



## Labour Conditions in Japanese Coal Mines <sup>(1)</sup>

THE coal mining industry in Japan has developed greatly in recent years, especially during and after the war. At the present time coal miners form approximately 12 per cent. of the industrial population of the country. The following figures give the number of workers employed in coal mines at the end of June in each of the years 1908 to 1919 <sup>(2)</sup>.

	Number of workers		Number of workers
End of June 1908	126,999	End of June 1914	182,637
» 1909	152,515	» 1915	193,142
» 1910	137,467	» 1916	197,907
» 1911	145,412	» 1917	250,144
» 1912	152,429	» 1918	287,159
» 1913	172,446	» 1919	348,240

The number of workers employed in mines other than coal at the end of June 1919 was 116, 918, or about one-third of the number in coal mining at the same date. Hence obviously labour problems in the mining industry in Japan centre in the coal mines. The industry is concentrated in three provinces, those of Kyushu, Hokkaido, and Joban. The number of workers in the different localities under the jurisdiction of various mining bureaux on 30 June 1919 was as follows.

Mining Bureau	Mining District	Number of workers
Sapporo	Hokkaido	34,802
Sendai	Eastern part of Honshu (including Joban)	29,786
Tokio	Central part of Honshu	10,038
Osaka	Western part of Honshu	861
Fukuoka	Kyushu	272,753
	Total	348,240

A number of peculiarities of character and organisation cause general conditions of mining labour in Japan to differ considerably

<sup>(1)</sup> SOURCES : The following publications of the DEPARTMENT OF AGRICULTURE AND COMMERCE (BUREAU OF MINES), Tokio, have been used in the preparation of this article :

- (a) *Mining Laws and Regulations*, March 1905 ;
- (b) *Report of Accidents and Sickness among Miners*, 1918 and 1919 ;
- (c) *Situation of Mining Work during the Year 1919* ;
- (d) *Mutual Aid Societies among Miners*, May 1919 ;
- (e) *Report on the Friendly Society of Miners*, June 1920.

Also *Keizai Shiryo* [*Journal of Economics*], published by the Asiatic Economic Research Bureau of the South Manchurian Railway Company. Vol. VII, Nos. 1, 4, 5, and 6. Tokio, 1921.

<sup>(2)</sup> DEPARTMENT OF AGRICULTURE AND COMMERCE : *Thirty-Fourth Statistical Report*, Tokio, 1919 ; *Reports of Accidents and Sickness among Miners for 1918 and 1919*. Tokio, 1919, 1920.

from those obtaining in other industrial countries. On 30 June 1919, as will be seen from table I, 95,283 or almost one-third of the total number of workers in coal mines were women; of these 67,836 were working underground, 52,013 as "putters", that is, collecting and loading coal on the mine cars. The employment of women in underground work is an old custom in the country, especially in the Chikuhō coal field in the Kyushū district, where hewers are accompanied by their wives, sons, and daughters, who also work in the mines and assist the men as "putters". This custom is universally recognised, and no legal prohibition of it has been considered necessary.

TABLE I. CLASSIFICATION OF COAL MINERS ACCORDING TO OCCUPATION, AGE, AND SEX, 30 JUNE 1919

Class of worker	Under 15		15 and under 20		20 and over		Total		Grand total
	Male	Female	Male	Female	Male	Female	Male	Female	
<i>Underground workers</i>									
Hewers	193	94	10,925	1,202	84,533	4,220	95,704	5,516	101,217
Timbermen	33	26	2,956	713	20,439	3,189	23,424	3,928	27,356
Putters	766	732	10,102	12,568	18,620	38,713	29,488	52,013	81,504
Carriers	59	24	2,202	275	11,847	852	14,108	1,451	15,259
Mechanics	22	—	639	2	5,197	4	5,908	6	5,914
Carpenters, blacksmiths, etc.	12	—	338	1	2,799	11	3,149	12	3,161
Others	332	93	2,970	1,922	12,598	3,195	15,900	5,210	21,110
Total	1,417	969	30,182	16,683	156,033	50,184	187,682	67,836	255,518
<i>Surface workers</i>									
Hewers	—	—	2	4	53	22	55	26	81
Dressers	429	578	1,484	5,742	3,842	10,833	5,455	17,158	22,613
Carriers	77	18	2,366	216	11,594	933	14,037	1,167	15,204
Mechanics	108	1	2,371	22	10,947	124	13,426	147	13,573
Carpenters, blacksmiths, etc.	193	—	2,190	21	8,996	91	11,379	112	11,491
Others	504	198	3,723	2,208	16,696	6,431	20,923	8,837	29,760
Total	1,011	795	12,136	8,213	52,123	18,439	65,275	27,447	92,722
Grand total	2,428	1,764	42,318	24,896	208,156	68,623	252,957	95,283	348,240

#### STANDARD OF EDUCATION AMONG THE WORKERS

The standard of literacy of mine workers in general is very low; from 20 to 30 per cent. of them are unable to read and write, few having attended a primary school for even one or two years. This is due to the fact that in earlier years mining work was considered degrading; at one time criminals were forced to work out their sentences in mines, and it was quite usual for bad characters to seek work there in order to avoid arrest. But with the introduction of compulsory education and with the general improvement in mining conditions, together with the fact that employers are now demanding certain minimum character requirements, the standard has gradually been raised. Mine workers of today have passed through the primary schools, while some

TABLE II. STANDARD OF EDUCATION AMONG COAL MINERS, ACCORDING TO AGE AND SEX, 1919

Degree of education	12 to 14		15 to 19		20 to 29		30 to 39		40 to 59		60 and over		Total		Grand
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Total
Without schooling	140	213	1,397	1,975	4,660	4,653	6,930	7,226	10,577	6,022	989	417	24,693	20,506	45,199
Left in middle of primary school course	350	369	4,692	4,447	11,313	7,126	10,785	5,049	8,191	2,326	384	159	35,715	19,476	55,191
Finished primary school course	621	412	8,656	4,969	17,730	6,386	10,888	2,721	6,396	1,075	196	29	44,487	15,592	60,079
Left in middle of higher primary school course	148	33	2,307	720	4,216	1,206	2,947	646	1,135	144	18	33	10,771	2,782	13,553
Finished higher primary school course	178	41	4,019	603	7,189	861	3,337	344	1,270	106	22	1	16,015	1,956	17,971
Left secondary school course unfinished	3	—	85	35	501	29	257	6	127	—	3	—	972	70	1,042
Finished secondary school course	—	—	20	4	76	2	32	1	31	1	—	—	159	8	167
Left in middle of college or other higher school course	—	—	—	—	34	1	10	—	3	—	—	—	47	1	48
Finished college or other higher school course	—	—	—	—	5	—	3	—	2	—	—	—	10	—	10
Total	1,440	1,068	21,176	12,753	45,724	30,264	35,189	15,993	27,728	9,674	1,612	639	132,869	60,391	193,260

have been through the secondary or middle schools, and a few have been educated in higher schools. Generally speaking, the illiterate miners are to be found among the older men, but each year shows an improvement in the standard of education. According to the investigation of the Fukuoka Mining Bureau the standard of education of 193,250 miners employed in the more important coal mines in 1919 was as shown in table II.

A number of employers have shown considerable activity in providing education for the children of miners, in some cases establishing primary schools, in others providing the public primary schools with special rooms exclusively for the use of miners' children. In many cases the employers pay the tuition fees and furnish the school supplies. The proportion of children of miners of school age attending school is on an average 80 per cent., while that for the rest of the country is 90 per cent.

### WORK AND REST PERIODS

The provisions governing conditions of work and accident and sickness compensation of workers are laid down in the Regulation concerning the Employment and Relief of Miners issued by the Department of Agriculture and Commerce in August 1916. Regulations governing working conditions apply only to employers who are the holders of permanent mining rights, while those concerning accident and sickness are to be observed by the holders both of permanent and provisional mining rights. As regards working conditions, the restrictions are limited almost entirely to women and child workers: it is forbidden to employ children under 12 years of age, and to employ women and children under 15 years of age, for more than twelve hours per day. No woman or child may be allowed to work between the hours of 10 and 4 during the night except on a shift, and then only provided the shift is changed periodically, the period not to exceed ten days. A thirty minutes rest interval must be given to all women and child workers in a day longer than six hours, and an hour rest interval in a day longer than ten hours. Two rest days per month are compulsory for women and children under 14, and four rest days per month where night shifts are worked.

Conditions of work for adult men are scarcely mentioned in the Regulations. However, each mine owner is obliged to forward to the chief of the Mining Bureau in his district the rules he has drawn up for the employment of workers in his mines, for which he must obtain sanction, and it is an administrative custom that the chiefs of Mining Bureaux do not approve such rules if the holders of mining rights do not include certain restrictions in connection with the conditions of work for adults. In reality, therefore, the condition of adult workers is on the whole better than might be inferred from the Regulation. In practice adult miners are employed generally on two shifts of ten hours each per day (reckoned from the time of arriving at and leaving the pit head), although some mines have already introduced the 8-hour

day with two or three shifts. Ordinarily adult workers are allowed at least two rest days per month, and from thirty minutes to one hour rest interval in the day, as for women and child workers.

#### COMPENSATION FOR ACCIDENTS AND SICKNESS

In accordance with the provisions of the Regulation for the Employment and Relief of Miners, relief must be given by the employer when a miner is injured, falls ill, or is killed in the course of his work, provided that the accident is not the result of a serious fault on the worker's part. The rules on this subject are as follows :

When a miner is injured or falls ill the employer shall, at his own expense, arrange for the miner to be medically treated, or shall bear the expense necessary for such medical treatment.

Pecuniary aid, up to a daily sum of at least one-half of the wage due to the miner per day, must be paid during the time he is not in receipt of wages through absence from work on account of such accident or illness. When such aid continues for more than three months, the employer may reduce it to one-third of the employee's wages.

If the injury or illness causes the miner such physical or mental disability as is described below, the employer shall extend relief on the following scale : if permanently and totally disabled, and requiring constant attendance, not less than 170 days' wages ; if permanently and totally disabled for any work, not less than 150 days' wages ; if disabled for his former work, incapable of recovering his former health, or disfigured in the face, in the case of a woman, not less than 100 days' wages ; if permanently partially disabled, but able to engage in former work, not less than 30 days' wages.

In the case of the death of a miner, the employer must pay to the surviving relatives of the deceased an amount equal to his wages for not less than 170 days, and contribute not less than 10 yen (\*) as funeral expenses to the relative of the deceased miner in charge of the funeral arrangements.

Each employer must draw up rules for the relief of his employees in accordance with the above Regulation, and must submit them for the approval of the chief of the Mining Bureau in that locality before commencing mining operations. In many cases the allowances made to the workers exceed those prescribed in the rules, sometimes being twice as much.

#### WAGES

According to the Mining Law wages must be paid at least once every month, and it is customary for miners to be paid monthly. The wages of surface workers are generally calculated on a time basis, while those of underground workers are on a piece-rate basis. For hewers (pick miners), the most numerous class of men, wages are paid to groups of men working together at the coal face, the rate of distribution within each group being left entirely in the hands of the workers of that group.

A considerable amount of money is paid in bonuses to underground workers with the object of encouraging regular attendance at the mines. Bonuses are paid in two ways : a fixed amount

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(\*) One yen = \$0.498 or 2s. 0<sup>2</sup>d. at par.

for each day's attendance, or a lump sum for attendance over and above a certain stated number of days. With regard to the latter, most mines draw up a schedule whereby the amount of the bonus increases according to the number of days worked over the stated limit. The actual method varies in different mines, but that adopted by the Noborikawa coal mine (owned by the Hokkaido Mining and Steamship Company, one of the largest coal mining companies in Japan) during March and April 1920, may be given as an example. For continuous attendance at work for the five days from 16 to 20 March, the company offers a bonus of 1.50 yen, and the same amount for the six-day period from 22 to 27 March; for the six-day period from 28 March to 3 April, and for the period from 5 to 15 April, 2 yen in each case. An additional bonus of 5 yen is paid for full attendance at work during the above periods—that is, during 28 days.

The most important point in connection with wages is the supply of rice at cheap rates. Fluctuation in the price of rice is the cause of most of the unrest among the Japanese, and employers, instead of meeting the rise in the cost of living with an increase in wages, which are always difficult to decrease later, prefer to arrange for the supply of rice, the main food stuff, at more or less fixed rates, irrespective of the fluctuations of the market. In a similar way, during and after the war, at the time of the trade boom, and when the cost of living was very high, many employers, without altering the standard wage to any considerable degree, made special allowances and bonuses to meet the conditions of the moment. Therefore it is practically impossible to calculate from the standard wage the actual income of the miners.

There are no general statistics of the average standard wages exclusive of special allowances or bonuses, but as an example those paid in some of the more important coal mines in the Kyushu district for the month of May 1920 may be given (\*).

	Wages in yen per day	
	Mine A	Mine B
Hewers (pick miners)	2.65	2.92
Timbermen	1.62	2.25
Putters	1.45	1.72
Carriers	1.35	0.97

Another example showing the ruling rate of wages in the industry relates to hewers of the Noborikawa Company. The average cash wage for all hewers of that company in December 1919 was 3.44 yen, or 74.87 yen per month. A year later the rate was 3.56 per day, and 81.59 per month.

In almost all mines some provision has been made for the supply of daily necessities to the miners. Sometimes the employers themselves manage this directly, at other times it is arranged through an agent, so that such article as rice, wheat, *sake*, tobacco, charcoal, tools, and other necessities are supplied at wholesale prices.

(\* *Osaka Asahi*, for August 1920.

RECRUITMENT AND DISCHARGE OF MINERS

Labour turnover in Japanese coal mines is rather high. Frequently the working force changes completely during the course of a year. One explanation of this is no doubt the fact that over 40 per cent. of the workers are single men. Hewers and other underground workers change most frequently and consequently substitutes for them are most in demand. Recruits are sought, as a rule, in the region of the mines, but outside the Prefecture if necessary. Recently in the mines of Hokkaido and Kyushu many Koreans were employed, and in 1919 in the Prefecture of Fukuoka there were 1,500 of these workers.

How to encourage men to remain at their work and prevent them from changing constantly is one of the most difficult problems of coalowners, and much effort and money is expended on this object. The expenses of recruiting workers are borne by the coalowners, but the travelling expenses of workers thus recruited are advanced by the employer and deducted later from wages. Some mines pay the travelling expenses of their workers only, others pay the whole or part of the travelling expenses of the worker and his family according to the length of his service. For example, if the worker stays six months at one mine, half his travelling expenses will be refunded to him, and if he stays more than a year all travelling expenses will be refunded. In some cases, when the workers are urgently needed, the coalowners advance the money for the payment of debts to enable the men to leave and take up immediate employment, and the heaviness of debts to the coalowner in most cases deprives the men of any freedom of movement. The expenses for recruiting workers in recent years in respect of certain mines is shown in the following table.

TABLE III. RECRUITING EXPENSES OF COAL MINEOWNERS IN JAPAN 1915 TO 1919

		1915	1916	1917	1918	1919
		yen	yen	yen	yen	yen
<i>Cost to coal owner per miner (excluding commission) :</i>						
Mine A	Highest	6.00	10.00	17.00	20.50	37.00
	Lowest	2.00	6.00	8.00	11.00	8.00
	Average	4.00	8.00	12.00	15.75	22.50
Mine B	Highest	10.71	13.89	15.87	33.40	—
	Lowest	2.03	1.89	0.68	0.61	—
	Average	4.83	5.18	6.23	8.90	—
Mine C	Highest	10.00	10.00	15.00	15.00	20.00
	Lowest	4.50	4.90	5.00	9.79	7.50
<i>Owner's commission per miner to agent :</i>						
Mine A	Highest	2.00	3.00	4.00	5.00	5.00
	Lowest	1.00	2.00	2.00	3.00	3.00
	Average	1.50	2.50	3.00	4.00	4.00
Mine C	Highest	3.00	3.00	5.00	5.00	5.00
	Lowest	1.50	1.50	2.50	2.50	2.50

As will be seen from the foregoing table, the expenses of recruiting and commissions are gradually increasing, and form a considerable item of expenditure to coalowners. With the trade depression, however, the need for this recruiting naturally diminished.

The circumstances under which employers are allowed to discharge workers are limited by the regulations which each mine must draw up in accordance with the State Regulation. Causes of discharge include imprisonment for crime; contravention of state laws and regulations or the rules of the coal mines; laziness; disorderly conduct or disobedience; physical weakness, sickness, or injury; or business reasons, such as the temporary closing of the mines. In the case of discharge owing to physical disability or the closing down of the mines two weeks' notice of discharge must be given. Employers are required to pay the travelling expenses of workers discharged under certain conditions. Travelling expenses must be borne by the employer (*a*) in the case of women and young persons when discharge occurs during the time the worker is receiving compensation on account of disability attributable to his occupation; (*b*) when discharge is made on the ground of physical disability; (*c*) in case of discharge, though the employer has ceased to pay compensation, after absence from work for more than three years through disability attributable to occupation.

#### UNEMPLOYMENT

During and immediately after the war coalowners were very eager to obtain new workers, but in 1920, when the reaction set in, many mines were obliged to curtail or cease operations, which resulted in the discharge of 18,746 miners between April and the end of October. These figures do not include instances where less than 50 men were discharged at the same time. The Furukawa Commercial Joint Stock Company, one of the largest firms in Japan, reported the unemployment figure in coal mines during 1920 to be 25,069. This unfavourable trade situation continued into 1921, and as a result negotiations were begun between the coalowners of Japan to decrease output of coal as from 1 May of that year. The Chikuho and Hokkaido coalowners associations decided to decrease output by 17 per cent. (calculated on the output of the last three years), and the coalowners of the Joban districts by 12½ per cent. (calculated on the output of the previous year). Coalowners have been gradually slackening their business, so that, although the decision to decrease output has been put into force, it is not expected to be followed by a proportionate decrease in the number of miners. According to the investigation made by the Chikuho Coal Owners' Association at the end of April 1921, just before the enforcement of the decision to reduce output, 58 important mines in that district employed 106,961 workers. Comparing this figure with that for the end of May 1920, at the commencement of the trade depression, it shows a decrease of 18,714 workers.



## SAFETY AND SANITATION

For the institution of safety precautions and the prevention of accidents in the mines, and for the maintenance of sanitary conditions, a regulation for mining police and another for the prevention of explosions in coal mines are in force.

During the year 1919 the total number of accidents in the coal mines was 181,282, and deaths or injuries from such accidents numbered 190,807. Of the deaths 707 occurred underground and 58 on the surface; of serious injuries 4,908 underground and 597 on the surface; of slight injuries 165,226 underground and 19,311 on the surface.

Comparing accidents in coal mines with those in metal mines, the number of accidents during the last five years in the former was 2.5 times as great as in metal mines; the number of deaths was 4.6 times, of seriously injured 3 times, and of slightly injured 4.6 times as great. Deaths and injuries by accident, in the year 1919, per 100,000 workers, were 217 deaths, 1,583 serious injuries, 53,029 slight injuries. Figures for previous years, on the same basis, are as follows.

TABLE IV. DEATHS AND INJURIES BY ACCIDENT 1915 TO 1919

	Death	Seriously injured	Slightly injured
1915	363	208	59,433
1916	226	700	51,447
1917	255	1,528	49,966
1918	237	1,570	46,685
1919	217	1,583	53,029

The Regulation concerning Employment and Relief of Miners contains prohibitions of the employment of persons suffering from certain diseases likely to affect the health of other workers or likely to be aggravated by the work on which they are engaged. It also contains provisions concerning the employment of women workers and children in unhealthy processes, and prohibits the employment of women within 35 days after childbirth, it being provided that this rule does not apply in cases where, at the end of 21 days, the woman is employed on work of a nature which the doctor pronounces to be harmless.

The Bureau of Mines has been studying the provisions for sanitation in mines throughout the country, the construction of workshops and dwelling houses in mining districts, the examination of drinking water, the analysis of the atmosphere in mines, and other such details. These investigations have been on foot since the time during the war when the mining industry

was flourishing. Several of the investigations in this connection are almost complete. The Bureau now intends to set up a commission, composed of government officials and prominent business men, to introduce improvements and to lay down, on fundamental lines, the provisions which the mineowners should adopt.

#### INSTITUTES FOR MEDICAL TREATMENT IN MINES

In all the larger mines, especially coal mines, employers have established medical institutions for the benefit of their workers. According to the investigation made by the mines inspector in the Department of Agriculture and Commerce, there were in 1919 171 mines throughout the country each with its own medical bureau, and doctors in the ratio of 1 to 595 workers. In the mines with no such medical bureau arrangements were made with the local doctor. In the same year the number of doctors specially engaged by the employers for the treatment of miners numbered 351. In the medical bureaux of the mining offices injury or sickness caused in the course of work was treated free, and ordinary illness or injury to the miner or his family at very low fees, and sometimes gratis. A similar method is followed in the cases where mineowners have made arrangements with the local doctor. The staff of the 171 medical bureaux included 474 doctors, 83 assistant doctors, 1 dentist, 2 assistant dentists, 91 pharmacists, 67 assistant pharmacists, 137 midwives, 460 female nurses, 47 male nurses, and 67 probationer nurses.

#### HOUSING

The majority of miners come from districts distant from the mines, without any household effects, wandering continually from one mine to another without any settled home. Not only are they generally averse to settling in any one district, but they have no means of setting up house, and therefore usually live in the quarters provided by the coalowners. From 80 to 90 per cent. of the miners live in such a way, and only from 10 to 20 per cent. in houses which they own or rent from persons other than coalowners. The conditions of the housing accommodation and the amount paid in rent has a great influence on the health, hygiene and morality of the miners' families, as well as on their mode of living. In most cases they live in blocks of tenement houses made of wood, each house divided into 5 to 10 flats. It is only recently that attention has been paid to the dryness of houses, the amount of sunshine, the water supply, and other sanitary conditions. Miners who are single live in the common boarding houses, which are more often than not under the supervision of the guild master <sup>(5)</sup>.

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<sup>(5)</sup> See p. 262.

According to the investigation made by the mines inspector of the Department of Agriculture and Commerce, of the 54 mines in the eastern part of Japan, the following information was given concerning tenement and boarding houses in 1919.

	Tenement house	Boarding house
Size (in tsubo <sup>(1)</sup> ) of one house	6.5	11.8
Number of occupants	3.1	8.7
Number of mats <sup>(2)</sup> in sleeping rooms of one house	10.0	15.7
Number of mats in the sleeping room, per head	3.2	1.8

(<sup>1</sup>) 1 tsubo = 35.584 sq. ft. or 3.3058 sq. metres.

(<sup>2</sup>) 2 mats occupy 1 tsubo.

A very small sum is charged for rent in respect of the houses supplied to miners, being in many cases only a portion of the cost of lighting or repairs. In some cases 10 sen (<sup>(6)</sup>) per month are charged as the lighting cost for one room; in others 25 sen, and again in others 3 sen per mat per month or 10 sen per cubic tsubo.

The erection of better houses, giving practically no return in rent, would involve a heavy expense for the coalowners, so that even though the need is great improvement is very slow.

#### LABOUR UNIONS

According to the investigation made by the Department of Home Affairs through the police authorities, it was estimated that at the beginning of January 1921 there were 56 organisations of miners with a membership of about 28,592, but this includes miners of all classes and is not confined to those in coal mines; moreover these organisations not only include unions in the exact sense of the word but also some mutual aid societies. At the beginning of 1920 there existed four important miners' labour organisations.

(1) The Miners' Department of the *Yuai Kai*. The *Yuai Kai*, or General Federation of Japanese Labour, was established in 1912, but it is only recently that miners have become members of it. In December 1919 the Miners' Department was formed. Its headquarters are with the *Yuai Kai* in Tokio, and several branches have been opened where there are more than 50 members. The total number of members is calculated at about 4,000.

(2) The Japanese Miners' Federation (*Dainippon Kozan Rodo Domei Kai*). This was established in October 1919 and is almost entirely composed of workers in metal mines. The membership is estimated to be about 9,000.

(3) The Miners' National Union (*Zenkoku Kofu Kumiai*), established in September 1919. This union is composed partly of metal workers and partly of coal miners, and has a membership of 6,000.

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(<sup>(6)</sup>) 100 sen = one yen.

(4) The Miners' Association (*Kofu Kyokai*), established in September 1919, composed of workers in the Kushu district, with a membership of several hundred thousand.

In October 1920 a federation of miners' unions, called the Pan-Japanese Federation of Miners' Unions (*Zen Nihon Kofu So Rengo Kai*) was established at the instigation of the Miners' Department of the *Yuai Kai*, embracing the three most important miners unions, the Miners' Department of the *Yuai Kai*, the Japanese Miners' Federation, and the Miners' National Union. This Federation of Miners' Unions is affiliated to the *Yuai Kai*.

The facts that mining areas are scattered and situated far from cities and towns, the centres of civilisation, and that miners as a class are generally more poorly educated than factory workers, account for the slow progress in the trade union movement. With the recent development, however, has naturally come an increase in the number of disputes, with occasional well organised strikes. At the time of the rice riots in 1918 many disputes occurred in the mining districts, especially the Chikuho coalfields, some ending in riots. In 1919, when the record number of 2,388 strikes took place in industry generally, 164 disputes were recorded in mines, involving 23,832 miners. In 1920 there were 80 disputes affecting 8,182 miners; of these 27 resulted in strikes involving 3,880 workers, while in the remaining 53, affecting 4,302 workers, no actual strikes occurred.

#### OLD GUILDS

In addition to the unions of recent origin there still exists a relic of feudal times—*Naya* or *Hamba*—the old guild, a kind of organisation of miners, internally providing mutual aid for the men in their daily work and in their private life, and externally acting as a bargaining body with the employers. Each guild has its head or master, and between the members and master there exists a relationship similar to that of master and man in feudal days. Often the master is head of the boarding-house, which he manages for the men. He is responsible for employment or unemployment in certain mines, for the allocation of work in the pits and also for the moral discipline and hygienic conditions of the men. In this case the miners under the masters have no direct relation with the coalowners and are only responsible to the guild owners. Of course wages are paid by the coalowners, who are the employers, but the masters occupy the position of supervisors, often taking advantage of this. Several of such old guilds may exist in one mine, and members of the guild number from 20 to more than 100. Until recently it was the usual custom for the masters to receive the wages of their men and distribute them, but such a procedure is now prohibited.

These old guilds have advantages as well as disadvantages, but although convenient for the coalowners they are to a great degree harmful to the miners. The chief defect is that, as in the feudal system, everything depends on the personality of the

master ; if he is kind the men under him enjoy many privileges, but if he is a taskmaster, as in the majority of cases he proves to be, the men suffer unduly at his hands. After all, masters of the old guild system are parasites on both the owners and the men. With the social development of the country and the growth of new labour unions such old guilds are gradually being reformed or abolished by the initiative of the employers or the opposition of the labour unions. In recent years many coalowners have prohibited the system ; others, while still allowing it to remain, have begun to employ men directly under their own supervision, with the result that not more than 10 per cent. of the coal mines keep to the old guild system proper, and many improvements are gradually being introduced into what remains of it.

### MUTUAL AID SOCIETIES

Besides the regulation under which relief is given by the employer to miners in case of injury, death, or disease through the performance of their work, there exist in several mines mutual aid societies of miners, the first of which was established in 1888. At the end of 1918 there were 172 mutual aid societies, of which about one hundred were set up during the last ten years. The Mutual Aid Society of the Hokkaido Coal Mining and Steamship Company, established in 1893, was the first of this kind in coal mining, and almost all the others have been established during the last seven years. They are usually of two kinds—one composed of miners only, the other of miners and other employees in the mines. No statistics relating to mutual aid societies in coal mines are available ; but in 1918 in mines generally they had 169,400 members, or nearly 39 per cent. of the total number of miners, at that time 431,400. The officers of the mutual aid society are nominated from among the officials of the mining companies, and it is rarely that the miners themselves are entitled to participate in the management of the society. The funds consist of the contributions of the members and subsidies from the mineowners. The miner's contribution to the society, although varying in the different societies, usually ranges between 10 and 20 sen per month. Ordinarily no distinction is made between men and women members as regards the amount of contribution, but it frequently differs according to the age of members. Allowances are made for the members of the society in case of deaths, injury, sickness, and of births, marriages, or similar events.

In connection with mutual aid societies of miners in Japan there still exists an old system of mutual aid organisations called Friendly Societies of Miners (*Tomoko Domei*). They are composed either of miners in the same mine or of miners in several different localities. According to the investigation of the Bureau of Mines in the year 1918 36,000 miners, or about 6 per cent. of the total, belonged to these organisations ; but this system is found mostly in metal mines. It only exists to a limited extent

in coal mines in the Hokkaido and Joban district, and not at all in the Kyushu district, which is the most important coal producing area in Japan.

#### MINES INSPECTION SYSTEM

For purposes of general mining administration there is a Central Bureau of Mines in the Department of Agriculture and Commerce. For local administration the country is divided into five districts, each of which has a local mining bureau. The majority of the officials of the central and local bureaux are engaged in sanctioning concessions and protecting mining rights while a comparatively small number of them are occupied with the inspection of mines and the protection of miners. The Imperial Ordinance assigns two inspectors and two assistant inspectors to the central bureau, and 15 inspectors and several assistant inspectors distributed over the five local bureaux. There are inspectors proper who occupy such positions as their main work or duty ; besides these there are several additional inspectors who are chiefly engaged on other work but at the same time act as inspectors. The number of such additional inspectors is not limited by any ordinance. On 1 May 1919 the number of central and local inspectors was as follows :

TABLE V. NUMBER OF MINING INSPECTORS, 1 MAY 1919

	Inspectors		Assistant Inspectors	
	Proper	Additional	Proper	Additional
Central Bureau	2	5	2	2
Local Bureaux :				
Sapporo	1	2	4	2
Sendai	2	2	5	5
Tokio	3	4	8	10
Osaka.	2	2	4	2
Fukuoka	4	2	12	5

These officials control all mines, not only coal, and according to their qualifications are responsible either for the general protection of workers or for the supervision of sanitation or safety. In 1918, out of 1,693 concessions for permanent coal mining rights, 719 were being operated ; of the 4,000 or more provisional concessions, about 10 per cent. were estimated to be working. As the number of mining concessions is so large even in coal mining alone, it is almost impossible for this small body inspectors to supervise all the mines. Those mines employing more than about five hundred workers, and those which are dangerous from the point of view of explosion, are visited by the inspectors most frequently, while the smaller ones are visited scarcely once a year.