

These figures show that there are considerable differences between the various branches of the chemical industry. The highest wages were paid in the nitrogen compounds, dyes, and photo-chemical industries, and the lowest in explosives, tar distillation, and artificial silk. Numerous divergences were also found within each branch between different areas and between different centres in the same area. These divergences are partly due to the employment situation and partly to the great variety of special products, manufacturing processes, and marketing conditions of the chemical industry.

Japanese Cotton Mills and the Abolition of Night Work

The abolition of night work for women and young persons as from 1 July 1929 is one of the most important measures of social legislation adopted in Japan in recent years. In a previous article in this *Review*¹ an account was given of the situation as regards night work in 1926 (when a partial prohibition had just been put into force), and it was stated that employers were making preparations in advance to adapt their methods of production to the necessities of the proposed change. A report just received from a correspondent in Japan, based on investigations made by the Bureau of Social Affairs, gives details of the actual arrangements (for shifts, hours of work, rest intervals, etc.) adopted in factories where night work has already been abolished.

It will be remembered that the amended Factory Act of 29 March 1923² (section 4) provides that in factories where ten or more persons are regularly employed, or where the work is dangerous or injurious to health, young persons under 16 years of age and women may not be employed between the hours of 10 p.m. (or 11 p.m. with the sanction of the administrative authorities) and 5 a.m. A transition period of three years, until 1 July 1929, was allowed, during which the provision was not to apply in places where workers were employed in two or more alternating shifts, and in addition the age "15 years" was to be substituted for "16 years". This prohibition seriously affects factories engaged in the textile industry, where a great number of women and young persons are employed, and as early as the autumn of 1928 the owners of these factories began to take steps to meet the new situation.

About February 1929 many textile factories began to abolish night work on their own initiative, without waiting for 1 July when the

¹ *International Labour Review*, Vol. XIX, Nos. 3-5, Feb.-April 1929 : "The Employment of Women in Japanese Industry", by I. F. AYUSAWA. Cf. in particular No. 3, March, pp. 393-395.

² INTERNATIONAL LABOUR OFFICE : *Legislative Series*, 1923, Jap. 1.

abolition was to become compulsory by law. The report states that out of the companies affiliated to the Japan Cotton Spinners' Association, which is composed of almost all the important cotton spinning mills in Japan, night work had already been abolished in 15, with 85 factories, where the number of spindles was about 3,700,000, or about 60 per cent. of the total number of spindles in all factories affiliated to the Association. The various working schemes adopted in these factories are summarised as follows.

SYSTEM OF OPERATION

Many factories have both the one-shift and the two-shift systems operating concurrently according to the nature of the work to be done. For instance, one shift on day work may be worked in the machine maintenance, wood working, and reeling departments, and two shifts in other departments. One shift on day work was formerly the usual practice in the weaving department, but with the abolition of night work more factories will adopt the two-shift system in this department.

DISTRIBUTION OF HOURS OF WORK

Where there is a two-shift system the daily working hours of the factory, either 18 (from 5 a.m. to 11 p.m.) or 17 (from 5 a.m. to 10 p.m.), are as a rule divided equally into two. The former system is more general. On the first shift work usually begins at 5 a.m. and finishes at 2 p.m.; in some factories in the western district of Japan, however, work finishes at either 1.30 or 3 p.m. The second shift generally begins directly after the first, and finishes at 11 p.m.; in some cases where the second shift begins at 1.30 p.m., work finishes at 10 p.m.

With one shift on day work, work usually begins at 7 a.m. and finishes at 4 p.m., or in some cases at 5 p.m.; but in factories where the second of two shifts finishes at 10 p.m., the departments working on one shift generally finish work at 3.30 p.m.

WAGES

In the companies where night work has been abolished it seems that an effort is being made to maintain the total hours worked per month close to the total worked when night work was in existence, so as to prevent the average monthly earnings of workers being reduced by the abolition of night work. This is effected by decreasing the number of holidays given. This also applies to payments by piece work. It is reported that if the average monthly wages become decreased by the abolition of night work, the companies will supplement or increase wage rates so as to maintain monthly earnings at the previous level. Where payment is made in the form of a monthly salary there will be no reduction, but rather an increase corresponding to the increase in the number of days of employment per month.

REST INTERVALS AND HOLIDAYS

Where the two-shift system is adopted, a rest interval of thirty minutes is given on the first shift at 7.30 a.m. for breakfast, or from 10.30 or 11 a.m. for the midday meal, and on the second shift a similar interval is given at 7.30 or 8 p.m. for supper. In factories where work stops at 10 p.m., the rest interval is thirty minutes at 6.30 p.m. for supper. Those working on one shift on day work are given thirty minutes rest interval at 11 or 11.30 a.m. or 12 p.m. for the midday meal.

In general four half-day holidays are given per month, but some factories in the western district give two whole days per month as holidays.

TIMES FOR MEALS

On the first of two shifts breakfast is taken in some factories before work begins (during thirty minutes from 4.30 a.m.) and in others during working hours (thirty minutes from 7.30 or 8.30 a.m.). The midday meal is taken in some factories during working hours (thirty minutes from 10.30 or 11 a.m.) and in others after work has finished (after 1.30 or 2 p.m.), while supper is taken during the thirty minutes from 5.30 or 6 or 7 p.m. On the second shift, breakfast is usually taken at 8 or 8.30 or 9.30 a.m., the midday meal before work begins (at 1 or 1.30 or 2.30 p.m.), and supper during working hours (at 7.30 or 8 p.m.); in factories where work stops at 10 p.m. supper is taken at 6.30 p.m.

On one shift on day work breakfast is taken at 6.30 a.m. before work begins, and the midday meal during working hours at 11 a.m. or 12 or 12.30 p.m.; in factories where work stops at 3.30 p.m. the midday meal is taken at 11.30 a.m. and supper at 5, 6 or 6.30 p.m.

TIME FOR BATHING

Where two shifts are worked, the workers on the first shift in some factories are allowed one or two hours for bathing from 2 p.m., or three hours from 5 p.m. On the second shift one or two hours are allowed for this from 11 a.m. In factories where work stops at 10 p.m. one hour is allowed from 11.30 p.m. Where one shift on day work is worked, bathing time is allowed during a period ranging from half an hour to two and a half hours from 4 p.m., or during one and a half hours from 5.30 p.m. In factories where work stops at 3.30 p.m. bathing is allowed for one hour from 3.30 p.m.

TIME FOR RISING AND RETIRING

On the first of two shifts the time for rising is 4 or 4.30 a.m., and for going to bed 8 or 8.30 p.m. On the second shift, where the hour for rising is 7.30 a.m., the time for going to bed is 11 p.m., and where the rising hour is 8 or 9 a.m., the retiring hour is midnight or 1 a.m. In factories where work stops at 10 p.m., the time for rising is 8 a.m.

and for going to bed 11.30 p.m. Where only one shift is worked the time for rising is 5 or 6 a.m. and for going to bed 9 or 10 p.m. In factories where work stops at 3.30 p.m. the time for going to bed is 8 p.m.

UTILISATION OF SPARE TIME

For the benefit of the workers arrangements are made for the utilisation of spare time for two or three hours from 3 p.m. or for three hours from 4 p.m. on the first of two shifts, and for three or four hours from 9 a.m. on the second shift. Where only one shift is worked one hour of spare time is given from 5 a.m. (chiefly for physical exercise) and two hours from 7 p.m. (for study), or one and a half hours from 4.30 p.m. or two hours from 6 p.m. The curricula for women consist of courses in ethics, Japanese language, penmanship, geography, history, calculation on the abacus, music, sewing, embroidery, knitting, artificial flower making, flower arrangement, etiquette, cooking, etc., as prescribed for supplementary education in primary schools, or in girls' domestic science schools. In addition, tennis, dancing, volley ball, group games, basketball, etc., are included in the course of physical exercises. For men there are jujitsu, Japanese fencing, and tennis. Lessons in the English and Japanese languages are also given as selected courses.

The daily schedules for workers in four of the largest cotton spinning and weaving companies in Japan are shown below.

(a) DAI-NIHON COTTON-SPINNING JOINT-STOCK COMPANY

(Dai-Nihon Boseki Kabushiki Kaisha)

Item of schedule	Two-shift system		One-shift system
	First shift	Second shift	
Time of rising	4.30 a.m.	9 a.m.	5 a.m.
Hours of work	5 a.m.-3 p.m.	3-11 p.m.	7 a.m.-5 p.m.
Rest intervals	10.30-11 a.m.	8-8.30 p.m.	Noon-12.30 p.m.
Meal times	4.30 a.m. 10.30 a.m. 5.30 p.m.	9.30 a.m. 2.30 p.m. 8 p.m.	6.30 a.m. Noon 5 p.m.
Bath times	5.30-8 p.m.	Midnight-1 a.m. (men) 11 p.m.-1 a.m. (women)	5.30-7 p.m.
Spare time	3-5 p.m.	10 a.m.-2.30 p.m.	5-6 a.m., 7-9 p.m.
Time of retiring	8 p.m.	1 a.m.	9 p.m.
Holidays	4 times a month	4 times a month	4 times a month

(b) TOYO COTTON-SPINNING JOINT-STOCK COMPANY

(Toyo Boseki Kabushiki Kaisha)

Item of schedule	Two-shift system		One-shift system
	First shift	Second shift	
Time of rising	4.30 a.m.	7.30 a.m.	
Hours of work	5 a.m.-2 p.m.	2-11 p.m.	7 a.m.-4 p.m.
Rest intervals	7.30-8 a.m.	7.30-8 p.m.	12.30-1 p.m.
Meal times	7.30 a.m. 2 p.m. 7 p.m.	8 a.m. 1.30 p.m. 7.30 p.m.	12.30 p.m.
Bath times	2.30-4 p.m.	11-11.30 p.m.	4-6.30 p.m.
Spare time	4-7 p.m.	9 a.m.-noon	
Time of retiring	8.30 p.m.	11.30 p.m.	
Holidays	4 times a month	4 times a month	4 times a month

(c) NISSHIN COTTON-SPINNING JOINT-STOCK COMPANY

(Nisshin Boseki Kabushiki Kaisha)

Item of schedule	Two-shift system		One-shift system
	First shift	Second shift	
Time of rising	4 a.m.	8 a.m.	6 a.m.
Hours of work	5 a.m.-2 p.m.	2-11 p.m.	7 a.m.-4 p.m.
Rest intervals	11-11.30 a.m.	8-8.30 p.m.	11-11.30 a.m.
Meal times	4.30 a.m. 11 a.m. 6 p.m.	8.30 a.m. 1.30 p.m. 8 p.m.	6.30 a.m. 11 a.m. 6 p.m.
Bath times	2-3 p.m.	11 p.m.-midnight	4-4.30 p.m.
Spare time	3-6 p.m.	9 a.m.-noon	4.30-6 p.m.
Time of retiring	8 p.m.	Midnight	10 p.m.
Holidays	4 times a month	4 times a month	4 times a month

(d) MATSUTA COTTON-WEAVING JOINT-STOCK COMPANY

(Matsuta Menpu Kabushiki Kaisha)

Item of schedule	Two-shift system		One-shift system
	First shift	Second shift	
Time of rising	4.30 a.m.	8 a.m.	6 a.m.
Hours of work	5 a.m.-1.30 p.m.	1.30-10 p.m.	7 a.m.-3.30 p.m.
Rest intervals	8.30-9 a.m.	6.30-7 p.m.	11.30-noon
Meal times	8.30 a.m. 1.30 p.m. 6 p.m.	8.30 a.m. 1.30 p.m. 6.30 p.m.	6.30 a.m. 11.30 a.m. 6.30 p.m.
Bath times	2-3 p.m.	11.30 p.m. -12.30 a.m.	3.30-4.30 p.m.
Spare time	3-6 p.m.	9 a.m.-1 p.m.	6-8 p.m.
Time of retiring	8 p.m.	11.30 p.m.	8 p.m.
Holidays	4 times a month	4 times a month	4 times a month

Labour in the Cuban Sugar Industry¹

The Cuban sugar industry is essentially an agricultural industry. The sugarcane is grown, the juice is extracted and is converted into raw sugar in Cuba; the latter operation involves some mechanical and chemical processes. But the refining of this raw sugar into the commercial forms of sugar (white, granulated, etc.), involving four distinct operations (mixing, boiling, filtering, and dессiccating) and carried out by means of no fewer than thirteen different sets or series of machines, is not, as a rule, undertaken in Cuba itself; only a few such refining factories exist.

¹ This article has been prepared by the International Labour Office from material supplied by the late Mr. Carlos LOVEIRA, Director of the Immigration, Colonisation, and Labour Department of the Cuban Ministry of Agriculture. The opinions expressed in the article are those of Mr. Loveira.