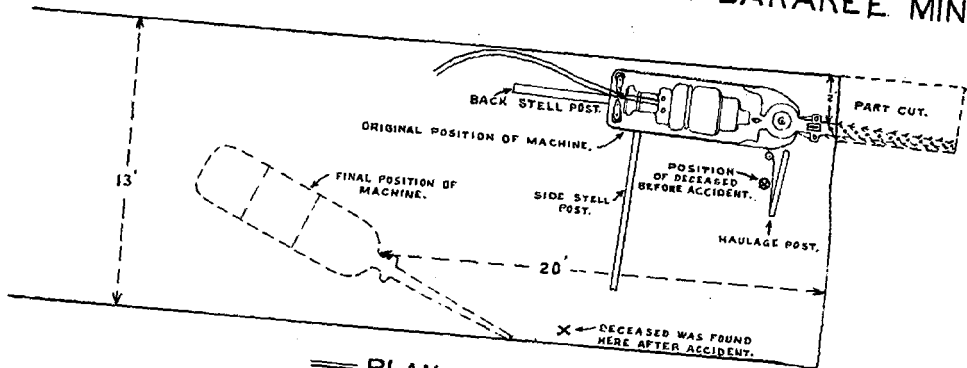


— SECTION ON A. B. —

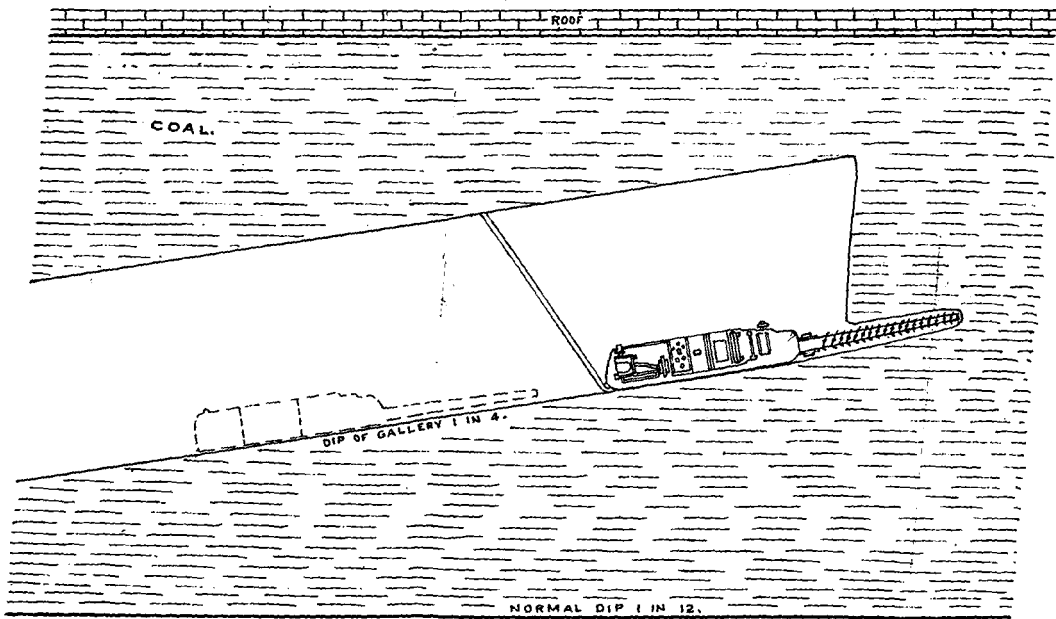


— PLAN —

PLAN ILLUSTRATING REPORT ON FATAL ACCIDENT BY A COAL CUTTING MACHINE AT THE EAST INDIAN COAL Co. LTD'S BARAREE MINE.



== PLAN ==



== SECTION ALONG GALLERY ==

small coal mines were required, under General Rule 47, to appoint managers holding first or second class certificates.

I have the honour to be,

SIR,

Your most obedient servant,

D. PENMAN,

Offg. Chief Inspector of Mines in India.

APPEN
STATISTICS OF MINES

Table

Number of mines regulated by the Indian Mines Act, number

PROVINCE.	District and mineral field.	Number of mines under the scope of the Act.	NUMBER OF MINES.				NUMBER OF MINES INSPECTED DURING THE YEAR.		TOTAL OUTPUT.
			Worked by mechanical power.	Not worked by mechanical power.	Opened during the year.	Closed during the year.	Number of mines inspected.	Number of inspections.	
Assam . . .	Lakhimpur . . .	7	5	2	...	...	5	10	CO Tons. 262,959 55,038 ...
	Naga Hills . . .	1	...	1	...	...	1	3	
	Sibsagar . . .	...	...	...	...	...	...	...
	TOTAL . . .	8	5	3	...	...	6	13	
Baluchistan . . .	Kalat . . .	...	...	...	...	...	...	...	...
	Loralai . . .	...	...	...	...	...	...	...
	Quetta-Pishin . . .	7	...	7	...	2	3	3	
	Sibi-Khost . . .	7	1	6	1	3	2	3	
TOTAL . . .	14	1	13	1	5	5	6	22,707	
Bengal . . .	Bankura, Raniganj.	4	...	4	...	...	4	6	10,602
	Birbhum „ . . .	3	1	2	...	...	...	...	17,696
	Burdwan „ . . .	229	202	27	16	31	186	418	4,885,554
	TOTAL . . .	236	203	33	16	31	190	424	4,913,852
Bihar and Orissa.	Hazaribagh—								
	Bokaro . . .	6	5	1	...	1	5	14	1,494,966
	Giridih . . .	11	5	6	3	...	9	23	786,642
	Jharia . . .	9	5	4	2	2	11	14	131,482
Carried over . . .	26	15	11	5	3	25	51	2,413,090	

DIX L
AND MINERALS.

No. 1.

of workers and output of minerals, during the year 1925.

AVERAGE NUMBER OF PERSONS EMPLOYED DAILY IN AND ABOUT THE MINES.													
BELOW GROUND.								Total below ground.	ABOVE GROUND.				Grand total below and above ground.
<i>Miners.</i>				<i>Others.</i>					Adult males.	Adult females.	Children.	Total above ground.	
Adult males.	Adult females.	Children.	Total.	Adult males.	Adult females.	Children.	Total.						
AL.													
1,840	183	...	2,023	...	...	...	...	2,023	1,184	273	...	1,457	3,480
81	...	...	81	290	...	...	290	371	328	4	...	332	708
...
1,921	183	...	2,104	290	...	...	290	2,394	1,512	277	...	1,789	4,183
...
...
87	...	...	87	...	...	...	...	87	48	...	...	48	135
193	...	...	193	167	...	...	167	360	285	...	5	290	650
280	...	...	280	167	...	...	167	447	333	...	5	338	785
67	60	...	127	8	...	...	8	135	21	25	...	46	181
31	10	...	41	11	2	...	13	54	24	18	1	43	97
11,897	6,101	15	18,013	5,941	3,621	11	9,573	27,566	9,816	4,918	183	14,917	42,503
11,995	6,171	15	18,181	5,960	3,623	11	9,594	27,775	9,861	4,961	184	15,006	42,781
3,566	3,865	...	7,431	1,616	960	...	2,606	10,037	2,472	998	60	3,530	13,587
4,787	1,386	...	6,173	677	75	...	752	6,925	1,206	402	1	1,609	8,534
264	244	...	508	67	20	...	87	595	324	192	3	519	1,114
8,617	5,495	...	14,112	2,390	1,055	...	3,445	17,557	4,002	1,592	64	5,678	23,235

APPEN
STATISTICS OF MINES.

Table

Number of mines regulated by the Indian Mines Act, number

PROVINCE.	District and mineral field.	Number of mines under the scope of the Act.	NUMBER OF MINES.				NUMBER OF MINES INSPECTED DURING THE YEAR.		TOTAL OUTPUT.
			Worked by mechanical power.	Not worked by mechanical power.	Opened during the year.	Closed during the year.	Number of mines inspected.	Number of inspections.	
Bihar and Orissa.	Brought forward	26	15	11	5	3	25	51	COAL— Tons. 2,413,090
	Hazaribagh—Karanpura	4	2	2	...	1	...	...	13,354
	Ramgarh	3	...	3	...	2	2	5	2,548
	Manbhum—Jharia	339	197	142	21	47	323	800	10,545,401
	Raniganj	89	22	67	8	13	39	74	729,933
	Palaman, Daltonganj.	1	1	...	...	...	...	...	17,274
	Sambalpur, Hingir-Rampur.	1	1	...	...	...	2	3	45,410
	Sonthal Parganas—Jainty	7	4	3	...	...	4	7	76,680
	Raniganj	6	5	1	...	...	...	...	85,901
	Rajmahal	11	...	11	11	2	...	...	1,653
	TOTAL	487	247	240	45	68	395	940	13,931,244
Central Provinces.	Betul	4	...	4	1	1	4	5	1,119
	Chanda, Ballarpur	5	5	...	...	...	4	6	150,490
	Chhindwara, Pench Valley.	32	10	22	1	7	32	97	485,768
	Narsinghpur, Mohpani.	1	1	...	...	...	1	4	70,039
	Yeotmal	1	1	...	...	1	1	2	1,138
	Hoshangabad	1	...	1	...	1	1	1	...
	TOTAL	44	17	27	2	10	43	115	708,554

DIX I—*contd.*AND MINERALS—*contd.*No. 1—*contd.*of workers and output of minerals, during the year 1925—*contd.*

AVERAGE NUMBER OF PERSONS EMPLOYED DAILY IN AND ABOUT THE MINES.													
BELOW GROUND.								Total below ground.	ABOVE GROUND				Grand total below and above ground.
Miners.				Others.					Adult males.	Adult females.	Children.	Total above ground.	
Adult males.	Adult females.	Children.	Total.	Adult males.	Adult females.	Children.	Total.						
<i>contd.</i>													
8,617	5,495	...	14,112	2,390	1,055	...	3,445	17,557	4,002	1,592	64	5,678	23,235
206	62	...	268	180	14	...	194	462	683	207	...	690	1,352
14	2	...	16	40	...	...	40	56	7	7	...	14	70
20,512	15,408	2	35,922	9,067	4,035	...	13,102	49,024	20,642	9,679	646	31,367	60,391
2,224	1,046	...	3,270	1,014	394	..	1,408	4,678	1,929	977	5	2,911	7,569
40	41	...	81	17	...	...	17	98	87	11	...	98	196
66	...	...	66	123	103	...	226	292	92	31	...	123	415
279	107	...	386	71	57	...	128	514	140	61	...	201	715
196	69	...	265	87	32	...	119	364	124	60	2	186	570
23	2	...	25	40	...	...	40	65	10	3	...	13	78
82,177	22,232	2	54,411	13,029	5,690	...	18,719	73,130	27,716	12,828	937	41,461	114,611
16	11	...	27	10	6	...	16	43	36	46	...	82	125
573	28	...	601	604	102	...	706	1,307	461	91	30	602	1,909
1,699	338	...	2,037	748	1,015	...	1,763	3,800	1,128	549	...	1,677	5,477
206	...	...	206	371	216	...	587	793	535	121	...	656	1,449
54	...	...	54	7	3	...	10	64	124	20	6	150	214
...	...	...	...	...	...	...	...	...	8	...	...	8	8
2,548	377	...	2,925	1,740	1,342	...	3,082	6,007	2,312	827	36	3,175	9,182

APPEN
STATISTICS OF MINES

Table

Number of mines regulated by the Indian Mines Act, number

PROVINCE.	District and mineral field.	Number of mines under the scope of the Act.	NUMBER OF MINES.				NUMBER OF MINES INSPECTED DURING THE YEAR.		TOTAL OUTPUT.
			Worked by mechanical power.	Not worked by mechanical power.	Opened during the year.	Closed during the year.	Number of mines inspected.	Number of inspections.	
Burma	Southern States. Shan	1	..	1	1	1	1	1	COAL— Tons. 25
Punjab.	Jhelum	15	1	14	...	2	16	28	49,369
	Mianwali	3	...	3	...	1	1	2	18,341
	Shahpur	2	...	2	...	...	2	3	6,952
	TOTAL	20	1	19	...	3	19	33	74,662
	GRAND TOTAL (COAL) FOR 1925.	810	474	336	65	118	659	1,532	19,969,041
	GRAND TOTAL OF PRECEDING YEAR.	846	487	359	81	102	652	1,423	20,256,034
	DIFFERENCE	-36	-13	-23	-16	+16	+7	+109	-286,993
Burma	Mandalay Northern States. Shan	1	...	1	...	...	...	...	IRON Tons. 1,013
		5	...	5	...	...	3	5	50,604
	TOTAL	6	...	6	...	...	3	5	51,617
Bihar and Orissa	Singhbhum	6	3	3	1	2	3	3	477,580

DIX I—*contd.*AND MINERALS—*contd.*No. 1—*contd.*of workers and output of minerals, during the year 1925—*contd.*

AVERAGE NUMBER OF PERSONS EMPLOYED DAILY IN AND ABOUT THE MINES.													
BELOW GROUND								Total below ground.	ABOVE GROUND.				Grand total below and above ground.
Miners.				Others.					Adult males.	Adult females.	Children.	Total above ground.	
Adult males.	Adult females.	Children.	Total.	Adult males.	Adult females.	Children.	Total.						
<i>concl.</i>													
15	...	...	15	...	...	...	...	15	4	...	...	4	19
458	...	1	459	218	...	...	218	677	468	...	...	488	1,165
95	...	...	95	22	...	...	22	117	140	20	19	179	296
49	...	...	49	19	...	...	19	68	50	...	...	50	118
602	...	1	603	259	...	...	259	862	678	20	19	717	1,579
49,538	28,963	18	78,519	21,445	10,655	11	32,111	110,630	42,416	18,913	1,181	62,510	173,140
50,994	30,795	117	81,906	23,980	10,821	166	33,967	115,873	46,830	21,994	2,391	71,215	187,068
-1,456	-1,632	-99	-3,387	-1,535	-166	-155	-1,856	-5,243	-4,414	-3,081	-1,210	-8,705	-13,946
ORE.													
...	...	...	...	...	...	...	...	...	114	2	...	116	116
189	...	...	189	...	...	...	...	189	404	38	...	442	651
189	...	...	189	...	...	...	...	189	518	40	...	558	747
1,050	748	...	1,798	11	...	...	11	1,809	774	322	...	1,096	2,905

APPEN
STATISTICS OF MINES

Table
Number of mines regulated by the Indian Mines Act, number of

PROVINCE.	District and mineral field.	Number of mines under the scope of the Act.	NUMBER OF MINES.				NUMBER OF MINES INSPECTED DURING THE YEAR.		TOTAL OUTPUT.
			Worked by mechanical power.	Not worked by mechanical power.	Opened during the year.	Closed during the year.	Number of mines inspected.	Number of inspections.	
Central Provinces.	Drug	1	...	1	1	...	...	...	IRON ORE Tons. 179
	GRAND TOTAL (IRON ORE) FOR 1925.	13	3	10	2	2	6	8	529,376
	GRAND TOTAL OF PRECEDING YEAR.	12	2	10	3	2	4	4	430,805
	DIFFERENCE	+1	+1	...	-1	...	+2	+4	+98,571
Bihar and Orissa.	Singbhum	3	...	3	2	1	...	...	MANGANESE Tons. 195
Bombay	Panch Mahals	6	...	6	...	2	2	2	52,069
	Belgaum	3	...	3	3	...	...	...	3,604
	TOTAL	9	...	9	3	2	2	2	55,673
Central Provinces.	Balaghat	95	2	93	13	6	70	132	262,450
	Bhandara	21	...	21	2	2	17	33	104,398
	Chindwara	7	1	6	...	1	3	5	37,109
	Jubbulpore	4	...	4	2	2	...	...	1,901
	Nagpur	58	3	55	12	8	35	36	216,287
TOTAL	185	6	179	29	19	125	206	622,145	

DIX—*contd.*AND MINERALS—*contd.*No. 1—*contd.*workers and output of minerals, during the year 1925—*contd.*

AVERAGE NUMBER OF PERSONS EMPLOYED DAILY IN AND ABOUT THE MINES.													
BELOW GROUND.								Total below ground.	ABOVE GROUND.				Grand total below and above ground.
Miners.				Others.					Adult males.	Adult females.	Children.	Total above ground.	
Adult males.	Adult females.	Children.	Total.	Adult males.	Adult females.	Children.	Total.						
<i>contd.</i>													
...	...	...	...	...	...	...	...	...	22	22	11	55	55
1,239	748	...	1,987	11	...	...	11	1,998	1,314	384	11	1,709	3,707
1,364	560	11	1,935	...	...	...	...	1,935	1,943	802	73	2,818	4,753
-125	+168	-11	+52	+11	...	...	+11	-63	-629	-418	-62	-1,109	-1,046
ORE.													
98	71	...	169	5	...	...	5	174	3	26	...	29	203
917	653	...	1,570	211	14	...	225	1,795	338	325	...	663	2,458
126	78	24	228	3	...	...	3	231	95	52	17	164	395
1,043	731	24	1,798	214	14	...	228	2,026	433	377	17	827	2,853
3,402	3,460	...	6,862	292	280	...	572	7,434	1,245	637	...	1,882	9,316
1,160	1,496	...	2,656	16	...	...	16	2,672	328	209	...	537	3,209
354	342	...	696	...	...	...	...	696	213	94	...	307	1,003
92	87	...	179	...	...	...	...	179	41	43	...	84	263
2,857	2,936	...	5,793	151	73	...	224	6,017	1,060	626	...	1,686	7,703
7,565	8,321	...	16,186	459	353	...	812	16,998	2,887	1,609	...	4,496	21,494

APPEN
STATISTICS OF MINES

Table

Number of mines regulated by the Indian Mines Act, number of

PROVINCE.	District and mineral field*	Number of mines under the scope of the Act.	NUMBER OF MINES.				NUMBER OF MINES INSPECTED DURING THE YEAR.		TOTAL OUTPUT.
			Worked by mechanical power.	Not worked by mechanical power.	Opened during the year.	Closed during the year.	Number of mines inspected.	Number of inspections.	
Madras	Bellary	3	...	3	2	1	3	3	MANGA. Tons. 5,419
	Vizagapatam	13	1	12	8	3	...	...	25,909
	Kurnool	1	...	1	...	1	...	...	6
	TOTAL	17	1	16	10	5	3	3	32,334
	GRAND TOTAL (MANGANESE) FOR 1925.	214	7	207	44	27	130	211	710,347
GRAND TOTAL OF PRECEDING YEAR.	186	6	180	111	15	52	56	668,331	
DIFFERENCE	+28	+1	+27	-67	+12	+78	+155	+42,016	
Burma	Northern States. Shan	1	1	...	...	...	1	4	-LEAD Tons. 321,369*
	Southern States. Shan	5	2	3	3	1	2	4	445
	Yamethin	1	...	1	1	...	...	...	20
	GRAND TOTAL (LEAD ORE) FOR 1925.	7	3	4	4	1	3	8	321,854
	GRAND TOTAL OF PRECEDING YEAR.	3	3	...	...	...	...	...	310,286
DIFFERENCE	+4	...	+4	+4	+1	+3	+8	+11,568	

* Amount of refined lead

DIX I—*contd.*AND MINERALS—*contd.*No. 1—*contd.*workers and output of minerals, during the year 1925—*contd.*

AVERAGE NUMBER OF PERSONS EMPLOYED DAILY IN AND ABOUT THE MINES.													
BELOW GROUND.								Total below ground.	ABOVE GROUND.				Grand total below and above ground
<i>Miners.</i>				<i>Others.</i>					Adult males.	Adult females.	Children.	Total above ground.	
Adult males.	Adult females.	Children.	Total.	Adult males.	Adult females.	Children.	Total.						
NESE ORE—<i>contd.</i>													
77	...	...	77	8	...	...	8	85	30	61	23	114	199
645	361	26	1,032	12	94	...	106	1,138	249	30	...	279	1,417
10	...	...	10	...	...	...	...	10	10	3	...	13	23
732	361	26	1,119	20	94	...	114	1,233	289	94	23	406	1,639
9,738	9,484	50	19,272	698	461	...	1,159	20,431	3,612	2,106	40	5,758	26,189
9,191	9,667	345	19,203	745	270	1	1,016	20,219	2,908	1,723	238	4,869	25,088
+547	-183	-295	+69	-47	+191	-1	+143	+212	+704	+383	-198	+659	+1,101
ORE													
2,575	...	...	2,575	333	...	...	333	2,908	768	...	...	768	3,676
521	...	...	521	4	...	...	4	525	146	43	...	189	714
25	...	...	25	27	8	...	35	60	...	...	...	...	60
3,121	...	...	3,121	364	8	...	372	3,493	914	43	...	957	4,450
2,415	...	...	2,415	137	...	...	137	2,552	994	11	...	1,005	3,557
+706	...	...	+706	+227	+8	...	+235	+941	-80	+32	...	-48	+893

extracted 46,175 tons.

APPEN.
STATISTICS OF MINES

Table

Number of mines regulated by the Indian Mines Act, number

PROVINCE.	District and mineral field.	Number of mines under the scope of the Act.	NUMBER OF MINES.				NUMBER OF MINES INSPECTED DURING THE YEAR.		TOTAL OUTPUT.
			Worked by mechanical power.	Not worked by mechanical power.	Opened during the year.	Closed during the year.	Number of mines inspected.	Number of inspections.	
									ANTIMONIAL
									Tons.
Burma	Northern Shan States.	...	...	...	...	...	...	...	1,100
	TOTAL OF PRECEDING YEAR.	...	...	...	...	...	...	...	1,200
	DIFFERENCE	...	...	...	...	..			-100
									SILVER
									ozs.
Burma	Northern Shan States.	...	...	...	...	1	4		4,831,548
Madras	Anantapur	...	...	...	...	...	...		21
	GRAND TOTAL (SILVER) FOR 1925.	...	...	...	...	1	4		4,831,569
	GRAND TOTAL OF PRECEDING YEAR.	..	...	...	...	...	...		5,287,960
	DIFFERENCE	...	...	...	...	+1	+4		-456,391

DIX I—*contd.*

AND MINERALS—*contd.*

No. 1—*contd.*

of workers and output of minerals, during the year 1925—*contd.*

AVERAGE NUMBER OF PERSONS EMPLOYED DAILY IN AND ABOUT THE MINES.													
BELOW GROUND.									ABOVE GROUND.				Grand total below and above ground.
Miners.				Others.				Total below ground.	Adult males.	Adult females.	Children.	Total above ground.	
Adult males.	Adult females.	Children.	Total.	Adult males.	Adult females.	Children.	Total.						
LEAD.													
Labour figures	included	with	those for	lead	ore.								
...
...
Labour figures	included	with	those for	lead	ore.								
...
Labour figures	included	with	those for	gold.									
...
...
...

APPENDIX
STATISTICS OF MINES.

Table

Number of mines regulated by the Indian Mines Act, number

PROVINCE.	District and mineral field.	Number of mines under the scope of the Act.	NUMBER OF MINES.				NUMBER OF MINES INSPECTED DURING THE YEAR.		TOTAL OUTPUT.
			Worked by mechanical power.	Not worked by mechanical power.	Opened during the year.	Closed during the year.	Number of mines inspected.	Number of inspections.	
Burma	Amherst . . .	2	...	2	2	1	...	...	TIN Tons. 2
	Mergui . . .	118	...	118	104	29	3	3	621
	Tavoy . . .	83	2	81	23	12	...	...	1,680
	Thaton . . .	1	...	1	...	...	...	...	4
	TOTAL	204	2	202	129	42	3	3	2,307
	TOTAL OF PRECEDING YEAR.	87	2	85	46	4	9	9	1,627
	DIFFERENCE	+117	...	+117	+83	+38	-6	-6	+680
Burma	Mergui . . .	...	...	...	...	...	...	...	WOLFRAM Tons. ...
	Tavoy . . .	...	...	...	...	...	...	...	772½
	Thaton . . .	...	...	...	...	...	...	...	...
	TOTAL	...	...	...	...	...	...	...	772½
	GRAND TOTAL (WOLFRAM) FOR 1925.	...	...	...	...	...	...	...	772½
	GRAND TOTAL OF PRECEDING YEAR.	...	...	...	...	...	4	4	739
DIFFERENCE	...	...	...	...	...	-4	-4	+33½	

DIX I—contd.

AND MINERALS—contd.

No. 1—contd.

of workers and output of minerals, during the year 1925—contd.

AVERAGE NUMBER OF PERSONS EMPLOYED DAILY IN AND ABOUT THE MINES.													
BELOW GROUND.								ABOVE GROUND.					Grand total below and above ground.
Miners.				Others.				Total below ground.	Adult males.	Adult females.	Children.	Total above ground.	
Adult males.	Adult females.	Children.	Total.	Adult males.	Adult females.	Children.	Total.						
ORE.													
25	...	...	25	...	...	...	...	25	8	...	...	8	33
2,014	77	7	2,098	65	...	...	65	2,163	837	94	...	931	3,094
1,915	18	5	1,938	41	...	...	41	1,979	1,118	78	5	1,201	3,160
2	5	...	7	...	...	...	...	7	...	...	...	...	7
3,956	100	12	4,068	106	...	...	106	4,174	1,963	172	5	2,140	6,314
2,153	56	8	2,217	36	...	...	36	2,253	917	109	20	1,046	3,299
+1,803	+44	+4	+1,851	+70	...	...	+70	+1,921	+1,046	+63	-15	+1,094	+3,015
ORE.													
Labour	figures	included	with	those	for	tin.							
...
...
...
...
...
...

APPEN
STATISTICS OF MINES

Table

Number of mines regulated by the Indian Mines Act, number

PROVINCE.	District and mineral field.	Number of mines under the scope of the Act.	NUMBER OF MINES.				NUMBER OF MINES INSPECTED DURING THE YEAR.		TOTAL OUTPUT.
			Worked by mechanical power.	Not worked by mechanical power.	Opened during the year.	Closed during the year.	Number of mines inspected.	Number of inspections.	
									GOLD.
									Ozs.
Bihar and Orissa	Singbhum . . .	1	...	1	1	...	...	...	...
Madras . . .	Anantapur . . .	3	2	1	...	...	...	...	288
	GRAND TOTAL (GOLD) FOR 1925.	4	2	2	1	2	...	...	288
	GRAND TOTAL OF PRECEDING YEAR.	3	2	1	1	2	1	1	3,646
	DIFFERENCE . . .	+1	...	+1	...	...	-1	-1	-3,358
									CHROMITE
									Tons.
									10
Baluchistan . . .	Quetta-Pishin . . .	2	...	2	1	...	...	...	...
	Zhob . . .	32	...	32	1	...	7	7	18,168
	TOTAL . . .	34	...	34	2	...	7	7	18,198
Bihar and Orissa	Singbhum . . .	5	...	5	...	...	1	1	3,038
	GRAND TOTAL (CHROMITE ORE) FOR 1925.	39	...	59	2	...	8	8	21,236
	TOTAL OF PRECEDING YEAR.	39	...	39	3	1	9	9	27,850
	DIFFERENCE . . .	...	...	...	-1	-1	-1	-1	-6,614

DIX I—*contd.*AND MINERALS—*contd.*No. 1—*contd.*of workers and output of minerals, during the year 1925—*contd.*

AVERAGE NUMBER OF PERSONS EMPLOYED DAILY IN AND ABOUT THE MINES.													
BELOW GROUND.									ABOVE GROUND.				Grand total below and above ground.
<i>Miners.</i>				<i>Others.</i>				Total below ground.	Adult males.	Adult females.	Children.	Total above ground.	
Adult males.	Adult females.	Children.	Total.	Adult males.	Adult females.	Children.	Total.						
6	6	..	12	...	...	...	...	12	1	...	...	1	13
6	...	...	6	61	...	...	61	67	116	10	...	126	193
12	6	...	18	61	...	...	61	79	117	10	...	127	206
7	...	...	7	94	...	...	94	101	142	6	4	152	253
+5	+6	...	+11	-33	...	...	-33	-22	-25	+4	-4	-25	-47
ORE.													
...	...	...	...	...	...	...	...	...	2	...	...	2	2
182	...	...	182	...	...	...	...	182	156	...	...	156	332
182	...	...	182	...	...	...	...	182	158	...	...	158	340
194	188	40	422	...	...	...	...	422	46	45	...	91	513
376	188	40	604	...	...	...	...	604	204	45	...	249	653
335	69	27	431	...	...	...	...	431	266	19	1	286	717
+41	+119	+13	+173	...	...	...	...	+173	-62	+26	-1	-37	+136

APPEN
STATISTICS OF MINES

Table

Number of mines regulated by the Indian Mines Act, number of

PROVINCE.	District and mineral field.	Number of mines under the scope of the Act.	NUMBER OF MINES.				NUMBER OF MINES INSPECTED DURING THE YEAR.		TOTAL OUTPUT.
			Worked by mechanical power.	Not worked by mechanical power.	Opened during the year.	Closed during the year.	Number of mines inspected.	Number of inspections.	
Burma	Northern Shan States.	...	...	...	...	...	...	...	ZINC CON Tons. 16,810
	TOTAL OF PRECEDING YEAR.	...	...	...	...	...	...	...	18,650
	DIFFERENCE	...	...	...	...	...	...	...	-1,840
Burma	Katha	3	3	...	...	1	1	...	GEMS. (a) Rubies. Carats. 109,998 (b) Sapphire. 2 | 31,508 (c) Spinel. 7,531
	GRAND TOTAL (GEMS) FOR 1925.	3	3	...	...	1	1	2	149,037
	GRAND TOTAL OF PRECEDING YEAR.	3	3	...	...	1	...	...	101,097
	DIFFERENCE	...	...	...	-1	+1	+1	+2	+47,940

DIX I—contd.

AND MINERALS—contd.

No. 1—contd.

workers and output of minerals, during the year 1925—contd.

AVERAGE NUMBER OF PERSONS EMPLOYED DAILY IN AND ABOUT THE MINES.													
BELOW GROUND.								ABOVE GROUND.				Grand total below and above ground.	
Miners.				Others.				Total below ground.	Adult males.	Adult females.	Children.		Total above ground.
Adult males.	Adult females.	Children.	Total.	Adult males.	Adult females.	Children.	Total.						
CENTRATES.													
Labour figures included with those for Lead Ore.													
...	
...	
533	533	106	106	639	260	260	899
533	533	106	106	639	260	260	899
779	779	174	174	953	464	464	1,417
-246	-246	-68	-68	-314	-204	-204	-518

APPEN
STATISTICS OF MINES

Table

Number of mines regulated by the Indian Mines Act, number of

PROVINCE.	District and mineral field.	Number of mines under the scope of the Act.	NUMBER OF MINES.				NUMBER OF MINES INSPECTED DURING THE YEAR.		TOTAL OUTPUT.
			Worked by mechanical power.	Not worked by mechanical power.	Opened during the year.	Closed during the year.	Number of mines inspected.	Number of inspections.	
Bengal . . .	Bankura . . .	1	...	1	1	...	...	...	MI Cwts.
Bihar and Orissa.	Gaya . . .	24	4	20	7	11	2	2	3,631
	Hazaribagh . . .	407	47	360	137	114	67	70	25,606
	Monghyr . . .	14	...	14	11	11	3	3	973
	Sambalpur . . .	4	...	4	2	4	...	...	...
	Manbhum . . .	1	...	1	...	1	...	...	...
	TOTAL . . .	450	51	399	157	141	72	75	30,210
Madras . . .	Nellore . . .	91	16	75	29	7	16	16	14,378
	Nilgiris . . .	9	...	9	3	3	...	...	401
	TOTAL . . .	100	16	84	32	10	16	16	14,779
Rajputana . . .	Ajmer-Merwara . . .	20	...	20	9	12	10	11	394
	GRAND TOTAL (Mica) FOR 1935.	571	67	504	199	163	98	102	45,383
	GRAND TOTAL OF PRECEDING YEAR.	513	64	449	208	128	24	24	40,529
	DIFFERENCE . . .	+58	+3	+55	-9	+35	+74	+78	+4,854

DIX I—contd.

AND MINERALS—contd.

No. 1—contd.

workers and output of minerals, during the year 1925—contd.

AVERAGE NUMBER OF PERSONS EMPLOYED DAILY IN AND ABOUT THE MINES.													
BELOW GROUND.								ABOVE GROUND.				Grand total below and above ground.	
Miners.				Others.				Total below ground.	Adult males.	Adult females.	Children.		Total above ground.
Adult males.	Adult females.	Children.	Total.	Adult males.	Adult females.	Children.	Total.						
CA.													
...	...	...	...	...	...	...	...	...	42	15	...	57	57
645	411	33	1,089	26	...	...	26	1,115	140	73	50	263	1,378
4,284	1,364	311	5,959	618	547	82	1,247	7,206	2,073	760	987	3,820	11,026
239	106	37	382	29	4	...	33	415	113	46	56	215	630
38	...	...	38	30	95	17	142	180	...	...	...	...	180
4	2	...	6	...	...	...	...	6	...	...	...	...	6
5,210	1,883	381	7,474	703	646	99	1,448	8,922	2,326	879	1,053	4,298	13,220
1,270	654	93	2,017	327	909	52	1,288	3,305	455	717	290	1,462	4,767
76	18	...	94	9	13	...	22	116	48	33	11	92	208
1,346	672	93	2,111	336	922	52	1,310	3,421	503	750	301	1,554	4,975
149	52	12	213	26	13	...	39	252	48	3	...	51	303
6,705	2,607	486	9,798	1,065	1,581	151	2,797	12,595	2,919	1,647	1,394	5,960	18,555
5,620	1,940	604	8,164	1,013	980	220	2,213	10,377	2,529	1,396	1,011	4,936	15,313
+1,085	+667	-118	1,634	+52	+601	-69	+584	+2,218	+390	+251	+383	+1,024	+3,242

APPEN
STATISTICS OF MINES

Table
Number of mines regulated by the Indian Mines Act, number of

PROVINCE.	District and mineral field.	Number of mines under the scope of the Act.	NUMBER OF MINES.				NUMBER OF MINES INSPECTED DURING THE YEAR.		TOTAL OUTPUT.
			Worked by mechanical power.	Not worked by mechanical power.	Opened during the year.	Closed during the year.	Number of mines inspected.	Number of inspections.	
Bihar and Orissa.	Hazaribagh . . .	5	...	5	...	3	...	...	LIME Tons. 559
	Shahabad . . .	11	...	11	2	2	...	...	248,445
	Singbhum . . .	3	...	3	1	...	1	1	4,223
	TOTAL . . .	19	...	19	3	5	1	1	253,227
Central Provinces	Bilaspur . . .	1	...	1	...	...	...	...	336
	Jubbulpore, Katni . . .	16	2	14	1	4	19	21	329,167
	TOTAL . . .	17	2	15	1	4	19	21	329,503
Burma . . .	Northern Shan States.	2	...	2	...	...	2	2	31,502
	GRAND TOTAL (LIMESTONE) FOR 1925.	38	2	36	4	9	22	24	614,232
	GRAND TOTAL OF PRECEDING YEAR.	41	1	40	7	13	513,333
	DIFFERENCE . . .	-3	+1	-4	-3	-4	+22	+24	+100,899

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DIX I—*contd.*AND MINERALS—*contd.*No. 1—*contd.*workers and output of minerals, during the year 1925—*contd.*

AVERAGE NUMBER OF PERSONS EMPLOYED DAILY IN AND ABOUT THE MINES.													
BELOW GROUND.								ABOVE GROUND.				Grand total below and above ground.	
Miners.				Others.				Total below ground.	Adult males.	Adult females.	Children.		Total above ground.
Adult males.	Adult females.	Children.	Total.	Adult males.	Adult females.	Children.	Total.						
STONE.													
67	24	10	101	...	...	...	...	101	...	...	...	...	101
690	181	37	908	333	252	264	849	1,757	522	152	135	839	2,596
37	16	...	53	...	...	...	...	53	16	22	...	38	91
794	221	47	1,062	333	252	264	849	1,911	538	204	135	877	2,788
25	...	...	25	4	30	5	39	64	54	50	5	109	173
908	746	...	1,654	289	797	...	1,086	2,740	266	768	7	1,041	3,781
933	746	...	1,679	293	827	5	1,125	2,804	320	818	12	1,150	3,954
151	...	...	151	...	...	...	...	151	30	...	...	30	181
1,878	967	47	2,892	626	1,079	269	1,974	4,866	888	1,022	147	2,057	6,923
2,412	2,288	201	4,901	858	1,032	23	1,913	6,814	759	551	137	1,447	8,261
-534	-1,321	-154	-2,009	-232	+47	+246	+61	-2,948	+129	+471	+10	+610	-1,335

APPEN
STATISTICS OF MINES

Table

Number of mines regulated by the Indian Mines Act, number

PROVINCE.	District and mineral field.	Number of mines under the scope of the Act.	NUMBER OF MINES.				NUMBER OF MINES INSPECTED DURING THE YEAR.		TOTAL OUTPUT.
			Worked by mechanical power.	Not worked by mechanical power.	Opened during the year.	Closed during the year.	Number of mines inspected.	Number of inspections.	
Bengal	Birbhum	1	1	...	1	...	...	..	STONE Tons. 95,537
Bihar and Orissa	Singbhum	7	...	7	7	...	...	...	59,435
	Shahabad	...	...	...	...	...	1	1	...
	TOTAL	7	...	7	7	...	1	1	59,435
Bombay	Thana	1	...	1	1	...	...	...	124,334
Burma	Thaton	5	2	3	4	...	6	7	7,962
United Provinces.	Agra	1	...	1	1	...	...	...	380
	Allahabad	3	...	3	3	...	...	...	120,500
	TOTAL	4	...	4	4	...	...	...	120,880
GRAND TOTAL (STONE) FOR 1925.		18	3	15	17	...	7	8	408,148
GRAND TOTAL OF PRECEDING YEAR.		5	...	5	4	1	...	...	366,677
DIFFERENCE		+13	+3	+10	+13	-1	+7	+8	+41,471

DIX I—*contd.*AND MINERALS—*contd.*No. 1—*contd.*of workers and output of minerals, during the year 1925—*contd.*

AVERAGE NUMBER OF PERSONS EMPLOYED DAILY IN AND ABOUT THE MINES.													
BELOW GROUND.								ABOVE GROUND.				Grand total below and above ground.	
<i>Miners.</i>				<i>Others.</i>				Total below ground.	Adult males.	Adult females.	Children.		Total above ground.
Adult males.	Adult females.	Children.	Total.	Adult males.	Adult females.	Children.	Total.						
100	...	...	100	...	...	...	...	100	50	40	10	100	200
158	60	8	226	...	...	...	...	226	23	...	...	23	249
...
158	60	8	226	...	...	...	...	226	23	...	...	23	249
258	...	...	258	...	...	...	...	258	258	96	...	354	612
1,656	135	...	1,791	...	...	...	...	1,791	302	...	...	302	2,093
65	...	...	65	13	2	...	15	80	...	...	...	...	80
701	629	89	1,419	...	...	...	...	1,419	10	...	...	10	1,429
766	629	89	1,484	13	2	...	15	1,499	10	...	...	10	1,509
2,938	824	97	3,859	13	2	...	15	3,874	643	136	10	789	4,663
716	12	9	737	...	...	...	...	737	585	10	20	615	1,352
+2,222	+812	+88	+3,122	+13	+2	...	+15	+3,137	+58	+126	-10	+174	+3,311

APPEN
STATISTICS OF MINES

Table

Number of mines regulated by the Indian Mines Act, number

PROVINCE.	District and mineral field.	Number of mines under the scope of the Act.	NUMBER OF MINES.				NUMBER OF MINES INSPECTED DURING THE YEAR.		TOTAL OUTPUT.
			Worked by mechanical power.	Not worked by mechanical power.	Opened during the year.	Closed during the year.	Number of mines inspected.	Number of inspections.	
									TRAP
Bihar and Orissa.	Sonthal Parganas .	3	...	3	3	...	...	...	Tons. 17,908
Bombay .	Colaba	1	...	1	1	...	...	...	650
	GRAND TOTAL (TRAPSTONE) FOR 1925.	4	...	4	4	...	...	...	18,558
	GRAND TOTAL OF PRECEDING YEAR.	...	...	...	...	...	...	...	...
	DIFFERENCE .	+4	...	+4	+4	...	...	...	+18,558
									SAND
United Provinces.	Agra	6	...	6	6	...	...	...	Tons. 10,700
	Allahabad	1	...	1	1	1	...	...	...
	TOTAL .	7	...	7	7	1	...	...	10,700
Central Provinces.	Raipur	2	...	2	...	...	...	...	4,668
	GRAND TOTAL (SANDSTONE) FOR 1925.	9	...	9	7	1	...	...	15,368
	GRAND TOTAL OF PRECEDING YEAR.	...	...	...	...	...	...	...	...
	DIFFERENCE .	+9	...	+9	+7	+1	...	...	+15,368

DIX I—*contd.*AND MINERALS—*contd.*No 1 - *contd.*of workers and output of minerals, during the year 1925—*contd.*

AVERAGE NUMBER OF PERSONS EMPLOYED DAILY IN AND ABOUT THE MINES.													
BELOW GROUND.								ABOVE GROUND.				Grand total below and above ground.	
<i>Miners.</i>				<i>Others.</i>				Total below ground.	Adult males.	Adult females.	Children.		Total above ground.
Adult males.	Adult females.	Children.	Total.	Adult males.	Adult females.	Children.	Total.						
STONE.													
64	...	...	64	...	...	...	...	64	37	16	...	53	117
6	...	...	6	20	10	...	30	36	6	...	...	6	42
70	...	...	70	20	10	...	30	100	43	16	...	59	159
...
+70	...	...	+70	+20	+10	...	+30	+100	+43	+16	...	+59	+159
STONE.													
205	21	9	235	...	...	...	...	235	...	...	...	...	235
...	...	...	...	...	...	...	...	...	40	...	...	40	40
205	21	9	235	...	...	...	...	235	40	...	...	40	275
110	70	35	215	...	...	...	...	215	40	20	...	60	275
315	91	44	450	...	...	...	...	450	80	20	...	100	550
...
+315	+91	+44	+450	...	...	...	...	+450	+80	+20	...	+100	+550

APPEN
STATISTICS OF MINES

Table

Number of mines regulated by the Indian Mines Act, number

PROVINCE.	District and mineral field.	Number of mines under the scope of the Act.	NUMBER OF MINES.				NUMBER OF MINES INSPECTED DURING THE YEAR.		TOTAL OUTPUT.
			Worked by mechanical power.	Not worked by mechanical power.	Opened during the year.	Closed during the year.	Number of mines inspected.	Number of inspections.	
Punjab	Jhelum . . .	1	1	...	...	...	1	5	SALT. Tons. 83,218
	Mianwali . . .	1	...	1	...	...	1	2	4,062
	Shahpur . . .	1	...	1	...	...	1	1	38,086
	GRAND TOTAL (SALT) FOR 1925.	3	1	2	...	...	3	8	125,366
	GRAND TOTAL OF PRECEDING YEAR.	3	1	2	...	...	2	2	159,918
	DIFFERENCE . . .	...	...	...	...	...	+1	+6	-34,552
Bihar and Orissa.	Singbhum . . .	2	...	2	...	...	...	...	SLATE. Tons. 164
	Monghyr . . .	6	...	6	1	...	...	...	1,944
	TOTAL . . .	8	...	8	1	...	...	...	2,108
Punjab . . .	Gurdaspur . . .	...	...	...	...	...	...	...	...
	Gurgaon . . .	5	...	5	1	1	7	10	2,019
	Kangra . . .	5	...	5	...	...	...	...	4,745
	TOTAL . . .	10	...	10	1	1	7	10	6,764
	GRAND TOTAL (SLATE) FOR 1925.	18	...	18	2	1	7	10	8,872
	GRAND TOTAL OF PRECEDING YEAR.	17	...	17	3	4	...	...	8,877
DIFFERENCE . . .	+1	...	+1	-1	-3	+7	+10	-5	

DIX I—contd.

AND MINERALS—contd.

No. 1—contd.

of workers and output of minerals, during the year 1925—contd.

AVERAGE NUMBER OF PERSONS EMPLOYED DAILY IN AND ABOUT THE MINES.													
BELOW GROUND.								ABOVE GROUND.				Grand total below and above ground.	
Miners.				Others.				Total below ground.	Adult males.	Adult females.	Children.		Total above ground.
Adult males.	Adult females.	Children.	Total.	Adult males.	Adult females.	Children.	Total.						
376	249	...	625	116	...	...	116	741	...	...	...	...	741
32	...	...	32	...	...	...	...	32	...	...	...	...	32
62	46	...	108	...	...	...	...	108	27	...	...	27	135
470	295	...	765	116	...	...	116	881	27	...	...	27	908
413	242	55	710	126	...	...	126	836	24	...	...	24	860
+57	+53	-55	+55	-10	...	...	-10	+45	+3	...	...	+3	+48
28	19	...	47	...	...	...	...	47	1	...	...	1	48
157	109	...	266	...	...	...	...	266	102	20	...	122	368
185	128	...	313	...	...	...	...	313	103	20	...	123	436
...
123	...	7	130	29	...	11	40	170	40	...	...	40	210
232	...	...	232	...	...	...	...	232	106	...	10	116	348
355	...	...	362	29	...	11	40	402	146	...	10	156	558
540	128	7	675	29	...	11	40	715	249	20	10	279	994
551	80	129	760	6	...	11	17	777	170	19	33	222	999
-11	+48	-122	-85	+23	...	...	+23	-62	+79	+1	-23	+57	-5

APPEN
STATISTICS OF MINES

Table
Number of mines regulated by the Indian Mines Act, number

PROVINCE.	District and mineral field.	Number of mines under the scope of the Act.	NUMBER OF MINES.				NUMBER OF MINES INSPECTED DURING THE YEAR.		TOTAL OUTPUT.
			Worked by mechanical power.	Not worked by mechanical power.	Opened during the year.	Closed during the year.	Number of mines inspected.	Number of inspections.	
Madras	Salem	2	...	2	...	...	1	1	MAG Tons. 29,620
	TOTAL OF PRECEDING YEAR.	2	...	2	...	...	1	1	24,427
	DIFFERENCE	...	...	...	...	...	...	...	+5,193
Central Provinces.	Jubbulpore	1	...	1	1	...	...	...	BAU Cwts. 32,065
Bombay	Belgaum	1	...	1	1	1	...	...	30,000
	Kaira	1	...	1	...	...	...	...	139,340
	TOTAL	2	...	2	1	1	...	...	169,340
	GRAND TOTAL (BAUKITE) FOR 1925.	3	...	3	2	1	...	...	201,405
	TOTAL OF PRECEDING YEAR.	2	...	2	...	...	...	...	443,760
	DIFFERENCE	+1	...	+1	+2	+1	...	...	-242,355

DIX I—contd.

AND MINERALS—contd.

No. 1—contd.

of workers and output of minerals, during the year 1925—contd.

AVERAGE NUMBER OF PERSONS EMPLOYED DAILY IN AND ABOUT THE MINES.													
BELOW GROUND.								ABOVE GROUND.				Grand total below and above ground.	
Miners.				Others.				Total below ground.	Adult males.	Adult females.	Children.		Total above ground.
Adult males.	Adult females.	Children.	Total.	Adult males.	Adult females.	Children.	Total.						
NESITE.													
1,706	495	...	2,201	..	...	...	...	2,201	231	28	...	259	2,460
570	800	385	1,755	...	...	...	...	1,755	156	54	30	240	1,995
+36	-305	-385	+446	...	...	...	...	+446	+75	-26	-30	+19	+465
XITE.													
Labour figures included with those for Marwara Limestone.													
43	...	...	43	...	...	...	...	43	50	...	...	50	93
56	50	...	106	9	...	...	9	115	13	4	...	17	132
99	50	...	149	9	...	...	9	158	63	4	...	67	225
99	50	...	149	9	...	...	9	158	63	4	...	67	225
151	119	...	270	30	30	...	60	330	28	9	27	64	394
-52	-69	...	-121	-21	-30	...	-51	-172	+35	-5	-27	+3	-169

APPEN
STATISTICS OF MINES

Table

Number of mines regulated by the Indian Mines Act, number

PROVINCE.	District and mineral field.	Number of mines under the scope of the Act.	NUMBER OF MINES.				NUMBER OF MINES INSPECTED DURING THE YEAR.		TOTAL OUTPUT.
			Worked by mechanical power.	Not worked by mechanical power.	Opened during the year.	Closed during the year.	Number of mines inspected.	Number of inspections.	
CLAY.									
Tons.									
Bengal . . .	Burdwan . . .	1	1	...	1	...	...	...	19,621
Bihar and Orissa. . .	Singbhum . . .	5	...	5	1	...	...	...	1,735
	Bhagalpur . . .	1	...	1	...	...	...	...	2,625
	Manbhum . . .	5	...	5	...	...	...	...	14,728
	Palamau . . .	1	...	1	...	...	...	...	5,120
	TOTAL . . .	12	...	12	1	...	...	...	24,208
Central Provinces.	Jubbulpore . . .	5	2	3	2	1	2	2	17,059
Delhi . . .	Delhi	3	...	3	2	1	...	..	2,133
	GRAND TOTAL (CLAY) FOR 1925.	21	3	18	6	2	2	2	63,021
	TOTAL OF PRECEDING YEAR.	20	2	18	9	6	1	1	57,402
	DIFFERENCE . . .	+1	+1	...	-3	-4	+1	+1	+5,619

DIX I—*contd.*AND MINERALS—*contd.*No. 1—*contd.*of workers and output of minerals, during the year 1925—*contd.*

AVERAGE NUMBER OF PERSONS EMPLOYED DAILY IN AND ABOUT THE MINES.

BELOW GROUND.								ABOVE GROUND.				Grand total below and above ground.	
<i>Miners.</i>				<i>Others.</i>				Total below ground.	Adult males.	Adult females.	Children.		Total above ground.
Adult males.	Adult females.	Children.	Total.	Adult males.	Adult females.	Children.	Total.						
11	13	...	24	..	...	...	...	24	8	...	...	8	32
85	170	35	290	...	...	...	...	290	13	23	...	36	326
12	22	...	34	...	...	...	...	34	20	9	3	32	66
142	1	...	143	58	...	...	58	201	58	39	...	97	298
19	7	...	26	2	...	...	2	28	26	9	...	35	63
258	200	35	493	60	...	...	60	553	117	80	3	200	753
118	261	8	387	...	...	...	...	387	56	...	5	61	448
15	...	...	15	...	...	...	...	15	17	...	...	17	92
402	474	43	919	60	...	...	60	979	198	80	8	286	1,275
506	450	28	984	14	...	...	14	998	177	30	13	220	1,218
-104	+24	+15	-65	+46	...	...	+46	-19	+21	+50	-5	+66	+47

APPENDIX
STATISTICS OF MINES

Table

Number of mines regulated by the Indian Mines Act, number of

PROVINCE.	District and mineral field.	Number of mines under the scope of the Act.	NUMBER OF MINES.				NUMBER OF MINES INSPECTED DURING THE YEAR.		TOTAL OUTPUT.
			Worked by mechanical power.	Not worked by mechanical power.	Opened during the year.	Closed during the year.	Number of mines inspected.	Number of inspections.	
Bihar and Orissa.	Singbhum . . .	5	...	5	5	1	...	...	STEATITE Cwts. 1,178
Central Provinces.	Bhandara . . .	1	...	1	1	1	...	...	6,750
	Jubbulpore . . .	2	...	2	...	...	2	2	25,736
	TOTAL . . .	3	...	3	1	1	2	2	32,486
Madras	Kurnool . . .	1	...	1	...	...	...	...	80
	Nellore . . .	2	...	2	...	...	...	...	1,645
	TOTAL . . .	3	...	3	...	...	...	...	1,725
Burma . . .	Pakokku Hill Tracts	2	...	2	2	...	...	...	62
	GRAND TOTAL (STEATITE) FOR 1925.	13	...	13	8	2	2	2	35,451
	GRAND TOTAL OF PRECEDING YEAR.	5	...	5	...	...	2	2	35,736
	DIFFERENCE . . .	+8	...	+8	+8	+2	...	...	-285

DIX I—contd.

AND MINERALS—contd.

No. 1—contd.

workers and output of minerals, during the year 1925—contd.

AVERAGE NUMBER OF PERSONS EMPLOYED DAILY IN AND ABOUT THE MINES.

TITE.	BELOW GROUND.								ABOVE GROUND.				Grand total below and above ground.	
	Miners.				Others.				Total below ground.	Adult males.	Adult females.	Children.		Total above ground.
	Adult males.	Adult females.	Children.	Total.	Adult males.	Adult females.	Children.	Total.						
56	...	...	56	26	17	10	53	109	18	11	2	31	140
30	30	...	60	...	...	...	...	60	80	30	...	110	170
65	20	...	85	30	60	...	90	175	25	35	5	65	240	
95	50	...	145	80	60	...	90	235	105	65	5	175	410	
1	3	...	4	...	...	...	...	4	5	3	...	8	12
22	1	1	24	...	...	...	...	24	13	9	...	22	46
23	4	1	28	...	...	...	...	28	18	12	...	30	58
...	...	...	...	15	...	...	15	15	...	...	...	...	15
174	54	1	229	71	77	10	158	387	141	88	7	236	623	
88	21	...	109	30	60	...	90	199	43	47	19	109	308	
+86	+33	+1	+120	+41	+17	+10	+68	+188	+98	+41	-12	+127	+315	

STATISTICS OF MINES

Table

Number of mines regulated by the Indian Mines Act, number

PROVINCE.	District and mineral field.	Number of mines under the scope of the Act.	NUMBER OF MINES.				NUMBER OF MINES INSPECTED DURING THE YEAR.		TOTAL OUTPUT.
			Worked by mechanical power.	Not worked by mechanical power.	Opened during the year.	Closed during the year.	Number of mines inspected.	Number of inspections.	
									BARY
									Tons.
Madras . . .	Kurnool . . .	5	...	5	4	2	1	1	11,600
	TOTAL OF PRECEDING YEAR.	6	...	6	5	5	...	...	15,660
	DIFFERENCE .	-1	...	-1	-1	-3	+1	+1	-4,060
									APA
									Tons.
Bihar and Orissa.	Singbhum . . .	2	...	2	...	...	...	...	1,480
	TOTAL OF PRECEDING YEAR.	2	...	2	1	...	...	...	6,428
	DIFFERENCE .	...	...	...	1	...	...	...	-4,946
									ASBES
									Cwts.
Central Provinces.	Bhandara . . .	1	...	1	...	1	...	...	...

DIX I—*contd.*AND MINERALS—*contd.*No. 1—*contd.*of workers and output of minerals, during the year 1925—*contd.*

AVERAGE NUMBER OF PERSONS EMPLOYED DAILY IN AND ABOUT THE MINES.

BELOW GROUND.								ABOVE GROUND.				Grand total below and above ground.	
Miners.				Others.				Total below ground.	Adult males.	Adult females.	Children.		Total above ground.
Adult males.	Adult females.	Children.	Total.	Adult males.	Adult females.	Children.	Total.					Adult males.		Adult females.	Children.	Total above ground.
TES.													
32	...	...	32	...	...	...	...	32	13	11	5	29	61
81	...	...	81	..	...	...	...	81	14	40	3	57	138
-49	...	...	-49	...	...	...	...	-49	-1	-29	+2	-28	-77
TITE.													
14	2	...	16	15	...	...	15	31	50	9	...	59	90
63	37	...	100	...	...	...	...	100	122	85	...	207	307
-49	-35	...	-84	+15	...	...	+15	-69	-70	-76	...	-148	-217
TOS.													
...	...	...	...	5	7	...	12	12	..	..	...	...	12

APPEN
STATISTICS OF MINES

Table

Number of mines regulated by the Indian Mines Act, number

PROVINCE.	District and mineral field.	Number of mines under the scope of the Act.	NUMBER OF MINES.				NUMBER OF MINES INSPECTED DURING THE YEAR.		TOTAL OUTPUT.
			Worked by mechanical power.	Not worked by mechanical power.	Opened during the year.	Closed during the year.	Number of mines inspected.	Number of inspections.	
Madras	Cuddapah	1	...	1	...	...	...	...	ASBES Cwts. 320
	GRAND TOTAL (ASBESTOS) FOR 1925.	2	...	2	...	1	...	...	320
	GRAND TOTAL OF PRECEDING YEAR.	2	...	2	1	1	...	...	665
	DIFFERENCE	...	...	...	-1	...	...	...	-345
Bihar and Orissa.	Puri	1	1	...	...	1	...	...	OCHRE. Tons. ...
	GRAND TOTAL (OCHRE) FOR 1925.	2	1	1	1	1	...	...	32
Central Provinces.	Chanda	1	...	1	1	...	...	...	32
	GRAND TOTAL (OCHRE) FOR 1925.	2	1	1	1	1	...	...	32
	GRAND TOTAL OF PRECEDING YEAR.	2	1	1	..	1	...	...	300
	DIFFERENCE	...	...	...	+1	...	...	...	-268

DIX I—*contd.*AND MINERALS—*contd.*No. 1—*contd.*of workers and output of minerals, during the year 1926—*contd.*

AVERAGE NUMBER OF PERSONS EMPLOYED DAILY IN AND ABOUT THE MINES.

BELOW GROUND.								Total below ground.	ABOVE GROUND.				Grand total below and above ground.
<i>Miners.</i>				<i>Others.</i>					Adult males.	Adult females.	Children.	Total below ground.	
Adult males.	Adult females.	Children.	Total.	Adult males.	Adult females.	Children.	Total.						
<i>TOS—contd.</i>													
50	40	...	90	...	...	...	...	90	45	34	20	99	189
50	40	...	90	5	7	...	12	102	45	34	20	99	201
44	32	9	85	...	...	...	...	85	1	...	...	1	86
+6	+8	-9	+5	+5	+7	...	+12	+17	+44	+34	+20	+98	+115
...	...	...	...	...	...	...	...	...	18	...	...	18	18
...	...	...	...	...	...	...	...	...	1	1	...	2	2
...	...	...	...	...	...	...	...	...	19	1	...	20	20
6	...	...	6	12	...	...	12	18	24	...	...	24	42
-6	...	...	-6	-12	...	...	-12	-18	-5	+1	...	-4	-22

APPEN
STATISTICS OF MINES

Table

Number of Mines regulated by the Indian Mines Act, number

PROVINCE.	District and mineral field.	Number of mines under the scope of the Act.	NUMBER OF MINES.				NUMBER OF MINES INSPECTED DURING THE YEAR.		TOTAL OUTPUT.
			Worked by mechanical power.	Not worked by mechanical power.	Opened during the year.	Closed during the year.	Number of mines inspected.	Number of inspections.	
Central Provinces.	Jubbulpore	...	..	..	..	..	1	1	FULLER'S Tons. 59
	TOTAL OF PRECEDING YEAR.	...	...	..	..	..	..	..	19
	DIFFERENCE	...	...	..	..	..	+1	+1	+40
Central Provinces.	Bhandara	1	..	1	..	1	..	..	CORUN Tons. 10
	TOTAL OF PRECEDING YEAR.	1	..	1	1	..	..	..	..
	DIFFERENCE	...	...	..	-1	+1	..	..	+10
Bihar and Orissa.	Manbhurn	1	..	1	1	1	..	..	KYAN Tons. 2
	TOTAL OF PRECEDING YEAR.	...	...	..	..	..	..	..	..
	DIFFERENCE	+1	..	+1	+1	+1	..	..	+2

DIX I—*contd.*AND MINERALS—*contd.*No. 1—*contd.*of workers and output of minerals, during the year 1925.—*contd.*

AVERAGE NUMBER OF PERSONS EMPLOYED DAILY IN AND ABOUT THE MINES.													
BELOW GROUND.								ABOVE GROUND.					Grand total below and above ground.
Miners.				Others.				Total below ground.	Adult males.	Adult females.	Children.	Total above ground.	
Adult males.	Adult females.	Children.	Total.	Adult males.	Adult females.	Children.	Total.						
EARTH.													
Figures included with those for limestone.													
...
...
DUM.													
2	2	...	4	...	...	...	...	4	...	...	...	...	4
...	...	...	...	...	...	...	...	...	12	3	...	15	15
+2	+2	...	+4	...	...	...	...	+4	-12	-3	...	-15	-11
ITE.													
3	3	...	6	...	...	...	...	6	...	...	...	...	6
...
+3	+3	...	+6	...	...	...	...	+6	...	...	...	...	+6

APPEN
STATISTICS OF MINES

Table

Number of mines regulated by the Indian Mines Act, number

PROVINCE.	District and mineral field.	Number of mines under the scope of the Act.	NUMBER OF MINES.				NUMBER OF MINES INSPECTED DURING THE YEAR.		TOTAL OUTPUT.
			Worked by mechanical power	Not worked by mechanical power.	Opened during the year.	Closed during the year.	Number of mines inspected.	Number of inspections.	
Bihar and Orissa	Singbhum	2	1	1	1	...	2	2	5,837
	TOTAL OF PRECEDING YEAR.	...	...	...	...	...	...	...	...
	DIFFERENCE	+2	+1	+1	+1	...	+2	+2	+5,837
	REFRACTORY Tons. 5,837								
	GRAND TOTAL (ALL MINERALS), 1925.	2,011	572	1,439	504	379	958	1,998	...
	TOTAL OF PRECEDING YEAR.	1,804	576	1,228	486	287	763	1,539	...
	DIFFERENCE	+207	-4	+211	+18	+92	+195	+399	...

DIX I—concl'd.

AND MINERALS—concl'd.

No. 1—concl'd.

of workers and output of minerals, during the year 1925—concl'd.

AVERAGE NUMBER OF PERSONS EMPLOYED DAILY IN AND ABOUT THE MINES.													
BELOW GROUND.								ABOVE GROUND.				Grand total below and above ground.	
Miners.				Others.				Total below ground.	Adult males.	Adult females.	Children.		Total above ground.
Adult males.	Adult females.	Children.	Total.	Adult males.	Adult females.	Children.	Total.						
MINERALS.													
88	...	...	88	...	...	...	...	88	161	53	...	234	322
...
+88	...	...	+88	...	...	...	...	+88	+161	+53	...	+234	+322
84,036	45,521	845	130,402	24,620	13,880	452	39,152	169,554	56,623	24,842	2,836	84,303	253,657
78,738	47,182	1,928	127,848	26,257	13,193	421	39,871	167,719	59,407	27,059	4,032	90,498	258,217
+5,298	-1,661	-1,083	+2,554	-1,437	+687	+31	-719	+1,835	-2,784	-2,217	-1,194	-6,195	-4,360

Table

Analysis of figures relating to

PROVINCE.	District and mineral field.	COAL.					
		Opening stock.	Raisings.	TOTAL.	Despatches.	Colliery consumption.	Coal delivered to coking.
		Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Assam .	Lachimpur . . .	...	262,959	262,959	245,960	14,594	2,405
	Naga Hills . . .	...	55,038	55,038	54,583	455	...
	Sibeagar . . .	...	...	...	...	...	...
	TOTAL . . .	...	317,997	317,997	300,543	15,049	2,405
Baluchistan .	Kalat . . .	...	...	...	...	...	...
	Loralai . . .	...	...	...	...	...	...
	Quetta-Pishin . .	1,073	5,622	6,695	5,477	...	...
	Sibi-Khost . . .	1,074	17,085	18,159	15,211	1,855	...
	TOTAL . . .	2,147	22,707	24,854	20,688	1,855	...
Bengal .	Bankura-Baniganj	415	10,602	11,017	8,480	2,005	...
	Birbhum ,, . . .	1,016	17,696	18,712	9,373	2,580	76
	Burdwan ,, . . .	562,844	4,885,554	5,448,398	4,379,086	593,437	11,968
	TOTAL . . .	564,275	4,913,852	5,478,127	4,396,939	598,022	12,044

DIX I—contd.

No. 2.

output of Coal and Coke.

		COKE.							
Coal despatched to coke factories.	Closing stock.	OPENING STOCK.		COKE MADE.		DESPATCHES.		CLOSING STOCK.	
		Hard.	Soft.	Hard.	Soft.	Hard.	Soft.	Hard.	Soft.
Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
...	...	...	...	802	...	802	...	...	...
...
...
...	...	...	...	802	...	802	...	...	...
...
...
...	1,218	...	...	...	...	...	...	...	...
...	1,093	...	...	...	...	...	...	...	...
...	2,311	...	...	...	...	...	...	...	...
...	532	...	...	...	...	...	...	...	...
...	6,683	...	...	...	50	...	50	...	...
...	463,907	292	1,503	350	7,421	553	7,449	89	1,475
...	471,122	292	1,503	350	7,471	553	7,499	89	1,475

Table

Analysis of figures relating to

PROVINCE.	District and mineral field.	COAL						
		Opening stock.	Raisings.	TOTAL.	Despatches.	Colliery consumption.	Coal delivered to coking.	
		Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	
Bihar and Orissa.	Haziribagh	Karapura.	559	13,354	13,913	4,194	7,654	...
		Bokaro .	27,197	1,494,966	1,522,163	1,436,240	54,923	7,069
		Giridih .	25,570	768,642	812,312	698,474	59,409	44,113
		Jharia .	75,901	131,482	207,383	104,016	15,858	599
		Ramgarh	233	2,548	2,781	2,520	245	...
	Manbhum	Jharia .	1,872,953	10,545,401	12,418,354	9,139,451	950,737	479,310
		Raniganj	243,089	729,933	973,022	524,087	111,546	163,176
		Palamau-Daltonganj	1,441	17,274	18,715	11,289	3,984	...
		Sambalpur-Hingir Rampur.	1,494	45,410	46,904	31,550	12,308	...
	Sonthal Parganas	Jainty .	2,500	76,680	79,180	64,772	10,197	...
		Raniganj.	18,002	85,901	103,903	59,769	17,136	245
Rajmahal.		...	1,653	1,653	1,453	...	...
	TOTAL .	2,268,939	13,931,244	16,200,183	12,077,815	1,243,997	694,512	
Burma .	Southern Shan States	...	25	25	23	...	...
Central Provinces.	Betul .	2,324	1,119	3,443	879	293	...	
	Chanda .	11,443	150,490	161,933	117,545	37,121	...	
	Chhindwara .	21,907	485,768	507,675	445,586	40,430	...	
	Narsinghpur .	2,818	70,039	72,857	62,806	8,370	...	
	Yeotmal .	...	1,138	1,138	...	1,138	...
	TOTAL .	38,492	708,554	747,046	626,816	87,352	...	
Punjab .	Jhelum .	2,591	49,369	51,960	47,817	2,945	...	
	Mianwali .	1,151	18,341	19,492	18,436	41	...	
	Shahpur .	...	6,952	6,952	6,835	117	...
	TOTAL .	3,742	74,662	78,404	73,088	3,103	...	
	GRAND TOTAL 1925.	2,877,595	19,969,041	22,846,636	17,495,912	1,949,378	708,961	

DIX I—contd.

No. 2—concl'd.

output of Coal and Coke—concl'd.

Coal despatched to coke factories.		COKE.							
		OPENING STOCK.		COKE MADE.		DESPATCHES.		CLOSING STOCK.	
		Hard.	Soft.	Hard.	Soft.	Hard.	Soft.	Hard.	Soft.
Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
...	2,065	...	..	...	...	...	...	...	...
...	23,931	193	110	302	4,328	432	4,388	63	50
...	10,216	...	...	32,722	26	31,288	26	1,434	...
...	86,910	151	733	...	393	28	930	123	196
...	16	...	...	...	...	...	...	...	...
667,373	1,848,856	7,264	14,797	21,006	290,414	23,630	294,938	4,640	10,273
...	174,213	63	10,560	39	113,173	21	112,700	81	11,033
...	3,442	...	...	...	...	...	...	...	...
...	3,046	...	...	...	...	...	...	...	...
...	4,211	...	...	...	...	...	...	...	...
...	26,753	...	...	...	164	...	158	...	6
...	200	...	...	...	...	...	...	...	...
667,373	2,183,859	7,671	26,200	54,069	408,498	55,399	413,140	6,341	21,558
...	2	...	...	...	...	...	...	...	...
...	2,271	...	...	...	...	...	...	...	...
...	7,267	...	...	...	...	...	...	...	...
...	21,659	...	59	...	...	...	59	...	...
...	1,681	...	...	...	...	...	...	...	...
...
...	32,878	...	59	...	...	...	59	...	...
...	1,198	...	...	...	...	...	...	...	...
...	1,015	...	...	...	...	...	...	...	...
...
...	2,213	...	...	...	...	...	...	...	...
667,373	2,692,385	7,963	27,762	55,221	415,969	56,754	420,698	6,430	23,083

APPENDIX I—contd.

Table No. 3.

The following table shows the fluctuations in the output of the principal minerals raised from mines classed under the Indian Mines Act. The other minerals raised are gems, slate, magnesite, steatite, clay, bauxite, fuller's earth, graphite, ochre, barytes, apatite, asbestos, bismuth, corundum and stone.

YEAR.	Coal.	Manga- nese ore.	Mica.	Lime- stone.	Salt.	Gold.	Copper ore.	Wolfram ore.	Iron ore.	Chro- mite ore.	Tin ore.	Lead ore.	Silver.
	Tons.	Tons	Cwts.	Tons.	Tons.	Troyozs.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Troy ozs.
1916	16,419,082	568,032	35,978	45,290	160,357	23,235	2,671	2,955	142,606	5,004	88	7	1,362
1917	17,326,884	497,052	35,896	82,340	152,542	22,991	20,108	3,966	178,303	17,266	182	...	1,281
1918	19,847,039	415,357	51,572	131,451	158,513	19,916	3,619	3,609	115,899	24,030	602	3	1,169
1919	21,759,727	420,184	41,883	146,810	174,974	11,191	32,756	2,905	101,322	14,067	701	2½	753
1920	17,082,711	532,636	44,866	1161,340	181,092	13,645	28,167	1,733½	148,472	23,123	1,056	128,908	2,870,595
1921	18,358,934	284,254	29,470	284,252	123,084	10,108	32,560	884½	286,190	27,727	1,032	144,089½	3,555,640
1922	18,168,988	392,322	30,089	140,507	187,157	8,388	30,764	942	240,383	19,695	1,080	172,018	4,206,138
1923	18,763,967	546,378	31,605	236,161	113,700	1,519	6,550	872	292,033	25,233	1,021	245,925	4,844,042
1924	20,256,034	668,331	40,529	513,333	159,918	3,646	38	739	430,805	27,850	1,627	310,286	5,287,960
1925	19,969,041	710,347	45,333	614,232	125,366	289	...	772½	529,376	21,236	2,307	321,854	4,831,569

Table No. 4.

The following table shows the amount of coal raised, the average number of persons working daily and the death-rates during the years 1916 to 1925 in respect of coal mines under the Indian Mines Act :—

YEAR.	Amount of coal raised.	Average number of persons work- ing daily below and above ground.	Number of deaths below and above ground.	DEATH-RATES.	
				Per 1,000,000 tons raised.	Per 1,000 per- sons working daily below and above ground.
1916	Tons. 16,419,082	143,459	169	10.29	1.18
1917	17,326,884	153,683	163	9.41	1.06
1918	19,847,039	176,269	197	9.93	1.12
1919	21,759,727	190,052	260	11.95	1.37
1920	17,082,711	175,943	172	10.07	0.98
1921	18,358,934	190,647	257	13.99	1.35
1922	18,168,988	184,355	209	11.50	1.13
1923	18,763,967	182,601	332	17.69	1.82
1924	20,256,034	187,088	230	11.35	1.23
1925	19,969,041	173,140	186	9.31	1.07

APPENDIX I—contd.

Table No. 5.

Aggregate horse power and purpose for use of electric motors installed both on the surface and underground at coal mines under the Indian Mines Act.

Coalfield.	HORSE POWER ON SURFACE.						HORSE POWER BELOW GROUND.					Total horse power of motors installed.
	Winding.	Ventilation	Haulage.	Coal washing or screening.	Miscellaneous.	Total.	Haulage.	Pumping.	Portable machinery.	Miscellaneous.	Total.	
Assam . . . . .	...	...	60	...	98	158	...	...	...	...	...	158
Bokaro . . . . .	...	...	...	...	...	...	...	20	80	60	160	160
Central Provinces . . . . .	...	160	16	...	127	303	99	638	31	...	768	1,071
Giridih . . . . .	...	...	...	110	197	307	185	1,694	30	...	1,909	2,216
Jharia	2,746	452	2,306	344	3,777	9,625	4,222	14,300	2,348	401	21,271	30,896
Raniganj	2,767	945	715	145	232	4,804	3,325	7,293	1,886	8	12,512	17,316
Ranigarh . . . . .	...	...	125	35	144	304	...	215	...	...	215	519
TOTAL	5,513	1,557	3,222	634	4,575	15,501	7,831	24,160	4,375	469	36,635	52,336

Table No. 6.

Number of Mines under the Indian Mines Act, where electric power is used, and the aggregate horse power of electric motors installed.

Province.	MINERALS WORKED.						Total horse power of motors installed.
	COAL.		SILVER-LEAD.		SUNDEY MINERALS.		
	Number of mines.	Horse power.	Number of mines.	Horse power.	Number of mines.	Horse power.	
Bombay . . . . .	...	...	...	...	1	245	245
Madras . . . . .	...	...	...	...	1	110	110
Assam	1	158	...	...	...	...	158
Bengal	46	13,887	...	...	1	50	13,937
Bihar and Orissa	58	37,220	...	...	...	...	37,220
Burma . . . . .	...	...	1	1,850	5	503	2,353
Central Provinces	3	1,071	...	...	3	240	1,311
TOTAL	108	52,336	1	1,850	11	1,148	55,334

APPENDIX I—*concl'd.*

Table No. 7.

Number and type of coal-cutting machines at work in Coal Mines under the Indian Mines Act.

Maker.	British.	American.	Chain.	Bar.	Percussive.	POWER.			Total number of machines.
						ELECTRICITY.		Compressed air.	
						A. C.	D. C.		
Anderson Boyes . . .	1	...	1	...	...	1	...	...	1
Goodman . . . . .	...	35	35	...	...	9	26	...	35
Hardiux	6	...	...	...	6	...	...	6	6
Ingersoll Rand . . .	...	1	...	...	1	...	...	1	1
Mavor and Coulson . .	56	...	1*	55	...	47	...	9	56
Siskol	5	...	...	...	5	...	...	5	5
Sullivan . . . . .	...	20	20	...	...	20	...	...	20
Diamond	1	...	1	...	...	1	...	...	1
TOTAL	69	56	58	55	12	78	26	21	125

Jharia coal-field 64 machines }
 Raniganj coal-field 53 " } Total number of square feet
 Bokaro coal-field 2 " } undercut 9,151,630.
 Central Provinces coal-field 6 " }

* Electric.

Table No. 8.

Number of mechanical ventilators in use at Coal Mines under the Indian Mines Act.

Assam.	Bengal.	Bihar and Orissa.	Central Provinces.	Punjab.	Total.
11	15	33	8	1	68

Table No. 9.

Number of safety lamps in use at Coal Mines under the Indian Mines Act.

Assam.	Baluchistan.	Bengal.	Bihar and Orissa.	Central Provinces.	Punjab.	Total.
2,119	1,175	5,962	4,342	1,301	5	14,904

1,435 were locked by screws, 8,465 by lead rivets, and 5,004 by magnetic means.

APPENDIX II.
ACCIDENTS IN MINES.

List of Fatal Accidents in mines regulated by the Indian Mines Act, 1901, during the year 1925.

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 wrought.	Cause of accident and remarks.
EXPLOSIONS AND IGNITIONS OF FIRE-DAMP—(1 death).						
1	15th March, 4 P. M.	Chittidand mine, Chittidand P. O., Punjab.	Punjab Coal Co., Ltd.	Noor Muhammad, (m.), 40, Coal-cutter.	Coal	Deceased was about to commence work in a prospecting drift rising at 1 in 3, and as he raised his open lamp to examine the roof he ignited a small accumulation of fire-damp. He was slightly burnt, and died three days later. Gas had never been found in the mine previously. Inspection and inquiry made.
FALLS OF ROOF AND SIDES. (a) Falls of roof—(61 deaths).						
2	3rd January, 5 A. M.	Mudidih mine, Sijua P. O., Manbhum.	Burrakur Coal Co., Ltd.	Hardas Manjhi, (m.), 18, Coal-cutter.	Coal	Deceased was killed by a fall of about 7 cwt. of coal and stone from an unsuspected slip in a seam seven feet high. Inspection and inquiry made.
3	7th January, 6-30 A. M.	Mohpani mine, Mohpani P. O., Central Provinces.	Great Indian Pen- insula Railway.	Bhoora Heeralal Kotwar, (m.), 30, Coal-cutter.	Coal	Whilst deceased and another coal-cutter were engaged in taking a 'slice' off a pillar of coal in course of extraction, the local roof, 18' x 60' x 4' thick, next to the face, fell from a height of 9 feet and broke down the supporting timbers. Deceased, while attempting to run away, was killed by the falling stone. The other person was entombed, but was promptly rescued. Inspection and inquiry made.
4	9th January, 11 A. M.	Kusunda mine, Kusunda P. O., Bihar and Orissa.	K. M. Selected Coal Co.	Fulmani Benia, (f.), 18, Coal-carrier.	Coal	Whilst loose coal was being dressed after blasting in a working place, deceased entered the place and a piece of coal, weighing about 15 cwt., fell on her from a height of about 15 feet. She was killed instantly. The place should have been fenced off before dressing was attempted. Inspection and inquiry made.

APPENDIX II—*contd.*

List of Fatal Accidents, 1925—*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 wrought.	Cause of accident and remarks.
FALLS OF ROOF AND SIDES—<i>contd.</i>						
(a) Falls of roof—(61 deaths)—<i>contd.</i>						
5	21st January, 2.45 P. M.	Amlabad mine, Jealgora P. O., Bihar and Orissa.	Eastern Coal Co., Ld.	Kirton Roy, (m.), 28, Coal-cutter.	Coal	Deceased left his own working place and went into another where the coal was soft. About a ton of coal and stone fell from a height of six feet and killed him. More careful working might have prevented the accident. Inspection and inquiry made.
6	23rd January, 24.00.	Raniganj mine, Raniganj P. O., Bengal.	Bengal Coal Co., Ld.	Kharia Bilaspuri, (m.), 30, Sukul Bilaspuri, (m.), 25, Dukhia Bilaspuri, (m.), 28, Prem Singh, (m.), 27, Coal-cutters.	Coal	Whilst the deceased were engaged in taking down roof coal in a gallery 20 feet in height, a mass of roof stone, 30' x 16' x 6' thick fell, killing two of them outright and causing fatal injuries to the others. If the roof coal had been left on or if the roof had been systematically timbered as ordered after a previous accident, this accident would probably have been avoided. Inspection and inquiry made.
7	23rd January, 9 P. M.	Babisole mine, Raniganj P. O., Bengal.	Bilbera Coal Co., Ld.	Rajkumari Teli, (f.), 24, Coal-carrier.	Coal	Deceased went into a fenced gallery and was killed by a mass of roof coal, 30' x 9' x 3'6" thick, which fell from a height of 13 feet. If deceased had remained in her working place instead of robbing coal, this accident would not have occurred. Inspection and inquiry made.
8	1st February, 5 A. M.	Chota Dhemo mine, Sitarampur P. O., Bengal.	Bengal Coal Co., Ld.	Kitbali Meah, (m.), 45, Coal-cutter.	Coal	Whilst deceased was loading coal in a depillaring area, he was injured by a piece of coal, 15' x 15' x 6", which fell from a height of 10 feet. He died four hours later. Inspection and inquiry made.
9	2nd February, 2-15 P.M.	Dhao mine, Jamai P.O., Central Provinces.	Rai Sahib Sundar- lal, Banker.	Dhanoti Pradhan, (f.), 15, Coal-carrier.	Coal	Deceased was loading coal in a gallery, when a portion of the roof, measuring 12' x 8' x 9" thick, fell from a height of 6 feet, killing her instantly. Three other persons were injured. Inspection and inquiry made.
10	3rd February, 11 A.M.	Teetalmuri mine, Sijua P.O., Bihar and Orissa.	Burrakur Coal Co., Ld.	Sukhrum Bhar, (m.), 20, Labourer.	Coal	Whilst deceased was engaged in erecting timber in an incline he was struck by a fall of roof stone weighing about 10 cwt. and sustained a fracture of the spine. He died four months later. Inspection and inquiry made.

1	6th February, 1-15 P.M.	Dahuka mine, Chora P.O., Bengal.	Raghunathbatty Coal Co., Ld.	Hital Bauri, (m.), 35, <i>Coal-cutter.</i>	Coal	Deceased was loading roof coal which was being cut, when a mass of coal, 3' x 1'6" x 2', fell upon him from a height of 8 feet. He sustained injuries to which he succumbed about 24 hours later. Deceased should not have attempted to load coal whilst another person was cutting the roof coal above him. Inspection and inquiry made.
12	12th February, 1-30 A.M.	Serampur mine, Giridih P.O., Bihar and Orissa.	East Indian Rail- way.	Tuhia Jolhin, (f.), 25, <i>Coal-carrier.</i>	Coal	As deceased was carrying coal out of a gallery a 'roof bump' occurred and a piece of coal fell off the side on to her foot. She died a month later. The accident was unavoidable. Inspection and inquiry made.
13	14th February, 12-30 P.M.	Tirap mine, Margherita P.O., Assam.	Assam Railways and Trading Co., Ld.	Sardu Makrani, (m.), 40, <i>Labourer.</i>	Coal	Deceased was injured by a mass of coal, 5' x 3½' x 3', weighing 2 tons which fell from the roof of an 'Opening'. He died two days later. The accident was due to a breach of standing orders as to the method of working. Inspection and inquiry made.
14	4th March, 2 A.M.	Benahir mine, Jharia, P.O., Bihar and Orissa.	Standard Coal Co., Ld.	Rajkumari, (f.), 45, <i>Coal-carrier.</i>	Coal	Deceased was killed in a working gallery by a fall of about 4 tons of coal from a height of about 20 feet. More careful examination of the roof might have prevented the accident. Inspection and inquiry made.
15	9th March, 12-30 P.	Jainty Central mine, Karmatar P.O., Bihar and Orissa.	Jainty Central Col- liery, Ld.	Rupn Mesh, (m.), 18, <i>Coal-cutter.</i>	Coal	Whilst engaged in widening a narrow gallery deceased was severely injured by a mass of roof stone, 4' x 4' x 6' which fell from an undetected 'slip' in the roof. He died two days later. Inspection and inquiry made.
16	20th March, 8-30 A.M.	Kendwadih mine, Jeaigora P.O., Bihar and Orissa.	Hurriladih Coal Co., Ld.	Nimai Bauri, (m.), 30, <i>Coal-cutter.</i> Khenti Baurin, (f.), 25, <i>Coal-carrier.</i>	Coal	The deceased were killed in their working place by the fall of a block of roof stone, weighing about 4 tons, which fell from a height of about 7 feet. More care on the part of the subordinate officials of the mine might have prevented the accident. Inspection and inquiry made.
17	20th March, 1-30 P.M.	Mudidih mine, Sijua P.O., Bihar and Orissa.	Burrakur Coal Co., Ld.	Bipti Turin, (f.), 35, <i>Coal-carrier.</i>	Coal	Deceased was killed by a mass of coal, 9' x 6' x 9' thick, which fell from the roof of a gallery which was 6 feet high. More care on the part of the subordinate officials of the mine might have prevented the accident. Inspection and inquiry made.
18	29th March, 5 A.M.	Noonodih mine, Jeaigora P.O., Bihar and Orissa.	Bengal Iron Co., Ld.	Bacha Goals, (m.), 30, <i>Coal-cutter.</i>	Coal	Deceased was killed by a fall of about 10 cwt. of overhang- ing coal from a pillar in a seam 8 ft. thick. More care in working might have prevented the accident. Inspection and inquiry made.

APPENDIX II—*contd.*

List of Fatal Accidents, 1925—*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 wrought.	Cause of accident and remarks.
FALLS OF ROOF AND SIDES—<i>contd.</i>						
(a) Falls of roof—(61 deaths)—<i>contd.</i>						
19	13th April, 11 A.M.	Ledo Valley mine, Margherita P.O., Assam.	Assam Railways and Trading Co., Ltd.	Khoda-box Mokra- ni. (m.), 43, Korku Mokrani, (m.), 32, <i>Labourers.</i>	Coal	The deceased were killed by a mass of coal, 8' x 7' x 4', which fell from between two 'slips' in the roof of an 'opening' 5 feet high. The accident would probably have been avoided if the deceased had not been sitting in the 'opening'. To do so was a breach of the special rules. Inspection and inquiry made.
20	17th April, 8 A.M.	Serampur mine, Giridih P.O., Bihar and Orissa.	East Indian Railway	Lakhia Ghatwarin, (j.), 28, <i>Coal-carrier.</i>	Coal	Whilst deceased was in a gallery in which roof coal was being dressed, she was struck by a piece of coal weighing about 30 lbs. which fell from a height of 14 feet. She died twenty-three days later. The accident would have been avoided if the gallery had been kept fenced until dressing of roof coal had been completed. Inspection and inquiry made.
21	18th April, 11-30 A.M.	Kujama mine, Jharia P. O., Bihar and Orissa.	K. S. Nanji & Co.	Mukti Rajwarin, (f.), 45, Kashlu Goala, (m.), 25, <i>Labourers.</i>	Coal	Whilst roof stone was being removed in a quarry from above an old gallery in a coal seam the stone gave way and the deceased were precipitated into the gallery. One of them was killed instantly and the other succumbed nine days later. The accident was due to the lack of proper precautions on the part of the officials of the mine. Inspection and inquiry made.
22	19th April, 0-30 hours.	Borjan and Kongon mine, Kongon P. O., Assam.	Nazira Coal Co., Ltd.	Abdul Jabbar, (m.), 35, <i>Coal-cutter.</i>	Coal	Deceased was struck by a piece of fireclay, 3' x 16' x 4", which fell from the roof of a gallery 8 feet high. His spine was fractured and he died three weeks later. The roof was being timbered at the time of the accident. If a temporary support had been used the accident would probably have been avoided. Inspection and inquiry made.
23	21st April, 12-30 P.M.	Tikak mine, Margherita P. O., Assam.	Assam Railways and Trading Co., Ltd.	Chanhan Halba, (m.), 26, <i>Labourer.</i>	Coal	Deceased was killed by a mass of coal, 8' x 4' x 3', weighing 3½ tons, which fell from the roof and side of an 'opening' 12 feet high. A concealed slip in the coal caused the fall. Inspection and inquiry made.

24	24th April, 7-0 A.M.	Nayadi mine, Kusunda P. O., Bihar and Orissa	Kosoonda and Nayadee Collieries Ltd.	Sukri Mura, (f.), 20, Coal-carrier.	Coal	A piece of stone, 14' x 3' x 21" thick, and weighing about 4 tons, fell on deceased from a height of 8 feet. She was killed instantly. The accident was due to negligence on the part of the subordinate officials of the mine. Inspection and inquiry made.
25	9th May, 6-30 A.M.	Rawdwin mine, Namtu P. O., Burma.	Burma Corporation Ltd.	Kaiyan Singh, (m.), 40, Miner.	Lead- silver ore.	Deceased was standing on a platform on a square set in a stope and driving spiling overhead when a large piece of ore fell away breaking the spiling and also the boards forming the platform. Deceased was precipitated into the stope two square sets or 10 feet lower down and was killed instantly. Inspection and inquiry made.
26	28th May, 5-30 P.M.	Sijua mine, Sijua P. O., Bihar and Orissa.	Tata Iron and Steel Co., Ltd.	Mangal Manjhi, (m.), 32, Sivdar.	Coal	Whilst deceased was trimming roof coal after a shot had been fired in a gallery 22 ft. high, he was killed by a fall of coal weighing about 5 tons. Inspection and inquiry made.
27	12th June, 1 P.M.	Sutikdih mine, Pathardihi P. O., Bihar and Orissa.	Sutikdih Coal Co., Ltd.	Sarnamai Baurin, (f.), 18, Coal-carrier.	Coal	Deceased was seriously injured by the unexpected fall of about $\frac{1}{2}$ cwt. of coal and stone from the roof of a gallery about 9 feet high and died seven days afterwards. The roof coal had been loosened by a shot, and more careful dressing might have prevented the accident. Inspection and inquiry made.
28	25th June, 12 A.M.	Dandot mine, Dandot P. O., Punjab.	E. S. I. Thakurdass Ramjiddass.	Rashid, (m.), 30, Coal-cutter.	Coal	Deceased was at work on a longwall face in a coal seam, 3 feet thick, when a piece of shale, 4' x 21' x 9" fell upon him from between two "slips" in the roof. He died four months later. The roof was well timbered, but a roof bar set on chocks 2 $\frac{1}{2}$ feet apart was broken by the fall. A stronger bar might have prevented the accident. Inspection and inquiry made.
29	1st July, 11-30 P.M.	Amlabad mine, Jeaigora P. O., Bihar and Orissa.	Eastern Coal Co., Ltd.	Bara Mutui, (f.), 34, Coal-carrier.	Coal	Deceased was killed by the fall of about 5 cwt. of roof coal in a gallery 8 feet high. The roof coal was being taken down by a miner and more care in the work might have prevented the accident. Inspection and inquiry made.
30	3rd July, 10 P.M.	Sutikdih mine, Pathardihi P. O., Bihar and Orissa.	Sutikdih Coal Co., Ltd.	Bidi Bonrin, (f.), 28, Coal-carrier. Gobinda Bauri, (m.), 20, Coal-cutter.	Coal	The deceased were killed by a fall of about 2 cwt. of coal from the roof of a gallery 18 feet high. More care in testing and securing the roof might have prevented the accident. Inspection and inquiry made (See Report, page 17).

APPENDIX II—contd.

List of Fatal Accidents, 1925—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 wrought.	Cause of accident and remarks.
FALLS OF ROOF AND SIDES—contd.						
(a) Falls of roof—(61 deaths)—contd.						
31	31st July, 11-15 A.M.	Tisra mine, Jharia P. O., Bihar and Orissa.	Alliance Colliery Co.	Ram Charan Gowala, (m.), 35, Coal-cutter.	Coal	Deceased was struck on the head and killed by a prop, 24 ft. long, which had been knocked out by a fall of roof coal. Inspection and inquiry made.
32	17th August, 2-45 P.M.	Ekra Khas mine, Bansjora P. O., Bihar and Orissa.	Maharaja of Cas- simbazar.	Matadin Lodh, (m.), 35, Sirdar.	Coal	Whilst deceased was dressing overburden on the face of a quarry he was killed by a fall of about one ton of stone. More care on the part of the deceased might have prevented the accident. Inspection and inquiry made.
33	27th August, 12-30 P.M.	Serampur mine, Giridih P. O., Bihar and Orissa.	East Indian Rail- way.	Rahman Meah, (m.), 26, Coal-cutter.	Coal	Deceased was bending down to clear away coal which he had cut from the roof of a working place, when he was severely injured by a piece of roof coal, 10' x 6' x 2', which fell on him from a height of 6 feet. He died shortly afterwards. Inspection and inquiry made.
34	8th September, 11-30 P.M.	Lodna mine, Jharia P. O., Bihar and Orissa.	Lodna Colliery Co., (1920) Ld.	Lao Passi, (m.), 25, Coal-cutter. Sukromani Mejhian, (f.), 19, Coal-carrier.	Coal	The deceased were killed by a fall of roof stone weighing about 15 cwt. in a seam, 26 ft. high, in which a pillar was being extracted. The roof was unsupported by props. If it had been propped the accident might have been prevented. Inspection and inquiry made.
35	14th September, 11-30 A.M.	Kajora mine, Andal P. O., Bengal.	Roy Dutta & Co.	Munsi Roy, (m.), 28, Coal-cutter.	Coal	Whilst deceased was loading coal at a place where roof shale was being dressed down he was injured by a piece of shale which fell from a height of 14 feet; he died three weeks later. Deceased should not have attempted to load the coal until the shale had been taken down. Inspection and inquiry made.
36	15th September, 6 P. M.	Lalki mine, Domchauch P. O., Bihar and Orissa.	F. F. Chrestien & Co., Ld.	Behari Gope, (m.), 22, Miner.	Mica	Deceased, whilst working at the face of an adit was struck by a mass of schist, weighing 1 maund, which fell from the roof a height of six feet. He was fatally injured. If the roof had been properly dressed and sufficient timber set the accident would not have occurred. Inspection and inquiry made.

37	17th September, 4 P. M.	Byauk Chaung mine, Tavoy, P. O., Burma.	Burma Finance and Mining Co., L.I.	Tin Va, 62, <i>Miner.</i>	Tin & Wolfram	Deceased was killed by a fall of ground in an adit.
38	22nd September 11 P. M.	Bhnggndih mine, Jharia P. O., Bihar and Orissa.	Bengal Nagpur Coal Co., Ld.	Iswari Singh, (m.), 28, <i>Propping mistry.</i>	Coal	Whilst deceased, was withdrawing props from a goaf, a mass of roof coal, 30' x 20' x 2', fell from a height of 7 feet. He was killed instantly. If a safety prop withdrawer had been used the accident might have been avoided. Inspection and inquiry made.
39	23rd September, 1 P. M.	Bagmara mine, Nawagarh P. O., Bihar and Orissa.	G. C. Bhattacharji & Sons.	Chedu Bohidas, (m.), 40, <i>Coal-cutter.</i>	Coal	Deceased opened a fence and entered an abandoned area, and was cutting coal there when a fall of roof stone, 12' x 8' x 1½", occurred. He was killed instantly. The accident though partly due to fault of deceased pointed to slackness on the part of the management in allowing general robbing of pillars. Inspection and inquiry made.
40	2nd October, 1 P. M.	Nandi Sibpur mine, Nandi P. O., Bengal.	Kar's Bricks and Tiles, Ld.	Dukhi Baurin, (f.), 30, <i>Coal-carrier.</i>	Coal	Whilst a miner was cutting coal from the corner of a pillar in a gallery which had been fenced off on account of unsound roof he was injured by a mass of roof stone 6' x 6' x 6" which fell from a height of 4 feet. Deceased who was loading the coal cut by the miner, was killed. If they had not gone through the fence the accident would not have occurred. Inspection and inquiry made.
41	9th October, 6 A. M.	Jainty Central mine, Karmatar P. O., Bihar and Orissa.	Jainty Central Collieries, Ld.	Surjoo Kole, (m.), 60, <i>Coal-cutter.</i>	Coal	Whilst deceased and another person were working in an underground gallery a mass of roof stone, 3½' x 2½' x 9", fell from a height of 7 feet causing injuries to both of them. Deceased succumbed to his injuries seven days later. Inspection and inquiry made.
42	13th October, 1-30 P. M.	Kirkend mine, Kusunda P. O., Bihar and Orissa.	Kirkend Coal Co.	Mahendra Bauri, (m.), 50; Kedar Bauri, (m.), 40, <i>Coal-cutters.</i>	Coal	The deceased were killed by a mass of coal, 40' x 8' x 2' 6", which fell from the roof and side of a gallery 9 feet high. The fall was caused by deceased robbing coal from the side of a gallery and exposing a fault over a distance of 40 feet. Inspection and inquiry made.
43	20th October, 4-30 P. M.	Pyinthadaw mine, Tavoy P. O., Burma.	W. C. Toms	Low San, (m.), 42, <i>Labourer.</i>	Wolfram and Tin	Deceased entered an old working to which access had been forbidden. Whilst undercutting a vein of ore he was buried and suffocated by the fall of about two tons of earth from the roof.
44	23rd October, 10 P. M.	Jogta mine, Sijua P. O., Bihar and Orissa.	Agabeg Bros.	Khanu Dhobey, (m.), 60, <i>Coal-carrier.</i>	Coal	Whilst deceased was cutting coal in a fenced-off gallery he was killed by roof stone, 5' x 2½' x 1', which fell from a height of 7 feet. Deceased should not have gone through the fence. Inspection and inquiry made.

APPENDIX II—contd.

List of Fatal Accidents, 1925—contd.

Serial number.	Date and hour of accident.	Name of situation of mine.	Name of owner.	Name, sex, age and occupation of person killed.	Name of mineral wrought.	Cause of accident and remarks.
FALLS OF ROOF AND SIDES—contd.						
(a) Falls of roof—(61 deaths)—contd.						
45	29th October, 11 P.M.	Tisra mine, Jharia P. O., Bihar and Orissa.	Commercial Colliery Co.	Gajraj, (m.), 30, Coal-cutter.	Coal	Deceased left his appointed working place and, passed through a fence to get coal from a prohibited area. A mass of roof coal, weighing about 6 cwt., fell upon him from a height of 24 feet, killing him instantly. Deceased should not have passed through the fence. Inspection and inquiry made.
46	4th November, 2-30 A.M.	Jamadoba mine, Jealgora P. O., Bihar and Orissa.	Tata Iron & Steel Co., Ltd.	Saday Kurmi, (m.), 21, Coal-cutter.	Coal	Whilst deceased was sitting in a gallery, a mass of roof coal, 50' x 13' x 1½', fell from well defined cleavage planes at a height of 7 feet, and killed him instantly. A close examination of the roof and the provision of props might have prevented the accident. Inspection and inquiry made.
47	20th November, 7-45 A.M.	Bararee mine, Jealgora P. O., Bihar and Orissa.	East Indian Coal Co., Ltd.	G. W. Rarity, (m.), 45, Assistant.	Coal	Whilst deceased was examining the roof in an area from which a pillar had been extracted, a small piece of roof stone, 6" x 6" x 1", fell on his head from a height of 28 feet. He was killed instantly. Inspection and inquiry made.
48	21st November, 6 A.M.	Monoharbahal mine, Asansol P. O., Bengal.	Baraboni Coal Concern Ltd.	Barka Manjhi, (m.), 29, Shot-firer.	Coal	Deceased was killed by a mass of roof coal, measuring 4' x 1' 9" x 25' long, which fell from a concealed 'slip' in the roof. Inspection and inquiry made.
49	25th November, 4 P.M.	Benahir mine, Jharia P. O., Bihar and Orissa.	Standard Coal Co., Ltd.	Nirooi Passi, (m.), 45, Sirdar.	Coal	Deceased was standing under some roof coal which had recently been blasted when a mass, weighing about 1½ cwt, fell on him from a height of 20 feet. He was killed instantly. If he had properly examined the roof before standing underneath it, he should have detected its unsoundness and the accident would have been avoided. Inspection and inquiry made.

50	8th December, 2-20 P.M.	Jamadoba mine, Jalgora P. O., Bihar and Orissa.	Tata Iron & Steel Co., Ltd.	Bhangi Rai, (m.), 35, Coal-cutter. Futi Rai, (f.), 25, Coal-carrier.	Coal	The deceased were filling coal in a gallery, 8' 6" in height when a mass of roof coal, 47' x 18' x 3' 6", fell from between pronounced cleavage planes. They were killed instantly. A proper examination of the roof and the provision of timber might have prevented the accident. Inspection and inquiry made.	
51	10th Decem- ber, 11 to 12 A.M.	Lalpeth mine, Chanda P. O., Central Provinces.	Dewan Bahadur Ballavdas & Sons.	Nopar Singh, (m.), 60, Coal-cutter.	Coal	Whilst engaged surreptitiously in wedging down some roof coal in a disused gallery, deceased dislodged a mass of coal, about 15' x 10' x 1½' thick, which fell on him from a height of 8 feet. He sustained fatal injuries and died two hours later. Inspection and inquiry made.	
52	17th Decem- ber, 5-30 A.M.	Charanpur mine, Charanpur P. O., Bengal.	Apcar Collieries, Limited.	Ramani Mejhian, (f.), 14, Coal-carrier.	Coal	Deceased was struck by a mass of roof-coal, 12' x 5' x 2' 9" thick, which fell from a height of ten feet. If the roof had been properly supported the accident would have been prevented. Inspection and inquiry made.	
(b) Falls of side—(62deaths).							
53	1st January, 1-30 P.M.	Mokpalin mine, Mokpalin P. O., Burma.	Public Works Department (Gov- ernment of Burma).	Suriahnarayana, (m.), 20, Driller.	Granite stone.	Whilst deceased was drilling a shot hole on the face of a quarry, about 2½ tons of rock fell from 5 feet above him striking him and causing him to fall to the floor of the quarry 15 feet below. Inspection and inquiry made.	
54	3rd January, 5-30 P.M.	Kanhan mine, Jamai P. O., Central Provinces.	Bansidhar Ram- niwas Goenka.	Mangly Mohasi, (f.), 15, Radhia Monasi, (f.), 13, Coal-carriers.	Coal	The deceased were killed by the fall of a mass of about 60 tons of earth from the side of an open cutting 19 feet deep. The accident would have been avoided if the sides, which were soft, had been sloped back. Inspection and inquiry made.	
55	6th January, 3-30 A.M.	Radhaballavpur mine, Samdi P. O., Bengal.	Salanpore Coal Co., Ltd.	Bhuban Bauri, (m.), 20, Coal-cutter.	Coal	Whilst persons were at work in a quarry, a mass of overburden, 20' x 9' x 2' thick fell, killing deceased instantly and causing serious injuries to another person. If the sides of the quarry had been properly stepped or sloped, the accident would not have occurred. Inspection and inquiry made.	
56	19th January, 10-30 A.M.	Bararee mine, Jalgora P. O., Bihar and Orissa.	East Indian Coal Co., Ltd.	Sudho Bilaspuri, (m.), 26, Coal-cutter.	Coal	Whilst deceased was robbing a pillar he was killed by a mass of coal, weighing about 2 tons, which fell from the corner of the pillar. The accident was due partly to the fault of deceased and partly due to lack of vigilance on the part of the subordinate officials. Inspection and inquiry made.	

APPENDIX II—*contd.*

List of Fatal Accidents, 1925—*contd.*

Serial Number.	Date and hour of accident.	Name and situation of mine.	Name of owner.	Name, sex, and occupation of person killed.	Name of mineral wrought.	Cause of accident and remarks.
FALLS OF ROOF AND SIDES—<i>contd.</i>						
(b) Falls of side—(62 deaths)—<i>contd.</i>						
57	23rd January, 12-30 P.M.	Bhulanbararee mine, Pathardihi P. O., Bihar and Orissa.	Bhulanbararee Coal Co., Ltd.	Atul Chattaraj, (m.), 24, <i>Deputy overman</i> ; Dunoo Singh, (m.), 19, <i>Labourer</i> ; Lu k Mejhian, (f.), 17, <i>Coal-carrier.</i>	Coal	The deceased were killed by a mass of coal weighing about 4 tons falling from the side of a pillar. The accident was due to lack of ordinary care on the part of the deceased deputy overman. Inspection and inquiry made. (<i>See Report, page 18</i>).
58	27th January, 1-30 P.M.	Khas Joyrampur mine, Jharia P. O., Bihar and Orissa.	Khengarji Trikoo & Co.	Matiram Kurmi, (m.), 29, <i>Coal-cutter.</i>	Coal	Deceased was killed in his working place underground by a fall of about 2 tons of coal. Inspection and inquiry made.
59	6th February, 4-30 P.M.	Ekra Khas mine, Bansjora P. O., Bihar and Orissa.	Maharaja of Cos- simbazar.	Semia Kolia, (f.) 16, <i>Coal-carrier.</i>	Coal	While deceased was sitting in a gallery she was struck on the head by a piece of coal, 6' x 8' x 4' which fell from a height of 12 feet. She sustained injuries from which she died three hours later. Inspection and inquiry made.
60	6th February, 8-30 A.M.	Gopalichuck (West) mine, Kusunda P. O., Bihar and Orissa.	Gopalichuck Coal Co., Ltd.	Gulu Meah, (m.), 35, <i>Coal-cutter.</i>	Coal	Deceased was severely injured in his working place underground by an unexpected fall of coal weighing about one ton. He died shortly afterwards. Inspection and inquiry made.
61	9th February, 12 A. M.	Hardua mine, Hardua P. O., Central Provinces.	Burn & Co.	Bansi Dhobi, (m.) 31, <i>Miner.</i>	White clay.	Deceased was returning to his working place in a quarry when a mass of clay, measuring about 7' x 4' x 1' thick, fell from the side at a height of 7 feet and partly buried him. He received injuries from which he died next day. Inspection and inquiry made.

62	18th February, 4-30 P. M.	Manmaklang mine, Namtu P. O., Burma.	Burma Corporation, Ld.	I. Err, (m.), 27, Miner.	Iron ore.	Deceased was putting in cribbing timber in a winze when a piece of ore, which had been released by men working on the side of an open cut above the winze, knocked out part of the timber fence protecting the winze. A piece of timber fell down the winze and injured deceased on the head. He died on the following day. Inspection and inquiry made.
63	20th February, 8-30 A. M.	Alkusa North mine, Kusunda P. O., Bihar and Orissa.	Raneegunge Coal Association, Ld.	Churaman Rai, (m.), 32, Bundu Turi, (m.), 35, Coal-cutters.	Coal	The deceased were killed by a fall of about 5 tons of coal from an undetected slip in the side of a pillar. The accident was partly due to negligence on the part of the subordinate officials of the mine who should have detected the slip by examination. Inspection and inquiry made.
64	22nd February, 4-45 A. M.	Bhulanbararee mine, Pathardihi P. O., Bihar and Orissa.	Bhulanbararee Coal Co., Ld.	Ghuna Kurmi, (m.), 36, Sirdar, Narain Teli, (m.), 40, Mouiram Teli, (m.), 24, Coal-cutters.	Coal	The deceased were killed by the fall of a slab of coal, 20' x 20' x 1' 3" thick, from the side of a pillar. The accident was due to an unsafe method of working. The method was changed after the accident. Inspection and enquiry made. (See Report, page 19.)
65	4th March, 1-40 P. M.	Sijua mine, Sijua P. O., Bihar and Orissa.	Tata Iron & Steel Co., Ld.	Ludhu Rajwar, (m.), 45, Coal-cutter.	Coal	Deceased was killed by a fall of about 1 ton of coal in a working gallery 6½ ft. high. The accident was due to lack of ordinary care on the part of deceased. Inspection and inquiry made.
66	17th March, 8-40 P. M.	Tharwa mine, Kodarma P. O., Bihar and Orissa.	Tata Sons & Co., Ld.	Hira Gope, (m.), 40, Miner.	Mica	Deceased, whilst working at the bottom of a winze, was struck by a piece of stone, 6" x 8" x 6", which fell from the side of a level 30 feet above. He was fatally injured. Inspection and inquiry made.
67	20th March, 4-45 A. M.	Bhulanbararee mine, Pathardihi P. O., Bihar and Orissa.	Bhulanbararee Coal Co., Ld.	Doni Chamar, (m.), 16, Labourer.	Coal	Deceased was killed by the unexpected fall of about 1½ tons of coal from the corner of a pillar. The coal fell from the corner of a badly crushed pillar which should have been fenced off. Inspection and inquiry made.
68	21st March, 7-20 A. M.	Bhulanbararee mine, Pathardihi P. O., Bihar and Orissa.	Bhulanbararee Coal Co., Ld.	Misri Dhaunk, (m.), 24, Coal-cutter.	Coal	Deceased was killed by an unexpected fall of about 2 tons of coal from the side of a pillar. Inspection and inquiry made.
69	28th March, 4 P. M.	Patlabari mine, Chirkunda P. O., Bihar and Orissa.	Ghela Panohan & Sons.	Bhajoo Kora, (m.), 35, Coal-cutter.	Coal	Whilst deceased was cutting floor coal in an underground gallery he was killed by a mass of coal, 4' x 5' x 6', which fell from a 'slip' in the side. This accident would have been avoided if steps had been taken to support the sides of the pillar. Inspection and inquiry made.

APPENDIX II—contd.

List of Fatal Accidents, 1925—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 wrought.	Cause of accident and remarks.
FALLS OF ROOF AND SIDES—contd.						
(a) Falls of side—(62 deaths)—contd.						
70	4th April, 2 P.M.	Jairamdanga mine, Asansol P. O., Bengal.	New Beerbhoom Coal Co., Ld.	Koka Manjhi, (m.), 22, Coal-cutter.	Coal.	Deceased went through a fence to rob coal in an underground gallery. A mass of coal weighing about 60 lb., fell from the side of the pillar and injured him. He died 3 hours later. Deceased was to blame for going through a fence. Inspection and inquiry made.
71	11th April, 8-30 P.M.	Bhalgora mine, Jharia P. O., Bihar and Orissa.	Bhalgora Coal Co., Ld.	Narangui Chamar, (m.), 14, Labourer.	Coal.	Deceased was employed in gathering slack coal near the edge of a goaf. He went through a fence into a dangerous place and was killed by a mass of side coal, weighing about a ton, which fell from a height of 20 feet. Inspection and inquiry made.
72	22nd April, 2 P.M.	Bhalgora mine, Jharia P. O., Bihar and Orissa.	Bhalgora Coal Co., Ld.	Fusan Teli, (m.), 38, Coal-cutter.	Coal.	Deceased went through a fence and was killed by a fall of 1 ton of coal from the side of a pillar at a height of about 20 feet. Inspection and inquiry made.
73	24th April, 12 noon.	Benahir mine, Jharia P. O., Bihar and Orissa.	Standard Coal Co., Ld.	Gangaram Chamar, (m.), 35; Jagroo Chamar, (m.), 32, Coal-cutters.	Coal	The deceased were killed by a fall of 10 tons of coal from the side of a pillar in a travelling road in a seam 20 feet thick. More careful examination of the side of the pillar might have revealed its weakness and led to precautions. Inspection and inquiry made.
74	24th April, 12-30 P. M.	Benahir mine, Jharia P. O., Bihar and Orissa.	Standard Coal Co., Ld.	Kamalludin Sekh, (m.), 20, Coal-cutter.	Coal	Deceased was killed by a fall of side and roof coal of about 8 tons from a pillar which was being extracted in a seam 24 feet thick. The accident was due to lack of ordinary care in examination on the part of several of the subordinate officials of the mine. Inspection and inquiry made. (See Report, page 19).
75	29th April, 1-45 P. M.	Central Salanpur mine, Katrasgarh P. O., Bihar and Orissa.	Central Salanpur Coal Concern.	Somarua Nunia, (m.), 13, Labourer, Ramjan Meah, (m.), 30, Painter; Sukhdeo Tewari, (m.), 28, Cook.	Coal	The deceased were killed by a mass of earth, 30 feet long, 10 feet deep and 9 inches thick, which fell from the side of a incline cutting. The sides of the cutting were not adequately sloped. Inspection and inquiry made. (See Report, page 20).

76	30th May, 4 P. M.	Khas Sitalpur mine, Ukhra P. O., Bengal.	Khas Sitalpur Col- liery Co.	Mangloo Keot, (m.), 30, Coal-cutter.	Coal	Whilst cutting floor coal in an underground gallery deceased was injured by a mass of coal, weighing about 80 lb., which fell from a height of 8 feet. He succumbed to his injuries two days' later. Inspection and inquiry made.
77	5th June, 1 P. M.	Bansdeopur mine, Kusanda P. O., Bihar and Orissa.	Bansdeopur Coal Co., Ltd.	Anshi Beldarin, (f.), 25, Labourer.	Coal	Deceased was suffocated by an unexpected fall of loose earth from the side of an open cutting. The side of the cutting should have been adequately sloped. Inspection and inquiry made.
78	11 June, 4-30 A. M.	Jairandanga and Bara- boni mine, Asansol P. O., Bengal.	New Beerbhoom Coal Co., Ltd.	Lila Khayra, (m.), 26, Coal-cutter.	Coal	Whilst deceased was undercutting coal near the corner of a pillar a mass of coal measuring 2' x 11' x 30' long, burst away from a well-defined 'cleat'. He was killed instantly. Inspection and inquiry made.
79	21st June, 2-30 A. M.	Bararee mine, Jeaigora P. O., Bihar and Orissa.	East Indian Coal Co., Ltd.	Baiskhi, (f.), 14, Coal-carrier.	Coal	Deceased and her mother were sitting at the corner of a pillar when coal weighing about one cwt. fell on them from a height of ten feet. Deceased was killed instantly and her mother sustained severe injuries. There was a suspicion, but no proof that the father of deceased had been illegally cutting coal from the side. Inspection and inquiry made.
80	11th July, 5-10 P. M.	Taungzun mine, Taungzun P. O., Burma.	Osman Musti Khan	Mangoo, (m.), 28, Cooly mistry.	Stone	Deceased was on the top of a quarry attempting to dislodge a piece of rock when he overbalanced and fell to the bottom of the quarry a distance of 25 feet. He received severe injuries from which he afterwards died. Inspection and inquiry made.
81	5th August, 5 P. M.	Suratand mine, Jharia P. O., Bihar and Orissa.	Suratand Coal Co., Ltd.	Giri Dosadhin, (f.), 35, Coal-carrier.	Coal	Deceased, whilst sitting in a gallery near her working place, was killed by a fall of coal weighing about 3 tons. More careful examination of the roof and sides might have prevented the accident. Inspection and inquiry made.
82	6th August, 12 A. M.	Karmatand mine, Karmatand P. O., Bihar and Orissa.	Sreeram Coal Co.	Fulia Turin, (f.), 23, Coal-carrier.	Coal	Deceased entered a fenced-off gallery and was killed by a fall of coal weighing about 7 cwt. from a height of about 8 feet. Inspection and inquiry made.
83	29th August, 5 P. M.	Alkusa South mine, Kusanda P. O., Bihar and Orissa.	Raneegunge Coal Association, Ltd.	Hansraj Matho, (m.), 26, Toohi Matho, (m.), 22, Coal-carriers.	Coal	The deceased were killed by a fall of about 2 tons of coal from the side of a pillar which was being extracted. The coal fell from a slip which should have been detected by examination. Inspection and inquiry made.
84	2nd September, 12 P. M.	Damagurria mine, Kulti P. O., Bengal.	Damagurria Coal Co., Ltd.	Bangshi Kole, (m.), 38, Coal-cutter.	Coal	Whilst deceased was barring down coal in a quarry overlying underground workings he dislodged a mass of coal weighing about one ton. This in its fall broke through the roof of an underground gallery carrying deceased with it. He was killed instantly. Inspection and inquiry made.

List of Fatal Accident, 1925—*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 wrought.	Cause of accident and remarks.
FALLS OF ROOF AND SIDES—<i>contd.</i>						
(b) Falls of sides—(62 deaths)—<i>contd.</i>						
85	17th September, 11 A. M.	Kurhurbaree mine, Giridih P. O., Bihar and Orissa.	East Indian Railway.	Jiria Rajwarin, (f.), 48, Coal-carrier.	Coal	Deceased, whilst sitting in a gallery, was struck by a piece of coal, weighing one maund, which fell from the side at a height of 4 feet. She sustained a fracture of the spine and died two hours later. Inspection and inquiry made.
86	19th September, 1 P. M.	Shanthe mine, Palaw P. O., Burma.	Burma Finance & Mining Co., Ltd.	Lai Chong, (m.), 40, Labourer.	Tin ore	Deceased was killed by a fall of side in an open cutting.
87	21st September, 9-30 A. M.	Mawson mine, Heho P. O., Burma.	Steel Brothers & Co., Ltd.	Law Lue, (m.), 25, Miner.	Lead	Whilst deceased was engaged in stoping operations underground he was struck by a fall of ground and subsequently died.
88	21st September, 10 P. M.	Napur mine, Raniganj P. O., Bengal.	Napur Coal Co., Ltd.	Sukoo Manjhi, (m.), 38, Coal-cutter.	Coal	Deceased entered a fenced-off area and, whilst robbing coal from the side of a pillar, was injured by a mass of coal, 6' x 3' x 1' 6", which fell from a height of 12 feet. He died two hours later. Inspection and inquiry made.
89	23rd September, 12 A. M.	Fatehpur mine, Jharia P. O., Bihar and Orissa.	Jharia Fire Bricks and Pottery Works, Ltd.	Gokul Barin, (m.), 32; Chuni Hazra, (m.), 28, Earth-cutters.	Coal	The deceased were removing material suitable for the manufacture of bricks and pipes from a heap of debris in a quarry when they were buried under about 5 tons of earth. The accident was due to incompetence and negligence on the part of the management. Inspection and inquiry made.
90	27th September, 5 A. M.	Damagurria mine, Kulti P. O., Bengal.	Damagurria Coal Co., Ltd.	Gowal Ahir, (m.), 22, Labourer.	Coal	Whilst cutting earth in a quarry deceased undercut a measurement pillar, 6 feet high. The pillar toppled over and fell upon him, killing him instantly. Inspection and inquiry made.

91	4th October, 3 A. M.	Bhagaband mine, Jharia P. O., Bihar and Orissa.	Borrea Coal Co., Ld.	Chitua Gope, (m.), 18, Labourer.	Coal	Deceased lay down by the side of a road with his head inside a fenced-off gallery when a piece of coal, 15' x 15' x 12' fell off the corner of a pillar from a height of 7 feet. He was severely injured and died six hours later. Inspection and inquiry made.
92	7th October, 2-30 A. M.	Angarpathra mine, Sijua P. O., Bihar and Orissa.	Lintons Angar- pathra Colliery, Ld.	Sanu Bhuiya, (m.), 22, Coal-cutter.	Coal	Deceased entered a fenced-off gallery and commenced to cut coal from the corner of a pillar. He was killed by a fall of coal weighing about 1½ tons. Inspection and inquiry made.
93	10th October, 3 P. M.	Taungpila mine, Hermingyi P. O., Burma.	Tavoy Wolfram Ld.	Wong Yeing, (m.), 35, Labourer.	Wolfram and Tin.	Deceased undermined the side of an open-cut and was killed by a fall of ground.
94	17th October, 8 A. M.	Taungzun mine, Taungzun P. O., Burma.	Osman Musti Khan	Nurabshair, (m.), 30; Mg. To Waw, (m.), 26, Drillers.	Stone (Granite).	Whilst the deceased were drilling a shot-hole about 10 feet from the floor of a quarry about 50 feet deep, about 3 tons of earth and stone fell from the top of the quarry, striking the deceased and killing them almost instantly. The accident was chiefly due to neglect of the precaution of stripping the overburden in advance of the rock face. Inspection and inquiry made.
95	31st October, 10 30 A. M.	Kodaigaon mine, Saoner P. O., Central Provinces.	Indian Manganese Co., Ld.	Bhola Teli, (m.), 30, Miner.	Manga- nese.	Whilst deceased was at work in a quarry at the foot of a bench, 20 feet high and 74 feet below the surface, a mass of rock, weighing about 12 tons, fell from the face of the bench. He was struck by the falling rock and sustained injuries which shortly afterwards proved fatal. Inspection and inquiry made.
96	11th November, 12-30 P. M.	Tisra mine, Jharia P. O.	Alliance Colliery Co.	Ankloo Bilaspuri, (m.), 27, Coal-cutter.	Coal	Deceased, whilst dressing the side of a pillar with a crowbar, released a mass of coal, 7' x 6' x 2'. A piece of coal, 2' x 2' x 18', struck him on the thigh. He died from hemorrhage three hours later. In using a crowbar deceased was disobeying instructions. He was told to bore a shot-hole so that the coal might be blasted down. If he had done so, the accident might not have occurred. Inspection and inquiry made.
97	24th November, 7-30 A. M.	Sutikdih mine, Pathardihi P. O., Bihar and Orissa.	Sutikdih Coal Co., Ld.	Sohini Bilaspuri, (f.), 23, Coal-carrier.	Coal	Deceased was struck by a piece of coal, weighing 30 lbs., which fell from the side of a quarry at a height of 34 feet. She was killed instantly. Inspection and inquiry made.
98	3rd December, 12-45 P. M.	Keuwadh mine, Kasunda P. O., Bihar and Orissa.	East Indian Coal Co., Ld.	Matla Manjhi, (m.), 30, Coal-cutter.	Coal	Deceased, whilst loading coal in a gallery, was struck by a piece of coal 8' x 4' x 2' which fell from the corner of a pillar. He was killed instantly. If a more careful examination of the corner of the pillar had been made by the subordinate officials, it is possible that the coal would have been found to be loose and in all probability the accident would have been avoided. Inspection and inquiry made.

APPENDIX II—contd.

List of Fatal Accidents, 1925—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 wrought.	Cause of accident and remarks.
FALLS OF ROOF AND SIDES—concl'd.						
<i>(b) Falls of side—(62 deaths)—concl'd.</i>						
99	11th December, 8 P.M.	Gopalichuck Head mine, Jharia P. O., Bihar and Orissa.	Gopalichuck Co., Ltd.	Coal Ramdhin Chamar, (m.), 24, Coal-cutter.	Coal	Deceased left his appointed working place, passed through a fence, and was robbing coal on the side of a "barrier", when a mass of side, 6' x 2' x 2', fell on him. He was killed instantly. Inspection and inquiry made.
100	13th December, 5-30 A.M.	Gopalichuck Head mine, Jharia P. O., Bihar and Orissa.	Gopalichuck Co., Ltd.	Coal Kadu Manjhi, (m.), 34 Loader.	Coal	Deceased was loading coal at a pillar under extraction, when a mass of coal, 6' x 2' x 2', burst from the side and fell on him. He was killed instantly. Inspection and inquiry made.
101	15th December, 5 P.M.	Khas Jharia mine, Jharia P. O., Bihar and Orissa.	Khas Jharia Colliery Co., Ltd.	Coal Luton Gope, (m.), 30, Coal-carrier.	Coal	Whilst deceased was robbing coal from the corner of a pillar in a seam 23 feet thick he was slightly injured by a fall of 6 tons of side coal which he had loosened by a shot. He developed tetanus and died eight days' later. Deceased was to blame because he left the working place allotted to him to rob a pillar. Inspection and inquiry made.
102	23rd December, 9-30 P.M.	Surangi (Bendro) mine, Tisri P. O., Bihar and Orissa.	F. F. Chrestien & Co., Ltd.	Mica Fani Gope, (m.), 25, Driller.	Mica	Deceased was levering down a piece of stone from the face of a quarry, when a slab 2' x 2' x 18" fell. Before he could get clear it struck him on the head and killed him instantly. Inspection and inquiry made.
IN SHAFTS (WHILST ASCENDING OR DESCENDING BY MACHINERY)—(18 deaths).						
103	7th February, 6 A.M.	Gopalichuck West mine, Kusunda P. O., Bihar and Orissa.	Gopalichuck Co., Ltd.	Coal Hurro Roy, (m.), 35, Coal-cutter.	Coal	Deceased attempted to alight from the cage at the top of a shaft before the cage was brought to rest on the keps. He fell down the shaft, 220 feet deep, and was killed instantly. The accident occurred in semi-darkness and better artificial lighting at the pit-top might have prevented it. Inspection and inquiry made.

104	23rd February, 7 P.M.	Jitpur mine, Jalgora P. O., Bihar and Orissa.	Bengal Iron Co., Ld.	Neat Meah, (m.), 40, Stone-cutter.	Coal	Deceased fell out of an ascending cage when the latter had nearly reached the surface. He fell down the shaft, a distance of 235 feet, and was killed instantly. The cage was provided with rigid gates but they had been taken off for repairs. Inspection and inquiry made.
105	30th April, 10-30 P.M.	Central Nodiha mine, Ukbra P. O., Bengal.	Central Nodiha Colliery, Ld.	Kerein Sowara, (f.), 14, Coal-carrier.	Coal	Deceased attempted to step off an ascending cage before it had come to rest at the top of a shaft, but slipped and was crushed between the cage and the landing platform. She died shortly after. Inspection and inquiry made.
106	23rd May, 8 A.M.	Raghunathbatty mine, Sitarampur P. O., Bengal.	Raghunathbatty Coal Co., Ld.	Keshav Kora, (m.), 32, Coal-cutter.	Coal	Whilst deceased was descending a shaft, 195 feet deep, he fell out of the cage and was killed. If gates or rigid fences had been fitted to the cages instead of chains, this accident would probably have been avoided. Inspection and inquiry made.
107	9th June, 9-30 A.M.	Budroochuck mine, Sijna P. O., Bihar and Orissa.	Budroochuck Coal Mining Co., Ld.	Peary Chamar, (m.), 25, Nagar Mahato, (m.), 30, Doman Mahato, (m.), 25, Underground Trolley men.	Coal	The deceased with three other persons were being lowered in a shaft 324 ft. deep, when the cages collided at the meetings due to a broken bridle chain on the ascending cage. The deceased were thrown out of the cage and fell to the shaft bottom. The other three persons escaped with slight injuries. The accident might have been prevented if the cages had been provided with rigid gates. Inspection and inquiry made. (See Report, page 20.)
108	24th July, 2-20 P.M.	Kustore North mine, Kusunda P. O., Bihar and Orissa.	Raneegunge Coal Association, Ld.	Jann Malik, (m.), 47, Munshi.	Coal	Whilst being lowered in a shaft the cage jammed on the keps and after clearing, the oscillation produced caused deceased to be thrown out of the cage. He fell a distance of 391 ft. Rigid gates on the cages would have prevented the accident. Inspection and inquiry made.
109	12th August, 2-30 P.M.	Barmondia mine, Sitarampur P. O., Bengal.	New Beerbhoom Coal Co., Ld.	Sadhu Lohar, (m.), 35, Propping- carpenter.	Coal	Whilst ascending a shaft deceased fell out of the cage and was killed. If gates had been fitted to the cages the accident would probably have been avoided. Inspection and inquiry made.
110	22nd August, 6 A.M.	Chora Khas mine, Chora P. O., Bengal.	Bilbera Coal Co., Ld.	Sasadhar Sircar, (m.), 24, Overman.	Coal	Whilst deceased was being lowered in a cage, a mishap to the winding engine took place and an overwind occurred. He was thrown out of the cage and killed. Inspection and inquiry made.
111	30th August, 10 A.M.	Jamuria West mine, Nandi P. O., Bengal.	West Jamuria Coal Co., Ld.	Langoor Bauri, (m.), 38, Tramner.	Coal	Deceased and two other persons were placing a rail on a cage for the purpose of raising it to the surface. The cage was raised before the rail was in position and on reaching the surface the rail struck the landing platform. Deceased was thrown out of the cage and fell down the shaft 534 feet deep. The accident was partly due to the cage having been signalled away before the rail had been placed in a proper position on the cage. Inspection and inquiry made.

APPENDIX II—*contd.*

List of Fatal Accidents, 1925—*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 wrought.	Cause of accident and remarks.
IN SHAFTS (WHILST ASCENDING OR DESCENDING BY MACHINERY)—(18 deaths)—<i>contd.</i>						
112	10th September, 9 A. M.	Burra Dhemo mine, Sitarampur P. O., Bengal.	Burra Dhemo Coal Co., Ltd.	Sheikh Hamid, (m.), 32, Baiju Kahar, (m.), 31, Bhadu Turi, (m.), 28, <i>Stone-cutters,</i> Hemi Baurin, (f.), 15, <i>Labourer.</i>	Coal	Whilst a cage was being lowered in a shaft, 580 feet deep, it collided with the ascending balance weight. Four of the eight persons on the cage were thrown out and killed. If the guides of the balance weight had been properly tightened the collision would not have occurred, and if gates had been fitted to the cages the occupants would not have been thrown out. Inspection and inquiry made. (<i>See Report, page 21</i>).
113	27th October, 5 A. M.	Simlabahal mine, Jharia P. O., Bihar and Orissa.	Bhalgora Coal Co., Ltd.	Gani Muhammad, (m.), 23, <i>Pump-man,</i> Hazra Singh, (m.), 32, <i>Labourer.</i>	Coal	The deceased were being lowered from a mid-inset in a shaft to a steam pump suspended and partly submerged in water about 80 feet below when the engineman apparently misjudging the position of the bucket, lowered it into the water. Gani was drowned and the other man was so severely scalded by the hot water that he died shortly after. This accident was caused by the engineman's negligence. Inspection and inquiry made.
114	27th November, 3-45 P. M.	Bawdwin mine, Namtu P. O., Burma.	Burma Corporation, Limited.	Htin Che Ywe, (m.), 27, <i>Trucker.</i>	Silver lead.	Whilst deceased was being raised in a cage with 11 other persons he leaned out of the cage and was struck on the head by a projecting landing at a level and thrown out of the cage. He fell to the bottom of the shaft a distance of 400 feet and was killed instantly. The gate of the cage consisted of a single rod. After the accident a proper gate was fitted. Inspection and inquiry made.

**IN SHAFTS (FALLING INTO THE
SHAFT FROM THE SURFACE)—(2 deaths).**

115	2nd July, 3-40 A. M.	Rajura mine, Wau P. O., Central Provinces.	Sir K. C. Daga and Sir M. B. Dada- bhoy.	Gudshila Mundi, (m.), 25, <i>Banksman.</i>	Coal	Deceased was employed as night-shift banksman, at a sinking pit covered by folding doors. He left the doors open and, presumably in a drowsy condition, fell into the shaft and was killed instantly. He should not have slept whilst on duty and he ought, in obedience to standing orders, to have closed the doors. Inspection and inquiry made.
116	29th November, 10-39 P. M.	Sodepur mine, Sitarampur P. O., Bengal	Bengal Coal Co., Ld.	Ramdayal Kurmi, (m.), 30, <i>Labourer.</i>	Coal	Whilst loading a cage at the ground level landing platform, deceased slipped and fell to the bottom of a shaft, 887 feet deep. He was killed instantly. Inspection and inquiry made.

IN SHAFTS (FALLING FROM PART OF THE WAY DOWN)—(7 deaths).

117	20th March, 5-15 P. M.	Bulluari mine, Kusunda P. O., Bihar and Orissa.	Chunilal Trikam- chaud Coal Co., Ld.	Kader Meah, (m.), 43, <i>Pumpman.</i>	Coal	Deceased fell out of a cage while it was descending a shaft and was killed. The use of rigid gates on the cages would have prevented the accident. Inspection and inquiry made. (<i>See Report, page 23</i>).
118	29th March, 6 P. M.	Surangi mine, Ganwan P. O., Bihar and Orissa	F. F. Chrestien & Co., Ld.	Bandhu Kalal, (m.), 15, <i>Labourer.</i>	Mica	Whilst climbing a ladder in a shaft deceased slipped and fell a distance of 24 feet. He sustained injuries which proved fatal.
119	3rd April, 8 A. M.	Khost mine, Khost P. O., Baluchistan.	N. W. Railway	Abdul, (m.), 22, <i>Beltman.</i>	Coal	Whilst alighting from a train of tubs at an intermediate level in a highly inclined shaft, deceased slipped and fell a distance of 200 feet. He sustained injuries which proved fatal shortly after.
120	31st May, 2-30 P. M.	Simlabahal mine, Jharis P. O., Bihar and Orissa	Bhalgora Coal Co., Ld.	Bhatu Dhobi, (m.), 15, <i>Pumpman.</i>	Coal	It was presumed that deceased was attempting to board a sinking bucket at a mid-landing in a shaft when he missed his footing and fell a distance of 168 feet to the bottom of the shaft. Proper arrangements had not been made for boarding the bucket at the mid-landing. Inspection and inquiry made. (<i>See Report, page 23</i> .)
121	23rd June, 4-30 P. M.	Monoharbahal mine, Asansol P. O., Bengal.	Baraboni Coal Con- cern, Ld.	Ramdhone Dosadh, (m.), 22, <i>Pumpman.</i>	Coal	Deceased, finding himself alone in the mine, attempted to climb up a column of pipes in a shaft, 375 feet deep, but fell and was killed instantly. Inspection and inquiry made.

APPENDIX II—contd.

List of Fatal Accidents, 1925—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 wrought.	Cause of accident and remarks.
IN SHAFTS (FALLING FROM PART OF THE WAY DOWN)—(7 deaths)—contd.						
122	17th July, 9-30 A.M.	Mawson Concession mine, Heho P. O., Burma.	Steel Brothers & Co., Ltd.	Sayaw-wo, (m.), 28, <i>Miner.</i>	Lead-silver.	Whilst deceased was assisting in the process of adding a 15 feet length of light galvanised iron ventilation pipe to an air column in a shaft at a point 80 feet from the surface, he missed his footing and fell down the shaft about 30 feet, being killed instantly. Inspection and inquiry made.
123	20th November, 2-15 P.M.	Bhatdee mine, Mohuda P. O., Bihar and Orissa.	Bengal Bhatdee Coal Co., Ltd.	Kiru Meah, (m.), 18, <i>Labourer.</i>	Coal	Deceased was being lowered in a cage in a shaft, 273 feet deep, and when a short distance from the bottom, he opened the cage chains and stepped from the cage into the shaft. He fell to the bottom of the shaft and was killed instantly. If he had waited until the cage came to rest at the shaft bottom, the accident would not have occurred. Inspection and inquiry made.
IN SHAFTS (THINGS FALLING FROM PART OF THIS WAY DOWN)—(1 death.)						
124	27th May, 4-30 P.M.	Jarangdih mine, Bokaro P. O., Bihar and Orissa.	B., B. & C. I. & M. & S. M. Railways.	George Manikan, (m.), 34, <i>Head mistry.</i>	Coal	Whilst deceased was oiling a sinking pump he was struck by something which fell from an unknown point in a shaft 650 feet deep. He died from his injuries 48 hours later. Inspection and inquiry made.
IN SHAFTS (MISCELLANEOUS)—(5 deaths.)						
125	12th April, 9-30 A.M.	Bagdiggi mine, Jharia P. O., Bihar and Orissa.	Villiers, Ltd.	Bhagat Ram, (m.), 25, <i>Tindal.</i>	Coal	A sinking bucket, which was full of water, was suspended about 7 feet above the bottom of a shaft, and deceased was standing beneath it engaged in the adjustment of the valve. The bucket was suddenly lowered and the valve spindle pierced deceased's head, killing him instantly. Inspection and inquiry made.

126	18th July, 10 P.M.	Banksimulia mine, Charanpur P. O., Bengal.	Bengal Coal Co. Ld.	Sukurmoni Mejhun, (f.), 15, Coal-carrier.	Coal	Deceased, whilst attempting to cross the bottom of a shaft, was struck down and killed by the descending cage. A proper pass-by road was provided which should have been used. Inspection and inquiry made.
127	18th September, 11-30 A.M.	Bawdwin mine, Namtu P. O., Burma.	Burma Corporation Ld.	Law Thaw, (m.), 32, Tramway.	Lead- silver.	Deceased attempted to cross the cage space at the bottom of a winze, and was caught by the descending cage. He sustained injuries which caused death a month later. The accident was due to the fault of the deceased. Inspection and inquiry made.
128	7th October, 5 A.M.	Joyrampur mine, Jharis P. O., Bihar and Orissa.	Joyrampur Coal Co.	Nakul Rajwad, (m.), 20, Signalman.	Coal	Deceased, whilst attempting to cross the cage space of a shaft, was killed by the cage descending on him. There was a proper pass-by road which should have been used. Inspection and inquiry made.
129	10th December, 8 P.M.	Jealgora mine, Jealgora P. O., Bihar and Orissa.	East Indian Coal Co., Ld.	Dhanuk Dasad, (m.), 26, Onsetter.	Coal	Deceased was crossing the bottom of a shaft whilst the cages were in motion. He was struck by the descending cage and sustained injuries to which he succumbed on the following day. There was a proper pass-by road which deceased should have used. Inspection and inquiry made.

SUFFOCATION BY GASES—(3 deaths).

130	13th February, 1 P.M.	Bawdwin mine, Namtu P. O., Burma.	Burma Corporation Ld.	Golab Singh, (m.), 25, Trucker; Bhawani Sankar, (m.), 30; Low Shung, (m.), 28, Miners.	Lead- silver.	The deceased passed through a fence into a part of the mine which had been prohibited to workmen because of danger from the fumes of a sealed-off fire. They were overcome by carbon monoxide gas. Inspection and inquiry made. (See Report, page 23)
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BY EXPLOSIVES—(19 deaths).

141	3rd January, 7 P.M.	Mawson mine, Heho P. O., Burma.	Steel Brothers & Co, Ld.	Dannie Rann, (m.), 30, Miner.	Lead- silver.	Whilst deceased was boring a shot hole in an underground working place an undetected misfired charge was pierced and exploded. He sustained serious injuries to which he succumbed twenty-seven days later. The misfired shot would probably have been detected and the accident avoided if a smaller number of shots had been exploded at one time and a proper examination made after firing. Inspection and inquiry made.
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APPENDIX II—contd.

List of Fatal Accidents. 1925.

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 wrought.	Cause of accident and remarks.
BY EXPLOSIVES—(19 deaths)—contd.						
132	8th January, 12-30 P.M.	Lodna mine Jharia P. O., Bihar and Orissa.	Lodna Colliery Co. (1920) L. d.	Jairam Chamar, (m.), 45, Coal-cutter.	Coal	Deceased was killed by a gunpowder shot which exploded before it was expected to do so. The accident points to the necessity for allowing sufficient time after lighting shots for escape to a place of safety. Inspection and inquiry made.
133	15th January, 5 A.M.	Kargali mine, Bokaro P. O., Bihar and Orissa.	Great Indian Penin- sula Railway.	Gaitri, (f.), 35, Coal-carrier.	Coal	Whilst at work in a quarry deceased received injuries from the unexpected explosion of a stray detonator, and when running away she fell over a fire and sustained severe burns. She died three days later from the shock of her injuries. Inspection and inquiry made.
134	27th January, 9-30 P.M.	Choitodih mine, Katrasgarh P. O., Bihar and Orissa.	Burrakur Coal Co., Ltd.	Laldhari Mahato, (m.), 28, Stone-cutter.	Coal	Deceased was killed in a sinking shaft by the explosion of an undiscovered charge of explosive which had previously misfired. The accident points to the necessity for great care in dealing with misfired shots. Inspection and inquiry made.
135	28th January, 4-30 P.M.	Mahua mine, Domchanch P. O., Bihar and Orissa.	J. S. Mull & Co.	Budan Turi, (m.), 30, Sirdar.	Mica	Whilst deceased was removing debris at the foot of a winze, part or whole of a misfired charge of dynamite exploded and killed him. Inspection and inquiry made.
136	5th March, 7 P.M.	Choto Dhemo mine, Sitarampur P. O., Bengal.	Bengal Coal Co., Ltd.	Jwahir Kanoo, (m.), 20, Labourer.	Coal	Deceased took a box containing 5 seers of gunpowder into the mine office, where it exploded. It was presumed that he had been smoking and that a spark had ignited the powder. He died from his burns five hours later. The person in charge of the explosive should not have been smoking. Inspection and inquiry made.

137	9th April, 6-15 P.M.	Kutchidhana mine, Ramakona P. O., Central Provinces.	Indian Manganese Co., Ltd.	Kushnia Dhimar, (m.), 35, <i>Shot-firer</i> ; Jamnaprooad- Brahmin, (m.), 45, <i>Blasting mate.</i>	Manga- nese.	Whilst the deceased were engaged in charging a shot hole in a quarry with gunpowder the charge exploded. They sustained burns which subsequently proved fatal. Inspection and inquiry made.
138	22nd April, 11 P.M.	Bokaro mine, Bokara P. O., Bihar and Orissa.	East Indian and Bengal-Nagpur Railways.	Dudristi Tati, (m.), 30, <i>Labourer.</i>	Coal	Deceased and another person were forcing gunpowder to the bottom of shot-hole with a steel drill when the charge exploded killing deceased and injuring the other person. The accident would not have occurred if the rules regarding explosives had been observed. Inspection and inquiry made.
139	1st May, 10 A.M.	Kubera mine, Gudur P. O., Madras.	V. Lakshminarsiah	D. Siddngadu, (m.), 30, <i>Labourer.</i>	Mica	Whilst deceased was drilling a shot-hole in the vicinity of a misfired hole an explosion occurred and he was fatally injured. It was considered probable that he had tampered with the misfired hole. Inspection and inquiry made.
140	11th June, 7 P.M.	Ekra Khas mine, Bansjora P. O., Bihar and Orissa.	Maharaja of Cossim- bazar.	Baran Moah, (m.), 34, <i>Stone-cutter.</i>	Coal	Deceased was killed by the discharge of a shot before he had time to get to a place of safety. The accident points to the necessity for allowing sufficient time after lighting shots for escape to a place of safety. Inspection and inquiry made.
141	6th July, 12 A.M.	Gua mine, Dongoaposi P. O., Bihar and Orissa.	Indian Iron and Steel Co., Ltd.	Madho, (m.), 26, <i>Driller.</i>	Iron ore.	Deceased was drilling in an old shot-hole containing a misfired charge of explosive. An explosion occurred and he received injuries from which he died 11 days later. The accident was due to the negligence of the blasting foreman who was dismissed. Inspection and inquiry made.
142	19th July, 4-30 A.M.	Bararoo mine, Jalgora P. O., Bihar and Orissa.	East Indian Coal Co., Ltd.	Gobiuda Nair, (m.), 32, <i>Shot-firer</i> ; Behari Singh, (m.), 26, <i>Driller.</i>	Coal	The deceased were fatally burned by the accidental ignition of about 2 lb. of compressed gunpowder. The accident would not have occurred if the deceased had complied with the standing instruction that no lamp shall be brought during charging operations within 15 feet of the explosives. Inspection and inquiry made.
143	9th November, 3-15 A.M.	Bawdwin mine, Nambu P. O., Burma.	Burma Corporation Ltd.	Ravilall, (m.), 22, <i>Miner.</i>	Lead- silver.	Deceased and two others were drilling in an old shot-hole by means of a handhammer power drill when an explosion of an undiscovered misfired shot occurred, killing deceased and injuring the two other men. Drilling in an old shot-hole was prohibited at the mine. Inspection and inquiry made.

APPENDIX II—*contd.*

List of Fatal Accidents, 1925—*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 wrought.	Cause of accident and remarks.
BY EXPLOSIVES—(19 deaths)—<i>concl'd.</i>						
144	2nd December, 10-30 A.M.	Mokpalimmine, Mokpali P. O., Burma.	Public Works Department (Government of Burma).	Kander Swami, (m.), 35, <i>Labourer.</i>	Stone	Deceased dropped a heavy brass tamping rod into a vertical shot-hole in a quarry which had just been charged with a cartridge of gelignite in the bottom and about $\frac{1}{2}$ lb. of loose gunpowder above. The charge exploded. Deceased was thrown to the floor of the quarry, a distance of 25 feet and sustained a fractured skull from which he afterwards died. Inspection and inquiry made.
145	11th December, 1-45 P.M.	Alkusa South mine, Kusunda P. O., Bihar and Orissa.	Raneegunge Coal Association, Ltd.	Birbal Roy, (m.), 23, <i>Coal-cutter.</i>	Coal	In spite of being warned by one of his fellow workmen deceased entered a working gallery where a gunpowder shot had been lighted. The charge exploded and he was killed instantly. Inspection and inquiry made.
146	26th December, 5 P.M.	Gaslitau mine, Sijua P. O., Bihar and Orissa.	New Maubhum Coal Co., Ltd.	Osman Khan, (m.), 35, Bellore Muhamamad, (m.), 20, <i>Coal-cutters.</i>	Coal	One of the deceased took about 3 lb. of compressed gunpowder cartridges from a canister and placed the gunpowder in a basket near an open lamp. It was ignited and the deceased were fatally burned. The accident points to the necessity for great care in the handling of explosives. Inspection and inquiry made.
HAULAGE—(15 deaths).						
147	18th January, 8-30 A.M.	Newton Chickli mine, Parasia P. O., Central Provinces.	Newton Chickli Collieries, Ltd.	Abdul Ghafur, (m.), 25, <i>Coal-cutter.</i>	Coal	Whilst deceased and six other persons were ascending an incline, a train of sixteen tubs which was being lowered over the top of the incline ran wild due to the rope breaking. The run-away tubs struck deceased and killed him instantly. Three other persons were seriously injured. Inspection and inquiry made. (See Report, page 24).
148	20th February, 4-30 P.M.	Netra mine, Katangjhri P. O., Central Provinces.	Indian Manganese Co., Ltd.	Tothal Bingwar, (m.), 50, <i>Labourer.</i>	Manga- nese.	An empty tub was being pulled up a self-acting incline at such a speed that it was drawn right up to the brake wheel. Deceased who was standing near the wheel was struck by the tub and fatally injured. Inspection and inquiry made.

149	1st March, 4 A.M.	Jharia Khas mine, Jharia P. O., Bihar and Orissa	Standard Coal Co., Ld	Balchand Rout, (m.), 35, <i>Trolleyman.</i>	Coal	Deceased was riding on a train of loaded tubs when he fell in front of the train and received injuries from which he died. He was not authorised to ride on the tubs. Inspection and inquiry made.
150	3rd March, 10-35 A.M.	Sendra mine, Bamejora P. O., Bihar and Orissa.	Sendra Coal Co., Ld	Bodhan Roy Koiri, (m.), 42, <i>Coal-cutter.</i>	Coal	Deceased was killed by a set of 5 loaded tubs which ran wild on a haulage incline through the breaking of a coupling. The accident points to the desirability of regular examination of all couplings, chains, ropes, etc. Inspection and inquiry made.
151	28th March, 11-30 A.M.	Chasnalla mine, Pathardibi, P. O., Bihar and Orissa.	Lodna Colliery Co., (1920) Ld.	Mongla Bauri, (m.), 29, <i>Hookman.</i>	Coal	Whilst a train of six loaded tubs was being hauled up a gradient of 1 in 2 a coupling chain on the first tub fractured allowing four tubs to run wild. Deceased was run over and killed. The accident was due to a defective "drag." Inspection and inquiry made.
152	28th April, 8-30 P.M.	Kurkend mine, Kusunda P. O., Bihar and Orissa.	Marine Coal Co., Ld.	Prasadi Barhi, (m.), 15, <i>Haulage assistant.</i>	Coal	Deceased, who was sitting on the side of a haulage road while the haulage was in motion, was killed by an empty tub which was overturned. Inspection and inquiry made.
153	18th June, 6-30 A.M.	Sripore mine, Kalipahari P. O., Bengal.	Lodna Colliery Co., (1920) Ld.	Jasoda Korani, (f.), 39, <i>Coal-carrier.</i>	Coal	Deceased was sitting on an underground endless rope haulage road when she was run over and killed. Inspection and inquiry made.
154	10th July, 11-15 A.M.	Sitalpur mine, Dishergarh P. O., Bengal.	Bengal Coal Co., Ld.	Nuna Bauri, (m.), 19, <i>Trolleyman.</i>	Coal	Whilst a train of empty tubs was being lowered down an incline, the five leading tubs became uncoupled and ran wild. Deceased, who was sitting at the entrance to a level, failed to get clear. He was struck by the front tub and killed instantly. Inspection and inquiry made.
155	29th July, 10-30 A.M.	Argala mine, Rangarh P. O., Bihar and Orissa.	Bengal Nagpur Railway Co.	Sridayal Singh, (m.), 42, <i>Chaprassi.</i>	Coal	Whilst a train of six loaded wagons was being hauled out of a quarry up a slope of 1 in 3 one of the coupling hooks between the second and third wagons broke. The "drag" came into action, but the wagon to which it was attached turned completely over and its coupling fell off. The four wagons ran wild to the foot of the slope. Deceased was sitting near the foot of the slope, and had he remained there he would have escaped injury. In attempting to cross the line he was struck by one of the tubs and fatally injured. Inspection and inquiry made.
156	7th August, 10-30 A.M.	Bararee mine, Jalgora P. O., Bihar and Orissa.	East Indian Coal Co., Ld.	Sakha Ram Chamar (m.), 40, <i>Coal-cutter.</i>	Coal	Deceased was sitting at the corner of a branch level when an empty tub which was being lowered by hand on the haulage incline ran wild and struck deceased who sustained a compound fracture of the right leg and other injuries. He died ten days afterwards of blood poisoning. The tub was being lowered by a miner against orders. Inspection and inquiry made.

APPENDIX II—*contd.*

List of Fatal Accidents, 1925—*contd.*

Serial number.	Date and hour of accidents.	Name and situation of mine.	Name and owner.	Name, sex, age and occupation of person killed.	Name of mineral wrought.	Cause of accident and remarks.
157	3rd September, 3 A.M.	Katras mine, Katrasgarh P. O., Bihar and Orissa.	Burrakur Coal Co., Ld.	Ram Kissun Mahato, (m.), 30, Hookman.	Coal	Deceased got in the way of a set of full tubs which upset at the bottom of a jig haulage. He sustained a severe fracture of the leg and died thirteen days afterwards. Inspection and inquiry made.
158	7th September, 8-30 P.M.	Chandametta mine, Parasia P. O., Central Provinces.	Pench Valley Coal Co., Ld.	Lankha Bhoieran, (f.), 30, Labourer.	Coal	Deceased, whilst going down the main haulage road of an Incline, was struck by loaded tubs which ran wild as a result of the breaking of the draw-bar of the second tub of a set of six. She was fatally injured, while three others escaped with slight injuries. Inspection and inquiry made.
159	21st September, 3-30 P.M.	Central Kurkend mine, Kusunda P. O., Bihar and Orissa.	Central Kurkend Coal Co., Ltd.	Pancham Chamar, (m.), 22, Trolleyman.	Coal	Deceased was riding without permission on a train of loaded tubs which was being hauled up an incline, when one of the tubs became derailed. He fell between the tubs and was killed almost instantly. The accident was due to breach of special rule 16. Inspection and inquiry made.
160	14th October, 5-30 A.M.	Lodna mine, Jharia P. O., Bihar and Orissa.	Lodna Colliery Co. (1920) Ltd.	Isarin Passi, (m.), 28, Trolleyman.	Coal	Deceased lay down on the side of a haulage road and fell asleep with his leg over one of the rails. He was run over and severely injured by a loaded train of tubs which was being drawn up the incline. He died seven days later. Persons should not sleep in a mine, and should not rest in dangerous places. Inspection and inquiry made.
161	24th December, 4-30 A.M.	Kustore North mine, Kusunda P. O., Bihar and Orissa.	Baneegunge Coal Association, Ltd.	Sahabdin, (m.), 30, Trolleyman.	Coal	Deceased was riding on a 2½ ton mine wagon underground for the purpose of operating the brake, when the wagon became derailed at a crossing. He was thrown off and sustained fatal injuries. Inspection and inquiry made.

HAULAGE—(15 deaths)—*concl.*

BY UNDERGROUND MACHINERY—(3 deaths).

162	11th June, 2-30 A.M.	Bararee mine, Jeaigora P. O., Bihar and Orissa.	East Indian Coal Co., Ltd.	Karam Elahi, (m.), 25, <i>Machineman.</i>	Coal	Whilst a bar coalcutter was cutting across a gallery rising at 1 in 4, the back stay gave way and the machine slipped backwards for a distance of 20 feet. Deceased, who was standing at the side of the machine holding the haulage post, was caught by the cutting bar and killed instantly. The accident points to the need for great care in setting the stays which hold a coalcutting machine up to its work. Inspection and inquiry made. (See Report, page 25).
163	18th August, 10-45 A.M.	Bankola mine, Ukhra P. O., Bengal.	Barrakur Coal Co., Ltd.	Abdul Karim, (m.), 32, <i>Machineman.</i>	Coal	Whilst deceased was holding the anchor prop of a chain coal cutting machine the prop slipped and fell with deceased on the jib. His leg was caught by the picks, drawn into the machine, and severed from his body. He died shortly after. In fixing anchor props, a hole sufficiently deep should be made so that there is no necessity to hold the prop till the strain is on. If this had been done, the accident would not have occurred. Inspection and inquiry made.
164	8th September, 10-30 P.M.	South East Baraboni mine, Charanpur P. O., Bengal.	Maharaja of Cossim- bazar.	P. Khandam, (m.), 26, <i>Pumpman.</i>	Coal	Whilst deceased was holding a lamp so as to illuminate the bar of a coal-cutting machine the stay-prop on which he was leaning slipped, causing him to fall on to the revolving bar. He received injuries from which he died two days later. Persons working coal-cutters should not stand near the cutting bars or chains when they are in motion. Inspection and inquiry made.

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SUNDRIES UNDERGROUND—(12 deaths).

165	6th March, 9 A.M.	Daroolah mine, Pandaveswar P. O., Bengal.	New Kenda Coal Co., Ltd.	Nondu Chamer, (m.), 21, <i>Coal-cutter.</i>	Coal	Deceased was standing on a ladder levering down some roof coal by means of a crow-bar, when the crow-bar slipped and he fell a distance of six feet on to some lumps of coal. He was killed instantly. Inspection and inquiry made.
166	28th March, 3-0 P.M.	Kharkharee and Mohespur mine, Katrasgarh P. O., Bihar and Orissa.	Kharkharee Colli- eries Ltd.	Sadhu Bilaspuri, (m.), 40, <i>Coal-cutter.</i>	Coal	Deceased who was supposed to have had an epileptic fit fell over a fence into a gallery 13 feet below the place where he was working. He died from shock nine hours later. The fence provided was inadequate. Inspection and inquiry made.

APPENDIX II—contd.

List of Fatal Accidents, 1925—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 wrought.	Cause of accident and remarks.
SUNDRIES UNDERGROUND—(12 deaths)—contd.						
167	11th April, 7 A.M.	Benahir mine, Jharia P. O., Bihar and Orissa.	Standard Coal Co., Ld.	Kusmi Kumarin, (f), 35 Labourer.	Coal	Deceased was killed by an empty tub which was being lowered down an incline by hand and which broke away and crushed deceased against the side of the road. The accident was due to carelessness on the part of a fellow workman. Inspection and inquiry made.
168	29th April, 11 P.M.	Bagdigi mine, Jharia P. O., Bihar and Orissa.	Villiers Ld.	Akha Singh, (m.), 30 Coal-cutter.	Coal	Deceased, whilst retiring without a light from a place in which the fuse of a shot had been lighted, fell over a prop and sustained a fracture of the base of the skull from which he afterwards died. Inspection and inquiry made.
169	7th May, 2-30 A.M.	Patmohna, Sitarampur P. O., Bengal.	Patmohana Collieries Ld.	Lakhoo Manjhi, (m), 24, Coal-cutter.	Coal	Deceased was found drowned with his face downwards in a shallow pool of water which had collected at the face of a gallery in which he had been working. He was said to have been subject to periodical fits of epilepsy. Inspection and inquiry made.
170	16th May, 3 A.M.	Benahir mine, Jharia P. O., Bihar and Orissa.	Standard Coal Co., Ld.	Kamal Shaw, (m), 35, Labourer.	Coal	Deceased was loading coal from a heap 8 feet high in a seam dipping at 1 in 12, when a piece of coal $3\frac{1}{2}' \times 2' \times 1'$ thick, rolled off the top of the heap on to his leg, crushing it. He died twenty hours later. Inspection and inquiry made.
171	1st July, 10 A.M.	Kurhulbaree mine, Giridih P. O., Bihar and Orissa.	East Indian Railway	Nirpat Dosadh, (m.), 23, Coal-cutter.	Coal	In a seam 15 feet thick, the top 5 feet of coal was being worked using a band of stone, which was supported by timber, as a platform. The platform collapsed and deceased received injuries by jumping off the platform to a heap of rock. He died from tetanus fifteen days later. The use of a middle band of stone as a platform is not good practice. Inspection and inquiry made.

172	5th September, 4-31 P.M.	Bawdwin mine, Namtu P. O., Burma.	Burma Corporation Ltd.	Low Lee, (m.), 30, Trucker.	Lead- silver.	Whilst deceased was standing on a ladder and attempting to open the door covering the top of the ladder-way, he slipped and the door fell back and knocked him off the ladder. He fell a distance of 10 feet and died from his injuries two days later. Inspection and inquiry made.
173	30th September, 2 P.M.	Kongon mine, Kongon P. O., Assam.	Nazira Coal Co., Ltd.	Anonto Barahi, (m.), 55, Coal-cutter.	Coal	Whilst deceased was attempting to get clear of some coal which he had pulled down he fell and received injuries from which he died two hours later. Inspection and inquiry made.
174	29th November, 5 P.M.	Hermyingyi mine, Hermyingyi P. O., Burma.	Burma Finance and Mining Co., Ltd.	Low Sing Fatt, (m.), 43, Miner.	Tin and Wolfram.	Deceased entered an abandoned adit and fell down a winze. He sustained injuries which proved fatal.
175	23rd December, Between 3 & 4 P.M.	Hermyingyi mine, Hermyingyi P. O., Burma.	Burma Finance & Mining Co., Ltd.	Chong Tai, (m.), 32.	Tin and Wolfram.	Deceased entered a disused adit, and, whilst engaged in breaking down ore from a vein, was struck down and fatally injured by a fall of rock from the side of the adit.
176	29th December, 12 A.M.	Parokya mine, Ganwan P. O., Bihar and Orissa.	F. F. Chrestien & Co., Ltd.	Kheman Gope, (m.), 45, Driller.	Mica	Deceased was at the bottom of a pit, 10 feet deep and 3 feet in diameter, and handed a piece of stone, weighing about 40-lbs., to a companion who was seated on a cross timber 6 feet above. The stone slipped from their hands and striking deceased on the head killed him instantly. Inspection and inquiry made.

BY SURFACE MACHINERY—(2 deaths).

177	11th February, 11 P.M.	Gua, Gua P. O., Bihar and Orissa.	Indian Iron & Steel Co., Ltd.	Arkito, (m.), 26, Labourer.	Iron	Deceased went inside a fence in order to oil machinery when a portion of his clothing was caught in the blades of a rapidly revolving fan. He fell against the fan and, being struck by the blades was killed instantly. If the fencing had been erected in such a position that oiling could be done from outside the fence, the accident would have been avoided. Inspection and inquiry made. (See Report, page 26).
178	4th March, 6-30 A.M.	Chargaon mine, Rambek P. O., Central Provinces.	T. Kooerji Bhoja	Dasria Mahar, (m.), 32, Labourer.	Manga- nese.	With the object of oiling an engine in motion deceased went inside the fencing. His clothing was caught by the key of the crank shaft and he was dragged round the shaft. He received fatal injuries and died within a few hours. The accident would have been avoided if proper arrangements had been made to oil the machinery. It should not have been oiled by hand while in motion. Inspection and inquiry made.

APPENDIX II—*contd.*

List of Fatal Accidents, 1925—*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 wrought.	Cause of accident and remarks.
ON SURFACE RAILWAYS AND TRAMWAYS BELONGING TO THE MINE—(5 deaths).						
179	7th May, 3-30 P.M.	Bokaro mine, Bokaro P. O., Bihar and Orissa.	East Indian and Bengal-Nagpur Railways.	Ganga Moti Bengharin, (f.), 22, Labourer.	Coal	Whilst deceased was clearing coal from a railway siding she was run over and killed by a railway wagon. Proper warning of shunting operations might have prevented the accident. Inspection and inquiry made.
180	19th May, 3-15 P.M.	MacLellan mine, Manharpur P. O., Bihar and Orissa.	Bengal Iron Co., Ltd.	Itwari, (f.), 30, Labourer.	Iron ore	Whilst walking by the side of a surface tram line deceased was overcome by faintness and fell in front of a moving tub. She sustained injuries which subsequently proved fatal. Inspection and inquiry made.
181	18th August, 8-30 A.M.	Tikak mine, Margherita P. O., Assam.	Assam Railways and Trading Co., Ld.	Arjoon Tanti, (m.), 25, Labourer.	Coal	Whilst deceased was walking down a self-acting incline on the surface he was knocked down and killed by a train of loaded tubs. If he had used the path provided the accident would not have occurred. Inspection and inquiry made.
182	5th September, 4 A.M.	Chowrassie mine, Dishergarh P. O., Bihar and Orissa.	Equitable Coal Co., Ld.	Mona Bauri, (m.), 13, Labourer.	Coal	Whilst deceased was lying asleep on a railway siding at night he was run over by a wagon which was being hand-shunted. If sufficient warning had been given or if deceased had not been so foolish as to sleep on the line this accident would have been avoided. Inspection and inquiry made.
183	21st November, 5 P.M.	Tikak mine, Margherita P. O., Assam.	Assam Railways and Trading Co., Ld.	Kunjaram Goala, (m.), 45, Rope Mistry.	Coal	Deceased had been riding on a set of tubs which had got partly out of control on a surface self-acting incline. He jumped off just as the set was suddenly stopped. The resultant jerk caused one of the tubs to be thrown over on top of him and he died two days later. Inspection and inquiry made.

BY ELECTRICITY—(2 deaths).

184	30th June, 12 NOON.	Banksimulla mine, Charanpur P. O., Bengal.	Bengal Coal Co., Ld.	Baidya Nath Naik, (m.), 30, <i>Electric Mistry.</i>	Coal	Deceased was disconnecting lighting wires carrying alternating current at 110 volts without first cutting off pressure from them, and was electrocuted. The accident would not have occurred if deceased had taken the precaution to cut off all pressure from the wires before handling them. Inspection and inquiry made.
185	16th August, 6-30 A.M.	Kendwadih mine, Knsunda P. O., Bihar and Orissa.	East Indian Coal Co., Ld.	Fagu Dosadh, (m.), 35, <i>Banksman.</i>	Coal	Deceased climbed up a post carrying alternating current at 2,200 volts, and was electrocuted. Inspection and inquiry made.
MISCELLANEOUS ON SURFACE—(15 deaths).						
186	25th January, 4-15 P.M.	New Kessurgurah mine, Nudkhurkee P.O., Bihar and Orissa.	New Kessurgurah Coal Co., Ld.	Rohini Bhuiyan, (f.), 16, <i>Coal-carrier.</i>	Coal	Deceased was found drowned in a subsidence about 25-foot deep. Inspection and inquiry made.
187	27th January, 5-45 P.M.	Kandivli mine, Malad P. O., Bombay.	Director of Develop- ment, Bombay.	Kudadad-Sherina- hamad, (m.), 20, <i>Labourer.</i>	Stone & Murrum.	Deceased fell from the top of a quarry and was killed.
188	12th February, 1 P.M.	Kutchidhana mine, Ramakona P. O., Central Provinces.	Indian Manganese Co., Ld.	Behari Singh, (m.), 40, <i>Mason.</i>	Manga- nese.	Deceased was employed in building the walls of a bungalow which were undergoing alterations. Whilst attempting to cross from one wall to another, he stepped on the ceiling, the latter broke and he fell through to the floor 14 ft. below. He sustained injuries from which he died one and a half hours later. This accident was due to the carelessness of deceased. Inspection and inquiry made.
189	13th February, 5-30 P.M.	Kujama mine, Jharis P. O., Bihar and Orissa.	Kujama Colliery Co.	Munshi Ram, (m.), 55, <i>Contractor.</i>	Coal	Deceased was assisting in the raising of a heavy spur wheel and drum shaft up to an engine foundation when the spur wheel tilted and crushed him against a wooden beam, causing injuries from which he afterwards died. Inspection and inquiry made.
190	15th February, 5 P.M.	Shanthay mine, Palaw P. O., Burma.	M. Haniff	Leong Gyi, (m.), 30, <i>Labourer.</i>	Tin ore	Deceased was engaged in washing ore in a water channel, 16 feet deep, in alluvial ground. The side of the cutting collapsed and buried him, causing his death from suffocation. The accident would have been avoided if the side of the cutting had been given a sufficient slope.
191	27th March, 2-15 P.M.	Jamadoba mine, Jaulgora P. O., Bihar and Orissa.	Tata Iron and Steel Co., Ltd.	Hari Ram Mahato, (m.), 32, <i>Winding engine- man.</i>	Coal	Deceased succumbed to burning injuries received in an enginehouse which was supposed to have been set on fire by an accidental ignition of gunpowder. Such accidents would be prevented if all unused gunpowder at the end of a shift was taken direct to the magazine. Inspection and inquiry made.

APPENDIX II—contd.

List of Fatal Accidents, 1925—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 wrought.	Cause of accident and remarks.
MISCELLANEOUS ON SURFACE—(15 deaths)—contd.						
192	14th April, 10-15 A.M.	Dutla Chai mine, Jamai P. O., Central Provinces.	R. S. Mathura- prosad Motilal & Co.	Lalchand Sharma, (m.), 35, Contractor.	Coal	Whilst deceased was walking on ground overlying old mine workings, an area about 28 feet in diameter subsided under him. He was completely buried and after a search for three days his body was recovered at a depth of 22 feet. Inspection and inquiry made. (See Report, page 27).
193	8th May, 7-30 P.M.	Argada mine, Ramgarh P. O., Bihar and Orissa.	Bengal Nagpur Railway Co.	Ramdhani Bilash- puri, (m.), 25, Earth-cutter.	Coal	Deceased was cutting over-burden on the edge of a quarry, 12 feet deep, when he slipped and fell into the quarry. A crowbar with which he was working fell with him and inflicted injuries on him which proved fatal 12 hours afterwards. Inspection and inquiry made.
194	17th May, 12 P.M.	Mosaboni mine, Rakha Mines P. O., Bihar and Orissa.	Indian Copper Cor- poration Ltd.	Jit Bahadur, (m.), 30, Labourer.	Copper	An excavation was being made over an inclined shaft so that the entrance could be walled and arched when a part of the roof of the shaft collapsed and deceased was buried in the subsidence. He died of suffocation before he could be rescued. Inspection and inquiry made.
195	29th May, 11-30 A.M.	Shivrajpur mine, Shivrajpur P. O., Bombay.	Shivrajpur Syndi- cate, Ltd.	Anappa Bhimappa, (m.), 40, Labourer.	Manga- nese.	Deceased was engaged in unloading iron sheets from a tipping wagon when the body of the wagon tipped on the wrong side, and the sheets fell upon him. His spine was fractured and he died within a few minutes. Inspection and inquiry made.
196	20th June, 6-45 A.M.	Kanbank mine, Kanbank P.O., Burma.	Kanbank (Burma) Wolfram Mines Ld.	Chalaya, (m.), 35, Labourer.	Tin and Wolfram.	An alluvial bank, 40 feet high, was being sluiced down by means of hydraulic monitors, and deceased was engaged in picking out stones from a screen at the foot of the elevator, 120 feet distant. A fall of ground larger than was expected took place and filled the suction pit in which deceased worked. He was suffocated.

197	19th July, 11 A.M.	Bagdigi mine, Jharua P.O., Bihar and Orissa.	Villiers Ld.	Raghu Singh, (m.), 23, <i>Boiler fireman.</i>	Coal	Deceased fell into a boiler feed tank and was severely scalded by the water which had become heated by escaping steam. He was attempting to stop a leak in the boiler injector and fell over the fence which was inadequate. Inspection and inquiry made.
198	17th October, 10 A.M.	Sukli mine, Tirodi P.O., Central Provinces.	Central India Mining Co., Ld.	Binjoower Chamar, (m.), 35, <i>Miner.</i>	Manganese.	Whilst engaged in sloping the side of an open-cast working, deceased over-balanced and fell on a bench 10 feet below. In falling he was severely injured by a crow-bar he was holding at the time. He died ten hours later. Inspection and inquiry made.
199	21st December, 11 A.M.	Bhangin mine, Japla P.O., Bihar and Orissa.	Sone Valley Portland Cement Co., Ld.	Mungia, (f.), 60, <i>Labourer.</i>	Limestone.	Whilst deceased was clearing stone at the foot of a quarry-face, a block of stone rolled down from the top and fell a few feet from her. As she ran away she tripped, falling on another block of stone and receiving injuries which proved to be fatal. Inspection and inquiry made.
200	22nd December, 9-30 A.M.	Bankola mine, Ukhara P.O., Bengal.	Burrakur Coal Co., Ld.	Bahadur Sinha, (m.), 40, <i>Labourer.</i>	Coal	Whilst the chimney of a vertical boiler was being raised into position, part of the wall of the boiler-house collapsed. The falling masonry fell on deceased and killed him. Another person was seriously injured. Inspection and inquiry made.

APPENDIX II—contd.

List of Fatal Accidents, 1925—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 wrought.	Reason for exclusion.	Cause of accident and remarks.
DEATHS NOT INCLUDED IN THE STATISTICS. (35 deaths.)							
1	3rd January, 4-0 P.M.	Borjan and Kongon mine, Kongon P. O., Assam.	Nazira Coal Co., Ld.	Durga Bahadur, (m.), 21, Labourer.	Coal	Not a mining accident.	Deceased was engaged in felling a tree, 60 feet high and 16' in diameter, when it fell on him and killed him. Inspection and inquiry made.
2	4th January, 6 A.M.	Dishergharh (West) mine, Dishergharh P. O., Bengal.	Equitable Coal Co., Ld.	Choones Mejhian, (f.), 16, Coal-carrier.	Coal	Not a mining accident.	The body of deceased was found in a well. Inspection and inquiry made.
3	12th January, 1-30 P.M.	Barkui mine, Farasia P. O., Central Provinces.	Pench Valley Coal Co., Ld.	Sahongi Gondni, (f.), 20.	Coal	Not employed.	A gang of five women were, for their own purposes, digging white clay in an abandoned coal quarry, when a mass of sand stone, 7'x3'x3' thick, fell on deceased from a height of about 9 ft., killing her instantly. These persons should not have entered the quarry. Inspection and inquiry made.
4	3rd February, 5-30 P.M.	Chora mine, Chora P. O., Bengal.	Chora Collieries Ld.	Ramabatar Dosadh, (m.), 35, Mathura Dosadh, (m.), 30, Coal-cutters; Mohangoo Dosadh, (m.), 22, Labourer.	Coal	Not a mining accident.	Two of the deceased were making gunpowder cartridges in a hut, when the third, Mohangoo Dosadh, entered and ignited the loose gunpowder by a lighted cigarette. They were badly burnt about the body and succumbed to their injuries. The accident might not have occurred if the cartridges had been made in a hut set apart for the purpose. Inspection and inquiry made.
5	4th February, 3-40 P.M.	Central Jinagora mine, Jharia P. O., Bihar and Orissa.	Central Jinagora Coal Co.	Fagoo Mushaher, (m.), 30, Labourer.	Coal	Not a mining accident.	Four wagons were fly shunted into a railway siding by a locomotive. The wagons struck some stationary wagons and moved the latter. Deceased, whilst attempting to cross the siding, was crushed between the wagons and the bufferstop. He was killed instantly. Inspection and inquiry made.

6	12th March, 8 A.M.	Bokaro mine, Bokaro P. O., Bihar and Orissa.	East Indian and Bengal Nagpur Railways.	Dhelia Chama- rin, (f.), 13,	Coal	Not em- ployed.	Deceased was stealing coal from the outcrop of a seam when she was killed by a fall of earth and coal. Inspec- tion and inquiry made.
7	20th March, 3-30 P.M.	Porascole mine, Ondal P. O., Bengal.	Bengal Coal Co., Ld.	Huto Mahato, (m.), 35, Coal-cutter.	Coal	Not a mining accident	Whilst a number of persons were sheltering from a storm in a hut, the thatched roof of the hut was blown off and fell on a fire which was burning near the doorway. Three persons were severely burned and deceased succumbed to his injuries. Inspection and inquiry made.
8	26th March, 7-30 A.M.	Sodepur mine, Sitarampur P. O., Bengal.	Bengal Coal Co., Ld.	Kristo Hari, (m.), 22, Sweeper.	Coal	Not a mining accident	Deceased was severely injured by the explosion of a detona- tor which was illegally in his possession. He died nine hours later. Inspection and inquiry made.
9	27th March, 3-30 P.M.	Bankola mine, Ukhra P. O., Bengal.	Burrakur Coal Co., Ld.	Ganga Gope (m.), 40, Cartridge maker.	Coal	Not a mining accident	Whilst deceased was preparing paper cartridge cases on the top of a gunny bag impregnated with gunpowder, the bag was ignited by a cigarette which he was smoking. He received burns from which he died five days later. Deceased was to blame as he should not have been smok- ing. Inspection and inquiry made.
10	18th April, 3 P.M.	Damagurria mine, Kulti P. O., Bengal.	Damagurria Co., Ld.	Gopal Tanti. (m.), 3. Nil.	Coal	Not em- ployed.	Whilst deceased was playing on a surface endless haulage road, he was knocked down and killed by a train of tubs. The haulage road which passed close to a number of huts should have been substantially fenced to prevent children straying on the line. Inspection and inquiry made.
11	20th April, 8 P.M.	Kandri mine, Monsar P. O., Central Pro- vinces.	M. A. Razaq.	Bhagwan Patel, (m.), 45, Contractor.	Manga- nese.	Not a mining accident.	Whilst at work in an office deceased upset a lighted lamp and set fire to his clothing. He sustained serious burns and died in hospital on the following day. Inspection and inquiry made.
12	24th May, 3 P.M.	Sijua mine, Sijua P. O., Bihar and Orissa.	Tata Iron and Steel Co., Ld.	Mungli Kamin, (f.), 20, Coal-carrier.	Coal	Not a mining accident.	Deceased fell into a properly fenced well, and was drown- ed.
13	7th June, 8 A.M.	Choitodih mine, Katragarh P. O., Bihar and Orissa.	Burrakur Coal Co., Ld.	Jathu Bhuiya. (m.), 25, Trolley man.	Coal	Not a mining accident.	Deceased was drowned whilst bathing in a quarry. Ins- pection and inquiry made.
14	11th June 12 noon	Taungzon mine, Taungz on P. O., Burma.	Osman Musti Khan.	Mahlay, (f.), 45,	Stone	Not em- ployed.	While walking on a public road deceased was struck and killed by a piece of stone which flew from a shot fired in a quarry about 300 feet away. Inspection and inquiry made.

APPENDIX II—contd.

List of Fatal Accidents, 1925—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 wrought.	Reason for exclusion.	Cause of accident and remarks.
DEATHS NOT INCLUDED IN THE STATISTICS—contd.							
(35 deaths).							
15	28th June, about 1 P.M.	Budroochuck mine, Sijua P. O., Bihar and Orissa.	Budroochuck Coal Mining Co., Ld.	Unknown, (m.), about 18,	Coal	Not employed.	With the object of getting a bird's nest, deceased climbed a tower carrying a 6,600 volt transmission line. His head came into contact with one of the conductors and he received a shock of approximately 3,800 volts to earth. He fell to the ground and was found dead near the base of the tower. Inspection and inquiry made.
16	17th July, 5 P.M.	Sijua mine, Sijua P. O., Bihar and Orissa.	Tata Iron & Steel Co., Ld.	Maharsing Koiri, (m.), 7, Not employed.	Coal	Not a mining accident.	One of the deceased took a quantity of gunpowder into a dwelling house where it was accidentally ignited, burning the two deceased so severely that they died shortly afterwards. Inspection and inquiry made.
17	28rd July, 6-30 P.M.	Loyabad mine, Bansjora P. O., Bihar and Orissa.	Burrakur Coal Co., Ld.	Bisal Tanti, (m), 38, Coal-cutter.	Coal	Not a mining accident.	Deceased was drying gunpowder over a fire when the gunpowder exploded and he was severely burned. He died seven days later. Gunpowder should not be dried over a fire. Inspection and inquiry made.
18	24th July, 11-30 A.M.	Goneshpur mine, Phularitand P. O., Bihar and Orissa.	Economic Coal Co., Ld.	Ghesiram Gora, (m.), 40, Coal-cutter.	Coal	Not a mining accident.	Whilst deceased was drying gunpowder over a fire in a dwelling house the gunpowder caught fire. He was severely burned and died four days later. Gunpowder should not be dried over a fire. Inspection and inquiry made.
19	6th September, 1 P.M.	Hteinthit mine, Tavoy P. O., Burma.	Mg. Maung	Ba Sine, (m), 45, Tributor.	Tin & wolfram.	Not a mining accident.	Deceased was cutting grass on the side of a hill when a landslide occurred and he was buried and suffocated.
20	6th September, 1-30 P.M.	Patiana mine, Kulti P. O., Bengal.	J. C. Banerjee.	Subria Chamarin, (f), 30, Coal-carrier.	Coal	Not a mining accident.	Deceased was drowned whilst bathing in an abandoned quarry. Inspection and inquiry made.

21	8th September, 12 A.M.	Phularitand mine, Katragarh P. O., Bihar and Orissa.	Phularitand Coal Co. Ld.	Dhanai Phani- kan, (f.), 25, Coal-carrier.	Coal	Not a mining accident.	Deceased fell into a well when drawing water and was drowned. Inspection and inquiry made.
22	12th September, 3 P.M.	Jharia Khas mine, Jharia P. O., Bihar and Orissa.	Standard Coal Co., Ld.	Imamoni Menh, (f.), 6.	Coal	Not em- ployed.	Deceased was drowned in a boiler feed tank. Inspection and inquiry made.
23	16th September, 7 A.M.	Mandree mine, Tharsa P. O., Central Provin- ces.	Central India Mining Co., Ld.	Paltin Gond, (f.), 22, Labourer.	Manga- nese.	Not a min- ing ac- cident.	Deceased was found drowned in an excavation containing water two feet deep. Inspection and inquiry made
24	18th Septem- ber, 5-20 P.M.	Bawdwin, Namtu P. O., N. Shan States, Burma.	Burma Corporation Ld.	Lee Way Chow (m.).	Lead- Silver.	Do.	Deceased was attempting to remove timber from a river in flood when the bed of the river collapsed due to old work- ings beneath it. His body was not recovered. Inspection and inquiry made.
25	23rd Septem- ber, NOON	Pandakanali mine, Bansjora P. O., Bihar and Orissa.	Burrakur Coal Co., Ld.	Sahidun Musal- main, (f.), 10.	Coal	Not em- ployed.	Deceased fell into an abandoned shaft and was drowned. The shaft was adequately fenced.
26	6th October	Kustore mine, Bansjora P. O., Bihar and Orissa.	Raneengunge Coal Association Ld.	Sarasatia Dha- rin, (f.), 5.	Coal	Do.	Deceased was playing near a surface tramline when she was struck by a loaded tub and knocked down. She died three days later.
27	15th October, 5 P.M.	Joyramdih mine, Nawagarh P. O., Bihar and Orissa.	Joyramdih Coal Co.	Dotlntin Bel- larin, (f.), 35 Labourer.	Coal	Not a mining accident.	Deceased was found drowned in a well. The well was suitably fenced.
28	24th October, 9 A.M.	East Mosla mine, Kalipahari P.O., Bengal.	East Mosla Colliery Co.	Srinati Baurin, (f.), 24.	Coal	Not em- ployed.	Deceased fell down a disused shaft and was drowned. Inspection and inquiry made.
29	3rd Novem- ber, 6 P.M.	Bulliar mine, Kusunda P. O., Bihar and Orissa.	East Indian Coal Co. Ld.	Bonshi Roy, (m) 30, Coal-cutter.	Coal	Not a min- ing ac- cident.	Whilst deceased and another man were making blasting cartridges in a miners' dwelling, about 4 lbs. of gunpow- der was ignited by the flame of an open oil lamp and they were burned severely. Deceased died twelve days later. If the gunpowder had been issued to the men in cartridge form the accident would have been avoided. Inspection and inquiry made.
30	3rd Decem- ber, 3 P.M.	Borjan mine, Kongon P. O., Assam.	Nazira Coal Co., Ld.	Kaloo Rai, (m) 30, Timber-cutter.	Coal	Not a min- ing ac- cident	Whilst a tree was being cut down it fell against and broke a branch of another tree. The branch struck deceased causing injuries which resulted in his death on the following day. Inspection and inquiry made.

APPENDIX II—*concl'd.*

List of Fatal Accidents, 1925—*concl'd.*

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 wrought.	Reason for exclusion.	Cause of accident and remarks.
DEATHS NOT INCLUDED IN THE STATISTICS— <i>concl'd.</i>							
31	22nd December, 12-30 P.M.	Simlabahal mine, Jharia P. O., Bihar and Orissa.	Bhalgora Coal Co., Ld.	Charamaon Gope, (m.), 25, <i>Pumpman.</i>	Coal	Not a mining accident	Deceased was drowned in a boiler feed tank containing 12 feet of water. Inspection and inquiry made.
32	24th December, 6 P.M.	New Kendah mine, Toposi P. O., Bengal.	New Kendah Coal Co., Ld.	Basan Kora, (m.), 20, <i>Coal-cutter.</i>	Coal	Not a mining accident	On his way from the magazine to the mine deceased took a canister containing gunpowder to his dwelling and opened it. The gunpowder was ignited by a naked light carried by deceased, resulting in burns which afterwards proved fatal. Inspection and inquiry made.
33	25th December, 1-30 P.M.	Loyabad mine, Bansjora P. O., Bihar and Orissa.	Burrakur Coal Co., Ld.	Mohadaia, (f.), 9.	Coal	Not employed.	It is presumed that deceased was sitting on the rails near an empty wagon standing in a siding, when by some means the wagon was set in motion. It ran over deceased, killing her instantly. Inspection and inquiry made.

APPENDIX II.

Table No. 2.

Statement of fatal and serious accidents in and about mines regulated by the Indian Mines Act, during the year 1925.

PROVINCE.	District and mineral field.	Total average number of persons employed daily.	FATAL ACCIDENTS.				SERIOUS ACCIDENTS.				DEATH-RATE PER 1,000 PERSONS EMPLOYED.		
			Number of separate fatal accidents.	NUMBER OF DEATHS.			Number of serious non-fatal accidents.	NUMBER OF PERSONS SERIOUSLY INJURED.			Below ground.	Above ground.	Below and above ground.
				Below ground.	Above ground.	Total deaths.		Below ground.	Above ground.	Total number of persons injured.			
Assam	Lakhimpur . . . Naga Hills . . . Sibsagar . . .	3,480	5	4	2	6	54	41	13	54	1.98	1.37	1.72
		703	2	2	...	2	...	...	...	...	5.30	...	2.84
	
	TOTAL	4,183	7	6	2	8	54	41	13	54	2.51	1.12	1.91
Baluchistan	Kalat . . . Loralai . . . Quetta, Pishin . . . Sibi, Khost . . .	...	...	...	...	...	...	...	...	...	...	...	...
	
		135	...	...	...	...	...	...	...	...	...	...	...
	650	1	1	...	1	4	2	2	4	2.78	...	1.54	
TOTAL	785	1	1	...	1	4	2	2	4	2.24	...	1.27	
Bengal	Bankura, Raniganj . . . Birbhum .. . Burdwan .. .	181	...	...	...	...	...	...	...	...	...	...	...
		97	...	...	...	...	...	...	...	...	...	...	...
		42,503	34	38	2	40	41	35	11	46	1.38	0.13	0.94
	TOTAL	42,781	34	38	2	40	41	35	11	46	1.37	0.13	0.93

APPENDIX II—*contd.*Table No. 2—*contd.*Statement of fatal and serious accidents in and about mines regulated by the Indian Mines Act, during the year 1925—*contd.*

PROVINCE.	District and mineral field.	Total average number of persons employed daily.	FATAL ACCIDENTS			SERIOUS ACCIDENTS.			DEATH-RATE PER 1,000 PERSONS EMPLOYED.				
			Number of separate fatal accidents.	NUMBER OF DEATHS.		Number of serious non-fatal accidents.	NUMBER OF PERSONS SERIOUSLY INJURED.		Below ground.	Above ground.	Below and above ground.		
				Below ground.	Above ground.		Total deaths.	Below ground.				Above ground.	Total number of persons injured.
COAL—<i>contd.</i>													
Central Provinces,	Hoshangabad	8	...	...	...	...	...	...	...	...	...
	Betul	125	...	...	...	...	...	...	...	...	...
	Chanda	1,909	1	1	...	1	4	4	...	4	0.77	...	0.52
	Chhindwara, Pench Valley.	5,477	5	5	1	6	23	15	8	23	1.32	0.60	1.10
	Narsinghpur, Mohpani.	1,449	1	1	...	1	2	...	2	2	1.26	...	0.69
	Yeotmal	214	1	1	...	1	1	1	...	1	15.62	...	4.67
	TOTAL	9,182	8	8	1	9	30	20	10	30	1.33	0.31	0.98
Punjab	Jhelum	1,165	2	2	...	2	3	4	...	4	2.95	...	1.72
	Mianwali	296	...	...	...	...	1	...	1	1	...	...	...
	Shahpur	118	...	...	...	...	...	...	...	...	...	...	...
	TOTAL	1,579	2	2	...	2	4	4	1	5	2.32	...	1.27
	GRAND TOTAL (COAL)	173,140	157	173	13	186	362	263	119	373	1.56	0.21	1.07

IRON ORE.

Bihar and Orissa.	Puri	...	...	...	...	...	...	...	...	...	...	...
	Singhbhum	2,905	3	1	2	3	9	1	8	9	0.55	1.82	1.63
	TOTAL	2,905	3	1	2	3	9	1	8	9	0.55	1.82	1.63

APPENDIX II—*contd.*Table No. 2—*contd.*

Statement of fatal and serious accidents in and about mines regulated by the Indian Mines Act, during the year 1925—*contd.*

PROVINCE.	District and mineral field.	Total average number of persons employed daily.	FATAL ACCIDENTS.			SERIOUS ACCIDENTS.			DEATH-RATE PER 1,000 PERSONS EMPLOYED.				
			Number of separate fatal accidents.	NUMBER OF DEATHS.		Number of serious non-fatal accidents.	NUMBER OF PERSONS SERIOUSLY INJURED.		Below ground.	Above ground.	Below and above ground.		
				Below ground.	Above ground.		Total deaths.	Below ground.				Above ground.	Total number of persons injured.
IRON ORE—<i>contd.</i>													
Burma . . .	Mandalay . . .	116	...	...	...	...	...	...	...	...	...	...
	Northern States. Shan	631	1	1	...	1	1	...	1	1	5.29	...	1.58
	TOTAL . . .	747	1	1	...	1	1	...	1	1	5.29	...	1.34
Central Provinces.	Drug . . .	55	...	...	...	...	...	...	...	...	...	...
	GRAND TOTAL (IRON ORE).	3,707	4	2	2	4	10	1	9	10	1.00	1.17	1.08
MANGANESE ORE													
Bombay . . .	Belgaum . . .	395	...	...	...	...	1	...	1	1	...	...	...
	Panch Mahals . . .	2,458	1	...	1	1	14	4	12	16	...	1.51	0.41
	TOTAL . . .	2,853	1	...	1	1	15	4	13	17	...	1.21	0.35
Central Provinces.	Balaghat . . .	9,316	2	1	1	2	4	1	3	4	0.13	0.53	0.21
	Bhandara . . .	3,209	...	...	...	...	...	...	...	...	...	...	...
	Chhindwara . . .	1,003	1	2	...	2	...	...	...	...	2.67	...	1.99
	Jubbulpore . . .	263	...	...	...	...	...	...	...	...	...	...	...
	Nagpur . . .	7,703	3	1	2	3	9	3	7	10	0.17	1.19	0.39
	TOTAL . . .	21,494	6	4	3	7	13	4	10	14	0.24	0.67	0.33

APPENDIX II—*contd.*Table No. 2—*contd.*Statement of fatal and serious accidents in and about mines regulated by the Indian Mines Act during the year 1925—*contd.*

PROVINCE.	District and mineral field.	Total average number of persons employed daily.	FATAL ACCIDENTS.			SERIOUS ACCIDENTS.				DEATH-RATE PER 1,000 PERSONS EMPLOYED.			
			Number of separate fatal accidents.	NUMBER OF DEATHS.		Number of serious non-fatal accidents.	NUMBER OF PERSONS SERIOUSLY INJURED.			Below ground.	Above ground.	Below and above ground.	
				Below ground.	Above ground.		Total deaths.	Below ground.	Above ground.				Total number of persons injured.
MANGANESE ORE—<i>contd.</i>													
Bihar and Orissa.	Singhbhum . . .	203	...	...	...	...	...	...	...	...	...	...
Madras . . .	Bellary . . .	199	...	...	...	...	...	...	...	...	...	...
	Vizagapatam . . .	1,417	...	...	...	1	...	1	1	...	...	...
	Kurnool . . .	23	...	...	...	...	...	...	...	...	...	...
	TOTAL . . .	1,639	...	...	...	1	...	1	1	...	...	...
	GRAND TOTAL (MANGANESE ORE.)	26,189	7	4	4	8	29	8	24	32	0.20	0.69	0.31
LEAD ORE.													
Burma . . .	Northern States. Shan	3,676	6	8	...	8	41	35	6	41	2.75	...	2.18
	Southern States. Shan	714	3	3	...	3	1	1	...	1	5.71	...	4.20
	Yamethin . . .	60
	GRAND TOTAL (LEAD ORE.)	4,450	9	11	...	11	43	36	6	42	3.15	...	2.47

APPENDIX II—contd.

Table No. 2.—contd.

Statement of fatal and serious accidents in and about mines regulated by the Indian Mines Act, during the year 1925—contd.

PROVINCE.	District and mineral field.	Total average number of persons employed daily.	FATAL ACCIDENTS.			SERIOUS ACCIDENTS.			DEATH-RATE PER 1,000 PERSONS EMPLOYED.				
			Number of separate fatal accidents.	NUMBER OF DEATHS.		Number of serious non-fatal accidents.	NUMBER OF PERSONS SERIOUSLY INJURED.		Below ground.	Above ground.	Below and above ground.		
				Below ground.	Above ground.		Total deaths.	Below ground.				Above ground.	Total number of persons injured.
WOLFRAM AND TIN ORE.													
Burma .	Mergui	3,094	2	1	1	2	...	...	...	0.46	1.07	0.65
	Tavoy	3,180	6	5	1	6	3	2	1	3	2.53	0.83	1.89
	Thaton	7
	Amherst	33
	GRAND TOTAL WOLFRAM AND (TIN ORE)	6,314	8	6	2	8	3	2	1	3	1.44	0.93	1.27
GOLD.													
Bihar and Orissa	Singhbhum	13	...	...	...	...	...	...	...	...	...	...
Madras	Anantapur	193	...	...	...	...	1	...	1	1	...	...
	GRAND TOTAL (GOLD).	206	...	...	...	...	1	...	1	1	...	...
CHROMITE ORE.													
Baluchistan	Quetta, Pishin	2	...	...	...	...	...	...	...	...	...	...
	Zhob	338	...	...	...	...	1	1	...	1	...	...
	TOTAL	340	...	...	...	...	1	1	...	1	...	...
Bihar and Orissa	Singhbhum	513	...	...	...	...	1	2	...	2	...	...
	GRAND TOTAL (CHROMITE ORE).	853	...	...	...	...	2	3	...	3	...	...

APPENDIX II—*contd.*Table No. 2—*contd.*Statement of fatal and serious accidents in and about mines regulated by the Indian Mines Act, during the year 1925—*contd.*

PROVINCE.	District and mineral field.	of Total average number persons employed daily.	FATAL ACCI- DENTS.			SERIOUS ACCI- DENTS.			DEATH-RATE PER 1,000 PERSONS EMPLOYED.		
			Number of separate fatal accidents.	NUMBER OF DEATHS.		Number of serious non- fatal accidents.	NUMBER OF PERSONS SERIOUSLY INJURED.		Below ground.	Above ground.	Below and above ground.
				Below ground.	Above ground.		Total deaths.	Below ground.				Above ground.	Total number of persons injured.
COPPER ORE.											
Bihar and Orissa	Singhbhum	322	1	1	1	...	...	...	...	4.27	3.11
Burma	Southern Shan States.	34	...	...	...	...	...	...	...	...	...
	GRAND TOTAL (COPPER ORE).	356	1	1	1	...	...	...	...	4.20	2.51
GEMS.											
Burma	Katha (Rubies, etc.)	899	...	...	...	1	1	...	1	...	...
MICA.											
Bihar and Orissa.	Manbhum	6	...	...	...	...	...	...	...	...	...
	Gaya	1,378	...	...	...	1	1	...	1	...	...
	Hazaribagh	11,026	6	6	...	6	4	5	1	6	0.83
	Monghyr	630	...	...	...	...	...	...	...	...	...
	Sambalpur	180	...	...	...	...	...	...	...	...	...
	TOTAL	13,220	6	6	...	6	5	6	1	7	0.67
Bengal	Bankura	57	...	...	...	...	...	...	...	...	...
Madras	Nellore	4,767	1	1	...	1	1	...	1	0.30	0.21
	Nilgiris	208	...	...	...	...	...	...	...	...	...
	TOTAL	4,975	1	1	...	1	1	...	1	0.30	0.20

APPENDIX II—*contd.*Table No. 2—*contd.*

Statement of fatal and serious accidents in and about mines regulated by the Indian Mines Act, during the year 1925—*contd.*

PROVINCE.	District and mineral field.	Total average number of persons employed daily.	FATAL ACCIDENTS.			SERIOUS ACCIDENTS.			DEATH-RATE PER 1,000 PERSONS EMPLOYED.		
			Number of separate fatal accidents.	NUMBER OF DEATHS.		Number of serious non-fatal accidents.	NUMBER OF PERSONS SERIOUSLY INJURED.		Below ground.	Above ground.	Below and above ground.
				Below ground.	Above ground.		Total deaths.	Below ground.				Above ground.	Total number of persons injured.

MICA—*contd.*

Rajputana	Ajmer-Merwara	303	...	...	...	...	...	...	...	...	...	...	...
	GRAND TOTAL (Mica).	18,555	7	7	...	7	6	7	1	8	0.56	...	0.36

LIMESTONE.

Bihar and Orissa.	Singbhum . . .	91	1	...	1	1	...	...	...	...	...	26.32	10.99
	Sahabad . . .	2,596	...	...	...	...	8	2	6	8	...	...	...
	Hazaribagh . . .	101	...	...	...	...	...	...	...	...	...	...	...
	TOTAL . . .	2,788	1	..	1	1	8	2	6	8	...	1.14	0.36
Burma . . .	Northern Shan States.	181	...	...	...	...	...	...	...	...	...	...	...
Central Provinces.	Bilaspur . . .	173	...	...	...	...	...	...	...	...	...	...	...
	Jubbulpore, Katni	3,781	...	...	...	...	1	...	1	1	...	...	...
	TOTAL . . .	3,954	...	...	...	...	1	...	1	1	...	...	...
	GRAND TOTAL (LIMESTONE).	6,923	1	...	1	1	9	2	7	9	...	0.49	0.14

APPENDIX II—*contd.*Table No. 2—*contd.*

Statement of fatal and serious accidents in and about mines regulated by the Indian Mines Act, during the year 1925—*contd.*

PROVINCE.	District and mineral field.	Total average number of persons employed daily.	FATAL ACCIDENTS.			SERIOUS ACCIDENTS.			DEATH-RATE PER 1,000 PERSONS EMPLOYED.				
			Number of separate fatal accidents.	NUMBER OF DEATHS.		Number of serious non-fatal accidents.	NUMBER OF PERSONS SERIOUSLY INJURED.		Below ground.	Above ground.	Below and above ground.		
				Below ground.	Above ground.		Total deaths.	Below ground.				Above ground.	Total number of persons injured.
STONE.													
Bengal . . .	Birbhum . . .	200	...	...	...	...	...	...	...	...	...	...
Bihar and Orissa.	Singbhum . . .	249	...	...	...	...	...	...	...	...	...	...
	Santhal Parganas	153	...	...	...	...	...	...	...	...	...	...
	TOTAL . . .	402	...	...	...	...	...	...	...	...	...	...
Bombay	Thana . . .	612	1	...	1	1	5	...	5	5	...	2·82	1·63
	Colaba . . .	42	...	...	...	...	...	...	...	...	...	...	...
	TOTAL . . .	654	1	...	1	1	5	...	5	5	...	2·82	1·63
Burma . . .	Thaton . . .	2,093	4	5	...	5	2	1	1	2	2·79	...	2·39
United Provinces.	Agra . . .	80	...	...	...	...	...	...	...	...	...	...	...
	Allahabad . . .	1,429	...	...	...	...	...	...	...	...	...	...	...
	TOTAL . . .	1,509	...	...	...	...	...	...	...	...	...	...	...
	GRAND TOTAL (STONE).	4,858	5	5	1	6	7	1	6	7	1·26	1·14	1·24

APPENDIX II—contd.

Table No. 2—contd.

Statement of fatal and serious accidents in and about mines regulated by the Indian Mines Act, during the year 1925—contd.

PROVINCE.	District and mineral field.	Total average number of persons employed daily.	FATAL ACCIDENTS.			SERIOUS ACCIDENTS.			DEATH-RATE PER 1,000 PERSONS EMPLOYED.		
			Number of separate fatal accidents.	NUMBER OF DEATHS.		NUMBER OF PERSONS SERIOUSLY INJURED.	Number of serious non-fatal accidents.	Total number of persons injured.	Below ground.	Above ground.	Below and above ground.
				Below ground.	Above ground.							Total deaths.
MAGNESITE.											
Madras	Salem	2,460	...	...	...	1	1	1	...	...
BAUXITE.											
Bombay	Belgaum	93	...	...	...	...	...	...	...	...
	Kaira	132	...	...	...	...	...	...	...	...
	GRAND TOTAL (BAUXITE).	225	...	...	...	...	...	...	...	...
CLAY.											
Bihar and Orissa	Bhagalpur	66	...	...	...	...	...	...	...	...
	Manbhumi	298	...	...	...	...	...	...	...	...
	Palamau	63	...	...	...	...	...	...	...	...
	Singhbhum	326	...	...	...	1	1	1	...	...
	TOTAL	753	...	...	...	1	1	1	...	...
Bengal	Burdwan	32	...	...	...	...	...	...	...	...
Central Provinces.	Jubbulpore	448	1	1	...	1	...	...	258	...
Delhi	Delhi	32	...	...	...	...	...	...	...	...
	GRAND TOTAL (CLAY).	1,265	1	1	...	1	1	1	1	162	

Statement of fatal and serious accidents in and about mines regulated by the Indian
Mines Act, during the year 1925—concl'd.

PROVINCE.	District and mineral field.	of Total average number of persons employed daily.	FATAL ACCI- DENTS.			SERIOUS ACCI- DENTS.			DEATH-RATE PER 1,000 PERSONS EMPLOYED.		
			Number of separate fatal accidents.	NUMBER OF DEATHS.		Number of serious, non- fatal accidents.	NUMBER OF PERSONS SERIOUSLY INJURED.		Below ground.	Above ground.	Below and above ground.
				Below ground.	Above ground.		Total deaths.	Below ground.				Above ground.	Total number of persons injured.

SANDSTONE.

United Pro- vinces.	Agra	235	...	...	...	...	...	...	...	...	...	...
	Allahabad	40	...	...	...	...	...	...	...	...	...	...
	TOTAL	275	...	...	...	...	...	...	...	...	...	...
Central Provin- ces.	Raipur	275	...	...	...	...	...	...	...	...	...	...
	GRAND TOTAL (SANDSTONE).	550	...	...	...	...	...	...	...	...	...	...

KYANITE.

Bihar and Orissa	Manbhurn	6	
	GRAND TOTAL (ALL MINES).	233,857	200	209	24	233	479	326	170	496	1.18	0.28	0.92

APPENDIX II—concl'd.

Table No. 3.

Statement of fatal accidents in mines regulated by the Indian Mines Act, during the year 1925, classified according to cause of accident.

Mineral worked.	Number of separate fatal accidents.	NUMBER OF PERSONS KILLED.										DEATH-RATE PER 1,000 PERSONS EMPLOYED.				
		Explosions of firedamp.	Falls of roof.	Falls of side.	In shafts.	Suffocation by gases.	By explosives.	Eruptions of water.	Haulage.	Miscellaneous below ground.	Surface.	Electricity.	Total deaths.	Below ground.	Above ground.	Below and above ground.
Coal	157	1	57	50	25	...	11	...	14	15	11	2	186	1.56	0.21	1.07
Clay	1	...	...	1	...	...	...	...	...	...	...	...	1	1.02	...	0.79
Copper	1	...	...	...	...	...	...	...	...	...	1	...	1	...	4.20	2.81
Iron Ore	4	...	...	1	...	...	1	...	...	...	2	...	4	1.00	1.17	1.08
Lead Ore	9	...	1	1	2	3	2	...	...	2	...	...	11	3.15	...	2.47
Lime Stone	1	...	...	...	...	...	...	...	...	...	1	...	1	...	0.49	0.14
Manganese Ore	7	...	...	1	...	...	2	...	1	...	4	...	8	0.20	0.69	0.31
Mica	7	...	1	2	1	...	2	...	...	1	...	...	7	0.56	...	0.38
Stone	5	...	...	4	...	...	1	...	...	...	1	...	6	1.26	1.14	1.24
Tin Ore	8	...	2	2	...	...	...	...	...	2	2	...	8	1.45	0.94	1.28
Wolfram ore ..																
TOTAL 1925	200	1	61	62	28	3	19	...	15	20	22	2	233	1.18	0.28	0.92
TOTAL PRECEDING YEAR.	233	2	87	64	31	...	26	...	20	17	29	5	281	1.49	0.34	1.09
DIFFERENCE	-33	-1	-26	-2	-3	+3	-7	...	-5	+3	-7	-3	-48	-0.31	-0.06	-0.17

APPENDIX III.

Statement of prosecutions under the Indian Mines Act, and Indian Penal Code, during the year 1925.

Province.	District.	Number of prosecutions.	Number of persons prosecuted.	Number of persons convicted.	Numbers of rules and sections of the Act contravened.	REMARKS.
Assam	Lakhimpur	1	1	1	Section 21, Special Rules 3 and 5.	
	Burdwan	1	1	1	Section 21, Special Rules 37 and 40.	
	Do	1	1	1	Section 21, Special Rule 19 read with Special Rule 23.	
	Do	1	4	4	Section 20, General Rule 12 of Notification No. 864-68-20, dated 10th March 1904.	
	Do	1	3	3	Section 20, General Rules 3, 7 and 19.	
	Do	1	1	1	Section 20, General Rule 47.	
	Do	1	3	2	Section 20, General Rules 1 (c), 3, 47 and 51.	One accused was excused as he was a minor.
	Do	1	2	1	Section 20, General Rule 3 of Notification No. 864-68-20, dated 10th March 1904.	Case against one accused was withdrawn as he could not be extradited for taking his residence in an Indian State.
Bergal	Do	1	1	1	Rules 17 and 18 of Bengal Government's Notification No. 4788, Com. dated 29th August 1924.	
	Do	1	10	7	Section 20, General Rules 1 and 3.	Three of the accused were acquitted.
	Do	1	3	2	Section 20, General Rule 2 (g) and Section 21, Special Rules 27, 52 and 70.	One of the accused was acquitted.
	Do	3	4	...	Section 20, General Rule 1 of Notification No. 11793-163, dated 30th December 1900; as amended by Notification No. M-498, dated 29th June 1922.	The three cases were withdrawn.

APPENDIX III.—*contd.*

Statement of prosecutions under the Indian Mines Act, and Indian Penal Code, during the year 1925—*contd.*

Province.	District.	Number of prosecutions.	Number of persons prosecuted.	Number of persons convicted.	Numbers of rules and Sections of the Act contravened.	REMARKS.
Bengal	Burdwan . . .	2	3	1	Section 20, General Rule 1 (1) of Notification No. 11793-103, dated 30th December 1908.	Case against two of the accused was withdrawn.
	Bankura . . .	1	5	5	Section 20, General Rules 1, 4 and 9	
	Manbhum . . .	7	13	1	Section 20, General Rule 12 of Notification No. 864-68-20, dated 10th March 1904.	Five cases were withdrawn, and two of the accused were acquitted.
	Do.	6	11	4	Section 20, General Rule 1 of Notification No. 11793-103, dated 30th December 1908 as amended by Notification No. M-498, dated 29th June 1922.	Three cases were withdrawn, and the case against two out of three accused, was withdrawn.
	Do.	3	6	5	Section 15 read with General Rule 47.	One case was withdrawn.
Bihar and Orissa.	Do.	1	2	2	Section 20, General Rule 19 and Rules 3 and 8 of Bihar and Orissa Governments Notifications No. 11761-M, dated 23rd August 1918 and No. 2608-VIIM-2, Com. dated 8th September 1924, respectively.	
	Do.	1	4	4	Section 20, General Rules 3 and 19.	
	Do.	1	1	1	Section 15 read with General Rules 46 and 47.	
	Do.	1	2	2	Section 20, General Rule 3 of Notification No. 864-68-20, dated 10th March 1904.	
	Do.	1	2	2	Section 21, Special Rule 4.	
	Do.	1	1	1	Section 20, General Rule 47.	

APPENDIX III—*contd.*

Statement of prosecutions under the Indian Mines Act, and Indian Penal Code, during the year 1925—*contd.*

Province.	District.	Number of prosecutions.	Number of persons prosecuted.	Number of persons convicted.	Numbers of rules and sections of the Act contravened.	REMARKS.
Bihar & Orissa	Maubhum . . .	1	1	1	Section 20, General Rule 45.	
	Do. . . .	1	1	1	Rule 17 of Bihar and Orissa Governments Notification No. 2608-VIIM—2, Com. dated 8th September 1924.	
	Do. . . .	1	2	2	Section 20, General Rules 3, 19 and 22.	
	Do. . . .	1	3	3	Section 20, General Rule 1 (4) of Notification No. 11793-103, dated 30th December 1908.	
	Do. . . .	1	2	...	Section 20, General Rule 1 (1) of Notification No. 11793-103, dated 30th December 1908.	The accused were acquitted.
	Hazaribagh . . .	3	3	...	Section 20, General Rule 1 of Notification No. 11793-103, dated 30th December 1908 as amended by Notification No. M-493, dated 29th June 1922.	The cases were withdrawn.
	Do. . . .	2	3	2	Section 20, General Rule 12 of Notification No. 861—68-20, dated 10th March 1904.	One of the accused was acquitted.
Burma	Monghyr . . .	1	1	...	Section 20, General Rule 1 of Notification No. 11793-103, dated 30th December 1908 as amended by Notification No. M-493, dated 29th June 1922.	The case was withdrawn.
	Mergui . . .	2	2	1	Section 20, General Rule 1 of Notification No. 11793-103, dated 30th December 1908 as amended by Notification No. M-493, dated 29th June 1922.	One case was withdrawn.

APPENDIX III—concl'd.

Statement of prosecutions under the Indian Mines Act, and Indian Penal Code, during the year 1925—concl'd.

Province.	District.	Number of prosecutions.	Number of persons prosecuted.	Number of persons convicted.	Numbers of rules and sections of the Act contravened.	REMARKS.
Central Provinces.	Balaghat . . .	1	1	1	Section 20, General Rules 14 and 15, and Section 21 Special Rules 46, 47 and 48.	
	Do. . . .	1	3	1	Section 20, General Rule 1 of Notification No. 11793-103, dated 30th December 1905 as amended by Notification No. M-495, dated 29th June 1922.	Two of the accused were acquitted.
	Chhindwara . .	1	4	4	Section 21, Special Rule 16.	
	Do. . . .	1	2	2	Section 20, General Rule 8, Section 21 Special Rules 23 and 52 and Section 39 read with Section 16.	
	Do. . . .	1	4	2	Section 20, General Rules 3, 4(a) and 4(b).	One accused was acquitted, and one died.
	Nagpur	1	1	...	Rule 16 of Notification No. 6438-182, dated 2nd September 1911.	The accused was acquitted.
	Jubbulpore . .	1	1	...	Section 20, General Rule 1 of Notification No. 11793-103, dated 30th December 1905 as amended by Notification No. M-495, dated 29th June 1922.	Dirto.
	Betul	1	2	2	Section 20, General Rules 3 and 19.	
Madras	Nellore	2	2	2	Section 20, General Rule 1 of Notification No. 11793-103, dated 30th December 1905 as amended by Notification No. M-495, dated 29th June 1922.	

APPENDIX IV.

MISCELLANEOUS.
Statement No. 1.
List of Inspection Circles.

No. 1 Circle.	No. 2 Circle.
1. All mines in Baluchistan.	1. All mines in Assam.
2. All mines in Bihar and Orissa except mines in the district of the Santal Parganas and such mines in the district of Manbhum as lie east of a line drawn from mile 175 on the Bengal Nagpur Railway to mile 169 on the Grand Trunk Road and continued in a straight line across the district.	2. All mines in Bengal,
3. All mines in the North-West Frontier Province.	3. Such mines in Bihar and Orissa as lie in the district of the Santal Parganas and in the district of Manbhum east of a line drawn from mile 175 on the Bengal Nagpur Railway to mile 169 on the Grand Trunk Road and continued in a straight line across the district.
4. All mines in the Punjab.	4. All mines in Bombay.
5. All mines in Rajputana.	5. All mines in Burma.
	6. All mines in the Central Provinces.
	7. All mines in Madras.

Statement No. 2.

Names of persons to whom first and second class certificates to manage a coal mine were granted during the year 1925.

(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.
King, William	313	28th January 1925 .	804	11th August 1920.
Lawrence, Edward Thornton	314	Ditto .	1438	4th August 1923.
Oakey, Oliver Guy	315	Ditto	1417	Ditto.
Peet, William Milner	316	Ditto .	849	11th August 1920.
Thomas, Onesimus	317	Ditto	321	26th July 1916.
Genders, Charles, Stanley	318	13th April 1925 .	1400	4th August 1923.
Spark, Edwin	319	Ditto .	1639	8th August 1924.
Johnson, Reeve Petgrave	320	11th May 1925 .	1638	Ditto.
Dowell, Thomas	321	3rd August 1925 .	1700	5th February 1925.
Veale, Alfred Pocock	322	7th December 1925	764	22nd January 1920
McDonald, Wilson	323	Ditto .	298	26th July 1916.
Ghoah, Satish Chandra	324	Ditto .	1863	31st July 1925.

APPENDIX IV—*contd.*Miscellaneous—*contd.*Statement No. 2—*contd.*

Names of persons to whom first and second class certificates to manage a coal mine were granted during the year 1925—*contd.*

(b) Certificates of Competency.

SECOND CLASS.

Name.	No. of certificate.	Date of certificate.	REMARKS.
Mondal, Pundari Kaksha	369	11th May 1925.	
Mukherjee, Tara Pada	370	Ditto.	
Choudhury, Bibhuti Bhusan	371	Ditto.	
Baker, Arthur	372	Ditto.	
Mitra, Sree Kantha	373	Ditto.	
Samanta, Indra Mohan	374	Ditto.	
Banerjee, Satyendra Nath	375	Ditto.	
Sadhu, Golok Behary	376	Ditto.	
Fleury, Gerald William	377	Ditto.	
Chatterjee, Ram Gopal	378	Ditto.	
Dutt, Hari Pada	379	Ditto.	
Roy, Pratul Kumar	380	Ditto.	
Babbs, Albert Dimberline	381	Ditto.	
Mukherjee, Bimala Charan	382	Ditto.	
Bhattacharjee, Srisankar	383	Ditto.	
Ewer, James Martin Alexander	384	Ditto.	
Banerjee, Phani Bhusan	385	Ditto.	
Murphy, Eguene Collin	386	Ditto.	
Bhattacharjee, Tara Bhusan	387	Ditto.	
Choudhury, Benoy Krishna	388	Ditto.	
Gupta, Manick Lal	389	Ditto.	

APPENDIX IV—*contd.*Miscellaneous—*contd.*

Statement No. 3.

GOVERNMENT OF INDIA.

DEPARTMENT OF INDUSTRIES AND LABOUR.

Dated Simla, the 25th July 1925.

NOTIFICATION.

No. M.-1051.—In exercise of the powers conferred by sub-section (1) of section 45 of the Indian Mines Act, 1923 (IV of 1923), the Governor-General in Council is pleased to exempt the following mines situated in the Mirzapur District of the United Provinces from all the provisions of the said Act:—

1. Stone Quarry Hill Tendua No. ³⁷⁻¹/₃₈₋₁, at village Bargeh.
2. Stone Quarry Hill Tendua No. 38-4, at village Bargeh.
3. Stone Quarry Hill Tendua No. 38-3, at village Bargeh.
4. Stone Quarry Hill Tendua No. 29-3, at village Bargeh.
5. Stone Quarry Hill Tendua No. 32-1, at village Bargeh.
6. Stone Quarry Hill Darhia No. 343-3, at village Baragaun.
7. Stone Quarry Hill Darhia No. 30, at village Baragaun.
8. Stone Quarry Hill Darhia No. 181, at village Baragaun.
9. Stone Quarry Hill Darhia No. 182, at village Baragaun.

A. A. L. PARSONS,

Secretary to the Government of India.

GOVERNMENT OF INDIA.

DEPARTMENT OF INDUSTRIES AND LABOUR.

Dated Delhi, the 7th November 1925.

NOTIFICATION.

No. M.-1051.—In exercise of the powers conferred by sub-section (1) of section 46 of the Indian Mines Act, 1923 (IV of 1923), the Governor-General in Council is pleased to exempt the Kharkhada Stone Quarry situated in the Kaira District of the Bombay Presidency from all the provisions of the said Act.

A. A. L. PARSONS,

Secretary to the Government of India.

APPENDIX IV—concl'd.

Miscellaneous—concl'd.

Statement No. 4.

RULES MADE BY THE GOVERNMENT OF BIHAR AND ORISSA.

The 16th January 1925.

No. 120-Com.—In exercise of the powers conferred by section 30 of the Indian Mines Act, 1923 (IV of 1923), the Governor in Council is pleased to make the following rule:—

RULES FOR ALL MINES.

INQUIRY IN THE CASE OF ACCIDENTS.

If a Court of Enquiry appointed under Section 21 of the Act finds that the accident was due to any carelessness or negligence on the part of the management, the Court may order the owner, agent or manager of the mine to pay all or any part of the expenses of the enquiry, and the amount so directed to be paid may, on application by the Chief Inspector or an Inspector to a Magistrate having jurisdiction at the place where the mine is situated or where such owner, agent or manager is for the time being resident, be recovered by the distress and sale of any movable property within the limits of the Magistrate's jurisdiction belonging to such owner, agent or manager.

By order of the Governor in Council,

J. R. DAIN,

Secretary to Government.