

the beginning of the Meiji Era that there shall be no illiterates in the country. Therefore, even persons with physical defects are admitted to elementary, middle or girls' high schools, provided that they are fit to attend a greater part of the lessons. But boys and girls who are blind or deaf and dumb are encouraged to enter schools specially founded for them. A special ordinance relating to the schools for the blind, and schools for the deaf and dumb has lately been issued for the purpose of perfecting their elementary and secondary education. The following table gives the number of them and that of their pupils in the years 1930-1934:

Year	Schools	Pupils	Blind	Deaf & Dumb
1934	138	9,500	4,709	4,791
1933	137	8,939	4,613	4,326
1932	136	8,604	4,530	4,144
1931	125	8,137	4,308	3,831
1930	122	7,728	4,088	3,640

Miscellaneous Schools Under the heading of "Miscellaneous Schools," the Japanese Government includes for convenience' sake all schools which do not fully come into any definite category of schools under the provisions in the laws and ordinances.

The following table gives the number of miscellaneous schools and that of their pupils in the years 1930-1934:

Year	Schools	Pupils
1934	1,350	209,674
1933	1,247	203,123
1932	1,235	196,903
1931	1,222	217,257
1930	1,279	228,512

Of the total given above, 157 were maintained by public bodies and 1,793 by private persons or bodies. As to their category those which might be classified as elementary schools num-

bered 242, middle schools 109, girls' high schools 68, business schools 514, colleges 27, the blind and the dumb schools 8, and the professional 982. Among miscellaneous schools, there are not a few which are to be highly estimated as educational institutions in their ideas and new methods of education. Many of the Christian schools are included among them.

New Educational Movements The educational system of Japan is so complete, as is specially the case with primary school education, that there has been hardly any room for such free educational movements as in Europe and America. The progress in other lines of national life, however, naturally stimulated the awakening of scholars and practical educators towards the end of the Meiji era. The development of major cities presented a large field for the experiment of new educational work. Influenced by Western thoughts and guided by scholars who gave expositions on European and American educational thoughts so as to adapt the characteristic environments in Japan, many new schools have been established in Tokyo and Osaka. Their scope of influence as well as their number is limited, and the new movement, which is more or less radical, is going through difficult times owing to the reactionary tendency in these years; but the existence of such schools as Mrs. Masako Yoshano's Bunka-gakuin, Mrs. Motoko Hani's Jiyu-gakuen, and Mr. Kuniyoshi Obara's Seijo-gakuen proves the demand for and appreciation of new education among the more advanced quarters of urban population. The new educational movement among primary school teachers must not be overlooked. Their curriculum cannot deviate very much from that fixed by the government, but their efforts for handling materials so as to adapt the local environment of

the pupils and to take in the projective method are bringing about good results. The representative schools are Tajima Primary School in Kawasaki, Urashima Primary School in Yokohama, etc. Primary schools of a similar kind may be found in many places throughout the country.

Training of Teachers

The Japanese Government, alive to the necessity of having a large supply of capable teachers, has spared no efforts in the completion of organs for their training. To give an outline of the present system, Hokkaido and the prefectures are called upon to establish and maintain at least one normal school each, and an institution for the training of business continuation school teachers when circumstances make it necessary, a responsibility which is also imposed on the cities. The Government itself undertakes the training of teachers of normal schools, middle schools, girls' high schools and technical schools by establishing and maintaining higher normal schools, higher normal schools for women, special institutes for the training of teachers, etc., and the students of these schools are given scholarships, covering part of their expenses, either by the Government or by the local public bodies. Moreover, such of the students of universities, colleges and the like as intend to become teachers, receive aid out of public funds or may be exempted from the payment of fees. Persons who have proved themselves deserving extended aid are chosen for studying abroad in order that they may be better qualified to teach higher arts and sciences.

The following table gives the number of schools for training teachers and that of their students in the years 1930-1934:

Year	Schools ¹	Students
1934	155	36,849
1933	157	41,060
1932	167	44,609
1931	175	49,226
1930	178	53,308

Organs for Training Elementary School Teachers The principal organs for training elementary school teachers are the normal schools, while the training course B grade of the Tokyo Academy of Music trains music teachers for elementary schools.

A normal school consists of the regular and the post-graduate courses, the former is divided into the first and second sections. The course of study of the first section extends over five years and it takes in the graduates of higher elementary schools of a two years' course or persons of over 14 years of age who have similar attainments. The course of study of the second section runs for two years and it takes in graduates of middle schools, girls' high schools and persons of similar scholastic attainments.

The following table gives the number of normal schools and that of their students and graduates in the years 1930-1934:

Year	Schools	Students	Graduates
1934	103	32,817	11,669
1933	103	36,867	12,611
1932	104	38,868	11,033
1931	105	43,852	15,524
1930	106	47,444	16,895

Organs for Training Teachers for Secondary Education As organs for training the teachers of secondary education, there are the higher normal schools, higher normal schools for women, special institutes for training teachers, the training course in drawing of the Tokyo Academy of

¹ Note: There are 4 colleges and their students included in this as well as in the number of the table on colleges.

Fine Arts and the training course, grade A of the Tokyo Academy of Music. The systems differ more or less with the schools or the main subjects taught, but their entrance requirements are, generally speaking, the completion of middle school, girls' high school and normal school, or the possession of the same or higher scholastic attainments, and their courses extend over four, three or two years, with additional post-graduate and special investigation courses.

The following table gives the number of the schools for the training of secondary school teachers and that of their students and graduates in the years 1930-1934:

Year	Schools	Students	Graduates
1934	7	4,456	854
1933	10	4,421	925
1932	15	4,245	—
1931	20	4,747	—
1930	22	4,189	—

In addition to the foregoing, teach-

Year	Agricultural		Technical		Commercial		Total		Graduates
	Schools	Students	Schools	Students	Schools	Students	Schools	Students	
1934	1	111	2	150	1	101	4	362	120
1933	1	116	2	150	1	105	4	371	118
1932	1	121	2	150	1	103	4	374	116
1931	1	117	4	151	1	97	6	365	118
1930	1	120	4	157	1	96	6	373	120

As further means of providing business school teachers, certificates are issued without examination to graduates of certain specified schools. Including those who passed examination the number of persons who received such certificates in 1933-1934 was 430.

Organs for Training Teachers of Business Continuation Schools For this purpose there are institutes which Hokkaido, the prefectures and cities alone are authorized to establish. They are of one or two year courses above the secondary education. The

ers' certificates are issued without examination to graduates of high grade schools both in Japan and in other countries in order to meet the deficiency in the supply of secondary school teachers. The main conditions are that the schools in question must be equal to or higher than the higher normal schools of Japan in entrance requirements and in curricula. Including those who passed examination there were 7,829 persons who received such certificates in 1933-1934.

Organs for Training Business School Teachers For the purpose of training teachers of practical subjects in technical schools, institutes are attached to the Government universities and colleges. They are of a three year course, the scholastic standard corresponding to that of the colleges.

The following table gives the number of such institutes and that of their students and graduates in the years 1930-1934:

following table shows the number of these institutes and that of their students in 1930-1934:

Year	Institutes	Students	Graduates
1934	43	1,014	529
1933	42	1,039	618
1932	44	1,122	656
1931	44	1,232	856
1930	45	1,299	878

Training of High-grade Professors No particular schools are instituted for the training of high-grade teachers. Scholarships, however, are given to students of the post-graduate

courses of higher normal schools for training such professors. Further, persons of adequate career and experience are sent to foreign countries for a further prosecution of studies, their expenses being met by the Government. The following are figures concerning such persons at the end of March, each year:

Year	Students abroad	Year	Students abroad
1934	133	1931	219
1933	184	1930	361
1932	191	1929	429

As a further means of supplying higher grade professors, a professor's licence is granted to persons holding doctor's degrees and those who have graduated from universities and colleges. In 1933-1934 the number of persons who received Higher School Professor's licences was 1,103, of which 8 were women.

Training of Special School Teachers and Nurses of Kindergartens Teachers for the blind and the deaf

and dumb are trained in the training courses in the Tokyo School for the Blind and the Tokyo School for the Deaf and Dumb. The nurses of kindergartens are trained in the training courses provided in women's normal schools, special courses in the higher normal schools for women and in the special institutions for the purpose established by private bodies. In 1933-1934 the number of kindergarten nurses' certificates given was 1,009.

Teacher's Certificate Given by Examination Persons who have similar scholastic attainments with the graduates of the schools mentioned above, may ask for an examination to get a teacher's licence. They have to undergo a strict examination by the special examination committees of the Educational Department. The number of persons who passed the examinations during 1932-1933 was 5,288. These may be classified as follows:

Teachers of	Applicants	Passed examination
Elementary School and Kindergarten	37,496	4,680
Normal School, Middle School and Girls' School	6,937	592
Higher Department of Higher School	194	44
Business School	889	110
Total	45,516	5,426

Physical Education and School Hygiene

With a view to promoting the rational development of the young and to encourage and further the spread of gymnastics, games and athletic sports, both eastern and western, there was established in 1924 a national Institute for Research in Physical Training, where research work is now in active progress.

For school hygiene, special attention is paid to buildings and equipments, and efforts are being made to improve and strengthen the physical constitution of pupils

and students by employing school physicians, dentists and nurses, by taking measures for the prevention of infectious diseases in schools, by making plans for open-air schools, vacation colonies, school feeding, school clinics and the like.

For the administrative organs responsible for the work referred to, Hokkaido and prefectures have school hygienic experts and directors of physical training, while the Department of Education has the Section of Physical Training, Supervisors of School Hygiene and the Institute for Research in Physical Training. In addition, there

are provided in the Educational Department a School Hygiene Investigation Committee and a Physical Training Investigation Council, which investigate and make researches in important questions submitted to them by the Minister of Education.

Social Education

For the diffusion and development of social education there has been created a Bureau of Social Education in the Department of Education, and a certain number of supervisors of social education are appointed in the Department, and directors of the same in the local governments.

Adult Education For the benefit of those adults who have had little or no chance to receive regular education, the Department has requested some of the schools under its direct control or under that of the local governments to start a

series of lectures. Most of the adults who are gathered to these lectures are labourers or farmers, and fuller reference to this is made in the chapter on labour.

Libraries The spread of libraries in Japan has been rather slow because of many reasons, but the place of the library in social education has been understood more and more clearly with the advancement of national and international life in recent years. The Government, therefore, established a national library at Ueno, Tokyo, and at the same time has given encouragement to local public bodies for establishing their own libraries by granting subsidies to them. It also tries to help them by holding short period courses for training capable librarians. The results of these efforts have been a notable progress in libraries, as may be observed in the following table:

Year	Public Libraries	Books	Readers	Daily average of readers of a library
1934	4,634	10,762,000	24,949,000	21
1933	4,686	10,563,000	24,766,000	20
1932	4,609	10,138,000	24,980,000	21
1931	4,609	9,636,000	23,355,000	19
1930	4,553	9,276,000	22,835,000	19

In November, 1931, the Tokyo Science Museum was established by the Government. It is located in Ueno Park, Tokyo and exhibits 1,751 technical and machine models and 106,124 specimens of natural science. In 1933-1934 209,843 people visited it in 329 days.

Young Men's Training Institutes A young men's training institute is designed to give mental and physical culture to young men with a view to maintaining and improving national standards. These institutions which are found all over Japan, side by side with the business continuation schools, are now reap-

ing a good result. The following are the figures for such institutes and their pupils in the years 1930-1934:

Year	Training Institutes	Students
1934	15,576	819,968
1933	15,546	835,723
1932	15,550	796,132
1931	15,617	794,171
1930	15,637	806,454

Young People's School

On April 1, 1935, the Young People's School was established by the amalgamation of the Young Men's Training Institute and the Business Continuation School.

The purpose of the new institution is to elevate young people's attainment as citizens of Japan by training mind and body, by cultivating moral nature and by educating in knowledge and ability indispensable to their profession and practical life.

The course of study of Young People's School is graded into three, common, regular and post graduate. The common course extends over two years, the regular course five years for boys and three years for girls (four years for boys and two years for girls may be allowed according to local conditions), and the post graduate course over one year. Graduates of the lower course of elementary school may enter the common course of Young People's School; those who finished the common course may be advanced to the regular course, while the graduates of the higher course of elementary school have the same privilege; and graduates of the regular course or those who are in possession of an adequate scholastic attainment may take the post graduate course.

Subjects of study are, in the common course, morals, civics, some of subjects common to middle schools, agricultural subjects and gymnastics, with additional studies on house-keeping and sewing for girls only; in the regular course the same subjects are given in a more advanced grade; and in the post graduate course, morals, civics and certain studies selected from the subjects of the regular course. Special course may be added. Pupils are free of charge as a rule.

Young Men's and Young Women's Associations With the object of giving mental and moral culture to those young men and women who are no longer cared for in the schools, the organization of young men's and young women's associations has been encouraged so

that there is at present hardly any city, town, or village where they are not established. These associations work, on the whole, according to the principle of self-government, quite different from the foregoing Training Institutes, and along the lines which they choose in view of the circumstances peculiar to themselves.

The following table shows the number of young men's and young women's associations and that of their members in the years 1930-1934:

Year	Y.M.A. Members	Y.W.A. Members
1934	15,440 2,488,113	13,468 1,512,682
1933	15,300 2,497,166	13,378 1,522,041
1932	15,365 2,518,173	13,394 1,534,125
1931	15,202 2,495,708	13,225 1,567,123
1930	15,144 2,553,192	13,322 1,550,460

Boy Scouts and Girl Guides The boy scout movement, which is also an important item in the social education of the young, has made much progress since the organization of the Japan Federation of Boy Scouts in 1922. The President of the Federation was the late Count Shimpei Goto, and its head office was located in the Department of Education building. The boy scouts which are affiliated with the Federation are scattered all over the Empire except 4 prefectures in Japan proper and the South Sea Mandated Islands. In 1925, the Marine Branch was established and it owns a training-ship.

The number of boy scout organizations and that of the members were approximately 1,100 and 90,000 respectively in March, 1935. The Federation is led by Count Yoshinori Futara at present.

The girl guide movement was first introduced into Japan in 1920. The earliest organizations appeared in Tokyo and Morioka, and the movement gradually spread over dif-

ferent parts of the country, although it has not yet achieved such progress as the boy scout movement, having only 27 guides with about 300 girls in 1931.

Educational Expenditure

Education in Japan, as previously mentioned, is principally controlled by the State, though it is partly delegated to local public bodies and partly carried on by private individuals or organizations by permission of the Government, and the expenditure incurred is met from these three different financial sources.

Part of the educational expenses of local public bodies, however, is met by the State Treasury in order that the teachers may be sufficiently paid and the burdens on the rate-payers may not be too heavy. Formerly the sum of ¥10,000,000 was yearly defrayed for this purpose, but it has been recently increased to ¥85,000,000 or more, and destitute municipalities receive special consideration in the apportionment of the grant.

Local governments are required to pay additional salaries at certain rates for long service to the teachers

of schools for which they are directly responsible. To meet part of these expenditures, the Government allocates a sum of money fixed annually in the National Budget and divides it among Hokkaido and the prefectures in proportion to the number of teachers. In cases where a city, town or a village undertakes to pay for residences of elementary school teachers, the higher local body is required to share part of the expense.

No investigation having been made, by any authoritative body, as to the amount of private money spent on education, the figures given in the following tables refer only to the amounts expended by the Government and local public bodies. In recent years educational undertakings have been greatly extended and the treatment of teachers considerably improved in accordance with the post-war programme of the country, and this has caused the educational expenditure to swell in a remarkable degree. The following table shows the total governmental and public educational expenditures during the years 1930-1934:

Year	State Treasury	Prefectures	Cities	Towns and Villages	School Associations	Total
1934	¥152,105,765	100,105,129	102,318,577	202,816,370	87,274	557,434,115
1933	148,083,243	97,885,783	87,530,024	199,345,796	89,538	532,984,684
1932	137,239,255	106,856,178	77,676,969	197,723,655	87,829	519,583,886
1931	143,320,002	111,298,987	81,642,411	213,334,298	71,733	549,667,431
1930	144,373,838	114,502,616	96,687,293	235,899,221	79,182	591,542,150

1 Note: The figures refer to the settled accounts of the fiscal years. For instance, the year 1931 means the fiscal year April, 1930—March, 1931.

The above table does not include the amounts expended on local educational administration.

In order to show the total expenditure, both governmental and local, the year 1933-1934 is taken and full details of the items of expenditure are shown:

GOVERNMENTAL EDUCATIONAL EXPENDITURE

1933-1934	
Administration	¥2,495,102
Elementary and Secondary education	103,578,350
Business education	656,824
Social education	2,239,029
Blind, Deaf and Dumb education	159,614
Universities and libraries	33,580,131
Others	9,395,715
Total	152,105,765

PUBLIC EDUCATIONAL EXPENDITURE BORNE BY LOCAL PUBLIC BODIES

Kind of Education	Hokkaido & Prefectures	1933-1934			Total
		Cities	School Associations of Municipalities	Towns & Villages	
Elementary Schools	—	¥84,604,453	¥37,846	¥176,039,206	¥260,681,505
Normal Schools	¥9,215,376	—	—	—	9,215,376
Middle Schools	20,651,387	220,362	40,477	166,324	21,078,550
Girls' High Schools	13,922,374	2,458,009	—	1,882,941	18,263,315
Higher Schools	521,324	—	—	—	521,324
Universities	1,459,187	1,121,300	—	—	2,571,437
Colleges	371,742	96,365	—	—	468,107
Business Schools	16,090,869	7,545,688	5,218	14,837,973	38,479,648
Teachers' Training Schools	302,817	—	—	—	302,817
Blind Schools	739,537	48,264	—	12	787,813
Deaf and Dumb Schools	389,000	94,313	—	—	483,313
Miscellaneous Schools	170,238	338,110	—	40,047	548,395
Young Men's Training Institutes	—	1,157,047	602	3,955,671	5,113,320
Kindergartens	—	972,707	—	511,096	1,483,803
Libraries	550,990	631,335	—	261,420	1,444,245
Miscellaneous	35,730,338	3,030,233	3,131	5,121,680	43,885,382
Total	100,105,129	102,318,577	87,274	202,816,370	405,328,350

The total amount of educational expenditure in Japan proper borne by private bodies was ¥62,512,310 for 1933-1934:

EDUCATIONAL EXPENDITURE BORNE BY PRIVATE BODIES IN 1933-1934

School	Expenditure	Revenue
Elementary Schools	¥1,265,860	¥ 769,479
Middle Schools	4,447,509	4,185,524
Girls' High Schools	6,876,014	6,300,396
Higher Schools	672,238	677,697
Universities	9,805,808	9,706,544
Colleges	11,498,350	11,681,439
Business Schools		
College grade	798,972	556,588
Secondary grade	6,542,004	5,894,728
Primary grade	227,293	141,573
Total	7,568,269	6,592,889
Schools for the Blind	288,429	231,282
Schools for the Deaf and Dumb	68,850	49,624
Miscellaneous Schools	13,265,866	11,421,456
Kindergartens	2,093,423	1,774,253
Young Men's Institutes	249,412	18,512
Y. M. A. and Y. W. A.	3,703,915	4,115,029
Libraries	708,367	406,563
Total	62,512,310	57,930,687

Other Schools

There are schools in Japan proper which do not come under the control of the Educational Department, and they have been excluded from the foregoing sections. But to complete the chapter on education we cannot pass without some mention of them.

Fuller explanations may also be found in other chapters.

Peers' Schools They belong to the Department of the Imperial Household, and the purpose of their establishment is the education of the nobility, but admission to them is by no means restricted to children of titled families. They are

called the Gakushu-in and Joshi (woman) Gakushu-in. The former is for boys and is composed of three departments, namely, elementary, middle school, and college. The latter is composed of two departments, namely, high school and college.

Two Special Schools The Department of Foreign Affairs has two schools; one is the To-a Dobun Shoin (Tung Wen College) in Shanghai and the other the Russo-Japanese Association School at Harbin.

The Jingu-kogakkan This was established by the Home Department and is a Shinto seminary.

The Fisheries Institute This is under the Department of Agriculture and Forestry.

In the Territories, schools are under the control of the Territorial Governments, as a matter of course, and full descriptions of them may be found in the chapters on Ter-

ritories. However, a list of the various universities and colleges is here appended.

CHOSEN

Keijo (Seoul) Imperial University
Keijo Imperial University Preparatory School
Keijo Law College
Keijo Medical College
Keijo Technical College
Sulgen Agricultural and Forestry College
Keijo Commercial College
Eight private colleges

TAIWAN

Taihoku Imperial University
Taihoku College
Four other colleges

KWANTUNG

Ryojun (Port Arthur) Technical University
Preparatory College for the same
Four private colleges

Foreign Teachers and Students

The number of foreign teachers and students at the end of March, 1934, was as follows:

Schools	Teachers		Total	Pupils & Students		Total
	male	female		male	female	
Elementary	—	6	6	146	78	224
Higher Normal	5	—	5	90	—	90
Woman's Higher Normal	—	—	—	—	24	24
Middle Schools	36	7	43	27	—	27
Girls' High Schools	3	50	53	—	1	1
Higher Schools	68	2	70	92	—	92
Universities	124	2	126	490	10	500
Colleges	126	71	197	158	52	210
Business Colleges	65	1	66	86	1	87
Business Schools	38	8	46	7	—	7
Miscellaneous	88	183	271	904	599	1,503
Total	542	330	883	2,000	765	2,765

The comparison for the five years, 1930-1934, is as follows:

Year	Teachers	Students	Year	
			Teachers	Students
1934	883	2,765	1933	1,059
			1932	908
			1931	940
			1930	871

CHAPTER XXIX

RELIGION

General Survey

From prehistoric ages Japan has had an indigenous cult which is now known as Shinto. Confucianism and Buddhism were introduced through Korea and China later, and Christianity more recently still. Islam, however, never gained a footing on her soil, though its literature has been introduced to some slight extent.

Shintoism has had nothing to do with the thought and life of the people, apart from its relations with the functions of the guardian deities of the nation and communities. It resembles the primitive Greek or Roman cults, but is much simpler and purer, both as regards the nature of its deities and the motives of its worshippers. It is now divided into two, namely, national Shintoism, which is represented by the shrines, and sectarian Shintoism, which developed towards the end of the Tokugawa Shogunate.

Confucianism is rather a code of moral precepts than a religion, except in that it teaches some vague ideas regarding a heavenly God. In the realm of moral culture it has exerted great influence on the minds of the Japanese people and on their principles of daily life; that influence being very noticeable in the Imperial Rescript on Education of the Emperor Meiji. Further mention of Confucianism will be omitted here because it has no meaning as a religious cult.

Buddhism has had still greater influence on all phases of Japanese life. Its fatalism has had a retarding effect on the material progress

of the Japanese as with other Oriental nations, but has induced a habit of dauntless composure in their behaviour, and its broad philanthropy gave rise to a spirit of mutual help among the people, subduing egoism or individualism. Its philosophical literature fed the national thought, while its fine art has left many masterpieces enriching the cultural life of the Japanese. This cult is still the most powerful among religions in Japan.

Christianity has made valuable contributions toward the civilization of Japan with its world-wide nature and positive teachings on human life. The number of believers is comparatively small, but its influence on the people's thought and morals is said to be even greater than that of Buddhism. It has raised Japan's moral standards, waging war against licensed prostitution, the low position of women, drinking and smoking, and polygamy as practised in a certain section of society. It has still to amalgamate itself with the life of the people in order to exert great influence upon them, but its future is hopeful.

Shinto Shrines

Most Shinto shrines are supervised by the Shrine Bureau of the Home Department, which consists of one chief official and 64 minor officials. The budgets of the Bureau for the fiscal year 1934-35 and 1935-36 are as follows:

Running expenses	1934-35	1935-36
Isé Great Shrine	¥230,000	¥230,000
Other national shrines	750,000	750,000
Ceremonies and rituals	7,105	7,105
Soldiers' shrines	14,255	14,255
Total	1,001,360	1,001,360

Incidental expenses	1934-35	1935-36
Repairs	¥396,500	¥849,000
Education of priests	11,066	11,066
Investigation	26,575	29,066
Reconstruction	35,040	35,184
Total	469,181	915,316
Sum total	1,470,541	1,916,676

The increase of repairs in 1935-36 is for shrines damaged by the typhoon of September 21, 1934.

The Isé Great Shrine is the most honoured of all the shrines as the first national shrine. The Goddess enshrined in it is Amaterasu-Omikami, which may be translated as Heaven-Shining-Great-God. According to the Japanese mythology, Amaterasu-Omikami sent down her grandson to the Nippon Islands to rule the people by the Kingly Way, giving him the Three Sacred Treasures, which have been handed down even to the present Emperor as the sacred symbols of the Imperial Throne (see Appendix, The Constitution of Japan; The Imperial Household Law Article X; and Chapter III). In the Great Shrine and appendant shrines more than 10 gods, who represent the Imperial ancestors or personify natural powers, are installed beside the principal Goddess.

The name of the shrine comes from its location in Isé province or more accurately on the Isuzu river, city of Ujiyamada, Miyé prefecture. The whole sacred area of the Great Shrine includes 13,135 acres.

About 87 priests are attending it under a chief priest. There are established a seminary for the education of priests, a police station, two museums, and a library in connection with the shrine.

The budget for the fiscal year 1932-1933 was ¥1,457,044, its fund amounting to ¥2,026,432.

According to the report of the Shrine Bureau, the Home Department, the number of other shrines in 1933 was as follows:

Governmental and national shrines	198
Prefectural and village shrines	49,457
Private shrines	61,351
Soldiers' shrines	104

The number of private shrines in Japan proper has been steadily decreasing since 1889, lessening from 136,783 in that year to 61,351 in 1933. There were many too superstitious and barbarous ones among them and the decrease speaks of the healthy progress of the religious ideas of the people and the radical policy of the government.

The total area of the sacred campus of these shrines (not including soldiers' shrines) covered 76,948,646 tsubo, 65,721,332 of it being government property.

The settled accounts of the 200 governmental and national shrines in the fiscal year 1931-1932 were as follows:

Income (yen)	Disbursement	Balance
3,699,601	3,409,045	290,556

In the income, there is included the contributions of worshippers amounting to ¥2,068,265. There were 11 shrines at which the contributions amounted to over ¥50,000. The sum total of the different kinds of fund possessed by these shrines amounted to ¥11,777,045 in the same fiscal year.

The total number of priests in Japan proper at the end of the year 1933 was 15,518.

For the education of priests there are one seminary of college grade at Isé as mentioned above, a department in Kokugakuin (Japanese literature) College of junior college grade, a middle school grade seminary affixed to the one at Isé, and 26 smaller places for giving a course of study, the total number of students being not more than 2,100. It may be said, therefore, that the education of Shinto priests is much lower than that of Buddhist priests or Christian pastors.

Sectarian Shintoism

Shinto Sect This sect is called by the general name given to the national cult when by this name the various Shinto branches were known. The principal ideas of the sect are to develop the Great Way of the Gods, and to propagate the national cult indigenous to the people of this country. Its believers and devotees consider it their most important duty to cultivate reverence for the gods, cherish the spirit of patriotism, elucidate Heavenly Reason and Humanity, pay homage to the Emperor, and observe all the Imperial ordinances.

Kurozumi Sect This was founded by Munetada Kurozumi (1780-1850), who was born at a small village of Okayama prefecture. His main idea was to inhale, while contemplating the Goddess Amaterasu-Omikami, the energy of the sun, and thereby to fill up the heart with satisfaction and complaisance. He teaches to avoid the following seven evils, which are against the will of the gods: (1) to be faithless to the country of the gods in which one was born; (2) to get angry and to worry over things; (3) to be arrogant and spiteful; (4) to entertain evil desires from seeing others do evil; (5) to neglect one's household affairs while in good health; (6) not to have sincerity even when one is entering upon the path of sincerity; and (7) not to accept things gratefully for which one ought to be grateful every day.

Shinto-Shusei Sect Kunimitsu Nit-ta (1829-1902), who was born in the province of Awa, was the founder of this sect. According to its tenets, the great source of the Way issues from the three gods; Ameminakanushi-no-kami, Takamimusubi-no-kami, and Kamimusubi-no-kami. All human beings get their

spirits originally from these gods, and our spirits, which are essentially as pure and as good even as the gods themselves, must be lovingly cherished and preserved. In order to do this, a doctrine is needed, which will keep our spirits under discipline, that is, well in order and in perfection.

Taisha Sect This was revived through the efforts of Sompuku Sengé (1845-1918), and teaches to revere and observe the divine will of the God Okuninushi, whose ideas of administration and spirituality constitute the Great Way of the Gods. When this is elucidated and the heavenly nature of the people is preserved, one's duty to the state is fulfilled, and all will be good, law-abiding citizens.

Fuso Sect The founder was Takekuni Fujiwara (1541-1646), and the one who furthered it was Han Shishino. Its chief doctrine is to worship the spiritual virtues of the three gods. Ameminakanushi-no-kami, Takamimusubi-no-kami, and Kamimusubi-no-kami.

Taisei Sect This was founded by Shosai Hirayama (1815-'90). The principal point of his teaching is to enhance the Great Way of the Gods. Its tenets are: (1) to worship the heavenly gods and the earthly gods and pay homage to the Imperial Sanctuary as well as to the august spirits of the successive Emperors; (2) to revere the divine ordinances infinite as heaven and earth, to extend the national principle of this country; (3) to illustrate in practice the moral codes ordered by heaven; (4) to discipline oneself in morality and truth, to fix the basis of faith wherein one gains peace of mind; (5) to abide in the One Truth which unifies the two realms of the Manifested and the Hidden, to get enlightenment on the true meaning of life and death; (6) to

undertake scientific investigations and encourage various enterprises; and (7) as regards the divine rites and ceremonial affairs, to follow the traditional standards which have been bequeathed by the successive courts.

Jikko Sect This sect, founded by Hanamori Shibata (1809-'90), makes it its principal teaching to promulgate the Great Way of the Gods, which is to be put into practice in our everyday life. We read in its tenets: (1) to enhance the Great Way of the Gods; (2) to study the ceremonial codes of this Divine Land; and (3) to spread the doctrine original to this country.

Shinshu Sect The founder of this sect was Masamochi Yoshimura (1839-1916) of Mimasaka province. He teaches to worship the heavenly gods and the earthly gods, to practise the divine rites according to the ceremonial codes of the successive courts as well as according to the formulas bequeathed by the family of Onakatomi, and to enhance the Great Way of the Gods.

Ontaké Sect Its teachings chiefly consist in following the Perfect Way of the Gods, enhancing the great principles of reverence to the gods, honour to the Emperor, and patriotism, and engaging in mission work in accordance with the laws of the state. The chief gods to whom worship is offered are Kunitokodachi-no-mikoto, Onamuchi-no-mikoto, and Sukunahikona-no-mikoto, who are called the Great Gods of Ontaké. Their spirits are believed to have been incorporated in Mount Ontaké, which means literally the "honourable mountain," on which the gods taught mankind the arts of medicine and magic. The origin of the sect is considered to lie in this legend.

Misogi Sect The Misogi Sect, or the Sect of Water Purification, was

founded by Masakané Inouyé (1790-1849) of Isé province. This sect is an extension of the Shinto doctrine which teaches purification and keeping evils away. These two practices are divine deeds which originated with the Gods Izanagi and Susano-o-no-mikoto.

Shinri Sect The Shinri Sect, or the Sect of the Reasons of the Gods, was founded by Tsunehiko Sano (1834-1906). In his exposition of the ancestral doctrine, he urges us to honour the spirits of all the heavenly gods and the natural reason inherent in all things, and thereby to find the way to faith.

Konko Sect The founder of this sect was a farmer called Bunjiro Kawaté (1814-1883) who became, while alive, Daijin Konko, or the Great God of Golden Lustre by the divine order of the heavenly god he believed in. His main teachings are to pay homage to the God Konjin of north-east, to elucidate the great principles of heaven and earth, to cherish patriotism, and to propagate the idea of oneness of this and the other world, and faith in the reason of life and death.

Teiri Sect This sect, which means the Sect of Heavenly Reasons, was founded by a woman called Miki Nakayama (1798-1887) of Yamato province. She teaches that the gods must be revered, patriotism encouraged, Heavenly Reason and Humanity elucidated, the Emperor honoured, and the Imperial ordinances obeyed. It lays great emphasis on practical discipline, and tells us that eight forms of dust must be swept away, which are: (1) grudging; (2) desires; (3) impure attachment; (4) hatred; (5) enmity; (6) anger; (7) covetousness; and (8) arrogance.

Buddhism

It was in the thirteenth year of the Emperor Kimmei (552 A.D.)

that Buddhism, first founded in India, came over to Japan after passing through China and Korea. The devotion of Prince Shotoku at the time gave a great impetus to its propagation throughout the country. Six schools of Buddhism, that is, Sanron, Hosso, Jojitsu, Kusha, Ritsu, and Kegon were introduced one after another. In the reign of the Emperor Kwammu (782-805 A.D.), Tendai and Shingon flourished. New schools such as Jodo, Zen, Shin, Nichiren and others then gradually developed. Through these long periods of its history, Buddhism further differentiated itself, owing to differences in the exposition of the doctrines and in the methods of propagation, into many sub-sects. Eleven of the principal sects still in existence are Hosso, Kegon, Ritsu, Tendai, Shingon, Yuzunembutsu, Jodo, Shin, Ji, Zen, and Nichiren; and these eleven are sub-divided into fifty-eight branches. Principal teachings of the eleven Buddhist sects follow:

Hosso Sect This sect was introduced into Japan by Dosho (628-700), a Buddhist priest who went to China in 653 and studied the teachings of this sect under Hsuan-tsang. The main teachings of Hosso are that all sentient beings find Salvation in accordance with the difference in character and endowments, of which five yanias are to be distinguished, that the doctrinal system of this sect and its scriptural texts are in full correspondence with the truth, that as all things are merely manifestations of pure consciousness, there are no real ego-souls and no real objects, and that the great fruit of Bodhi and Nirvana is attainable in and through the reality of the Middle Path which is neither existent nor non-existent.

Kegon Sect Roben (688-776) of Todaiji Temple, Nara, the first prop-

agator of this sect in Japan, learned its doctrines from the Chinese Buddhist priest Dokei who visited Japan during the Tempyo era (729-749). The teachings of this sect are based upon the Kegon Sutra, which says that the ultimate reason of Suchness is absolute and infinite; the Ultimate and the Manifested are mutually related and intimately intertwined; each Manifestation too is so thoroughly and interminglingly related to another Manifestation that between the two there is no wall of individual separation. The teachings of the sect are, therefore, called the Perfect Doctrine. Those who, in accordance with the doctrine, understand the mystery of the mute evolution of the spiritual cosmos, and who practise goodness and are guarded in their conduct, are sure to attain Buddhahood and to realize the Ultimate Reason. The head-temple of this Sect is Todaiji in the city of Nara.

The term "Shinnyo", or tathatva, which we have translated "Suchness" in the foregoing, is a very comprehensive word, signifying "truth", "reality", or "the first principle of emptiness". The first character, "Shin", means "that which is true without any admixture of error". The second "Nyo", is the same as is usually translated "like". The two taken together have come to mean "the Absolute Itself". There are three main interpretations of it. The Kegon Sect; as one of these interpretations, identifies the absolute and the relative, the noumenal and the phenomenal, asserting that each separate phenomenon, being endowed with the qualities of the Absolute, has unlimited power to produce other phenomena. The doctrine derived from the Kegon Sutra teaches that even a single particle of dust has the

manifold, infinite and absolute virtues of all things in the universe, and that so, if a man observes a certain practice, he is at the same time doing all other religious practices.

Ritsu Sect The Ritsu or the Sect of Moral Discipline ("Vinaya" in Sanskrit) was first propagated in Japan by Ganjin (686-763), a Chinese Buddhist priest, who came to Japan during the Tempyo era (729-749). It obtains its name from the Vinaya-pitaka, according to which its followers strictly regulate their daily conduct. It teaches to observe, as ordered by Buddha, all the precepts ("sila" in Sanskrit) such as the Five Precepts, the Eight Precepts, the Six Novitiate Precepts, the Ten Precepts, or the Two Hundred and Fifty Precepts. Toshodaiji in Nara prefecture is the head-temple of this Sect.

Tendai Sect The founder of this sect was Chisha Daishi (537-597) of the Sui Dynasty.

A Japanese priest Saicho (Denkyo Daishi, 766-822) went over to China in the year 782 during the Yenyaku era, and studied the principles of Tendai there. On his return to Japan, he became the chief exponent of the sect in this country. The teachings of the Tendai Sect are comprised in two divisions, metaphysics and meditation. It critically systematized in its metaphysical part all the teachings of Sakyamuni, drawing a clear line between what is mere expedient and what really represents the spirit of the founder of Buddhism. As the result Tendai has come to consider Sadharma-pundarika Sutra (that is, The Lotus of Good Law) the doctrine of Sakyamuni, in which the reason of his appearance on earth is truthfully explained. The meditation part consists in applying our minds to all that is taught in the Sutra and realizing it in our daily

practical life. Ten grades are distinguished in the practice of meditation, while its main object is to put a stop to disturbing thoughts and to get enlightened on the principles of the four classes of Buddhist doctrines. The ultimate end of all this is the realization of the mysteries of the Pundarika. When you perceive that the Hidden and the Manifest are of one and the same essence and realize that state of mind which is known to the Buddhas only and to nobody else, you have the central teaching of Tendai, that is you have attained the final enlightenment in which the spiritual and the material are thoroughly unified.

They have three sub-sects or branches in this sect, each of them having its own head-temple. They are: (1) the Tendai Branch, whose head-temple, Yenryakuji, is situated in Shiga prefecture; (2) the Jimon Branch, which has its head-temple in Onjoji of Shiga prefecture; and (3) the Shinsei Branch, the head-temple of which is Saikyoji of Shiga prefecture.

Shingon Sect The first exponent of this sect in Japan was Kukai (Kobo Daishi, 773-835), who went over to China soon after Saicho, the Japanese founder of Tendai. According to this sect, there are three fundamental conceptions, which are, Substance, Appearance, and Function. The Six Universals—earth, water, fire, air, the void, and consciousness—are Substances. The four systems of Mandala, that is, Great Mandala, Samaya Mandala, Dharma Mandala, and Karma Mandala, are Appearances. The three Secrets—body, words, and mind—are Functions. The Six Universals are the elemental substances of which all things are constituted. They take Appearances, which, though innumerable, can be classified under four headings. The first is the Great Man-

dala representing all living beings such as Buddhas, Bodhisattvas, Gods, evil spirits or human beings. The second is the Samaya Mandala which consists in Mudras and symbolic Instruments of Buddhas, Bodhisattvas, devas, and spirits. The third is the Dharma Mandala containing all the names or titles of the Buddhas and other beings. The fourth and last one is the Karma Mandala in which are represented all the Functions as well as the outward bodily attitudes assumed by Buddhas and other beings. As the six Universals are infinite and mutually intermingle and are most intimately related, so the four Mandalas are also mutually related and intermingled. That is to say, the Buddhas' four Mandalas are also our own just as they are in the Buddhas, and conversely, our own Mandalas are those of the Buddhas. When the four Mandalas or Appearances are symbolized in our bodies and our fingers are "knotted" after the regular formulas, and the mouth recites the various Mantram and Dharanis, and the mind contemplates the sameness of the mind, Buddha, and all sentient beings, then the Functions of the three Secrets are completed. Let this completion be attained, and we are Buddhas while we are in this material existence.

"Mandala" has a large number of different meanings. It is often applied to concrete objects such as an altar, a platform, a circular plate, a picture, and possibly an image; but it came to have the abstract meaning of "growth", "perfection", or "a complete collection of all virtues."

This sect is sub-divided into eight branches, which are: Koya, Omuro, Daikakuji, Daigo, Toji, Yamashina, Ono, and Senyuji.

Three hundred years after the death of Kukai, the Japanese found-

er of Shingon Sect, a priest called Kakuban known as Kokyo Daishi (1094-1143), established a new school of Shingon. Under this there are two branches now, one of which is Chizan and other Buzan. The head-temple of the former is Chishaku-in, Kyoto, while that of the latter is Chokokuji (Hasedera), in Nara prefecture.

Yuzu-nembutsu Sect This was founded in 1117 by Ryonin, known as Showo Daishi (1071-1132). Its principal teachings are that as all things are essentially of one nature and intimately related, the virtues of one person must be also those of all others, and conversely; that the merits of the Buddha's name invoked by all earnest hearts will mutually grow, establishing a spiritual communion with one another in a most thorough manner; that therefore the invoking of the Buddha's name and contemplating him, even during this short period of one's earthly life, must bear the great fruit, if it is most sincerely done, of making us all attain to Buddhahood through the perfection of infinite merits.

The head-temple of this sect is Dainembutsuji of Osaka prefecture.

Jodo Sect The founder of this sect was Genku, known as Yenko Daishi or Honen, (1133-1212), and it was established in 1174. The basis of the doctrines of the Jodo Sect is laid upon the original prayers of Amitabha Buddha. Being convinced of the general sinfulness of human nature, which makes us incapable of enduring all the painful process of self-discipline and self-perfection, Jodo teaches us to throw all our reliance upon the strength of the original prayers of Amitabha Buddha. When we thus, absolutely believing in him, invoke his name with all the sincerity of the heart, we shall be born in future in his

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Pure Land. The head-temple, Chi-on-in, is in Kyoto.

One of Genku's disciples, called Shoku (1176-1247), established a new separate school at Nishiyama, which is known as the Seizan Branch of Jodo. This branch is again subdivided into three: (1) Zenrinji, its head-temple bearing the same title, is in Kyoto prefecture; (2) Komyoji; and (3) Fukakusa, Seigwanji, Kyoto, is its head-temple.

Shin Sect Shinran (1173-1262), who is known as Kenshin Daishi, founded the Shin Sect. He was a disciple of Genku, and the main doctrines do not vary so very much from those of his master except in this: that we, the ignorant, have no real existence, and however strenuously we may exert ourselves, we have no "causal germ" in us which will develop into Buddhahood. The priests of the sect can marry and eat flesh. The original prayers of Amitabha in which the invocation of the Buddha's name is highly recommended, testify that the causal germ of Buddhahood, by virtue of the efficiency of the prayers, will be planted in us, which means that all that is necessary for us to be reborn in the Pure Land of Amitabha is now sufficient and fulfilled.

There are at present ten branches of the Shin Sect: Hongwanji, Otani, Bukkoji, Takata, Kibé, Kosho, Idzumoji, Yamamoto, Seishoji, and Sammonto.

Ji Sect This was first promulgated by Ippen (1239-1289). The principal ideas of the sect are: Life is a frail and impermanent thing, and as every moment of it flits away, every act of ours must be regarded as the last one on earth. When, perceiving the truth of this fact, we do not neglect in every thought of ours to invoke the name of the Amitabha Buddha, we shall surely reach the final blissful state of Bud-

dhahood.

The head-temple, Shōjōkoji, is in Kanagawa prefecture.

Zen Sect Under this name three Sects are comprised: Rinzaï, Soto, and Obaku.

The Rinzaï Sect of Zen was first taught by Yeisai (1140-1215) who came back from China in 1192. Soto finds its first Japanese exponent in Dogen (known as Joyo Daishi, 1199-1253) who studied zen in China during the Sung dynasty and returned to Japan in 1234. Obaku was introduced to Japan by a naturalized Chinese priest Yin-gen (1592-1673) in 1653.

The Zen Sect teaches the doctrine which is known only to the Buddha and the transmission of which takes place only from one mind to another. It transcends logic and objective understanding. We do not have to purify ourselves from sins, nor is it necessary to seek after supreme knowledge. The ultimate truth is not in mere learning, thinking, or in discipline. It is above doctrines, meritorious deeds, and also above any special attainment. Zen teaches us to abide right in the truth and reality of life, every act of which will then reveal thousands of Samadhis. Whether lying or sleeping, whether drawing water or hewing wood, every movement grows full of significance. That is why Zen sums up its teachings in the following four phrases: "No reliance on word or letter; a special transmission outside of the scriptural doctrines; a direct pointing at the soul of man; and attainment to Buddhahood by seeing into one's own mind."

There are fourteen branches in the Rinzaï Sect: Kenninji, Kenchoji, Tofukuji, Engakuji, Nanzenji, Daitokuji, Myoshinji, Tenryuji, Yeigenji, Shokokuji, Hokoji, Buttsuji, Kokutaiji, and Kogakuji. The Soto

Sect has two head-temples, Yei-heiji, and Sojiji. Obaku is undivided, and its head-temple is Mam-pukuji, Uji.

Nichiren Sect This was founded by Nichiren (1222-1281) on the merits of the Saddharma-pundarika Sutra. The life of the Sect is in the seven syllables of "Na-mu-myo-ho-ren-gé-kyo," which is called "Daimoku," or a kind of theme. As this is the title of the Sutra revealing the absolute oneness of all opposites, even evil-hearted ones will attain to Buddhahood if they recite it in sincerity, and along with it all the ten universes will be equally benefited.

This sect is sub-divided into nine branches: (1) Nichiren-shu (the head-temple, Kuonji, is in Yamana-nashi prefecture); (2) Hommon-shu, (Hommonji at Ikegami and six other temples in Shizuoka prefecture are its head-temples); (3) Hokkē-shu, (its head-temple, Honjoji, is in Niigata prefecture); (4) Kempon-hokkē-shu, (Kochoji and other four temples in Shizuoka prefecture are its head-temples); (5) Hommyo-hokkē-shu, (its head-temple is Honryuji, Kyoto); (6) Nichiren-seishu, (its head-temple is Daisekiji in Shizuoka prefecture); (7) Nichiren-shu-fujufusé-ha, (its head-temple is Myokakuji in Okayama prefecture); and (8) Nichiren-shu-fujufusé-komon-ha, (the head-temple, Honkakuji, is also in Okayama prefecture).

Christianity

Before the Restoration Christianity was first introduced into Japan by Francis Xavier, a Jesuit Father, who came to Kagoshima in 1549. This was the time when Nobunaga Oda was at the height of his power, and he gave great encouragement to the spread of the Christian religion. Hideyoshi Toyotomi, his successor, too, was kindly disposed towards it. Combined with the devout and un-

firing work of the missionaries, this attitude on the part of the authorities made it possible for Christianity to gain followers with wonderful rapidity. Their number is reported to have run into hundreds of thousands.

Hideyoshi, however, changed his policy later on. Christianity was interdicted, its followers were persecuted, and the missionaries had to leave the country. When the Tokugawa Shogunate was established, still stricter measures were adopted, especially after the Shimabara Rebellion in 1637. Christianity had now no hope of being revived under the rigorous government policy of exclusion. The only port open to foreigners was Deshima, Nagasaki, where the Dutch traders were allowed to carry on their business.

The American envoy, Commodore Perry, came to Uraga in 1853, demanding a friendly commercial treaty with his country. The Shogunate government granted this request in 1854 not only to America, but to Russia, England, France and Holland, and in the year following the three ports of Kanagawa, Nagasaki, and Hakodaté were opened to foreign trade. A party of American missionaries were the first to avail themselves of the opportunity thus offered to them. Among them were the Rev. J. Liggins, of the Protestant Episcopal Church of the United States of America, and the Rev. M. C. Williams, who came to Nagasaki in 1859. These were soon followed by Dr. G. F. Verbeck, of the Presbyterian Church (1859), and J. Goble, of the American Baptist Missionary Society (1860), and others. In 1864, the Rev. J. H. Ballagh, of the Dutch Reformed Church, came from America, and in the following year Dr. Thompson, of the American Presbyterian Church, reached here

as a missionary.

In 1869, the Rev. D. C. Greene made Kobé the basis of his mission work representing the American Board of Commissioners for Foreign Missions. The first woman missionary, Miss Kidder, of the Dutch Reformed Church, arrived here in the same year. In 1873, the American Methodist Episcopal Church and the Canadian Methodist Church sent their missionaries, and in 1876 the Evangelical Association of North America started its propaganda work.

The Restoration When the feudal system of Tokugawa collapsed and the Imperial House was restored to power, the edicts prohibiting "Kirishtan" were withdrawn in the sixth year of Meiji (1873), and the missionaries were officially permitted to establish schools, to publish religious tracts, and to preach their doctrines in all the sea-ports open for foreign trade. In 1872, the Rev. Brown and Rev. Ballagh of Yokohama established, aided by their young followers, a Christian church to be known as the Yokohama Yaso Kyokai, which was the beginning of the Union Church. In the following year a sister church was organized at Tsukiji, Tokyo. This was the first Christian church in the metropolis. In 1876 Nagasaki saw another church established. Later all these churches were federated in the name of the United Church of Christ in Japan. This was the origin of the Nihon Kirisuto Kyokai. The Rev. D. C. Greene who started his mission work in Kobé established a church known as the Settsu First Christian Church. This was the first Congregational Church ever organized in Japan, and developed into the present Kobé Kumiai Kirisuto Kyokai. In the same year the Umemoto-Cho Church came into existence in Osaka, which later came

to be called the Osaka Kumiai Kirisuto Kyokai. Some time before this, thirty-five students of the Kumamoto Foreign School, who were converted to Christianity under the influence of their American teacher, Captain Janes, came up to Kyoto, and entered the Doshisha College just established by Jo Neshima, who had lately returned from America. After their graduation from the college they grew active as propagators of Christianity, and built up the foundations of the Nihon Kumiai Kirisuto Kyokai. In 1872, the Rev. Loomis and Rev. Ballagh opened a Bible class for young men in the above-mentioned Church at Yokohama every Sunday afternoon. In 1873, a Congregational Missionary, Dr. Berry, set up in Kobé a Sunday-school, probably the first one conducted in the Japanese language. As to the vernacular translation of the Bible, in which Dr. Brown had been engaged for some time, the work progressed rapidly early in the Meiji era, and the New Testament was completed in December, 1879, and the Old Testament in 1886. The chief translators were Brown, Verbeck, Greene, and MacLay, while among the native assistants were Takakichi Matsuyama, Masatsuna Okuno, Masahisa Uyemura, Kajinosuké Ibuka, Goro Takahashi, and others.

Y. M. C. A. In 1880, the Young Men's Christian Association was first organized in Tokyo, and among the leaders must be mentioned Hiro-michi Kozaki, Kajinosuké Ibuka, Masahisa Uyemura, and Yoshiyasu Hiraiwa.

In 1870, Miss Kidder opened a school for girls in Yokohama. This was the first institution of the kind in Japan, and from it developed the present Ferris School for Girls. Four years later another girls' school, Kobé Jo Gakuin, was erected in Kobé

by the Congregationalists.

According to the statistics of 1882, there were in that year 145 foreign missionaries, 93 organized churches, 13 of which were self-supporting, 4,367 adult members, 39 mixed schools, 15 girls' schools, 9 middle schools, 7 theological colleges, 109 Sunday schools, 49 ordained preachers, 100 assistant preachers, 37 Bible women, and 5 hospitals.

In 1883, the Church of Christ sent missionaries to Japan, and in 1885 the Presbyterian Church of the United States of America did the same. The American Society of Friends, and the Evangelical Protestant Missionary Society of Germany and Switzerland also dispatched their agents. In 1886, missionaries came from the Methodist Episcopal Church, South, and in Osaka a hall was set up for the Young Men's Christian Association. In 1887 the missionaries and representatives of the Episcopal Church of England and America had a conference, the result of which was the organization of the Holy Catholic Church of Japan. In the same year, the American Unitarian Association sent its representative, the Rev. A. M. Knapp, and following him came the Rev. Clay McCauley.

Freedom of Faith On February 11, 1889, the Constitution was promulgated, and freedom of faith was definitely guaranteed by Article XXVIII. This year, L. D. Wishard, International College Secretary of the Young Men's Christian Association, came, and planned out a summer school for Bible study for the first time in this country. Since then every summer sees its work carried on. The United Church of Christ in Japan changed its name into the Church of Christ in Japan, compiled a fundamental law, settled on its creeds, and at last became an independent organization. Soon

after, they put up a Board of Missions and made progress towards financial independence.

In 1890, the Universalist General Convention of America sent its missionaries. In 1895 officers of the Salvation Army came, and Gumpei Yamamuro joined it, and they at once started on their propaganda work. In the same year, the United Brethren in Christ started a mission.

While the foreign missionaries, up to 1901, had not been allowed to hold land in Japan, which greatly inconvenienced their activities, the Home Minister this year gave permission to the Baptist Missionary Society in Japan to organize a corporation which could hold and manage lands and buildings for missionary purposes.

In 1905 the Japanese Congregationalists planned to be financially independent of the foreign mission at the end of this year, in which they later succeeded.

In 1907 representatives of the Methodist Church of Canada, the Methodist Episcopal Church, South, and the Methodist Episcopal Church convened in Tokyo with a view to effect a confederation of the three denominations in Japan. The First General Conference of the Methodist Church of Japan thus took place, and Yoichi Honda was chosen to be its first Bishop and was duly consecrated. In the same year F. L. Brown, of the International Sunday School Association, arrived and the outcome of this visit was the organization of the Sunday School Association of Japan, marking an epoch in the history of the Sunday School of the Christian Church. The conference of the World's Student Christian Federation was also held this year in Tokyo, in which 160 foreign visitors took part representing twenty-five nations. This was the first world's convention of any

kind in Japan.

Roman and Greek Churches The Catholic Church has been active ever since the opening of the sea-ports for foreign trade. The missionaries from the Société des Missions Etrangères in Paris are working all over the country, which is now divided by them into seven districts: Tokyo, Osaka, Hakodaté, Nagasaki, Shikoku, Niigata, and Sapporo. At present a Bishop resides in Tokyo, and in Shikoku the Dominicans from Spain are active, while in Hokkaido the Franciscans have found their principal fields of activity, where there are two Trappist monasteries. The Jesuit missionaries reached here again in 1908, but instead of following up their predecessors' work, they have now a college established in Tokyo and concentrate their efforts on education. Besides the Jesuits, those that are chiefly engaged in educational work are Missionnaires de Marie, Société des Soeurs de Saint Paul, Société de Sacré Coeur and others. In the prefecture of Nagasaki where the Catholics have been at work for the last three hundred years, though secretly, they are still in the ascendancy.

The activities of the Greek Church centered in the person of the Russian priest Father Nicolai, who came to Japan first as priest attached to the Russian consulate in Hokkaido in 1859. He reached Japan after crossing Siberia, and while settling in Hakodaté, he baptized Takuma Sawabé and two other Japanese. In 1872 he came to Tokyo where he began missionary work. In 1884 he started to build a fine large church in Tokyo, which was completed in 1891. The church was regarded at that time as the greatest and finest building of this sort throughout Japan. The internal disturbances in Russia which followed the great

world war made it very difficult to maintain this beautiful edifice, until in 1919 the followers succeeded in organizing an independent church known by the name of the "Orthodox Church of Christ in Japan."

The Japanese Christian Movement for 1935 According to the report of Dr. William Axling, Honorary Secretary of the National Christian Council of Japan and Honorary Secretary of Tokyo Misaki Kaikwan:

A candid review of the Christian movement in Japan for 1935 compels calling attention to some low tide tendencies as well as evidences of real advance.

Counter Currents. The genius of Christianity is its world-wide outlook, its world-encircling sympathies and its world programme. A reaction against internationalism in any land therefore runs counter to the genius of this religion and hampers its spread. The recent rising tide of nationalism in Japan has not actually come into conflict with the Christian church and its institutions, but it has undoubtedly raised questions in the minds of many people regarding its international idealism and has slowed down the church's progress.

A New Stage in Indigenization. Another factor contributing to this temporary slowing down process has been the drastic cuts in funds from abroad and the wholesale withdrawal of missionaries on the part of mission organizations in Western lands because of the economic depression. In many cases there has been a full fifty percent cut in funds from abroad and an equal reduction in missionary staff on the field. This has thrown the Japanese church back upon its own resources both in workers and in finding finances for its work.

Although the present emphasis on nationalism and the withdrawal of

men and money from abroad has slowed down the forward march of the Christian church in the Empire the result has not been entirely negative and unfortunate. The pressure of the present nationalistic mood has compelled the Christian church and its institutions to make a reappraisal of the values inherent in the nation's indigenous moral and spiritual culture and to seriously strive to orientate and indigenize itself in order that it may become more truly native to the soil and not a mere importation from the West.

Moreover the withdrawal of funds and missionary personnel has forced the Japanese church to assume a larger responsibility both for the leadership and for the support of the Christian programme in this land. This has called forth latent powers of leadership and unexplored hitherto unutilized financial resources.

Renewed Interest in Religious Education. Thirty seven years ago the Department of Education issued a ruling banning religious teaching from schools of every grade throughout the Empire. The nation's educators and intellectuals carried along on the high tide of the modern scientific advance, eagerly fell in with this non-religious mood and for fifty years religions old and new have been fighting with their backs to the wall.

However, ever-increasing cases of graft and scandals among educators, the terrific in-roads of Communism among the students and the plunge of the people into crass materialism and its attendant evils have shocked thoughtful men and women into a great awakening.

This awakening has resulted in a marked resurgence of interest in religion among people of every class. Recently the Department of Education appointed a Religious Education Investigation Commission to

make a study of the relation between religion and education. This Commission, composed of outstanding educational and national leaders, after prolonged study brought in a report calling attention to the need of schools remaining neutral as regards the different religions but urging that constructive measures be taken by all schools to promote and cultivate the religious spirit among their pupils and students.

This new interest in religious education has opened the schools of the Empire to Christian as well as Buddhist speakers and given Christianity a new opportunity to mould the life of the nation's youth.

An Outstanding Event. The outstanding event of the year for the Christian movement was the All-Japan Christian Conference held in Tokyo, November 26-27. This was a delegated conference and the two hundred delegates represented practically every communion and every national Christian organization in the Empire. This made it not only an all-Japan but an all-Christian gathering.

This conference concentrated its study and discussion on two major questions, Church Union and the launching of a Nation-Wide United Campaign of Evangelism. As regards the question of Church Union the Conference considered first "The Basis for Union" and second "The Next Step" in the realization of union.

As a result of the discussion the following actions were taken:

1. To approve of Church Union in principle.
2. To make the tentative "Basis of Union" and the suggestions made on the floor of the Conference and in the four sectional meetings materials for reference in the work of evolving a more satisfactory basis for union.

3. To appoint a Commission on Church Union. It being understood that this commission should undertake immediately a re-study of the "Basis of Union" and inaugurate such activities as it may deem necessary to prepare the way for union.

4. That this commission shall consist of twenty-five members, twenty-one of whom shall be appointed by this Conference and four co-opted by the commission itself.

Regarding the second major question the Conference voted, "To appoint a Commission on United Evangelism of fifteen members to plan and launch a United Nation-Wide Evangelistic Movement."

These two commissions have been set up and are actively at work carrying out the decisions of the Conference.

The National Christian Council. In order to present an unbroken front and create a spirit of solidarity among the Christian forces of the Empire the National Christian Council was organized in 1923. Today forty-one communions and national organizations are cooperating in this body. The Council serves as a clearing house for the Christian movement and correlates and unifies the life and work of the Christian forces. It serves also as their mouthpiece and in times of necessity speaks for them on moral, social and religious questions. The Council has its headquarters at the Christian Building, No. 6 Itchome, Nishiki Cho, Kanda, Tokyo.

Some Statistics. There are at present 2,167 organized Protestant churches in Japan. In addition there are a large number of chapels and preaching places. The total church membership is 200,323. The members of the Roman Catholic and Greek churches would raise this total to 300,000.

There are 2,853 Protestant Sunday

Schools with 176,351 pupils. In the field of education there are 93 Christian schools, including Boys' Middle Schools, Girls' High Schools, Special Schools, Universities, and Theological Seminaries. These schools have a total enrollment of 36,910 students. Including the pupils in the Sunday Schools and the students in the Christian schools the Protestant church in Japan has thus a total constituency of 413,584.

State Regulation of Religions

Supervising Office A wholesale change of the governmental system took place at the time of the Restoration, and in the third year of Meiji (1870) the Mimbusho was established to take care of various affairs of the state, such as general home affairs, communications, etc. In the fourth year, this office was abolished, and the office of religious affairs was transferred to the Finance Department. With the establishment of the Kyobusho, or Department of Religions, in 1872, the shrines and temples were placed under the care of the new office. Then the Government appointed Shinto and Buddhist priests as official religious instructors who were to preach and educate the people according to the moral principles as follows: (1) to cherish reverence for the gods and the spirit of patriotism; (2) to elucidate Heavenly Reason and the principle of humanity; and (3) to honour and pay homage to the Emperor and to observe the Imperial ordinances. Afterwards the Kyobusho was abolished too, and all the business conducted by this office up to that time was transferred to the Department of Home Affairs which was established in 1873. The official appointment of religious instructors (Kyodo-shoku) was discontinued in 1884, and the business of appointing preachers was entrusted

to the head-priests (Kwancho) of the various religious sects, together with the right of selecting the resident priest (Jushoku) for the temples under their jurisdiction. Each sect was, moreover, given the power of managing its own affairs under the supervision of the Government. Religion was thus separated from politics. With the promulgation of the Constitution on the 11th of February in the 22nd year of Meiji (1889), the principle of religious freedom was firmly established. In April, 1900, the former Bureau of Shrines and Temples was divided into two sections, i. e., the Bureau of Shinto Shrines and the other the Bureau of Religions. All administrative policy concerning the Shinto shrines is now in charge of the former and is entirely independent of the policy governing religions. The Bureau of Religions was transferred to the Education Department in 1913, and is under its jurisdiction at present.

Administration of Religions At present, there are three kinds of religions in Japan. These religions are dealt with by the Government each in a different way, because Japan is still without specific laws defining the political status of these religions in connection with the State, though the principle of the administrative policy can recognize no such difference, as the Constitution guarantees freedom of faith. The Government, however, finds it natural not to mete out a uniform method of supervision over all these religions; for Buddhism, which has been in very close relation to the State and society for over one thousand years, and Shinto, which is the national cult of Japan, and Christianity, which was introduced to this country only half a century ago (putting aside the fact that it was once in this country a few centuries

ago) can hardly be treated in a uniform method with satisfactory results.

From a practical point of view, the religious denominations which are officially recognized and come under the proper jurisdiction of the Bureau of Religions at present are Shinto and Buddhism. The denominations of Shinto are called "Kyoha" and those of Buddhism "Shuha." A religious order is a congregation of preachers and adherents following a definite system of creeds having temples or preaching halls from which their religious movements issue. Shinto and Buddhist Sects have not yet special regulations concerning cases of secession or incorporation, inasmuch as they are not allowed to make such regulations without the approval of the Education Minister. But affairs concerning the inner policy of the various sects are generally left to their own self-government, though the religious sects concerned are required by the State to compile fundamental rules defining their administrative policies approvable by the Education Minister.

Alteration of Rules The approval of the Education Minister is also required when they abolish or alter these rules. Each sect, Shinto or Buddhist, is required by the Government to select a head-priest, or Kwancho to govern and represent that sect. The appointment of a head-priest also requires the official approval. In the compilation of a constitution for each sect they have to define the following particulars: (1) the fundamental law, (2) the status of the preacher and his official title, and (3) the grades of preachers and their appointment and dismissal. These particulars are to be regulated by each Shinto head-priest. Meantime, each Buddhist head-priest is to regulate

the following particulars: (1) the fundamental law, (2) rules concerning the management of temples, (3) the status of the priest and preacher and their official titles, (4) the appointment and dismissal of the resident priest, or Jushoku, of a temple, and grades of preachers, and their appointment and dismissal, and (5) the preservation of old historical documents, treasures, and properties belonging to the temples.

Besides thus defining the particulars as stated above, the constitution of each sect has to regulate, through practical necessity various affairs concerning its self-government. It must define, for instance, the functions and powers of the head-priest and the method of election; the organization and power of the council; functions of various officers; financial affairs; organization of a temple or a preaching hall; qualifications of a resident priest; affairs relating to the personnel, such as conferring honours or giving punishments; missionary work; education; and other functional activities. Needless to say, the head-priest governs his own sect according to the articles of this law. In short, the work of the Government in the matter of supervision over the various sects of Shinto and Buddhism, is to indicate to them what is needed for that kind of work prior to the compilation of their fundamental laws, and to give its official approval when these laws are prepared, and then to see if all the provisions are carried out satisfactorily.

While all the Shinto and Buddhist sects are thus placed under the direct supervision of the Government as far as such fundamental affairs as are mentioned above are concerned, they are left to the care of the local governments concerning the practical functionings of their prop-

aganda work. When the Shintoists or Buddhists want to build their temples or preaching halls, for instance, they must approach the local governments for permission. As Buddhist temples are, on account of their historical significance, regarded as legal persons, the use of the temple grounds, changes in their acreage, cutting down of the trees, and disposition of immovable property, temple treasures, historical documents, or fundamental funds, etc. all require the approval of the local governor concerned.

Special Treatment of Christianity
The Government gives no official recognition as regards the Christian denominations, because they, as such, stand in no legal relationship to the Government. In the case of Christianity, therefore, the official supervision does not go further than looking after its missionary activities, selection of preachers, establishment of churches or preaching halls, etc. The Ordinance No. 41 of the Education Office issued in 1899 requires that those who wish to engage in missionary work notify the local governor of the name of their religion and methods of preaching with their personal history. When they want to build churches or other establishments for religious purposes, they have to approach the local authorities for permission, stating details of these establishments, methods of management and maintenance, qualifications of the preacher, and the process of selecting such preacher. In other words, the Government has special provisions for the Shinto and Buddhist denominations because of their peculiar historical status, while it is contented with being a mere overseer as regards Christianity. As far as their religious functions are concerned, however, the Government makes no distinction whatever between Shinto

and Buddhism and Christianity. All religious sects are left to themselves unmolested as long as they do not disturb the peace of the country or practise immoralities in connection with the propagation of their doctrines and the carrying out of their respective religious rituals.

Educational Institutions There are a large number of educational institutions established by various religious sects for the purpose of bringing up properly qualified preachers. Like other professional or general educational establishments, these re-

ligious schools are under the supervision of the Education Minister. Meantime, charity works such as reformatories, dispensaries and other organizations financed by the religious bodies are placed under the jurisdiction of the Home Minister similarly with activities maintained by unreligious bodies in general.

Religious Statistics

The following are the statistics of preaching halls, preachers and adherents of various religious sects and denominations:

SECTARIAN SHINTO

(End of 1933)

Denomination	Preaching Halls	Preachers		Total	Adherents (in 1930)
		Men	Women		
Shinto	638	3,531	706	4,237	1,206,778
Kurozumi	454	3,850	544	4,394	551,236
Shusei	261	1,771	261	2,032	411,801
Taisha	208	2,914	145	3,059	3,343,477
Fuso	507	4,131	1,347	5,478	486,906
Jikko	259	1,960	619	2,579	403,519
Taisei	208	2,132	503	2,635	728,373
Shinshu	331	2,163	802	2,965	2,059,391
Ontaké	777	6,020	2,357	8,377	738,647
Shinri	305	1,391	289	1,680	1,412,332
Misogi	36	1,381	200	1,581	337,283
Konko	1,186	2,083	921	3,004	747,869
Teiri	9,943	38,125	24,393	62,518	4,118,238
Total	15,113	71,452	33,087	104,539	16,525,840

Note: The "kancho" or the executive head of each denomination is not included in the number of preachers.

BUDDHISM

(End of 1933)

Denomination	Temples	"Kancho"	Priests		Total	Adherents (in 1930)
			Men	Women		
Tendai	4,425	3	9,516	1,523	11,039	2,134,369
Shingon	11,922	10	12,999	685	13,684	8,526,867
Jodo	8,254	4	7,099	850	7,949	3,997,875
Rinzai	5,979	14	4,889	257	5,146	2,367,977
Soto	14,208	1	12,305	—	12,305	6,859,324
Obaku	500	1	426	26	452	111,841
Shin	19,809	10	28,619	11	28,630	13,259,390
Nichiren	4,970	9	7,320	263	7,583	3,315,359
Ji	494	1	460	1	461	383,171
Yuzunenbutsu	357	1	277	24	301	133,493
Hosso	41	1	97	12	109	14,772
Kegon	27	1	24	—	24	22,869
Others	46	—	—	—	—	—
Total	71,032	56	84,031	3,652	87,683	41,127,307

Note: There were 35,265 minor temples in addition to the number given above.

RELIGION

CHRISTIANITY

(End of 1933)

Denomination	Church and preaching stations	Preachers		Total	Adherents
		Men	Women		
Roman Catholic (1932)	238	—	—	274	191,008
Greek Orthodox	184	60	0	60	39,936
Presbyterian	442	476	25	501	49,717
Congregationalist	188	170	19	189	31,484
Episcopal	246	329	139	468	26,618
Baptist	80	72	15	87	7,416
Methodist	347	417	108	525	33,190
Salvation Army (1934)	303 (corps)	—	—	561	15,100
Holiness •	456	270	147	417	19,357
16 other denominations	304	329	67	396	25,628

Note: For the latest statistics see the article "The Japanese Christian Movement for 1935."

CHAPTER XXX

SOCIAL PROBLEMS AND SOCIAL WORKS

Social Problems

These may in the main be summarized under 5 headings:

(1) Poverty and Its Relief. In Japan the gap between rich and poor may not be quite so great as in some Western countries, but nevertheless it exists, and tends in some ways to become greater with the industrialization of the country. Poor-relief is one of the greatest problems of the authorities, for it must include the city slums, the beggars, and the increasing number of peasant paupers. In May, 1935, the number of the poor listed as coming under the poor relief protection law was 1,989,203, or 2.8 per cent. of the total population in Japan proper.

(2) Condition of Labourers. This, with the attendant matters of pay and hours, especially in relation to international labour conferences and agreements, calls for careful Government handling: the protection of child and woman labour particularly so.

(3) Position of Women. The protection of women and elevation of their social and legal status is in some ways especially an Oriental problem. Socially, their position has been much raised of late years, till now it approximates nearly to that of men; but the old discriminative laws enacted in the Meiji Era still handicap women in many respects. In regard to the age-old question of licensed prostitution the Government is planning the entire abolition of the system within a year or so, but statistics show, indeed, a slight

retrogression, for the number of women involved has increased, owing perhaps to the recent financial depression.

(4) Public Health. In a country which carries such a dense population this is a matter of vital importance. Medical science in Japan is second to none in the world with regard to its recent progress and present position, her doctors and surgeons having made contributions of inestimable value to mankind, and in some cases paid for them with their lives. But difficulties attend its application. The cost of treatment and of drugs and chemicals is high, and suggestions have been made for the nationalization of all medical business in order to help the poor.

(5) Thought Guidance. The guidance of the people's thought through the eddying turmoil of modern ideas and theories, from Marxism to Fascism with all intermediate shades, and the handling of practical matters connected therewith, are of the very gravest concern to this country, and are engaging the deepest attention of the authorities. The final settlement of these matters must be largely dependent on that of the preceding problems, though some consider that more radical and direct action is necessary for its attainment than merely the so-called social work. But inasmuch as most of these movements, radical or reactionary, include schemes for the sudden overthrow of the existing social system, neither the Government nor the people at large can regard them with unconcern.

The fourth problem, relating to Public Health, is specially treated in Chapter XXXII, while further reference is made to the others in the chapter on Labour.

Social Work

Before Meiji Era Prince Shotoku, Regent, established, in 593, Hidenin (house for the poor), Sheyakuin (medicine house for the poor) and Ryobyoin (house for the sick). In 730 the Empress Komyo founded Hidenin and Sheyakuin at Nara. She herself washed the bodies of the poor and nursed the lepers.

Gyoki, a Buddhist monk who lived at the time of the Emperor Shomu (724-749), established 9 public lodging houses and a public bath house at Arima hot springs near Kobe among other benevolent works which he established at places where he made a stay in an evangelistic journey of the country.

Hokin-in, a Buddhist nun and sister of Wake-no Kiyomaro, a famous loyalist, made an appeal for and saved 375 rebels who were sentenced to death in 764, whom she took under her care. When a little later, at the end of the 8th century, famine struck Kyoto and children were abandoned on the streets she gathered 83 under her motherly care. This was the beginning of orphanages in Japan and it was soon followed by the Empress Masako, consort of the Emperor Junna (823-833), who took care of many orphans and abandoned children in Kyoto. In 876 she established a leper asylum in the precinct of Daikakuji temple, Kyoto.

In 1180 Jugen, a monk, built 15 public bath houses for the poor. Kosho, another Buddhist monk, worked for prisoners, taught beggars and outcasts to refrain from drinking, and instructed prostitutes in the doc-

trines of Buddhism.

The monk Ninsho of Seidaiji temple, Nara, followed the example of Prince Shotoku and repaired houses for poor patients and lepers. For lepers he built an asylum which is still standing at Kitayama, Nara, and is under Government protection as a specimen of social work of the early times. Later he became the superior of Gokurakuji temple at Kamakura and established, in 1287, an asylum for the poor. In the following 20 years the asylum accommodated over 57,250 patients, of whom over 46,800 were cured. At the foot of Kamakura hill he also built a house for sick horses.

Public baths for the poor were prevalent in the Kamakura age (1192-1337). It was during this period that nunneries were first opened for the protection of women who were maltreated by husbands something in the manner of the 6 cities for refuge in Num. 35, Old Testament. Two of these have remained to the present day: one Tokeiji at Kamakura which was rebuilt in 1285 by Sadatoki Hojo for his mother; the other Mantokuji in the country of Nitta, Gumma prefecture, which was established in this age and which a daughter of the Tokugawa entered in 1591. These nunneries were highly admired because of the nuns who came from warrior aristocrats and could stand against local authorities in protecting the weaker sex who took refuge in the nunneries. They became known as Enkiri-dera or divorce temples.

In 1670 Tsunanori Mayeda (1643-1742), the lord of Kaga, present Kanazawa prefecture, established public lodging houses for beggars and poor patients on a hillside south of his castle in Kanazawa. There were 45 houses, each measuring 12 by 120 feet. When opened 1,753 beggars and outcasts were taken in.

Poor travellers were given expenses at leaving and unemployed artisans were cared for till they found suitable posts, while others were taught petty industries. One of the latter was skilled in sword making and the masterpieces signed by the swordsmith "Hinin Kiyomitsu" or beggar Kiyomitsu are highly admired.

The blind were early protected by the Imperial House and in the Nara Age the Kugas took charge of them by Imperial order and the blind were taught to get a living by music. There arose many first class blind musicians of the "biwa" or the "koto". In the Yedo Age the blind received relief money or got occupations in acupuncture and massage. In 1722 the Tokugawa Shogunate built an asylum at Koishikawa, Yedo (Tokyo) for patients of the poorest class. Its first capacity was 40 beds, but it was later increased to 150.

Kanonko, a Buddhist corporation, was established in 1830 by Sukenari Naha of Akita. Later 72 donors came to his help and the aged, invalids, the sick, the deformed and idiots were cared for. In 1930 the corporation had a fund amounting to ¥51,887 and 2,760 koku of rice.

The above are a few examples selected from among numerous recorded instances of social work in old Japan. It must also be noted that relief work either by the government or individuals necessarily followed natural calamities in all ages on a considerable scale.

Meiji Era The earthquake of Nagoya in 1891, the North-Eastern tidal wave damages and the famine in 1896, had quickened the development of orphanage work, and at the time of the Sino-Japanese and Russo-Japanese wars relief work for soldiers, child protection, and free medical treatment were also being

taken up. Yet they had been largely carried on by philanthropic individuals and hardly differed from the old-fashioned benevolent and rescue work. The World War served as a great stimulus for the development of modern social work, for the economic, social and moral changes suddenly brought about at that time and after the great conflict raised various kinds of social problems and at the same time accelerated progress in all kinds of social work, such as relief of the poor, free medical treatment, provision of houses, employment exchanges, child protection, settlement work and the like. The great earthquake of 1923 was an epoch-making event from the standpoint of the development of such work. From the beginning of the twentieth century the Japanese Government has issued many laws on social work, the most important of them being as follows:—the Military Relief Act of 1917, the Tuberculosis Prevention Act of 1919, the Employment Exchange Act and the Housing Association Act of 1921, the Health Insurance Act of 1922, and the Insanitary Houses Improvement Act and the Public Pawnshops Act of 1927.

Bureau of Social Affairs In regard to the administrative organization of social work, before the World War there were only a few officials engaged in reform and relief work in one corner of the Department of Home Affairs. But in August, 1917, a relief section was established in its Local Government Bureau. In 1919, this section was called the Section of Social Affairs and in 1920, it became the new Bureau of Social Affairs and a central organization for social work; in 1922, the present independent Bureau of Social Affairs came into existence and the administration of all social work throughout the country was brought under

its control. The present social work in Japan is summarized in March, 1932 as follows: the existing number of social work institutions and organizations, both public and private, was 6,278, with an annual expenditure of ¥41,769,538 and the total amount of their property was estimated at ¥215,025,943.

The present tendency of Japanese social work is paving the way for the transformation of social work into a definite Governmental social policy. While the old benevolent work has developed into the present social work, the fundamental idea and methods have undergone a great change. The present social work is carried on not necessarily with the idea of benevolence but rather on the principles of social solidarity and mutual help. From the standpoint of public welfare and mutual responsibility, modern social work has as its aim the solution of social problems and positive social reconstruction to accomplish the social welfare policy in co-operation with legislation on labour and social insurance.

Imperial Participation The Imperial House has been one of the leading factors in the promotion of social work in Japan. Not to speak of the Imperial gifts in olden times, the Imperial donation of ¥1,500,000 in 1907 was the commencement of modern social work in Japan on a considerable scale because it called forth contributions from the people amounting to ¥24,350,000, and a society was organized for medical treatment for the poor. The annual Imperial donation for representative social works all over Japan was begun in 1921. The Imperial House has always taken the initiative in giving large amounts of money for social work of different kinds with a full understanding of the aim of modern social work. For the celebration of the birth of the Crown

Prince a fund amounting to ¥750,000 was donated by the Imperial House for the protection of children and mothers of the poor. The opening ceremony of the corporation Aikukai (Loving Nursery Corporation) established with the fund was held in the Tokyo Kaikan at Hibiya on April 29, 1934, in the presence of H. I. H. Princess Kuni, mother of the Empress.

Administration and Expenses

Organs for the Administration As mentioned above, the Government established an independent Bureau of Social Affairs in 1922 to control all the social works and institutions in the Empire. The office is located by the moat at Marunouchi, Tokyo, and stands facing the Imperial Palace. The Bureau consists of three departments, namely, Department of Labour, Department of Health Insurance, and Department of Social Work. The social affairs of local prefectures are under the direct control of the Sections of Social Affairs which are established in Prefectural and Municipal Offices.

The most important official organization for fundamental investigation of social work is the Social Work Investigation Committee established by the Government in 1926. This Committee, composed of distinguished persons in Government service and private life, have enquired into such matters as the social work system, assistance to children, improvement of insanitary living quarters, and changes in the Reformatory Law. Of the private societies for investigation of social work, the Central Charity Association was the first instance of this kind. The Social Work Investigation Association in Osaka and the Buddhists' Social Work Investigation Association in Tokyo were established in 1913, the Religious

Colleges Social Work Investigation Institute in 1917, and the Ohara Social Problems Investigation Institute and the Kyocho Kai or Labour-Capital Harmonization Association in 1919. There are 35 such organizations in Japan. Of these, the largest are the two last mentioned. The Ohara Social Problems Investigation Institute was established by the same donor, Mr. Ohara, who had been the supporter of the famous Okayama Orphanage and is engaged in an impartial and fundamental investigation of various kinds of social problems; it has a library of its own devoted to the same purpose and gives printed reports on its investigations. The Kyocho Kai has for its object the promotion of co-operation between the employers and the employed, and is engaged, in order to carry out its purpose, in the investigation and promotion of social institutions, the education of labourers and the publication of magazines and books, in the Social Policy Institute and the Kyocho Kai Hall.

Other Associations There are many associations organized for the purpose of unifying social works. The first organ of this kind is the Central Charity Association. This Association, engaging in such works as holding meetings of social workers, publication of printed matter, and investigation of social work, has contributed a great deal toward the development of such work in general. Similar associations are organized in every part of Japan reaching to the present number of 43. There are supplementary organs for carrying out social work effectively. The most important of them is the Block Committee System. It was established to encour-

age a spirit of mutual aid among the people, and aims at the survey and improvement of poor quarters and the giving of suitable guidance and protection to the miserable. According to an estimate in 1931-1932, there were 166 committees in all with 27,907 members and they are distributed all over Japan.

For the training of officers and workers there are 6 organs established in Tokyo and Kanagawa prefectures. The Kyocho Kai has held lecture meetings and the Central Social Work Association has held similar meetings for the cultivation of social work knowledge among the people. In 1921, the Social Work Department was established in the Tokyo Imperial University. The Japan Women's College, and the Social Work Lecture Institute in the Higashi-Honganji, a Buddhist temple in Kyoto, have worked for the same purpose. A chair of social work in the Nihon University and a similar lectureship in the Tokyo Women's Union College, together with Social Work Departments in several Christian Colleges are doing a good work for the training of young people for social work.

Expenses The expenses for social work are derived from three sources, i. e., State, local and private. These expenses have increased on account of the rapid development of the work, especially since the rice riots in 1918 and the Great Earthquake of 1923. The expenses of social work borne by the National Treasury in 1935-36 reached ¥17,929,000, including all social works handled by the Home, Justice and Communications Ministries. The following table gives only those which are handled by or through the Bureau of Social Affairs of the Home Ministry:

ESTIMATED EXPENDITURE OF THE BUREAU OF SOCIAL AFFAIRS IN 1932-1936

	(In yen)			
	1932-33	1933-34	1934-35	1935-36
Ordinary				
The Bureau	410,510	416,010	408,088	418,035
The Imperial Office of the International Labour Office	113,136	119,918	125,517	142,530
National Correction Institute	45,648	45,648	45,648	45,648
Wounded Soldiers' Institute	117,287	114,006	113,824	123,733
Labour exchange office	190,757	191,257	186,953	186,953
The Ainu protection	37,858	37,858	37,858	37,858
Military relief	2,453,388	2,761,865	1,594,001	2,074,902
Subsidy for local correction institutes	120,768	122,287	152,735	144,440
Charity relief	28,091	28,091	—	—
Subsidy for labour exchange	282,866	308,740	308,740	284,395
Subsidy for charity relief	2,834,776	2,834,776	2,834,776	2,834,776
Subsidy for prevention of child maltreatment	—	20,000	50,000	50,000
National expense for Health Insurance	3,073,444	3,072,824	3,072,824	2,706,434
Sick and funeral aid	16	16	16	—
Total	9,708,545	10,073,296	8,930,980	9,189,704
Extraordinary				
Encouragement of public pawnshops	415,276	722,100	389,013	50,000
Subsidy for the improvement of bad residence districts	250,000	350,000	200,000	150,000
Subsidy for public works for unemployment in cities	14,873,955	—	—	—
Unemployment relief	—	7,029,185	4,593,185	3,443,004
Investigation work, improvements, committees, etc.	4,173,166	2,954,832	2,181,331	1,933,004
Total	19,712,397	11,056,117	7,363,529	5,576,508
Grand total	29,420,942	21,129,413	16,294,509	14,716,302

Child Protection

Child protection in Japan is divided into the following nine main classes:—(1) Care for women in pregnancy or confinement, (2) care for infants, (3) for weakly children, (4) for children of the very poor, (5) for the education of children, (6) for child-workers, (7) for maltreated children, (8) for children to be reformed, and (9) for abnormal children.

Women in Pregnancy or Confinement
The infant mortality rate of Japan was lower until 1900 than in Western countries, but since then it has gradually risen, till it reached the deplorable figure of 189 deaths for every 1,000 births in 1918. Though there has been a decrease since then, in 1933 the rate was still as high

as 12.1 per cent. As for the still-birth rate, though there was some tendency towards a decrease, it was 5.2 for every 100 births in 1934, the total number of still-births reaching 113,043, that is, 1.66 for every 1,000 of population. The greatest emphasis in child protection is laid on the protection and aid of expectant mothers, or the protection of children before and at the time of birth. For this kind of work there are at present such organizations as maternity hospitals, visiting midwives and confinement advisory institutes, besides legislation for maternity protection. In 1932-33 there were 45 maternity hospitals throughout the country, while visiting midwives' organizations numbered 391. Legislation for maternity protection is includ-

ed in the Factory Law, the Mining Law and the Health Insurance Law. The first two laws provide that owners of industrial and mining plants shall not require expectant mothers to work if they apply for leave of absence; after child-birth the mother shall not be required to resume work for 6 weeks, though if she requests work after 4 weeks and a doctor certifies her as fit, she may be allowed to resume it.

According to the Health Insurance Law, persons insured are to receive 20 yen for the expenses of confinement and also a daily amount corresponding to 60 per cent. of each day's wage throughout the non-productive period for 28 days before and 42 days after child-birth.

Infant Protection The institutions now existing are divided into the following four kinds:—(a) hospitals for the unweaned pauper infants, (b) day-nurseries, (c) institutions for providing milk or other nutritious food for sickly and undersized children, and (d) infant health consultation institutes.

(a) **Infant hospitals.** There were 19 infant hospitals in the country in March, 1933. Of these 5 were established by public authorities and the rest were managed by private bodies or individuals.

(b) **Day-nurseries.** The demand for this work has become greater year by year, owing to the recent development of industry and the influx of population into cities. The oldest institute for this work was the one established by Mr. Shobi Akazawa in the city of Niigata, June, 1890. In May, 1933 there were 634 in the country, of which 155 were public establishments.

(c) **Institutions for providing nutritious food.** The work for providing milk was first undertaken by the Hygiene Bureau of the Home Office with the help of the city of

Tokyo as an emergency measure immediately after the Earthquake of 1923, for infants whose parents were quartered in parks or other places of the city. There were 6 such organizations.

(d) **Infant health clinics.** The first independent organization for this kind of work was the Osaka Children's Clinic established in 1919. In March, 1933 there were 121 such advisory institutes.

Child-Protection As for the legislation for the protection of poor children, it is provided for in the part concerning children in the Regulations for Relief of the Poor promulgated on April 2, 1929. According to the national survey, made by the Bureau of Social Affairs, 1926, the number of widows and their children, and children of widowers or whose parents were destitute of daily necessities was 133,588.

(a) **Orphan Asylums.** The orphanage may be said to have been one of the earliest institutions that led the Japanese toward social relief work in general, as was the case with Western countries. The work has made remarkable progress and is supported by the public with better understanding and large contributions. In March, 1933, there were 127 orphan asylums in the country of which only three were founded by public bodies. The total expenses of these asylums in 1932-1933 were ¥722,230 for 7,015 children which were chiefly met by incomes from the funds, incomes from business, subscriptions and public or private donations. Lately, however, the inmates of these asylums have decreased on account of the development of various kinds of child-welfare work in other directions.

(b) **Protection of weakly children.** Physically weak children are cared for in recreation houses located near

the sea or in the woods. The first example of this kind of work was that of the Tokyo Child-Nursing Institute which took a certain number of weakly children to the seashore of Boshu in 1900. Later, in June, 1926, the Child Protection Society, a corporation established in the compounds of the Bureau of Social Affairs, took up the work and has since provided a model example of it. As for the medical treatment of weakly children, the Children's Charity Hospital and the Children's Department of the Osaka Branch Hospital of the Japan Red Cross Society have been producing good results.

(c) Protection of Children of School Age. The elementary school attendance in Japan surpasses most of the nations of the world in its high rate. But there are a certain number of children who are kept from school partly through the operation of Article 33 of the Regulations for Elementary Schools, which recognizes as right in certain cases the non-attendance of children of school age, and partly because of poverty of the family. In March, 1933, the number of such children was 31,271. Encouragement of school attendance of these children, in some way or other, is made by the Government and various private bodies. Every year the Education Department gives Common Education Encouragement Grants to prefectures for the purpose of encouraging children to attend school. Owing to this help, the rate of school attendance of children in general has increased in a notable degree, and the percentage of daily attendance was 99.57 in the school year 1932-1933 against 99.54 in the school year 1931-1932.

The number of schools for giving poor children compulsory education and the number of those which have evening classes for the same

purpose was 38. Besides these schools there were 15 nurse-maids' schools with 451 pupils, and the schools for poor children had 4,599 pupils, at the end of March, 1933.

The heavy depression in farm and fishing villages stripped elementary school children of their lunch and the Government bore the expenses for their lunch for three years, from April, 1932 to March, 1935. The disbursement of the National Treasury for the purpose was ¥668,101 for 1932-33, ¥1,069,536 for 1933-34 and ¥1,481,873 for 1934-35. The number of children benefited was 425,628 in 13,865 schools during the year 1932-33, and 512,632 in 13,614 schools during the following year.

(d) Protection of Child Workers. The International Labour Conference paid great attention to this problem of protection of child workers, and its first conference in 1919 adopted an agreement relating to the minimum age of child workers employed in industries and their night work, the second Conference in 1920 an agreement relating to the minimum age of child workers at sea and the third conference in 1921 an agreement relating to the same employed in agriculture. In Japan, there had been some laws in force already, but the International Labour Conference, and recent labour conditions necessitated the revision of these laws and regulations. The legislative measures now in force for protection of child workers are the Revised Factory Law of 1923, the Minimum Age of Industrial Workers Law of 1923, the Regulations for Relief of Miners of 1926, and the Minimum Age of Seamen and Certificate of Health Law of 1923. In the Revised Factory Law, Article III provides that children under 16 years of age and women shall not be employed more than 11 hours a day (exception being 15 hours for cer-

tain kinds of occupation), Article IV prohibits their night work, and Article VII states that they shall not be employed in dangerous work. In the Minimum Age of Industrial Workers Law, Article II provides that children less than 14 years of age shall not be employed in industrial work, but those children over 12 years of age who have finished the ordinary elementary school course shall be exempted from this rule. In the Regulations for Relief of Minors, Article VI provides that children under 16 years of age and women shall not be employed more than 11 hours a day and Article XII and XIII that children under 16 years of age shall not be employed in dangerous work. And in the Minimum Age of Seamen and Certificate of Health Law, Article II provides that children less than 14 years of age shall not be employed and Article III that in case of children under 18 years of age being employed, a doctor's certificate of health must be obtained. Just before the enforcement of these laws, that is, at the end of 1925, there were 474 children over 10 and under 12 years of age and 6,709 children who were over 12 and under 14 years old and had not yet finished their compulsory education employed in industries, but the Minimum Age of Industrial Workers Law enforced on July 1, 1926, has since prohibited their employment.

(e) Reformatory work. In March, 1900, the Reformatory Law was enacted and the establishment of prefectural reformatories was encouraged by the Government. According to this law, however, their establishment was voluntary. In 1908, it was revised and the Prefectural offices were compelled to found reformatories. Within two years after the enactment of the Law 30 reformatories were founded, both pub-

lic and private. In August, 1917, an ordinance in regard to the founding of a national reformatory, which had been pending for many years, was promulgated, and in March, 1919, a State Reformatory, named the Musashino-Gakuin, was founded at a suburban village of Tokyo. The bills for juvenile courts and houses of correction, which had been pending for many years, were for the first time presented to the Imperial Diet by the Law Bureau as Government Bills, and in April, 1921, they were published as the Juvenile Law and the House of Correction Law. To meet the need of the progress of the times, however, these were revised and Law No. 55 was promulgated in May, 1933. It is called the Juvenile Protection Law and became effective on October 1, 1934.

In October, 1935 there were 53 reformatories, the capacity being for 2,688 children. The estimated expenses amounted to ¥677,312 for 1934-35. In addition to these reformatories, there are 31 Correction Societies which are taking care of boys and girls who are not under the direct care of the reformatories.

(f) Protection of Abnormal Children. Blind and deaf-mute children are taken care of in blind schools and deaf-mute schools. The importance of protecting feeble-minded and other mentally defective children has long been insisted upon by the thinking public, but the number of organizations for that purpose is only 6 in all, of which only one, that is, the Imamiya-Gakuen established by the City of Osaka, is a public one, the number of inmates being 145, in March, 1933. It is estimated that there are over 5,000 such children left entirely to the ineffective care of individual homes.

(g) Prevention of Maltreatment. The Law for the Prevention of Child

Maltreatment, which was promulgated with Law No. 40 in April, 1933, states the power of prefectural governors to give adequate warning to the maltreatment of children by the people who have power over them and make provisions for putting such children under the care of suitable persons when necessary and prohibits having such children engage in such performances as acrobatics and circuses or in infamous houses.

It was put in force on October 1. In the half year from October 1, 1933 to March 31, 1934, the number of the children protected by the Law was 593; of the total 179 were from maltreatment by parents or relatives, while 414 were forced to overwork in petty shows or as street singers, geisha girls, etc.

The number of children protected by the Law in 1934-1935 was as follows:

Kind of Protection	Boys	Girls	Total	Maltreated by Parents and the like	Maltreated by others
Advice	68	76	144	79	65
Left with parents or others on condition	9	16	25	21	4
Protected by severing from the maltreating persons	70	64	134	119	15
Total	147	156	303	219	84
Prohibition of the use of such children			352 cases	16 indicted	

An Illustration The High Mountain Health-Resort for Children of Weak Constitution at Tatehina, Nagano prefecture, is here taken as an illustration of private social works in Japan. Most of the soldiers who went to the front from Kami Suwamachi, Nagano prefecture, during the Russo-Japanese War of 1904-5 served in the Third Army commanded by General Nogi and participated in the attacks on Port Arthur. These soldiers either died in the front or went home wounded, and recruits were sent from among the young men who had been left behind. Dr. Kanji Ozawa, a medical practitioner and founder of the health-resort was present at a farewell party held for these soldiers. He noticed then that all of these men were high-spirited. In spite of that he could not help observing that their physical constitution was much inferior to that of the soldiers who had gone to the front before them, and strongly felt the need of physical building up of the young from their infancy, whereupon he retired from his profession for the time being and pursued studies on pediatrics at Kyoto Imperial University. He later resumed his profession as a pediatrician to serve for the improvement of health of the young in the district.

His first experiment was a seashore resort at the Yawata pine field of Hojo situated at the mouth of Tokyo Bay, where he took children of his relatives and friends who were constitutionally weak, but the trial proved unsuccessful.

His attention was, therefore, directed to a mountain health-resort, and his search for a "Davos" of Japan was commenced. He himself walked around the mountain slopes, plateaus and valleys of the Alpine mountain ranges of his province Shinano such as Mt. Yariyake which is 2,179 metres high and the foot of the Yatsugatake. The place which he finally chose as the most convenient and best for his purpose was the foot of Mount Tatehina, Suwa county, Nagano prefecture.

He had been a school physician of Takashima Elementary School of Kami-Suwamachi, Nagano prefecture since 1898 and in July, 1923, he and other physicians of the school advised parents of the 3,000 boys and girls in the school of the need of taking an immediate measure for the protection of the weak and suggested the establishment of a summer resort at the hot spring regions at the foot of the Tatehina Mountain, 1,300 metres above the sea-level. Both parents and the Town Council responded favourably to their advice and on July 28, 1923, ¥100 was contributed by the parents as a part of expenses for the purpose. Accordingly, on August 1, 1923, he took 28 children, their parents and teachers of the school to that place for a week's trial. The success of the first and second summer resorts at Tatehina resulted in giving the promoter a building in 1925 where 191 weak boys and girls were taken care of, and thus the work became a permanent one. Subsidies were given by the Home Ministry and the prefecture and another build-

ing was added in the meantime, which was named the Keifuku Kan or benevolent hall.

Through the sympathy of Governor Umetani of Nagano prefecture, who paid three visits to the place, a patch of land was obtained behind the Kosai hot springs which commands a splendid view, and a hot spring swimming pool with an area of 200 tsubo was constructed, which was opened on August 7, 1926.

The air of the plateau is very pure and dry, enjoying full sunshine and ample ultra-violet rays; The average atmospheric pressure is about 700 mm. in summer; the temperature is 28°C at the highest, 14.2°C at the lowest, the average not exceeding 20°C.

Equipment of the Resort: the area of the

swimming pool is 26 sq. m. (about 200 tsubo) with a depth of 1.5 m. at the deepest. Recently a deep pool has been constructed beside it for grown people.

The area of the playground is about 600 tsubo, provided with various sporting goods.

Buildings and equipments are: Main building, one-storied with 4 eight-mat rooms and 2 six-mat rooms (the size of a mat is about 5 feet by 2.5 feet); The Keifuku Kan, one-storied, with 5 eight-mat rooms; The dining hall, with a kitchen and an office; A medical dispensary; and beds for 120 children.

The daily schedule which is followed by the Resort is as follows:

Daily Routine	On a fine day	On a rainy day
1 Rising	5:30 a.m.	
2 Salute to the Emperor	Line up on the playground facing toward the east	The same in the house.
3 Gymnastics	For about 15 minutes.	Free playing in the house.
4 Breakfast	6:30 a.m.	
5 Vocal music and story-telling	For about forty minutes from 7:30 a.m.	
6 Tea	8:30 a.m.	
7 Swimming at the pool.	9 a.m.	A recital by gramophone.
8 Walking.	On the way home from the pool practical lessons on botany and zoology.	Musical concert, or story party.
9 Lunch	11 a.m.	
10 Physical examination	For about forty minutes.	
11 To the swimming pool	1:30 p.m.	Gymnastics (sitting); stories
12 Walking	Same as in the morning.	Lectures on hygiene.
13 Tea	3:30 p.m.	
14 Gymnastics	For about 30 minutes at 4 p.m., after it free walking.	Indoor exercises and play.
15 Supper	6 p.m.	
16 Firework display	7:30 p.m., playground.	Free indoor games.
17 Retiring	8 p.m.	

Economic Protection

Supply and Improvement of Houses
(a) Building and management of houses by public bodies. To meet the pressing need of supplying economical and at the same time sanitary houses, in the year 1918, a note was issued to encourage public bodies to build and supply houses, the building cost of which might be loaned from the Funds of the Deposit Bureau of the Finance Department. This loan together with a loan from the Reserve of the Post Office Life Insurance greatly facilitated the

building work. Several other means were adopted to facilitate the work, namely, the sale of building materials produced from the Government forests at low cost, reduction in or exemption from freight charge for transportation of building materials, application of the Land Expropriation Law, if necessary, in case of buying land for the building of houses of public bodies, and freedom from the Registration and Construction Taxes. The total number of houses built during the 16 years from 1919 to 1935 reached 78,400 with the total cost of building ¥133,538,177.

The Government issued the Housing Association Law in April, 1921, and it was put into force the same year. The association is to be a legal person possessing several privileges in respect of taxation, acquisition of land, etc., and the working funds were loaned to the associations from the Funds of the Deposits Bureau of the Finance Department through the prefectural offices. In November, 1935, there were 2,770 associations under the Law, owning 31,072 houses. The Dojun-kai, a building corporation, established immediately after the great earthquake of 1923 with a fund of ¥10,000,000, a part of the contributions for the reconstruction of Tokyo and Yokohama, has supplied many dwellings and apartments for the people in these two cities, independent of the government measure.

(b) Enforcement of the Insanitary Building Site Improvement Law. Supply of dwellings is one aspect of this question and their improvement is another. The first step taken by the Government in the latter was to improve and remake the sites in cities where poorly built houses were crowded together. A nation-wide investigation made in June, 1925, showed that there were 217 such quarters with over 72,600 families and over 309,000 inhabitants. The land level was generally low, the quarters naturally damp, and an intricate network of unpleasant narrow roads, together with a congestion of small but not at all compact houses lacking in proper light and ventilation, made the place an unplanned hodge-podge. For the start of their programme, the Government, taking up a plan to remake such quarters existing in the so-called six largest cities (Tokyo, Osaka, Nagoya, Kyoto, Kobe and Yokohama) and in the rural districts contiguous to them, enacted

in March, 1927, the Insanitary Building Site Improvement Law which was enforced in the same year. Subsidies granted to local governments from the national treasury for this purpose amounted to ¥3,034,820 in 1927-1934. The work is to be continued till 1943 with a subsidy amounting to ¥1,707,685.

Public Lodgings Single working men, unemployed persons and the like, as a rule, sleep at imperfectly-equipped doss-houses or cheap lodgings, or live with others. In 1925, there were 8,873 doss-houses with 92,861 monthly sojourners who had families, 200,518 single persons and 208,775 one-night lodgers, amounting to 502,154 persons in all. This situation was not at all desirable viewed from any angle, and the preparation of cheap yet healthy public lodging-houses seemed an urgent need for the welfare of labourers and the like. The number of such lodgings at the end of the fiscal year, 1932-1933, was 152 and the monthly average number of lodgers was 245,650. Of the total number of lodgings 67 are free, the rest charging 10, 15 or 20 sen a night.

Public Markets The public markets are retail markets managed by public bodies or public welfare organizations having as their aim a cheap supply of food-stuffs and other daily necessities. According to the investigation made in November, 1921, by the Bureau of Social Affairs, the average cost of food-stuffs of the poor families in the city of Tokyo was 54.7% of their total living expenses. On the other hand, the rapid rise of the prices of commodities in the post-war period showed no signs of halting while individual incomes failed to catch up with the price level. And in August, 1918 a rice riot was started by the poor housewives at a small village of Toyama prefecture which spread

over the country like a prairie fire. The situation awakened Imperial solicitude, and ¥3,000,000 was granted for relief from the Privy Purse. The Government also provided ¥10,000,000, and the amount of contributions by wealthy men and benevolent persons reached ¥25,000,000. This money was used in giving rice to the poor in the country and in opening establishments where rice was sold at lower prices. In December of the same year, the Government issued a note encouraging the establishment of public markets, and made available loans at a low rate of interest for the necessary expenses in establishing such markets. In March 1933 there were 291 such markets opened in almost all prefectures but 6, and sales for the fiscal year amounted to ¥51,280,228.

Lunch Rooms The object of the people's lunch rooms, whether attached to a public lodging-house or independent, is to provide labourers, small-salaried men and the like with simple, wholesome and sanitary meals at cheap rates. In March, 1933, there were 70 of these people's lunch rooms, most of them managed by public bodies and located in cities and towns, with 989,681 meals taken in a month. Each meal cost from 12 to 20 sen.

Public Baths Japanese people greatly enjoy their baths, but only a small proportion of them can do so in private. The majority have to utilize public baths. Moreover, it is not very infrequently the case that people take fewer baths than they require as the bath-charges are

not cheap enough, and herein lies the need of sanitary, well-equipped, cheap or free public baths. The number of public baths in March, 1933 was 169, patronized by 1,959,445 bathers a month.

Public Pawnshops The pawnshop and the money-lender are utilized by the people of small means as a simple and popular means of monetary circulation. The Public Pawnshop Law was promulgated in 1927, which regulated on the subjects of managing bodies, subsidy of 50 per cent. of equipment expenses from the national treasury, loans, computation of interest and term of pledge. At the end of May, 1933, there were 529 public pawnshops, the total amount of loan reserve being ¥9,810,000. The present financial depression throughout the urban and rural districts caused unprecedented tightness of money among the salarymen, labourers and farmers of smaller means, and the need for public pawnshops became more acute. The 63rd session of the Imperial Diet gave consent to a plan for the establishment of 200 pawnshops by the Government in 1932 and the number in 1933 gained 285 over the previous year. This policy has been continued for 1934 and 1935, and the estimated amount of subsidies for the establishment of public pawnshops was ¥722,100 for 1933-34 and ¥389,013 for 1934-35. At the end of November, 1935 the number of public pawnshops was 1,061, the results of these pawnshops for the 5 years 1930-35 are given below:

PAWNERS AT THE PUBLIC PAWNSHOPS

Pawnshops	Pawners								Total
	Labourers	Day-labourers	Small industrialists	Merchants	Farmers	Fishermen	Others		
1930-31	261	343,791	95,792	108,451	176,833	63,399	34,139	144,340	966,745
1931-32	314	393,762	112,888	129,556	229,502	77,590	44,976	176,101	1,164,375
1932-33	510	465,012	139,498	151,957	293,249	96,091	48,496	237,707	1,432,000
1933-34	765	567,355	154,810	200,600	394,526	142,457	86,964	311,070	1,857,812
1934-35	999	709,782	182,742	238,423	600,101	207,571	118,473	404,270	2,381,362

STANDING LOANS OF THE PUBLIC PAWNSHOPS

Pawnshops	Number of Loans	Amount of Loans (in yen)	Average Amount per Loan (in yen)	Standing Amount of Loans at the End of the Fiscal year (in yen)	
1930-31	261	1,228,672	4,709,853	5.27	3,809,972
1931-32	314	1,433,020	7,242,398	5.05	3,675,878
1932-33	510	1,731,476	8,475,092	4.89	4,031,242
1933-34	765	2,254,220	11,796,763	5.23	5,248,027
1934-35	169	2,900,872	15,690,231	5.41	8,213,794

Protection of Unemployed

Employment Exchanges There have been from olden times private employment exchanges called "Keian" or "Kuchiireya" conducted by individuals. But there were no free exchanges until 1901, when in Hon-go Ward of the City of Tokyo there was established a free lodging-house for low class labourers and the unemployed, and along with this charitable work the first private free employment exchange was founded for the lodgers in 1906. The earliest public employment exchanges were established in Tokyo, in 1911. At the close of the Great War, the Home Office felt the urgent necessity of extending and developing the employment exchanges in order to meet the needs of the time. In 1920, the Office put into circulation a low-interest loan for the establishment of the employment exchanges to cope with the demands caused by an extreme business depression. And in June of the same year, the Home Office, in order to systematize the work of employment exchanges, took charge of all the affairs relating to them, and in order to extend, unite and develop them, allowed the Kyocho-Kai to start a central managing office of all the employment exchanges in the country.

(a) Employment Exchange Law. Complying with the general demand, the Employment Exchange Law was issued in 1921. According to this Act, employment exchanges are, in

principle, public organizations. They are voluntarily established and conducted by the heads of cities or towns, but in some instances the Home Minister gives orders for the establishment in places where he thinks the conditions demand it. The National Government subsidizes them to the extent of one-half of the expenses for buildings and equipment at the beginning and one-sixth or less of other expenses. One Central and several Local Employment Exchange Bureaux are to be founded for the unification of those exchanges in the country, and the work is under the supervision of the Home Minister and the Directors of these Bureaux. A standing committee is to be established to direct the management of the exchanges. There may also be established private free employment exchanges with the permission of the administrative authorities, and the aid afforded by all these employment exchanges must be free of charge.

After the enforcement of this Law, in November, 1922, the convention relating to unemployment, adopted by the First International Labour Conference at Washington, was ratified and published for the encouragement of this kind of work. In addition to the provision above mentioned, the Regulations for Enforcement of the Employment Exchange Law were revised, 1924, in order to systematize the connections among employment exchanges, and there were also newly-introduced regula-

tions for the establishment of seasonal-employment exchanges, and of employment exchange committees in cities and towns for the promotion of this work. It is true that there are still a great many employment exchanges run for profit, but owing to the increase and improvement of public employment exchanges, they are gradually decreasing. And to conform with a resolution adopted at the Washington Conference of 1919, the National Government enforced from the 1st of January, 1927, the Regulations for the Control of Employment Exchanges for Profit.

(b) Activities of employment exchanges. In March, 1923, the Gov-

ernment established the Employment Exchange Bureau, and in April, the Central Employment Exchange Bureau, the Tokyo and the Osaka Local Employment Exchange Bureaux, and in April, 1927, the Nagoya Local Employment Exchange Bureau. In February, 1924, the system of the Employment Exchange Committee was introduced as an enquiry office for the administrative authorities concerned with the work. At the end of November, 1935, there were 673 such employment exchanges, cases handled in 1934 being 1,569,982 for general works and that for day-labourers reaching 16,724,102. Details for past 5 years follow:

LABOUR MARKET

General Employment Exchanges

	Men Wanted	Works Wanted	Employed	Excess of Men Wanted	Excess of Works Wanted	Percentage of Employment
1930	904,730	1,168,114	336,107	—	263,354	28.8
1931	1,134,817	1,366,161	481,293	—	231,544	35.2
1932	1,217,457	1,502,468	540,725	—	285,011	36.0
1933	1,451,908	1,528,291	633,315	—	76,293	41.4
1934						
Total	1,704,042	1,569,982	672,460	224,000	—	42.8
Men	956,089	1,068,254	425,863	—	112,165	39.9
Women	837,953	501,728	246,597	336,225	—	40.1

Day-labour Exchange

	Men Wanted	Works Wanted	Employed	Excess of Men Wanted	Excess of Works Wanted	Percentage of Employment
1930	5,128,345	6,174,973	5,122,110	—	1,046,628	82.9
1931	11,861,050	14,196,691	11,748,118	—	2,335,041	82.8
1932	13,870,289	17,891,341	13,778,503	—	3,521,052	79.2
1933	16,897,143	20,124,272	16,779,159	—	3,227,129	84.4
1934	14,367,778	16,724,102	14,213,876	—	2,356,324	85.0

A special event in 1934 and 1935 in connection with employment exchange was finding work for young women of the North-Eastern Districts to protect them from being sold to infamous houses because of the farm-village depression in those districts. The number of women who obtained employment outside of their own prefectures during September, 1934 to June, 1935, was 4,992 or 7 times as many as the same period in the previous year. The loan for the purpose standing at the end of September, 1935, amounted to ¥85,500

for 1,420 women, ¥6,700 of which being refunded.

(c) Privileges in connection with employment. The privileges to be enjoyed by those who are cared for by public employment exchanges and the special arrangements connected with them are as follows:

(1) Reduction in fares—half third-class—is allowed for a train or steamer, (2) An advance of wages may be granted, (3) Loans may be made for expenses in travelling from the present domicile to the destination, (4) Implements for work are

lent; also (5) Mutual aid systems of unemployment insurance, medical treatment and credit, (6) Occupational fitness test for the choice of work, (7) Vocational guidance lecture meetings, and (8) A low interest loan, may all be availed of.

(d) Juvenile Employment Exchange. Juvenile employment has lately become one of the most important social problems which draws the serious attention of thinking people. To encourage boys and girls to choose their work according to their abilities is most desirable in view of the fact that their livelihood will thus be made secure for the future and there will be smaller danger of their losing positions. The Government has paid much attention to this point since the year 1925, and the Employment Exchange Bureau, taking into consideration the opinions of the prefectural authorities, designated the elementary schools to be connected with Public Employment Exchanges, and held consultation meetings on this subject, calling school masters and other persons concerned to attend, and a committee for juvenile vocational guidance was to be established, composed of those officials of Public Employment Exchanges who were well informed of juvenile employment and those educationists, doctors and social workers for child protection who were well versed in

child psychology.

There are three institutions for the juvenile employment guidance, namely, the Tokyo Prefectural Juvenile Employment Exchange, the Tokyo City Woman and Juvenile Employment Exchange, and the Juvenile Division of Osaka City Central Employment Exchange. Many Public Employment Exchanges include the work of juvenile employment exchange, beside these organizations.

In 1931-1932, there were 25,665 elementary schools of which 4,202 had connection with Public Employment Exchanges, and the number of cases being 212,854 and the employment rate was 41 per cent.

(e) Unemployment Relief. The Government, in 1925, asked the six largest cities and Osaka Prefecture to start public works in order to provide work for day-labourers who were suffering from seasonal unemployment in winter, and granted half of the cost for wages to labourers thus employed. This work generally concerns itself with roads, dredging, waterworks, sewers, river banks, reclamation of land, necessities for the army, etc. Since 1929 the Government has been encouraging local governments to give work to jobless salarymen, subsidizing one-half of the expenditure. The results of the relief work which was supported by the national treasury in the past three years are given below:

UNEMPLOYMENT RELIEF ENTERPRISES

	Kind of Men Relieved	Business Expenses (in yen)	Wages paid (in yen)	Number of Working Days
1932-33	General labourers	46,030,515	16,331,337	10,991,055
	Salarymen	1,655,394	1,516,353	1,125,273
	Total	47,685,909	17,847,690	12,116,328
1933-34	General labourers	34,882,642	12,053,138	9,157,047
	Salarymen	1,803,635	1,662,208	1,369,509
	Total	36,686,277	13,715,346	10,526,556
1934-35	General labourers	22,783,531	6,772,262	5,165,659
	Salarymen	1,547,057	1,417,195	1,150,352
	Total	24,330,588	8,189,457	6,316,011

(f) Vocational Guidance and Provision of Employment. The work of vocational guidance and providing employment has developed only of

late years, especially since the Great Earthquake. Vocational guidance emphasizes the development of ability for employment by simple methods, while providing employment means the utilization of institutions necessary for employment. The oldest institution for vocational guidance is the Tokyo Municipal Vocational Guidance Society, which is a juridical body established in 1922, with a fund of ¥100,000 contributed to the city by the Kanegafuchi Spinning Company for the relief of the unemployed. There are now 6 institutions for vocational guidance in the country.

Institutions for providing employment are much older than those for vocational guidance. The first example was an organization established by Fukuoka prefecture, in 1884, for the purpose of giving employment to samurai families after the abolition of feudalism. This work has gradually been extended with the change of social conditions and increasing financial difficulties, and there are 73 organizations giving employment, chiefly home work for women, such as hand and machine sewing, knitting, embroidering, doll-making, lace-making, flax-thread-making, envelope-making and the like.

In connection with the work of providing employment, mention must be made of the Keisei-Sha. It is a juridical corporation, with an endowment fund of ¥1,000,000. This organization is engaged in such work as protecting the crippled, giving them employment, helping them to study, and providing them with artificial limbs. This study of the problem of providing artificial limbs by the organization is so far the only example in this country, though it has been greatly developed abroad, especially since the European War.

It is believed that it will do much in the future toward the promotion of the happiness of the crippled. The homes as well as the workshops of the organization are situated in the compounds of the Asylum for Disabled Soldiers in Tokyo prefecture.

The Population and Food Investigation Committee has adopted very important resolutions, and the Government is now seriously studying the points contained in them. The most important of them are (1) to put employment exchanges under the management of the State, (2) to provide the means for prevention of unemployment and relief work by the establishment of public unemployment funds of the State and local public bodies, (3) to take some measure for the supervision and encouragement of unemployment mutual aid institutions, (4) to encourage and supervise the establishment of the systems of giving discharge allowances and of providing unemployment reserve funds (5) to encourage the establishment by industrials themselves of labour efficiency and unemployment prevention committees, and (6) to establish such organizations as an unemployment investigation committee or an unemployment investigation institute.

As for the establishment of an unemployment insurance system, the Government, besides trying to obtain exact figures about unemployment as the basis of such a system, is doing its best not only to examine the results of systems of discharge allowances, mutual aid associations and health insurance but also to make a comparative study of the legislation on this subject in various foreign countries, and when it reaches a definite conclusion, intends to submit it to a labour insurance investigation committee.

Poor Relief

General Poor Relief The Regulations for Relief of the Poor were promulgated as early as 1874. The revised Relief Law was promulgated on April 2, 1924 and was put in force on January 1, 1932. The regulations maintain the old spirit of mutual help among relatives and neighbours and, at the same time, emphasize social solidarity and public responsibility of relieving the impoverished people. Those who are relieved by the law are poor old people above 65, helpless juveniles under 13, poor pregnant women, helpless invalids and cripples, those who are handicapped by sickness, wound or mental disorder, and poor mothers who are nursing infants under one year.

The period of time for relief should generally be as long as it is required, but sometimes, especially when the case is taken up by a Block Committee, it is fixed, for example, at three or four weeks. The method of relief is of two kinds, indoor and outdoor, and as for the former, such large cities as Tokyo or Yokohama have their own homes or other relief institutions, otherwise the smaller municipalities entrust the relief of the poor to those orphanages, asylums or charity hospitals which are managed by private persons or organizations.

The number of the poor who were protected by the law on May 1, 1935, was 125,735. Details follow:

NUMBER OF THE POOR AND THE RELIEVED

(May 1, 1935)

(A) Number of Persons enlisted as the Poor		
	House-holds	Persons
Those who cannot support themselves	174,340	625,531
Those who are barely supporting themselves	339,608	1,362,672
Total	514,008	1,988,203

(B) Number of the Relieved

Conditions	Those who needs relief	The relieved
Above 65	82,538	33,847
Below 13	198,310	62,153
Pregnancy	6,940	454
Invalids and cripples	19,231	7,376
Diseased or Wounded	40,523	14,080
Mental disorder	27,044	7,148
Nursing mothers	9,911	845
Total	384,569	125,735

Special Poor Relief Special poor relief, as against general poor relief, includes (1) Proper attention for those found sick, dying or dead by the roadside, (2) Relief of sufferers from natural calamities, and (3) Relief of impoverished soldiers and their bereaved families.

Attention to the sick and dead found by the roadside is of fairly long standing, but the regulations now in force were issued in 1899; these regulations aim at relieving those people who are found sick on the road, or disposal of dead bodies, and care for the children who are with them. The heads of the cities or towns where they are found must apply to the prefectures concerned for authority to take charge of them in case there are no relations on whom they can depend. The expenses for their relief, if not met by those who are relieved themselves or their supporters, must be defrayed by the prefectures concerned, and they may be handed over to public or private institutions for further help though there is no fixed period of time.

Calamity Relief Japan suffers particularly from natural calamities owing to its climate and volcanic activities, the losses amounting to nearly ¥70,000,000 every year, from fires and floods. To relieve the sufferers from these calamities, there have been established the Natural Calamities Relief Fund Law and Sea Disaster Relief Fund Law, in 1899. The Government had pro-

mulgated the Biko Choehiku Law in 1880, according to which ¥1,200,000 had been paid out of the National Treasury each year. This amount of money had been distributed between the Central Government and Prefectures which, in addition to this national aid, had appropriated public saving funds. Consequently, the total of the funds both of the Central Government and Prefectures had been enormous. Since 1890, the disbursement from the National Treasury and the appropriations by Prefectures had been abolished and the said Laws were issued instead. At the end of April, 1935, the total amount of the funds was ¥91,496,777, a decrease when compared with the preceding year. The reason was the unusual amount of disbursement for relief in 1934-35 which reached ¥3,671,388. Besides the special donation from the Imperial House which amounted to over ¥53,000 for sufferers in prefectures, the public contributed ¥7,640,075 through the Social Bureau in that year.

With the sad experience at the time of the Great Earthquake of 1923 fresh in the public memory, Osaka and Kyoto introduced the Great Calamities' Relief Regulations soon after that terrible event, according to which the Prefectural Offices, the Municipal Offices, the Army Division, and the Gendarmerie Corps are to co-operate in cases of great emergency.

The annual number of marine disasters off the coasts of Japan is over 1,000, and the average number of persons killed, injured or missing in these disasters reaches 600 or 700 a year. For the relief of these persons, the Sea Disaster Relief Law was issued in 1899, by the terms of which the heads of municipalities are invested with certain powers to give relief at the expense

of the captain or owner of the ship concerned, but in case the money is not refunded by the captain or owner, or the relief proves insufficient, the expense incurred is paid by the National Government.

Military Relief Military relief work differs from other relief work. Its object is to give help to soldiers or their families who are suffering from want on account of military service. The method of this relief is of two kinds, institutional and domiciliary, and the law for the former is the Disabled Soldiers' Asylum Law and for the latter the Military Relief Law.

The Disabled Soldiers' Asylum Law provides for the life-time care in the Disabled Soldiers' Asylum of those who are receiving an additional pension on account of wounds received on active service or illness incurred during their term of service. The governing condition is that they must have no other source of help, but those who need such relief and suffer from deformity or disablement more severe than the kinds mentioned in Article 24, Items 1 and 2 of the Enforcement Regulations of the Pension Law, can also be taken care of. The admission of all cases shall be sanctioned by the Home Minister. There is one such asylum established by the State at Sugamo, Tokyo.

The Military Relief Law was issued in 1928. By this Act, relief is given to common soldiers who were disabled or crippled while in public service, and to their families, to the families of soldiers on active service or soldiers called out for special service and the families of soldiers who died on service if the said families are in need of help.

The cost for this relief has been increasing though the number of cases fluctuates every year. The figures for the fiscal year 1934-

1935 were 31,996 households involving 105,772 persons relieved, and ¥2,809,248 expended for the purpose.

MILITARY RELIEF 1930-1935

	Number of Persons Relieved	Amount of Allowances (in yen)
1930-31	51,856	1,586,095
1931-32	71,649	1,731,614
1932-33	99,023	2,427,496
1933-34	98,907	2,702,935
1934-35	105,772	2,809,248

Private Military Relief The organizations for private military relief work numbered 31 at the end of March 1929, the Japan Red Cross Society and the Imperial Military Aid Society being the most prominent, and these organizations are mainly engaged in the giving of relief, generally temporary, to those who are outside the application of the Military Relief Law.

Health Protection

From very long ago, the Imperial Household has paid attention to the care of the sick. A sort of dispensary called Hospitals for the Poor were established in 593, by Prince Shotoku. The present Saisei-Kai, a foundational juridical person, established by the wish of the Emperor Meiji to give medical treatment to the poor, continues the work of these ancient hospitals.

Free Medical Treatment There are fairly many organizations which give free treatment, e. g., hospitals, medical consultation offices, visiting treatment societies, visiting nursing societies, etc. The Government decided to extend the work to farm-villages and fishing communities with ¥6,000,000, a part of which was donated by the Imperial House. There are 142 hospitals and 313 smaller branch hospitals or medical clinics, according to the statistics of 1932. In 1933-34 persons treated by the hospitals only were 895,526.

Cost-Price Treatment The Emperor Meiji pointed out, in his edict, that Japan was also experiencing an economical change with the general trend in the world, that it was most regrettable to see faithful but poor subjects suffering from illness unable to get medical treatment, and that there was acute need to give suitable relief to them; and he gave a large amount of money elsewhere mentioned.

The thing most dreaded by the labouring classes is sickness or injury. Once smitten by sickness or rendered idle by injury, a workman is thrown out of work no matter how much he may desire it and has no means of getting medical treatment; his days of unemployment may be prolonged forever, and finally he may be stripped of all his possessions and his family may starve.

The Cost-Price Medical Treatment Association, a corporate juridical person, was organized on the 5th September, 1911 by the effort of Mr. Suzuki and Dr. Kato.

The Association has its headquarters in Tokyo and four branch offices in Tokyo, Yokohama, and Osaka and there are now 41 cost-price medical treatment offices established by public bodies in different parts of Japan, and 112 hospitals in which the proletariat patients are treated at cost-price.

The Do-ai (or mutual love) Hospitals in Tokyo and Yokohama, the Imperial Charity Association, the Red Cross Hospital, the Jikei (or benevolence) Association Hospital have recently begun cheap medical treatment. The Do-ai Hospitals in Tokyo and Yokohama were established with the money given by the American people at the time of the Great Earthquake, 1923, as a memorial of their kind assistance in that period of trial. Mr. Suzuki, who has

played a brilliant part in the promotion of this kind of social work, is now insisting upon the national management of all medical business for the thorough protection of the life of the people in view of the unreasonable high cost of medical treatment by common practitioners and consequent loss of life and impoverishment.

Sanatoria, Asylums and Special Hospitals There is to be found a regulation concerning mental disease in the Taiho Laws issued in 701. But the number of sufferers increased in direct proportion to the advancement of civilization. The statistics record the fact that at the end of 1912 there were 32,964 insane persons, by the end of 1922 the figure rose to 50,891, and in 1933 it stood at 76,039, an increase of 2,499 as compared with the preceding year, the ratio is 11.31 in every 10,000 of the population, an increase of 0.22 as compared with the preceding year.

(a) Laws and regulations concerning insane persons. The Law for the custody of Insane Persons was enacted in 1900, with the object of protecting the public from harm at the hands of insane people. It provides for the appointment of a responsible person to place an insane person under his custody, and if necessary, by the approval of the prefectural governor, to confine the said insane person. The expenses, according to this law, shall be borne by the estate of the insane persons themselves or by proper responsible persons, as the case may be, and in case any insane person protected by the order of the head of a municipality is unable to reimburse the money advanced by the municipality, the prefecture shall bear the expenses.

The Insane Asylums Law, which may be taken as a sub-division of the previous one, gives power to the

competent Minister to order and bring prefectures, if necessary, under obligation to establish insane asylums or hospitals (Art. 1), and makes provisions concerning the state subsidy.

(b) Present condition of insane asylums and hospitals. At the end of 1933 there were 8 public hospitals for the insane and 112 private asylums, with combined capacity for 15,996 patients. At the end of 1933 there were 5,070 in-patients in these hospitals and asylums.

(c) Tuberculosis. It is almost impossible to get the exact number of the cases of tuberculosis in this country, but the ratio of patients per 1,000 of the examined in accordance with the provisions of the Law for the Prevention of Tuberculosis was 0.26, a decrease of 0.05 as compared with the previous year, and in 1932, there were 87,427 killed by pulmonary tuberculosis, that is 74.4 in every 1,000 deaths, the highest ratio for these five years. The Government issued regulations, 1914, concerning the establishment of tuberculosis sanatoria in cities of more than 30,000 population, and regulating the state subsidy thereto. The present Tuberculosis Prevention Law was enacted in 1919.

(d) Leprosy. For the prevention of leprosy, the Leprosy Prevention Law was issued in 1908. By this law, aid for indigent lepers out of public funds, the order of the competent Minister for the establishment of leper-asylums by united prefectures, or the use of private ones in lieu of public ones and other such matters are provided for. The whole country, in conformity with this law, was divided into five Divisions numbered one to five. Besides these 6 public leper-asylums, there are 7 private ones. The Koyama Fukusei In, established by the Roman Catholic Church in Shizuoka prefec-

ture, the Ihai En in Tokyo prefecture, the famous Kumamoto Kaishun Byoin founded by an English lady, Miss Riddell, and the Tairo In in Kumamoto prefecture have done

valuable work for many years, being managed by Christian missionaries. (See Chapter XXXII on these subjects.)

STATISTICAL TABLE OF SOCIAL WORKS IN JAPAN

(The fiscal year 1932-1933)

Name	Organization or Institution	Property and Fund	Expenditure
Organs	1,193	¥33,067,649	¥5,167,489
Unifying organizations	55	4,999,211	1,760,692
Investigation org.	35	850	1,204
Educational org.	6	13,500	8,412
Supplementary org.	17	30,300,150	1,934,189
Block committees	70	—	754,698
Backing organs of the block committees	1,010	2,753,938	708,294
Child protection	1,481	14,146,539	3,781,247
Protection of pregnant women (Midwives)	391	11,841	109,276
(Hospitals)	45	1,188,442	507,482
Protection of suckling infants	19	231,473	82,419
Day-nursery	589	3,188,642	925,867
Feeding infants	127	5,495,723	722,230
Child consultation	121	90,088	115,698
Protection of cripples	1	21,708	2,829
Protection of weak children	6	1,910,625	244,598
Protection of sick children	17	33,670	27,440
Protection of poor children	38	562,290	119,914
Schools for nursemaids	15	14,042	6,290
Education of working children	11	83,709	15,196
Reformatory education	59	—	677,312
Reformatory protection	31	¥88,718	¥60,237
Protection of abnormal children	6	1,048,034	122,653
Stammer correction	4	64,041	19,152
Economical protection	1,832	—	—
Housing work	642	—	—
Common inns	152	—	—
Public markets	291	—	—
Cheap dining rooms	70	—	—
Public baths	167	—	—
Public pawnshops	510	—	—
Relief and prevention of unemployment	556	1,930,484	2,943,158
Giving works	72	1,887,054	1,262,354
Employment exchanges	473	—	1,479,876
Vocational guidance	5	93,430	200,928
Poor relief	582	24,930,670	2,747,668
Relief at homes	195	3,270,488	327,802
Relief in institutions	113	10,882,898	1,348,659
Protection of cripples and invalids	26	1,501,372	167,712
Protection of the bereaved families of soldiers	248	9,325,912	903,495
Medical treatment	599	33,301,464	10,659,165
Charity hospitals	142	22,203,020	56,188,448
Consultation rooms	312	3,500,318	1,664,418
Consignment treatments	61	302,351	76,545
Insane hospitals ¹	44	1,234,381	451,865
Tuberculosis sanatoria ²	28	4,155,540	1,371,959
Leper homes	12	1,905,854	905,930
Miscellaneous	548	114,907,632	21,495,621
Settlement works	152	7,374,050	4,097,502

Name	Organization or Institution	Property and Fund	Expenditure
Consultation bureaux	146	65,818	23,477
Protection of women	23	600,312	172,397
Mother and child protection	13	63,257	11,883
Father and child protection	1	—	1,655
Visiting sick people	12	37,873	33,641
Hygienic education	89	2,334,088	1,032,967
Funeral aids	6	93,752	28,092
Other works	106	104,337,582	16,034,007
Total	6,791	227,384,438	46,794,348

Note: (1) and (2) for the poor only. See Chapter XXXII for full statistics.

STATISTICAL TABLE OF SOCIAL WORKS IN JAPAN

(Continued)

Name	Results (Cases or men treated)	Workers
Organs	(Cases) 3,707,680 (Students) 198	33,755
Unifying organizations	—	380
Investigation org.	—	36
Educational org.	(Students) 198	130
Supplementary org.	—	102
Block committees	(Cases) 3,707,680	33,107
Backing organs of the block committees	—	—
Child protection	(Cases) 155,773 73,739	5,047
Protection of pregnant women (Midwives)	(Cases) 8,507 18,636	347
(Hospitals)	45,175	426
Protection of suckling infants	12,655	84
Day-nursery	59,475	2,191
Feeding infants	7,015	691
Child consultation	(Cases) 55,103	250
Protection of cripples	14	6
Protection of weak children	716	110
Protection of sick children	12,124	36
Protection of poor children	4,599	220
Schools for nursemaids	451	47
Education of working children	824	61
Reformatory education	2,364	503
Reformatory protection	—	—
Protection of abnormal children	145	34
Stammer correction	1,195	19
Economical protection	(Houses) 33,500 (Tsubo) 38,337,314 (Sale) 51,280,228 (yen) (Loan) 8,475,093 (yen)	—
Housing work	(Houses) 33,500	—
Common inns	(Tsubo) 2,947,300	—
Public markets	(Sale) 51,280,228 (yen)	—
Cheap dining rooms	(Tsubo) 11,876,174	—
Public baths	" 23,513,340	—
Public pawnshops	(Loan) 8,475,093 (yen)	—
Relief and prevention of unemployment	13,778,335	2,253
Giving works	13,332	303
Employment exchanges	(Hired) 540,725	1,886
Vocational guidance	13,778,335	—

Name	Results (Cases or men treated)	Workers
Poor relief	284	64
Relief at homes	(Cases) 135,211	1,128
Relief in institutions	(Cases) 135,937	271
Protection of cripples and invalids	9,106	646
Protection of the bereaved families of soldiers	(Cases) 555	92
	(Cases) 40,588	119
Medical treatment	1,838,854	13,000
Charity hospitals	1,038,521	6,713
Consultation rooms	757,763	4,153
Consignment treatments	20,801	451
Insane hospitals	8,130	791
Tuberculosis sanatoria	9,194	705
Leper homes	4,445	187
Miscellaneous	4,583	
	(Cases) 57,967	2,065
Settlement works	—	—
Consultation bureaux	(Cases) 43,446	190
Protection of women	3,512	
	(Cases) 8,405	89
Mother and child protection	1,071	23
Father and child protection	45	3
Visiting sick people	—	34
Hygienic education	(Cases) —	35
Funeral aids	(Cases) 6,116	41
Other works	—	1,677

CHAPTER XXXI

LABOUR AND LABOUR MOVEMENTS

Labour

Vocational Classification

Statistics classifying the population in Japan proper according to the kinds of work actually engaged and

the number of employees in each occupation can be obtained from the Report of the National Census of 1930 as follows:

CLASSIFICATION OF THE PEOPLE IN JAPAN PROPER
ACCORDING TO THEIR OCCUPATION

	(The 1930 Census)			Total	Employee	Female
	Total	Male	Female			
Total Population	64,450,005	32,390,155	32,059,850			
Unoccupied	34,830,365	13,359,918	21,470,447			
Occupied	29,619,640	19,030,237	10,589,403	20,037,851	10,676,109	9,397,742
Farming	14,140,107	7,743,065	6,397,042	9,133,617	3,173,283	5,960,334
Marine	546,624	501,078	45,546	314,378	271,258	43,120
Mining	251,220	210,174	41,046	241,430	200,496	40,934
Industry	5,699,581	4,269,151	1,430,430	4,037,681	2,808,985	1,228,696
Commerce	4,478,098	3,013,903	1,464,195	2,282,556	1,299,831	982,725
Transport	1,107,574	1,028,595	78,979	925,268	848,020	77,248
Public service	2,044,151	1,691,803	352,348	1,821,237	1,532,051	289,186
Domestic	781,319	84,203	697,116	781,319	84,203	697,116
Miscellaneous	570,966	488,265	82,701	536,365	457,982	78,383

According to the investigation made by the Labour Section of the Bureau of Social Affairs the classifications of labourers according to kinds of occupation at the end of 1934 was as follows:

Factory workers	2,539,384
Mine workers	247,186
Transport and communication, day-labourers and others	2,977,707
Total	5,764,277
Male	4,066,322
Female	1,697,955

Labour Conditions

Factories and Labourers The num-

ber of factories where more than 5 operatives are employed, in Japan proper in 1934 was 80,311, an increase of 8,371 or 11.6 per cent. as compared with the previous year.

The number of labourers, employed in the 80,311 factories above mentioned, in 1934 was 2,163,453 (1,147,097 males, 1,016,356 females), gaining 262,362 or 13.8 per cent. over the previous year. Classification of the same according to kinds of industry follows:

Sex Distribution

	Number	Percentage	Male	Female
Textile industry	969,320	44.8	184,805(19.1%)	784,515(80.9%)
Metal industry	184,682	8.5	171,505(92.9%)	13,179 (7.1%)
Manufacturing of machines, tools, etc.	314,669	14.6	288,199(91.5%)	26,470 (8.5%)

Sex Distribution

	Number	Percentage	Male	Female
Ceramic industry	82,363	3.8	65,359(79.4%)	17,004(20.6%)
Chemical industry	192,270	8.9	124,727(64.9%)	67,543(35.1%)
Lumber industry and making of wooden manufactures	76,584	3.5	69,710(91.0%)	6,874 (9.0%)
Printing and binding	56,891	2.6	50,178(88.2%)	6,713(11.8%)
Food stuff industry	147,565	6.8	120,850(81.9%)	26,715(18.1%)
Gas and electric industry	8,260	0.4	8,190(99.2%)	70 (0.8%)
Miscellaneous industry	180,849	6.1	63,576(48.6%)	67,273(51.4%)
Total	2,163,453	100	1,147,097(53.0%)	1,016,356(47.0%)

Age Distribution

	Under 16	16-49	Above 50
Textile industry	168,530(17.4%)	791,337(81.6%)	9,853(1.0%)
Metal industry	4,586 (2.5%)	175,301(94.9%)	4,795(2.6%)
Manufacturing of machines, tools, etc.	14,000 (4.4%)	294,208(93.5%)	6,461(2.1%)
Ceramic industry	3,533 (4.3%)	75,076(91.2%)	3,754(4.6%)
Chemical industry	9,430 (4.9%)	178,295(92.7%)	4,545(1.4%)
Lumber industry and making of wooden manufactures	2,001 (2.6%)	71,859(93.8%)	2,724(3.6%)
Printing and binding	2,754 (4.9%)	52,972(93.1%)	1,165(2.0%)
Foodstuff industry	2,946 (2.0%)	140,772(95.4%)	3,847(2.6%)
Gas and electric industry	12 (0.1%)	7,927(96.0%)	321(3.9%)
Miscellaneous industry	8,419 (6.4%)	119,706(91.5%)	2,724(2.1%)
Total	216,311(10.0%)	1,907,453(88.2%)	39,689(1.8%)

Unemployment The first thorough investigation on unemployment in Japan was made at the national census of October 1, 1935, and the number of jobless labourers and salary-men at that time was 322,527. Annual estimation had been made by the Social Bureau since 1929, based on the reports sent in by local governments as standing at the beginning of every month. The number had increased from 268,000 of Sep-

tember, 1929 to 505,000 of September, 1932. But the tendency turned at the end of 1932 as the result of Government's emergency measures and an increased demand for labour in the heavy industry for the services and the number was diminished to 346,000 in September, 1935. The rate of decrease of unemployment is greatest for factory and mine labourers as it is shown below:

UNEMPLOYMENT BY KINDS OF LABOUR

Average of	Salarymen		Day labourers		Factory and Mine labourers		Total	
	Number	Index	Number	Index	Number	Index	Number	Index
1932	81,078	100	197,993	100	209,197	100	489,168	100
1933	71,992	88	189,941	96	151,920	73	413,853	85
1934	68,546	84	184,095	93	121,677	58	374,318	77
1935 (Jan.—Sept.)	67,874	83	174,773	88	116,554	56	359,202	73

The movement of employment at factories and mines in 1930 and 1931 showed an excess of dismissal over

new employment, but it was reversed since. Details follow:

MOVEMENT OF EMPLOYMENT AT THE FACTORIES AND MINES WHERE MORE THAN 50 OPERATIVES ARE EMPLOYED

	At the Factories			At the Mines		Total Number of Employment (October)
	Dismissal	New Employment	Total Number of Employment (October)	Dismissal	New Employment	
1930	569,433	515,159	1,139,837	163,611	112,930	216,189
1931	656,114	555,055	1,100,730	103,015	69,954	180,427
1932	483,853	540,543	1,071,372	87,173	75,460	170,518
1933	524,937	634,254	1,195,129	114,670	147,059	205,841
1934	568,535	723,298	1,368,630	142,596	152,413	221,664
1935 (Jan.—Aug.)	369,934	588,135	1,485,996 (Aug.)	114,551	126,555	237,695 (Aug.)

Wages According to the investigation made by the Department of Commerce and Industry, the average wage of factory labourers per hour was 12 sen, in 1934. The cheapest

was 8 sen of textile industry labourers who contain a large number of women and juvenile workers, as shown in the above table. Details follow:

	Aggregate Labour Hours	Total Amount of Wage (in yen)	Per Hour Wage (in sen)
Textile industry	2,848,099,453	214,048,251	8
Metal industry	538,667,569	109,609,271	20
Manufacturing of machines, tools, etc.	948,483,455	192,401,224	20
Ceramic industry	235,108,976	33,171,112	14
Chemical industry	569,094,006	77,821,151	14
Lumber industry and making of wooden manufactures	217,512,612	28,045,207	13
Printing and binding	179,653,864	31,397,510	17
Foodstuff industry	326,058,163	42,517,805	13
Gas and electric industry	32,686,088	7,200,878	22
Miscellaneous industry	379,352,980	37,598,613	10
Total and average	6,304,672,166	773,811,022	12

AVERAGE DAILY WAGES OF LABOURERS

(In 13 largest cities)

(Compiled by the Department of Commerce and Industry)

Kind of employment	(In Yen)					
	1929	1930	1931	1932	1933	1934
Textile industry:						
Silk-reeler (Female)	0.97	0.85	0.75	0.67	0.67	0.65
Cotton-spinner (Female)	1.17	1.07	0.89	0.79	0.75	0.74
Silk-thrower (Female)	0.88	0.81	0.78	0.76	0.77	0.75
Cotton-weaver (Machine) (Female)	0.99	0.87	0.76	0.70	0.67	0.69
Silk-weaver (Hand) (Female)	0.99	0.84	0.81	0.78	0.80	0.80
Hosiery-knitter (Male)	1.63	1.60	1.49	1.45	1.45	1.56
" (Female)	0.91	0.82	0.76	0.72	0.72	0.73
Manufacturing of metal, machine and tool:						
Lath-man	2.32	2.18	2.04	2.13	2.25	2.26
Finisher	2.33	2.16	2.14	2.14	2.23	2.29
Founder	2.35	2.19	2.01	2.08	2.18	2.22
Blacksmith	2.29	2.11	2.04	2.08	2.23	2.21
Wooden-pattern maker	2.43	2.32	2.17	2.16	2.30	2.35

Kind of employment	1929	1930	1931	1932	1933	1934
Ceramic industry:						
Potter	1.92	1.87	1.81	1.70	1.74	1.76
Glass-maker	2.09	1.96	1.80	1.73	1.70	1.68
Cement-maker	2.06	2.13	2.07	2.10	2.12	2.13
Brick-maker (Shape)	1.64	1.42	1.14	1.09	1.15	1.16
Tile-maker (Shape)	1.77	1.59	1.40	1.29	1.33	1.39
Chemical industry:						
Medicine-worker	1.67	1.71	1.87	1.91	1.77	1.71
Match-maker (Male)	1.47	1.42	1.26	1.17	1.07	1.04
" " (Female)	0.68	0.65	0.59	0.54	0.49	0.50
Oil-presser	1.92	1.78	1.58	1.61	1.63	1.61
Japanese-paper maker	1.51	1.47	1.46	1.45	1.40	1.35
Foreign-style paper maker	1.75	1.76	1.72	1.68	1.68	1.65
Leather-maker	2.28	2.05	1.97	1.92	2.00	1.98
Foodstuff industry:						
Flour-miller	1.87	1.79	1.62	1.62	1.64	1.66
Saké-brewery worker	1.93	1.92	1.78	1.64	1.79	1.79
Soy-brewery worker	1.87	1.74	1.58	1.54	1.53	1.53
Sugar-refinery worker	2.12	2.17	2.08	2.07	2.06	2.08
Confectioner	1.53	1.50	1.41	1.40	1.44	1.40
Canner	1.68	1.70	1.64	1.53	1.54	1.37
Clothings manufacturing:						
Tailor (for European dress)	2.44	2.14	2.03	2.00	1.89	1.97
Shoe-maker	2.36	2.13	1.85	1.74	1.76	1.74
Wooden-clogs maker	1.83	1.61	1.40	1.38	1.41	1.39
Engineering and construction works						
Carpenter	2.77	2.49	2.14	1.98	1.88	1.90
Plasterer	3.07	2.66	2.32	2.19	2.13	2.13
Stone-mason	3.23	2.92	2.50	2.36	2.26	2.26
Brick-layer	3.12	2.87	2.56	2.38	2.31	2.31
Roofing-tile layer	3.32	2.92	2.49	2.38	2.31	2.34
Painter	2.76	2.54	2.28	2.14	2.12	2.09
Wood and bamboo works:						
Sawyer (Machine)	2.22	2.04	1.82	1.72	1.65	1.63
Joiner	2.32	2.15	1.92	1.80	1.80	1.82
Lacquerer	2.08	1.87	1.70	1.63	1.61	1.63
Rope-maker	1.58	1.50	1.47	1.39	1.40	1.49
Floor-mat maker	2.56	2.36	2.03	1.95	1.90	1.90
Printing and book binding:						
Compositor	2.38	2.36	2.27	2.17	2.14	2.16
Book-binder	2.06	1.88	1.75	1.69	1.70	1.69
Stevedore and daily labourer:						
Stevedore	2.32	2.12	2.02	1.89	1.90	1.98
Day labourer (Male)	1.93	1.63	1.40	1.30	1.28	1.30
" " (Female)	0.99	0.83	0.75	0.73	0.74	0.76
Fisherman:						
1.74	1.66	1.55	1.47	1.44	1.43	
Domestic employee:						
Male servant (monthly contract)	16.21	14.26	12.59	12.11	12.23	12.43
Maid servant (" ")	12.30	11.51	10.24	9.58	9.74	10.12

**AVERAGE DAILY WAGES OF WORKERS EMPLOYED IN FARMING
AND SERICULTURE PRODUCTION**

(In Yen)

Wages of Workers Employed in Farming										
	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934
General index numbers	99	93	94	92	87	95	58	52	54	54
Workers by the year										
Male										
Actual	0.78	0.74	0.71	0.66	0.66	0.57	0.47	0.42	0.44	0.44
Index numbers	101	96	92	86	86	74	61	54	57	57

	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934
Female										
Actual	0.56	0.53	0.51	0.46	0.48	0.41	0.33	0.29	0.32	0.30
Index numbers	98	93	89	81	84	72	58	51	56	52
Workers by the season										
Male										
Actual	1.53	1.45	1.42	1.43	1.45	1.25	0.95	0.85	0.89	0.88
Index numbers	94	90	88	88	90	77	59	52	55	54
Female										
Actual	1.23	1.17	1.12	1.13	1.08	0.96	0.72	0.66	0.69	0.69
Index numbers	96	91	88	88	84	75	56	51	53	53
Workers by the day										
Male										
Actual	1.51	1.42	1.53	1.44	1.35	1.14	0.86	0.77	0.79	0.79
Index numbers	99	93	101	95	89	75	57	51	52	52
Female										
Actual	1.21	1.10	1.24	1.28	1.03	0.87	0.64	0.55	0.57	0.61
Index numbers	105	96	108	111	90	76	56	48	50	53

N. B. The investigation refers to the facts in the districts selected as most suitable for the purpose. Wages per day are calculated by averaging wages, and amount paid in kind are estimated by equivalent money value. Average is calculated by means of simple arithmetical average. Base: 1921-23=100

Wages of Workers Employed in Sericulture

	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934
General index numbers	120	120	97	96	98	74	61	56	59	59
Workers by the year										
Male										
Actual	1.20	1.29	1.07	0.99	0.94	0.73	0.59	0.53	0.58	0.57
Index numbers	122	139	115	106	101	78	63	57	62	61
Female										
Actual	0.90	0.86	0.69	0.73	0.72	0.51	0.38	0.37	0.41	0.41
Index numbers	121	121	97	103	101	72	54	52	58	58
Workers by the season										
Male										
Actual	1.69	16.7	1.34	1.26	1.32	1.05	0.89	0.81	0.86	0.84
Index numbers	120	118	95	89	94	74	63	57	61	58
Female										
Actual	1.34	1.24	0.99	0.93	1.01	0.84	0.67	0.62	0.65	0.66
Index numbers	128	128	94	89	96	80	64	59	62	63
Workers by the day										
Male										
Actual	1.78	1.80	1.46	1.50	1.52	1.09	0.93	0.86	0.89	0.88
Index numbers	111	112	91	93	94	68	58	53	55	54
Female										
Actual	1.41	1.37	1.07	1.17	1.21	0.85	0.73	0.67	0.69	0.70
Index numbers	118	114	89	98	101	71	61	56	58	59

N. B. Base: 1921-1923=100.

AVERAGE DAILY WAGES OF MINERS

(In Yen)

	1929	1930	1931	1932	1933	1934
Mineral mines						
In the shafts						
{ Male	2.10	2.04	1.85	1.72	1.77	1.81
{ Female	0.86	0.84	0.76	0.73	0.73	—
Out of the shafts						
{ Male	1.90	1.79	1.62	1.55	1.64	1.61
{ Female	0.72	0.70	0.65	0.61	0.63	0.65
Average	1.86	1.78	1.63	1.54	1.62	1.63

	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934
Fisherman	93.7	94.7	99.8	114.7	111.3	105.2	97.8	92.5	88.8	93.2
Domestic employee:										
Male servant	97	102	102	103	101	89	79	77	77	78
Maid servant	102	109	105	107	105	98	87	82	83	86
average	99.5	105.5	103.5	105.0	103.0	93.5	83.0	79.5	80.0	82.0
Total Average	102.9	102.7	101.5	102.1	101.4	94.4	85.9	82.6	82.3	82.8

Real Wages

(Being a résumé of Mr. Tosuké Iguchi's investigation which appeared in the "Social Reform", January, 1935).

Money Income The most reliable statistics on wages in Japan are

compiled by the Ministry of Commerce and Industry from the reports of factories which employ more than five operatives each, though they are limited to factory labourers. The following table gives the money income of factory labourers in 1926-1927.

INCOME OF FACTORY LABOURERS CLASSIFIED ACCORDING TO THE AMOUNT OF MONTHLY INCOME

(1926-1927)

(in Yen)

Class of Labourers according to Monthly Income	Number	Total Income	Income from Labour					From Other Sources				
			Total	Housemaster Regular work	Side work	Wife	Members	Total	Rent-ing rooms	From propri-ety	Pre-sents	Others
Less than 60	86	53.51	50.65	48.88	0.14	1.49	0.14	2.86	0.10	0.14	2.46	0.16
" " 80	361	71.57	66.50	62.50	0.30	3.10	0.60	5.07	0.23	0.52	4.04	0.28
" " 100	582	90.09	82.74	77.28	0.26	3.41	1.79	7.28	0.57	1.01	5.16	0.54
" " 120	443	109.36	98.43	90.73	0.49	3.91	3.30	10.93	1.07	2.23	6.78	0.85
" " 140	295	128.67	116.26	106.44	0.57	4.31	4.94	12.41	1.10	2.94	7.56	0.81
" " 160	128	149.08	132.80	116.86	1.04	3.18	11.22	16.78	0.77	4.31	9.93	1.77
" " 180	71	169.31	151.70	133.36	0.79	5.02	12.53	17.61	1.12	4.84	10.44	1.21
" " 200	37	188.29	165.49	138.31	1.05	5.49	20.64	22.80	1.25	6.95	13.01	1.59
More than 200	32	229.66	201.55	176.04	0.70	4.57	20.24	23.11	0.90	14.61	11.45	1.15
Number of households investigated	2,028											
			Average									
		105.38	95.59	87.64	0.45	3.61	3.59	9.79	0.72	2.09	6.27	0.71

Living Expenses From the above table it will be seen that the classes of labourers who have an income of more than ¥120, earn more than ¥90 from regular work of the housemaster. It may be assumed that they belong to good classes of labourers, for, according to the statistics of the Bank of Japan and the Ministry of Commerce and Industry, the average daily wage of a labourer is about ¥2.50, so that when he works full 30 days the monthly income will be ¥75. The number of

labourers belonging to these classes occupies about a half of the 2,028 households treated in this report, but it is clear that they constitute only a small part of the total number of labourers in Japan. It is likely that a great majority of labourers are earning less than ¥2.50 a day from regular work. With this in mind the following table of labourers' living expenses has been compiled as the basis for making out the index number of labourers' living expenses.

LIVING EXPENSES OF LABOURERS

(In 1926-1927)

(In Yen)

Amount of Income	Less than 60		Less than 80		Less than 100		Average of Percentage
	Ex-pense	Per-centage	Ex-pense	Per-centage	Ex-pense	Per-centage	
Total Expense	58.66	100.00	71.34	100.00	84.86	100.00	100.00
Food Total	24.54	41.83	29.85	41.84	33.33	39.28	40.98
Cereals Total	9.82	16.74	11.92	16.71	13.17	15.52	16.32
Rice	8.96	15.28	11.37	15.94	12.61	14.86	15.36
Barley	0.50	0.85	0.18	0.25	0.14	0.16	0.42
Others	0.36	0.61	0.37	0.52	0.42	0.50	0.54
Fish	1.69	2.88	2.32	3.52	2.55	3.01	3.05
Meat	0.29	0.50	0.52	0.73	0.53	0.62	0.62
Eggs	0.32	0.55	0.43	0.60	0.64	0.75	0.63
Milk	0.10	0.17	0.22	0.31	0.17	0.20	0.23
Beans and vegetables	2.02	3.44	2.39	3.35	2.67	3.15	3.31
Dried eatables	0.23	0.39	0.39	0.55	0.37	0.44	0.46
Bean curd, pickles	1.27	2.17	1.75	2.45	1.86	2.19	2.27
Seasonings	2.26	3.85	2.69	3.77	3.19	3.76	3.79
Dishes to order	0.60	1.02	0.64	0.90	0.80	0.94	0.95
Lunch	1.72	2.93	1.09	1.53	1.16	1.37	1.94
Likes Total	4.22	7.19	5.49	7.69	6.22	7.33	7.41
Liquor	1.86	3.17	1.92	2.69	2.20	2.59	—
Tobacco	1.13	1.93	1.42	1.99	1.38	1.63	—
Confectionaries and fruits	0.87	1.48	1.69	2.37	2.15	2.53	—
Table water	0.36	0.61	0.46	0.64	0.49	0.58	—
Housing Total	13.36	22.78	14.73	20.65	16.49	19.43	20.96
Rent for house or room	11.62	19.81	12.45	17.45	13.94	16.43	17.90
Repairs	0.51	0.87	0.40	0.56	0.52	0.61	0.68
Water	0.22	0.38	0.24	0.34	0.25	0.29	0.34
Equipments	1.01	1.72	1.64	2.30	1.78	2.10	2.04
Electric light and fuel	3.51	5.98	3.79	5.31	4.26	5.02	5.44
Clothing Total	4.49	7.65	6.38	8.94	8.66	10.21	8.93
Clothes	2.42	4.12	4.38	6.14	6.09	7.18	5.81
Accessories	2.07	3.53	2.00	2.80	2.57	3.03	3.12
Medical and sanitary	5.31	9.05	4.49	6.26	6.08	7.16	7.50
Child bearing	2.11	3.60	1.32	1.85	1.95	2.30	2.58
Educational	0.09	0.15	0.40	0.56	0.68	0.80	0.50
Transportation	0.37	0.63	0.90	1.26	1.04	1.23	1.04
Communications	0.06	0.10	0.17	0.24	0.15	0.18	0.17
Paper, pen, etc.	0.08	0.14	0.07	0.10	0.08	0.09	0.11
Public burdens Total	0.11	0.19	0.16	0.23	0.19	0.22	0.21
Taxes	—	—	—	—	0.03	0.03	0.01
Others	0.11	0.19	0.16	0.23	0.16	0.19	0.20
Entertainment Total	2.44	4.16	4.90	6.87	5.69	6.69	5.90
Presents	1.88	3.20	3.48	4.88	4.29	5.06	4.38
Dinner, etc.	0.04	0.07	0.11	0.15	0.14	0.16	1.52
Recreation	1.37	2.34	2.34	3.28	2.73	3.22	2.95
Travel Total	0.17	0.29	0.89	1.25	0.61	0.72	0.76
Excursion	0.02	0.03	0.27	0.38	0.10	0.12	0.18
Others	0.15	0.26	0.62	0.87	0.51	0.60	0.58
Hire	—	—	0.03	0.04	0.08	0.09	0.04
Others	0.10	0.17	0.55	0.77	2.07	2.44	1.13
Ill-stated	0.55	0.94	0.37	0.52	0.81	0.95	0.80

Weights of the Necessaries The following table shows the weights or comparative value of the necessities for labourers' living. Less impor-

tant items were omitted in making out classified weights and weights in the total expense. As to the comparative weight of the articles, that

in Tokyo has been taken from the report of the Cabinet Statistics Bureau.

WEIGHTS OF NECESSARIES FOR
LABOURERS' LIFE
1922-1933

Item	Weight of Individual Article	Weight of Class	Weight in the Total Ex-pense
Food	—	—	46.27
Cereals	—	19.83	—
Japanese rice	85	—	—
Chosen rice	11	—	—
Barley	1	—	—
Vermicelli	2	—	—
Buckwheat	1	—	—
Fish and shellfish	—	3.71	—
Salt salmon, sardine, tapes (each)	1	—	—
Meat	—	0.75	—
Beef	6	—	—
Pork	2	—	—
Chicken	1	—	—
Eggs	—	0.76	—
Milk	—	0.28	—
Beans and vegetables	—	4.02	—
Soy-bean	1	—	—
Red-bean	1	—	—
Peas	1	—	—
Onion	1	—	—
Potatoes	3	—	—
Dried food	—	0.55	—
Dried radish	1	—	—
Porphyra	5	—	—
Bean-curd, pickles	—	2.76	—
Bean-curd	5	—	—
Boiled fish	2	—	—
Pickled radish	1	—	—
Roasted smashed fish	1	—	—
Seasoning	—	4.61	—
Sugar	7	—	—
Soy	12	—	—
Bean paste	6	—	—
Salt	1	—	—
Dried bonito	5	—	—
Table-luxuries and likes	—	9.00	—
Saké	10	—	—
Beer, cider	2	—	—
Tea	2	—	—
Confectionaries	6	—	—
Fruits	3	—	—
Tobacco	7	—	—
Dwelling	—	—	23.67
House rent	—	20.21	—
Repairs	—	0.77	—
Matting and window glass (each)	1	—	—
Drinking water	—	0.38	—

Item	Weight of Individual Article	Weight of Class	Weight in the Total Ex-pense
Furnitures	—	2.31	—
Chinaware, etc.	1	—	—
Ironmongery	1	—	—
Light and fuel	—	—	6.14
Gas	3	—	—
Charcoal	12	—	—
Fire-wood	2	—	—
Electric light	5	—	—
Clothing	—	—	10.09
Clothes	—	6.57	—
Bleached cotton tissues	2	—	—
Dyed cotton tissues	2	—	—
Printed cotton tissues	2	—	—
Striped cotton tissues	1	—	—
Cotton flannel	3	—	—
Silk tissues	1	—	—
Meisen silk tissues	12	—	—
Muslin	13	—	—
Serge	4	—	—
Cotton and silk for wadding	7	—	—
Thread	1	—	—
Wool	1	—	—
Accessories	—	3.52	—
Japanese collar	1	—	—
Shirts	9	—	—
Stockings	3	—	—
Japanese sacks	7	—	—
Towels	1	—	—
Hats and caps	5	—	—
Umbrella	2	—	—
Clogs	12	—	—
Shoes	10	—	—
Miscellaneous	—	—	13.82
Medical and sanitary	—	8.58	—
Soap	7	—	—
Medicine	3	—	—
Bath fee	20	—	—
Barber	10	—	—
Educational, etc.	—	0.66	—
Textbook and tuition	1	—	—
Stationery	1	—	—
Car fare	—	1.19	—
Reading and recreation	—	3.36	—
Newspaper	8	—	—
Movies	2	—	—

The general index number of living expenses fell below the average of the preceding years in the two years immediately after the commencement of the World War. But where a boom came during the war, it rapidly rose and continued so for several following years. In 1921,

however, prices went down and the index number of living expenses became low. Since then it has undergone but a slight change, with the exception of 1924 and 1925 in which it showed a slight upward movement. After 1931 the general tendency is on the rise, though slowly. As to the movement of the index number of different classes of articles, that of food the weight of which is the largest naturally corresponds to that of the general index number. The ups and downs of clothing, light and fuel index numbers are comparative-

ly great. Dwelling expenses show a special movement and are much affected by the movement of the general index number. The rise of the dwelling expenses in the years of the World War was not very sharp as compared with other expenses and thus served to modify the rise of the general index. On the contrary, in the years after 1926 the falling of dwelling expenses is very slow and thus serves to hinder the fall of the general index number. Miscellaneous expenses have not come down in a great degree either.

GENERAL INDEX NUMBER OF LABOURERS' LIVING EXPENSES
1922-1933

	Food	Dwelling	Light and Fuel	Clothing	Miscellaneous	General Index
1922	224.9	160.1	291.9	233.1	231.2	215.4
1923	208.7	160.9	289.4	221.1	220.8	205.3
1924	215.2	158.6	301.0	220.5	218.1	208.0
1925	224.3	171.1	282.6	221.9	219.5	214.4
1926	210.8	183.6	272.2	194.2	219.1	207.6
1927	203.0	193.5	293.3	168.5	214.0	204.4
1928	191.7	194.6	290.6	167.5	213.4	199.0
1929	186.0	193.3	263.7	161.5	208.2	193.1
1930	165.5	186.7	215.9	139.4	195.7	174.5
1931	139.5	182.6	191.9	113.7	177.6	155.6
1932	145.2	179.0	165.4	115.8	181.8	156.5
1933	147.2	177.4	205.2	125.9	183.8	161.1

Movement of Wages How then was the movement of wages in Japan proper in comparison with that of living expenses? There are several statistics on wages in Japan taken by the Bank of Japan, the Ministry of Commerce and Industry, the Cabinet Statistics Bureau and the Asahi Newspaper. Of the above the first two cover the longest period and are most widely referred to. They are taken here also as the basis of the study. The Bank of Japan Labour Statistics are based upon the conditions in 1926 and are compiled from the reports of about 4,000 private factories in Japan proper employing more than 40 operatives each. They give the index number of wage rates and that of earnings. The Ministry of Commerce and In-

dustry index number of wages have been revised three times since 1900. It is based upon the report of factories employing more than 5 operatives in 13 largest cities on the earnings, wages and other payment including even payment in kind, of the labourer at a stated date. Both statistics are not complete because they disregard the number of holidays and differences of ability among labourers. They are, however, the best material on hand as showing the main current of the movement of wages in Japan proper.

The index number of the real value of labourers' earnings may be drawn by dividing the index number of wages by the index number of living expenses.

INDEX NUMBERS OF WAGE RATES AND REAL VALUE OF EARNINGS
 1926-1933

Year	National	Tokyo	National	Tokyo	Index	Index	National	Tokyo	Index
	Index	Index	Index	Index	Number	Number		Index	
	Number	Number	Number	Number	of Earn-	of Earn-	Number	Number	Number
	(Ministry	(Ministry	of Real	of Real	ings of	ings of	of Living	of Real	of Real
	of Com-	of Com-	Value of	Value of	Labourers	Labourers	Expenses	Value of	Value of
	merce and	merce and	Wages	Wages	in Japan	in Tokyo		Earnings	Earnings
	Industry)	Industry)			(Bank of	(Bank of			
					Japan)	Japan)			
1914	100.0	100.0	100.0	100.0	—	—	—	—	—
1915	100.1	98.5	108.2	106.5	—	—	—	—	—
1916	105.7	106.7	105.1	106.1	—	—	—	—	—
1917	121.7	128.7	98.4	104.0	—	—	—	—	—
1918	161.0	164.0	92.3	94.1	—	—	—	—	—
1919	221.8	218.2	102.3	100.6	—	—	—	—	—
1920	288.1	292.2	122.5	124.2	—	—	—	—	—
1921	287.1	297.3	137.8	142.7	—	—	—	—	—
1922	309.3	322.0	138.9 143.6	122.6 149.5	—	—	—	—	—
1923	308.0	328.2	150.0	159.9	—	—	—	—	—
1924	316.3	356.1	152.1	171.2	—	—	—	—	—
1925	311.9	346.0	145.5	161.4	—	—	—	—	—
1926	310.1	347.7	149.4	167.5	100.0	100.0	100.0	100.0	100.0
1927	303.9	343.8	148.7	168.2	102.1	104.6	98.4	103.7	106.3
1928	303.4	333.4	152.4	167.5	105.3	108.3	95.9	109.8	113.0
1929	299.8	331.1	155.2	171.4	103.9	107.6	93.0	111.7	115.7
1930	274.6	301.1	157.3	172.5	98.7	102.8	84.1	117.4	122.3
1931	246.7	295.8	158.6	190.2	90.7	97.1	74.9	121.0	129.6
1932	236.4	286.4	151.0	182.9	88.1	96.3	75.4	117.5	127.7
1933	236.7	289.6	147.0	179.8	89.2	98.8	77.6	115.0	127.4

The index numbers of the Ministry of Commerce and Industry is converted from 1900=100 base to 1914=100 base, and index number of living expenses is converted from 1914=100 base to 1925=100 base.

The wages in Japan proper showed a rapid upward trend during the World War, which continued down to 1924. Since then, however, it began to fall, and the decline was specially great in 1930 and 1931. After the replacement of gold embargo in 1931 the tempo of dropping became slower till it became stationary in 1933 and 1934. This wage movement pretty fairly corresponds to that of living expenses.

On the other hand, the index number of real wages fell in the earlier years of the World War. During this period wages rose considerably, but prices rose far more than wages. In 1918 the real wages were the lowest and the social unrest ensued, of which one example is rice riots

which took place almost all over Japan. After 1919 the index number rapidly went up, the rise of wages far exceeding that of prices. For the following 5 years the upward tendency continued, although money wages were much lessened. From 1924 to 1931 both the index number of living expenses and that of money wages continued to come down. The index number of real wages, however, kept up the upward tendency. But after the replacement of gold embargo it began to go down again and at present it is barely in keeping with the level of the period immediately after the War.

At the end of the World War the urbanization of population was conspicuously great and the supply

of labour was abundant. The demand for labour was also great, and thus the standard of labourers' living was kept high. But after 1910 depression began to set in and the industries of the country began to rationalize their business and mechanize their working facilities so that the demand for working hands was much cut down. The number of the unemployed, therefore, must have been considerably great in 1930 and 1931. But since accurate or reliable number of the unemployed is unobtainable, it has been naturally excluded in the calculation of the index number of real wages.

Real Wages, 1931-1935 In order to make more detailed study of wages after the replacement of gold embargo in 1931, a monthly index number of real wages is made out of the index number of living expenses compiled by the Asahi and that of the earnings compiled by the Bank of Japan. Taking October, 1931, as the base, it is as follows:

 MONTHLY INDEX NUMBERS OF THE
 REAL VALUE OF WAGES IN
 OCTOBER, 1931—JULY, 1935

Year and Month	Index Number of Earnings (Bank of Japan)	Index Number of Living Expenses (The Asahi)	Index Number of Employment (Bank of Japan)	Index Number of the Real Value of Wages
1931,				
Oct.	100.0	100.0	100.0	100.0
Nov.	100.1	98.9	99.3	101.2
Dec.	100.8	100.3	98.5	100.5
1932,				
Jan.	99.1	102.7	98.2	96.5
Feb.	101.1	103.7	98.3	97.5
March	102.0	103.5	99.0	98.6
April	98.6	102.7	100.4	96.0
May	98.4	102.2	100.5	96.3
June	98.2	100.9	100.4	97.3
July	97.5	100.9	100.4	96.6
Aug.	97.4	100.9	100.6	96.5
Sept.	97.8	102.0	101.7	95.9
Oct.	100.4	101.1	102.1	99.8
Nov.	100.3	102.0	102.9	98.8
Dec.	140.2	105.4	103.7	98.9
1933,				
Jan.	101.1	106.8	104.3	94.7

Year and Month	Index Number of Earnings (Bank of Japan)	Index Number of Living Expenses (The Asahi)	Index Number of Employment (Bank of Japan)	Index Number of the Real Value of Wages
1933,				
Feb.	102.9	105.3	105.7	97.7
March	103.6	104.7	107.1	98.9
April	100.1	104.5	109.2	95.8
May	99.6	104.3	109.8	95.5
June	100.0	104.3	109.9	95.9
July	98.8	104.2	110.5	94.8
Aug.	98.4	104.2	110.9	94.4
Sept.	100.2	104.5	112.5	95.9
Oct.	100.9	105.1	113.6	96.0
Nov.	101.2	106.2	114.8	95.3
Dec.	103.6	105.4	115.6	98.3
1934,				
Jan.	99.3	105.1	116.1	94.5
Feb.	105.1	106.0	116.8	99.2
March	106.3	106.7	118.3	99.6
April	102.6	107.3	121.9	95.6
May	102.6	107.9	122.6	95.1
June	102.4	107.5	122.8	95.3
July	101.3	108.5	123.4	93.4
Aug.	101.5	109.8	124.1	92.4
Sept.	101.8	110.0	125.0	92.5
Oct.	103.1	112.3	126.8	91.8
Nov.	104.5	112.3	127.9	93.1
Dec.	107.5	111.7	128.7	95.2
1935,				
Jan.	102.9	111.1	129.1	92.6
Feb.	104.4	111.3	130.1	93.8
March	105.7	111.5	131.4	94.8
April	102.9	111.7	135.7	91.3
May	101.5	111.7	136.4	90.9
June	101.5	111.4	136.1	91.1
July	101.3	112.5	136.0	90.0

Both the index number of earnings of the Bank of Japan and that of living expenses of the Asahi are converted to October, 1931=100 base.

It will be seen that the index number of living expenses gradually rose since January, 1932, while that of earnings has shown almost no elevation, and thus the index number of real wages has gone low. It is unnatural that wages did not rise in the face of the rising expenses in the four years since the replacement of gold embargo. There are many opinions advanced concerning the causes of this phenomenon. It fails to be explained away by a delay in the readjustment of wages in comparison, for 4 years had already passed away since. Another ex-

planation advanced is that the increase of female and juvenile workers had much to do with lowering the index number, although the wages of mature and skilled workers may have been in a steady rise. In

any case the movement of real wages is not favourable to labourers as a whole. The following table shows the movement of real wages according to different kinds of labour.

INDEX NUMBER OF THE REAL VALUE OF WAGES
ACCORDING TO KINDS OF LABOUR

	1926	1927	1928	1929	1930	1931	1932	1933
Spinning (Female)	100.0	101.4	105.5	103.6	103.2	99.4	87.4	80.6
Silk-reeling (Female)	100.0	97.6	100.0	101.3	98.4	90.5	81.6	79.5
Weaving (Female)	100.0	99.8	102.6	102.6	99.7	99.2	90.8	85.7
Braiding and knitting (Female)	100.0	101.1	100.3	100.4	99.3	101.8	97.2	90.5
Manufacturing of machines	100.0	112.5	108.1	110.0	112.9	119.3	127.7	129.7
Shipbuilding	100.0	97.7	104.6	109.2	111.9	115.6	120.2	125.2
Vehicle making	100.0	103.4	104.9	103.9	105.9	113.4	113.9	115.4
Tool making	100.0	101.9	104.4	104.7	106.5	114.9	116.4	115.1
Metal work	100.0	102.1	108.0	111.5	116.1	125.1	124.9	124.1
Ceramic	100.0	103.1	104.9	106.2	109.3	113.0	109.8	107.8
Paper-making	100.0	102.2	106.8	110.2	121.0	126.4	119.9	119.1
Medicine	100.0	102.3	105.0	109.2	116.2	126.7	121.1	106.6
Rubber manufacture	100.0	103.2	107.9	112.5	114.8	123.0	117.1	111.2
Fertilizer	100.0	103.5	105.5	109.3	120.5	126.0	125.9	123.0
Food and drink	100.0	103.7	105.5	109.3	117.3	126.1	122.5	119.2
Printing and book-binding	100.0	104.0	107.1	107.0	114.0	123.8	121.2	116.4
Timbering and woodwork	100.0	102.0	103.1	103.3	104.6	105.3	99.6	94.4
Dyeing	100.0	100.0	102.3	102.5	109.0	118.0	114.6	107.4

According to the report of the Bank of Japan on earnings.

MONTHLY INDEX NUMBER OF EARNINGS AND REAL VALUE OF WAGES
ACCORDING TO KINDS OF
LABOUR

Year and Month	Earnings			Real Value		
	Spin-ning	Dye-ing	Ship-build-ing	Spin-ning	Dye-ing	Ship-build-ing
1931,						
Oct.	100	100	100	109.0	100.0	100.0
Nov.	99	99	101	100.1	99.7	102.3
Dec.	97	99	103	96.7	98.5	102.5
1932,						
Jan.	97	102	104	94.4	99.3	101.3
Feb.	96	102	105	92.6	98.5	101.3
March	95	104	108	91.8	100.9	104.4
April	94	101	104	91.5	98.7	101.2
May	93	100	105	91.0	96.7	102.4
June	91	102	108	90.2	100.9	107.2
July	90	101	102	89.2	99.6	101.1
Aug.	89	101	101	88.2	99.7	99.6
Sept.	88	102	102	85.3	99.6	100.2
Oct.	89	100	106	88.0	99.1	104.9
Nov.	89	99	110	87.3	97.4	107.4
Dec.	89	101	117	84.4	95.5	110.6
1933,						
Jan.	90	100	113	84.3	93.7	105.9

Year and Month	Earnings			Real Value		
	Spin-ning	Dye-ing	Ship-build-ing	Spin-ning	Dye-ing	Ship-build-ing
1933,						
Feb.	90	99	116	85.5	93.8	110.1
March	89	99	117	85.0	94.1	111.8
April	88	97	118	84.2	92.9	108.0
May	86	97	111	82.5	92.6	106.7
June	86	97	113	82.5	93.1	108.1
July	85	96	111	81.6	92.1	106.6
Aug.	85	95	110	81.6	91.3	105.7
Sept.	86	99	112	82.3	94.5	107.1
Oct.	86	98	112	81.8	92.5	106.9
Nov.	87	98	114	81.9	91.8	107.3
Dec.	87	98	120	82.5	92.0	114.2
1934,						
Jan.	86	96	113	81.8	91.1	107.7
Feb.	87	97	118	82.1	91.0	111.5
March	86	96	118	80.6	90.0	110.4
April	85	93	115	79.2	86.7	107.5
May	84	94	113	77.8	87.5	104.4
June	84	95	113	78.1	88.2	104.7
July	84	95	111	77.4	87.4	102.4
Aug.	84	95	113	76.5	86.8	102.7
Sept.	85	96	113	77.3	86.9	102.5
Oct.	86	97	114	76.6	86.1	101.7
Nov.	86	96	119	76.6	85.3	105.6
Dec.	86	96	122	77.0	85.8	108.9

Year and Month	Earnings			Real Value		
	Spin-ning	Dye-ing	Ship-build-ing	Spin-ning	Dye-ing	Ship-build-ing
1935,						
Jan.	86	94	117	77.4	84.6	105.0
Feb.	85	97	118	76.4	87.0	105.2
March	85	94	119	76.2	84.4	106.6
April	85	92	115	76.1	82.1	103.3
May	83	91	115	74.3	81.5	103.2
June	84	91	115	75.4	81.4	102.9
July	83	90	112	73.8	79.6	99.6

Made out of the classified earnings of the Bank of Japan and the index number of living expenses of the Asahi, both being converted into October, 1931=100 base.

The study of the above tables shows that the movement of real wages is pronouncedly unfavourable in the case of female workers. The real wages for the first four kinds of labour in the first table are almost stationary since 1926, which, however, have come down in recent few years. This is worth notice, because the above-mentioned labour is connected with industries whose productions have been finding a great market in the world.

The Index Number for December, 1935 According to the investigation made by the Asahi, the index number of nominal wages in December, 1935, was 262.6 (1914 as the base) and showed a rise of 1.2 per cent. as compared with that of the previous month. The index number for male labourers rose 1.6 per cent. due to the seasonal demand for male labourers. Wages of female labourers and those of the day labourers declined 0.2 and 0.5 per cent. respectively. The index number of real wages was 144.3 and showed a rise of 1.5 per cent. owing to the lower cost of living.

	Index Number of Money wages		Index Number of Real wages	
	Nov.	Dec.	Nov.	Dec.
Woollen yarn spinner (Female)	198	106	108	108
Cotton weaver (,,)	213	210	117	116
Rayon weaver (,,)	216	214	118	118
The average index number for female	214	214	117	117
Lath-man	330	341	181	188
Founder	332	330	182	181
Cement maker	323	325	177	179
Medicine maker	354	353	194	194
Paper maker	323	344	177	189
Flour miller	333	340	183	187
Sugar refiner	285	282	156	155
Confectioner	225	225	124	124
Rayon maker	239	238	131	131
Tailor	223	212	122	117
Carpenter	210	210	115	116
Plasterer	231	236	127	130
Lumberman	166	166	91	91
Joiner	218	228	120	125
Compositor	371	394	204	217
Stevedore	264	274	145	151
The average index number for male	277	281	152	155
Day Labourers	212	211	116	116
Total average	260	263	142	144

Remarks: The above are given on the basis of July, 1914 taken as 100.

In 1935 the general tendency was weak during the first half and with August as the bottom it took an upward swing. Though the index number for December was 0.3 per cent. lower, as compared with that of the corresponding month the year before, the average of the year was 258.0, showing a rise of 0.8 per cent. as compared with the average of 255.9 of 1934.

This rise of wages was caused by the activities in textile, machinery and chemical industries. The conditions in the industrial circle in general were also good which helped to pull up the level.

The index number of real wages was influenced by the rise in the index number of cost of living and therefore could not rise so high as the nominal wages. The average of

	Index Number of Money wages		Index Number of Real wages	
	Nov.	Dec.	Nov.	Dec.
Silk-reeler (Female)	225	228	124	120
Cotton spinner (,,)	218	219	120	120

the year was 142.9 and showed a decline of 2.8 per cent. as compared with 147.0 of the year before. The trend of the index number of real wages during 1935 was as follows :

	Nominal Wages	Real Wages
January	256.0	143.7
February	256.4	143.7
March	261.3	146.1
April	261.0	145.8
May	259.5	144.0
June	256.2	143.4
July	255.6	141.7
August	253.3	139.6
September	256.8	139.0
October	257.2	140.0
November	259.5	142.2
December	262.6	144.3

Working Hours The working hours are being reduced at least legally. After July, 1929, night work for women and children was abolished in factories under control of the Factory Law, and the hours were shortened in the spinning and weaving industries. By the revision of the Factory Law in the same year, the limitation of hours was also enforced in such factories as employ 10 workers or less. Moreover, the 11 hour

day in the silk industry was changed to one of 10 on July 1, 1930. Thus the hours are legally decreasing, but as a matter of fact, there is not much actual shortening, for grown up men work beyond the regular hours for additional wages, while factory owners often dismiss regular labourers and hire cheaper day labourers, or as an alternative require the regular men to do extra work.

According to the third labour census of October 10, 1930, the average daily earning of factory workers was ¥1.36 for actual working hour of 9h. 28m. exclusive of the hour of recess. Figures of the Cabinet Statistics Bureau show that it rose to ¥1.89 in 1934. On the other hand, the wage rate per working hour has been kept ¥0.12 since 1931. The rise is generally considered as being mainly due to the increase of extra working hours, and it may be safely said that the actual working hour in 1934 increased at least one hour over that of 1930.

Labour Accident and Mortality In 1933 the number of labourers injured while at work in factories was 48,363 and deaths numbered 404.

FACTORY ACCIDENTS IN 1933

	Death	Severely wounded	wounded	Total
Private factories				
Textile industry	37	1,362	3,972	5,371
Machine, tools, etc.	127	4,654	18,596	23,377
Chemical industry	85	1,523	5,586	7,194
Food stuff ..	23	247	631	951
Miscellaneous industry	57	1,244	2,672	3,973
Special factories	25	217	855	1,097
Total	354	9,247	32,362	41,963
Government factories	50	1,555	4,795	6,400
Grand total	404	10,802	37,157	48,363

LABOUR ACCIDENTS

(Compiled by the Social Bureau, Home Ministry)

	Total	In Govern- ment Factories	In Private Factories						
			Total	Textile In- dustry	Machi- nery In- dustry	Chemi- cal In- dustry	Food- stuff In- dustry	Mis- cellaneous Industry	Special Facto- ries
1924	45,053	12,722	32,331	8,716	13,354	6,627	1,148	1,606	880
1925	41,011	11,868	29,143	9,585	11,735	4,769	1,095	1,082	877

	Total	In Govern- ment Factories	In Private Factories						
			Total	Textile In- dustry	Machi- nery In- dustry	Chemi- cal In- dustry	Food- stuff In- dustry	Mis- cellaneous Industry	Special Facto- ries
1926	49,812	11,829	37,983	10,491	17,089	6,648	1,103	1,584	1,068
1927	57,032	12,195	44,837	9,864	20,696	7,935	1,332	4,010	1,000
1928	54,496	9,812	44,684	9,219	22,247	7,541	1,146	3,665	866
1929	58,113	8,910	49,203	8,955	25,691	8,675	1,141	3,809	932
1930	50,984	7,714	43,270	7,170	21,452	8,287	1,169	4,214	978
1931	41,316	6,109	35,207	5,790	17,298	6,677	1,078	3,475	889
1932	39,720	5,487	34,233	5,587	16,968	6,229	879	3,685	885
1933	48,363	6,400	41,963	5,371	23,377	7,194	951	3,973	1,097

RATE OF FACTORY CALAMITIES PER 1,000 OPERATIVES

	Total	In Govern- ment Factories	In Private Factories						
			Total	Textile In- dustry	Machi- nery In- dustry	Chemi- cal In- dustry	Food- stuff In- dustry	Mis- cellaneous Industry	Special Facto- ries
1927	31.32	91.34	26.57	9.99	85.07	44.65	15.36	23.80	41.92
1928	29.15	73.04	25.75	9.33	83.35	40.24	13.72	19.92	24.55
1929	29.92	67.29	27.18	8.77	89.59	42.60	13.20	20.35	36.63
1930	28.59	59.53	26.17	7.97	79.64	42.34	13.98	23.47	38.83
1931	23.75	52.26	21.69	6.38	69.92	34.37	13.94	20.31	35.61
1932	23.13	46.76	21.40	6.50	63.51	31.59	11.09	11.46	36.39
1933	25.67	45.70	24.07	6.18	68.25	30.79	11.37	20.88	45.34

In 1934 the number of calamities in the mines was 73,239 with casualties of 73,687 people, death num-

bered 880 increasing in all items as compared with the previous year.

CALAMITIES IN MINES

Year	Cases	Deaths	Wounded	Total of casualties
1925	187,026	786	187,515	188,301
1926	158,332	801	158,468	159,269
1927	163,108	1,002	163,593	164,595
1928	142,035	891	141,974	142,865
1929	129,649	964	129,419	130,383
1930	107,346	874	106,836	107,710
1931	78,310	694	77,955	78,649
1932	65,724	686	65,374	66,060
1933	66,929	833	66,340	67,173
1934	73,239	880	72,807	73,687

Marine Accidents The number of fishing boats and vessels without engines wrecked in 1934 was 12,596 and that of vessels with engines 2,900, increasing 513 and 1,456 respectively as compared with the previous year. The number of crews wrecked with those boats and vessels was 4,448 de-

creasing 1,381 on the previous year. 596 of the total were perished or missing. The increase of marine calamities in 1934 is largely due to the typhoon in September that raged over the western and central districts of the Main Island.

MARINE ACCIDENTS

	Total Number of Fishing Boats and Vessels	Fishing Boats and Vessels Wrecked		Amount of Loss (in ¥1,000)	Total Number of Fishermen	Crews on the Wrecked Boats and Vessels		
		Without Engine	With Engine			Perished	Survived	Total
1925	356,920	835	171	—	1,116,565	618	2,631	3,249
1926	350,943	977	289	—	1,112,435	606	2,763	3,369
1927	354,554	1,788	332	—	1,125,983	520	3,723	4,243
1928	360,126	1,683	454	—	1,130,430	472	2,749	3,221
1929	350,961	1,141	362	924	1,112,002	419	2,774	3,193
1930	359,295	2,578	619	1,370	1,109,700	479	2,871	3,350
1931	360,690	1,076	510	1,069	1,110,506	1,174	2,840	4,014
1932	360,686	2,239	770	1,764	1,106,850	569	1,652	2,221
1933	363,473	12,083	1,444	4,797	1,097,254	714	5,115	5,829
1934	364,582	12,596	2,900	4,785	1,103,346	596	3,852	4,448

Labour Hygiene The hygienic equipment of factories is legally required, but its progress and improvement is rather slow and partial. In compliance with the requirements stated in the new ordinance on labour hygiene, factory managers are

endeavouring to make improvements under the guidance of the Government and prefectural authorities, and good results have been reported as to the health of factory labourers. (See Chapters on Agriculture, Fisheries, and Mining also.)

Labour Movements

General Survey for 1935

The trade union movement in 1935 was rather inactive because of the fall of idealistic communists and the rise of realistic nationalists. A bettered labour condition also narrowed the sphere of activities to a considerable extent. Notable events in 1935 were the division of the Seamen's Union into two which ended in the establishment of the New Seamen's Union of Japan, and the organization of the Zen-Nippon Rodo Sodomei, or All-Japan General Federation of Labour as a result of the amalgamation of the Japan General Federation of Labour and the National Trade Union Federation. The number of labour disputes has been in the falling tendency since 1931, and in 1935 the trend was unchanged although demands for raising wages increased with improvement in the industrial outlook. The most conspicuous dispute in the year was that

of nationalistic trade unions against private railways at Toyohashi, Aichi prefecture.

Labour and Industry Ministry Proposed The labour policy of the Government in 1935 was to emphasize the nationalistic tendency and to urge compromise between capital and labour. The third general meeting of the Shakai Taishuto, or Social Mass Party, in January, adopted a resolution urging the Government to issue laws providing for the State control of industry and labour, while the fourth general meeting of the Japan Labour Union Council took a similar action.

The unification of the Japan General Federation of Labour and the National Trade Union Federation, hitherto two rival national centres of labour unions, was an epoch-making event in the history of trade unionism in the country. At the inaugural meeting of the new federation, held on January 15, 1935, a re-

solution urging the State control of labour and industry was adopted, of which the gist was as follows:

(1) The creation of the Ministry of Labour and Industry, with an advisory board where the interests of working classes are represented by delegates from trade unions. (2) For the control of industries (a) the need of State control over important industries with a view of finally bringing them under State management, (b) the appointment of a provisional commission of inquiries, (c) the organization of industrial unions of smaller enterprisers, the trade unions participating in the control of these unions, (d) the control of dividends and increase of wages as emergency measures, (e) the control of prices for export goods and important commodities for domestic consumption. (3) For the control of labour, the passage of the Trade Union Act and the Collective Agreements Act, the revision of the Industrial Disputes Act, the creation of Industrial Courts, measures for the protection of skilled workers, the appointment of Industrial Co-operation Boards consisting of equal numbers of representatives of capital, labour and consumers.

Labour Acts Since the laying on the table of the Trade Union Bill at the 59th session of the Diet in 1931, no progress was made in the Houses for labour legislation. But in 1935 important labour bills appeared in the Diet which stimulated opinions pro and con in industrial and labour circles. They were the Labour Pension Bill, a readjustment of the Shop Law, the establishment of the insurance for automobile accidents.

The Labour Pension Bill was proposed by the Social Bureau, Home Ministry, in July, 1935. The Bureau had been making studies of unemployment insurance and pension system for the protection of labour-

ers. But in accordance with their opinion the present social and economic conditions in Japan did not allow the initiation of such unemployment insurance as is found among western nations. So they dropped the idea of unemployment insurance and recommended the pension bill which had been adopted by the Unemployment Committee in order to legalize and enlarge the pension system already in existence.

Pension was being paid by employers to labourers who were dismissed or retired, but the practice was limited to only a small portion of factories. Of the total 520,000 men dismissed from factories and mines, which employ more than 50 operatives each, in 1933, only 13 per cent. were the recipients of pension. According to the investigation in July, 1935, among 31,050 factories which employed more than 10 operatives, only 2,214 had a pension system, while 2,972 factories pensioned them off as an act of benevolence. Among 939 mines where more than 10 operatives were employed, 257, or 27 per cent. only had a pension system or custom of it. The defect of the existing pension systems is that there is no special funds to insure payment. It is with reason that in the labour disputes of 1934 and 1935 demands for raising the retiring allowances or ensuring their permanency occupied more than 15 per cent. of the reasons. So it was that the bill for the establishment of a common and permanent system of retiring allowances was recommended by the Social Bureau. The bill, after several meetings of committees concerned, was adopted in its final shape by a special committee on December 24, 1935, and was presented to and voted by the Houses in the 69th Session of the Diet in May, 1936.

Shop Bill in Making The need of a

shop law was acutely felt for the protection of workers in retail stores, and the Social Bureau sent out questionnaires to prefectural governors for the investigation of claims on both sides of employer and employee on July 25, 1935. The result was that on the closing hour of shops a majority of employers and all of employees agreed with the sugges-

tion of the bureau to shorten the working hours by fixing an earlier closing hour at 9 or 10 o'clock at the latest. The bill is not yet in final shape, but the bureau is exerting its best efforts so to do. The present status of evening business of 1,707 shops in 108 cities on March 20, 1935, was as follows:

CUSTOMERS AND AMOUNT OF SALES ACCORDING TO HOURS IN THE EVENING OF MARCH 20, 1935.

Number of Shops of Customers which the Investigation was made	Number of Customers & Amount of Sales on the Day	Total	Customers and Amount of Sales after 9 o'clock p.m.			
			9-10	10-11	11-12	After midnight
Number of Customers	Actual Number	209,412	25,422	9,224	1,800	395
	Index Number	100.00	12.14	4.40	0.86	0.19
Amount of Sales	Actual Amount	¥188,322	¥19,761	¥5,855	¥924	¥108
	Index Number	100.00	10.49	3.11	0.49	0.06

Automobile Accident Insurance With the rapid increase of trucks and automobiles in recent years the number of accidents is increasing accordingly. In the decade from 1924 to 1934, it was quadrupled, the annual average for 1932-34 being 1,462 deaths and 34,883 injuries. The proportion of automobile accidents against calamities in factories or mines is by no means small. Most of the sufferers are people of poor means and the Social Bureau proposed a Government Insurance for Automobile Accidents in August, 1935.

Protection of Labourers During 1935 the problems that came to public attention most were those of temporary employment, labour condition in small factories for export goods, and female miners working underground. According to the investigation made by the Social Bureau, the number of factories where more than 100 operatives are regu-

larly and irregularly employed was 754 (30%) at the end of December, 1934, and the number of the temporarily employed there reached 80,000, or 17 per cent., of the total. When smaller factories are taken into consideration the number and percentage will be much greater. The investigation in Osaka prefecture in January, 1935, indicates that there were 85,000 (24%) labourers in temporary employment among 360,000 in that prefecture.

Again, the number of factories where more than 100 men were temporarily employed was 152, that of factories which had more than 1,000 labourers in temporary employment was 11, the Yawata Foundry of the Japan Iron Manufacturing Company leading the list with 11,276. In a certain factories the volume of the temporary employment exceeds that of the permanent employment.

TEMPORARY EMPLOYMENT BY INDUSTRIES
(Factories where more than 100 operatives are employed)

Kind of Factory	Number of Factories which use Temporary employees	Sex	Perma- nent Em- ployees	Temporary Employees			Total	Percen- tage of Tem- porary Employees	In the name of Day-labourers	
				Direct Contract	Through Con- tractors	Total			Direct Contract	Through Con- tractors
Dyeing and Spinning	129	Male	24,278	1,326	686	2,012	26,290	7.65	773	1,234
		Female	97,968	2,047	222	2,269	100,237	2.26	218	117
Machinery and tools	288	Male	135,984	37,418	6,887	44,305	180,289	24.57	1,278	8,950
		Female	12,614	3,722	456	4,178	16,792	2.49	249	541
Chemical	223	Male	57,842	5,384	3,230	8,614	66,456	12.96	1,214	6,215
		Female	24,883	2,280	409	2,689	27,572	9.75	126	904
Food	37	Male	6,147	1,048	112	1,160	7,307	15.87	267	266
		Female	2,580	684	65	749	3,329	22.50	50	4
Mis- cellaneous	55	Male	9,881	841	21	862	10,743	8.02	113	171
		Female	2,726	498	21	519	3,245	15.99	—	—
Special	22	Male	22,984	11,848	76	11,924	34,908	34.16	119	5,313
		Female	505	787	19	806	1,311	61.48	51	381
Total	754	Male	257,116	57,865	11,012	68,877	325,993	21.13	3,764	22,149
		Female	141,276	10,015	1,192	11,210	152,486	7.35	694	1,947
Sum Total			398,392	67,883	12,204	80,087	478,479	16.74	4,458	24,096

Temporary employment is a result of the combination of an increased demand for hands and uncertain prospect of business. Most of temporary employees are paid poorer than the permanent ones, neither are they qualified to receive bonuses or retiring allowances. Contracts are made between capital and temporary labour in such a way as not to give the latter rights prescribed by the Factory Law, Art XXVII, Article 2, on retiring or dismissal allowances. Moreover many of temporary labourers are hired through the medium of day labour contractors and are exposed to a high commission. Central and local government authorities are taking actions to minimize these abuses either by issuing orders or by negotiations with the parties concerned.

Women in the Pits The resolution adopted by the 19th international labour council at Geneva concerning the prohibition of female underground labour in all kinds of mines drew anew people's attention to the matter. Japan and India are the only countries where women work in the mine pits. India is to abolish it by June 1, 1939. In 1928 the Home

Ministry prohibited the underground work of juveniles and women in mines with 5 years' grace, but allowed an exception for smaller mines. The number of juvenile and female workers in the pits are steadily decreasing since, as is shown in the following table:

DECREASE OF JUVENILE AND FEMALE WORKERS IN THE PITS

At the End of June	Juveniles	Female	Total
1928	481	38,411	38,892
1929	1,419	33,532	34,951
1930	1,060	24,470	25,530
1931	516	11,385	11,901
1932	291	7,518	7,799
1933	291	6,854	7,055
1934	106	5,627	5,733

Labour Disputes

The number of labour disputes in Japan reached its climax in 1931 with 2,456, but since then has steadily gone down, it being 1,432 in 1935. The days when left wing proletarian parties and trade unions were in the leading position had passed, and patriotic or national socialistic elements have begun to have their say among labourers. Harmony among

all parties in industry has become the slogan of labourers, and the labour disputes have naturally taken a turn for compromise. A better labour condition brought about by the extension of foreign trade has also had much to do to decrease the disputes.

At the end of November, 1935, the number of labour disputes for the year was 1,432, with 72,506 participants, or a decrease of 104 cases and 30,806 persons, compared with the corresponding period of the previous year. The number of participants per case was 56, a decrease of 11 persons, and indicates that the scale of disputes became smaller due to the fact that they mostly occurred among operatives in smaller factories or firms.

The nature of demands in these disputes was positive in character as it had been in the previous year, although negative demands as op-

position against a decrease of wages rather increased, comprising 8.3 per cent., as compared with 4 per cent. of the corresponding period of the previous year.

Disputes in connection with dismissal numbered 202 and demands for payment of wages for the period reached as many as 121, revealing the fact that there is a considerable section of industry not at all benefited by the inflation. Disputes on retirement and dismissal allowances have increased from 14 per cent. in 1932 to 16.6 per cent. in 1935.

By the end of September, 1935, labour disputes for the year which were accompanied by strikes, sabotage or lockouts numbered 467. Of the total the number of cases that ended in the victory of labourers was 114, or 24.4 per cent., in defeat 130, or 27.8 per cent., and in compromise 223, or 47.8 per cent.

LABOUR DISPUTES

	1932	1933	1934
Manufacturing of metal, machines and tools	322	251	231
Chemical industry	311	277	332
Textile industry	336	240	226
Foodstuff industry	74	73	68
Miscellaneous industries	308	251	204
Mine industry	56	52	85
Gas and electric industry	9	16	17
Transportation	264	215	201
Engineering and construction works	153	198	179
Communication	4	6	5
Others	380	308	316
Total	2,217	1,897	1,915
Participants	123,313	116,733	120,307

CASES CLASSIFIED ACCORDING TO DEMANDS

	1932	1933	1934
Positive demands			
Increase of wages	397	576	622
Shorter hour	20	26	32
Holiday	1	3	0
Recognition of freedom of labour unions	7	7	9
On labour committees	0	0	0
Better equipments for labourers in factories	11	14	15
Rejection of overseers	26	45	45
Total	464	672	723

LABOUR DISPUTES

	1932	1933	1934
Negative demands			
Against lowering of wages	289	110	78
Against revision of working method, etc.	17	32	34
Against revision of the method of paying wages	98	103	113
For establishment or improvement of pension	327	255	288
Against dismissal	488	319	309
Total	1,219	819	822
Others	534	406	370

NUMBER OF LABOUR DISPUTES ACCOMPANIED BY STRIKES, SABOTAGE OR LOCK-OUTS 1925-1934

Demand for	Recognition of freedom of labour unions	Against the reduction of wages	Increase of wages	Against the revision of the method of counting or paying of wages	Shorter hour
1925 { Cases	4	100	41	44	9
Men	631	7,903	6,245	5,226	942
1926 { Cases	6	226	47	58	5
Men	2,041	14,610	4,643	20,683	718
1927 { Cases	13	94	60	36	8
Men	9,347	8,610	6,129	3,454	314
1928 { Cases	(1)8	(1)108	58	19	9
Men	467 (2,196)	16,252 (678)	4,762	1,645	625
1929 { Cases	6	91	129	45	10
Men	231	5,807	18,441	26,031	1,214
1930 { Cases	10	80	(3)288	(1)38	8
Men	591	8,045	33,628 (673)	3,222 (49)	214
1931 { Cases	(2)10	167	(4)213	55	18
Men	907 (384)	13,800	11,207 (681)	2,710	1,919
1932 { Cases	2	(2)194	(3)137	(1)50	(1)11
Men	565	14,416 (69)	6,968 (22)	4,197 (38)	956 (15)
1933 { Cases	2	50	254	32	14
Men	43	2,979 (32)	20,634 (68)	7,459	601
1934 { Cases	1	32	295	46	12
Men	48	11,749	18,458	2,428	534

Demand for	Establishment of holidays	Against the revision of working method or rule	Payment of wages	Better equipments	Establishment or increase of pension
1925 { Cases	—	5	—	10	11
Men	—	344	—	5,146	566
1926 { Cases	—	24	—	8	32
Men	—	3,476	—	3,280	2,380
1927 { Cases	1	2	—	7	28
Men	12	212	—	535	3,502
1928 { Cases	1	4	—	6	40
Men	100	51	—	2,408	2,672
1929 { Cases	1	20	—	3	(2)62
Men	219	2,082	—	94	5,143 (77)
1930 { Cases	1	11	94	4	(1)126
Men	7	1,772	6,588	167	5,035 (783)

Demand for	Establishment of holidays	Against the revision of working method or rule	Payment of wages	Better equipments	Establishment or increase of pension
1931 { Cases	—	10	96	6	(2)79
Men	—	242	8,083	968	2,915 (64)
1932 { Cases	1	6	110	6	53
Men	10	263	4,999	229	1,619
1933 { Cases	3	10	51	5	29
Men	144	288	2,675 (10)	181	969 (21)
1934 { Cases	—	12	45	5	27
Men	—	940	1,898 (58)	139	1,300

Demand for	Reappointment or against dismissal	Not to punish the leaders of disputes	Rejection of superintendents	Other	Total
1925 { Cases	—	—	16	53	298
Men	—	—	1,471	12,268	40,742
1926 { Cases	4	—	30	55	495
Men	39	—	2,974	12,390	67,234
1927 { Cases	53	—	37	45	383
Men	6,214	—	2,164	6,701	47,194
1928 { Cases	30	4	(1)24	(1)82	(4)393
Men	5,260	118	1,098 (15)	7,879 (26)	43,337 (2,915)
1929 { Cases	(1)81	2	(1)25	(1)96	(5)571
Men	7,320 (40)	116	2,666 (35)	7,917 (11)	77,281 (163)
1930 { Cases	128	—	12	(1)100	(6)900
Men	9,702	—	975	9,878 (33)	79,324 (1,538)
1931 { Cases	(2)182	—	25	(4)123	(14)984
Men	11,128 (37)	—	1,616	7,810 (29)	63,305 (1,231)
1932 { Cases	(8)183	—	17	(8)100	(23)870
Men	9,240 (782)	—	1,070	8,806 (519)	53,333 (1,445)
1933 { Cases	(4)78	—	27	43	598
Men	4,271 (90)	—	4,206	2,337 (1,401)	46,787 (1,622)
1934 { Cases	78	—	25	45	623
Men	5,400	—	3,571	3,013	49,478 (58)

Figures in parenthesis represent female cases or partakers.

RESULT OF DISPUTES

	Total	Compromised	Demands Accepted	Demands unaccepted	Defeated	Left unsettled
1930	900	294(32.7)	261(29.0)	321(35.7)	10(1.1)	14(1.5)
1931	984	346(35.2)	223(22.7)	385(39.1)	7(0.7)	23(2.3)
1932	870	315(36.2)	205(23.6)	328(37.7)	10(1.1)	12(1.4)
1933	598	263(44.0)	123(20.6)	206(34.4)	3(0.5)	3(0.5)
1934	623	271(43.5)	163(26.2)	188(30.2)	1(0.1)	—

Figures in parenthesis represent percentage.

Tenant Disputes

In the past 5 years tenant disputes centred round the protection of tenant rights, or demand of tenants for the continuation of the contract. The difficulty for a farmer to get another farm has become much greater than that of finding work for a labourer in a city. To lose one's farm is to starve, and tenant disputes along this line are accordingly acute. In 1934 the number of tenant disputes was

5,828, an increase of 1,828, as compared with the previous year.

TENANT DISPUTES 1929-1934

	Number	Tenant participants	Area Included (in cho)
1929	2,434	81,998	56,830
1930	2,478	58,565	39,799
1931	3,419	81,135	60,364
1932	3,414	61,499	39,027
1933	4,000	48,073	30,595
1934	5,828	121,031	85,838

The causes of disputes in the past 9 years has been as follows:

CAUSES OF TENANT DISPUTES

Causes	1926	1927	1928	1929	1930	1931	1932	1933	1934
	(in percentage)								
Bad crops	71.1	50.6	47.3	50.6	22.9	34.3	31.0	16.2	21.3
Class warfare	2.3	4.7	4.7	2.2	3.2	2.8	3.6	0.9	1.2
High tenant rates	6.5	9.9	6.4	4.4	4.6	2.8	2.2	2.5	1.7
Low price of agricultural products	0.2	1.0	0.6	0.1	11.5	7.0	1.4	0.5	0.7
Cancel of tenant rights	1.5	21.1	24.7	28.9	40.4	38.2	44.5	56.9	55.4
Arrearage of farm-rent	1.8	2.4	3.3	3.9	5.4	5.1	9.2	12.1	10.2
Breach of compromises or contracts	—	0.3	0.4	1.5	1.6	0.9	1.5	0.7	0.2
Rejection of new tenant contract by the old land-owners	—	—	—	—	—	—	0.9	0.5	0.8
Miscellaneous	16.6	10.0	12.6	8.4	10.4	8.9	5.7	9.7	8.5

The above table shows that the disputes in connection with tenant rates are on the decrease, while those of tenant rights are on a remarkable increase, and, in 1933 and 1934, disputes caused by the cancellation of tenant rights or withdrawal of land by landowners constituted over 55 per cent. of the total number of disputes. Among the disputes included in the item "arrearage of farm-rent" there were many which were caused by the strong attitude of landowners to cancel contracts because of the arrearage. Breach of compromises or contracts also means, in most of cases, the unwillingness on the part of landowners to renew the old contracts.

The continuous increase of disputes on tenant rights comes from

the following causes:

(1) Landowners, suffering from arrearage of farm-rents, are compelled to take a drastic measure, such as withdrawing of farm-lands; (2) The price of land is going up as one of the effects of the Rice Control Law and smaller landowners are tempted to dispose of their lands; and (3) the extremely bad crops in the previous year have severely stricken smaller landowners no less than tenants.

Disputes in 1935 According to the report of the Department of Agriculture and Forestry, conditions of tenant disputes and of mediation for tenant disputes and the tendency of landowners' associations and tenants' unions in 1935 were as follows:

1) Tenant Disputes in 1935. The

number of tenant disputes was 5,512, an increase of 1,504 as compared with the year before. Details follow:

TENANT DISPUTES IN 1935

	In 1935	Compared with 1934
Number of disputes	5,512	+1,054
Settled	4,191	+1,194
Unsettled	1,321	- 140
No. of participants		
Landowners	20,474	1,934
Tenant peasants	76,797	13,868
Area of land under disputes		
Paddy field	40,222.1 cho	5,204.4 cho
Dry land	4,272.5	633.5
Others	348.3	800.5
Total	44,842.9	3,765.4

Natural damages that followed one after another in 1934 and 1935 increased disputes on reduction and exemption of farm-rent, which had been decreasing, since the fall of 1934. Accordingly the number of participants and the area of land involved in the disputes increased. Demands for the return of tenanted lands have kept an increasing tendency owing to the sales of farm-lands, the increase of small landowners who began to till their own farms and arrearages of farm-rent. The number of cases which had relations with return of tenanted lands comprised 48.8 per cent. or about one half of the total cases. The disputes in connection with bad crops numbered 1,681 or 30.5 per cent. and showed an increase of 730 cases or 9.2 per cent. and disputes against the demand for payment of farm-rent increased 634 or 11.5 per cent. as compared with the previous year. The Tohoku (north-eastern) districts led the list in number as in the previous year. In the Kwansai districts disputes arising out of bad crops were many. Among the prefectures where a specially great number of disputes arose Akita prefecture heads others with 436 cases, fol-

lowed by 393 cases of Yamanashi prefecture, 331 of Okayama prefecture, 325 of Tochigi prefecture, 238 of Miyagi prefecture and 227 of Fukuoka prefecture. Fukushima, Yamagata, Niigata and Aomori prefectures had more than 200 cases of disputes.

2) Mediation for Tenant Disputes. Appeals for arbitration in accordance with Tenant Dispute Arbitration Law, was 6,315 on 4,061 disputes an increase of 895 cases.

NUMBER OF ARBITRATION OF TENANT DISPUTES IN 1935

	Number in 1935	Increase as Compared with 1934
Number of appeals	6,315	1,832
Number of disputes concerned	4,061	895
Complainants		
Landowners	1,397	325
Tenant peasants	2,505	519
By mutual agreement	117	31
By both sides	42	20
Participants		
Landowners	8,942	1,804
Tenant peasants	22,419	2,990
Area of land involved	9,535 cho	1,032 cho

In addition to the above, cases mediated by Tenant Officials, outside of the Tenant Dispute Arbitration Law, numbered 290, the cause of most of which was bad crops.

3) Landowners' and Tenant-farmers' unions in 1935.

Kinds	No. of Unions	No. of Member
Tenant-farmers' unions	4,011	242,422
Landowners' unions	531	39,172
Landowners and tenant-farmers' unions	1,748	202,785

a). Tenant-Farmers' Unions

Year	No. of unions	No. of members
At the end of		
1932	4,650	296,839
1933	4,510	302,736
1934	4,390	276,246
1935	4,011	242,422

b). Landowners' Unions

Year	No. of unions	No. of members
At the end of		
1932	662	50,454
1933	686	49,645
1934	633	48,836
1935	531	38,172

c). Landowners and Tenant-Farmers' Unions

Year	No. of associations	No. of members
At the end of		
1932	2,098	258,613
1933	2,309	279,431
1934	2,219	271,434
1935	1,748	202,785

Trade Unions

Trade Union Movement Important problems of the year 1935 that confronted the trade unions were that of the temporary employment and daylabour and that of retirement or dismissal allowances. Trade unions became aware of their weakness in copying with the times and naturally were led to form a great union. The birth of the All-Japan General Federation of Labour is one of indications of this tendency.

At the same time, there were several schisms among certain unions largely because of the nationalistic members who took liberty of organizing new unions by themselves. The greatest was the New Japan Seamen's Union, which was established in May. The schisms and reunions were caused by two trends of thought; one social democratic principle and the other Nipponism. At the end of June, 1935, the number of trade unions was 976 gain of 11, with associated labourers of 412,000, an increase of 25,000 as compared with the previous year.

Labour Festival The second labour festival was held on April 3, the first Emperor Jimmu's day, under the auspices of the General League of Trade Unions in Japan. Seven

trade unions of Nipponism were represented by 5,779 men. They first gathered at the Yasukuni Shrine (Shrine for Soldiers) at 9 A.M. and then marched to the Kokugi-kan (Wrestling Hall) over two miles and there they made an oath of love and service for the country. Their slogans were "Unification of Fighting Fronts of Patriotic Trade Unions," "Complete Protection of the Rights of Living for Labourers," "Extinction of Class Warfare," "Propagation of Nippon Spirit," "Expansion of Industries," "Labour Service for the Country," "Bringing about the National Council of Industry and Labour," etc. At Yokohama Dockyard 2,300 members of Yokohama Koshin-kai held a similar meeting, while at Tsurumi, Uraga and Yawata in Kyushu, thousands of patriotic labourers took part in the labour festival on the same day.

The 16th May Day The 16th May Day was observed all over Japan in 1935 at 29 places with 21,000 participants. General aspect of the May Day since its inauguration in Japan in 1920 may be perceived in the following table:

MAY DAY IN JAPAN

Year	Number of Places of Gathering	Number of Participants	Women in the Participants
1920	1	1,000	—
1921	4	4,150	—
1922	6	8,030	—
1923	12	10,780	—
1924	13	15,516	—
1925	21	25,629	—
1926	45	42,330	—
1927	48	42,100	1,500
1928	38	24,400	1,000
1929	23	23,000	1,050
1930	51	37,500	2,000
1931	61	39,800	1,900
1932	70	41,000	2,000
1933	30	25,490	1,606
1934	39	21,600	1,800
1935	29	21,650	2,380

TRADE UNIONS

(Compiled by the Bureau of Social Affairs)

	Unions	Members	Total number of labourers	Union percentage
1924	469	228,278	4,245,619	5.3
1925	457	254,262	4,485,810	5.6
1926	488	284,739	4,641,681	6.1
1927	505	309,493	4,703,757	6.5
1928	501	308,900	4,824,780	5.3
1929	630	330,985	4,873,081	6.8
1930	712	354,312	4,713,002	7.5
1931	818	368,975	4,729,436	7.9
1932	932	377,825	4,860,276	7.8
1933	942	384,613	5,126,719	7.5
1934	965	387,964	5,764,277	6.7
1935	976	412,000	5,890,000	7.0

Farmers' Unions Farmers' unions are changing from temporary organizations to permanent ones, and steadily increase in number. According to the Ministry of Agriculture and Forestry in 1921 there were only 681 tenant farmers' unions. It

increased to 4,775 unions at the end of June, 1934. The number of landowners' unions correspondingly increased from 192 to 672 in the same span of time. Opposition between the two apparently is much expanded in scope and deepened in nature.

FARMERS' UNIONS

	Landowners		Tenant-farmers		Landowners and tenant farmers	
	Unions	Members	Unions	Members	Unions	Members
1929	655	55,138	4,156	315,771	1,986	244,943
1930	640	53,278	4,208	301,436	1,980	247,880
1931	645	50,556	4,414	306,301	2,047	255,088
1932	662	50,454	4,650	296,839	2,098	258,613
1933	686	49,645	4,810	302,736	2,309	279,431
1934	633	48,836	4,390	276,246	2,219	271,434
1935	531	38,172	4,011	342,422	1,478	202,785

The Consumers' Co-operative Movement

The consumers' co-operative movement among the working classes is rather unsound since 1931. Many consumers' co-operative societies have been dissolved or amalgamated. The number in 1934 was 71 with a membership of 23,117. Tokyo had the largest number of the societies counting 28. The most important societies are the Yokohama Koshin, membership 1,573; the Ishikawajima Jikyo, 2,202; Kuré Koyu, 2,300; the Steel Manufacturing Workers' 866; the Josai, 629; the Koto, 731. The 71 societies classified according to

the size of membership are as follows:

Range of membership	Number	Percentage
1-50	8	11
51-100	9	12
101-200	17	24
201-300	16	23
301-400	6	8
401-500	5	7
501-600	2	3
601-700	2	3
701-800	1	1
801-900	1	1
901-1,000	1	1
Above 1,001	3	4

Generally one member has one share ranging from 1 to 20 yen. The classification of 47 larger socie-

ties according to their capital is as follows:

Paid-up capital (In yen)	Number of Societies
1-500	7
501-1,000	5
1,000-2,000	4
2,001-3,000	10
3,001-4,000	7
4,001-5,000	2
5,001-10,000	8
10,001-20,000	2
200,001 and above	2

The average monthly purchase of a member is ¥10.79 and the purchas-

ing power increased as compared with the previous year. The rate of business expenses against the amount of sale was 6.3 per cent., and 8 societies exposed deficits.

Village Societies In addition to these more closely organized societies, there are some village co-operative associations. Since 1926, the need of forming village co-operative societies has come to be recognized by the farmers, and such societies are making rapid progress with the help of the national farmers' unions.

VILLAGE CO-OPERATIVE SOCIETIES

Number of Cooperative Societies

(At the year end)

	1929	1930	1931	1932	1933	1934
Total	14,047	14,082	14,163	14,552	14,651	14,815
Credit	2,547	2,449	2,135	2,051	1,756	1,511
Trading	315	328	330	325	311	332
Purchasing	305	323	325	336	332	332
Utilization	281	295	304	312	316	306
Trading and purchasing	265	284	286	307	292	263
Trading and utilization	276	287	277	267	268	264
Purchasing and utilization	85	102	114	116	131	144
Trading, purchasing and utilization	339	359	427	478	490	496
Credit and trading	227	223	204	196	175	166
Credit and purchasing	2,145	2,024	1,929	1,759	1,370	1,056
Credit and utilization	153	149	129	117	106	96
Credit, trading and purchasing	3,086	3,075	3,132	3,194	2,718	2,361
Credit, trading and utilization	66	59	47	42	38	32
Credit, purchasing and utilization	364	374	373	355	286	248
Credit, trading, purchasing and utilization	3,593	3,751	4,151	4,497	6,062	7,206
Classified by the organization						
Limited liability	12,619	12,733	12,910	12,968	8,863	5,973
Unlimited liability	1,179	1,112	1,030	990	1,182	971
Guaranteed liability	249	237	223	394	5,106	7,871

Operation of Cooperative Societies

(Amount in yen)

	1928	1929	1930	1931	1932	1933
Number of societies investigated	13,169	13,170	13,161	13,122	13,106	13,446
Number of members of societies	4,405,553	4,571,785	4,743,091	4,813,140	4,978,248	5,238,253
Capital						
Total amount	284,095,172	299,557,511	307,597,146	313,023,822	312,668,822	319,831,829
Amount paid up	199,589,562	216,248,937	228,226,949	234,572,589	239,725,266	243,968,997
Reserved fund	94,085,007	104,593,916	113,881,893	120,622,210	124,157,646	130,222,170
Loans	175,049,134	197,224,836	239,581,816	255,913,637	276,072,070	293,599,862

	1928	1929	1930	1931	1932	1933
Credit societies						
Number of societies investigated	11,578	11,530	11,449	11,358	11,290	11,617
Number of members of societies	3,636,578	3,755,876	3,861,078	3,856,482	3,925,801	4,140,448
Deposits	1,011,242,067	1,108,366,648	1,102,573,886	1,070,803,053	1,063,163,980	1,179,131,095
Trading societies						
Loans (in advance)	845,354,705	897,206,318	984,476,442	1,005,672,559	1,017,632,665	1,017,621,318
Number of societies investigated	7,515	7,626	7,777	8,167	8,477	9,529
Number of members of societies	2,547,218	2,690,273	2,845,490	3,027,070	3,151,865	3,536,261
Total amount of sales (for the year)	245,773,860	254,555,387	192,473,843	181,140,200	202,838,620	201,398,919
Purchasing societies						
Number of societies investigated	9,550	9,505	9,576	9,931	10,086	10,721
Number of members of societies	2,927,980	3,014,997	3,152,016	3,341,512	3,498,860	3,811,395
Total amount of purchases (for the year)	149,011,320	155,174,923	127,270,950	105,881,259	129,110,813	155,991,976
Utilization societies						
Number of societies	4,761	4,826	5,073	5,424	5,647	7,158
Number of members of societies	1,756,142	1,855,751	1,998,105	2,143,193	2,281,068	2,835,943
Total amount of charges for utilization (for the year)	5,670,698	5,826,309	5,727,582	5,391,517	5,731,098	6,816,095

Fishermen's Societies Fishermen's societies are the corporations organized by fishermen with the object to acquire fishing right and piscary as well as to establish common working orders.

	(At the year end)					
	1928	1929	1930	1931	1932	1933
Number of societies classified by number of members	3,870	3,892	3,874	3,928	3,957	3,980
Under 50	1,287	1,267	1,239	1,260	1,262	1,271
51-100	988	924	913	884	892	904
101-200	919	947	957	997	1,004	975
201-500	619	642	649	661	670	687
501-1000	93	98	100	105	109	120
1001 and over	14	14	16	21	20	23
Number of members of societies	509,863	512,761	526,579	546,622	555,736	570,056
Federations of societies						
Number of federations	48	64	61	63	69	70
Number of member-societies	636	816	830	881	917	925

Measures for Assistance of Workers

The Government Aid The most important policy of the Government in this connection in 1931 was the drafting of the Labour Union Law. But by the strong opposition of the representatives of business organiza-

tions the essential part of the Bill was deleted. The Labour Dispute Harmonizing Bill met the same fate. But the Government did something for the labourers by enforcing the Child Insurance Law, the Labour Accident Relief Law, and the Labour Accident Legal Insurance Law. The second one, the Labour Ac-

cident Relief Law provides for relief by employers of workers injured in quarrying, etc., in civil engineering work, in transport work, and as longshoremen. Hitherto, these labourers had no protection, being outside the terms of the Mine Law or the Factory Law, except that they occasionally received gifts or consolation money from employers. By the enforcement of this law their compensation becomes for the first time a legal obligation on employers. The number of enterprises which come under the Law was 8,160 and that of employees 321,962 in 1932. The number of cases in 1932 was 31,582 and the money expended amounted to ¥927,037.

Relief in Factories and Mines The condition of reliefs in 1933 in the factories and that in 1933 and 1934 in the mines which come under the Factory Law and the Mine Law were

as follows :

	Number	Expenses (in yen)
Factory (1933)		
Cases of relief	29,726	1,269,690
Private factories	15,887	820,032
Government factories	13,837	449,658
Mine		
Cases of relief in 1933	13,219	1,397,722
Cases of relief in 1934	12,001	1,596,547

The Insurances The types of insurance available for labourers and people of small means generally are (1) Health Insurance, (2) Post-Office Life Insurance, (3) Post-Office Annuities and (4) Labour Accident Relief Legal Insurance.

(1) Health Insurance has been in existence since 1926. In 1935 the limit of application was enlarged so as to include smaller factories and transportation works. The results of the Insurance in recent 5 years follow :

NUMBER OF PERSONS INSURED AND AMOUNT OF ALLOWANCES

	Number of Persons Insured				Amount of Allowances		
	(At the end of March)				(From April of the Previous Year to March)		
	Total	Compulsorily Insured	Government	Private	Cases	Days	Amount
1931	1,547,780	1,513,090	933,683	614,097	6,597,103	85,023,726	¥32,723,084
1932	1,633,237	1,599,230	1,047,553	585,684	5,835,389	74,969,245	26,512,962
1933	1,720,199	1,684,509	1,122,141	598,058	5,676,370	71,722,467	23,764,305
1934	2,001,481	1,965,026	1,294,926	706,555	6,495,694	81,378,745	26,636,928
1935	2,315,431	—	1,503,708	811,723	—	—	—
1935 (July)	2,915,800	—	2,021,377	894,423	—	—	—

(2) The Post Office Life Insurance policies for adult in force at the end of March, 1934 were as follows (See Chapter XII):

	March, 1933 (revised)	March, 1934
Number	28,183,187	20,057,686
Premiums	¥ 14,726,032.8	16,251,313.5
Sums insured	¥2,412,793,951.1	2,554,183,847.2

There is no way of finding the exact number of policies contracted by labourers, but judging from the lowest class of sums insured about 17

per cent. of the total may be insurers of the labouring class.

Child Insurance is provided for under the Post-Office Insurance scheme. According to the rules, the age of the child must be from 8 to 12, which means that about 19,000,000 children are eligible. The monthly premium is of three kinds, 80 sen, 50 sen and one yen, while the term of insurance is for 15 years or 20 years. For a monthly premium of one yen the insured amount is ¥60

for children under 4 years, 20 yen is added for every subsequent year, reaching 180 yen at the age of 9. From age 10 to the expiration of the term a total amount of from ¥86 to ¥190 according to the age of the insured at the time of making the original contract. The number of

policies in force at the end of March, 1934 was 1,760,029, premiums ¥1,213,149.5 and sums insured ¥237,262,337.

(3) The condition of the Post Office Annuities at the end of March, 1934 was as follows (See Chapter XII.):

	March, 1933	March, 1934
Number of policies	248,197	270,664
Premiums	¥44,834,975.03	55,178,047.03
Amount of annuities paid in the fiscal year	¥18,901,336.06	21,902,757.02

(4) Labour Accident Relief Legal Insurance. The Labour Accident Relief Legal Insurance Law was enforced on April 1, 1932. The purport of the law is to insure harmonious practice of the provisions of the Labour Accident Relief Law, in view of the cases that may arise in which labourers engaged in works under such smaller capitalists as stone-cutters, public-works or building contractors and stevedore masters cannot get allowances specially when large-scale accidents occur. According to the

provisions of the law, subscription is compulsory for public-works or building contractors, and the premium is borne by the employers entirely. In 1932-1933 the number of policies taken was 5,148 and the premiums received amounted to ¥1,100,188.43. The number of cases of sickness or casualties was 3,505 and the expenses amounted to ¥143,572.68. Details for the three years since its enforcement are given below:

LABOUR ACCIDENT RELIEF LEGAL INSURANCE

	1932-33	1933-34	1934-35
Premiums received (in yen)	1,100,188	1,318,022	1,553,884
Allowances in the year (amount in yen)			
Medical	{ Cases 476	2,937	—
	{ Amount 54,130	296,868	567,715
Absent Relief	{ Cases 1,045	7,473	—
	{ Amount 35,091	153,686	278,914
Relief for the deformed	{ Cases 102	402	—
	{ Amount 10,802	62,902	139,044
Relief for the deceased	{ Cases 122	346	—
	{ Amount 43,920	132,012	171,468
Surrender	{ Cases —	10	—
	{ Amount —	8,100	19,224
Total	{ Cases 1,745	11,168	—
	{ Amount 143,943	653,568	1,176,865

Creation of Landed Farmers The work of creating and maintaining landed farmers by national subsidy was begun in 1926, and it was carried out in all prefectures except Tokyo. During 8 years from 1926 to 1933, the amount of loans reached ¥109,072,100 for new establishments

and maintenance. The money comes from the treasury of the Post-Office Insurance.

The area of land possessed by the new landed farmers in 1933 was 25,201 cho (cho=2.45 acres) of rice fields, 22,464 cho of upland-farms and 1,097 cho of other land, making a

total of 48,763 cho. The number of new landed farmers in 1933 was 125,232, and that of maintainers 13,046.

Warehousing of Cereals for Emergency For the relief of farmers in the north-eastern prefectures in the Main Island which are almost yearly stricken by natural disasters, the Imperial House specially donated a sum of money on November 7, 1934, to establish "go-kura" or village warehouses for storing cereals for emergency. The Government immediately took measures for providing ¥1,636,800 including the Imperial donation to encourage building village-warehouses. The number of proposed buildings is 4,830, 4,164 of which were already completed at the end of October, 1935.

Mutual Assistance Organizations The number of associations organized by the new landed-farmers, for the purpose of mutual assistance in payment of loans and improving farming methods, reached 1,116 in 1932 with a total membership of 34,576. The business of these bodies varies according to local conditions, but almost all of them are making efforts to save money and pay back loans received by members or prepare for lean years, and to help members in cultivation, etc. They also organize subsidiary occupations for members, give help in paying taxes, and organize lectures or exhibitions. When there are sick people among members the association helps them with

materials or by working on the fields for them so as to maintain the ownership.

Dispute-Harmonizing Law The Government is eager to prevent labour disputes if possible, and especially those involving left wing organizations. If this cannot be done there is no other means to meet the situation than equitable adjustment of disputes after their occurrence. The Labour Dispute Harmonizing Law was first issued in 1926, but experience has since convinced the Government of the need for its revision. The Government sets much store by the services of official mediators or "harmonizers," and in the revised law the power of such officials is to be increased.

In 1934, there was only one case in which a labour dispute was settled by the effort of a harmonizing committee organized according to the provisions of the Harmonizing Law. The number of cases settled by harmonizing effort outside the Law increased along with the increase in the number of disputes. Figures for 1934 follow:

Number of disputes	1,915
" " cases handled by arbitrators of all kinds	600
Harmonizing committee	1
Official arbitrator	150
Police arbitrator	241
Other officials	8
Municipal officials	26
Private arbitrator	174
Settled by arbitration	597
Unsettled	3

Employment Exchange (See Chapter XXX.)

CHAPTER XXXII

MEDICINE AND SANITATION

General

Foreign Physicians "Where there are three doctors there are two atheists" says the old proverb: yet medicine has ever been the handmaid of religion, and it was through a Christian missionary, St. Francis Xavier, that Western bodily healing first reached the shores of Kyushu. Later, when trade between foreign countries and Japan was the privilege of Dutch merchants only, the physicians who came with them proved a priceless source of knowledge to those Japanese who travelled secretly to Nagasaki in order to learn these new things: and the Bavarian scientist, P. F. von Siebold, spent three years in Yedo instructing the Shogunate doctors in his art. Then, as the Meiji Era opened the gates to foreign learning of every sort, Western medicine entered on the flowing tide, submerging, at least for a time, the native or Chinese system that had obtained for so many centuries, and of which further mention will be found on another page. Europeans were engaged to organize hospitals and to teach medical science in the colleges; and though Germany soon came to dominate the field in the latter case, it was an Englishman, Dr. Willis, who was the first to be officially engaged; he and Dr. Anderson being appointed to the

Military and the Naval hospitals respectively in Tokyo.

It was largely through the influence of the late Dr. Baelz, who successfully attended an Imperial patient when the latter was dangerously ill, and of Dr. Scriba, the well-known surgeon, that Japan soon turned to Germany for almost all her medical instruction, though the late Baron Takagi, founder of the Tokyo Charity Medical College and Hospital and formerly head surgeon of the Navy, kept his institution for many years representative of the English school of medicine.

Among Americans might be mentioned Dr. A. E. Vedder, naval surgeon, Dr. Hepburn, and Dr. Eastlake, the father of American dentistry in Japan, though perhaps both were more famous as dictionary-makers; and, more recently, Dr. Teusler of St. Luke's Hospital in Tsukiji.

Physicians, Dentists,

Pharmacists, etc.

Medical Practitioners The total number of medical licences issued in 1934 was 3,321 (besides 17 to foreigners), showing an increase compared with the preceding year of 180 (the number issued to foreigners increased by 4). In the following table is given the number of persons to whom licences were issued:

	1933	1934
Graduates of universities	1,649	1,692
Completed course in Government or public colleges	115	239
Completed course in designated private colleges	1,374	1,377
Completed course in foreign colleges (including examination)	3	5
Total	3,141	3,321

The total number of medical practitioners at the end of 1934 was 55,016 (besides 31 foreigners), showing an increase over the preceding year of 2,224 practitioners (an increase of 6 among foreigners). The

following table gives the number of medical practitioners at the end of 1934 (the percentage for the preceding four years are also given for comparison):

NUMBER OF MEDICAL PRACTITIONERS

	At the end of 1934		Percentage			
	1934	1933	1932	1931	1930	
Graduates of universities	17,034	30,96	29.51	27.09	25.16	23.08
Completed courses in Government, public or designated private colleges of medicine	26,846	48.80	48.33	48.65	48.94	49.01
Completed course in foreign schools (including examination)	67	0.12	0.12	0.12	0.13	0.13
Passed examination	10,352	18.82	20.42	22.27	23.43	24.55
Licensed on account of official career	37	0.07	0.09	0.11	0.14	0.19
In practice before and since promulgation of the Law of Medical Practitioners	596	1.08	1.36	1.55	1.96	2.80
In practice within limited districts	84	0.15	0.17	0.21	0.24	0.24
Total	55,016	100.00	100.00	100.00	100.00	100.00

Of the above total number those who actually engaged in the diagnosis and treatment of patients in 1934 were 49,301 being 89.61 per cent. of the total. The number corresponds 7.23 practitioners per 10,000 inhabitants.

The ratio of the distribution of medical practitioners between urban and rural districts was 12.45 practitioners per 10,000 of population

in the urban districts while it was 4.8 per 10,000 inhabitants for the rural districts.

Dental Surgeons The total number of licences issued to dental surgeons in 1934 was 1,154, being a decrease of 21 when compared with the preceding year. In the following table is given the number of persons to whom the licences were issued in 1934:

	1933	1934
Completed course in dental colleges	1,074	1,053
Completed course in foreign schools (including those who passed examination)	7	2
Passed examination	94	99
Total	1,175	1,154

The total number of dental surgeons at the end of 1934 was 18,998 (besides two foreigners), showing an increase on the preceding year of 1,014 (number of foreigners increas-

ing by one). The following table gives the number classified according to universities or colleges and the percentage each bears to the total:

	At the end of 1934		Percentage			
	1934	1933	1932	1931	1930	
Completed course in Government or designated private dental colleges	10,178	58.12	50.82	48.14	44.57	42.02
Completed course in foreign schools (including examination)	78	0.41	0.43	0.43	0.45	0.51
Passed examination	8,730	45.95	48.72	51.40	54.94	57.41
In practice from the time before the promulgation of the Law of Dental Surgeons	3	0.02	0.03	0.03	0.04	0.06
Total	18,998	100.00	100.00	100.00	100.00	100.00

Of the above number, those who were actually engaged in practice numbered 17,622 which corresponds to 92.76 per cent. of the total number of dental surgeons.

The total number of those dental surgeons who were actually in practice was at the rate of 2.58 per 10,000 of the population.

The ratio of the distribution of dental surgeons in cities and districts of the country was 4.79 for cities and 1.56 for districts per 10,000

inhabitants.

At the end of 1934, besides the above mentioned number of dental surgeons, there were 83 medical practitioners who specialized in dentistry.

Pharmacists The total number of pharmacist's licences issued in 1934 was 1,422 showing a decrease, when compared with the preceding year, of 80 licences. In the following table is given the number of persons to whom licences were issued in 1934:

	1933	1934
Graduates of universities	22	25
Completed course in Government or public College of pharmacology collages	296	*298
Completed course in designated private school of pharmacology	1,138	1,059
Completed course in foreign schools (including examination)	2	3
Passed examination	44	37
Total	1,502	1,422

*Note: Include, the graduates of pharmacological department attached to Government or public medical universities.

The total number of pharmacists at the end of 1934 was 23,283 (besides 1 foreigner) showing an increase, compared with the preceding year's figures, of 1,481 (the number of

foreigners remained stationary); and the following table gives the number classified according to universities or colleges and the percentage each bears to the total:

	Number at the end of	Percentage				
		1934	1933	1932	1931	1930
Graduates from universities	286	1.23	1.32	1.21	1.27	1.19
Completed course in Government or public in private (designated) colleges of pharmacology	†12,401	53.26	50.02	46.57	42.46	39.44
Completed course in foreign schools (including examination)	31	0.13	0.14	0.12	0.13	0.15
Passed examination (including examination under former regulations)	10,565	45.38	48.52	52.10	56.14	59.22
Total	23,283	100.00	100.00	100.00	100.00	100.00

†Note: Indicates graduates of pharmacological departments of Government or public medical collages or of the pharmacological departments attached to Government or public medical universities.

Of these pharmacists, (1) the number of practising pharmacists (these include those who were engaged in the dispensing of medicines in the pharmacy, those engaged in the sale of medicines and those engaged in

the manufacture of medicines) was 15,431; (2) the number of those who, being employed by hospitals or other dispensaries, dispense medicines was 2,628; and (3) those who were exclusively engaged in the sale of pa-

tent medicines numbered 1,348. Those coming under (1) corresponds to 66.28 per cent. of the total number of pharmacists while (2) and (3) represented 11.29 and 5.79 per cent. respectively.

At the end of 1934, the proportion of pharmacists to the population was 3.41 per 10,000 inhabitants, showing an increase of 0.17 on the preceding year.

Pharmacies and Traders in Medicines

Pharmacies The number of pharmacies at the end of 1934 was 11,988 of which 11,843 were run by pharmacists and 145 by non-pharmacists, showing an increase, when compared with the preceding year, of 248 pharmacies run by the pharmacist and 27 pharmacies managed by non-pharmacists.

Traders in Medicines The total number of persons engaged in the sale of medicines at the end of 1934 was 29,618, showing an increase of 831 persons over the preceding year; among them, the qualified pharmacists who were engaged in the sale of medicines without opening pharmacies numbered 674 and the druggist 28,944. Of these druggists those who were qualified to deal in designated medicines numbered 4,189, of whom those employing pharmacists numbered 1,889, those coming under the provisions of Art. XXXVII, Item 4 of the "Regulations for the Trade in Medicines and the Handling Thereof" numbered 124 and those coming under the second clause of the supplementary provisions of the same regulations were 2,176.

Medicine-Manufacturers The total number of medicine-manufacturers at the end of 1934 was 3,967 being an increase of 135 on the preceding year. Of these manufacturers 1,268 were pharmacists, 951 those who employ pharmacists, and 1,748 nei-

ther pharmacists nor those employing pharmacists.

Midwives

Number The total number of midwives at the end of 1934 was 58,270 (besides two foreigners), showing an increase of 1,680 (no change in the number of foreigners) on the preceding year; they may be classified into 4,501 persons who completed the course in designated schools or training institutes, 50,081 who passed the examination, and 3,219 who have been practising before and since the time the Midwives Regulations were put into effect, and 469 who practise in limited districts.

Distribution The proportion which midwives bear to the population was 8.54 per 10,000 of the population, being an increase of 0.12 on the preceding year.

The number of midwives per every 10,000 population was 11.76 in the urban and 7.05 in the rural districts, showing an increasing 0.04 in the former and 0.13 in the latter as compared with that in the previous year.

Nurses, Acupuncturists; Moxicauterists, and Shampooers

Nurses The total number at the end of 1934 of nurses who obtained licences from the prefectural offices was 102,921 (of whom 4,224 were under-nurses) showing an increase of 6,901 over the preceding year.

Male Nurses The number of male nurses at the end of 1934 who obtained licences from the prefectural offices was 205, showing an increase of 33 over that of the preceding year.

Acupuncture, Moxicautery, and Shampooing The following table gives the number of persons engaged in acupuncture, moxicautery, and shampooing who obtained licenses from the prefectural offices at the end of 1934.

	Not Blind			Blind		
	Males	Females	Total	Males	Females	Total
Acupuncture	2,500	560	3,060	1,660	332	1,992
Moxicautey	3,153	884	4,037	699	154	853
Shampooing	7,972	3,707	11,679	15,340	9,311	24,651
Acupuncture and moxicautey	7,293	1,374	8,667	1,399	303	1,702
Acupuncture and shampooing	1,024	251	1,275	2,576	607	3,183
Moxicautey and shampooing	527	125	652	385	87	472
Acupuncture, moxicautey, and shampooing	4,647	734	5,381	4,618	866	5,484
Total	27,116	7,635	34,751	26,677	11,660	38,337

Among the above mentioned shampooers there were 2,043 who were engaged in the treatment of contusion by means of Judo.

The following table gives the ratio to the population of the above mentioned acupuncturists, moxicautey-ists, and shampooers and the percentage of the blind and those who are not blind among them:

	Per 10,000 inhabitants	Percentage		Total
		Not Blind	Blind	
Acupuncture	0.74	60.57	39.43	100.00
Moxicautey	0.72	82.56	17.44	100.00
Shampooing	5.33	82.15	67.85	100.00
Acupuncture and moxicautey	1.52	83.59	16.41	100.00
Acupuncture and shampooing	0.65	28.60	71.40	100.00
Moxicautey and shampooing	0.17	58.01	41.99	100.00
Acupuncture, moxicautey, and shampooing	1.59	49.53	50.47	100.00
Total	10.72	47.55	52.45	100.00

Hospitals

Public Hospitals At the end of 1934

PUBLIC HOSPITALS IN 1934

Capacity of admitting patients	In cities			In towns		In villages		Total
More than 10	4	17	5				26	
" 30	4	12	—				16	
" 50	11	11	—				22	
" 100	35	3	—				38	
Total	54	43	5				102	

In the following table are given the accommodation for patients and the number of patients accommodated in 1934 by these hospitals:

Accommodations	10,125
Of the above capacity:	
For tuberculosis	641
" infectious diseases	259
Number of patients:	
Remaining from the preceding year	4,000
Admitted this year	95,136
Discharged	86,864
Died in hospital	7,840
At the end of the year	4,432

Aggregate number of in-patients treated each day	2,184,921
Average capacity per hospital	99.26
Average number of in-patients per hospital	971.92
Average number of days a patients stayed in hospital	22.04

Private Hospitals (Charity Hospitals, Tuberculosis Hospitals, Insane Asylums and Leprosaria excluded.) The total number of private hospitals at the end of 1934 was 2,725 (of which 73 had been established by

the public juridical persons and 8 by foreigners), which, when compared with the figures for the preceding year, shows an increase of 272 hospitals.

The following table gives the number of these hospitals in urban and rural districts classified according to their capacity of accommodating patients:

	Cities	Towns	Villages	Total
With capacity for more than 10	1,220	603	218	2,046
" " 30	264	90	36	390
" " 50	141	42	21	204
" " 100	69	12	4	85
Total	1,694	752	279	2,725

In the following table are given the number of private hospitals classified according to the diseases they treat:

	Cities	Towns	Villages	Total
General	802	566	215	1,583
Medicine	196	43	20	269
Surgery	173	38	8	216
Paediatrics	59	2	1	62
Ophthalmology	108	41	21	170
Obstetrics and gynaecology	191	45	13	249
Dermatology and venereal and Genito-urinary diseases	66	6	—	72
Otorhinolaryngology	94	10	1	105
Dental surgery	1	—	—	1
Others	4	1	—	5
Total	1,694	752	279	2,725

In the following table are given the figures in connection with the accommodation for patients and the number of patients, etc. in the private hospitals:

Accommodations	77,162
For infectious diseases	4,235
" tuberculosis	2,504
Number of in-patients	
Remaining from the preceding year	23,491
accommodated in 1934	556,097
Left the hospital	548,185
Died in hospital	33,702
At the end of 1934	27,701
Aggregate number of in-patients treated each day	10,504,423
Average capacity per hospital	28.32
Average number of in-patients per hospital	223.70
Average number of days in hospital of a patient	17.23

Charity Hospitals (Tuberculosis Hospitals, Leprosaria and Insane Asylums excluded.) The total number of public and private charity

hospitals at the end of 1934 was 30, of which 8 were public and 22 private hospitals, showing a decrease on the preceding year of 4 private hospital.

The following table gives the capacity and the number of patients who were taken care of by them in 1934:

Accommodations	3,049
Number of in-patients	
Remaining from the preceding year	2,044
" " " " *	75
Accommodated in 1934	27,525
" " " " *	2,823
Left the hospital	24,080
" " " " *	2,654
Died in hospital	3,098
" " " " *	164
At the end of 1934	2,391
" " " " *	80
Aggregate number of in-patients treated each day	870,625
Average capacity per hospital	37.680
Average number of in-patients per hospital	101.63
	1,082.23

Average number of days in hospital of a patient	27.98
Percentage of paying patients	8.93%

* Indicates the number of paying patients.

Insane Asylums The total number of public and private insane asylums (with the accommodations of at least 10) at the end of 1934 was 130, consisting of 9 public and 121 private asylums, showing an increase on the preceding year of ten private asylums.

The following table gives their accommodating capacity and the number of patients who were taken care of in 1934.

Accommodations	17,298
Number of in-patients	
Remaining from the preceding year	7,431
Accommodated in 1934	* 5,023
Left the asylum	* 11,197
Died in asylum	1,985
At the end of 1934	* 9,448
Aggregate number of in-patients treated each day	1,130
Average capacity per asylum	* 8,175
Average number of in-patients per asylum	* 5,642
Average number of days in asylum of a patient	2,725,527
Percentage of paying patients	*2,060,524
	133.06
	212.71
	173.12
	58.66%

* Indicates the number of paying patients.

Tuberculosis Hospitals The total number of public and private tuberculosis hospitals (with the accommodations of at least 10) at the end of 1934 was 91 (2 of which had been established by foreigners), consisting of 25 public and 66 private hospitals showing an increase of 5 public and 10 private hospitals, on the preceding year.

The following table gives the accommodations and the number of patients who were taken care of in 1934 :

Accommodations	7,271
Number of in-patients	
Remaining from the preceding year	3,232
Accommodated in 1934	* 1,827
Left the hospital	* 5,368
Died in hospital	* 7,342
At the end of 1934	* 2,368
Aggregate number of in-patients treated each day	* 5,336
Average capacity per hospital	2,516
Average number of in-patients per hospital	* 1,662
Average number of days in hospital of a patient	3,781
Percentage of paying patients	* 2,009
	1,279,947
	*714,410
	79.90
	195.26
	112.24
	51.60%

* Indicates the number of paying patients.

Leprosaria The total number of public and private leprosaria (with the capacity for at least for 10) at the end of 1934 was 14 (1 of which had been established by foreigners), consisting of 3 Governmental, 4 public and 7 private leprosaria. The following table gives the accommodation capacity and the number of patients who were taken care of by them in 1934 :

Accommodations	4,457
Number of in-patients	
Remaining from the preceding year	4,278
Taken care of in 1934	* 36
Left the leprosarium	* 1,394
Died in leprosarium	* 5
At the end of 1934	* 415
Aggregate number of in-patients treated each day	* 4
Average capacity per leprosarium	309
Average number of in-patients per leprosarium	* 5
Average number of days in leprosarium of a patient	4,957
Percentage of paying patients	* 32
	1,634,424
	* 11,839
	318.36
	408.71
	287.71
	0.72%

* Indicates the number of patients who bear the whole or a part of their expenses.

The following are the figures concerning the three National Leprosaria of Nagashima Aiseien, Kuryu Raku-senen and Miyako Ryoyojo :

	Aiseien	Raku-senen	Miyako
Capacity of admitting patients	732	115	60
Number of in-patients:			
Remaining from previous year	751	93	52
Accommodated in 1934	364	598	41
Discharged	61	—	6
Died	46	8	6
At the end of the year	1,008	183	81
Aggregate number of in-patients treated each day	13,377	47,145	27,595
Average number of days a patient stayed in leprosarium	281.06	246.83	296.72

Hospitals for Prostitutes At the end of 1934 there were 133 hospitals for prostitutes, and the total capacity for them was 5,430 (of which 10 were in the infectious diseases rooms). Compared with the preceding year, there was a decrease of 3 hospitals and an increase of 100 in accommodating capacity. The number of patients who had remained over from the preceding year in the hospitals was 1,331 and those who entered them in 1934 numbered 48,920, making a total of 50,251 (of whom 592 were clandestine prostitutes admitted under the provisions of Art. III of the Administrative Execution Law).

The following table gives some facts connected with the above mentioned hospitals for prostitutes :

	1934
Average capacity per hospital	40.83 patient
Average number of patients admitted per hospital	377.83 ..
Average number of days a patient remained in hospital	18.98 days
Average number of days a clandestine prostitute remained in hospital	24.21 ..

Infectious Diseases Hospitals (Established under the provision of the

Law for the Prevention of Infectious Diseases). The total number of infectious diseases hospitals at the end of 1934 was 1,286, consisting of 115 established by cities, 974 by towns, villages and other similar public corporations and 197 established by town or village associations or other similar associations. The accommodation capacity of these hospitals was 27,046 making an average of 21.03 per hospital.

The isolation wards at the end of the same year numbered 7,251, consisting of 64 established by cities, 6,825 by towns, villages or similar public corporations, and 371 by the town or village associations or similar associations; and the accommodations in these isolation wards were 66,319, the average per ward coming to 9.15.

The total number of isolation houses at the end of 1934 was 66, of which 11 were those established by cities, 55 by towns, villages or similar public corporations. The estimated total capacity of these isolation houses was 1,715, the average capacity per house coming to 25.98 persons.

At the end of 1934, there were 47 disinfecting stations.

Medicines

Medicines and Preparations not Mentioned in Pharmacopoeia The number of persons who reported in 1934 to prefectural offices of medicines or preparations, which could not be found in pharmacopoeia but which were nevertheless sold or imported, was 609 and the number of prescriptions reported was 3,087. As compared with the previous year, the number of persons decreased by 96 and that of prescriptions increased by 715.

Inspection of Medicines In the tours of inspection made during 1934, 26,052 places a decrease of 1,609

when compared with the preceding year) were visited. The following

table gives the places visited and the results of the inspection:

	Number of places visited	Percentage of places visited against places to be visited	Percentage of deleterious medicines discovered places	Percentage of deleterious medicines discovered medicines	Percentage of violators of the regulations punished
Total	26,052	24.90	25.91	54.10	0.51
Pharmacists	4,754	40.25	29.55	60.29	0.72
{ with pharmacy	106	7.10	11.32	53.77	2.83
{ others	44	30.56	11.36	13.64	2.27
Non-pharmacists	6,103	21.71	9.27	21.78	0.60
Druggists	875	13.74	2.93	7.20	2.27
Medicine-manufacturers	670	21.43	32.09	80.60	0.30
Hospitals	10,120	28.64	38.08	77.60	0.38
Medical practitioners	3,422	19.95	16.19	33.72	0.18
Dental surgeons	458	9.71	23.17	56.99	—
Veterinary surgeons					

Patent Medicines At the end of 1934, the total number of patent medicine traders was 41,548, which shows an increase of 703 when compared with the figures of the preceding year. Of these, there were 10,854 pharmacists, 3,168 medical practitioners and veterinary surgeons. Those who employed pharmacists numbered 2,585, those who come under Art. XXIV of the Patent Medicine Regulations were 18,404, and those who come under Art. XXV, of the same law 6,481, while there were 56 who were engaged exclusively in the importation and sale of patent medicines.

The total number of recognized patent medicines was 309,260 (of which 203 were imported), showing an increase of 25,785 when compared with the figures of the preceding year.

Patent medicines manufactured or imported in 1934 amounted to ¥85,468,377 (of which ¥512,919 represented the import from the territories). The figure meant that every person in the country used ¥1.25 worth of patent medicine which was an increase of 1 sen over the previous year.

Japanese and Chinese Medicine

In Japan, as in the West, there is

a system of home treatment, the history of which can be traced back into ancient times. Needless to say, however, that by far the greater part of home treatment in those days sprang from superstition. The people in those days had no knowledge of medicine, but it would be an error to say that all the methods employed in home treatment were nonsense. Such methods as are really efficacious and can stand the test of modern science have come to survive to this day and these cannot be cast aside as mere superstition. In this connection it may be remembered that digitalis, cocaine, and other remedies and drugs have all originated in some simple home medicine of uncivilized peoples.

There are naturally many methods of home treatment in Japan, some of which can hold their own against the tests of modern science, while others cannot.

(1) The latter group of treatments is based upon superstition or erroneous conceptions of medicine and as such it cannot stand the test of modern medical science. Belonging to this group are such so-called methods of cure as incantation, prayer, conjuration, etc. Yet it must be said that sometimes people are cured from their diseases in conse-

quence of auto-suggestion, and in such cases the cure can hardly be said to have been brought about by superstition.

(2) Rational home treatment can be classified into physical and pharmaceutical treatment. The former includes hydrotherapy, balneotherapy, sand-bathing, massage, acupuncture, moxibustion, etc. and since other remedies are already recognized as physical therapy by present medical science and need no special explanation, it is only necessary to review here, in brief, acupuncture and moxibustion.

Acupuncture Acupuncture, as a method of treatment or preventive of disease, consists in the introduction of a gold, a silver, or a steel needle into the living tissues and moving it very little vertically or, in some cases, leaving it in the tissue for from 2 to 3 minutes. Little is known of the early history of acupuncture in Japan, but this much is known, that the art was introduced to this country from China in the reign of the Emperor Kimmei (about 550 A. D.). After reaching Japan great improvements were made in technique as well as in the needle itself and the practice of it spread widely year after year. However, with the introduction of Western medical science after the Meiji Restoration, acupuncture gradually dwindled in favour, but in recent years it has somewhat regained.

The needle now in use is from 3 to 10 cm. in length and about 0.2 mm. in thickness. There are certain specified points in the human body, some three or four hundred, where the needle can be inserted and it has been found that these points agree, in general, with Head's zones.

If the operator is skilful in introducing a needle into the tissues, no pain will be felt by the recipient. Only a little shock as though caused

by electricity will be felt and hardly any bleeding will take place. As regards the action of the needle upon the human body its stimulative function must first be mentioned. As the needle stimulates the nerves, it serves to invigorate their function directly or reflectively and dilates the blood vessel, thus bettering the nourishment of that part of the body to which the treatment is applied and arousing a weakened function into greater activity. In the second place its sedative function has to be mentioned, and sedative results are achieved according to the length of time the needle is allowed to remain in the tissue. Its third function is that of inducing blood from other parts of the body to the part where the treatment is given, thus serving to relieve any congestion of blood.

Acupuncture is thus a good remedy for functional diseases of the nervous system as paresthesia, motor paralysis, ankylosis, and several forms of neuralgia. It cannot be applied in cases of high fever, wasting disease, hæmorrhagic diathesis or any acute infectious disease. Among the places where the application must not take place may be mentioned wounds, gangrenous growths, the heart, the lungs, blood vessels and the pregnant uterus.

Moxibustion This method was brought, with acupuncture, from China in the reign of the Emperor Kimmei, and it came into general use after gradual improvement in its methods.

The moxibustion method of this country, with the moxa, was introduced to Western countries by Rhiene (1673), Buschaf (1674), both of the Netherlands, Jan Craset (1689) of France and Kampfner (1690) of Germany. After the beginning of Meiji, moxibustion, like acupuncture, gradually ceased to be practised, but of late it is again growing in popu-

larity. In moxibustion, as in acupuncture, there are specific points of the body on which lighted moxa may be placed, thus producing erythema or blisters on the skin. Moxa is made from the leaves of mugwort which, after being dried in the sun, are rubbed and softened like cotton. They are then rolled into balls the size of a red bean or a soya bean and placed upon the skin. Cases where moxibustion cannot be used are almost the same as in acupuncture. Due allowance in the size of the moxa balls and the frequency of their use must be made for an infant or a weakened body. The diseases for which moxibustion is effective are:

(1) Nervous diseases:—neuralgia, cramp, neurasthenia, hysteria, chorea, and certain kinds of cerebrospinal diseases.

(2) Motor nervous diseases:—myalgia, articular rheumatism, myositis, arthritis.

(3) Digestive disorders:—atonia of the stomach and bowels, Ectasia of the stomach, gastric and intestinal catarrh, stomach paroxysm, dyspepsia, constipation, and diseases of the liver.

(4) Urinary diseases:—nephritis, pyelitis, cystitis, ureteritis.

(5) Gynecological diseases:—endometritis, metritis, Ovaritis, salpingitis, anomaly of situation and functional disorders.

(6) Pediatric diseases:—dyspepsia, catarrh of the stomach and bowels.

Moxibustion causes leucocytosis, gives an impetus to the recovery of the exhaustion curve line, increases blood sugar, complement and saponin. When used constantly, it creates erythrocytes and haemoglobin. The nature of moxibustion, according to the studies of authorities, is not only that of heat stimulation, but also that of a protein-therapy.

Home Medicines Prince Sukunahikona is generally regarded as the founder of the indigenous medical science and pharmacy of this country. Communication with China naturally served to bring into this country Chinese medicine and pharmacy, which enjoyed great vogue, so much so that towards the end of the Tokugawa Shogunate Japanese medicine, to use an apparent contradiction of terms, was almost entirely Chinese. When, however, Western medical science was introduced immediately after the Meiji Restoration, people soon abandoned the Chinese school, and not only was Chinese medicine driven out of this country, but most of the Japanese people gave up using home remedies, though in recent years, there has been a return to them. Medical science has made great progress, but the methods of cure have not advanced hand in hand with this progress. Diseases which were incurable in the past still remain incurable and people have again begun to think of home remedies. At the same time we cannot overlook the fact that new Western medicines, which are dispensed on purely scientific lines, are always better than drugs, though these, to some extent, are incorporated in the new medicines. In some cases, however, natural drugs are better than chemically prepared ones, and some physicians, who formerly considered drugs rather lightly, are now prescribing them more freely. In Japan, there are hundreds of drugs, but as space does not permit writing in full, a brief mention will be made of a few which may be of interest to the Western world and which have scientific value.

Home medicines are usually classified into animal, vegetable, or mineral matter, as below.

ANIMAL MATTER:

(1) The sea-ear. The shell, when powdered, is used for eye trouble.

(2) The oyster. The shell is used as an antacid and stomachic; and its fleshy part is utilised as a roborantia and a nutrientia.

(3) The blister beetle. Cantharidin contained in the insect is an efficacious ingredient and is good for the relief of arthritic rheumatism or an abscess, and sometimes is used to give impetus to suppuration. In China, it is said, the insect was used for poisoning purposes.

(4) Honey. Used as a cough remedy and as a laxative.

(5) The lamprey. Used for hemeralopia. Recently it was found that it contains plenty of vitamin A.

(6) The toad. Used as a cardiac and its efficacious ingredient is gamain or Bufotoxin, and its work is similar to digitalis.

VEGETABLE MATTER:

(1) The tangle. This, as it contains iodine in its composition, is used as an alterantia of syphilis and consumption or scrofulousness.

(2) Rhea-grass. Used for diarrhoea as perspiratory diuretica, narcotic expectorantia or astringentia; and it is well known that the efficacious ingredient "ephedolin," was abstracted from it by Dr. Nagai.

(3) The lily of the valley. Contains convallarin and is used for heart trouble.

(4) The rocambole. This is good for stopping a cough and helping expectoration, besides which it has a sterilizing power in the bowels. It is also prescribed for pulmonary tuberculosis.

(5) Saffron. Polycrocin and crocin are efficacious ingredients and the vegetable is good for disorders of menstruation.

(6) Ginger. This is a sudorific and expectorantia, and is sometimes used for dyspepsia. The efficacious ingredient is gingerol.

(7) The purple willow. This, as it contains a chemical compound of salicylic acid, is used for skin diseases, rheumatism or fever.

(8) The geranium nepalense. This is used widely in Japan, and is good for diarrhoea and

intestinal catarrh. The efficacious ingredients have not yet been found.

(9) Ginseng. Is the best-known of Japanese home medicines. It contains volatile oil and saponin. It is used as a tonic in consumption, neurasthenia, impotence, decrepitude, anæmia.

(10) The plum. This is good for dyspepsia and diarrhoea as a peptic.

(11) The plantain. This is used as a diuretic and expectorant. It is also good for whooping-cough. Plantagion is the efficacious ingredient.

(12) Arrowroot. After being dried in the sun, the root is used for fevers or headaches. It contains plenty of starch.

MINERAL MATTER:

(1) Calcite. This is a peptic and is good for pulmonary tuberculosis. It contains calcium carbonate and magnesium.

(2) "Fukuryukan." This is made from the burnt clay of old clay cooking-stoves and is good for morning-sickness, sea-sickness and intoxication. It contains vitrioline, calcium and magnesium, but it is still uncertain what ingredients are good for disease.

Health Preservation Work

Control of Foods, Beverages, etc. Foods, beverages, and other articles actually under control of the Home Department in accordance with the provisions of the Department Ordinances based on Law No. 15, 1900, are milk and milk-products, non-alcoholic drinks, snow and ice, artificial saccharine matters, food and beverage preservatives, injurious pigments, utepsils for foods and beverages, and methyl alcohol, etc. The business of producing and manufacturing these things is making healthy development under the guidance of the authorities concerned, as is shown by the following figures:

PRODUCTION OF MILK DRINKS, ETC.

	(In litres)				
	1930	1931	1932	1933	1934
Cow's milk	109,035,601	110,364,820	116,475,168	123,636,138	217,748,875
Goat's milk	720,930	878,701	838,247	1,001,713	1,181,816
Milk products					
Condensed milk	10,748,790 kg.	10,245,596 kg.	9,338,778 kg.	13,523,866	15,535,897
Condensed skim-milk	1,495,627 "	1,850,168 "	1,688,183 "	1,537,776	2,465,113
Powdered milk	603,605 "	753,218 "	529,603 "	979,870	924,997
Butter	4,443,022 "	4,714,772 "	1,029,727 "	1,810,719	3,930,354

	1930	1931	1932	1933	1934
Snow and ice					
Artificial ice	2,172,032,110 kg.	2,076,336,118 kg.	2,255,939,221 kg.	2,496,890,730 kg.	2,190,803,723
Natural ice	118,057,532 "	123,210,908 "	115,737,956 "	110,685,674 "	126,505,282
Snow	1,024,500 "	2,259,213 "	1,871,539 "	1,356,332 "	2,625,471
Refreshing drinks					
Mineral water and soda water	5,356,235	7,519,309	7,119,783	7,384,382	7,334,329
Ramuné	73,778,361	60,667,910	56,722,724	43,221,867	43,785,612
Cider	64,369,594	64,539,992	73,047,750	53,684,554	53,705,621
Lemonade, etc.	22,637,902	22,637,902	22,954,172	24,152,273	22,728,171
Fruit juice, syrup, etc.	9,770,019	9,872,600	11,279,420	10,036,299	18,522,424
Acid drinks made from milk and milk products	—	—	1,369,521	1,224,910	1,659,844

The total quantity of refreshing drinks as given above, when compared with the total population for the year, comes to 2.09 litres per inhabitant, showing an increase of 0.01 litre, compared with the preceding year.

Results of Examination

	(A) Total number of examination	(B) Number of examination in which injurious articles were discovered	Ratio of (B) to (A) in percentage	Compared with the preceding year
Milk and milk products	79,711	3,858	4.84	1.15 (incr.)
Snow and ice	3,341	173	5.18	6.10 (decr.)
Refreshing drinks	290,719	21,970	7.56	1.21 (..)
Utensils for foods and beverages	87,280	6,834	7.83	9.58 (..)
Confectionary	54,324	2,740	5.04	3.20 (incr.)
Canned and bottled foods	29,806	416	1.40	0.96 (decr.)
Alcoholic drinks	92,315	952	1.03	0.49 (..)
Other foods and beverages	94,422	6,722	7.12	2.58 (incr.)
Preservatives and decolourisers	234	10	4.27	0.81 (decr.)
Toys	2,497	138	5.53	2.95 (incr.)
Toilet articles	5,219	162	3.10	3.61 (decr.)
Miscellaneous	27,277	4,050	14.85	7.15 (..)
Total	767,145	48,025	6.26	1.49 (..)

Waterworks and Sewerage

Waterworks During the year from April, 1934 to March, 1935, sanction was given for the construction of

waterworks in 44 municipalities and private corporations.

Those places which obtained permission to construct waterworks may be classified as follows:

Undertaken by	Number of waterworks for which sanction or permission of the construction was given	Number of waterworks which now supply water
Cities	105	100
Towns and villages	357	309
Towns' or villages' associations	{ 6	6
Prefectures	{ 1*	3
Private corporations	4	97
Total	110	515
	583	

Note: * This mark refers to the one established by city, town or village guild.

Sewerage During the year 1934 no permission to construct sewers was given out.

The number of municipalities which have so far obtained permission to construct sewers number 43 in all, of which 25 have completed their work

while 18 have the work under way.

Removal of Foul Matter The following table gives a general idea of foul matter conducted in 1934 in 126 cities, under the provisions of the Law for the Removal of Foul Matter:

Number of houses within the districts in which removal of foul matter was carried out	4,354,862
Removal from the above mentioned houses	{ Refuse 3,065,034,844 kg. Dirt 663,014,301 .. Night-soil 905,047 k.l.
Average amount removed per house	{ Refuse 703.8 kg. Dirt 153.9 .. Night-soil 0.5 k.l.
Number of houses from which the holders of the land removed foul matters under Art. XXI of Regulation for Enforcement of the Law	83,431
Number of incineration plants	116
Amount of refuses burnt	1,383,388,475 kg.
Water-closets with purifying equipments	12,875
Number of water-closets directly connected with the main under Art. 12 of the Regulations for the Enforcement of the City Building Law	26,081

Note: 1 The figures for the night-soil given in the table represent only those for which city authorities are held responsible for its removal.
2 Number of incineration plants does not include the provisions for burning in the open.

Slaughter-houses and Slaughtering

Slaughter-houses The total number of slaughter-houses at the end of 1934 was 694, of which 86 was established by cities, 357 by towns and villages, 45 by live-stock raisers' or industrial associations, and 206 by private individuals. When compared with the figures of the preceding year, it shows an increase of 1 in city slaughter-houses, 14 in

towns and villages, 14 in those of live-stock raisers' or industrial associations, and a decrease of 5 in those privately established.

Slaughtering The number of animals of various kinds slaughtered in 1934 for food purposes and its comparison with the figures for the preceding year are given below (those slaughtered for household use due to some unavoidable circumstances are not included):

Kind of animals	Number of cattle slaughtered in 1934	Compared with 1933
Cattle	289,741 head	29,457 (decrease)
Calves	28,992 ..	2,172 (..)
Sheep	1,357 ..	187 (..)
Goats	2,902 ..	33 (increase)
Pigs	938,410 ..	31,147 (decrease)
Horses	89,300 ..	3,942 (..)

The following table gives the weight of meat yielded in 1934 by the slaughtered animals and a com-

parison of the yield with that of the preceding year:

	Total weight		Average weight per head	
	1934 kg.	Compared with 1933 kg.	1934 kg.	Compared with 1933 kg.
Cattle	53,761,577	4,471,312 (decr.)	185.55	3.11 (incr.)
Calves	1,413,622	83,785 (..)	48.76	0.71 (..)
Sheep	24,749	4,720 (..)	18.24	0.85 (decr.)
Goats	29,166	488 (incr.)	10.05	0.05 (incr.)
Pigs	46,444,544	795,857 (decr.)	49.49	0.77 (..)
Horses	12,609,318	416,828 (..)	141.20	1.50 (..)

The following table gives the number of cases in 1934 in which, after examination of animals for slaughter, slaughter was prohibited or or-

ders were given for destruction after slaughter of the whole or parts of the carcasses or of the viscera only.

	Number prohibited	Wholly destroyed	After slaughter	
			partly destroyed	Viscera only destroyed
Cattle	72	163	4,397	70,890
Calves	15	17	220	1,098
Sheep	—	—	1	514
Goats	—	—	2	71
Pigs	251	173	4,431	366,918
Horses	168	46	3,375	11,944

Inspection of Imported Meat In 1934, the inspection of imported meat was carried out in the 9 ports of Osaka, Yokohama, Kobé, Shimonoseki, Moji, Ujina, Nagasaki, Izuhara and Tsuruga.

The total amount of meat inspected at these ports was 12,075,227 kilogrammes, showing an increase of 1,778,412 kilogrammes over the preceding year. Classified by the kinds of meat, it was as follows :

	Weight of meat inspected (in kg.)
Fresh beef	229,987
Chilled beef	8,136,537
Frozen beef	3,676,685
Mutton	44,170
Pork	7,748

	Actual numbers			Percentage		
	Males	Females	Total	Males	Females	Total
Admitted into insane asylums under the law concerning Asylums for the Insane	1,247	700	1,947	2.48	2.43	2.46
Admitted into substitute asylums under the same Law	1,803	1,079	2,882	3.58	3.75	3.64
Under custody in other asylums or hospitals	3,038	1,674	4,712	6.03	5.02	5.05
Under custody in other places	5,541	1,241	6,782	11.01	4.31	8.57
Under temporary custody	86	30	116	0.17	0.10	0.15
Not requiring admission or custody	38,636	24,060	62,696	76.73	83.50	79.23
Total	50,351	28,784	79,135	100.00	100.00	100.00

Insane Persons

At the end of 1934, the total number of insane persons was 79,135 which showed an increase of 3,096 over the figures of the preceding year. Its ratio to the population of the country in that year was 11.31 per 10,000 of population, which, compared with the preceding year, showed an increase of 0.22.

The following table gives the number of insane persons at the end of 1934 classified according to the places of their custody or confinement :

Poisoning

The total number of persons poisoned in 1934 was 14,943 (an increase of 871 over the preceding year), of which 8,515 (56.98 per cent.) were poisoned intentionally, 6,392 (42.78 per cent.) by accident, and 36 (0.24 per cent.) poisoned by others; and of these persons poisoned 3,182 died, of which 2,811 were those poisoned intentionally, 356 those poisoned by accident, and 15 those poisoned by others, which mean that 33.02 per cent. of those who were intentionally poisoned died, 5.57 per cent. of those accidentally poisoned also died, and 41.67 per cent. of those poisoned by others also succumbed. Of poisonous substances the most frequently used in intentional poisoning and poisoning through other's injuries are chemicals, especiality a preparation containing phosphorus; accidental poisoning is mostly due to eating poisonous animals or plants or putrid food.

Burials and Cremations

The total number of burial-grounds at the end of 1934 was 977,558 and their total area was 22,847 hectares, making the average area of burial-ground 0.02 hectare; and the total number of crematoria at the end of the same year was 34,832 in which 690,490 bodies were cremated during the year, so that a crematorium burnt on an average 19.8 bodies. In the same year 646,845 bodies were buried uncremated, so that those cremated came to 51.6 per cent. and those buried uncremated to 48.4 per cent. of the total number of burials, which, when compared with the percentage for 1933, showed an increase of 1.8 per cent. in those cremated.

Prevention of Infectious Diseases

Cholera In 1934, there was no cases of cholera.

Dysentery, including Ekiri The total number of cases of dysentery in 1934 was 42,952 and there were 14,790 deaths therefrom which when compared with the figures for the preceding year, showed an increase of 4,902 cases and 570 deaths. The ratios of these cases and deaths to the population in the same year were 6.30 cases and 2.17 deaths per 10,000 inhabitants, showing, compared with the preceding year, an increase of 0.64 cases and 0.06 deaths.

The total number of cases of dysentery which broke out in urban districts during the year under review was 26,955 which corresponds to 62.76 per cent. of the total number of cases in the country. Of these, there were 7,937 deaths. The rate of cases and deaths per 10,000 of urban population was 12.45 and 3.67 respectively, showing, when compared with the preceding year, an increase of 0.47 case and 0.35 death.

Typhoid Fever The total number of cases of typhoid fever in 1934 was 42,595 cases and deaths therefrom 7,731 showing an increase of 4,066 cases and 499 deaths when compared with the preceding year. The ratios of these cases and deaths to the population in the same year were 6.25 cases and 1.13 deaths per 10,000 inhabitants showing, when compared with the preceding year, an increase of 0.52 cases and 0.05 deaths.

The total number of cases of typhoid reported for urban districts during the year was 19,454 which corresponds to 45.67 per cent. of the total number of cases for the whole country. Of the above number, there were 3,771 deaths.

The ratios of these cases and deaths to 10,000 of urban population was 8.99 and 1.74 respectively, showing, when compared with the preceding year, an increase of 0.55 cases and 0.03 deaths.

Paratyphoid Fever The total number of cases of paratyphoid fever in 1934 was 4,482, of which 340 died showing, when compared with the preceding year's figures, an increase of 823 cases and a decrease of 18 deaths.

The ratio of these cases and deaths to the population in the same year were 0.06 cases and 0.05 deaths per 10,000 inhabitants, showing, when compared with the preceding year, a decrease of 0.13 cases and no change in deaths.

The total number of cases of paratyphoid fever reported for urban districts in 1934 was 1,792 which corresponds to 40.12 per cent. of the total number of cases for the whole country, and the deaths therefrom numbered 131.

The ratio of cases and deaths per 10,000 of urban population was 0.83 and 0.06 respectively, showing, when compared with the preceding year, a decrease of 0.17 case and 0.02 death.

Smallpox In 1934 smallpox broke out in Hokkaido and other 20 prefectures, the total number of cases being 320 with 36 deaths. The ratios of these cases and deaths to the population in the same year were 0.05 case and 0.01 death per 10,000 inhabitants. The largest number of cases occurred in Kumamoto prefecture, it being 102 cases with 2 deaths; in the other prefectures the number of cases was all less than 31. (In 1933 there occurred 375 cases with 56 deaths). The total number of cases of smallpox in urban districts was 172 (20 deaths), corresponding to 53.75 per cent. of the total number of cases for the whole country, and the ratio to 10,000 of urban population showed 0.08 case and 0.01 death.

Typhus In 1934 25 cases of typhus broke out in prefectures of Aomori (with 3 deaths) and Hyogo (in urban

districts). (There were 4 cases in 1933 with 1 death).

Scarlet Fever The total number of cases of scarlet fever in 1934 was 16,688 with 509 deaths, showing, when compared with the preceding year's figures, an increase of 4,057 cases and 101 deaths.

The ratios of these cases and deaths to the population in the same year were 2.45 cases and 0.07 deaths per 10,000 inhabitants. Compared with the preceding year, there was an increase of 0.57 in the ratio of cases while the death-rate increased by 0.01.

The number of scarlet fever cases which broke out in cities throughout the country in 1934 was 13,663, representing 81.87 per cent. of the total number of cases in the whole country. Of these there were 369 deaths. The proportion of these cases and deaths per 10,000 of urban population was 6.31 and 0.17 respectively, showing, when compared with the preceding year, an increase of 1.36 cases and 0.03 deaths.

Diphtheria The total number of cases of diphtheria in 1934 was 30,109 with 5,009 deaths, showing, when compared with the preceding year's figures, an increase of 1,564 cases and a decrease of 184 deaths.

The proportion of these cases and deaths to the population in the same year was 4.42 cases and 0.75 deaths per 10,000 inhabitants, showing, when compared with the preceding year, an increase of 0.17 case and a decrease of 0.03 death.

The number of cases of diphtheria which broke out in cities throughout the country in 1934 was 14,454 which represents 48.01 per cent. of the total number for the whole country. Of these, there were 2,222 deaths and the ratios of these cases and deaths per 10,000 of urban population were 6.97 and 1.03 respectively, showing, when compared with the preceding

year, a decrease of 0.08 case and 0.13 death.

Epidemic Cerebrospinal Meningitis The total number of cases of epidemic cerebrospinal meningitis in 1934 was 1,187, of which 657 ended fatally, showing, when compared with the preceding year's figures, an increase of 828 cases and 436 deaths. The proportion of these cases and deaths to the population in the same year was 0.17 case and 0.10 death per 10,000 inhabitants, showing an increase of 0.12 in case and 0.07 death as compared with preceding year.

The number of cases of epidemic cerebrospinal meningitis in cities

throughout the country in 1934 was 515, which represents 43.39 per cent. of the total number of cases in the whole country. Of these cases, there were 321 deaths, and the proportion of these cases and deaths to the urban population in the country was 0.24 case and 0.15 death per 10,000 inhabitants, showing, when compared with the preceding year, an increase of 0.14 case and 0.08 death.

Plague No cases of plague occurred in 1934.

The following table gives the condition of cholera and four other infectious diseases in the country during the fifty years since 1884:

FIFTY YEARS OF INFECTIOUS DISEASES

	Cholera		Dysentery		Typhoid fever	
	Cases per 10,000 inhabitants	Deaths per 1,000 deaths from all causes	Cases per 10,000 inhabitants	Deaths per 1,000 deaths from all causes	Cases per 10,000 inhabitants	Deaths per 1,000 deaths from all causes
1884	0.24	0.07	6.01	9.68	5.56	9.57
1885	3.64	11.32	12.46	12.97	7.38	8.10
1886	40.15	14.43	6.26	7.22	17.05	14.57
1887	0.31	0.87	4.09	5.65	12.01	13.02
1888	0.20	0.61	6.60	8.69	10.87	12.18
1889	0.18	0.53	5.62	7.30	8.81	10.54
1890	11.23	42.91	10.41	10.60	8.48	10.31
1891	2.70	9.10	11.23	13.15	10.65	11.28
1892	0.21	0.55	16.99	18.76	8.55	9.50
1893	0.15	0.39	39.78	44.11	8.10	8.74
1894	0.13	0.37	36.57	44.91	8.64	9.49
1895	12.81	43.49	12.24	18.68	8.60	9.83
1896	0.34	1.00	19.54	14.72	9.67	10.14
1897	0.20	0.56	20.54	26.49	6.07	6.69
1898	0.15	0.42	20.81	25.12	5.79	6.39
1899	0.19	0.53	24.59	25.82	6.26	7.01
1900	0.08	0.25	10.34	11.16	5.33	5.89
1901	0.02	0.07	10.97	11.68	5.33	5.80
1902	2.92	9.62	8.09	8.80	4.61	5.01
1903	0.03	0.10	6.50	7.74	4.04	4.61
1904	0.00	0.00	4.82	5.41	4.16	4.84
1905	—	—	7.93	8.57	4.78	5.25
1906	—	—	4.59	5.38	5.19	6.17
1907	0.74	2.48	5.08	5.85	5.29	5.59
1908	0.13	0.39	6.38	7.62	4.76	5.18
1909	0.07	0.02	5.61	6.22	5.03	4.97
1910	0.56	1.90	6.33	6.85	6.98	7.35
1911	0.00	0.00	5.37	5.51	6.68	6.26
1912	0.53	1.62	4.96	5.52	6.09	6.06
1913	0.01	0.02	3.20	3.59	5.29	5.30
1914	0.00	0.36	4.87	5.19	6.61	6.01
1915	—	—	3.88	3.99	6.70	6.52
1916	1.88	5.27	4.07	3.83	7.56	7.07

	Cholera		Dysentery		Typhoid fever	
	Cases per 10,000 inhabitants	Deaths per 1,000 deaths from all causes	Cases per 10,000 inhabitants	Deaths per 1,000 deaths from all causes	Cases per 10,000 inhabitants	Deaths per 1,000 deaths from all causes
1917	0.16	0.45	2.67	2.63	6.28	6.05
1918	—	—	2.46	1.89	7.59	6.61
1919	0.52	2.09	2.30	1.98	9.72	6.92
1920	0.89	2.16	2.27	2.05	9.63	7.15
1921	0.01	0.01	2.19	2.28	8.83	8.25
1922	0.13	0.22	2.67	2.12	9.08	5.70
1923	0.00	0.00	3.47	5.53	9.00	8.53
1924	—	—	3.15	5.77	9.87	10.04
1925	0.10	0.31	2.46	5.49	7.66	7.51
1926	0.00	0.01	2.83	6.63	7.26	7.65
1927	0.00	0.00	3.49	7.81	6.12	6.04
1928	0.00	0.00	4.06	9.06	6.77	6.63
1929	0.03	0.09	4.81	10.02	5.93	5.94
1930	—	—	4.61	10.57	6.43	6.68
1931	—	—	4.54	9.93	5.85	6.12
1932	—	—	4.86	10.95	5.86	5.53
1933	—	—	5.66	11.91	5.73	6.06
1934	—	—	6.30	11.98	6.25	6.26

	Smallpox		Diphtheria	
	Cases per 10,000 inhabitants	Deaths per 1,000 deaths from all causes	Cases per 10,000 inhabitants	Deaths per 1,000 deaths from all causes
1884	0.45	0.66	0.60	2.03
1885	3.33	4.04	0.74	1.75
1886	18.89	19.71	0.84	1.55
1887	10.07	13.22	0.69	1.90
1888	1.01	1.13	0.64	1.92
1889	0.33	0.40	0.66	1.83
1890	0.07	0.03	0.60	1.75
1891	0.87	0.85	0.83	2.32
1892	8.10	9.36	1.05	2.82
1893	9.96	12.66	1.36	3.42
1894	2.93	3.94	1.25	3.42
1895	0.30	0.31	1.42	3.54
1896	2.44	3.75	1.96	3.64
1897	9.46	14.03	3.49	6.38
1898	0.40	0.41	4.50	7.24
1899	0.27	0.27	4.76	7.24
1900	0.02	0.00	4.00	6.22
1901	0.02	0.00	3.29	5.03
1902	0.01	0.01	3.28	4.50
1903	0.02	0.01	2.99	4.48
1904	0.25	0.25	2.68	3.89
1905	0.06	0.00	2.77	3.86
1906	0.10	0.11	2.92	4.38
1907	0.21	0.43	3.01	4.22
1908	3.51	5.67	3.46	4.83
1909	0.01	0.00	3.63	4.65
1910	0.02	0.01	3.78	4.92
1911	0.04	0.03	3.93	4.79
1912	0.00	0.00	3.72	4.59
1913	0.02	0.04	3.65	4.88
1914	0.09	0.10	3.42	4.16
1915	0.00	0.00	3.62	4.31
1916	0.05	0.04	2.94	3.33

Note: In the figures for dysentery after 1922, those of "Ekiri" are included.

	Smallpox		Diphtheria	
	Cases per 10,000 inhabitants	Deaths per 1,000 deaths from all causes	Cases per 10,000 inhabitants	Deaths per 1,000 deaths from all causes
1917	0.91	0.97	3.12	3.65
1918	0.26	0.19	2.77	2.58
1919	0.72	0.57	2.54	2.30
1920	0.57	0.58	2.71	2.38
1921	0.16	0.16	2.56	2.72
1922	0.12	0.06	2.38	1.65
1923	0.33	0.29	2.18	2.33
1924	0.29	0.21	2.22	2.53
1925	0.07	0.07	2.32	2.79
1926	0.21	0.15	2.26	2.89
1927	0.06	0.08	2.48	3.04
1928	0.12	0.09	2.83	3.30
1929	0.02	0.01	3.13	3.60
1930	0.00	0.00	2.88	3.25
1931	0.00	0.00	3.23	3.54
1932	0.05	0.04	3.30	3.71
1933	0.06	0.05	4.25	4.42
1934	0.05	0.03	4.42	4.12

Expenses The amount of infectious diseases prevention expenses defrayed out of the National Treasury in the fiscal year 1934 (from April, 1934 to March, 1935) was ¥1,460,605.

In addition to the above, the amount of grants-in-aid from the National Treasury for infectious diseases prevention expenses incurred

by Hokkaido and other prefectures (in the cases of sanatoria for tuberculosis, by cities) was ¥1,520,991.

Tuberculosis

The following table shows the results of health examinations conducted in 1934 by the prefectural governments.

	1934	Compared with the preceding year
Estimated number of persons requiring health examination	1,878,039	42,047 (incr.)
Number of persons examined	1,563,268	37,126 (")
Number of persons diagnosed as tuberculous	439	36 (")
Ratio of the tuberculous per 1,000 of the examined	0.27	0.01 (")
Number of persons ordered to refrain from work	63	1 (decr.)

Trachoma

The following table shows the re-

sult of examinations conducted by the prefectural governments during 1934.

	1934	Compared with the preceding year
Number of persons examined	5,681,134	220,210 (decr.)
Number of trachoma patients		
Severe cases	37,634	4,758 (")
Mild cases	424,234	20,316 (")
Suspected cases	119,449	3,445 (")
Total	581,317	28,519 (")
Ratio of patients per 100 persons examined	877	0.08 (")
Number of patients ordered to suspend from their work	227	25 (incr.)

Vaccination

The total number of the 1st period vaccination performed in 1934 was 2,038,512 of which 1,891,150 proved positive and 87,943 negative while 59,419 were not examined of the result of vaccination. Compared with the figures of the preceding year, there was a decrease of 44,159 in the total number of vaccination, and of 41,612 in the number of positive vaccination and an increase of 674 of negative vaccination and a decrease of 3,221 cases where results not yet examined.

		1934	1933	1932	1931	1930	
		%	%	%	%	%	
First period	Public vaccinations	First time	96.50	96.46	96.94	96.90	96.78
		Second time	76.11	77.62	79.40	77.67	78.80
	Private vaccinations	First time	97.95	98.00	97.79	98.22	97.68
		Second time	70.05	71.22	78.70	88.24	73.83
Second period	Public vaccinations	First time	68.88	67.16	70.07	66.92	62.87
		Second time	25.46	23.55	25.34	23.60	21.61
	Private vaccinations	First time	59.79	76.59	59.31	56.10	49.86
		Second time	32.51	30.43	36.07	26.95	23.58

Special vaccinations were carried out in 1934 in Hokkaido and other 25 prefectures, and the number of persons vaccinated at these vaccinations was 3,631,382.

Port Quarantine

The total number of vessels inspected in 1934 by harbour offices and temporary port quarantine stations was 19,464 Japanese vessels (with a total tonnage of 67,007,129) and 4,041 foreign vessels (with a total tonnage of 29,619,403), making a total of 23,505 vessels (with a total tonnage of 96,696,532). The total number of persons inspected was 2,384,746 of which ship's crew numbered 1,365,477 and passengers 1,019,269. Compared with the corresponding figures of the preceding year, the number of vessels increased by 893 and that of crew and passengers by 95,906. By these inspections were found 4 persons suffering from smallpox, 9 from scarlet-fever

The total number of the 2nd period vaccination was 2,006,892 of which 1,191,144 proved positive, 783,637 negative and 32,111 yet unexamined, showing, compared with the figures of the preceding year, an increase of 108,506 in the total number vaccinated 86,187 in positive takes, 22,180 negatives and 139 unexamined cases.

The following table gives the percentages of successful vaccinations (the percentages for the preceding four years are also given for comparison.)

and 28 from other notifiable infectious diseases, making a total of 41 cases (1 death). Compared with the preceding year, this shows an increase of 13 patients.

Of the above mentioned vessels inspected, 14 vessels and 263 persons thereon were subjected to disinfection. When compared with the preceding year, there was an increase of 4 vessels and 29 persons. The vessels subjected to detention numbered 9, being an increase of 3 when compared with the preceding year. The destruction of rats and insects was carried out on 1,297 vessels and 6,007 rats were caught, which, compared with the preceding year, shows an increase of 39 in the number of vessels and of 689 in that of rats.

Health Examination of Prostitutes

The prostitute quarters actually existing at the end of 1934 (the term prostitute quarters does not here and

hereinafter necessarily mean segregated quarters exclusively, but is also intended for convenience's sake to include all places where licensed prostitutes have been permitted to carry on their trade) numbered 422 being a decrease of 54 over the preceding year. The daily average during the year of licensed prostitutes in these quarters was 45,880, showing a decrease of 2,807 on the preceding year.

The number of health-examination offices for these prostitutes was 413, and the total number of cases examined in these offices was 2,718,819, showing a decrease of 192,018 over the preceding year and in 55,700 cases the prostitutes were found diseased. The ratio of cases of disease to the total number examined was 2.05 per cent, or 0.08 per cent. higher than in the preceding year. The number of hospitals (including

places for treatment lacking hospital accommodations) for admitting these diseased prostitutes was 168, and the average number of times a prostitute was admitted into hospital during the year was 1.21 or 0.03 less than in the preceding year.

The following table gives the number, classified according to disease, of prostitutes in the whole country who were during the year found to be diseased upon examination. When two or more diseases are found in the same person, the one which appears first in the table is taken to be the principal disease; thus for instance, if a prostitute is suffering from both syphilis and gonorrhoea, she is taken to be infected with the former disease and the latter is added to the number in brackets under gonorrhoea (the percentage for the preceding four years are also given for comparison).

	Number of cases in 1934	Ratio in percentage to the total number of cases of disease				
		1934	1933	1932	1931	1930
Syphilis	3,515	6.31	6.92	7.02	6.46	5.65
Gonorrhoea	25,910 (1,081)	48.46	48.03	49.99	52.44	53.57
Chancroid	15,880 (2,049)	32.19	30.84	30.08	27.04	26.97
Ulceration	3,233 (1,225)	8.01	7.66	7.14	8.21	7.49
Infectious skin-diseases	223 (26)	0.44	0.49	0.41	0.53	0.45
Tuberculosis	4 (—)	0.01	0.02	0.04	0.05	0.01
Leprosy	— (—)	—	—	—	—	—
Trachoma	1,134 (5)	2.04	2.23	2.96	4.40	3.36
Other diseases	5,799 (189)	10.75	10.58	10.98	10.10	11.75
Total	55,700					

Note: In the percentage of cases of diseases, the diseases which are found in one and the same person are taken as separate cases, so that their total exceeds 100.

Rabies

No case of rabies in men was reported in 1934.

The number of rabid dogs reported in 1934 was 11, showing a decrease of 11 from the figure for the preceding year.

The number of persons bitten by rabid dogs in 1934 was 9 showing a decrease of 11 as compared with the preceding year.

The number of persons who had

preventive injection for rabies in 1934 was 2,894, showing a decrease of 136 as compared with the preceding year. Of the above number, 9 were those who had been bitten by rabid dogs, and 2,885 by animals suspected of rabies.

Bacteriological Laboratories

The number of bacteriological laboratories at the end of 1934 was 204 consisting of 145 which were established by prefectural governments,

19 by cities, 1 by towns or villages and 39 by private individuals, showing an increase of 1 in the total number on the figures of the preceding year.

The number of bacteriological examinations made in 1934 were 3,574,918 of which those connected

with the notifiable infectious diseases were 3,221,912 and those not connected therewith 353,006, showing an increase of 146,264 in the total number of examinations on the figures of the preceding year.

(On vital statistics of the Japanese see Chapter II.)

CHAPTER XXXIII

PROGRESS OF SCIENCE

Astronomy and Geophysics

Volcanic Activity in Japan proper during the Period between July, 1934 and October, 1935

By Hidezo Tanakadate

In the 1935 Year Book, volcanic activities in Japan proper during the period from June, 1931 to June, 1934 were briefly described. In this chapter the activities of the Japanese volcanoes in the period between July, 1934 and October, 1935 are given.

Chishima Zone This volcanic islet Taketomi Volcanic Islet near Alaid Island came first in sight in January, 1934. It stood formerly on the floor 20-50 m. deep, and attained a height of 117 m. above the high tide level. It is a cinder cone with a typical homate form. During its activity, a considerable quantity of basaltic lava flowed out through a new pit formed at the northeastern foot of the cone, and spread on the sea bottom forming a vast plateau of 10-15 m. high above the sea surface.

The lava mass filling the crater, flowed over the lowest part of the crater rim and spread on the surface of the above-mentioned lava plateau. The base of the homate, which is circular in shape, has the maximum diameter of about 800 m., trending in a northeasterly direction. The crater, 300 m. in diameter, is full of a-a lava, with scoriaceous hills about 15 m. high standing on its surface. The crater rim is elevated in its southwestern part with the maxi-

mum height of 117 m. and depressed on the opposite side with the minimum height of 70 m. The lava plateau in the northeastern foot of the homate is 250 m. long from E. to W. and 200 m. across and extends northeastward under the sea. The total area of the new islet has been estimated at 0.437 km., the islet being situated about 450 m. east of Alaid island.

The morphological change of the volcano observed by the writer in August-September 1935, i.e. one year after his first visit is given below.

The relief of the crater bottom is unchanged, but the solfataric action diminished in every fissure. Some fissures on the top of the central hill exhibited in 1934, a temperature of about 700°C or more; at present, however, they are cooled down to about 400°C.

The solfataras situated on the lava plateau in the northeastern foot of the cone were very active in 1934, but became entirely calm in 1935.

Sea wave erosion against the coastal cliff on the eastern and northern sides broke remarkably the cone body.

The maximum retreat of the shore attained 50 m. in the east and 25 m. in the north in one year. The destroyed materials were carried away by drifts and deposited on the western and southern sides. On the western side, the drifted materials formed an angular bar projecting about 300 m. westwards, of which more than 150 m. is hidden under the sea, from the shore formed in the

year 1934.

The strait between Alaid Island and Taketomi Islet became 300 m. wide, with a channel 150 m. wide and more than 5 m. deep in the middle. On the southern side, is a square flat bar of sand extending 200 m. in EW. and 150 m. in NS. direction.

The depth of the sea surrounding the islet diminished considerably.

Although the islet has been strongly abraded by wind at the outer surface of the cone, it remained nearly unchanged.

Notwithstanding the strong erosions of the conide by exogenetic agencies, the area of the islet 0.448 km. is nearly equal to that of 1934.

Nasu Zone After the big eruption which began in June, 1929, the eruptive activity of Komagatake decreased gradually, the quantity of smoke diminishing remarkably in every crater pit or crevice on the bottom floor of the caldera.

The solfataric actions consisting of the issuing of smoke from the surface of the different pumice flows at the mountain foot is nearly ceased.

The temperature in the fissures near the main round crater was only 200°C in the summer of 1933, while it was 780°C at the time one year later than the eruption of 1929.

The bottom floor of the large caldera which was elevated by the accumulation of lumps of lava, considerably settled down.

On July 8, 1935, 9:45 a.m., the ground trembled for a while at the southern foot of the volcano, while dark smoke rose on the crater simultaneously.

On September 16, when the writer visited the summit, the quantity of smoke decreased, as a whole, in the craterlets and crevices formed on the occasion of the 1929 eruption. It must, however, be noticed that fissures were newly formed in the west-

ern part of the bottom floor of the caldera on the west of the main round craterlet; they were vomiting strong sulphuric gas with a temperature of about 400°C.

During the months of September and October rumbling sound from the volcano was heard.

Iwate-San is situated in the northeastern part of the main island of Japan. It consists of the andesitic lavas and is a twin volcano though it has a single isolated cone. The western volcano or the main body of Iwate-San is crowned with a large caldera, 2.6 km. in diameter from east to west and 1.6 km. across, and about 300 m. deep. In the centre of the bottom, stands a flat dome with several explosion pits on the top. Two very active solfataras lie near the barranco on its western side.

The other volcano stands on the eastern side of the caldera wall and culminates at a height of 2040 m. a. s. l. This has a circular crater about 300 m. in diameter, with a central cone, a dome, which is fuming from several pits on both the western and the eastern flanks. The volcano made big eruptions in 1686 and 1719.

In the month of September, 1934, smoke clouds rose frequently above the crater of the eastern volcano, and on 23rd roaring sounds were heard in the vicinity. It is the first time that this volcano manifested any activity since 1719. On March 23, 1935, about 5:0 p.m., the people at the eastern foot saw a smoke cloud which rose about 100 m. high above the summit. On April 23, when the writer visited the mountain, the solfataras in the caldera did not show any change. On the southern part of the crater rim of the eastern volcano, steam has been issuing along several new fissure lines. Some fumaroles situated on the eastern flank of the central dome have

also been vomiting steam of high temperature. It is probable that the volcanic activity has been slightly increasing since the summer of the year 1934.

Akita-Komagadake, 20 km. SSW. of the volcano and belonging also to the Nasu Zone, showed an explosive activity in the year 1932 for the first time in our history. Further Okunakayama in the vicinity of an extinct volcano Nishidake, which is 30 km. NE. of Iwate-San and belongs to the same volcanic zone, was frequented by local earthquakes during the period between spring and autumn in the year 1933.

Such phenomena occurring in a certain limited region of the Nasu Zone seem to be correlative to each other and to indicate a slight increase of volcanic activity.

The Volcano Observatory of the Earthquake Research Institute, Tokyo Imperial University, was inaugurated in the summer of 1934. It is situated on the eastern flank of Asama-yama at a height of 1,406 m. a. s. l.

Since the autumn of 1932, Asama-yama made only a few explosions of minor intensity until April 20, 1935, when a violent outbreak took place and the volcano entered into an active phase.

According to the result of survey by Mr. Minakami, Volcanologist at the Observatory, the bottom floor of the active crater was undergoing remarkable deformation since July 1934. The floor continued to sink since July, but in the latter part of September, it began to rise and continued to do so with a mean daily rate of 20 cm. This elevation of the crater floor amounted to about 50 m. just before the explosion of April 20.

Preceding the active period, which began with the explosion of April 20, seismographs in the observatory

had been registering volcanic micro-tremors since January 2, 1935, while none was observed during the year 1934.

The clinographic observation of the ground was also started in 1933, the result being as follows. From the beginning of March 1935, extraordinary variations in earth-tilt have been observed. Then the ground began to tilt with a daily mean rate of 1.5" towards the same direction as that in April 1935. The amount of this inclination eventually reached 50" with a maximum daily tilt of 2.5". On April 17, the tilt changed its sense into the opposite direction.

On April 20, i.e. the third day since the above-mentioned change took place, a severe explosion occurred. It was observed that extraordinary tilts of the earth's surface are invariably followed by violent explosions, after which the ground recovers into its former state.

In the following is given the result of some important observations carried out by the observatory.

On April 20, 1935, 4:20 a.m., a great explosive eruption took place with a strong detonation, a smoke column of 12 km. in altitude rose in the sky. Ash precipitated in the region extending southeastward from the volcano, about 250 acres of forests having been burnt thereby. The roaring sounds were heard through the day.

Ash precipitation zone extended towards the east to the Pacific Ocean including Tokyo, 140 km. from the volcano. The total mass of lava blocks, lapilli, and ash ejected on this occasion is estimated to have been as much as 4,500,000 tons. The sound area had an extent of 250 km. towards NE. as well as SW.

On April 21, 12:15 p.m., a smoke eruption lasted about 10 minutes. 10:25 p.m., a great explosion with detonating sounds, and lapilli show-

ering in the vicinity of the observatory.

On May 5, 8:47 a.m., a strong explosion accompanied by detonating sounds which culminated into a strong cannonade. Lava blocks of about one cubic metre were thrown out southward, even to a distance of 500 m. The smoke covered the eastern side of the volcano, while lapilli of nut-size fell in the vicinity of the observatory.

On May 11, 2:36 a.m., a minor outburst; 4:6 a.m. a weak explosion; 6:26 a.m., a large explosive eruption with big detonating sounds followed by roarings, the ejectamenta having fired the forest covering the somma mountain on SW. side; 8:00 a.m., a small explosion; 2:37 p.m., 4:15 p.m., strong eruptions with ash, lapilli and even lava blocks, thereby the city of Tokyo having been veiled again with the ash.

On May 16, 9:15 p.m., a strong eruption preceded by a large detonating sound and strong air shocks, which were felt even in the city of Tokyo. The summit of the volcano was covered with red hot ejectamenta which caused forest on its southern flank to take fire. Soon after lapilli fell in the southeastern vicinity.

On May 20, 4:4 a.m., a big detonation and air shocks followed by roaring sounds and ash rain; 8:30 a.m., 10:0 a.m., ash rain.

On May 22, 11:23 a.m., a smoke column rose suddenly with a detonating sound, while the earth trembled and lapilli covered the eastern side of the volcano. Ash rain veiled the city of Maebashi, 35 km. east of the volcano. Zigzag lightning flashed in the smoke cloud. 6:25 p.m., 7:5 p.m., small explosions.

On May 28, 6:16 p.m., a large outbreak with rumbling sound followed by smoke column of 4 km. in altitude, the area covered with ash extended toward E. and N.

On August 17, 4:58 p.m., a strong explosion with detonating sounds, while ash precipitated in the southern region including Shizuoka city, 200 km. from the crater. On August 28, 8:11 a.m., a smoke column rose to a height of 6.4 km. above the volcano.

Fuji Zone Hakone Volcano, which is built up of alternating lava flows of different andesitic lava and ejecta beds, is crowned with a huge caldera, apparently oval in shape, with its long axis of 13 km. trending N-S., and short axis of 9 km. trending E.-W. The central cones consist of three domes; Kamiyama, Komagatake and the twin dome of Futagoyama, these being arranged in a zone trending NNW-SSE.

Although the volcano has no record of eruption in our history, yet it often manifested the activity either in the form of strong solfataric outburst or violent volcanic earthquakes.

1934. Since the month of February, the trembling sounds have been heard from Komagatake and the earth temperature of the neighbourhood increased remarkably. The water of lake Ashinoko, an atrio lake, became noticeably warm just at the foot of Komagatake.

In the vicinity of Komagatake a number of mud cones were formed, 25 acres of bamboo and cryptomeria forest having been completely devastated by heat.

1935. Besides the above-mentioned volcanic phenomena, the environs of Komagatake were frequented by local earthquakes.

Miharayama in Oshima has been comparatively calm for recent years.

On April 26, 1935, awful sounds of roarings, rumblings, etc., occurred intermittently with a time interval of 10 min., while red hot scoræ were thrown up from the deep-bottom floor of the crater.

Norikura Zone Yakedake makes

usually its eruption alternately with Asama-yama, and it seems now to have increased its eruptive force as the explosive activity of the other is decreasing.

On September 11, 9:0 p.m., a strong detonation. On September 12, 3:0 a.m., and 6:0 a.m., earthquakes of local character were felt in Matsumoto city, 40 km. distant in an easterly direction; later rumbling sounds have been heard from the volcano.

Hakusan Zone Hakusan volcano is situated on Hakusan zone parallel and near the coast of Japan Sea.

It is 2702 m. high a. s. l. and is crowned with several explosive craters. It manifested its explosive activities in the years 1177, 1239, 1547, 1548, 1554 and 1579. On February 3, 1935, 3:0 p.m., roaring sounds were heard in villages around the western foot of the volcano. On February 18, earthquakes occurred in the same villages. On March 3, wood cutters witnessed a smoke column rising in a new place on the western flank of the volcano. On March 9, an expert of the Forest Bureau in Kanazawa city, explored the place of the smoke emission and discovered new solfataras. On March 11, ski runners visited the new solfataras, which were found to have been scattered over an area 30 m. x 40 m. in the neighbourhood of the water fall pot of Senjogataki lying in a valley on the western side of the highest peak of the volcano, and about 2 km. from it. Some solfataras were vomiting smoke clouds to an altitude of 100 m., the temperature of the sulphuric gas having been roughly estimated at 200°C.

Aso Zone The Volcanological Laboratory of the Kyoto Imperial University is situated on one of the central cones of Aso volcano, at a distance of 7.3 km. to the west from the actual scene of eruptions. It has six branch stations established a-

round the active crater. In the above-mentioned stations, altogether seven in number, micro-tremors and eruptive earthquakes have been observed since several years ago.

Mr. K. Sassa of the Laboratory studied the data thus obtained up to 1933. He classified the micro-tremors into four groups, and gave, after examining the properties of waves, their periods, amplitudes, velocities etc., full explanations for each group about their mechanisms. He also studied the depths of the centres of certain eruptive earthquakes, and obtained about 860 m. as the result, while the initial velocities of ejecta were worked out to be between 30 m/sec and 94 m/sec, varying according to the quantity of volcanic gases explosively evolved from the magma and not to the depth at which the eruption earthquake occurs.

Further observations for the eruptions of Aso volcano in the above-mentioned stations would furnish basis important for solving various problems on volcanology. On July 16, 1934, in the night, roaring sounds. On July 17, 10:25 a. m., an explosive eruption occurred with large detonations, while red hot scoræ were ejected from the northeast corner of the first (counted from north) craterlet. On October 4, a strong eruption took place in the 1st craterlet with rumbling sounds and steam emission. The white cloud of steam attaining a height of 500 m., was illuminated by the red hot lava in the night. The second craterlet as well as the third were also active in the same time. Steam was vomited also from the northwest corner of the fourth craterlet.

In November, the rumbling sounds were heard continuously from the first and the fourth craterlet.

On December 16, 8:0 a.m., an eruption with dark smoke and ash rain. A new pit 5 m. in diameter was

formed at the northwestern corner of the first craterlet; it was sending forth white smoke with hissing sounds. Another pit about the same size opened at a place about 10 m. away; it contained water of light green colour. This outburst in the new pits continued for the ensuing days.

On December 21, 11:45 a.m., a strong shock caused by something like an abrupt depression in a subterranean cave was felt in the meteorological station of the Aso volcano, 1.2 km. south of the active crater. Then the ground shook strongly. After a while a dark smoke column rose from the crater. On January 7, 1935, whole day, smoke eruptions followed by ash precipitations, which covered the eastern flank of the Aso volcano. On January 13, large red hot scoriæ were thrown up from the first craterlet about 50 m. high. Some scoriæ had a diameter of about 80 cm. The eruption continued for the ensuing days. On February 28, hot mud of 85.2°C - 91.9°C was thrown out from the fourth craterlet. On March 6-8, rumbling sounds became very strong and in the night fire phenomena were seen.

On March 10-14, abundant quantity of red hot scoriæ were ejected in the vicinity of the crater. On May 5, an eruption occurred in a new pit in the first craterlet and continued for many days. On May 10, the first craterlet began to throw red hot scoriæ. On May 28-30, smoke eruption throwing scoriæ and ash. The new crater pit was enlarged remarkably. On June 7, occurred roaring sounds which increased in intensity in the evening. On June 10, 7:0 a.m., a sudden explosion hurled up red hot scoriæ, some one metre in diameter, while ash called yona precipitated in the southern plain. On August 21, smoke emission with roaring sounds, then ash

precipitation in the southern plain. On October 8, 8:0 p.m., an explosion with high column of smoke which was seen even from Kumamoto city.

Kirishima Zone Kirishima mountain is a group of volcanoes consisting of a number of cones which are arranged in a long zone of 12 km. trending from NW. to SE. It culminates at the peak of Takachiho, 1574 m. a. s. l. Some craters are active while others are dormant and filled with water. There are also many solfataras and hot springs.

Recent eruptions of this volcanic group occurred in the Ohachi crater on the west flank of Takachiho, while recent but one took place in Shinmoe 1934. Since spring, the crater lake of Shinmoe volcano became turbid by mud explosions on the bottom floor. The gas vomited from the lake bottom killed subaqueous plants.

On July, 25, 1934, rumbling sounds were heard from the crater. This subaqueous emission of mud and gas would suggest an activity of a volcano-tectonic line which trends NE.-SW. with the craters of Sinmoe and lake Oohata, in the line.

The volcanic cone of Sakurajima rises about 1,100 m. a. s. l., having a base, rather circular in shape and 9 km. in diameter. Though apparently a single cone, it is composed of three volcanoes, namely Kitadake (North peak), Nakadake (Middle peak) and Minamidake (South peak). Each cone is provided with a crater from which lava streams flowed out thus forming the main body of the island.

According to Prof. Matsumoto of Kyushu Imperial University, the volcano is a central cone of the Ahira caldera occupying the northern end of Kagoshima Bay, a depression trench in Southern Kyushu.

Numerous eruptions are recorded in history, of which those in 1475-76, 1749, 1779-81 and 1914 issued

enormous quantities of lava.

One of the most tremendous eruptions took place in 1914, thence Sakurajima became a peninsula instead of an island. Since then volcanic force gradually diminished year after year, a calm state having continued until the year 1935.

In September, 1935, from the middle of the month, earthquakes of local origin visited the hamlet of Yumoto in the southern coast of Sakurajima.

On September 20, 2:0 p.m., ash veiled the island and at 6:0 p.m., white smoke rose on the mountain accompanied by rumbling sounds. Recollecting the last disastrous catastrophe, more than 650 people fled into the opposite coast. In the evening, ash attained a thickness of about 10 cm. in the villages of Nojiri and Mochiki on the southern coast of Sakurajima, while sulphuric gas covered the neighbourhood.

On September 21, 2:0 p.m., smoke increased remarkably. According to Mr. Maruoka, Director of the Kagoshima Meteorological Station, the new pit situated in the southern crater (Minamidsake), had a circumference of about 200 m. On September 22, ash showered in Sakurajima so that drinking water kept in tunks became turbid. Farms, about 500 acres in extent, at the eastern foot of the volcano was completely devastated. On September 23, 6:0 p.m., a smoke eruption accompanied by an earthquake and a big cannonade. On September 24, from noon, dark smoke began to issue and veiled the eastern part of Sakurajima; 7:0 p.m., roaring sounds were heard; 8:13 p.m., fire columns with lightnings of zigzag form. On October 14, 1:0 p.m., smoke emission continued about one hour.

The Iō-Jima (Iō-Shima) in Satsuma Province is situated at a point $130^{\circ} 18' \text{ S.}$ and $30^{\circ} 47' \text{ N.}$, about 42

km. southeast of Sata-no-Misaki, the southernmost promontory of Kyushu. Iō-Jima together with its sister Island Take-Jima are nothing other than eminences of the northern wall of a submerged caldera, for which Prof. Matsumoto gives the name of Kikai. This caldera mountain stands under deep sea water more than 300 m., and is open towards southeast having the form of a horseshoe with a diameter of 10 km. in a northeasterly direction.

Iō-Jima is 5.4 km. long from east to west and 3.2 km. wide. Mountain occupying its northern section is a part of the caldera wall which slopes slowly towards the north, while it falls abruptly towards the south showing nearly perpendicular precipices.

On the bottom floor of the caldera extending on the south of the island, two volcanic mountains stand: the higher one is Iō-Dake, a gigantic dacitic dome with a height of 717 m. a. s. l. at high tide, while the lower one is Inamura-Dake which has a small crater on the top. Iō-Dake, the highest mountain in the island, is crowned with several active explosion pits sending out an abundant quantity of sulphur gas, though no eruption has been recorded since remote time. Sulphur mining has been operated for a long time at these solfataras by cooling the dense gas until it solidifies in a long narrow tunnel built up with stone.

On September 12, 1934, were felt two weak shocks at about 3:0 p.m., then a strong earthquake at 11:20 p.m. The latter has been followed by many others during the ensuing days. On September 17, the convulsion reached its climax in number and intensity; they were accompanied by rumbling sounds. Afterwards shocks diminished in frequency. On this day, fishermen who were passing near the eastern coast of Iō-Jima

saw ebullitions of sea water at a place which became later the centre of eruption. On September 20, as a cyclonic centre was passing the scene a huge column of smoke rose on the sea surface, accompanied by an issuing of abundant pumiceous lava blocks.

As soon as the lava reached the bottom floor of the sea, it solidified in its outer part rapidly through direct cooling and evaporation of the surrounding water. The gas bubbles fluxing from the interior of the ejected mass expanded as it rose, and increased the buoyancy of the lava, bread crusted pumice having been thus formed. Some pumiceous blocks measured about 30 m. cubic; they long remained red hot in the interior and lightened during night. As soon as they cooled to solid blocks, they sank into the sea about 300 m. deep. In such a way pumices and pumiceous lava blocks accumulated mostly in the vicinity of the eruptive vent and gradually formed a submarine cone.

On December 8, this submarine volcano appeared for the first time above the sea surface. The small cone was then making strong eruptions of Strombolian type, hurling out scoriaceous lava and ash. The height of the cone was increasing gradually by the accumulation of the ejectas until it reached the maximum altitude of 20-30 m. above sea level in the latter part of December.

On December 30, the cone was destroyed by a strong explosion and disappeared from sight leaving only a small rock which had formed the western part of the cone. After the explosion, the activity became again submarine.

On January 8, 1935, a new volcanic islet rose again in the place of the former cone and was showing strong eruption of Strombolian type. In the northern part of the islet, was

situated a cinder cone with a crater, while on the south a lava plateau of 200 m. square extended above the sea surface.

This small islet, or Iō-Jima-Shintō, as I shall call it, is 300 m. in maximum length in NE. direction and about 150 m. across.

On January 21, the height of the cinder cone attained about 12-15 m. a. s. l. and the crater was vomiting dark cauliflower of smoke at each paroxysm which accompanied rumbling sounds and cannonades. Ash covered Take-Shima and Iō-Jima and gave heavy damages to bamboos, pines, cryptomerias, and even the cultivated potatoes.

Pumices were deposited along the eastern coast of Iō-Jima and formed a barrier reef of 500-1,000 m. wide. They accumulated also on the seabed which rose and swelled until flat islands appeared in the vicinity of the eruptive scene. The largest measured 600 m. x 200 m. The pumiceous lava belongs to a dacite with extraordinary rich silica contents. In the summer of 1935, the above-mentioned volcanic islet was, according to the reports of the visitors, replaced by a flat dome of lava. It was 300 m. long in N.-S. direction, 250 m. across and 30 m. high a. s. l. On September 20, 6:0 p.m., as a motor boat was passing near the new islet, a strong explosive eruption occurred with a huge smoke column.

Kuchinoerabu made a strong explosive eruption in the month of December, 1933, which continued until January 12, 1934.

On April 21, 1935, in the morning smoke increased abruptly and remarkably.

Iō-Torishima is situated at a point $28^{\circ} 12'$ E. and $27^{\circ} 52'$ N., about 100 km. west of Amami-Oshima, and 180 km. north of Naha, Okinawa Island.

The island consists of two volcanoes of andesitic lava. The southern has a double crater and a flat dome in the central part of the inner crater, while the northern, which is smaller but higher than the other, culminates at a height of 190 m. a. s. l. The northern crater has many active solfataras in it, while the southern has several fumaroles on the inner wall. Sulphur is mined in the former.

It manifested eruptive activity in the years 1796, 1855, 1868 and 1903. On July 3, 1934, a smoke explosion of this volcano was reported by certain news papers; it seems that about this time a number of new solfataras were formed on the inner wall of the northern volcano. A grass plain, about 40 square m. in extent, and situated around the new solfatara, was devastated.

Final Remark

(1) a) Such a slight activity as manifested by Iwate-San, Komagatake in Hakone, Hakusan, Shinmoe crater in Kirishima or Iō-Torishima may be a secondary phenomenon having no connection with the deep-seated magma.

b) The explosions of Sakurajima or Kuchinoerabu, or the new building of fissures on the caldera bottom of Komagatake may be regarded as the epigonal phenomena following their former great outbursts.

c) The minor activity occurring in the deep crater bottom of Mihara-Yama or the explosion of Yakedake may be regarded as preludes of the coming eruptions.

d) Iō-Yama volcano on Paramusir Island has entered since October 1934 into a new phase of explosive activities for the first time in our history; it is showing at present periodical pulses of explosion.

e) Volcano Asama made a strong outburst on April 20, 1935 and en-

tered into a new period of activity, repeating explosions of Vulcanian type.

f) Volcano Aso was active in the year 1935 in the first craterlet, but did not show any remarkable outburst.

g) The most important outbursts during the present period was the submarine eruption of Iō-Jima in the Ryukyu arc. By this eruption was issued out an abundant quantity of acidic pumiceous lava, while by the submarine eruption of 1933-1934 in the northern extremity of the Kurile arc were ejected scoriaceous ash as well as basic lava of a-a type.

(2) The a-a lava of Taketomi Islet belongs to basalt and is most basic among those recently ejected by the Japanese volcanoes as it contains about 50% of SiO_2 . The pumiceous lava flowed out in the case of the submarine eruption near Iō-Jima contains more than 70% of SiO_2 , and proves to be most acidic among those recently ejected in this country.

(3) The volcanoes of the northern Kuriles have recently been active making explosion one after another with a time interval of about one year.

(Japanese Journal of Astronomy and Geophysics Vol. XIII, No. 2, 1935)

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descriptions). These observations are reduced to 17 equations of condition in which p denotes the respective weights and v the residuals.

Now, assuming $\Delta s_{\oplus} = 0$ in the equations, we have solved at first by the method of least squares

$$\sin Q \Delta p + \cos Q \Delta q - \Delta s_{\epsilon} = \Delta L \dots \dots \dots (2, 1)$$

where $\Delta L = (s_{\epsilon} \pm s_{\oplus}) - L_0$, s_{ϵ} and s_{\oplus} are the semidiameters of the Moon and Sun, respectively, L_0 , the distance between the centres and Q , the position angle, and next solved

$$\begin{aligned} -\Delta(s_{\epsilon} \pm s_{\oplus}) &= \Delta L - \sin Q \Delta p \\ -\cos Q \Delta q &\dots \dots \dots (2, 2) \\ &+ \text{outer contact} \\ &- \text{inner contact} \end{aligned}$$

We obtained thus

$$\begin{aligned} \Delta p &= \Delta(\alpha_{\epsilon} - \alpha_{\oplus}) \cos \delta_{\epsilon} = +2.''51 \pm 0.''37 \\ \Delta q &= \Delta(\delta_{\epsilon} - \delta_{\oplus}) = +2.''10 \pm 0.''58 \\ \Delta s_{\epsilon} &= -0.''95 \pm 0.''32 \\ \Delta s_{\oplus} &= -0.''1 \pm 0.''3 \end{aligned}$$

Reduction of Observations of the Partial Phases All observations of the partial phases are photographic. Hashimoto and Torao obtained 10 plates (3 of which could not be measured) with Zeiss 65 cm refractor (these are shown by G accompanied with the number in Table II) at Mitaka Notsuki and Semba 25 plates (2 of which not measured) with Steinheil 10 cm refractor (number without any symbol) at Mitaka, Kubokawa 20 plates (2 of which not measured) with a 13 cm coronagraph (I suffixed to the number) at Losap, Iba 14 plates (8 of which not measured, since the images were half covered by cloud) by an 11 cm refractor (I accompanied with the number) at Kobe, and Nishigaki and Shimizu 9 plates (3 of which not measured) with an 8 cm refractor (m suffixed to the number) at the Musashi High School. Refer to §5, regarding the method and result of measurement.

Now there are three methods to treat the observations of partial phases: (1) by measuring the length of the chord, (2) by measuring the degree of obscuration, and (3) by measuring the position angle of

the line joining the centres of the Moon and Sun. According to our experience, however, the cusps, that is, the extremities of the chord are not sharply defined on the photographic plates, and the position angle can not be measured with sufficient accuracy too, although rapid variations of the time are remarkable near the contact phases. Hence we have chosen the degree of obscuration for our reduction.

The equations of the partial eclipse are written as follows:—

$$\begin{aligned} L_0 \sin Q &= (\alpha_{\epsilon} - \alpha_{\oplus}) \cos \delta_{\epsilon} = p \dots \dots (3, 1) \\ L_0 \cos Q &= \delta_{\epsilon} - \delta_{\oplus} + \epsilon = q \end{aligned}$$

where L_0 is the angular distance of the Moon and Sun, Q , the position angle,

$$\epsilon = \sin 2\delta_{\epsilon} \sin^2 \frac{1}{2}(\alpha_{\epsilon} - \alpha_{\oplus}) / \sin 1''$$

and α_{ϵ} , δ_{ϵ} and α_{\oplus} , δ_{\oplus} the topocentric right ascensions and declinations of the Moon and Sun, respectively. The degree of obscuration, D_0 is given, denoting the topocentric semidiameters of the Moon and Sun by s_{ϵ} and s_{\oplus} , respectively, in the form

$$D_0 = \frac{s_{\epsilon} + s_{\oplus} - L_0}{2s_{\oplus}} \dots \dots \dots (3, 2)$$

Now, differentiating each of (3, 1) and (3, 2) with the symbol Δ and eliminating ΔQ , we have

$$\begin{aligned} -\sin Q \Delta p - \cos Q \Delta q + \Delta s_{\epsilon} \\ + (1 - 2D_0) \Delta s_{\oplus} = 2s_{\oplus} \Delta D_0 \dots \dots (3, 3) \end{aligned}$$

The degree of obscuration, on the other hand, can also be written as $(L' - m) / (2L' - w)$ employing Besselian coordinates in the theory of eclipses, in which we put $w = 0.5455$ because we used $k = 0.272068$, although ordinarily taken as 0.5459.

In order to consider this as variable in the equation,

$$\text{put } \Delta D_0 = D_{obs} - D_{comp} - \frac{\partial D_0}{\partial w} \Delta w$$

$$\Delta D = D_{obs} - D_{comp}$$

then we have finally, as $\frac{\partial D_0}{\partial w} = D_0 / (2L' - w)$,

$$\begin{aligned} -\sin Q \Delta p - \cos Q \Delta q + \Delta s_{\epsilon} \\ + (1 - 2D_0) \Delta s_{\oplus} + \frac{2D_0}{2L' - w} (s_{\oplus} \Delta w) \\ = 2s_{\oplus} \Delta D \dots \dots \dots (3, 4) \end{aligned}$$

This equation (3, 4) has been formed at first in the topocentric co-ordinates. But each coefficient may also be considered as formed geocentrically within the accuracy of observations, when we take Δp , Δq , Δs_{ϵ} and Δs_{\oplus} as the geocentric quantities.

Thus we may compute each coefficient from the eclipse elements with sufficient accuracy, without computing the parallaxes of the Moon and Sun.

We have not employed the eclipse elements in the current astronomical ephemerides to compute the coefficients, but employed those derived by Ishii in the Tokyo Astronomical Observatory Report 1 (1933), 195-198, No. 4.

As the value of Δw was found to be indeterminate by solving the 60 equations with the five unknowns, we have obtained at first the four values as follows:—

	Partial phase	Contact	Weighted mean
$\Delta(\lambda_{\epsilon} - \lambda_{\oplus})$	+3.''69 ± 0.''37	+3.''06 ± 0.''54	+3.''48 ± 0.''20
$\Delta(\beta_{\epsilon} - \beta_{\oplus})$	+1.''75 ± 0.''43	+1.''15 ± 0.''67	+1.''55 ± 0.''19
Δs_{ϵ}	-1.''21 ± 0.''31	-0.''95 ± 0.''32	-1.''17 ± 0.''09
Δs_{\oplus}	+1.''90 ± 0.''42	-0.''1 ± 0.''3	+1.''23 ± 0.''64

The weighted mean has been obtained by assigning double weight to the result from the partial phases.

The correction to the semidiameter of the Moon has been reduced to its mean distance from the Earth. The basic

$$\begin{aligned} \Delta p &= -0.''71 \pm 0.''26 \\ \Delta q &= +1.''71 \pm 0.''36 \\ \Delta s_{\epsilon} &= -1.''21 \pm 0.''31 \\ \Delta s_{\oplus} &= +1.''90 \pm 0.''42 \end{aligned}$$

Next, assuming that the residual of each equation is equal to $\frac{2D_0}{2L' - w} (s_{\oplus} \Delta w)$, we obtain

$$\Delta w = -0.00003 \pm 0.00024$$

which is the mean value from the 38 residuals in the cases $D > 0.1$.

Transforming Δp and Δq into the ecliptic co-ordinates, and adding 3.''8 and -0.''1, the corrections already applied to compute the revised elements, to the components of $\lambda_{\epsilon} - \lambda_{\oplus}$ and $\beta_{\epsilon} - \beta_{\oplus}$, we obtain

$$\begin{aligned} \Delta(\lambda_{\epsilon} - \lambda_{\oplus}) &= +3.''69 \pm 0.''37 \\ \Delta(\beta_{\epsilon} - \beta_{\oplus}) &= +1.''75 \pm 0.''43 \end{aligned}$$

Conclusion The corrections obtained are as follows:

Geology and Geography

On the Echelon Structure of Shikoku and the Origin of Japanese Arcs

By Shingo Yehara

Introduction In a former paper the writer has described two movements in Setouchi, the Izumi-sandstone and the Setouchi Movements. In order to ascertain these movements in Western Setouchi he extended his study from his Sumoto Trough to-

ward the Hiuchinada and Iyonada, and two years after came to the conclusion that the two movements are parts of a single one, namely the Japan Sea Movement which came from compression.

The Median Line in Shikoku, along which the Izumi-sandstone Series thrust over the Crystalline Schist Series, is rather straight and smooth, but in part flexuous and concave. It shows a stronger thrust which pressed there and gave rise to a strain whose result is the 'Blatter'

or echelon structure formed within the formations of Shikoku. In his study the writer has noticed 3 great Echelons in Shikoku and many others in Japanese Islands.

When the force which gives rise to strain or echelon structure, proceeds through the lithosphere, occasionally it produces faults perpendicular or parallel to it, as in the case of the Ashidagawa and the Numatagawa near the town of Kozan in Chugoku or Shionoe of Shikoku. The echelon wave in the sedimentary rocks is modified by the resistance of the great mass of igneous rocks which do not flow like sedimentary rocks, as in the case of Kii peninsula and Tamba plateau, where the trend of the Palaeozoic and Mesozoic mountains and their associated tectonic lines change from WE. to NS. in approaching the igneous rocks.

In the tectonic history of Cainozoic of South Japan, the echelon structure is most important, and NE. tectonic lines of the Setouchi Movement may be treated with the echelon structure whose force came from NW.

The writer takes this opportunity to express his sincere thanks to Mr. S. Mizobuchi, Principal of the Third High School, who gave him aid and constant encouragement; to Mr. J. Matsumoto, Director of the Sumitomo Goshi-kaisha, to whom he is greatly indebted for financial assistance during many years.

His thanks are also due to the Imperial Educational Department for valuable financial assistance. He is especially indebted to Mr. S. Sawata who has given him aid in his field studies, for a number of years past.

Stratigraphy of the Izumi-sandstone Series This series stretches EW. from the Naruto Strait to the Iyonada, beyond North Shikoku. It is not only divided into two tectonic regions by the transverse valley of the Naka-

yamagawa, but also into the two sedimentary regions (A) and (B) by the same valley. In geological time there might have been a topographical boundary along the Nakayamagawa between both regions; also the sea of the Izumi-sandstone appears not to have been in the same condition on both sides of the river.

(A) Izumi-sandstone Series of the Asan Range and to the South of Hiuchinada. (1) Basal conglomerate: This consists of gravels of the Palaeozoic and unconformably overlies the granite. At Nuka (Sanuki Prov.), however, it consists of arcose sandstone which overlies granite whose transition to the former is gradual; but coal seams, intercalated in 5 or more layers in the sandstone might be an indication of the boundary between both rocks. The thickness of the conglomerate is variable; sometimes it is replaced by shale. In Hiketa, where the conglomerate is developed, it is traversed by NE. faults which are limited to the northern half of the Asan Range. In Omimura (Sanuki Prov.), a fossil horizon in which *Trigonia Japonica*, *Astarte Packardi*, *Ostrea gigas* are contained, is found in the conglomerate.

(2) Hiketa shale. This consists of a thick layer of shale. In Awaji, it is fossiliferous; in Sanuki, however, rather scanty. In Hiketa (Sanuki Prov.), *Cacullaea Sachalinensis*; in Makikawa (Sanuki Prov.) *Hamites*; in Tokawa (Sanuki Prov.) *Inoceramus* and *Turrilites*; in Bodaisan (Sanuki Prov.) *Inoceramus*; in Hotokezaki (Iyo Prov.) *Inoceramus*; in Saijo (Iyo Prov.) a bivalve and in Tano (Iyo Prov.) *Inoceramus* have been obtained.

(3) Fucoid sandstone: This consists of sandstone and shale. The sandstone contains Fucoid (*Archaeozostera*) at least in 3 horizons. Mr. Miki has described several localities

of Fucoid in the Asan Range; lately however, Mr. Sawata has made new discoveries in the following places: Shimootaki and Besshi (both places being at the foot of Mt. Otaki of Awa Prov.), Otokoyama and Masukawa (both places being to the E. of the Inohana-toge).

To the W. of the pass of Inohana, however, marine shells are found in the sandstone; in Awai (Sanuki Prov.) *Inoceramus*, *Astarte Packardi*; in Tojshiba (Iyo Prov.) a coral; but in Kurumi (Iyo Prov.) a block of Fucoid.

(4) Hashikura shale: This consists of sandstone and shale, divided by EW. faults, pressed and disturbed; near the Median Line sandstone becomes mylonitised. It is occasionally fossiliferous but rather scanty. In Hikaidani (Awa Prov.), *Turrilites Otsukai*, *Inoceramus regularis*, a coral; in Ishibotoke (Awa Prov.) *Turrilites Otsukai*; in Santogoe (Awa Prov.) an Echinoid; and in Nakamine (Awa Prov.) an Ammonite are found.

(B) Izumi-sandstone Series of the Takanawa Peninsula (1) Koyatoge conglomerate: This consists of the conglomerate interbedded with sandstone; the conglomerate consists of gravels of the Palaeozoic. It overlies the Palaeozoic of the Takanawa Peninsula, which has suffered intrusion from, and metamorphosis by, the granite. In the sandstone there are two fossil horizons; upper and lower. From the lower, *Trigonia subovalis*, *T. Japonica*, *Inoceramus regularis* and *I. Schmidtii* have been obtained, while in the upper *Trigonia subovalis* has been found. In Kurotaki to the E. of Koyatoge, badly preserved remains of *Astarte Packardi* are also found in the conglomerate. In Matsuyama the conglomerate is metamorphosed by the granite which might have intruded into the conglomerate in early Ter-

tiary time.

(2) Kawakami shale: This consists of shale interbedded with sandstone. In the shale three horizons of *Inoceramus* have been discovered; one at the foot of the hill of Matsuyama castle and Omiedai; the second at Shiroyama and the third at Gyodoyama.

(3) Misaka sandstone and shale: This consists of sandstone and shale; at Kitadani, *Astarte Packardi* is found in the sandstone. It is divided by EW. faults, pressed and disturbed; near the Median Line the sandstone becomes mylonitised.

Tectonic Geology of the Izumi-sandstone Series In the Asan Range, the series unconformably overlies the granite with the basal conglomerate, dipping SE.; to the S. the succession of the stratigraphical order is regular and unilateral; in approaching the Crystalline Schist Series, however, it is divided by the EW. fault along which the north portion of the series thrust over the south. The south portion consists mainly of Hashikura shale, which is divided into many blocks by EW. faults; each block thrust over one another toward S. to the terminal one, which thrust over the Median Line.

The tectonic relation of the Asan Range is the same as that of the Izumi-sandstone Series to the S. of the Hiuchinada, where it consists of basal conglomerate, Hiketa shale and a portion of Fucoid sandstone, though it is entirely lacking in Hashikura shale. In the Asan Range, the boundary between the granite and the Izumi-sandstone is usually EW., while it changes to the SW. as it approaches Hiuchinada, where the width of the series is less than $\frac{1}{2}$ of the Asan Range. All these seem to be due to the fact that the pressure of the Hiuchinada was stronger than the lateral thrust which pressed the Asan Range.

The Izumi-sandstone Series of the Takanawa Peninsula unconformably overlies the Palaeozoic, dipping SE. Its tectonic relation is the same as the Asan Range; to the S. the stratigraphical order is regular and unilateral; however, in approaching the Crystalline Schist Series it is divided by the EW. fault along the Shigenobugawa. Along the fault the north portion of the series thrust over the south, which is divided by EW. faults into blocks. These blocks thrust over one another, the terminus one thrusting up along the Median Line.

The Median Line and its Movements
As stated above, the Median Line in Shikoku may be divided into two tectonic regions by the transverse valley of the Nakayamagawa, namely, the Tokushima-Saijo and Matsuyama regions. On the Tokushima-Saijo side the line takes an ENE-WSW. trend; it is rather smooth and straight, but in Ikegatani (Awa Prov.), Wakimachi (Awa Prov.) and Mishima (Iyo Prov.) some notches may be remarked; these are due to the thrust which pressed there much more strongly than elsewhere. To the W. of Mishima the line gradually curves SW.; to the S. of Saijo, however, it curves acutely SSW. along the course of Kamogawa, and finally changes its trend to EW. from Kurose to Yuyaguchi, a village along the Nakayamagawa. This may be due to the enormous pressure which pressed the Izumi-sandstone Series from the NW. to the W. of Mishima and most severely on the Kurose-Yuyaguchi portion, where the Izumi-sandstone and the Median Line may have been pushed S.

Along the transverse valley of the Nakayamagawa, the Median Line of the Matsuyama side is pushed out about 10 km. more to the S. than on the Saijo side. On the Matsuyama side the Median Line is rather

smooth, but in Mitake (Iyo Prov.) a notch may be observed, where a friction breccia appears in the Crystalline Schist. At Inuyose pass, the line is pushed out toward the S. with the Izumi-sandstone; where a 'Reibungsbreccia' appears between the Izumi-sandstone and the Crystalline Schist.

The notches and flexures on the Median Line, mentioned above, have occasionally some relation to the Echelon structure, as in the case of Inuyose (Shimantogawa Ech.), Mishima (Murotsaki Ech.) and Wakimachi (Tsurugisan Ech.).

Along the Median Line two or three phases of tectonic movement may be remarked; one in the Post-Cretaceous, or early Tertiary, the other Post-Miocene. The former is the chief topic of this paper. The latter might have been a great movement by which the Japanese Islands were reformed. In the town of Tobe, 12 km. S. from the city of Matsuyama, Izumi-sandstone is thrust over the Miocene conglomerate which is developed along the Median Line. The Miocene deposits which consist of conglomerate, sandstone, shale and tuff overlie the Crystalline Schists and occupy here and there the summits of the Ishizuchi mountain range, which are about 2,000 m. high. This may be due to the lateral thrust of Post-Miocene time, which pressed the Izumi-sandstone Series from the NW. and pushed up the mountain range to such a height. The downwarping of the Setouchi and the flowing out of the Sanukite lava might have been associated with this movement.

In Gunchu, a town to the S. of Matsuyama, a Diluvial deposit dips acutely to the NW. along the Median Line; this may have been affected by movements of the line in most recent times.

The Yoshinogawa and the Hijikawa-

Shimantogawa Blocks As mentioned above, two great tectonic regions may be supposed to exist on either side of the transverse valley of the Nakayamagawa, the western side of which is pushed out about 10 km. further S. than the eastern side. Yuyaguchi, a village along the Nakayamagawa, is the bending point of the Median Line.

Mt. Tsutsujo, S. of Mt. Ishizuchi, is a high mountain in the Crystalline Schist Series; it occupies the point where the two mountain arcs are linked, and corresponds to Yuyaguchi. On the western side of Mt. Tsutsujo, there is a gorge of the Omogogawa running NS.; it is affected by the tectonic influence of the Matsuyama side; while, on the eastern side of the mountain, there is the upper course of the Yoshinogawa, which is under the tectonic influence of the Saijo side.

In the Sakawa Basin, there are two tectonic boundaries; Ochi-Unomachi and Ochi-Ino lines which intersect at the foot of Mt. Yokokura, near the town of Ochi. The Ochi-Unomachi line, which is pushed out toward the S. is under the tectonic influence of the Matsuyama side, while the Ochi-Ino line is under the influence of the Saijo side. The Yuyaguchi-Tsutsujo-Ochi line bisects Shikoku into two great tectonic regions; the eastern, or Yoshinogawa,

and the western, or Hijikawa-Shimantogawa, blocks. In Iyo, Saijo Plain is called Dozen Plain while the Matsuyama Plain is called Dogo Plain. Prof. Ogawa called Shikoku twin islands. Dr. Naumann said that Shikoku was divided into E. and W. blocks by the Kochi-Saijo line. The Yoshinogawa and the Hijikawa-Shimantogawa blocks, however, may be a natural way of dividing Shikoku into two tectonic regions.

Tectonic Geology of Shikoku Lately, geological studies of Shikoku and Chugoku have been published by many geologists, of which we may mention the 1/75,000 Geol. Sheets, by Messrs. Sato, Suzuki, Akagi and Mizuchi, geologists of the Imp. Geol. Surv. and Dr. Ogura, formerly geologist of the Surv.; the stratigraphical studies of the Crystalline Schist Series of Besshi Mine by Mr. Kado-kura and late Dr. Ozawa; and the tectonic studies of Chugoku and Shikoku by Dr. Ozawa and Mr. Kobayashi. In order to ascertain, however, the thrusting relation between the Izumi-sandstone Series to the S. of Hiuchinada, and the geological formations of Shikoku, a study of the Cainozoic tectonic geology of the Mishima-Muroto-saki district was necessary.

In succeeding order from N. to S., the geological formations of the district consist of

Geological Formation		Geological Age	
Izumi-sandstone Series	Torinosu Series	Upper Cretaceous	Upper Jurassic
Crystalline Schist Series	Samposan Series	Pre-Chichibu	Middle Triassic
Mikabu Series	Akigawa and Muroto Groups	Lower Chichibu	Jurassic
Chichibu Series	Naharigawa Series	Permo-Carboniferous	Early Tertiary
Kurotaki Series	Yasuda Bed	Lower Triassic	Pliocene
Monobegawa Series		Lower Cretaceous	

The trends of the several formations of Shikoku are EW. in eastern Shikoku, while they bend evenly SW. as they approach the valley of the Yoshinogawa, the Monobegawa and Tosa Bay. The Naharigawa

Series is a formation rather younger than the Izumi-sandstone Series; so the bending must be due to the lateral pressure which pressed the Izumi-sandstone Series and thrust it over the Crystalline Schist Series

along the Median Line, on the S. side of the Hiuchinada. And as the boundary between the Torinosu-Samposan Series and the Akigawa Group forms an arc, the bending is the first step to the formation of the arc which faces the concave side towards NW.

Origin of the Tosa Bay As mentioned above, the lateral pressure of the Mishima side gave rise to the bending of the geological formations of Kochi environs and caused them to bulge out towards the Pacific, forming arcs. The arc curvature might have been greater as it approached the S., because in the Pacific, there is no resistance, and, from the tensional effects, concentric and radial fractures may have been produced in the arcs, by which the greater portion of the arcs were broken and submerged. This may be the origin of Tosa Bay.

In this sense the Urado Bay of Kochi and the acute curving to the N. of fathom lines of Tosa Bay may be the torn cleft of Samposan Series and others. Dr. Imamura, who attributes the seismicity of Kochi environs to the depression of the E. plain of Kochi, told the author that he had long time considered that the relation between Wakasa Bay and the Isenoumi may be the same as that between Hiuchinada and Urado Bay. In both cases the former was pushed from the N. and the other occurred as a tension crack.

On the Murotosaki, there are three terraces which show the uplift of this peninsula in most recent times. Lately Dr. A. Imamura has ascertained by base levelling that the uplift of the peninsula dips SE. The uplift may be the effect of pressure from the NW. of the Mishima side; and may have been acting from geological times to the present.

Tectonic Geology of Chugoku The geology of Chugoku has not been

studied so thoroughly as that of Shikoku; lately, however, the 1/75,000 Geol. Sheets of Imabari, Onomichi, Fuchu, Shobara and Okayama have been published by the Imp. Geol. Survey. Some of these areas are the paths through which the lateral thrust, pushing the Izumi-sandstone to the S. of Hiuchinada, passed Chugoku. The important geological formations of these areas are as follows:

Geological Formation	Geological Age
Chichibu Series	Permo-Carboniferous
Nariha Series	Upper Triassic
Inakone Series	Lower Cretaceous?
Tertiary	Miocene
Granite	Post-Triassic
Basalt	Early Diluvial
Andesite	" "

To the W. of the town of Kozan, there is a plateau of 500 m. whose outer side is surrounded by another of 600 m.; forming a curve which faces the concave side toward the NW. These plateau lands are in the SE. corner of the Miyoshi Basin, which belongs to the Gogawa-Murotosaki Echelon. The Echelon is produced by the force from the NW., which may be pushing the concave side of the plateau. At the front of the plateau there is a stream of the Ashidagawa running NE. toward the town of Fuchu, along which a NE. tectonic line is to be inferred, as well as another along the fringe of the islets of Onomichi.

Beyond Setouchi, from Chugoku to Shikoku, there is the Palaeozoic whose trend is NW.; it has suffered intrusions from large masses of granite. The Palaeozoic and granite are divided by the NE. tectonic lines into many blocks, which thrust over one another SE. under horizontal pressure from the NW., the terminal block later possibly having pushed up over the Median Line. From the trend of the Palaeozoic in the islets

of the Hiuchinada, it may be supposed that the terminal block was pressed toward Shikoku, forming a curve from NW. to WE.

Origin of the Hiuchinada As stated above, the Palaeozoic and granite of Setouchi are divided into many blocks by NE. faults, which are thrust over one another towards the SE., pressing the terminal block along the Median Line, and pushing up the Izumi-sandstone over the Crystalline Schist Series. Under enormous horizontal pressure, the terminal block and others might have down-warped and formed a hollow upon the upper surface, this possibly be the origin of the Setouchi. The eruption of the sanukite may be a phenomenon associated with the down-warping.

Stern-bow-wave Type of the Gogawa-Murotosaki Echelon The horizontal pressure, which pressed Kozan plateau from NW., produced the down-warped-hollow of the Hiuchinada and thrust the Izumi-sandstone over the Crystalline Schist Series and pushed out the formations of South Shikoku toward the SE., forming arcs whose southern portion is broken and submerged. The direction of the force is perpendicular to the Iwami coast of the Japan Sea and passes the Miyoshi Basin beyond Hiuchinada toward Murotosaki.

The topography produced by the force is most noteworthy. It may be studied on a topographical map by the marking of mountain ridges and streams along the forces passing the district from NW. to SE. In this way it may be found that the arrangement of the ridges and streams is the stern-bow-wave type of echelon structure. This study was most important in leading up to the discovery of another echelon of the Japanese Islands and the direction of horizontal pressure which pressed the Islands.

Three Great Echelons of Shikoku There are three great echelon structures in Shikoku. They are (1) Yanaizu-Shimantogawa Ech., (2) Gogawa-Murotosaki Ech. and (3) Matsue-Tsurugisan Ech.

(1) **Yanaizu-Shimantogawa Echelon** In Chugoku, the concave coast of Masuda (Iwami Prov.) and the Yanaizu promontory, which protrudes SE., the Takatsugawa, the Imazugawa and its associated mountain ridges are in the echelon structure. The trends of the Palaeozoic of the Yanaizu peninsula form an arc facing the concave side toward the NW.; and the strike of the Palaeozoic in the islets in Suwonada and Akino-umi forms also an arc parallel to the peninsula. These islets may be detached islands along the radial faults, produced by the pushing force from the NW.

In Shikoku, the Hijikawa River and the Shimantogawa River, and associated mountain ridges, together with the Onogahara plateau and the mountain ridges of Onigajo, are in the echelon structure, which belongs to the stern-bow-wave type. When the echelon wave proceeds, the wave front is pushed and its outside receives tensional stresses, while the rock particles of the path are shifted toward the wave front and produce a groove behind. The weaker portion of the wave front is apt to be traversed by a stream and the groove of the path becomes a river course. These may be the origin of the Shimantogawa and the Hijikawa; and in Chugoku, of the Takatsugawa and the Imazugawa rivers.

In connection with the Yanaizu-Shimantogawa Echelon, but independently, Mr. G. Imamura and Mr. Mino studied the terraces developed along the lower course of the Hijikawa. They inferred the earth waves which influenced the formation of terraces and measured the wave length and

its height. According to Mr. Imamura the earth wave faces its concave side toward the NW.; its origin may be in Iyonada where the gravity constant is negative in the geodetic survey. The writer was very interested to hear that the direction of the earth wave is the same as that of the echelon whose character may become clearer through such a study.

(2) Gogawa-Murotosaki Echelon In Chugoku, the Gogawa and the Ashidagawa, and their associated mountain ridges, among which the Asayama, Otsuchiyama and Oyurugiyama ranges and the Kozan plateau are remarkable, are in the echelon structure. The Numatagawa may be the river which flows along the tectonic line produced by the echelon wave; and the islets in the Hiuchinada (Marugamishima, Ibukishima and Matashima etc.) are also in the echelon structure.

In Shikoku, the Sasareoyama Range, the arcuate fracture of the river course of the Yoshinogawa between Otaguchi and Arise, the Monobegawa and its associated mountain ridges, and the Yotsuashido mountain ridges between Awa and Tosa are all in the echelon structure, which belongs to the stern-bow-wave type.

The Gogawa-Murotosaki Echelon is rather clearer than the other echelons in its geological structure, as stated above.

(3) Matsue-Tsurugisan Echelon In Chugoku, the Hinokawa river, the Hanamiyama Range, the ridges between Mimasaka Prov. and Bitchu Prov., the Takahashigawa river and the ridges between Bitchu Prov. and Bingo Prov., are in the echelon structure. The Nariha Basin, where the Rhaetic plant beds are developed, is surrounded by the Palaeozoic, whose trend forms an arc facing the concave side towards the NW. The islets of the Mizushima of the

Setouchi form also an arc parallel to the Palaeozoic.

In Shikoku, the coast of Marugame and the faults of the Izumi-sandstone of Shionoe are NE. in their trend, which is perpendicular to the force from the NW. The ridges of the Izumi-sandstone of Santo-goe and the concave arrangements of the rivers and ridges of the Crystalline Schists and Mikabu Series around the Tsurugisan show the stern-bow-wave type of echelon structure.

Origin of the Yoshinogawa When two echelon waves interfere in a line, it may produce a weaker lithosphere for outer resistance. The Murotosaki and Tsurugisan Echelons intersect in a NS. line, along which the transverse valley of the Yoshinogawa might be dissected. Outside the curved fracture between Otaguchi and Arise there is no fault along the transverse valley of the Yoshinogawa; it may be an antecedent stream as stated by Dr. J. Suzuki. In an echelon the concave portion between the coulisses may become the course of a river; the Iyagawa may be a river flowing between coulisses.

The river course of the Yoshinogawa turns to the right at the end of the transverse valley, where the town of Ikeda and the Asan Range lie. At the head of the turning there are three terraces on the Asan Range; the highest 800 m., the next 600 m., and the lowest 50 m. These terraces have deposits on the upper surface consisting of gravels, sands and muds, transported by the river in Diluvial times. The uplift of the terraces may be due to the pressure of the Gogawa-Murotosaki Echelon which is pressing the Izumi-sandstone from the Umpenzi-yama side.

Distribution of Echelon Structures in the Japanese Islands In Honshu, Shikoku and Kyushu 13 echelons, produced by the strain associated with

the lateral thrust of the Japan Sea, may be postulated. The forms of these echelons may be classed into three types; (1) Stern-bow-wave type, (2) Semi-circular type, (3) Semi-hyperbolic type.

For example, the three great echelons of Shikoku mentioned above belong to the first type; the Tamba plateau (9) and Tateyama (11) Echelons to the second type, the Koyasan (8) and Akaishi (10) Echelons to the third type. The horizontal pressure which proceeds through the lithosphere near the surface may give rise to the first type. The second type has usually a deep, depressed area in its centre, which is surrounded by concentric high mountain ridges, as in the case of Wakasa Bay and Toyama Bay. The NW. pressure which is very profound, may have given rise to such an echelon. The echelon wave of the third type may have been affected by large masses of igneous rocks or by the tectonic lines. The Koyasan Echelon changes the trend of the wave from WE. to NS. to the E. of Kii peninsula, where the large mass of quartz porphyry is developed. The quartz porphyry does not flow like sedimentary rocks, under lateral thrust. The Akaishi Echelon also changes its trend from WE. to NS. as it approaches the Fossa Magna; it may be affected by the Itoigawa-Sundo Line which conceivably was pressed from the NE.

In Hokkaido and North Japan, however, the direction of the horizontal pressure is NE.; the Hidaka, the Kitakami and the Abukuma Ranges are subjected to the lateral thrusts from the NE. In Hokkaido, the coal-bearing Tertiary of the W. side of the Hidaka Range was thrust over by the Cretaceous rocks from the E. This remarkable fact has been studied by Dr. Imai, Dr. Tokuda and lately by Dr. Nagao. It may

be due to the lateral thrust from the Okhotsk Sea side. In the map reading of the Hokkaido we may suppose some echelon waves which were produced by the force from the NE.; they may be found at (1) Mt. Yubari (1668 m.) of Ishikari Prov.; (2) Mt. Poroshiridake (2052 m.) of Hidaka Prov., to the W. of the town of Obihiro; (3) in the Wassam environs of Teshio Prov.; and (4) Mt. Byobudake (1792 m.), the boundary between Kitakami Prov. and Ishikari Prov.

According to Dr. Tokuda, along the Chishima Islets, which are the coulisses of an echelon structure, a force from the NE. by which the echelon structure was produced, may be assumed.

In the Kitakami Mountain-land, all the trends of the Palaeozoic and Mesozoic are NNW. and subjected to lateral pressure from the NE. To the N. of the land, there is the Upper Cretaceous of the town of Kuji, which is subjected to pressure from the NE. From the town of Hachinohe to the city of Morioka, there is an echelon wave involving the Kuji Cretaceous; this may have been produced by the force from the NE.

In the middle of the land, however, large masses of granite are developed and the echelon wave is not remarkable. To the S. of the land there is the Triassic overlaid by the Jurassic. They form a syncline whose trend is NNW.; it may be due to a lateral thrust from the NE.

Further, North Japan may be divided into two parts (E. and W.) with the NW. line connecting the city of Sendai and the city of Akita. The eastern part, which consists chiefly of Tertiary, intruded by volcanic rocks, may be subjected to lateral thrusts from the Pacific side, while the Japan Sea side of the western part may be subjected to pressure from the NW. The moun-

tains and rivers of the Aomori-Akita regions are chiefly NNW. in their trends and may be under the influence of lateral pressure from the NE.; while those of the Echigo oil field of the western part are subjected to the pressure from the NW. of the Japan Sea side.

In the Abukuma plateau, the trend of the gneissic rocks and the crystalline schists are NNW., and may be subjected also to NE. lateral thrust. There the echelon structure, however, is weakly developed. The Mesozoic of Soma district and the coal bearing Tertiary of Iwaki may have been pressed from the NE., as mentioned by Dr. Tokunaga.

The Kwanto district is pushed from two directions; one from the NW. Echigo side (12, 13) whose pressure may have given rise to the arcuate chain of the Asama-Akagi-Haruna-Nikko-Nasu Volcanoes, the other from the NE. Pacific side which, with the NW. force, may have produced the clockwise vortex motion around the Sagaminada. Further, the NE. lateral pressure affects the Shichito-Marianna arc at that portion between Shichito and Ogasawara where the arc is pressed toward W.

Origin of the Fossa Magna In early Tertiary times, North Japan was pushed from the NE., and thrust along the Itoigawa-Sundo line over South Japan, which was under the influence of a lateral thrust from the NW. The Median Line of South Japan curves acutely from WE. to NS. as it approaches the Fossa Magna. It may be affected by lateral pressure from North Japan and at the same time by that of the NW.

Mr. Homma, who studied the Neogene Tertiary developed in the Fossa Magna in the central district of Nagano Prefecture, defined both walls of the fossé and observed the movement of W. walls toward the

SE., and at the same time the movement of the E. walls towards the SW. Under the pressure of both walls the Neogene Tertiary was folded in the time of the Post-Lower Pliocene.

The study may suggest the mode of movement at the time of the origin of the fossé.

Dr. Tokuda thought that the echelon arrangement of the Hida, Kiso and Akaishi Ranges was due to the influence of the Shichito-Marianna arc, which was pressed from NW. (South Japan Sea side). According to him, old Japan, whose trends were EW., was partly pulled at the W. of the Itoigawa-Sundo line from the S. or SE. by the force which pressed Shichito-Marianna arc from the NW., and produced the echelon coulisses, influenced by the strong shearing stress, due to the preexisting old land mass of North Japan; and in the progress of the action the Itoigawa-Sundo line was produced. Afterwards, however, North Japan was pushed at the E. of the Itoigawa-Sundo line from the NW. (Japan Sea side) and produced the echelon arrangement of the Tertiary foldings of the Echigo, Mogami and Akita oil fields; and by the interference of the two echelon coulisses of both sides of the Fossa Magna there was produced the spindle shaped warping structure which may be the so-called Japanese Alps—Hida Range.

However, it appears to the author that Dr. Tokuda unfortunately failed to observe two movements which acted on both sides of the fossé, as well as also the fact that, in the formation of the Shichito-Marianna arc, the pressure from the NE., which acted on the portion between Shichito and Ogasawara Is. was important.

Lateral Thrusts of the Japan Sea Movement In the Japanese 'Bogen', Wakasa Bay and the coasts of Iwa-

mi are most important in connection with the Japan Sea Movement. The Notoid Bank of Prof. Koto embraces the Cul de Sac on its ES. side, which may have a close relation with Wakasa Bay and the Echelon of the Tamba plateau. The Echelon may be due to the lateral thrust from Wakasa Bay.

The Chugoku Range lies to the Japan Sea side rather than the middle of Chugoku. Its general trend is EW.; in approaching Tsushima Strait, however, it bends SW. and forms the Taisayama Range. The bending is due to the lateral thrust from NW., which pressed the range more severely than that which pressed the other part of the Chugoku Range. The pressure affects the trend of the Median Line, which is EW. in the E.; in approaching the transverse valley of the Yoshinogawa of Shikoku, however, it bends gradually to the SW. and reaches to the S. of the city of Oita in Kyushu.

Wakasa Bay, Chugoku Range and Taisayama Range have been pressed from the Japan Sea side and may have a close connection with the ori-

gin of the Japan Sea.

Conclusion By the study of Echelon structures we may determine the direction of the horizontal movement which pushed the Japanese Is. The movement which came from the Japan Sea may be called the Japan Sea Movement; that from the Okhotsk Sea the Okhotsk Sea Movement, and the one from the North Pacific, the North Pacific Movement. In early Tertiary times the Japanese 'Bogen' might have been formed by these movements in such a way that North Japan and Kyushu were supported from the Pacific side by a lateral thrust or some other force, while Honshu was pushed out from the NW. toward the Pacific.

The Riukiu and the Shichito-Marianna arcs may have been formed also in the same way; the former, supported from the South Japan Sea side in Kyushu and Formosa, was pushed out from Tunghai; the latter, supported from the Pacific side in Shichito and Mollken, was pushed out from the South Japan Sea side.

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Radio Research

On the Propagation of High-Frequency Radio Waves of Long Distance Transmitting Stations. Part I—Observations During a Period of the "Polar Year"

By Tomozo Nakai.

To study the propagation of high-frequency radio waves, field-strength measurements and directional observations on long-distance stations, such as Melbourne, San Francisco, New York, Rio de Janeiro, Buenos Aires, London, Berlin, and a few others, were made at our laboratory during the period of the 2nd Polar

Year Observations. Although the period of the Polar Year Observations has expired, the measurements are still being continued. The results have been described in a series of reports, the present paper containing only those obtained during the period of the Polar Year Observations.

(1) Observations on short-wave stations equipped with directive antennas show that a direction finder generally indicates the true direction, provided the observations are made anywhere in the direction of their beam. In this case the waves may arrive from the route of either the shortest or the longest distance.

Should the observations, however, be made anywhere outside the direction of their beam, a direction finder will often indicate a direction deviating by more than several degrees or even by several decade degrees from the true one. In the case of waves travelling near the pole of the earth, during hours when auroras are often found in that vicinity a direction deviating by more than several degrees may often be observed, even though the beams be directed to the place of observation. The facts stated above do not generally hold for stations near the antipodes of the earth, such as Buenos Aires and Japan where the so-called antipode effect occurs.

(2) At between 600 to 900 J.C.S.T., about the winter solstice, the ionization near the north pole in the direction of 15° , measured clockwise from the north, seems to be too feeble to return the 7,000-kc wave to the earth after being refracted, while that near the pole in the direction of 25° measured clockwise from the north—northern Canada about 70° N., 110° to 170° W.—is found to be strong enough to refract the 11,000-kc wave downward. The ionization at the latter place, however, seems very strong at 1,400 to 2,200 J.C.S.T., about the winter solstice, with the result that the 7,000-kc to 11,000-kc waves may be so attenuated by heat loss or scattering that none of it is received in Japan during these hours. This strong ionization seems to be closely related to auroras or their influences.

(3) The night-waves seem to suffer from unexpectedly large attenuation which, instead of decreasing smoothly with time, do so with uneven variation.

(4) Some new attenuation characteristics of high-frequency radio waves in the ionosphere should be sought to replace the old ones.

A New System of Modulating Electron Oscillation Without Undue Frequency Modulation

By Tatsuo Hayashi

It is shown that electron oscillation, maintained by means of the two grids of a tetrode, can successfully be modulated by the anode potential without undue frequency modulation, which lastnamed has hitherto been the principal obstacle in distortionless wireless telephony with centimetre waves. The inner-grid electrodes, which are maintained at a high positive potential with respect to the filament, accelerates the electrons that are emitted from the filament. The outer-grid electrode, the potential of which is kept negative with respect to the filament, acts as the oscillating anode of the usual triode electron oscillator and pushes back those electrons, resulting in the so-called electron oscillation in the space between the filament and the outergrid. The anode of the tetrode, which operates as the modulating anode, varies the oscillation amplitude almost linearly when its voltage changes from 0 to +30 volts. With increasing potentials of the modulating anode, the number of electrons that pass through the potential barrier in the neighbourhood of the oscillating anode increases, which means a decrease in the number of electrons joining the general to-and-fro motion of electrons, resulting in decrease of oscillation amplitude. The wavelength of the oscillation, on the other hand, is determined only by the potentials and the geometrical configurations of the inner-grid and the outer-grid electrodes, the anode potential variation not affecting its value. The wavelength is always constant throughout the positive region of the anode.

When, however, the potential of the modulating anode is lowered more than -17 volts, the wavelength diminishes considerably, owing probably to shifting of the "Umkehrpunkt" toward the oscillating grid by the resultant negative electric field which causes the decrease in wavelength.

To obtain distortionless modulation, unless the oscillating anode voltage is kept negative, the wavelength will not always be constant.

Actual telephony tests with this system have yielded very promising results. The distortion is almost nil at negative potential of the oscillating anode, appearing gradually only when it approaches zero. The external circuit was tuned to the Gill-Morrell region of oscillation. The distortion is not serious even when detuned (Barkhausen-Kurz oscillation), provided that the electrode voltages are kept at suitable values.

The wavelength of this type of oscillation at the Barkhausen-Kurz region was 98 cm. Calculation by means of the Barkhausen-Kurz formula gives $\lambda_0=117$ cm., while the value calculated by Scheibe's formula is $\lambda_0=107$ cm. The experimental value came out smaller compared with the theoretical values, which is probably due to the special shapes of the grid electrodes and also to the selective collecting action of the anode, in that it catches only those long-path electrons that can touch the oscillation anode. It is reasonable, therefore, to regard the electron oscillation of the present experiment as the result of the to-and-fro motion of the electrons in the space between the filament and the outer-grid.

Television Synchronizing System 100-Line Television

By Kenjiro Takayanagi,
Shigeo Takahashi
and Ywao Ochiai

In the experimental system, two separate communication channels were used—one for the picture and another for both synchronizing and speech.

The speech or music accompanying the picture was picked up by the microphone and amplified to a suitable level before being fed into the speech transmitter.

The Nipkow disc for subdividing the image has 100 holes arranged in a spiral, and rotates at 20 revolutions per second. For producing high-frequency synchronizing signals, the disc has a second set of apertures on equal radii. These apertures interrupt the light beam from a separate illuminating lamp and produce impulses in a photocell, the frequency of which is 20,000 cycles, that is, ten times the line frequency.

For low frequency synchronizing signals, A.C. mains (60 cycles) of the motor were utilized, so that the low-frequency synchronizing signal is three times that of the pictures per second. The step-up of both synchronizing frequencies has many advantages in framing the picture.

Now, the high-frequency synchronizing signal is modulated by this low-frequency one, and together with the sound, modulates again the sound transmitter. The wave forms of synchronizing signals, both low and high, were sinusoidal, owing to simplicity in separation at the receiving station.

At the receiving end, two detectors are employed; the one for detecting the synchronizing signal and the other for speech or music. The detected synchronizing signal, which

has a frequency of 20,000 cycles, are amplified and applied to a driving oscillator, the frequency of which is controlled by the incoming synchronizing signal. The output of the driving oscillator again controls the frequency of the saw-teeth shaped wave generator. This extra driving oscillator eases the adjustment.

Again, detecting the high-frequen-

cy synchronizing signal, the low frequency synchronizing signal may be obtained. The detected signal may be amplified to a suitable level before being applied to the saw-teeth shaped wave generator.

In the practical tests made during May, 1934, the synchronizing system proved very satisfactory.

Zoology

Study on *Trypanosoma conorhini* (Donovan), Occurring in the Alimentary Tract of *Triatoma rubrofasciata* (de Geer) in Formosa

By Kaoru Morishita

Natural Incidence of the Flagellate in *Triatoma* and its Seasonal Prevalence *Triatoma* attacks human beings with preference, and as far as my experience goes, it has been captured only in or near human habitations. In four cases I found its nests in the corner of a stable, in boxes in a storehouse, and under the floor of human dwellings. They occur at random, as a rule, in the adult stage (male or female) or as nymphs of the third to fifth stage, whereas in the nest all developmental stages are found. Although it has so far

been found only in Taihoku, Keelung, Tansui, Kagi, Shoka, and Taito, it may possibly occur in the whole island. In Taihoku, whence my materials have mostly come, it occurs almost everywhere, not only in the suburbs but also in the heart of the city.

From April 1928 to December 1932, covering five seasons, the 412 examples of the insect have been captured by the writer in Taihoku. They occur almost all the year around, although no catch has been noted in March, undoubtedly an accidental gap without meaning. Generally, the first appearance is in April and the number keeps on increasing during the summer months from May to August, after which it begins to decrease, as may be seen from the following table:

NUMBER OF *TRIAMOMA RUBROFASCIATA* CAPTURED IN TAIHOKU, ARRANGED ACCORDING TO MONTHS

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1928				1	4	9	6	9	1	0	23*	0	53
1929	0	0	0	2	3	10	11	12	7	0	0	0	45
1930	0	0	0	2	10	69*	6	7	1	0	0	0	95
1931	0	2	0	1	2	4	10	7	4	1	1	0	32
1932	1	0	0	3	70*	25	42	35	6	1	2	2	187
Total	1	2	0	9	89	117	75	70	10	2	26	2	412

* specimens from nest included.

As to the incidence of infection, out of the 385 insects examined 238 (or 61.8%) contained the parasite. If in this respect we consider the

sex and the different stages, where they have been noted, we see that the infection is most frequent in adult females and least in nymphs.

Donovan (1909) found the infection rate in India to be nearly 90%, while Lafont (1912) found it for his *Trypanosoma boylei* to be 80% in Mauritius and 50% in Réunion. Compared with Donovan's result, my own percentage figure for total infection is somewhat lower. But we must note that it varies in different years, from which we see that the percentage infection ranges between 54.3 and 90. It is also different, if the insect lot examined includes many nymphs, which, being less subject to infection, lower the total percentage of infection.

We do not see any ground for assuming that the percentage of infection differs according to months, although there are some irregular fluctuations during the year.

It may be safely concluded that the natural incidence of the flagellate in question among Taihoku *Triatoma* is fairly marked at all seasons of the year. I may add that in other places also the incidence is not markedly different.

Summary and Conclusion (1) A species of flagellates, resembling in many points the insectan phase of *Trypanosoma cruzi* Chagas, occurs very commonly in the gut of *Triatoma rubrofasciata* in Formosa. Investigations and experiments conducted by the writer in 1928-1932 on its morphology and biology led to the conclusion that it can infect certain mammals, but is non-pathogenic and referable to *Trypanosoma conorhini* (Donovan).

(2) In Taihoku the frequency of *Triatoma* infection is 61.8% on the average; 72.7% in adult females, 63.9% in adult males and 46.6% in nymphs. The percentage of infection for the years 1928-1932 ranges

between 54.3 and 90. The monthly variations are not notable.

(3) In the insect host, it occurs exclusively in the alimentary tract from the mid-gut to the rectum, and in no other part of the body except the Malpighian tubes, in which it was found only once.

(4) The principal forms produced in the insectan body are crithidial, leishmania and metacyclic trypanosome forms, supplemented by pyri-, spindle-shaped and transitional forms. The size of the first two and the last varies considerably owing to division.

(5) The trypanosomes of the mouse are transformed in the insect gut into the crithidial form almost entirely after 24 hours. For some days the infection is confined to the mid-gut but reaches the anterior part of the hind-gut in 5 days at the latest, and the posterior part of the hind-gut and rectum in 2 days more. At the beginning of infection, the typical crithidial form is the prevailing one and the spindle-shaped form is occasionally found; later the crithidial forms of varying size are produced and various irregular forms increase and lead to the final appearance of the leishmania form. The metacyclic trypanosome form can be seen as early as 5 days after the infection and reaches the rectum after 9 days more at the latest. On the 10th day of infection there is no general rule in regard to the forms produced or their distribution in the gut. It is probable that the metacyclic trypanosome form can be produced in any part of the gut.

(6) *T. conorhini* develops exclusively in the gut lumen and no hap-tomonad or intracellular form has been observed so far.

(7) *T. conorhini* begins to appear in the feces of *Triat. rubrofasciata* as early as 13 days after the com-

mencement of infection; in many cases, however, after 20 days or more.

(8) Though *T. conorhini* can infect mammals, it retains on many points the character of insect parasites; the production of the leishmania form in addition to the metacyclic trypanosome form has probably an important significance. I am of opinion that the life cycle of this flagellate in the insect body proceeds in two different lines: one leading to the leishmania form (leishmania cycle) and the other to the metacyclic trypanosome form (trypanosome cycle). Sometimes, however, the metacyclic form appears to be transformed into the leishmania form. The two lines may again unite at a later stage and both produce the leishmania form.

(9) Although the natural vertebrate host of *T. conorhini* is still unknown, it can develop to typical *Trypanosoma* when inoculated into mice and rats, but not in the pigeon.

(10) The most striking characteristics of the mammalian form of *T. conorhini* is its extraordinarily elongated body with thread-like posterior part, and the presence of a pot-shaped structure just in front of the parabasal body.

(11) The total length of the trypanosome body on the first day of infection in mammals is 28.1μ on the average; the average maximum of 53.7μ is reached on the 3rd or 4th day, after which it tends to become somewhat less, owing to the shortening of the free flagellum. The relative length of the anterior and posterior parts of the body is subject to change, the latter being longer at an early stage but shorter after the 4th day. The variation in length from day to day is not so marked as in *Trypanosoma lewisi* and the maximum length is always less than twice the minimum. On each

day, almost all the individuals or at least about half of them have the modal length.

(12) It is remarkable that no division has been observed in the mammalian form of *T. conorhini*.

(13) In the mammalian blood, *T. conorhini* occurs, so far as my researches go, in the lung, heart, liver and kidney as well as in the peripheral vessels.

(14) The insectan form of *T. conorhini* multiplies actively in normal agar containing rabbit blood. Subcultures have failed. In the cultures the same forms appear as in the insect gut, excepting the metacyclic trypanosome form. Cultures from the infected mammalian blood have not succeeded.

(15) Infection of mice can be most easily effected by the intraperitoneal injection of the gut contents of infected *Triatoma*. Subcutaneous inoculation is not always successful. Attempts to infect mice by the insect bite have failed, but infection per os and through skin wounds succeeded. Therefore, percutaneous and peroral infections are probably the natural way of dissemination.

(16) *T. conorhini* may appear in the peripheral blood as soon as 3 hours after the intraperitoneal injection of the gut contents, although in some cases the first appearance was as late as 8 days after. This difference in the incubation period seems to be attributable to the variable number of metacyclic trypanosome form present in the injected material. In oral infections the incubation period was 1 day and in percutaneous 11 days.

(17) Under experimental conditions, the infection by *T. conorhini* lasts in normal mice for 1-36 days, correlated to the number of the trypanosomes appearing in the blood. Heavy infections last on the average

for 12.8 days; light infections for 19.4 days.

(18) The number of parasites in the peripheral blood is not subject to much variation, but depends upon the number introduced by the inoculation.

(19) Similar peculiarity is also observed in young mice, contrary to the expectation that they may be less resistant.

(20) Sub-inoculation of the mammalian form has not succeeded beyond the first, and even the first sub-inoculation resulted in very light infections.

(21) In the mouse splenectomy furthers infection, but if it is performed before the appearance of the parasites in the blood, it has apparently no effect. On the other hand, if the operation is performed during the appearance of the parasites, it conspicuously prolongs the duration of infection, although the parasites do not increase in number. This may be due to the inhibition of the production of the destructive substance in the host.

(22) In mice treated with human serum just after inoculation, the resulting infection was very light, whereas in the control it was always more steady or definite. If, however, the human serum was injected into mice 6-14 days after the appearance of the trypanosome in the blood, the infection course did not seem to have been so markedly altered as in infections with old-standing *Trypanosoma gambiense*. The injection into mice of various animal sera, such as those of the horse, water buffalo, native cattle, dairy cattle, hog, rabbit and fowl, just after inoculation, resulted in lighter infections than in the control. Whether this result is due to something analogous to the trypanocidal action of normal human serum on pathogenic trypanosomes,

is not clear.

(23) As to the resistivity developed in the mouse in the course of infection, it appears from various considerations that it possesses an a priori resistance to the multiplication of *T. conorhini*, which may increase as the infection continues and the production of the destructive substance also increases during the infection course, becoming very strong at a late stage, owing perhaps to the antigenous property of the parasites killed, so that the more the parasites are killed, the more or the more rapidly the antibody is produced. As a matter of fact, heavy infections last for a rather short time.

The recovered animals have acquired absolute immunity or resistance against re-infection and retain it as long as 107 days, but it becomes subsequently weakened, so that 165 days after the disappearance of the parasites light reinfection is possible; and this diminution of resistivity is accelerated by splenectomy. After a certain duration of infection, however, complete immunity is the result, even if splenectomy is carried out.

(24) Animals recovered from the infection of *T. conorhini* can be readily infected with *T. cruzi*, which seems to be biologically similar to the former.

(25) *Triatoma* of all developmental stages becomes infected by *T. conorhini*, through ingestion of the blood of infected mouse. *Rhodnius prolixus* can also be infected.

(26) The length of passage through the mammal host has no effect on the infectivity of *T. conorhini* for insects, these becoming infected similarly whether the blood is ingested as early as 24 hours after the inoculation or later. The only important factor is the presence of a sufficient number of parasites in the blood.

(27) The natural vertebrate host of *T. conorhini*, which still remains to be found out, must be rather an animal with little chance of being attacked by the insect. But since the latter shows a high percentage of infection in nature, it is inferred that dissemination takes place from insect to insect by direct transmission, heredity playing no part in the process. The possible ways of infection are the mutual attack of the insects and fecal contamination due to crowded life. No cysts nor any resistant forms have been found in *T. conorhini*, and all forms produced in the life cycle are probably infective for the insect.

(28) *T. conorhini* can survive outside of the insect body for at least 2 days at room temperature during the summer season. It seems probable that infection of the insect is due to contamination with feces containing such surviving forms.

(29) Infected young *Triatoma* can complete metamorphosis without interruption of the infection, so that this may be of quite a long duration, lasting for 343-492 days in insects infected at the first instar, for 375-520 days in those infected at the second, 351-465 days in those infected at the third, 220-344 days in those infected at the fourth, and 238-352 days in those infected at the fifth instar.

(30) Subsequent feedings on rabbit, mouse, guinea-pig, horse, dairy cattle, native cattle, fowl and pigeon, failed to dislodge *T. conorhini* already established in the *Triatoma* gut, there being no difference in this respect between susceptible and immune animals. This may be because the ingested blood, whatever may be its original property, undergoes alteration in the insect gut and loses its trypanolytic property. On the contrary, the sera of water buffalo, na-

tive cattle, dairy cattle and fowl exhibited marked trypanolytic action in vitro.

(31) As to the factors affecting the production of metacyclic trypanosome form in the insect gut, the age difference of the host and the duration of infection appear to be negligible, as also the animal species which furnish the blood as well as the frequency of the feedings. Temperature has also been found to produce no marked difference. So other efficient factors have to be found out.

(32) Attempts to increase the infective power and multiplication of metacyclic trypanosome form by bringing them in repeated contact with the blood of certain animal species, have resulted in failure. For reasons given in the text, it should be possible to effect it in the long run, and the first step in this process must be the acquisition of resistivity to the action of the blood of the host. On the other hand, the metacyclic trypanosome form from *Triatoma* repeatedly fed on certain animal species does not lose its infectivity for other animal species; time is an important factor in this process of adaptation. The infectivity for vertebrates of the metacyclic trypanosomes produced in the insect gut must have been acquired in a long course of time. The taxonomic position of the genus *Herpetomonas* as defined by Wenyon, appears to me uncertain, until it has been proved beyond doubt that it never can parasitize vertebrates.

(33) From the facts mentioned above, the trypanosome before us may present a primitive form which has become adapted to vertebrates in comparatively recent time. (Japanese Journal of Zoology Vol. VI, No. 3, November 5, 1925.)

Medicine

Cause of Diabetes Mellitus and its Cure

By R. Arima.

During the past twenty-five years devoted to the studies of tuberculosis immunization, I have often come across cases of pulmonary tuberculosis combined with diabetes. My attention was, therefore, turned to the possibility of eliminating this dangerous complication. The works which hitherto appeared on the subject, relate more to the symptoms than to the cause. The literature was, therefore, laid aside and studies commenced upon a clean slate. The experiments made by Minkowski and Mehring, and the insulin theory were of course accepted.

That the pancreas is a digestive gland and Langerhans' islands are an important organ in regulating the metabolism of carbohydrate must be granted. At diabetic autopsy I find not only the islands, but the total gland-tissues are affected.

The retrogressive changes of an organ may require various explanations as to the causes. But when such changes are caused by the chronic impediment of organic function, the cause may be assumed to be fatigue or senility. If this proposition stands, it may be concluded that diabetes may be defined as a pathological change brought about by fatigue or senility due to a disorder of the alimental function.

Again, diabetes is an acquired disease, mainly affecting persons after middle age. This means that it requires long time to mature. Another point of note is the fact that the disease is found mostly among persons of over-nutrition and scarcely among those who spend plenty of calories, such as labourers. Diabetes may

thus be described as a pathological change due to alimental intoxication. Moreover, it is a universal disease. It exists irrespective of geographical, racial and habitual differences. Man's food is so divergent that it is difficult to pick out any one of the main nutritive agents, such as protein, fat, and carbohydrate, as a chief general cause of alimental intoxication. On the contrary, the most universal elements among inorganic secondary nutritive factors are water and salt, of which the former may be dismissed out of consideration for obvious reasons. But salt is in use in such manner and degree that it has now nearly gone over the limit to be nutritive, but has become a luxury.

Salt is discharged from the human body by means of perspiration and urination. The skin is most aptly called the "big kidney" and helps a great deal urination. This important fact is too often forgotten by diabetic patients. Their intake and output of salt is not balanced. To make the matter worse, they are excessively fond of salt. All the cases of diabetes I have met were men with a strong taste for salt. It may be concluded that diabetes results when more quantity of salt than can be ordinarily discharged is taken.

Animal diabetes is confined to dogs, horses and cattle. With horses and cattle it is rare, while with dogs it is rather frequent. Salt is given to horses and cattle mixed in the fodder, while it is given to dogs in the shape of waste food. Thus dogs have more chance to take salt. Note should be also taken that dogs do not perspire.

The above hypothesis not only explains the phenomenon that diabetes develops mostly after one's adulthood, but also the development of the

disease among the youth. Langerhans' islands take five years to mature after one's birth, which then tend to decrease and become conspicuously small in number in adults. This phenomenon is to be interpreted as signifying that a certain quantity of salt acts as a stimulant to the growth of the islands, but detrimentally beyond that limit.

Upon the above hypothesis, I have been conducting experiments for ten years. Invaluably good results have been obtained with cases of tuberculosis combined with diabetes by the reduction or an entire abolishment of salt from their diet. One case was completely cured by seven years' limited use of salt, while others, after years of evident cure by saltless diet, developed diabetic symptoms through its free use.

A physician, a friend of the writer's, was suffering from diabetes mellitus at 55. He tried dietetic treatment for three years without much result. In the meantime, he dropped it. About this time he lost taste for salt, and after about three months he was completely cured. A second case is another physician who was affected with medium degree diabetes. (Here it may be noted that in Japan few cases of diabetes of severe category exist). After profuse use of salt, such symptoms as polyuria, thirst, lassitude followed, and excretion of glucose lasted for four hours. Its highest density was 5 per cent. On the following day, when he refrained from salt, though continuing carbohydrate (rice) diet, the diabetic symptoms decidedly decreased and glucosuria, which lasted for only two hours, showed 0.5 per cent. glucose at the highest. He continued rice dieting and was completely cured.

The writer has been a spare eater for the last twenty years. He possesses no penchant for salt. He has

had no diabetic trouble. In 1934, when he was 53, he purposely overtook salt, with the result that temporary polyuria and glucosuria followed. The experiment was repeated twice with the same results. The quantity of salt taken at one experiment was 10 gr. Had he continued to take this amount every day, diabetes would certainly have resulted.

Koyama, of the Arima Institute, who made special studies of diabetes mellitus, reports that in saline glucosuria of rabbits, as well as in Piqure glucosuria and adrenalin glucosuria, a specific retrogressive change of the islands, accompanied with arterial and vernal hyperaemia or hemorrhage of the pancreas, is noted. The injection of hypertonic saline solution into the abdominal cavity gives rise to glucosuria together with the same changes of the pancreas as mentioned above. The lesion is hyaline degeneration as evidenced by turbid swelling and pycnosis, or the tissue destruction, or the total disappearance of the islands. The mechanism of the four kinds of glucosuria mentioned above is not, as has been considered up to the present, glycogen mobilization of the liver through nervular transmission, but is monistically of organic and insular character. If rabbits, which usually are not given salt, drink physiological saline solution, hyperplasia and conspicuous neoplasm of islands, accompanied by hyperaemia of the pancreas, are seen in the first stage, and then the degenerative alteration is observed. Daily administration of hypertonic saline solution to rabbits or dogs will cause the same pathological changes as the diabetic pancreas of man, such as hydropic degeneration of the islands, atrophy, hyaline degeneration, and the sclerosis of the islands and the pancreatic tissue. The insular neoplasm of various de-

grees which is observed at the post-mortem examination of human diabetes is also found in the animal experiments. This seems to reveal that diabetes is comparatively easily cured by either limited use of salt or its total abstention.

An excessive absorption of salt was a subject of much heated discussion before the age of experimental medicine. G. V. Bunge, for instance, is decidedly against it in

his Text-book of Physiological Chemistry (1894) by even saying that "Poeklung der Kulturmenschen bei lebendigem Leibe", or "the civilized people are soaking themselves in salt." Salt taken in a far larger quantity than is necessary is not only the cause of the kidney troubles and diabetes mellitus, but also the cause of the symptoms of senility, such as arteriosclerosis.

CHAPTER XXXIV

PRESS AND PUBLICATIONS

Press

Early History

Yomiuri Even in Old Japan some form of public announcement was issued from time to time, like the *Acta Diurna* of the era of the Roman Empire, but perhaps the present subject may appropriately be begun with the *Yomiuri*, the oldest semblance of the newspaper, which name can be literally translated "reading aloud and selling." The *Yomiuri* sheets were so named because the venders read aloud the contents of the newspaper on the street while soliciting buyers. The *Yomiuri* sheets were essentially the *Flugblatt* of the Middle Ages of Europe. They consisted of single printed sheets, or pamphlets of several pages, recording the latest events of the period. Even in those days the progress of wood-block prints permitted the appearance of illustrations in the sheets. In many cases the illustrations were the outstanding feature, and the descriptive matter was of secondary importance. In this respect the *Yomiuri* differed from the *Flugblatt* of Europe.

Its Publishers Old records are lacking to identify the publishers of the *Yomiuri*, but it appears that the publishers of newspapers, or rather equivalents to newspapers, in the earlier part of the Tokugawa period (about 250 years before the Restoration of Meiji, 1868) were men of little fame and honour. Even at the end of the Tokugawa period it appears that the publishers of the *Yomiuri* were men of so lowly posi-

tions that they were not permitted to enter the society of even wood-block printers. It is, however, considered likely that this early form of the newspaper failed to make any progress owing to government pressure. The *Yomiuri* carried contents that were often inflammatory and distasteful to the government. Suspension of publication was ordered so frequently that no decent publishers dared to take it up as an enterprise. Only men of low repute engaged in the business often against the law.

Printing of the *Yomiuri* sheets was done by wood-block prints. The contents of the *Yomiuri* sheets can generally be divided into two, prose and poetry. This distinction, it appears, existed from the early part of the Tokugawa period. In the era of Genroku (1688-1703) the hawkers sold their sheets on the street either calling the attention of prospective buyers by singing, with or without the accompaniment of the *samisen*, or merely reading aloud the contents. At the end of the Tokugawa period sheets were sold with the sellers singing popular ballads.

Its Contents A perusal of those *Yomiuri* sheets still extant shows that at the outset of the development the chief interest of the sheets lay in the illustrations. What are believed to be the oldest *Yomiuri* have illustrations of the Battle of the Osaka Natsu-no-jin in May in the first year of the era of Genna (1615), accompanied by descriptive matter. Judging from the frequent

issuance of suppression or suspension orders, *Yomiuri* sheets appear to have been published and sold in abundance during the eras of Empo (1673-80), Teikyo (1684-87) and Genroku (1688-1703). In Western Japan, with Osaka as the centre, there is evidence of the popularity of erotic contents in *Yomiuri* sheets, featuring such stuff as stories of double suicides. Since the vendetta of the famous Forty-seven Ronin vendetta stories formed the chief subject of interest and after the era of Genroku subjects of natural calamities were featured. In the eras of Bunkwa (1804-17) and Bunsei (1818-29) the enforcement of justice and morality undertaken by the Shogunate government, stressing the protection of right and chastisement of wrong, was reflected in the stories featured in the *Yomiuri* sheets of those days, even in the accounts of natural calamities and those of sex relations. Because the stories were written by men of low repute, the contents of the *Yomiuri* sheets in many cases were repellent in tone. Immediately before and after the Restoration of Meiji accounts of the civil disturbances were written, but by this time the number of *Yomiuri* sheets had considerably decreased owing to the appearance of newspapers in the more correct sense of the term.

Fusetsugaki Another equivalent of the modern newspaper, in addition to the *Yomiuri*, was a periodical named "*Fusetsugaki*" or Book of Reports, which carried foreign intelligence. These books were of two kinds, one with Dutch and one with Chinese reports. After the third Tokugawa Shogun adopted the policy of seclusion, it was only China and the Netherlands which had intercourse with Japan. Captain "Yanyos" (Jan Josten) of Holland, after Japan's adoption of the se-

clusion policy, presented annually a book descriptive of foreign affairs to the Shogunate government. It was the *Oranda Fusetsugaki*, or Book of Dutch Reports. The Chinese government in those days presented to the Shogunate government of Japan Chinese intelligence after the manner of the Dutchmen. Information obtained thus was placed in the hands of the Prime Minister and kept confidential, but after the American "black ships" came to knock at the door of Japan, permission was granted to make copies of those books for public circulation. The presentation of Dutch documents continued until the era of Ansei (1854-59), but as the country was opened to foreign intercourse this custom was discontinued at the request of the Dutch government, which instead of the customary annual volume presented Dutch newspapers to the Japanese government. It is considered certain that the newspapers thus presented to Japan were copies of the *Javasche Courant*, organ of the Government of Batavia.

Precursor of Modern Paper When the provincial clans requested that the Dutch Book of Reports be made public, the Shogunate government's *Yosho Shirabesho*, or Bureau for the Study of Western Learning, agreed and planned to publish it. This plan did not materialize, as the Dutch government then replaced the book with newspapers, but instead, the bureau translated the newspapers into Japanese and published them for general circulation. This was the precursor of the modern newspaper in Japan. Not content with this Dutch newspaper, the Shogunate government continued to translate and publish other newspapers from Holland and imported Chinese-language newspapers published by white Christian evangelists in Hong-Kong, Shanghai and other places, and had

them not only translated and annotated but printed and bound into books and entrusted Hyoshiro Yorodzuya, a book purveyor to the Shogunate government, with the public sale of these books. In general printing wooden types were used. For printing these Chinese newspapers imposition was adopted and for this purpose the Shogunate government had to establish a special department for type foundry. This enterprise was a reflection of the out-and-out principle the Shogunate government adopted for opening the country to foreign intercourse. Those books were chiefly published during the era of Bunkyo (1861-63). Hence they were popularly called Bunkyo Shimbun (newspaper).

Papers in Yokohama In the meantime, anti-foreign sentiment was gaining force in this country and after the era of Bunkyo this interfered with the translation and publication of foreign newspapers. Foreign residents of Yokohama, however, translated and published foreign-language newspapers in Japanese and they were patronized by those who favoured opening the country to foreign intercourse. Men on the staff of the Bureau for the Study of Foreign Learning had an eye on foreign affairs and established a new institution for the purpose of translating into Japanese articles dealing with Japan which were printed in the English-language newspapers in Yokohama, such as the Japan Commercial News and Japan Times. Those translations were not printed but written by scribes and circulated among interested persons. The years during which this was done extended from 1863 to 1865. Foreign residents of Yokohama also published three Japanese-language newspapers, Kaigai Shimbun (Foreign Newspaper), Bankoku Shimbun

(International Newspaper) and Rondon Shimbun (London Newspaper). Of these three, the Bankoku Shimbun had in its contents not only foreign intelligence but news of Yokohama and comment on the English-language newspapers of Yokohama; it introduced ideas of British civilization and carried many advertisements. This journal was edited ably in a characteristic style and published monthly. From this time general progress in newspaper-making was noticeable.

Foreign Language Papers The first foreign-language newspaper published in Japan was the Nagasaki Shipping List and Advertiser issued for the first time in the year 1861 by a resident Britisher, Mr. Hanseard. It was a weekly. The publisher soon moved to Yokohama, where he continued his publication under the name of The Japan Herald, the first issue of which was brought out in December of the same year. He employed Mr. Black, another Britisher, then a resident of the port city, as editor-in-chief. The example set by the Japan Herald was soon followed by the appearance of the Japan Commercial News in 1863, a weekly published by a Portuguese. In October of the same year the Japan Herald, in addition to the weekly, started a daily newspaper which featured advertisements. In the year 1865 the Commercial News was discontinued and Mr. Rickerby, a banker, bought the newspaper equipment and started the Japan Times in September of the year. In 1867 Mr. Black had a dispute with the new owner of the Japan Herald, and, leaving the paper, he issued the Japan Gazette, an evening paper. The popularity of the Japan Gazette overwhelmed the Japan Times and the latter lost much patronage and finally had to discontinue publication. The disappearance of the Japan

Times, however, was followed by the launching of the Japan Mail. In addition to these newspapers, there was another English-language newspaper, having the name of the Japan Express, published by an American, whose first issue appeared in 1866. The copies of this newspaper were hand-written, carved in wood blocks, and printed. While the name of the publisher and the period of publication are unknown, it is recorded in a diplomatic document in the possession of the French government that this journal represented the American interests. In addition to these papers, there were also a French newspaper, L'Echo du Japon, in the era of Keio (1865-7), an English magazine of caricature, the Japan Punch, which was published continuously for 20 years from the era of Bunkyo (1861-3), and a French magazine of caricature entitled Tobayé. These publications stimulated directly or indirectly the birth of the Japanese modern newspapers.

The Restoration Demand for foreign intelligence was the principal factor in the birth of newspapers in the East as in the West. In Japan, too, newspapers of the earlier periods carried much foreign news, but when there were big developments like civil disturbances they played up internal affairs. The Restoration of Meiji in 1868 afforded the press of Japan much scope for development. Newspaper editors in Yedo, the present Tokyo, were excellent scholars and their papers were much superior to those edited in the provinces. One of the papers in Yedo already advocated parliamentary politics as early as this period. Newspapers published by those holding the "Emperor-centric" policy were filled with articles which merely reflected on the intelligence of the editors themselves. They only advocated the "Emperor-centric" policy and did

not propose any advanced ideas about reforms. Newspapers affiliated with the Shogunate government enjoyed much larger circulation than their competitors and it is stated that one of them had a circulation of 3,000.

The Press Law

The press law in Japan was enforced by the Government for the first time in February, 1869. This was the signal for several new newspapers to spring up. The Government, however, interfered so much with the press that sales of newspapers were much hindered and the healthy progress of the press was checked. While the business side of the press was dull, editing itself attained notable progress. Political news had become unusually constructive and efforts were made to establish a new civilization and propagate new and advanced ideas among the people.

Modern Papers

The Yokohama Mainichi The first true Japanese daily newspaper appeared in December, 1870, with the publication of the Yokohama Mainichi Shimbun. Not only was this newspaper a daily but it consisted of a single foreign-style paper sheet with printing done with lead types. In outside appearance it had the semblance of the modern newspaper. Although its contents were much inferior to those of the newspapers that were founded later in Tokyo, it resembled English-language newspapers in that it carried many advertisements.

More Papers Born The year 1872 saw several more dailies born, newspapers which were more perfect in appearance and reading matter than their predecessors. Those newspapers included the Tokyo Nichi Nichi Shimbun, Yubin Hochi Shimbun, and

the Nisshin Shinjishi, the last being edited under the supervision of Mr. Black, formerly editor of the Japan Herald. The Nichi Nichi and Hochi remain to this day but the Shinjishi had to change hands in 1875 when the Government, in an effort to bring pressure to bear upon democratic newspapers, controlled the activities of foreigners in newspapers. The change of ownership brought decadence to the journal and the paper was discontinued shortly afterward.

Government and Press

Era of Terrorism An era of terrorism dawned upon Japan's journalism in 1875 when the government, dissatisfied with the way in which the press in general stirred up the discontented elements of the people, revised the press law with the avowed purpose of curbing the influence of the newspapers. Severe punishment was provided for violation of the press law. Journalists writing articles censuring the government were fined or imprisoned. Indeed, this was the first time journalists in Japan were exposed to punishment. Not content with this cruel legislation, the government in July, 1877, invested the Home Minister with power to suppress newspapers or delay their publication, and he was thus free to bring pressure to bear upon them as he saw fit. This objectionable law worked havoc with the press, whose progress was much hampered thereby.

The era in which newspapers served as political party organs began in 1881. Two years before that time the movement in favour of instituting the Diet was launched by the late Taisuké Itagaki and others.

Revised Press Law The government's desperate policy of oppression toward the liberals of the period, which resulted in the prohibition of

the formation of political associations and the oppression of newspapers and magazines, came to a definite halt on December 26, 1887, with the enforcement of a new government decree. Two days later a revised press law was issued, considerably modifying the strict control of the press, which had had the effect of almost exterminating all the free political organs of the country. The new press law was drafted on the basis of the principle of "freedom of the press," recognized in the Japanese Constitution which was to be promulgated shortly. The new press law was received by journalistic circles with much satisfaction. Indeed, the modified press law marks a turning point in the history of the development of the modern newspaper in this country.

Whereas under the old law a prospective publisher had to apply for a permit to start a newspaper, by the new regulations he had only to notify the authorities of his intention to issue a journal. The prefectural governor was robbed of his power to suppress newspapers or confiscate the newspaper plants and only the Home Minister was given such power. Unreserved criticism for public good was admitted, and compared with the despotic rule that had prevailed before, newspaper management under the new law became markedly free.

Emergence of Independent Dailies

The approaching promulgation of the Constitution, coupled with the removal of the ban on the formation of political associations and the growing political enthusiasm among the people, revived political newspapers. In the meantime, the Diet was instituted and the majority of the best-known editors of influential newspapers were elected to the legis-

lature. As a natural consequence, the newspapers of these editors became their political tools and alienated public sympathy. Their popularity showed a decided tendency to wane.

The Kokumin and Yorozu While the political organs were thus losing influence, a strictly politically-independent newspaper which refused to cater for the popular taste of the people but which assumed an attitude to instruct the public was founded and caught the fancy of the intellectuals of the day. Its editing, however, was on the old lines and this newspaper never became popular. In the year 1890 Mr. Iichiro Tokutomi founded the Kokumin Shimbun, a popular newspaper. This journal enjoyed the support of the masses and soon other papers more or less imitated the style of editing inaugurated by the Kokumin. In 1892 the late Mr. Shuroku Kuroiwa founded the Yorozu Choho, which added to the Kokumin's style of editing a strong spice of sensationalism, devoting much of its space to the publication of detective and love stories. The Yorozu invaded the fields of the Miyako Shimbun, Yamato Shimbun and other newspapers then having the largest circulation. Thus, the promulgation of the Constitution served to bring about marked progress in the development of the modern newspaper in this country.

Chinese War and the Press The Sino-Japanese War (1894-5) caused severe competition in news reporting. The Osaka Asahi Shimbun, by introducing new features in covering war news, greatly increased the number of its subscribers. In Tokyo the Chuo Shimbun, closely affiliated with the military, was conspicuous for its activities in the issuance of extras and consequently gained an enlarged circulation. Other papers

also sent war correspondents and featured news from the front. The Yorozu then was the most popular newspaper, having a circulation of 50,000. In point of circulation the newspapers of that time were in the following order: The Yorozu Choho, Kokumin Shimbun, Tokyo Asahi Shimbun, Miyako Shimbun, Nihon Shimbun, Chuo Shimbun, Tokyo Nichi Nichi Shimbun, Jiji Shimpō, Mainichi Shimbun, Yubin Hochi Shimbun and Yamato Shimbun. The war was also responsible for the appearance of influential provincial newspapers, including the Fukuoka Nichi Nichi Shimbun in Kyushu, the Shin Aichi in Nagoya, the Kahoku Shimpō in Sendai and the Hokkai Times in Hokkaido.

After the Russian War

Catering to the Public Following the Sino-Japanese War the majority of the newspapers in Tokyo adopted an impartial attitude toward politics and concentrated their efforts in popularizing their pages. To advance their sales they resorted to means which often savoured of vulgarity and received public criticism. The city of Osaka witnessed a duel between the Asahi and the Mainichi not only in business but in news gathering. In the meantime, the Russo-Japanese War (1904-5) occurred to start keen competition in war coverage. The Asahi both in Tokyo and Osaka, the Osaka Mainichi and the Jiji Shimpō competed severely in the matter of extras and increased their circulation. At the end of the war the peace treaty was signed at Portsmouth, but the peace terms were found unsatisfactory and stoutly opposed by all the newspapers of Tokyo and Osaka, with the exception of the Kokumin and the Chuo, both of Tokyo, the political organs of the then Government. Anti-peace mass meetings

were held both in Tokyo and Osaka, and in Tokyo the participants in the mass meeting, incited by inflammatory articles in one or two newspapers, turned into a mob and attacked the building of the Kokumin Shimbun. To suppress the mob the government had to proclaim martial law. The government simultaneously issued an urgent Imperial Ordinance and suspended the publication for certain periods of the newspapers which incited the public to violence. During one month shortly after the enforcement of the Imperial Ordinance the Yorodzu, the Niroku, the Miyako, the Nihon, the Jimmin, the Asahi of Tokyo and Osaka, and other papers were suspended. Of these papers, the Niroku and the Osaka Asahi suffered suspension twice in a month.

Equilibrium of Influence The panic in the newspaper world thus brought about upset the equilibrium of influence. The Kokumin was robbed of much circulation; so was the Chuo. The Yorodzu, with a special appeal to the youth of Japan, increased its circulation markedly. In Osaka the Mainichi took advantage of the suspension of publication which the Asahi suffered and invaded its unfortunate yet heretofore superior competitor's field, with the result that finally their influence in business and other respects became about even.

Motion Picture Utilized Several changes for the better were effected following the Russo-Japanese War, and it is noteworthy that the changes effected all concerned the newspaper enterprises. The Kokumin, which had suffered a dwindling popularity since the paper became the object of public censure by supporting the government that signed a "humiliating peace treaty," issued provincial editions, an example which was soon followed by other news-

papers. Shortly afterward the Hochi attained success by issuing an evening edition. This ambitious enterprise was also followed by several other competitors. As regards the contents of newspapers, the Yorodzu reported all sorts of sports and amusements; the Asahi brightened its pages with articles from the pen of famous men of letters like the late Soseki Natsumé, and the Hochi established a precedent by carrying a novel in serial form that suited home reading. On the business side, the Hochi took the initiative in establishing provincial branches. The Yamato promoted an exhibition and began a motion picture demonstration show throughout the country.

That these enterprises attained favourable results soon showed in the increased number of circulation. According to reports considered reliable, the Osaka Asahi topped the list with 350,000. The Osaka Mainichi came next with 300,000, and the other papers came in the following order: the Hochi, 200,000; the Yorodzu, the Kokumin and the Yamato each 150,000; the Tokyo Asahi, 80,000, and the others 30,000 or 40,000 each.

In the Taisho Era

Expansion of the Business One notable advance made by the press of Japan during the Taisho era was the remarkable expansion of newspaper business. All first-class journals erected imposing structures for their offices and installed expensive high-speed presses. By the end of the era all the leading newspapers in Tokyo and Osaka had become public corporations with their capitalizations above the ¥1,000,000 mark. The earthquake and fire of 1923 reduced to ashes the majority of the newspapers in Tokyo, except the Hochi, Nichi Nichi and Miyako.

Of the unfortunate sufferers, those financially well off got to a good start and soon recovered their former positions, but those less financially favoured failed to raise their heads again and had to be content with insignificant showings. At present the Osaka Asahi and Osaka Mainichi possess more than 1,000,000 subscribers each, and big papers in Tokyo have subscribers approaching the above figure. It is not an exaggeration to say that the achievements made by the press of Japan after the dawn of the era of Showa (1926-) are a high-water mark of Japan's modern culture.

Present-Day Newspapers

The newspaper business in Japan as a whole in recent years has developed to such an extent that in its scale, system and construction as a modern industry, as well as in the rapidity and accuracy of news dispatching and reporting, it can be favourably compared with that in any other country of the world. The attainment of Japanese newspaper business is owing first to the cultural development of Japan and also to the strenuous efforts of men interested in the enterprise.

Number of Newspapers

The number of daily newspapers in Japan proper at the end of 1934 was 1,219, showing a gain of 40 over the end of 1933, according to government statistics. In addition, there were on the same day 470 newspapers issued 4 times or more a month and 5,392 newspapers issued 3 times or less a month. All these 7,081 papers come under the category of "newspapers" and are so treated by the Government. The newspapers classified according to prefectures follow:

Prefecture	Daily papers	Issued 4 times or more a month	Others and Total
Tokyo	291	103	1,635
Kyoto	36	9	302
Osaka	94	48	600
Kanagawa	18	8	98
Hyogo	43	23	279
Nagasaki	15	6	71
Niigata	24	21	125
Saitama	9	3	82
Gumma	17	2	69
Chiba	14	2	86
Ibaraki	8	1	120
Tochigi	13	4	68
Nara	7	5	84
Mie	25	8	115
Aichi	80	21	512
Shizuoka	40	4	130
Yamanashi	7	1	28
Shiga	24	2	83
Gifu	13	4	74
Nagano	38	9	251
Miyagi	19	1	48
Fukushima	24	3	80
Iwate	11	4	44
Aomori	15	5	58
Yamagata	14	5	54
Akita	6	13	48
Fukui	13	10	64
Ishikawa	8	8	40
Toyama	7	7	73
Tottori	4	3	32
Shimane	3	1	29
Okayama	11	4	100
Hiroshima	23	11	144
Yamaguchi	32	12	111
Wakayama	18	10	71
Tokushima	3	1	23
Kagawa	3	1	56
Ehime	20	7	141
Kochi	4	4	35
Fukuoka	68	31	266
Osaka	31	4	78
Saga	10	7	49
Kumamoto	7	4	62
Miyazaki	13	2	42
Kagoshima	5	2	39
Okinawa	4	5	14
Hokkaido	87	21	377
Total	1,219	470	7,081

Mainly in Tokyo and Osaka As may be seen from the above table, the majority of newspapers are published in Tokyo and Osaka. This is because Tokyo is the capital of the Empire and Osaka is the centre of social and economic life in West Japan. The combined number of

daily newspapers in the two largest cities is 30 per cent. of all and their combined circulation covers almost all parts of this country. Large daily papers have their own provincial editions of more than 20 kinds. The spheres of provincial editions are divided between the large papers of Tokyo and Osaka. Tokyo papers publish provincial editions for Eastern Japan, Hokkaido and Saghalien, while Osaka papers issue those for Western Japan, Shikoku, Kyushu, Korea and Formosa. These provincial editions eat into the business spheres of country papers. Re-

cently, Tokyo and Osaka papers have been issuing Manchurian editions. Next to these cities in the number of their papers come Aichi (Nagoya), Hokkaido, Kyoto, Hyogo (Kobé), Fukuoka and Nagano prefectures, reflecting the extent of cultural development of those localities. Okinawa prefecture (Loochoos) issues only 16, the smallest number of all, and 19 are issued in Tokushima prefecture in Shikoku.

Increase or Decrease The following table gives the number of newspapers which increased or decreased each year, from 1925 to 1934:

	With Guarantee Money				Without Guarantee Money				
	Sum total	Total	Daily	4 times or more monthly	3 times or less monthly	Total	Daily	4 times or more monthly	3 times or less monthly
1925	6,899	4,789	826	313	3,600	2,160	188	142	1,832
1926	7,600	5,089	861	344	3,854	2,511	174	165	2,172
1927	8,350	5,438	916	380	4,142	2,912	177	170	2,565
1928	8,445	5,482	966	399	4,117	2,963	184	178	2,601
1929	9,191	5,917	1,020	417	4,480	3,274	201	198	2,880
1930	10,180	5,995	1,031	428	4,556	4,135	184	221	3,780
1931	10,666	6,290	1,088	476	4,781	4,376	197	247	3,982
1932	11,118	6,801	1,124	463	4,714	4,817	206	241	4,370
1933	11,860	6,878	1,179	461	5,038	5,182	210	261	4,711
1934	12,166	7,061	1,219	479	5,392	5,084	215	258	4,611

Circulation

Circulation Unpublished The circulation of daily newspapers in Japan ranges from about 4,000 to about 1,500,000. Japanese newspapers never make public their exact circulation. For this reason, it is impossible to get the exact figures of circulation of each or any. What is believed to be comparatively correct of the daily circulation of more than 1,100 newspapers is an estimate of about 19,000,000. The number of households in Japan is over 17,500,000. Newspapers are far more widely read in cities than in provinces and they are read more in commercial and industrial districts than in agricultural districts. Tokyo has the largest number of daily newspapers, and the more powerful ones

are a well-defined force in society. Among them are the Tokyo Asahi Shimbun, the Tokyo Nichi Nichi Shimbun, the Yomiuri Shimbun, the Hochi Shimbun, the Jiji Shimpō, the Miyako Shimbun, the Kokumin Shimbun and the Chugai Shogyo Shimpō. The first-mentioned two papers are predominant, having an overwhelming influence in newspaper circles. As organizations for news reporting these two giant papers rank among the world's largest newspapers.

Osaka City has a relatively small number of daily papers, 86 in all, but, as regards circulation, the Osaka Asahi Shimbun, which is the head office of the Tokyo Asahi Shimbun, and the Osaka Mainichi Shimbun, which controls the Tokyo Nichi Nichi Shimbun, predominate all, and their circulation is said to be nearly the

same. The two papers have practically the whole of Western Japan under their control, and their influence is felt stronger in Kyushu districts by the publication of the "Kyushu Asahi" and the "Western Mainichi" commenced in February, 1935.

Estimated Circulation Estimated circulation of leading dailies in Japan at the end of 1933 was as follows:

Tokyo	
Tokyo Asahi Shimbun	1,100,000
Tokyo Nichi Nichi Shimbun	1,000,000
Yomiuri Shimbun	1,000,000
Jiji Shimpō	200,000
Chugai Shogyo Shimpō	150,000
Kokumin Shimbun	150,000
Hochi Shimbun	300,000
Osaka	
Osaka Asahi Shimbun	1,300,000
Osaka Mainichi Shimbun	1,200,000
Leading Provincial Papers	
Shin-aichi, Nagoya	200,000
Fukuoka Nichi Nichi, Fukuoka	180,000
Hokkai Times, Sapporo	100,000
Kahoku Shimpō, Sendai	100,000

Subscriptions Subscription fees of Japanese daily papers in large cities range from 80 sen to 1 yen. Airplanes are used for transportation between Osaka and Fukuoka, but in most cases it is done by trains and electric cars.

English-Language Papers English-language daily papers in Japan proper and colonies are as follows: The Japan Advertiser (American), The Japan Times (Japanese owned), both in Tokyo, the Osaka Mainichi English Edition (controlled by the Osaka Mainichi Shimbun), the Japan Chronicle (British), in Kobé, the Seoul Press (Japanese), in Keijo, and the Manchuria Daily News (Japanese), Dairen.

System of Newspapers

The Asahi Shimbun Here the two representative Japanese dailies, the

Tokyo (Osaka) Asahi Shimbun and the Tokyo Nichi Nichi (Osaka Mainichi Shimbun), are selected as examples for explaining the business system of Japanese newspapers. The Osaka Asahi Shimbun was founded in January, 1879. A retrospect of the past fifty years of the Asahi will "convince the public that the ideal set forth in the beginning that the paper should grow to be a great power like the 'rising sun', Asahi, and its opinion be as fair and impartial as the sun, has been fulfilled, for it now occupies one of the foremost positions among the daily papers not only of Japan, but of the world, and its views on current topics are very weighty in forming the public opinion of the country." The success of the Asahi is due to the able management of the late Ryuhei Murayama, whose career is identified with the history of the paper. It was in 1881 that he started the paper. With the financial support of the late Riichi Uyéno he pushed on the business.

The Mezamashi Purchased At that time Japanese journalism was in a backward position, and the daily papers were divided into two classes, one consisting of large papers whose main principle it was to discuss political problems, and the other of small papers printing novels and daily social events. The Asahi belonged to the latter category at first, but Murayama made his organ fall in line with the prevailing tendency, to become a paper possessing the characteristics of the two classes. He made it accessible to and readable for all classes of society. Inventions were utilized by him. For example, he made full use of the telegraph, which was not commercialized then. In this way, the Asahi, which at first was in straitened circumstances, began to pay, and in a few years it grew to be

one of the leading papers of Japan. He purchased a Tokyo daily named the *Mezamashi* in 1888 and renamed it the *Tokyo Asahi Shimbun*. Other large rival papers started a united front against the *Tokyo Asahi*, but it tided over the crisis. Murayama was the first newspaper manager to publish sister papers in the two largest cities of Japan, and this method was copied by the *Jiji Shimpō*, which started the *Osaka Jiji Shimpō* in 1905, although the two *Jijis* have now severed their connections altogether. The *Asahi* was the first of all Japanese papers to instal the rotary presses in 1890. After the Russo-Japanese War the *Asahi* by general consent became the largest paper in Japan. By this time, the *Osaka Mainichi* had begun to be the most influential rival paper of the *Asahi*. When the Russo-Japanese War broke out in 1904, the *Asahi* with its superior correspondence ramifications fulfilled its mission as reporting organization of the war. The following statistics give an outline of the status of the *Asahi Shimbun*.

Its Capitalization The *Asahi Shimbun Publishing Company* is a joint-stock concern with a capitalization of ¥6,000,000. The number of personnel, excluding despatch boys, was 2,212 for the *Osaka Asahi* and 1,583 for the *Tokyo Asahi*, a total of 3,795, at the end of 1933. The *Asahi* is equipped with 36 super-speed presses, one German Iris colour press, 2 German gravure presses, 19 airplanes, 500 carrier-pigeons, 2 sets of telephoto equipment and private telephones between Tokyo and Osaka. Besides its two dailies, the *Asahi* publishes the following periodicals all in vernacular: the *Weekly Asahi*, the *Asahigraph* (weekly), the *Asahi Sports* (bi-monthly), the *Asahi Camera*, the *Screen and Stage*, the *Woman*, *Children's Asahi* and

the *Library Editions of the Osaka and Tokyo Asahi* (monthly). "*Japan in Pictures*," *Asahigraph* overseas edition (monthly) and "*Present-day Japan*" (annual), both in English, are published by the *Asahi*. It has its own special correspondents in London, New York, Paris, Berlin, Shanghai, Peiping, Nanking, Moscow, Los Angeles and Harbin and possesses both Junker and Puss Moth planes.

Its System The system of *Osaka and Tokyo Asahi* offices is:

General Affairs Bureau
 President
 Vice-President
 Chief Editor
 Managing Director
 Directors
 Auditors
 Secretariat

Printing Bureau:
 Printing Section
 Technical Section

Business Bureau:
 Sales Section
 Advertising Section
 Accounts Section

Editorial Bureau:
 Editing Section
 Politics Section
 Social News Section
 Photograph Section
 Foreign News Section
 Home News Section
 Reference Section
 Sports Section
 Proof-reading Section
 Science and Arts Section

Enterprise Section
 Asahigraph Section
 Aviation Section
 Section of Correction of Errors

Each bureau and section has its own chief. The editorial bureau has besides the sections, editorial managers, advisers and editorial writers, who are controlled by the chief of the editorial bureau.

Aerial Mail Service The *Asahi Shimbun* inaugurated regular mail aviation between Tokyo and Osaka and between Tokyo and Sendai in 1923. With the establishment of the

Japan Air Transport Company, the *Asahi* transferred gratis these services to the company. Since August, 1929, the *Asahi* has been operating the *Tokyo-Niigata* regular mail aviation.

The Osaka Mainichi and Tokyo Nichi Nichi The *Osaka Mainichi* originated in the *Osaka Nippo*, then the largest daily in Osaka, first published in 1876. The present name was adopted in 1888. Already in those days, the *Osaka Mainichi* was one of the most influential papers in the country. In 1889 the late Osamu Watanabé reorganized the paper into a partnership enterprise, with the support of the late Hikoichi Motoyama. The late Takashi Hara, afterwards Premier, once assumed presidency of the paper, but he let it in 1900 and was succeeded by the late Eitaro Komatsubara, once Education Minister. It was in 1903 that Motoyama became the president. Through his efforts the paper gained prominence. Its capitalization is ¥10,000,000, the principal shareholders being businessmen of Tokyo and Osaka. This is in contrast to the shareholders of the *Asahi*, who are mostly men connected more or less closely with the paper. In Tokyo, the *Osaka Mainichi* inaugurated the *Mainichi Dempo* and absorbed the *Tokyo Nichi Nichi* in February, 1911. The *Tokyo Nichi Nichi*, which thus came under control of the *Osaka Mainichi*, has the oldest history in Japanese journalism; it was published in 1872 by a group of the most advanced men of the day, including the late Genichiro Fukuchi, one of Japan's famous writers. Count Miyoji Ito once controlled this paper as a Government organ. In 1904, the paper was transferred to the Iwasaki family, the nucleus of the Mitsubishi interests. The *Osaka Mainichi* has a large staff, its members numbering

2,124 and the *Tokyo Nichi Nichi* 3,454. Motoyama died in 1932 and was succeeded by Mr. Motosuké Kido, whose position was chairman of the directorate following reorganization of the system. But, he soon resigned the post and was succeeded by Dr. Minoru Oka. The paper, in addition to its regular editorial staff, has many editorial advisers, including Mr. Iichiro (Soho) Tokutomi as contributing editor, Mr. Yosaburo (Sansa) Takekoshi, men of literary fame, and several others.

Its Departments The editorial department of the *Osaka Mainichi* and *Tokyo Nichi Nichi* consists of the editorial bureau which attends to the general make-up of the paper and to which are attached a political section, reference section ("morgue"), and camera squad; the domestic news bureau; the foreign news bureau (exclusive of the Eastern Asia news bureau, specially devoting its efforts to covering news in China, Manchuria and Siberian Russia) the central transmission bureau, which is in charge of receiving news from all parts of the country and also exchanging news with the *Tokyo Nichi Nichi* and vice versa; the literary bureau which attends to the editing of daily feature page, the *Sunday Mainichi*, a popular weekly magazine, the *Mainichi* year book, and other special publications; the editorial section which is composed of the editorial writers; and the proof-reading bureau. All of these bureaux come under the direct control of the executive editor who is assisted by the editorial manager; the editorial director, meanwhile, controls the editorial writers of the *Osaka Mainichi* and the *Tokyo Nichi Nichi*. The business department consists of the sales (circulation) bureau, the advertisement bureau, the accounts bureau, and the printing bureau, all of which come under

control of the head of the business department. Like the Asahi Shimbun, the Osaka Mainichi Publishing Company maintains branch offices and stations and resident staff correspondents in all the principal cities of this country and abroad.

The Equipment It also has its exclusive long-distance telephone system between the Osaka Mainichi and Tokyo Nichi Nichi. A squad of specially trained stenographers at both ends send and receive news at the rate of 1,000 words per three minutes. The latest N.E. type telephoto apparatus, invented by Dr. Niwa, is used in sending not only photographs but facsimiles of official documents and important manuscripts between Tokyo and Osaka. The Osaka Mainichi typographical department has 11 Nippon Ultra-Lightning Presses, each one of which is capable of printing 150,000 4-page sections per hour; in addition, there are 12 high speed units, each one of which prints from 72,000 to 90,000 4-page sections an hour. The Nippon Ultra-Lightning Presses were built by R. Hoe & Company of America specially for the Mainichi. The Osaka Mainichi has a Lockheed Altaire plane, made by the Detroit Aircraft Corporation. The Osaka Mainichi plane develops a maximum speed of 227 miles an hour with a cruising range of 3,500 kilometres. The Tokyo Nichi Nichi has a Breda 33 High Speed Touring Airplane of Italian make.

Tickers and Accessory Business Two tickers are installed at the Osaka Mainichi. These instruments record the pulse of financial circles from time to time from the Osaka Stock Exchange. Each one of three units of the Albert rotogravure press (German made) can print 24,000 4-page sections per hour. These three combined can print a 48-page gravure magazine of half the standard newspaper size in one process.

They are also capable of doing multi-colour printing. One of the features of the Osaka Mainichi is that since 1922 it has been publishing the Braille Osaka Mainichi, a weekly paper. This is the only periodical for the blind issued in Japan. The Osaka Mainichi also publishes a large number of periodicals, including Japan, Today and Tomorrow, an annual magazine printed in English, the Mainichi Directory, an annual publication in Japanese, the Sunday Mainichi, the Economist, a bi-monthly economic magazine in Japanese and many others. The Osaka Mainichi Charity Corps, organized in 1911, deal with circuit hospital-work, relief of the poor, poverty prevention, support of various social welfare enterprises and emergency relief of sufferers.

News Agencies

The long contemplated merger of the Shimbun Rengo Tsushin Sha (later Domei Tsushin Sha) and the Nippon Dempo Tsushin Sha has been finally realized on June 1, 1936, the new agency assuming the name of the Domei Tsushin Sha. The Domei Tsushin Sha consists of over 200 Japanese daily newspapers as members and its directorate is organized by representatives of larger dailies and the Broadcasting Corporation of Japan. It maintains close relations with the Tass, A. P., U. P., Stefani, Reuter, D. N. B., and Havas, which have their branch offices in Japan in the Domei Building. Branch offices are located in Washington, New York, San Francisco, Los Angeles, London, Berlin, Paris, Moscow, Bangkok, Manila, Batavia, Singapore, Shanghai, Nanking, Hong Kong, and other important cities in China. The Nippon Dempo remains as a purely advertizing service agent after the merger.

Leading Newspapers and their Presidents

	Capitalization	Presidents or Representatives
Tokyo		
Tokyo Nichi Nichi Shimbun	Y10,000,000	Minoru Oka
Tokyo Asahi Shimbun	6,000,000	Seiichi Uyeno
Hochi Shimbun	1,100,000	Seiji Noma
Yomiuri Shimbun	Private	Matsutaro Shoriki
Chugai Shogyo Shimpō	2,000,000	Tokichi Tanaka
Jiji Shimpō	5,200,000	Sheichi Yamamoto
Miyako Shimbun	3,000,000	Eisuké Fukuda
Yamato Shimbun	Private	Fumio Iwata
Kokumin Shimbun	3,000,000	Moriji Shiki
Chuo Shimbun	400,000	Katsuzo Horikawa
Niroku Shimpō	—	Yonekichi Matsumoto
Yorodzu Choho	Private	Zenji Hasegawa
Tokyo Maiyu Shimbun	320,000	Masajiro Kimura
Tokyo Yukan Shimpō	Private	Tetsuya Nakajima
Japan Advertiser	150,000	B. W. Fleisher
Japan Times	500,000	Hitoshi Ashida
Osaka		
Osaka Asahi Shimbun	6,000,000	Seiichi Uyeno
Osaka Mainichi Shimbun	10,000,000	Minoru Oka
Osaka Jiji Shimpō	500,000	Nobuyoshi Shindo
Other Prefectures		
Fukushima Minyu Shimbun (Fukushima)	330,000	Kiyoshi Ujiie
Kahoku Shimpō (Miyagi)	Private	Jiro Ichiriki
Iwaté Nippo (Iwaté)	200,000	Seiro Goto
Akita Sakigaké Shimpō (Akita)	300,000	Wafu Ando
Niigata Shimbun (Niigata)	200,000	Sukesaku Yamada
Shinano Mainichi Shimbun (Nagano)	300,000	Takeo Kosaka
Shinaiichi (Aichi)	1,500,000	Ukichi Oshima
Nagoya Shimbun (Aichi)	1,050,000	Mataunosuke Yora
Shizuoka Minyu Shimbun (Shizuoka)	200,000	Mitaunosuke Oishi
Gifu Nichi Nichi Shimbun (Gifu)	Private	Katsumi Takahashi
Isé Shimbun (Mie)	300,000	Yoshiharu Matsumoto
Hokkoku Shimbun (Ishikawa)	150,000	Masataké Hayashi
Goshu Nichi Nichi Shimbun (Shiga)	200,000	Shichieemon Nakamura
Kyoto Hinodé Shimbun (Kyoto)	Private	Seinosuke Gokawa
Kyoto Nichi Nichi Shimbun (Kyoto)	Private	Fumio Yamané
Kobé Shimbun (Hyogo)	500,000	Nobuyoshi Shindo
Kobé Yushin Nippo (Hyogo)	500,000	Kazuo Nakai
Japan Chronicle (Hyogo)	Private	Douglas George Young
Chugoku Nichi Nichi Shimbun (Hyogo)	200,000	Takeo Segawa
Tokushima Nichi Nichi Shimpō (Tokushima)	150,000	Rintō Ichihara
Sanin Nichi Nichi Shimbun (Tottori)	250,000	Eijiro Miyoshi
Chugoku Minpo (Okayama)	300,000	Makoto Omori
Chugoku Shimbun (Hiroshima)	300,000	Saneichi Yamamoto
Kwammon Nichi Nichi Shimbun (Yamaguchi)	Private	Totanosuké Suemitsu
Fukuoka Nichi Nichi Shimbun (Fukuoka)	1,000,000	Shingo Nagae
Kyushu Nippo (Fukuoka)	600,000	Hisashi Morita
Nagasaki Shimbun (Nagasaki)	100,000	Choichi Kondo
Kyushu Shimbun (Kumamoto)	300,000	Daishiro Takagi
Kagoshima Shimbun (Kagoshima)	Private	Saneyoshi Kodama
Hokkai Times (Sapporo, Hokkaido)	300,000	Yoshio Abé
Otaru Shimbun (Otaru, Hokkaido)	400,000	Ikutaro Yagami
Hakodaté Mainichi Shimbun (Hakodaté, Hokkaido)	300,000	Kiyoshi Sato
Karafuto Jiji Shimbun (Maoka, Karafuto)	150,000	Mihaichi Kurioka
Taiwan Nichi Nichi Shimpō (Formosa)	1,000,000	Toru Kawamura
Keijo Nippo (Korea)	500,000	Akio Tokizané

Manshu Nippo (Dairen)
Manchuria Daily News (Dairen)
Hoten Mainichi Shimbun (Mukden)
Shengking Jihpao (Mukden)

Capitalization
750,000
Private
200,000
350,000

Presidents or
Representatives
Yoshimaro Murata
Yasutaro Takayanagi
Kinshi Matsumiya
Yasuzo Soméya

Advertisements

Advertisements form one of the largest sources of income of the newspaper business, along with the subscription fees. About ten large papers in Japan carry the majority of advertisements in the country; while other papers are doing a poor business in this field. For example, the Tokyo Nichi Nichi Shimbun secured altogether 527,000 lines of advertisements for April, 1932, and the Tokyo Asahi Shimbun acquired 422,000 lines of advertisements in addition to the "Want Ads." for the same month; but, in reality, their income from advertisements has been yearly decreasing, in spite of the fact that strenuous efforts are being made by leading papers for selling space. Eight large advertising service agents in Tokyo are supplying advertisements to daily newspapers on commission. These agents are the Nippon Dempo, Hakuhodo, Toyokuni Tsushin, Shojikisha, Kokokusha, Kobodo, Keikasha and Mannensha. "Want Ad." rates of the Tokyo Nichi Nichi and Tokyo Asahi are as follows:

3 Line Ad.	5 Line Ad.	10 Line Ad.
Once 3.50	Once 6.00	Once 12.00
3 times 3.30×3	3 times 5.50×3	3 times 11.00×3

For the want of job advertisement special rate of ¥2 for 3 lines is fixed.

Newspaper Organizations

The Japan Newspaper Association (Nippon Shimbun Kyokai) This consists of daily newspapers, news agencies and advertising agencies under Japanese management; it

Naikaku Kisha Kai
Kasumi Club
Yamashita Club

was founded in 1913. His Imperial Highness Prince Naruhiko Higashikuni has been honorary president of this association since 1926. Count Keigo Kiyoura, former Premier, is president and Mr. Hoshio Mitsunaga, president of Nippon Dempo, is director-in-chief. It has among its honorary members noted persons such as Mr. Ichiro Tokutomi, Mr. Yukio Ozaki, Mr. Seichi Uyeno, Dr. Yujiro Miyaké, Dr. Minoru Oka, Mr. Ukichi Oshima and Mr. Takeshi Azuma. The association membership includes almost all the Japanese daily newspapers. The Shunjukai is a social club of newspaper editors, magazine writers and correspondents. It was organized in 1908 and has among its members leading newspapermen and magazine writers of Tokyo. The Nijichinichikai is composed of high editorial staff members of daily newspapers. It was established in 1926. Its members are editorial directors, managers, news editors and other men of important positions in the editorial service of influential papers. The Shimbunkisha Club (Newspapermen's Association) consists of newspapermen and news agency reporters mostly connected with the business of the Imperial Diet. The Federation of Newspapermen and News Agency Reporters was organized in 1931. It consists of 46 newspapermen and news agency reporters' clubs which are connected with various governmental institutions and economic and financial bodies. Leading newspaper and news agency reporters' clubs are as follows:

Connected with the Cabinet
Foreign Office
Seiyukai

Sakurada Club
Shinto Kisha Kai
Rōdō Kisha Kai
Kunai Kisha Kai
Kokuchokai
Shinyu Club
Naisei Kenkyu Kai
Hitotsubashi Club
Zaisei Kenkyu kai
Kinyu Doshi Kai
Nosei Kisha Kai
Unemé Kai
Tokiwa Club
Kabuto Club
Tetsudo Issin Kai
Hosei Kenkyu Kai
Takumu Club
Tokyo Undo Kisha Club

Newspaper Courses in Universities
The Meiji University and Jochi University, Tokyo, opened their newspaper courses in April, 1932. The Newspaper School (Shimbun Gakuin), founded by Mr. Shinjiro Yamane, of the Kokumin Shimbun, sent out its first graduates numbering 40 in December, 1932. The Tokyo Imperial University Journalism Course, established as a section of the Department of Literature was opened in April, 1932. Mr. Hideo Ono is in charge of the course. Lecturers include noted newspapermen and magazine proprietors having many years' journalistic experience. The Newspaper Course of the Jochi University was opened in April, 1932.

A Historical Summary

The number of books published in Japan prior to 1881 is not accurately known. But judged from the records and catalogues of books now existing, they may be roughly taken as follows:

About 1,800 between the time of founding the country and one year before the time when the Shogunate

Minsaito
Kokumindomei
Proletarian Parties
Imperial Household Department
Navy Ministry
Army Ministry
Home Office
Ministry of Education
Ministry of Finance
Bank of Japan
Ministry of Agriculture and Forestry
Ministry of Commerce and Industry
Ministry of Communications
Stock Exchange
State Railways
Ministry of Justice
Ministry of Overseas Affairs
Modern Sports

Mr. Ono is in charge of this course also.

Students' Newspapers At the end of 1932 there were 51 so-called students' newspapers in Japan. These papers are published by universities and schools once a week or once or twice a month. The Teikoku Daigaku Shimbun, issued by the Tokyo Imperial University, is one of the largest of its kind and is issued every Monday. It is an eight-page paper, which was founded in 1920. The Kyoto Imperial University also issues a newspaper of the kind. The Mita Shimbun is issued by the Keio University and is one of the oldest and most influential of those published by private universities. It was founded in 1917.

Publications

Government was established at Kamakura.

About 5,000 since the establishment of the Shogunate Government at Kamakura until one year before the time when the Tokugawa Shogunate was established.

About 60,000 between the establishment of the Tokugawa Shogunate and the Meiji Restoration.

About 130,000 between the 1st and

the 10th year of Meiji, 33,819 between the 10th and the 13th year of Meiji, and 679,368 between 1881 and 1924. Statistics for latest years follow:

1925	18,028
1926	20,212
1927	19,967
1928	19,880
1929	21,111
1930	22,476
1931	23,110
1932	22,104
1933	24,025
1934	26,331
1935	30,847

Publications in 1935

The publications that were presented to the Home Department numbered more than 30,000. In classifying them according to different categories and comparing the number in each category with those in 1934 the following results are obtained: Publications on literature made a gain of 238 over 2,798 of 1934; those on education a decrease of 757 from 2,798 of the year before, text-books an increase of 460 over 1,809 of 1934; publications on domestic affairs an advance of 652 over 1934's 1,163; religious books a gain of 257 over the 1934's figure of 1,339; books on industry an increase of 322 over 1,166 of the year before, reflecting an expansion of heavy industries; those on economics a gain of 477 over 1,005 of 1934; music a great increase of 519 over 888 of the year before; philosophy a gain of 260 over 1934's 985; geography a gain of 205 over 1934's 986; politics an increase of 343 over 704 of 1934, most probably due to the vogue which the question of the clarification of the National Polity enjoyed; languages a decrease of 147 as against 1,114 of 1934; books on fine arts a gain of 60 over 907 of 1934; medicines a de-

crease of 18 from 832 of 1934; sociology an increase of 28 over 832 of 1934; books on engineering a gain of 80 over 724 of the year before; law an increase of 139 over 635 of 1934, due to be same cause as under books on politics; scientific books a gain of 212 over 448 of 1934; biography an increase of 52 over 532 of 1934; amusements a gain of 6 against 552 of 1934; history an increase of 60 over 470 of the year before; books on the military affairs a decrease of 24 from 407 of 1934; series a gain of 135 over 234 of 1934; mathematics an increase of 145 over 202 of the year before; statistics an increase of 26 over 130 of the year before; books on Shintoism a gain of 3 over that of 1934; books on transportation a decrease of 6 from 151 of the 1934; books on handicrafts an increase of 78 over 67 of 1934; books on travel a gain of 33 over 77 of 1934; dictionaries a decrease of 32 from 134 of the year before; and books on miscellaneous subjects an increase of 182 over 2,415 of 1934. As the result the total number of publications during 1935 showed an increase of 4,016 over the figure of 26,331 books published in 1934.

In short the number of publications has been on the increase every year. But it is speaking only quantitatively. In the past few years books which much resemble pamphlets have greatly increased. Of course it cannot be said that all pamphlets are made up of poor stuff, but it can be safely stated that qualitatively speaking the publication circle is not showing much improvement recently.

Classification The total number of the publications in 1935 was 3,0347, including books, pamphlets, leaflets, handbills, maps, drawings, musical notes, photographs, and toys. These publications are classified as follows:

Kinds	No.	Government publications	Kinds	No.	Government publications
Shintoism	220	—	Statistics	256	20
Religion	1,596	—	Mathematics	347	—
Philosophy	1,245	—	Science	660	78
Education	2,041	—	Medicine	827	1
Text-books	2,269	—	Engineering	804	73
Literature	2,660	4	Industry	1,488	80
Languages	967	—	Transportation	145	1
Dictionaries	102	—	Military affairs	333	2
History	530	—	Fine arts	915	—
Biographies	584	—	Music	1,407	—
Geography	1,191	38	Amusements	558	—
Travel	110	—	Handicrafts	1,815	—
Law	774	—	Series	369	—
Politics	1,047	482	Miscellaneous	2,606	36
Economics	1,482	36	Total	30,347	852
Sociology	804	1			

MEMBER OF THE BOOK SELLERS' ASSOCIATIONS OF THE COUNTRY

Name of Association	At the end of Sept., 1935	At the end of Feb., 1936
Tokyo Book Sellers' Association	3,321	3,268
Hachioji Book and Magazine Sellers' Association	107	107
Kyoto Book and Magazine Sellers' Association	623	623
Osaka Book and Magazine Sellers' Association	1,160	1,165
Book and Magazine Sellers' Association of Kanagawa	350	350
" " " Hyogo	516	517
" " " Nagasaki	182	181
" " " Niigata	359	361
" " " Saitama	156	156
" " " Gumma	136	134
" " " Chiba	299	300
" " " Ibaraki	177	179
" " " Tochigi	164	164
" " " Nara	84	84
" " " Miye	92	82
" " " Aichi	284	284
Nagoya Book and Magazine Sellers' Association	301	301
Book and Magazine Sellers' Association of Shizuoka	360	361
" " " Yamanashi	70	79
" " " Shiga	106	106
" " " Gifu	260	269
Shinano Book and Magazine Sellers' Association	210	213
Book and Magazine Sellers' Association of Miyagi	153	154
" " " Fukushima	145	139
" " " Iwate	152	155
" " " Aomori	126	126
" " " Yamagata	134	134
" " " Akita	133	134
" " " Fukui	113	113
" " " Ishikawa	211	213
" " " Toyama	181	181
" " " Tottori	114	114
" " " Shimane	149	151
" " " Okayama	191	191
" " " Hiroshima	335	335
" " " Kagawa	211	290
" " " Wakayama	175	175
Book Sellers' Association of Tokushima	94	94

Name of Associations	At the end of Sept., 1935	At the end of Feb., 1936
Book and Magazine Sellers' Association of Ehime	83	83
Sales Association of Books and Magazines of Kagawa	112	104
Book and Magazine Sellers' Association of Kochi	96	84
" " " Fukuoka	464	464
" " " Oita	166	166
" " " Saga	108	109
Book and Magazine Sellers' Association of Kumamoto	267	268
" " " Miyazuki	70	70
" " " Kagoshima	200	100
" " " Hokkaido	834	835
" " " Okinawa	21	21
Taiwan Book Sellers' Association	78	78
Chosen Book Sellers' Association	334	342
Manchurian Book and Magazine Sellers' Association	142	143
Karafuto Book and Magazine Sellers' Association	79	81
Total	14,974	14,947

Imports and Exports During the Meiji and Taisho eras the imports of publications far exceeded the exports. The balance, however, gradually decreased because of a steady increase in exports. In 1935 the total value of imports amounted to ¥2,066,000 against ¥2,255,000 of exports. The destinations of the exports were mainly the countries

where the Japanese are residing in great numbers, such as the Kwantung Province, Manchoukuo, the U. S. A., the Hawaii Islands and China. The countries from which books are exported to this country are, in the order of importance, England, Germany, the U. S. A. and France. Details follow:

EXPORTS AND IMPORTS OF BOOKS AND PERIODICALS (in Yen)

	Exports		Imports	
	1933	1934	1933	1934
Manchoukuo	263,628	412,755	9,488	9,456
Kwantung Province	341,573	577,903	3,908	6,378
China	159,227	210,559	6,964	21,807
Hong-Kong	3,350	8,958	250	—
British India	1,898	3,316	162	901
Straits Settlements	40,572	48,538	465	649
British Borneo	1,103	1,500	—	—
Dutch East Indies	2,245	8,243	481	383
French Indo-China	272	66	7	—
Asiatic Russia	1,138	806	136	40
Philippine Islands	28,285	26,277	5	—
Siam	342	170	2	185
Great Britain	12,094	15,550	547,950	818,827
France	3,807	10,901	101,347	139,540
Germany	11,547	44,643	563,203	790,878
Belgium	3,220	214	1,272	1,954
U.S.A.	270,250	293,112	266,274	446,789
Canada	20,772	23,811	6,511	3,470
Peru	4,778	2,968	—	—
Brazil	24,163	40,969	826	—
Australia	703	5,887	—	—
Hawaii	179,179	173,616	—	—
Others and Total	1,383,137	1,921,996	1,531,506	2,266,436

Public Libraries Public libraries both official and private are to be found in all parts of Japan. During 1933 there were 4,686 public libraries throughout Japan.

The largest public library in Japan is the Imperial Library situated in Uyeno Park, Tokyo. Here large reading rooms allow visitors by the thousand to be seated comfortably. There are a countless number of old and new books stored for public perusal. A feature of this library is the large number of books from foreign countries which the institution possesses for its visitors. Books may also be taken outside, but this privilege is enjoyed only by yearly subscribers. The Tokyo Imperial University Library, rebuilt following the earthquake and fire of 1923, is another large library in Japan.

The following table gives detailed figures regarding the number of public libraries, both official and private, and the number of visitors, and the number of books collected:

Table Showing No. of Libraries, Visitors and Collection of Books

Year	No. of libraries	No. of collection of books	No. of visitors
1929	4,400	8,592,000	22,847,000
1930	4,553	9,276,000	22,835,000
1931	4,609	9,636,000	23,355,000
1932	4,609	10,138,000	24,980,000
1933	4,686	10,563,000	24,766,000
1934	4,881	10,903,394	26,383,674

Magazines

Historical One of the oldest magazines in Japan was the "Mei-roku-zasshi" which was published in 1873. But this magazine was full of heavy material only suitable for scholars. It was four years later that a number of magazines to cater to popular interest came into existence. The magazine named "Marumaru-chim-bun", for instance, was one of these and was full of sarcastic verses, popular lyrics and also of many

laughter-provoking cartoons. Short stories were also favourable reading matters in it. For novels principally appeared the "Hodan-zasshi". For pleasure-reading the "Robun-chimpo." There also appeared a magazine named "Tokyo-shinshi" written chiefly in Chinese, but decidedly erotic. There were also such ones as the "Homei-shinshi," "Moon and Snapping Turtle" and "Kwagetsu-shinshi," and "Shimbun-shi."

The "Homei-shinshi" was a more or less imitation of the "Tokyo-shinshi." The "Tsuki-to-Suppon" (Moon and Snapping Turtle) was largely a cartoon paper. The "Kwagetsu-shinshi" (Flower and Moon Magazine) was a pure literary paper under the editorship of Ryuho Nari-shima and lasted about five years from 1879. The "Shimbunshi" (New Proses and Verses) was under the editorship of Shunto Mori. Political magazines also were not slow to arise. The "Ohmei-shinshi" was a private organ of democratic politicians such as Saburo Shimada, Ikuzo Ohoka and Ryo Koyezuka and was full of fervent articles of democratic principles. The "Fuso-shinshi" was also another of this type of magazines, and there were many others of this sort of papers. No one, however, lasted long, because they all evoked official ban soon. Among these political magazines there was one "Dekinei-sodan" which is remembered by the imprisonment of Eitaro Komatsubara, later Education Minister, on account of his anti-Government articles. It was not, however, Mr. Komatsubara alone who was sent to jail on account of one's political view outspoken in letters. Many were imprisoned on account of similar offences. Ryuhoku Nari-shima of the "Kwagetsu-shinshi" was once forced to spend months in jail. As the day of the first opening

of Parliament drew nearer, the number of political magazines increased. In 1886 the "Chuo Koron" (Central Review) was first published. The year 1887 was an epoch-making in the history of magazines in Japan as it was in February of that year that Mr. Ichihiro (Soho) Tokutomi started a publishing society named "Minyu-sha" with the "Kokumin-no-tomo" as its organ which surpassed all other periodicals of the day in the amount of circulation. A few months later the Kokumin Shimbun, a daily paper, was published by the same society headed by Soho Tokutomi. In June the Hakubun-kwan was brought into existence which soon published the "Nippon Taika Ronshu" (Essays by Great Scholars). This resulted in a big success. The "Jogaku-zasshi" (Ladies' Magazine) of Zenji Iwamoto, the "Kyoiku-hochi" (Educational News) of San-nosuké Kusakabé and the "Tetsu-gaku-kwai Zasshi" (Philosophical association magazine) of Yenryo Inouyé, were published almost simultaneously. The circulation of the aforesaid "Nippon Taika Ronshu" was indeed an epoch-making in the sales of all published matters in those days. In 1889 the Hakubun-kwan published the "Nippon no Shonen" (Children of Japan) which surpassed the "Nippon Taika Ronshu" in the amount of circulation. Even that, however, counted only ten thousand, a fact quite uncomparable to the modern colossal number of successful publishing matters. The business condition of the Hakubun-kwan went on successfully and in January, 1895, they published the "Taiyo" (Sun) which soon secured 50,000 readers. In 1904 another hit was made by the issue of the "Nichi-Ro Senso Shashin Gaho" (graphic news of the Russo-Japanese War) which was published alongside the "Nichi Ro Senso Jikki" (true stories

of the Russo-Japanese War), with 150,000 copies published. Some months later such magazines as the "Jitsugyo no Nippon" (Japan of Business), "Fujin-sekai" (World of Women), "Nippon Shonen" (Youths of Japan) etc. were published by Mr. Giichi Masuda which caused a great sensation among the magazine people. Another noted publisher of those days was a certain Mr. Shimada who published a number of periodicals for youths and children and also for arts to an equally big surprise to other publishers. It is of interest to note that both Mr. Masuda and Mr. Shimada as well as Mr. Ohashi of the Hakubun-kwan were men from Niigata prefecture. In 1919 the "Kaizo" was published and became a good rival of the "Chuo Koron" which had attained leading position in the magazine world of Japan by this time. Years later came another big magazine man and he was Mr. Seiji Noma, now president of the Dai Nippon Yuben-kai (Eloquency Society of Great Nippon) and also president of the Hochi, one of the leading dailies in Tokyo. His first periodical enterprise was the "Yuben" (Eloquency) which was followed by the "Kodan" (Heroic Story) "Club" "King", "Fujin (Women) Club" and "Gendai" (Present Day). It is a matter of surprise, indeed, that the circulation of the "King" numbers one million copies monthly. In the meantime, the "Taiyo" of the Hakubun-kwan which lasted 36 years disappeared from the magazine world. Soon a rival of the "King" in the bigness of circulation appeared and that was the "Shufu-no Tomo" (Friend of Household Wives) by Mr. Takeyoshi Ishikawa.

Present State At present these two, the "King" and the "Shufu no Tomo", are the two rival million

scale periodicals in Japan, and following them are the "Hino-dé" (Sun-rising) of the Shincho-sha, "Kaizo" (Reconstruction) of the Kaizo-sha, "Chuo-koron" (Central Review) of the Chuo-koron-sha, "Bungei-shunju" (Literary Review) of the Bungei-shunju-sha, etc. all of which are for popular interest or for women.

Hardly a month passes without seeing seven or eight new magazines. Of course, this increase is counteracted by those which are discontinued. After all, however, whilst there is continuously a great number of magazines that disappear, there are constant recruits.

Serious Periodicals Those patronized by intelligentsia are the "Chuo Koron", the "Kaizo", the "Gaiko Jiho", and others. The last mentioned one is specialized in foreign affairs, but the first mentioned two have a wide sphere of current topics treated in them. Politics, social affairs, economic depression, education, religion and other matters are substantially printed. These magazines have readers of many years' standing. The "Bungei Shunju" prints mostly literary articles in its regular issues and fictions and novels in its special issues. The Nihon Gaiji Kyokai, otherwise known as the Foreign Affairs' Association of Japan, which was founded in 1931, publishes a monthly titled the "Kokusai Hyoron" (International Review), which characterizes in printing articles regarding events of international and domestic affairs of a serious nature. The association also issues an English-language quarterly, "Contemporary Japan", which is the only English-language magazine in Japan treating politics, foreign affairs, economy, finance and social problems of this country. These Gaiji Kyokai periodicals are read by people of enlightened class

and rank among magazines of the most advanced status in this country.

Economic and Woman's Journals Students of economy and finance in Japan and close observers of industrial situation of Japan take interest in reading the "Diamond", the "Economist" and the "Toyo Keizai", all claiming a high reputation for many years as economic periodicals. The first-mentioned especially is read by investors in securities. Magazines standing for nationalism are read widely along with a general tendency, of which nationalism is gaining momentum, while those of communist taint are neglected. However, magazines for State socialism are not at all to be despised by reading public. As women's magazines, the "Fujin Koron", the "Fujin Club", the "Shufu-no Tomo", etc., are read widely among young women.

LIST OF PRINCIPAL PERIODICALS

Politics and literature:

- Chuo Koron (Central Review)
- Kaizo (Reconstruction)

Politics and law

- Kokusai Hyoron (International Review)
- Sekai Chishiki (World Knowledge)
- Shakaisaku Jiho (Social Policy Review)
- Kokusai Chishiki (International Knowledge)

- * Gaiko Jiho (Diplomatic Review)
- Hogaku Shimpo (Science of Law)

Finance and Economic Magazines:

- Toyo Keizai Shimpo (Oriental Economic Review)
- Economist
- Diamond
- Nippon Hyoron (Japanese Review)
- Keizai Chishiki (Economic Knowledge)
- Keizai (Economy)

Popular Magazines:

- King
- Hindé (Rising Sun)
- Kodan Kurabu (Kodan Story Magazine)
- Gendai (Present Generation)
- All Yomimono (all Stories)
- Hanashi (Story)
- Shinseinen (New Young Generation)

Literary Magazines:

Bungei Shunju (Literary Review)
 Bungei (Literary arts)
 Bungaku (Literature)
 Bungaku Hyoron (Literary Review)
 Shincho (New Tide)
 Araragi, a waka magazine
 Hototogisu, a haiku magazine
 Butai (Stage)

Woman's Magazines:

Fujin Koron (Woman's Review)
 Fujin Kurabu (Woman's Club)
 Shufu-no Tomo (Friend of Ladies)
 Fujin-no Tomo (Woman's Friend)

Statistics of Newspapers and Magazines

The statistics of the publication of newspapers and magazines since 1875 is appended for convenience.

The figures are those of newspapers and magazines published in accordance with the newspaper law.

Year	Total	(No. of Newspapers)
1875	53	—
1885	321	—
1895	753	—
1905	1,775	—
1915	2,851	—
1925	6,899	—
1926	7,600	(5,089)
1927	8,350	(5,438)
1928	8,445	(5,482)
1929	9,191	(5,917)
1930	10,130	(5,995)
1931	10,666	(6,290)
1932	11,118	(6,301)
1933	11,860	(6,678)
1934	12,166	(7,081)
1935	13,267	—

CHAPTER XXXV

LITERATURE, ARTS AND MUSIC

Literature

History

Yamato Period The history of Japanese literature may be divided, in accordance with the political development of the country, into 6 periods: the Yamato, Heian, Kamakura, Muromachi, Yedo and Tokyo periods. The Yamato period comprises the Kodai (archaic period) and the Nara age that followed. The term, Yamato, is derived from the district of Yamato wherein was the seat of the Imperial capital throughout that age. This nascent age of Japanese literature ended in 781 A. D., with the removal of the Imperial capital to Kyoto, then called Heian, by the Emperor Kammu. It may seem improper to include so long a period under one section, but this early stage of Japanese literary growth can thus conveniently be considered as one concrete age, and be studied as such.

(1) **Literary works.** The literary works which reveal the mind of the Yamato period and which are still extant, are: the Kojiki, Nihonshoki, Fudoki, Norito, Senmyo, Manyoshu, Kaifuso, and Nihonraiki.

The principal writers are: Ohno-Yasumaro, Toneri-shinno, Yamabé-no-Akahito, Kakinomoto-no-Hitomaro, Yamanoeno-Okura, Otomono-Yakamochi, Ohmino-Mifuné, besides certain sages of the prehistoric age. The last mentioned, Ohmino-Mifuné, was proficient in Chinese classics and poetry.

(2) **Development and classification.** Narrative prose and lyric verse assumed concrete form in this period. From a literary point of view the writings of the period can be divided into two sections: works in descriptive style, of which the Kojiki is the main representative; and poetry that followed, with the Manyoshu¹ anthology as the typical poetic composition.

Individual self-consciousness realized meagre general development; instead, a collective sense controlled society. But ample evidence of a pure national spirit is seen. In the latter part of this period alien ideas were introduced from China and India, but could not find their way deeply into the minds of the people. It is not to be wondered at, therefore, that the literary achievements

¹ Manyoshu (or Manyoshu). The anthology is considered to be one of the greatest poetical attainments of the nation not only in this period, but all through the history of Japanese literature. Its compiler is unknown. The period in which the poets of the book lived covers 450 years from 318 to 764 A. D., and the range of the social standard of the poets extends to all classes from the Emperor down to the farmer or the hermit. The book contains 4,495 poems, which consist of 262 long poems, 4,172 waka and 62 others. Their themes are taken from human relations, love, lamentation, the four seasons, and natural scenery. They are written in the Yamato dialect with Chinese characters. The eminent anthologists in it are Kakinomoto-no-Hitomaro of the epic long poems; Yamanoeno-okura of the long lyrics who took his themes from social and economic problems of his day; Yamabeno-aka-hito, the only poet on nature among the group; Otomono-yakamochi who is believed to be the compiler of the book himself by many critics, and Nukatano-ohogimi and Sakanoé-iratsumé, who distinctly tower above many poetesses who left beautiful love songs with the anthology to their posterity.

of this awakening period are instinct with the noble national spirit of loyalty and ancestor-worship, permeated with the national traits of optimism, frankness, and genuine simplicity.

Heian Period The Heian period starts from the year in which the Emperor Kammu removed the Imperial palace to Kyoto, then called Heian, and ends in 1186 when the Shogunate government was established by Yoritomo Minamoto at Kamakura. This second literary period, covering nearly 400 years, following the period of dawn, saw Japanese prose and poetry reach full bloom.

Generally speaking, the literature of the period emerged from a style of clear-cut simplicity to one of elegance and delicacy, all literary productions assuming a mood of refined sentiment. In presentment likewise there appeared the graceful kana syllabary, in keeping with current ideas. This harmonization of content and form in the literature of the Heian period set an example to succeeding generations. The Heian period is thus the golden age of Japanese literary achievement. The period may further be subdivided into the following four sections:

- Early Heian period (781-884)
- Middle Heian period (885-980)
- Mature Heian period (981-1064)
- Last Heian period (1065-1182)

(1) Early Heian Period. During this period, imported Chinese culture exercised no small influence on the literary circles of the country, resulting in the popularity of Chinese classics and poetry. Among poetical works are the Ryoumshu, Bunkashureishu, Keikokushu, while among authors were the Emperor Saga, Kukai, Onono-Takamura, Miyakono-Yoshika, Oyeno-Otomo, Sugawarano-Koreyoshi, Tachibanano-Hirosuké, Sugawarano-Michizané, Fujiwara-

no-Sukeyo and Miyoshi-Kiyoyuki. With the overwhelming influence wielded by these imitators in the domain of newly imported Chinese literature, the Japanese waka (31-syllabled poem) was threatened at one time with relegation to obscurity. But the situation was saved through realization of a proposal from Sugawarano-Michizané to discontinue the customary visits of Government envoys to China. In consequence, Chinese literature gradually lost its former influence, and the eminent position once occupied by this alien form of belles-lettres was taken by Japanese poetry. The forerunner of the revived waka verse was the Rokkasen, a collaboration of six representative poets, namely, Ariwarano-Narihira, Onono-Komachi, Bunyano-Yasuhidé, Kisen-hoshi and Otomono-Kuronushi. A further literary achievement of the period is the appearance of works in the Japanese kana syllabary, such as the Taketori-monogatari and the Isé-monogatari.

(2) Middle Heian period. This is the age of national consciousness when the waka poetry triumphed over Chinese forms, pushing itself forward like tidal waves. In poetry works like the Kokin-wakashu and Gosen-wakashu are prominent, while in fiction such works as the Utsubo and Ochikubo and Tosa-nikki, in Japanese kana syllabary, are representative products.

(3) Mature Heian period. This is the period in which the literary development of the Heian era attained the highest perfection, creating a golden age of prose. In the field of waka we have such poets as Izumi-shikibu, Akazome-Emon, Fujiwarano-Kinto, Fujiwara-Sane-kata and Noin-hoshi, while in the realm of prose there appeared woman novelists, like Murasaki-shikibu and Seisho-nagon, the former being

the authoress of the Genji-monogatari,¹ while the latter composed the Makurano-soshi, opening up a literary régime of women, as if flowers of innumerable variety and colouring blossomed all at one time.

(4) Last Heian period. A general survey of the period gives the impression of its being politically transitional from Imperial rule to Shogunate administration. Along with the decline of the Fujiwara family in power, literature also hastened towards decline. And in consequence, towards the early part of the period the literary cult turned from novels to historical works, producing the Eiga-monogatari and Okagami. In the realm of poetry also a new tendency was apparent, which gave birth to such noted poets as Toshinari Fujiwara and Saigyohoshi; and at the same time a scientific criticism of poetry was initiated and prevailed under students like Mototoshi Fujiwara, Toshiyori Minamoto, and Kiyosuké Fujiwara.

(5) General development. The most characteristic feature of the period lies in the movement from impromptu and lyrical poetry to stories and narration which require plots and objectification of things. The instinctive or primitive sentiment of the Manyoshu precedes the more intellectual Kokinshu; and the Shikashu that followed is pervaded by more meditative and philosophical reflections. With reference to prose, the myths and legends

appearing in the Manyoshu and Kiki (short for Kojiki and Nihon-shoki) underwent mutation and took the form of narrative tales in the Taketori-monogatari and the Isé-monogatari. This realistic tendency was further augmented by the Utsubo-monogatari, and later produced the famous Genji-monogatari, turning its direction thenceforward toward historical compositions, such as the Eiga-monogatari and the Okagami. To enhance this realistic tendency of the time legends and fairy tales mingling with current realism regained their former influence, producing the Konjaku-monogatari, a fairy tale dealing with supernatural and supersensuous things. Furthermore, amid this abundance of literary composition there are others with characteristic features common to meditative, lyrical literature, namely the Tosa-nikki, Murasaki-shikibu-nikki, Makurano-soshi, Izumi-shikibu-nikki, Tombo-nikki, Tonominé-shosho-monogatari and Sarashina-nikki.

Kamakura Period The period of about 150 years, beginning with the Minamoto-Yoritomo Shogunate government at Kamakura in 1182 and ending in the Kemmu era of 1334, is called the Kamakura period, in the history of our literature. For the first 50 years literature was under the influence of the preceding Heian period; but the one hundred years that followed saw two literary currents sweeping against each other, one at Kyoto, the cultural centre,

¹ Genji-monogatari The author Murasaki-shikibu (975-1025) was born a daughter of Tametoki Fujiwara, a family of the illustrious Fujiwara clan, and served at Court for some years as lady-in-waiting to the Empress Akiko. She is known as Lady Murasaki, but her personal name is not known. It is a large book (nearly 1,000 pages in Arthur Waley's English translation), written in a pure old Japanese, extremely refined and pregnant, with Japanese character, or kana, sentences, and literary critics agree in the opinion that it belongs to the greatest masterpieces of the world novels.

Genji-monogatari means the Tale of Genji, mainly a love story between the hero Genji and several heroines. It is also a most vivid picture of a civilization, nine hundred years ago, probably as refined, though in the central city only, and certainly as colourful, as the world has ever known. The most striking thing about the book is how modern, how universal is its feeling. It reflects the Oriental characteristics in every line and still shows human nature very much the same as the Occidental.

and the other at Kamakura, the pivot of political authority. Although, during the period, there was no literary movement worthy of special mention, yet it created its own literary atmosphere which resulted in the production of numerous so-called war-tales and religious literature.

(1) Kamakura literature. The fact that the emotional and sentimental tendency of earlier ages gradually turned to philosophical meditation during this period explains why the works of the time are generally void of individual touch while being true to type. Buddhist pessimism then dominated social thought. The popularization of the Buddhist religion in this period was the result of the natural growth of that religion on the one hand, and of the reaction of public sentiment against the ceaseless civil wars, on the other.

(2) Representative works. War literature, like the Hogen-monogatari, Heiji-monogatari, Heiké-monogatari and the Gempei-seisuiiki, is the most outstanding production of the age. Just as in the preceding period, when literary material was gathered from historical facts, so in the Kamakura period subjects were sought for from the social conditions obtaining when bloodshed, side by side with the simple, arduous life of the samurai, completely saddened and subdued public sentiment. With reference to waka, inspired by the advent of well-known poetical works like the Shin-chokusenshu, were born the Zoku-gojuishu and Kinkai-shu. The Shin-kokinshu, another anthology of poetry, shows the highest point that Japanese poetry had so far reached. The Kinkaishu suggests a return to the Manyōshū, while the Shin-chokusenshu gives an impression of having reached the acme of poetical refinement, retrac-

ing its way back to the beauty of simplicity. It is a pity, however, that rival influences between groups of literary men and critics in study of literary theory left the healthy development of literature very much handicapped. Ranking as principal poets of the period were Gotoba-jōko, Tsuchimikado-jōko, Juntoku-jōko, Yoshitsuné, Sadaie, Iyetaka, Jakuran and Sanetomo.

Muromachi Period The Muromachi period is the term applied to the 270 years sandwiched in between the Kamakura and Tokugawa periods, beginning in 1335 when Takauji Ashikaga rebelled against the Emperor Godaigo and terminating in 1603 when Iyeyasu Tokugawa removed the Shogunate government to Yedo.

(1) Muromachi literature. In consequence of civil disturbance in the preceding age, the literary movement of the period was rather stagnant; the Court nobles were deprived of their positions, while the militarists, taking advantage of the disorderly administration of the central government, exercised an unfavourable influence on the natural development of literary talent generally. Nevertheless, even in such helpless social conditions, the period had the literature peculiar to such an age. Despite the troublesome yoke of historical events, there emerged a certain free and simple literary style; hence, instead of the waka, tales, and diaries, that flourished down to the close of the last period, such descriptions of war and historical tales as the Masukagami, Jinnoshotoki, Taiheiki, Yoshitsuneki and Soga-monogatari were born, besides rambling notes like the Tsurezuregusa, with their own characteristic attractions.

(2) New Forms of Literature. It is worthy of special mention that in this chaotic period originated such new literary forms as the renka,

yokyoku (utai), kyogen and otogisoshi, which saw full development in the following period. Tanka (or waka) verse developed and gave birth to a more diminutive mode, the haikai (or haiku); kyogen evolved into joruri and drama; while otogisoshi reappeared in the form of novels and plays, all in the period that followed. Herein we notice the beginnings of modern thought, the product of classicism evolving into modernism, and aristocracy into plebeianism. The Muromachi period thus occupies an important position in our literary history, functioning as a bridge that connects the preceding periods with the more illustrious Yedo literature. Another thing worthy of note in this connection is the creation at this time of the Kanazawa Bunko, the Ashikagagakko and the Gozan-bungaku, the first two being seats of learning and the last a branch of literature.

Yedo Period The Yedo period begins in 1603 when the Tokugawa Shogunate took up the task of civil government in Yedo, and ends, after 265 years, in 1868, when the Meiji Restoration was accomplished. This forms the most important section in the history of Japanese literature. The Yedo literature succeeded the decadent Muromachi literature and handed on its wealth of achievement to the Meiji period. The remarkable fecundity of this era is to be attributed to various factors, but to none more fundamental than the good government of Iyeyasu Tokugawa, the first Shogun of that line. Realizing the importance of the diffusion of learning for good government, he engaged Confucian scholars, published books, started schools and collected rare literary works. The example thus set by the first Shogun was emulated by succeeding Shoguns, each striving to open up the way for easier access to knowl-

edge and culture both in town and country, until in the Genroku era under the rule of the fourth Shogun, Tsunayoshi, national culture reached its highest stage of development. The Yedo period may be divided into the following four sections:

Centered around Osaka and Kyoto,

1. Period of enlightenment (1603-1680)
2. Period of development (1681-1741)

Yedo as the centre,

3. The period of eastward advance of literature (1741-1791)
4. Period of maturity (1791-1868)

(1) Period of Enlightenment. True to its name, this period, following the establishment of the Tokugawa Shogunate in Yedo, saw the collection and publication of ancient books, and annotations thereof, as well as translations of Chinese literature. It is but natural that during this period nothing worthy of note was produced save as foundation work in preparation for what was to come. From another viewpoint this is the age when our traditionally mystic view of art, and our undue belief in tradition, greatly wanes in influence.

(2) Period of Development. A bird's-eye view of the period gives the impression of a rapid development in popular literature, with Osaka and Kyoto as the centre and the Genroku era as its climax. The origin of this literary movement is traceable to the Mitogaku, which later led to a renaissance of the classics; we see a revival of haikai verse under Basho, the poet; and then the appearance of Chikamatsu's joruri. Each made unfettered development within its own sphere of influence. Towards the close of the period, however, these branches of literature lost popularity, until eventually they could scarcely enjoy public recollection.

(3) Eastward Advance of Literature. This is the period when the so-called Kamigata literature of Kyoto and Osaka, began its movement eastward to establish a new literary movement in the city of Yedo, the seat of the Shogun's government. By this time the popular literature founded by Chikamatsu and Saikaku had declined. Buson became the representative haikai poet of the time. Besides haikai, there came into vogue in Yedo various kinds of short poetry, namely, senryu, witty epigrammatic verse; kyoka, comic verse; and kyobun, nonsense notes. Also in this period the so-called literature for men of the world cropped up, following the publication of the kibyoshi and sharébon.

(4) Period of Maturity. It was in this period that the construction of the main body of Yedo literature was completed. As a result of the encouragement of learning by the Shogun's highest official, Sadanobu Matsudaira, both art and learning made a remarkable advance, producing a number of artists, and authorities on Japanese and Chinese classics. Parallel with this phenomenal development of classics, popular literature resumed its firm grip on the public. Inasmuch, however, as during the latter half of the period the country was completely upset by troubles both from within and without, most of the literary progress was confined to the early part of the period. Nevertheless, this is known as the period when Yedo literature was crowned with full maturity.

What most characterize Yedo literature are its fecundity in kinds, volume of production and sphere of influence. Not only was it prolific but, all branches of art and learning, from the aristocratic classics down to kyoka, senryu, haikai, joruri (gi-

dayu) and popular novels, showed systematic advancement. The social structure in those days could not but react on the taste and sentiment of the people, as is evidenced by the two different literary currents that prevailed throughout the period. Whereas the so-called aristocratic literature, which dominated those days, stood on a foundation of Bushido and Confucianism, the popular literature strove to create the epicurean's world. Each of these tendencies went on cultivating its own field of influence in its own respective class, yet what most aptly represents the characteristic features of Yedo literature is the stronger public appeal of popular literary works. These intellectual diversions of the common people, unlike the traditional, conservative and retrogressive taste of classical literature, are optimistic, and charged with the spirit of uplift and mirth. But the negative policy of the Tokugawa government proved an impeding factor in the healthful growth of popular literature, resulting in a gradual loss of individuality. In this way authorship gradually kept aloof from essential requirements of progressive art; the most glaring example of this deplorable tendency is clearly noticeable in Bakin's works.

Tokyo Period The Tokyo period of Japanese literature begins with the Meiji Restoration of 1868 and still happily continues in our present Showa era. In this short period of sixty-five years the volume of national literature surpasses any other period in Japanese history. The same can be said of its quality.

(1) A general survey of the literary movements of this period reveals the enormous influence exercised by Western literature; all works have thus been enriched in quality and enabled to rank among the most advanced literatures of the

West. The present period can conveniently be subdivided into four sections in the following way, chronological figures being given for form's sake:

1. Period of transition (1868-1886)
2. Period of new literary movement (1887-1901)
3. Period of naturalism (1902-1910)
4. Period of neo-romanticism (1911-)

(1) Period of Transition. During this time the new and old forms and types of literature maintained coexistence, beginning with the earliest years of the Meiji era and terminating about the 12th year, when the *Shosetsu-shinzui* by Shoyo Tsubouchi was published. In the early part of the period, still under the influence of the reserve energy of the preceding Yedo period, the novels of Kanagaki-Robun, the plays of Kawataké-Mokuami, the Soshō style haiku all made their influence felt; but the tendency to inertia could not cope with the destructive invasion of European thought and principles; namely, the utilitarianism of Britain and America, the universal love and altruism of Christianity, French liberalism and German nationalism. To be more concrete, in the realm of fiction there appeared, through the influence of such English writers as Lytton and Scott, the *Keikoku-bidan* by Ryukei Yano, the *Kajinno-kigu* by Shiba-Tokaisanshi, *Setchubai* by Tetchō Suehiro, *Ryokusuidan* by Suto Nansui, and *Bunmei-tozenshi* by Meikaku Fujita, which were brought out one after another. All these are political novels. Following these came the *Shosetsu-shinzui* and *Tosei-shoseikatagi*, written by Shoyo Tsubouchi, sign-posts pointing to the new-born movement in national literature. Coincident to the rise of

the new literary movement appeared a new form of poetry with the publication of the *Shintaishisho*. Mingled with these new renaissance phenomena the cultural and literary aesthetics of France and Britain were being introduced through translations.

(2) New Literary Movement. The most outstanding characteristic of the literature of this period is that it completely relinquished Yedo influence and established its own assimilation of the romantic thought then sweeping over Europe and America. Realism, especially psychological delineation, came to be demonstrated by novelists like Shoyo Tsubouchi and Futabatei Hasegawa. They were soon followed by Koyo Osaki, Rohan Koda, Bizan Kawakami, Kyoka Izumi, Ryuro Hirotsu, Chugai Goto, and Ichiyo Higuchi, a woman novelist. These fiction writers dealt with either idealistic, pungent or psychological materials. Especially noteworthy for phenomenal activity in poetry were Toson Shimasaki and Bansui Tsuchii, composers of long poems; and Tekkan Yosano, Saishu Onoé and Kun-en Kaneko in the sphere of tanka verse. Furthermore, there was the Negishi school initiated by Shiki Masaoka, and the Araragi school by Sachio Ito. As to haiku verse, under Shiki Masaoka were composers affiliated with the Nihon school; under Koyo Osaki was founded the Shiginsha school, and with the combined efforts of Seisetsu Sassa, Shiei Fujii and Shachiku O-ono was formulated the Tsukubakai. To criticize briefly the works of the period it may be said that though not altogether lacking in a touch of realism, the general impression indicates an ever-growing trend towards romanticism, and in some cases to mere literary "isms."

(3) Period of Naturalism. The

trend of literary movement during the last quarter of the Meiji era was toward the domination of naturalism. This literary current emerged in all forms of literature, and, founding itself on the actual reality of things, tried to grasp the truth of humanity. In this sudden rise of naturalism, much influence was exercised by the works of French, German and Russian novelists. Representative Japanese novels indicative of this new movement include works by Doppo Kunikida, Toson Shimazaki, Katai Tayama, Hakucho Masamuné, Shusei Tokuda, Seika Mayama, Homei Iwano, Seiko Nakamura and Shuko Chikamatsu. Against this realistic trend there appeared in the literary arena Soseki Natsumé, Kyoshi Takahama and Ogai Mori, upholding the transcendent school, commonly called the Kotoha. In the realm of literary criticism Hogetsu Shimamura, Tenkei Hasegawa, Tengen Katakami and Gyofu Soma wielded their pens under the banner of art for life's sake. In the domain of drama, plays depicting social thought came into existence under Ibsen's influence. A similar trend was apparent in general poetry and short verse, represented by Yumei Kamowara's and Kyukin Susukida's symbolic poems, Gyofu Soma's poems in colloquial style, Rofu Miki's free verse and Hakushu Kitahara's prose-poems. In the sphere of short poems, came Bokusui Wakayama, Aika Doki, Takuboku Ishikawa and Yuguré Maeda, exploiting new fields, just as Hekigodo Kato and Seisensui Ogiwara did in the realm of haiku. Literature created in the atmosphere of naturalism is generally too much involved in representation of the ugly side of human life, failing thereby to see the whole of life. It is not unnatural, therefore, that the naturalistic trend of the period did not long enjoy public support

and was obliged to effect a change towards the close of the Meiji era.

(4) Period of Neo-romanticism. We may be doing injustice to modern literary movements by crowding all their complex currents under the one category of neo-romanticism. Yet, it is a fact that after the predominant sway of naturalism, every new branch of literary activity obviously based itself on the reactions of the naturalism of the preceding period. Contrary to the negative, sceptical and pessimistic view of life as evinced by naturalism, neo-romanticism attempts to draw from life with the eye upon reality and humanity, in a positive attitude and a spirit of optimism. At the back of this new movement were the pragmatism of William James, Bergsonian philosophy, Tagore's mysticism, Tolstoy's humanism, and the ideas of several other influential Occidental writers. Neo-romanticism was, in its early days, supported by Rinsen Nakazawa, Yohei Ishizaka, Jiro Abé, Saneatsu Mushakoji and other youthful thinkers. It was at that time that the European War broke out. This greatly stimulated the literary movement, pushing it further into the actual life of the people; eventually it built up such intimate human relations that a drastic renovation was considered unavoidable. This welcomed the rise of many new novelists and playwrights; among whom were Saneatsu Mushakoji, Takeo Arishima, Yoshio Nagayo, all holding fast to their principles; Toyohiko Kagawa and Koyata Ebara initiated the vogue of religious fiction and literature; Naoya Shiga, Ton Satomi, Ryunosuké Akutagawa, Yoshio Toyoshima, Masao Kumé, Haruo Sato and Kan Kikuchi cultivated their own field, in a characteristic style of description. In addition to these fiction writers there

arrived on the scene, Seikichi Fujimori, Mimei Ogawa, Kan Eguchi and Hiroichiro Maedako, as representative socialistic writers; and no small number of novelists producing popular literature. Similarly, in the circle of drama quite a number of new playwrights appeared: of these, Kichizo Nakamura, Yuzo Yamamoto and Jun-ichiro Tanizaki were the most noted. Shoyo Tsubouchi, aforementioned, opened up a new field in pageant and juvenile plays. Another novel phenomenon worthy of note is the powerful growth of scenario writing. With reference to poetry, the long form gradually developed into prose, while folk-songs came to the fore, in Yaso Saijo, Shogo Shiratori, Sakutaro Hagiwara and Ujo Noguchi. The overwhelming vitality of the ever-growing literary movement also lent stimulation to the composition of short poems which, following the revival of *Mannyoshu* study, tried to assimilate nature while giving birth to new verse composed in colloquial style. As to haiku, there is nothing which requires special mention, save the tendency to re-establish itself in couplet form. Summing up all these facts, we arrive at the conclusion that Japanese literature has made wonderful strides and built up a nation-wide sphere of influence that qualifies it to rank with world literary attainment, without forgetting to maintain its own traditions and thereby to create a new and distinct literature of its own.

Contemporary Tendencies

Some of the more prominent movements in modern Japanese literature passed through so many critical phases after the middle of the Taisho (circa 1916), that they began to suffer decline at the close of the period; and then new movements began to appear.

The First Stage First there is the movement towards proletarian literature, Ohmi Komaki, Yobun Kaneko, Hirabayashi, Aono and Maedako made the first systematic attempt to create literary movement for the proletarian classes, and it was in this circle that such promising writers as Hayama, Kuroshima, and Taiko Hirabayashi were brought up.

The Second Stage Launched by a few younger writers who gathered around Kan Kikuchi, eminent novelist and dramatist, this group promoted new ideas of sensual beauty by abandoning the old conventions and aesthetic notions. Riichi Yokomitsu, disclosed a new realm of style in fiction, being much influenced by the French novelist, Paul Morand.

This literary circle loves fantasy and imagination, thinking much of form and style. Their idea is to stress the outside rather than the inside, the material more than the spiritual. Their refinement of style displays a rapid tempo, and new sensations, which contributed to its popularity among the later generation.

The Third Stage The third stage in our present-day literature is marked by a powerful appeal from the "Literature for Majority." Kan Kikuchi, changed over to this new movement in fiction. In the tenth year of Taisho (1920), "Madam Pearl" was brought out, and this incited the emulation of many other writers.

There are two aspects indicated in the "Literature for Majority." One of these tends mostly to depict modern life struggles in an attractive way; Kikuchi, Kumé, and Kato are included in this circle. Shirai, Maki, Naoki, and Osaragi are mostly concerned in producing historical and biographical fiction, full of fantastical descriptions.

To the Proletarian groups already mentioned can be added another group of novelists like Nakano, Murayama, Kobayashi, Hayashi, Tokunaga, Fujimori, Ineko Kubokawa; and critics like Kurahara and Miyamoto. On the other hand, a type-setter, Choku Tokunaga, produced a clever work, "The Street without the Sun," which was translated into German. The labourmen, Sui and Kanechika, are also beginning to produce able and promising works.

The prominent phenomenon of the literary world in 1933 was the decline of proletarian literature. The leading periodicals began to keep the young communistic writers at a respectful distance from the January number of the year and the old writers who had their days in the Meiji era were reinstated in their place. The tendency of the year was decidedly reactionary in literature, especially in novels.

In the world of drama almost no original work was published, except some translations of Western dramas.

In 1934 religious literature began to flourish on the waves of the so-called Renaissance of religion in Japan while magazines of poetry witnessed a greater circulation.

Introduction of French literature represented by Valéry and André Gide and a fresh study of Russian literature, which once was most influential in literary circle of Japan, has given a mode of thought to young writers.

Literature in 1935

Trend of Thought The international unrest, political and diplomatic, was naturally reflected in journalism. The tide of Marxism ebbed and liberalism followed suit. It is, however, noteworthy that in spite of this the percentage of liberal or progressive articles appearing in the

press and periodicals was greater than that of reactionary or nationalistic ones.

Opinions for and against Fascism and its introduction into this country engaged the keenest attention of the public throughout 1934 and were continued in 1935, without coming to a conclusion, as is quite natural with such matters. Prof. T. Minobé's case continued to be one of the centres of interest, but, either of the two opposed camps were rather chary of taking the initiative in the controversy. To that extent the interest in the subject may be said as having subsided. The alleged Fascist influence over the procedure of the Imperial Artificial Silk Company case was also a matter on which much literature appeared. The question of discipline in the Army which was raised in connection with the assassination of Lieutenant-General T. Nagata on August 12 and the stabilization of the political parties were two other subjects upon which much was written.

Among Marxists and their sympathizers who made contributions to periodicals of liberal tendency the following names were most noteworthy: H. Ouchi, H. Yamakawa, T. Morito, H. Arisawa, G. Omori, C. Ishihama, and K. Arahata; among liberalists, S. Sasaki, N. Hasegawa, T. Yanaibara, T. Miyazawa, Y. Ozaki, M. Royama, T. Minobé, T. Baba, K. Miki, I. Nishida, K. Kiyozawa, K. Abé, E. Kawai, H. Sugimura, and K. Tanaka. Over against this Fascist critics were few, the representative ones being K. Sugimori, Y. Takata, etc. A large majority of the Fascist propagandists employed other means than article writing to spread their political thoughts.

Philosophical discussions did not show much activity other than the one on casualism in which such men as Y. Nakagawa, R. Yokomitsu, J.

Ishiwara, H. Saegusa, K. Oka and K. Honda participated.

Next to and in connection with the Fascist problem the social status of farmers in the country was a subject of keen discussion in 1935. Representative articles on the subject were "Poor Crop and Japanese Agrarian Community" (The "Kaizo", February and March numbers) by H. Yamakawa, "Characteristics of Farmers' Burdens" (The Central Review, March) by Gitaro Hirano, "Farm Villages and Class Selection" (The Central Review, April) by Y. Furuya, "Farmers and Fascism" (The Central Review, July) by T. Inomata, "The Recent Tenant Disputes" (The Kaizo, November) by M. Okada, and "Class Construction of Farmers" (The Economist, August 11) by M. Suzuki. In the discussions there were two entirely opposite views which were expressed on the existence of remnants of feudalism in agrarian communities. One group of opinions supported the theory that a semi-slavery institution which obtained in the feudal age still remained in Japan, while the other maintained that, though admitting the survival of some remnants of the old days, yet there was developing a social distinction between the bourgeois and the proletariat in agrarian communities and that the relation between landowner and tenant was not that of master and slave. Reports on investigations of Japan's capitalism in general also occupied many columns of leading periodicals.

Literature On February 9, 1935, a meeting of literary men was held under the auspices of the Kokusai Bunka Shinkokai (Society for International Cultural Relations) with the purpose of publishing the present day Japanese literature in foreign languages. It was later reported that the society decided to publish 85 stories by Meiji, Taisho and Sho-

wa writers of Japan in English, including such masterpieces as "Botchan" by Soseki, "The Youth" by Ōgai, "Yoakemayé" (Before the Dawn) by Toson.

In March, the 67th Session of the Diet voted on the request of the Foreign Department for ¥1,000,000 for international cultural work for the fiscal year beginning with April, including ¥300,000 for the said Society for International Cultural Relations.

On July 15 and 16, the first meeting of the new Committee for the Investigation on Literary Copyright was held in the official residence of the Home Minister. Its purpose was to protect the rights of literary men and to promote the culture of the people through writings.

The Bungei Konwakai (Literary Roundtable Society) awarded its first annual prizes to Riichi Yokomitsu for his story "Monsho" (The Emblem), and to Saisei Murobu for "Ani Imo-oto" (Brother and Sister), and decided to translate these stories into English and French.

In November, the International Pen Club was established under the guidance of the Foreign Ministry with the purpose of promoting international activity of Japanese literary men and the translation and publication of Japanese literature in foreign tongues.

Towards the end of the year the hitherto unorganized proletarian writers gathered themselves together around Fusao Hayashi, Suyekichi Aono and others and published their plan of organizing the Independent Literary Men's Club.

Great losses in the literary world of the country were sustained in 1935 in the deaths of the following conspicuous figures: Dr. Shoyo Tsubouchi, who was one of the foremost literary men of Japan and had made a conspicuous contribution to the development of the kabuki and

general literature all through his life; Hiroshi Yosano, a pioneer poet in the new Japanese style of poetry; Umitaro Hayashi, who was known under the pen-names of Itsuma Maki, Fubo Hayashi and Joji Tani and was one of the most popular story writers of the day; Kameo Chiba, writer and critic; and Viscount Shiro Hamano, writer of detective stories.

Novels and Stories In 1935 there appeared no novels or stories so noteworthy as "Shunkin Sho" by Tanisaki and "Monsho" (The Emblem) by Yokomitsu which had become the objects of literary discussions in 1934. It was nevertheless a busy year as a whole and "Yoaké Mayé" (Before the Dawn) by Toson Shimazaki which had been published in the "Central Review" over several years and completed in 1935 was a topic of much comment in literary circles. The proletarian writers also regained their popularity among the reading public and their stories became more widely read than in the previous three years following the Manchurian incident, with the natural result that the demarcation between the bourgeois and the proletarian literatures is gradually disappearing.

In the number of publications Fumio Niwa, a young novelist who first attracted attention in 1934, and Saisei Murobu headed the list. Niwa wrote stories which chiefly dealt with decadent love affairs, with "My Cock" as a representative one. Murobu mostly wrote love stories as usual, but also put out stories dealing with social aspects, such as "A Picture of Society" and "The Holy Mother of the Orphanage". The popularity of these writers seemed to lie in their peculiar way of appealing to men's instincts. There were several writers of this category, such as the old novelist Shusei Tokuda, who depicted the mis-

erable life of prostitutes in "Their Lives" (The Kaizo, January).

The influence of French modern literature was felt in this country in recent years and some stories took on the colouring of the humanism of André Gide, Ramon Fernandez, etc.

The French stories which have been translated into Japanese in 1935-36 are as follows:

- Henry de Montherlant: Les bestiaux
 André Malraux: Le Temps du Mépris
 Julien Green: Adrienne Moxurat
 Jean Cocteau: Portraits-couvenir (1000-14)
 Gustave Flaubert: Lettres à George Sand
 Maupassant: Fort Comme la Mort
 Ramon Fernandez: Le Paria
 André Suarès: Trois Hommes
 Marcel Arland: Antarès
 Paul Bourget: Essais de Psychologie contemporaine
 Paul Valéry: Variété I
 " " II
 " Monsieur Teste
 André Gide: Pages de Journal (1929-32)
 Si le Grain ne Meurt
 Les Nouvelles nourritures
 Les Poésies d'André Walter
 Les Nourritures Terrestres
 Paludes
 Le Prométhée mal enchaîné
 L'immoraliste
 André Malraux: Les Conquérants
 Le loi royal
 Antoine de Saint Exupéry: Vol de Unit.

The stories which took for their themes the social life and affairs were written by such novelists as Hirotsu and Kojiro Serizawa. The latter's "Dressing of a Petty Official" (The Bungei, February) depicted the life of an official and "Woman's Glass" (The Kaizo, September), the life and psychology of college boys of contemporary Japan, who either having a slight leaning towards the "left" or standing in between the "left" and the "right", are embarrassed by vague uneasiness or discouraging atmosphere of the environments. "Woman's Glass" was counted among the best stories which appeared in 1935.

The completion of "Yoaké Mayé" above mentioned was much congratulated both on account of the writer himself and Japanese modern literature, for the story had been read with much expectation as one of the greatest novels in recent years. Shusei Tokuda wrote many stories and kept up his position as a veteran story writer. Hakucho Masamuné published some novels during the year, but he has been much more active as a literary critic in recent years. Shoken Kamitsuka, Shuko Chikamatsu, and Ton Satomi also published several stories.

Among the writers who constitute the mainstay of the literary circles Riichi Yokomitsu concentrated his efforts in writing "Kazoku Kaigi" (Family Meeting), which occupied the serial columns of the Nichi-Nichi. Yasunari Kawabata published many stories which drew attention due to their beautiful description of both the scene and the psychology. Two characteristic writers, Kosaku Takii and Masuji Ibusé, were active also in this year.

Of the younger writers, Kakuchu Cho, a Korean young man, wrote stories of Korean life imbued with much criticism of social ideas. Tomoji Abé and Joji Tsubota wrote notable stories. Tatsuzo Ishikawa was first introduced to the general public by his work "So Min" (The Bungei Shunju, September) a story of Japanese emigrants to Brazil, for which he was awarded the Akutagawa Prize.

Plays were rather unwelcome to the pages of periodicals in 1935, as it had been so in the previous year, except Kokushi Kishida, Mantaro Kubota and Masao Sukanaka, whose works appeared in the Central Review, the Kaizo, the Mita Bungaku and the Shincho.

A conspicuous feature of the proletarian novels in 1935 was in their

separation from political affairs and broadening of the field of selecting themes. Fusao Hayashi published a long story entitled "Sonéa" (the youth) in the Kaizo, Sept., Oct. and Nov., in which he depicted the political conflict between the Jiyuto party and the old clan statesmen just before the opening of the national assembly of Japan in the early years of Meiji. Seikichi Fujimori wrote "Kazan Watanabé", a great figure at the end of the Tokugawa Shogunate, which was placed on the stage in January, 1936. The author evidently identified his ideals with those of this progressive scholar and artist. Yamaji Kishi also found an outlet of his ideas in historical figures "Chujiro Yoshino" and "Genseki Tsuchiu".

The troubles of the Marxists which were caused by the change of political and social environments since 1931 were handled by many young writers who more or less had connection with the movement, if not its direct leaders. Tomoyoshi Murayama wrote "The Theatre" in which the cultural movement of Marxists through stage performances was described. Kensaku Shimagi's "A Case of Turning" was a conscientious sketch revealing the true mind of a young Marxist who was baffled by unfavourable environments. The writings of J. Nakano, H. Hirabayashi, and Y. Hayama, also drew the attention of literary critics.

K. Kaga and N. Tokunaga wrote stories of labourers. Koroku Hirata and Katsuyé Yuasa were noticed as promising novelists of a realistic bent, especially in the broadness of scale of their stories.

Among women writers who were active in 1935 may be counted such names as Y. Nogami, C. Uno, F. Hayashi, Y. Chujo, T. Hirabayashi, I. Kubokawa and H. Asai. Those works which won more or less admiration

were as follows: Hayashi's "Oyster," Chuji's "The Breasts," several stories by T. Hirabayashi, and I. Kubokawa's "A Bagful of Candies."

In 1935 many writers of "pure" literature descended from their "tower of ivory" to the street and began to publish stories in daily papers. Representative ones were "The School for Brides" by Teppei Kata-

oka and "The Holy Virgin" by Saisei Murobu in the Tokyo Asahi, and "A Family Meeting" by Riichi Yokomitsu in the Tokyo Nichi-Nichi. Of the popular writers Kan Kikuchi's "Conversation on Virginity" and Masao Kumé's "Ryusen Ko", both of which appeared in the Tokyo Nichi-Nichi and Osaka Mainichi, drew a large number of readers.

Fine Arts

History

Pre-Asuka Period This period, corresponding to what is called the dark age of art, has nothing specially to describe, although it is perhaps the longest period, extending, as it does, from the age of myths down to about the 7th century, A. D.

According to archaeology the ancient Japanese worked in stone, artifacts such as stone images being used in ancestor worship. These are rough hewn sculptures, representing persons clad in armour, wearing a sword, or other arms, all having been used in burial as guardians of the tomb. It was customary, too, in ancient times to have a similar primitive engraving, in the form of a ladder or a wheel, made on the coffin; the plain, artless impression thus conveyed is expressive of the simple mode of living in that remote age.

The dwellings were also in very simple style, constructed of barked but unhewn timber. Even in this simplest type of building there were two styles, known as the Izumo and the Isé; which implies that the ancient culture of Japan was dual, derived either from Izumo or Isé. The former style of structure is represented by the Izumo Shrine, Izumo province; and the latter by the great Shrine of Isé, although

these now give no more than a vague idea of what must have been the prehistoric architecture of the country.

In addition to the above, there are earthen figures called haniwa which arrest the attention not only of archaeologists but also of artists. According to historical records, the Emperor Suinin, who abdicated in 2 B. C., abhorred the cruel old custom of burying people alive, around the grave of a high personage, certain individuals being selected from among those persons who were under patronage of the deceased in life. At the instance of a retainer, Nominno-Sukuné, he caused earthen figures to be interred in place of living persons, when the Empress Hihashimé died; and this was the origin of haniwa. It is believable, however, that the haniwa existed before Suinin's time. The haniwa is, from an artistic point of view, by no means of high value. It is, nevertheless, the only art product of Japan before the importation of Buddhism. Moreover, its value rests on the fact that it is a work produced solely by the Japanese before they had been influenced by Chinese art. Besides, it is invaluable in that it gives some idea of the life of the people of its day. The variety of haniwa may be roughly classified into human figures, birds and animals, architectural structures, household ar-

ticles and arms.

Asuka Period As has been stated in the preceding section, for some time after the foundation of the Empire by the Emperor Jimmu, there was nothing worthy of mention in the realm of art. The Asuka period covers the reign of the Empress Suiko (592-629), when the Imperial palace was in the province of Yamato. Already, as early as the time of the Emperor Yuryaku, in the middle of the 5th century, a painter named Isura came over from Chosen, with which country Japan then had frequent intercourse, and through which Chinese civilization had been introduced. Later, during the reign of the Emperor Sushun, towards the end of the 6th century, another painter called Hakka came with carpenters to build temples. But it was not until Shibatatto came over from China, in the reign of the Emperor Keitai (507-533), that Buddhism was introduced into Japan, despite the fact that communication had long before continued with Chosen, then called Kudara.

Shibatatto must have been expert in the art of sculpture, for he was the grandfather of Kuratsu-kurinatori who cast the large image of Buddha now in the Horyuji temple, in the Empress Suiko's time. Nevertheless, it is evident that the country which contributed most toward founding Japan's fine art technique was Kudara.

The development of art in the Suiko régime was really wonderful. Prince Shotoku, a man of wide learning and an enthusiastic devotee of Buddha, spurred on the ever increasing devotion to art. The leading structures of the period were the Horyuji and Tennoji temples; but those parts of them that have best withstood the wear and tear of time are the two-storied kondo, gate, the five-storied pagoda of the Horyuji

temple and the three-storied pagodas of the Horyuji and Horinji temples. No doubt the creative design of the Prince must have been woven into them, but it is nevertheless true that they were modelled after Kudara architecture. It is only from these structures that one can form any idea of what Chinese architecture in those days might have been. The Tamamushi-no-zushi, (a miniature temple) in the Horyuji temple, is valuable not only as a model of ancient architecture but as an example of the structural art and craft of the Suiko régime. The honey-suckle design on the metal fittings of the miniature temple bears close resemblance to similar art motives of Greece. The sculptures of the Suiko period are not all from one source, some coming from China or Chosen, while others are home creations, either from the hands of Chinese sculptors, or the combined efforts of Japanese and naturalized aliens.

The fine art of the Suiko period has thus great depth and width, and at the same time affords invaluable reference for study.

Hakuho Period In the history of Japanese fine art, following the Suiko era comes the Hakuho period which starts in the reign of the Emperor Jomei, terminating in that of the Emperor Mommu (629-697). In the 15th year of the reign of the Empress Suiko the custom of sending a government envoy to China, then called Sui, was established, followed by increased intercourse between the two countries. Later, in the 2nd year of the Emperor Jomei's administration, the first envoy was dispatched to Tang, as China was then called. By the establishment of this custom artistic products of China came direct to Japan instead of through the Korean Peninsula, as they had done up to that time. Moreover, the Taika Re-

formation, by which the political system of China came to be closely followed from the time of the Emperor Kotoku, contributed much toward developing Hakuko art.

(1) *Painting.* One of the most outstanding facts in the art of this period is that paintings were imported from the Continent, and Buddhist pictures were painted by priests from China and India. The mural paintings of the kondo of the Horyuji temple testify to this; the fresco work of the temple is further advanced in technique than that of India, and is prized as the leading example of mural painting in any extant wooden building. This and other examples of imported pictorial art technique during the period eloquently speaks of the inflow from Indian sources into Oriental countries.

(2) *Bronze.* The most representative work of the period is the big bronze images of Buddha and two disciples at the Yakushiji temple at Nara. Upon their pedestals are engraved a hoshokumon design in lieu of honeysuckle which by that time had ceased to command preference. The hoshokumon design is the art of inlaying or setting jewels in necklaces, armlets, pedestals, and halos around the heads of images. To return to the Yakushiji temple's three images, it is interesting to notice that, side by side with the hoshokumon, there is an engraving of arabesque design in grapes. This grape pattern has also its origin to the west of India, through which it came to China when that country was called Han, and prospered in the age of Tang.

(3) *Architecture.* The only mod-

el of architecture constructed in this period and still extant is the three-storied pagoda of the Yakushiji temple at Nara. Another example of the best architectural technique of the period is to be seen at the Nara Imperial Museum where models of five-storied pagodas of the times are preserved.

Tempyo Period The Nara period (707-780) is called the Tempyo Era in the history of Japanese fine art. Through the zealous efforts of the Emperor Shomu and Empress Komyo, who were unrivalled in piety, Buddhist doctrine was thoroughly demonstrated in the capital of Nara, with a consequent development of Buddhist fine art. It was veritably the golden age of fine art in religion. The casting of the Daibutsu (great image of Buddha) at the Todaiji temple and the construction of the temple itself may be pointed out as the greatest examples of art within the period. The Daibutsu has several times suffered from fire, which made imperative the repair of the image; and, in consequence, only the petals of the lotus blossom upon which the image sits retain traces of contemporary art motives. On the surface of these petals are engraved scenes from the sacred world of Buddha, which, from the view point of technique in painting are decidedly excellent. In front of the building occupied by the colossal statue of Buddha there is a bronze-lantern which minutely exemplifies characteristics of the Tempyo period. The remains representing the sculptures of the period include several images in the same temple.

(1) *Shoso-in Museum.*¹ After the

¹ The Shoso-in is located in the precinct of the Todaiji temple at Nara. The building is a typical wooden storehouse of old Japanese Aze-Kura style. No metal nails are used and no walls of earth. The whole building consists of three separate sections which have no windows but one entrance door for each. In the interior each section is two storied with an attic. The dimensions of the building are approximately 108 feet to 30 feet, the height from the ground to the roof top being 39 feet.

Formerly the treasures were kept free from light, untouched for a long period of years. Since 1872 the doors are opened annually for airing for two weeks, from November 1st to 14th. All the

demise of the Emperor Shomu all the objects of art and craft he possessed were donated to the Todaiji temple by the Empress Komyo. Nearly all were treasured in the Shoso-in Art Museum of Nara, and have safely been handed down to the present. Perfect preservation of art products from so remote an age could be expected only in such a country as Japan. The national treasures of the Shoso-in not only abound in rare paintings but also in many objects of industrial art, such as textiles, lacquer-ware as well as gold and silver ware, porcelain and writing utensils. Especially noteworthy are the Tang masterpieces from the Imperial household of China. In addition to those of Japanese and Chinese production, examples from the East Roman Empire, Persia, India and countries west of China are found in the museum. Thus the Shoso-in Art Museum is representative of the art products covering both East and West from even before the 7th century.

(2) *Ganjinwajo.* A priest known as Ganjinwajo in Japan with a num-

ber of disciples, visited Nara, then capital of the country, not long after the completion of the Daibutsu. He and his followers had drifted ashore in the southern part of Kyushu. These foreigners left an indelible impression on the history of Japanese art, because they belonged to a group of leading artists of the Tang period of China. Their skill in art was woven into the art of the Tempyo period, not only in the fields of painting and sculpture, but also in architecture. That art products from their hands must have been as great in number as in variety is evidenced by the art treasures of the Toshodaiji temple in Yamato province. The image of Buddha enshrined in that temple exhaustively represent the characteristics of the art of the Tang dynasty. Besides these there are several wood-engravings in which, it is surmised, the sculptures of the succeeding period had its origin. Among the foreigners were persons of other than Chinese nationality. Gumporiki, as he was called in Japan, was an expert sculptor, from the country

precious objects are kept in glass cases. In the northern section there are kept treasures of the Imperial House before and at the time of the Emperor Shomu, mirrors, desks, musical instruments, screens, medicines, etc. The middle section contains arms and armour, cases, glass and lacquer wares. The southern section largely contains religious antiques of the Todaiji temple.

The Shoso-in apparently existed in the precinct of the Todaiji temple before 756 A.D. when the Empress Komyo, widow of the Emperor Shomu, dedicated to the Varrocana Buddha or Daibutsu the Imperial treasures as a memorial of the deceased. Weather has beaten it of course. Battles went on around the sacred ground and the Shoso-in itself was once stricken by a thunderbolt. But the wooden storehouse has been mysteriously preserved through 1,179 years, with partial repairs. Most of its contents listed in the "Todaiji Kemmotsu Cho" (catalogue of donation), dated June 21, 8th year of Tempyoshohō (756 A.D.), have been kept unharmed solely due to the loyalty of the officials and people to the Imperial House to whom the Shoso-in belongs.

The most important treasures are the "Kemmotsu Cho" (catalogue of donation), letters of the Emperor Shomu, essays written by the Empress Komyo, a long sword of the Emperor Shomu, Kin-kin Hyomon Kin (gold and silver ornamented Oriental harp), Shitan Genkwan (a stringed instrument), Gogen Biwa (a five-stringed lute), Mokuga Shitan Kikyoku (a sandalwood checker board ornamented with wooden mosaic), Toriké Tachionna Byobu (a screen with a female figure who wears feathered garments), Urushi Ko Hei (a lacquered earase), Yōraku or diadems and fragments of the crown of the Emperor Shomu and Empress Komyo, Gingaku Men (masks used in an old performance "gigaku"), bronze mirrors, swords and other arms and armor; Imperial edict engraved on a bronze plate, glass cup, lacquered chest painted with gold and silver dust, gold and silver ornamented leather box, hangings with figures of Buddhas, Mitta Ebon (a painted tray), silver bottle, and censer with a handle.

Priceless documents of Tempyo period are stored in Shoso-in, 779 in all. They include census registers, maps, official documents, I.O.U. and books, and present indispensable materials for the study of official and civil life 11 centuries ago.

For protection, inspection of the treasures of the Shoso-in is not permitted to the general public, but the pictures of all treasures are published in book form named "Tōyō Zuko," and all the documents may be found in the "Dai Nippon Ko Mon Jo" (Japan's old documents).

of Kunlunkuo the exact location of which is still a question. Judging by the fact that the Ganjinwajo party included people from the west of China, it is but a matter of course that the engravings at the Toshodaiji temple resemble the fresco art of countries west of China. From what remains, there is sufficient reason to believe that some of the descendants of the Persians driven out of the country by the Mohammedans, arrived in Japan with the party.

All kinds of cultural forms and products were imported during this period. These the Japanese could digest and work with a skill not inferior to that of the foreigners. A general impression of the Tempyo period, however, is that there was too much copying of Chinese art and so, too little originality. This one-sided trend of evolution gave rise to a movement for a revival of art genuinely Japanese in origin.

Konin Period The Konin period (782-888) begins about the time that the Emperor Kammu transferred the capital from Nara to Kyoto, lasting till the reign of the Emperor Konin. The outstanding characteristic of the Konin period lies in the phenomenal rise of native art at the hands of noted priests. Kobodaishi and Chisho-daishi were priest-sages of refined artistic endowment. Quite a number of pictures and sculptures of the period are from their hands. The Toji, Koyasan and Miidera temples treasure works of theirs. As one of the prominent painters of the time we may name Kudara Kawanari on whom there are a number of books, but none giving reliable historical information about him. He must have been among those artists summoned by the Emperor Saga to paint the pictures of landscape and rough seas seen on the walls and paper sliding-screens of the Seiryoden Hall of

the palace. The custom of painting landscapes and characters on screens of the Imperial palace was thereafter developed setting a fashion in drawings which please the eye. In those days screens were popular, and this helped to popularize landscape painting.

The typical sculptures of the period are such sacred images as are seen at the Shingoji temple, Kyoto, known as the Shingoji style sculpture, and others at the Murofuji temple in Yamato province, known as the Murofu style. The rise of the art of engraving images of Japanese gods may be mentioned as a memorable event of the age.

As regards architecture the period shows very few examples that now remain, the representative structures being the main hall and five-storied pagoda of the Murofuji temple. The Heian Shrine constructed in Kyoto, closely modelled after the structures of the age under review, offers excellent material for the study of Konin architecture.

Fujiwara Period The Fujiwara period (889-1186) covers the three hundred years between the reign of the Emperor Uda and that of the Emperor Antoku. At the beginning of the period the Emperor Uda, at the suggestion of Michizane Sugawara, discontinued the custom of dispatching envoys to China, thereby cutting off facility of communications with the continent. During the consequent isolation Japanese art was afforded a chance to cultivate its native genius and its own field of influence. The continental art that had been freely absorbed and adopted up to that time commenced to produce national characteristics as is demonstrated by yamatoyé work in the sphere of painting.

(1) **Painting.** Koseno-Kanaoka was probably the most skilled landscape painter of the period. His

reputation was such that the horse he painted on a paper sliding-door was credited with getting out of the screen at night to feed on bush clover in the yard. Koseno-Hirohata, a well-known painter, was one of his descendants. As skilled painters of that age we may mention also Motomitsu Fujiwara, Mitsunaga Fujiwara, Takayoshi Fujiwara and his son Takachika, besides Toba-sojo and Kakuyu, all of whom specialized in painting yamatoyé or native style, which had developed from a school in the Tang period of China, called Karayé. Japanese paper-doors and folding screens were what they selected to paint on.

Besides yamatoyé many other schools of Japanese style paintings were started, such as the kamiyé, utayé, ashideyé, and okoyé. The last mentioned was a school of comic genius whose premier artist was Toba-sojo, a noted priest of the day. Three albums of comic pictures from his brush are treasured at the Kozanji temple. Another important arrival was the yemakimono (paper-scroll) which later developed until reaching its golden age in the Kamakura period. The aforementioned three artists were the most popular masters of the age. Some of their work still survives.

Consequent upon the ever inculcated Buddhist precepts, Buddhist paintings flourished, so much so that specialists in that art were always in evidence. In this religious sphere of painting also national characterization was effected to no meagre extent. The most outstanding of the Japanized Buddhist schools was named the Eshinfu, started by Eshinsozû, a priest, first affiliated with the Tendai sect of Buddhism, but later preached the doctrines of the Jodo sect. Probably this school was second to none at that time in Japanization of technique. Tameto,

commonly called Great Takuma, who did the fresco work of the Ho-o-do at Uji, belonged to the Takuma family, producing accomplished painters of the time. The most representative Buddhist paintings are treasured at the Hokkeji, Yamashiro Chohoji, Yamato Horinji, Koyasan, the Toji temples and the Imperial Art Museum of Tokyo.

(2) **Sculpture.** Remarkable advancement in the realm of Buddhist sculpture was revealed in consequence of effective doctrinal propaganda by the Tendai and Shingon sects. Wood-engraving stood unrivalled, but that art, unlike the same mode of the previous age, was mainly in what is called parquetry work. Sculptors collaborated, and in most cases images were constructed in separate parts, each carved by a different artist, under an accomplished specialist. It is interesting to note that even in the carving of hands, feet, head and body there was a division of labour into smaller parts, and each section was put in charge of one sculptor. When completed the several parts were put together, painted with lacquer and gilded.

Guilds of sculptors, like the Shichijo-bussho, Shichijo-omiya-bussho, Rokujo-marikoji-bussho and Sanjobussho, established studios one after another. Especially noteworthy in this field was the Shichijo-bussho started by the famous artist Jocho who was practically supreme in the realm of sculpture in the Fujiwara period. The peculiarity of the Jocho school of his creation lies in its soft, mild features with smooth, elegant textile folds or plaits, which characterize the most glorious period of Fujiwara art. The images of Amitabha enshrined at the Ho-o-do, Hokaiji, Saikyoji and Chusonji temples are all representative works of the Fujiwara period.

(3) **Architecture.** Along with the

development of Japanese style painting a new Japanese architecture, as seen in what they call the Shinden-zukuri (main building of a peer's residence), prevailed. This style gradually encroached on the domain of sacred structures, as is well exemplified in the Ho-o-do and Konjikido, above cited.

Within three hundred years after the country's adoption of a seclusion policy, an indigenous style characteristic of the Yamato race made the fullest possible development in all branches of art.

Kamakura Period Between the Emperor Gotoba and Emperor Godaigo the Kamakura Shogunate assumed the reins of government. The Kamakura period (1187-1340) of political history is at the same time that of Japanese art. During those 150 years traditional Japanese sentiments and thought developed vigorously, against the aristocratic culture which had gained influence in the previous period. Such a turn of cultural development could not but react on art; the anti-traditional spirit of the age began to tell on artistic creation. Not only from within but also from without the country a radical change was introduced, because in those days the Yuan period succeeded the Sung in China; and its highly favoured cultural attainments came dashing to the Japanese shores. The two movements, of foreign and domestic origin, combined to lay a foundation for modern fine art which started and developed in and after the Muromachi period.

(1) **Painting.** Continued civil wars, military administration, and war literature, all contributed to the voluminous production of yemakimono (picture-scrolls) based on themes from battle scenes. Another kind of yemakimono worthy of special mention was painted for the purpose

of propagating the doctrines of newly risen sects of Buddhism, such as the Zen and Jodo. This pictorial demonstration of religious doctrines proved quite effective; for, by depicting the life and work of founders, a more direct appeal was made to prospective converts. For the same reason the yemakimono came to serve also as a means to propagate knowledge of the origin and development of a shrine. Quite a number of picture-scrolls of the period still remain in perfect condition, those reckoned among greater works being the History of the Kitano Tenjin Shrine, Murasaki-shikibu-nikki, Sanjurokkasen, Mokoshurai-ekotoba, Honen-shonin-gyojo-edzu. The last mentioned is a yemakimono depicting the personal history of Honen-shonin, the noted priest who founded the Jodo sect of Buddhism. Among scores of yemakimono painters, Nobuzane Fujiwara, Keion Sumiyoshi, En-i, Takakané Takashina and Yoshimitsu Tosa were the most popular. A further noteworthy event of the period was the rise of portrait painting. Generally speaking, until this period there was no other method for reproducing figures except by sculpture. The term for portrait was niseyé. But toward the end of this period a new mode appeared. The technique of portrait painting made rapid advance from the time of Takanobu Fujiwara, Tairano-Shigemori, Minamoto-no-Yoritomo whose works are treasured at the Shingoji temple, all rare masterpieces.

With reference to Buddhist painting, the aforementioned Takuma school gradually improved in technique; and with the appearance of Shoga, a descendant of the Takumas, the Takuma school of Buddhist painting was founded, drawing a clear line between the old and new delineations.

(2) **Sculpture.** The Kamakura period was also a fecund age in the direction of sculpture. Compared with the work of the preceding period it appeals with more virility. The Shiehijo-bussho, the most important sculptors' association or guild, which had been making steady progress, produced a group of consummate artists in Koei, Unkei, Jokaku, Kwaikai, Tankei, Jokei, Koben and Kosho, all contemporaries. Among them the most skilled were Unkei, Tankei and Kwaikai, who are recognized as the best sculptors since the time of Jocho. Whereas Unkei and Tankei excelled in producing the expression of passion, as in statues of nio (Deva kings), Kwaikai specialized in gentle, elegant figures, like those from the chisel of Jocho.

(3) **Industrial Art.** Lacquer-ware technique, too, made a remarkable advance. The art of engraving also progressed, especially with the appearance of the Kamakura-bori (Kamakura style of engraving). Technique in metal work, also saw much development, inheriting the characteristic virtues of the Fujiwara period. Up to that time native ceramic art was in so primitive a stage that only unglazed ware could be manufactured. After Kato Shirozaemon-Kagehisa returned from Sung, marked progress was made in this field, and fine chinaware became a home product.

(4) **Architecture.** The mansions of nobles had been built in the Shinden-zukuri style, but during the Kamakura period the Buké-zukuri style of architecture started and soon dominated. This is a simple, plain style with an unusual number of sliding-doors to let in light. Though this style of structure has gone out long ago, one can get an idea of it through various yemakimono in which this style of architecture is represented. After the

advent of the Zen sect of Buddhism under Eisai-zenshi from China, then called Sung, and the establishment of the Kenninji temple at Kyoto, Zen style of architecture came to attract attention. A good example of this style, still intact, is the Enkakuji temple at Kamakura.

Muromachi Period Succeeding the Kamakura age came the Muromachi period (1341-1580), which, after the two centuries and a half of civil strife, ended with the downfall of the Ashikaga Shogunate. In China the civil disturbances of the late Yuan dynasty had been brought under control by the rise of the Mings, resulting in the advent of the golden age of Ming culture, which exercised some influence on Japan.

(1) **Painting.** As was customary whenever Chinese culture attained its zenith, communication between the two countries, which had been on the wane, revived again, resulting in the gradual decline of yemakimono, portrait and Buddhist painting, handed down from the preceding Kamakura period, domestic art unable to cope with the powerful influence of Sung-Yuan style of painting in China. Early in this period there were not a few yemakimono worthy of note such as the Gosannen-gunki by Korehisa Fujiwara and the Yuzu-nembutsu-engi, joint work of Hiroyuki Tosa, Yuki-bidé Kasuga, Mitsukuni Fujiwara, Ryuko Awataguchi, Jakusai Rokkaku and Eishun Hogan. The latter still remains in the form of a coloured wood-engraving, perhaps the most widely known as our oldest example of this art.

Typical portrait work of the period is that of the Emperor Godaigo in the Daitokuji temple, Kyoto, and of Yoshimochi Ashikaga, at the Shingoji temple. Far more characteristic of the age, however, are the

portraits of Zen priests or so-called "Chinso." The most typical chinso is, perhaps, the portrait of Seiichi-kokushi, painted by Mincho, preserved in the Tofukuji temple. Strictly speaking, chinso has more similarity to the Sung-Yuan style than to the Tosa school of portraits.

Buddhist painting of the Muromachi period may roughly be adjudged stationary. Copying of old works seemed to have been the only task attracting artists, among whom a priest named Myotaku-zenshi was known for skill in painting Acala pieces; the principal works of this priest-painter are treasures of the Imperial Art Museum. The most distinguished pictorial artist throughout the period, however, was Mincho. Among his works handed down to the present are the portrait of Seiichi-kokushi, above-mentioned, Gohyakurakan (five hundred disciples of Buddha) in the Tofukuji temple, and Daïnehanzu, known as the largest painting in the country. In his brush work are ample traces of the style of the Sung-Yuan period in China; and he was, moreover, the leading painter of the age by whose art the Continental technique, introduced with the Zen sect in the Kamakura period, was digested, assimilated and consummated.

Special mention should be made of the advent of the Sung-Ming style in yamatoyé work, enhancing the traditional style of that art. This new movement was no doubt made possible by the Ashikaga policy of encouraging trade with China, then called Ming. In consequence, numerous Chinese works of art continued to be imported, greatly stimulating the domestic art world. Among various merits and demerits then inherited from the Continent, kakemono (hanging pictures) and a more advanced technique in painting flowers and birds were perhaps

the most outstanding. It is also a fact worthy of special mention that the Sung-Yuan style of sumiyé painting (black and white) became popular throughout Japan, under artists like Jasoku Soga, Sotan Oguri, Shinno Nakano, Sesshu and Masanobu Kano. These five sumiyé painters were talented pupils of Shubun who enjoyed the confidence of the Shogun and occupied an important position under the Shogunate government as a painter.

(2) Sculpture. Images of Buddha continued to be supplied by the Shichijo-bussho of which mention has already been made. But these products gradually lost their artistic value. The aforementioned Shubun was also a good sculptor. It is said of his skill that the great wooden statue, 40 feet high, of Amitabha, enshrined in the Unkyoji temple, was originally the work of a Nara sculptor, but was retouched by Shubun's chisel and improved.

(3) Industrial Art. In this epoch the development shown in industrial art was mainly due to the whimsical enthusiasm of the Shogun. Chanoyu (tea ceremony), a ceremonial etiquette genuinely Japanese, gave rapid rise to various branches of industrial art especially in fine porcelain, the climax of which was reached during the latter part of the period. This progress was not only in works of manual art like tea-cups, trays and so on, but in kakemono and tokonoma (alcove) furnishings of the tea-room, and the building itself, all of which are required for the full ceremony of tea-serving. Most of the teacups used for chanoyu in those days were of Chinese make, or imports from the South Seas.

(4) Architecture. The Zen style of architecture greatly improved. This combined with the cult of chanoyu, lent impetus to the construc-

tion of simple but tasteful habitations and temples, with gardens and arbours harmonious to the main building, well represented by the Kinkakuji and Ginkakuji temples in Kyoto.

Momoyama Period The thirty years that followed is termed the Momoyama period. During this comparatively short interval civil disturbances stirred up the whole country under the governments of Nobunaga Oda and Hideyoshi Toyotomi, acting as military dictators.

(1) Painting. Eitoku Kano was perhaps the greatest painter of the period. Nearly all the mural pictures in the castles of Azuchi and Osaka and the mansion at Shuraku are attributed to the brush of this famous artist. The peculiarity of the painting of the period lies in its grand scale and gorgeous, bright colouring. This is especially true of Eitoku Kano's work. Another noted landscape and ukiyoyé painter was Sanraku Kano; in the Sesshu school of sumiyé were Kogan Unkoku and Tohaku Hasegawa; the Tosa school had Mitsuyoshi who succeeded to the Tosa school which had by that time been reduced to a school only in name.

(2) Sculpture. The most striking feature of the Momoyama sculpture is its clever adaptation to decoration of architecture. Besides Hidari-Jingoro, whose fame as an accomplished sculptor and engraver still enjoys nation-wide popularity, there were skilled artists like Yuzemon Miyanishi and Matayemon Okabé. As in the Muromachi period, the art of carving "No" masks came into vogue.

(3) Industrial Art. Metal work experienced remarkable improvement. The sword-guard artists evolved novel designs. Also in the technique of bronze casting no insignificant progress was made by

casters like Yashichiro Hagoya, Dojin Nishimura, Yojiro Tsujido, Yayemon Nagoya and Echizen-no-Shojosansho. The current of the age could not but influence the art of raised lacquer, handed down from previous periods; now works on large scale, fit for the decorative purposes of architecture, began to dominate the situation. The Kannon-do of Chikubu-shima and the Kodaïji temple of Kyoto best represent the technique of this period.

Ceramics also were greatly enhanced in technique. Impelled by the nation-wide use of chinaware, due to the popularization of chanoyu, imported articles grew insufficient. As a natural consequence, home industry in this direction was greatly stimulated, resulting in Nagasuké Chojiro's invention of the rakuyaki style and Rokubei Mikazuki's bizen-yaki style of ceramic ware. In the realm of textile art, what is to be noted is that in the Tensho era (1573) a new technique in weaving was introduced from Ming, China, and reached Nishijin, Kyoto, where it appeared in the form of Yamatonishiki, ito-nishiki, karaori-nishiki, kinran (gold brocade), donsû (satin damask), rinzu, and so on.

In conclusion it may be said of the art of the Momoyama period that, while developing such gorgeous and imposing structures as the Shurakutei and Momoyama Castle, it popularized the exclusive, austere and polite art of chanoyu. Thus two diametrically opposed arts developed all through the Momoyama period.

Yedo Period The Yedo period (1603-1867) started with the Tokugawa Shogunate in Tokyo, then called Yedo, and terminated with the downfall of that government just before the Meiji Restoration. During the 260 years of the Tokugawa Shogunate Yedo flourished, cultivat-

ing its own culture as against that of Kyoto, giving the country two centres of culture, one in the east and one in the west.

In the early Yedo period communication with countries beyond the sea opened and foreign trade was thereby greatly stimulated. Whereas Japan had hitherto had little or no dealing with Europeans, save Spaniards and Portuguese, Hollanders and Britons now began to come to her shores for commercial purposes. Relations with neighbouring countries also increased in intimacy, due to improved communication facilities. Nevertheless, the people were not satisfied with official passivity but extended their trade with Siam, Cochín, Tonking, Luzon. Furthermore, Iyeyasu Tokugawa, the first Shogun of that line, even attempted to trade with Spain and Mexico, sending envoys for that purpose. By this improved intercourse with foreign countries traditional Japanese art was greatly influenced. In the Kan-er era (1644), Yemosaku Yamada first produced pictures in Western style painting. Fortunately or unfortunately, however, the third Shogun, Iyemitsu, with a view to stamping out Roman Catholicism pursued and imposed an isolation policy by prohibiting the entrance of all foreigners except Hollanders and Chinese. Under this high-handed policy the infiltration of foreign influence was almost completely checked, and domestic genius again came into its own, developing another golden age of fine art.

(1) Painting. The Kanos, who had flourished since the Muromachi period, produced skilled artists like Yasunobu, Naonobu, Tsunenobu and Morinobu, all of whom had the honour of serving the Shogunate as official painters. But this special favour proved a cause of decline in the Kano school later. Among the

foregoing four principal members of the Kano school, the last mentioned, Morinobu, was the most excellent, known by the pen-name of Tan-yu. Tsunenobu ranks next in artistic skill. The Tosa school, which had been waning in influence, recovered its laurels in the days of Mitsuoki who was promoted to the Emperor's service. In those days the Sumiyoshi school originated from the Tosa, and became firmly established under Jokei, younger brother of Mitsunori. Toward the close of this period an attempt was made for the revival of yamatoyé, by Totsugon Tanaka, Ikkei Ukita and Tametaka Okada, among whom Tametaka Okada was pre-eminent. The yamatoyé of the Meiji and Taisho eras started from their work. Yosai Kikuchi is another painter of the group.

One of the greatest painters of the age was Korin Ogata whose art may be traced back to that of Sotatsu school which was originally a style of painting for decorative purposes. Under Korin were Kanzan, Shiko Watanabé and Hoichi Sakai. Their work surprised foreign eyes as a revelation of the peculiar excellence of Japanese art. Being used for decoration the work of the Kōetsu school had close relations with textile, dyeing, ceramic and other technical industries of the time.

Ukiyōé, which for originality is one of the salient art products of the Yédo period, developed hand in hand with popular drama and popular literature. It is said that the Ukiyōé or *genré* style of picture, was started by Iwasa-Matabéi-shōi; certainly he and Choshun Miyagawa, Shunso Katsukawa, Utamaro Kitagawa, Kiyonaga Torii, and Hokusai Katsushika are known as the most accomplished ukiyōé painters. Of ukiyōé there are two kinds, namely, hand-painting and colour-print.

The latter form was most characteristic of the age. The black and white prints, started by Moronobu Hishikawa, were forerunners of *beniyé*, which is a coloured print made on coloured wood blocks, an engraved block for each colour. Before this printing process was adopted for mass production, brushes were used for colouring. At first two colours, red and green, were used for printing from engraved blocks, but Harunobu Suzuki later invented an improved process of printing in five colours, starting the *nishikiyé* which met with popular favour as time went on. Later, in the hands of masters like Utamaro and Hokusai, the process of colour-printing from wood-engravings saw marked improvement, until the finished pieces far surpassed the original hand-painted work in artistic value. Landscape prints in *ukiyoé* style were started by the famous Hiroshigé Ando. Some people may look down upon *ukiyoé* as vulgar art; but nevertheless it was art most true to the life of the Yédo period. In later years it was not seldom that European collectors of works of fine art were found ready to pay even several thousand yen for a sheet of mere colour-print. This was not without reason.

Special mention should also be made of the arrival of Ifuchieu, a painter of the Ching dynasty in China; for it was through this artist that the Nan-Sung literary school of painting was first introduced into this country. In the early days of the Nan-Sung style of painting, Nankai Gion, Hyakusen Sakaki, Taiga Ikeno and Buson Yosano were its most excellent exponents. Later, with the rise of Chinese classics, the Nan-Sung literary school made great strides and its influence practically dominated the country, producing such noted names as Unsen Kushiō,

Daizen Hirose, Kaiséki Noro, Chikuden Tanomura, Kazan Watanabé, Aigai Takaku, Baikan Sugai, Hanko Okada, Chikudo Nakabayashi and Baiitsu Yamamoto, among whom Chikuden Tanomura was reputed the most excellent. Kazan Watanabé and Baiitsu Yamamoto enjoyed popular favour next to Chikuden.

Buncho Tani became the most brilliant artist of the age, both in Pei-Sung and Nan-Sung styles of painting; he was a pupil of Kangen Kitayama who learned technique from Fei Hun-yuan and Chu Ko-chin who entered Japan during the Ching dynasty of China. There were some other very important painters, too, namely, Rikyo Yanagisawa, Jakuchu Ito, Sosen Mori and Ganku. Especially popular were the pictures of domestic fowls by Jakuchu, and monkeys by Sosen.

An important event, moreover, was the appearance of the Maruyama school with Okyo Maruyama as its founder. Okyo's style was derived mainly from Ming and Ching paintings, and developed into what resembled sketches. His pupil, Goshun Matsumura, established the Shijo school, which in later years grew to be as popular as the Maruyama school. By these two styles the Kyoto world of pictorial art was dominated.

(2) Architecture. The Momoyama architecture of the preceding period developed into a far more elaborate style, and with more elegance. This elaborate rococo style of Yédo architecture had less value as fine art than as mere decoration. Examples of the architecture of this period are found in the celebrated buildings at Nikko, which, as everybody can recognize, are more worthy to be called an excellent decoration than an excellent example of fine art.

(3) Sculpture. Although there is not much to be said about the

sculpture of this period there are yet two outstanding instances that exemplify the use of Chinese carving; there are the Mampukuji temple at Uji, by a Chinese, Ingenzen-shi, and the art of Zen-shu-chokoku (Zen architecture), by a Buddhist sculptor, Fan Ton-sheng, from Foo-choo, China.

(4) Industrial Art. Both manual and industrial art greatly advanced in technique, and metal, textile, dyeing, lacquer and ceramic industries flourished like all sorts and varieties of flowers. A Chinese introduced from Ming the process of decorating ceramics with brilliant colours or in gold or silver. And through the efforts of Kakiemon Sakai and others the famous Arita and Imari potteries were founded. In this field of fine art the name of Jinsai Nonomura should be remembered, for he occupied the highest position. Cloisonne ware also experienced a remarkable promotion in technique, along with other branches of industrial art.

The time arrived at last when the people awoke from their age-long sleep, with all doors closed to foreigners. Besides Hollanders, came Russians, Britons, Frenchmen and Americans, in spite of the national agitation to keep the country shut against foreign intercourse. Already from Holland Western learning and art had percolated in through Nagasaki. Oil painting in Western style was attempted by Gennai Hiraga. The new style of painting spread far into the country even to Akita prefecture, and reached consummation under Kokan Shiba later. Thus towards the close of the Yedo period the urge of Western art reached Japanese shores in great force.

Meiji Art. The modern age in the history of Japanese fine art started over 60 years ago when the Emperor Meiji established Imperial govern-

ment in Tokyo. The Oriental fine art, which first sprouted in Mesopotamia, made eastward advance blending with Indian and Chinese art until it at last reached the Far East and established its central influence in Japan.

(1) Architecture. With the Meiji Restoration came a turning point in our history; the country was opened to free foreign intercourse, followed by the inflow of European culture like a flood. Western civilization soon began to exercise an overwhelming influence all over the country, and eventually everything foreign met with enthusiastic popular favour. This phenomenal change in the country directly influenced architecture; and European-style of structures sprang up here and there. Even in the Japanese style of building were mixed Western modes of architecture. These radical changes in the architectural world of Japan had no small influence on other branches of our fine art.

(2) Japanese Painting. In the early part of the period Nan-Sung literary painting still prevailed, supported by Kyou Hodachi, Koseki Nakanishi, Shoka Watanabe, Gokaku Hirano, Rozan Yasuda, Soun Tasaki, Yukoku Noguchi, Aizan Taniguchi, Watei Taki, Chokunyu Tanomura, Seiko Okumura, Kampo Araki, Shohin Noguchi and others.

It so happened that in the 11th year of Meiji a certain American professor in the chair of philosophy at the Tokyo Imperial University, being charmed with Japanese paintings such as the ukiyoyé and Kano and Tosa work, proposed to start a movement for the preservation of these schools of art. In conformity with Professor Fenollosa's suggestion, the Government, in the 21st year of Meiji, established the Tokyo Fine Art Academy. As a result of the movement, the old schools of

Japanese style of painting revived and a number of painters regained influence, of whom the more distinguished were Hogaï Kano and Gaho Hashimoto of the Kano school; Kanyo Morizumi, Kangi Yamana, Mitaté Kawabé, Fuko Matsumoto of the Tosa school; Zeshin Shibata, Kansai Mori, Bairei Yukino, Gyokusho Kawabata, Keinen Imao of the Maruyama school; Chikudo of the Kishi school; Honen Tsukioka and Gekko Ogata of the ukiyoyé school.

In the 40th year of Meiji the first art exhibition was opened by the Education Office; and since that time it has been held once every year, greatly stimulating the resurrection of traditional Japanese art. The Tokyo circle of Japanese style painters was represented by Taikan Yokoyama, Kanzan Shimomura, Kogyo Terasaki, Gyokudo Kawai, Tomoné Kobori, Jippo Araki, Suiun Komuro, Somei Yuki, Kiyokata Kaburagi, Reika Yoshikawa, Eikyu Matsuoka, Hyakusui Hirafuku and Keigetsu Matsubayashi; while in the Kyoto circle were well-known painters like Kokyo Taniguchi, Hobun Kikuchi, Seiho Takeuchi, Shunkyo Yamamoto, Kako Toji, Keigetsu Kikuchi and Suisho Nishiyama. All of these east-and-west leaders displayed great activity in nurturing the Japanese style of painting as we see it today.

(3) Western Painting. Towards the end of the Yedo era the foundation of the Occidental style in painting had already been laid by Kokan Shiba and Dezen Aodo; and now came Togai Kawakami, Yuichi Takahashi, Horyu Goseda, Hosui Yamamoto, Shinkuro Kunisawa, Chu Asai, Shotaro Oyama, Kiyowo Kawamura and Naojiro Harada, for whom the former foundation work became the basis for a new start. In the early Meiji days, English and Italian painters came to give lessons at the

fine art department of the Tokyo Imperial University. Later, in the 21st year of Meiji, the Meiji Bijutsukai was founded for the purpose of enhancing the Western style of painting. It was, however, not until Kiyoteru Kuroda returned from France and opened a department for Western style painting in the Tokyo Fine Art School, that the Occidental mode really became established. Important artists in the new style in those days were Saburosuké Okada, Eisaku Wada, Takeji Fujishima, Kotaro Nagahara, Mankichi Kobayashi, Fusetsu Nakamura, Kunishiro Mitsutani, Sanzo Wada and Kunzo Minami. The models set by these great painters still prevail to-day, but will in future be more subjected to the influence of the Japanese style before reaching consummation, just as the Japanese style will assimilate Western motives and technique as it keeps on its forward march.

(4) Industrial Art. The ceramic industry made rapid advancement after the arrival of Wagner from Germany with a new technique; and with the help of Kozan Miyagawa, Yohei Kiyokazé, Dohachi Takahashi, Rokubei Shimizu and Sobei Kinkozan. In recent years Hazan Itaya, Rokubei Shimizu and Ichiga Numata have won distinction in this sphere of art. During the Meiji era, fine cloisonne was manufactured and exported in abundance. Metal work also developed to a remarkable extent, producing a number of skilled artists. In the domain of lacquer and dyeing industries no less improvement brought Japanese industrial art to the verge of its golden age.

The tendency of Western countries to vie with one another in holding Japanese art exhibitions amply endorses the international value of Japanese art.

(5) Sculpture. Upon opening the Tokyo Fine Art Academy, Kyuichi Takeuchi and Koun Takamura gave lessons in traditional Japanese wood sculpture. Western style sculpture was also taught, by an Italian instructor in the academy, side by side with lessons from Shukei Naganuma who had returned from Italy, followed by Fumio Asakura, Taimu Tatehata, Seibo Kitamura. From Koun Takamura and Kyuichi Takeuchi we come down to Choun Yamasaki, Unkai Yonehara, Denchu Hirakushi, Shin Naito. In the Meiji era the rise of ivory carving was also conspicuous, producing engravers like Gyokuzan Asahi and Komyo Ishikawa.

What helped the phenomenal ascendancy of all branches of art were the Bunten (Education Office's art exhibition) which later came to be called Teiten (Teikoku Bijutsuin art exhibition), and the Inten (Nihon Bijutsuin art exhibition). Besides, there were and are exhibitions held by many other smaller groups of painters. From the viewpoint of art, it is not too much to say that Japan is to the Orient what France is to Europe.

Present Day Art

The period since the close of the Meiji era has been no less remarkable in the art history of Japan than the previous period, evincing brilliant activity in every direction. Since 1919, when the Imperial Art Academy was established, a systematic movement in the art world of Japan has been promoted. During the Taisho and Showa eras many institutions and organizations have been created, and new schools successively introduced from Western countries, especially from France, Germany, and Italy. Western-style painting, coming first under the sway of French impressionism, and

later passing through many stages of European influence, has produced vigorous and progressive artists who are thinking hard and exploring the furthest reaches of European pictorial thought. They have already reached the level of their Occidental benefactors, in technique. At a time when all the visual arts, if not all others as well, seem to be aspiring towards Occidental ideals of art, it must yet be noticed that our native art traditions are still retained, and characterize all works of purely Japanese fine art, with its classical rhythm and beauty.

Japanese-style Painting There are now in this country various exhibitions of Japanese-style paintings held by many institutes, wherein members are always seeking to achieve a more perfect expression of their ideals through traditional form and long-fostered technique. In the earliest stages of modern Japanese art, Kakuzo Okakura and other leaders, entertained this ideal, along with a number of artists and art societies, as well as such pioneers in our art-world as Hogaï Kano or Gyokusho Kawabata; and they joined efforts in the development of this school. Recently the art produced by their efforts has, in other hands, begun to degenerate into merely lifeless, mechanical work; and Western realism, instead of the old traditional method, is gaining gradual influence among painters. But in spite of the struggle between Orientalism and Occidentalism in technique, the art workers in Japanese style are still vigorous.

The "Teiten" or Imperial Fine Art Academy Exhibition, which includes various Sections of Fine Art, in 1931 celebrated the 25th anniversary of its establishment. As the only art exhibition under management of the Government, it has, since its foundation, been exerting

a profound effect upon this sphere of art, along with the Institute of Japanese Art (Nihon Bijutsuin), which is a private institution established specially for Japanese-style paintings. This was organized in 1898 under direction of Kakuzo Okakura and Gaho Hashimoto. These two institutes have continued to hold an exhibition every year. They have given birth to works of admirable achievement and merit, under such masters as Seiho Takeuchi, Taikan Yokoyama, Eikyu Matsuoka, and Hyakusui Hirafuku, all of whom are contributors to the native school.

On the other hand, there are other painters who also produce extremely creditable work, bringing out the profundity of the Oriental spirit and rising high above the conflict between Japanese traditionalism and Western realism. They are all grouped in organizations. Selson Maeda, Yukihiko Yasuda, Usen Ogawa, Sofu Nagano and Keimei Mamichi belong to the Nihon Bijutsuin; and Somei Yuki, Eikyu Matsuoka, Tsusen Ogiu, Ren Yamada, Shokin Katsuta, Nanyo Inui, Katsuji Koizumi, Ryuko Tsutaya, Gengetsu Yazawa and Saiten Tamura comprise the Japanese Painting Society (Nihon Gakai).

In the Kansai district, the Free Painting Society of Japan (Nihon-Jiyugadan) was organized by certain artists grouped in Kyoto, which has in itself special significance for lovers of genuine Japanese art. The members are Keisen Ikeda, Bunto Hayashi, Keigaku Nishi, Kokan Watanabe, Shunki Tamaya, Manshu Ueda and other painters. The number of talented painters is too numerous to mention, but the following are well known: Buzan Kimura, Yukihiko Yasuda, Kokei Kobayashi, Insho Domoto, Kwansetsu Hashimoto, Heihachiro Fukuda, Selson Mayeda, Shokan Taichi, Keisen Tomi-

la, Gakuryo Nakamura, Kampo Arai, Koka Yamamura, Tokan Fudeya, Sofu Nagano, Seisui Hashimoto, Usen Ogawa, Tsunetomi Kitano, Koichiro Kondo, Seiju Komoda, Eiho Hashimoto, Kahaku Kobayashi, Chi-yuki Sakikura, Nampu Katayama, Sanryo Sakai, Fudo Tomitori, Taigetsu Koyama, Taigyū Okuma, Kiyokata Kaburagi, Fumio Tanaka, Ryushi Kawabata, Toyoshiro Fukuda, Issō Sakaguchi, Rofu Ochiai, Shumpa Kawaguchi, and Keimei Anzai.

Western-style Painting It is not too much to say that the striking progress of Western-style painting is chiefly owing to the efforts of the Nikakai members, who, dissatisfied with the purely academic tendency of the Imperial Fine Art Academy, freed themselves from its restraint, and organized a society of their own. The Nikakai was organized in 1913 by an active group of rising painters of fresh and advanced ideas, the members being Ikuma Arishima, Yujo Fujikawa, Hakutei Ishii, Morichi Kumagai, Jutarō Kuroda, Tokusaburo Masamuné, Katsuyuki Nabei, Kigen Nakagawa, Hanjiro Sakamoto, Shintaro Yamashita, Sotaro Yasui, Haruyé Koga, Seifu Tsuda, Seiji Togo, and foreign painters, André L'Hôte and Zadikine. In 1922 was founded the Shunyokai by Misei Kosugi and other artists who had formerly been associated with the Western-style painting Section of the Institute of Japanese Art, but who had seceded from it, together with Ryuzaburo Umehara. The other members are Hakuyo Kurata, Noboru Hasegawa, Kanaé Yamamoto, Gen-ichiro Adachi, Shohachi Kimura, Tsuruzo Ishii and Ippei Okamoto. The Pacific Art Society, the oldest Western-art organization of the Meiji era, was established in 1905, and with them instruction in Western-style painting was first begun. Toraji Ishikawa, Banka Maru-

yama, and Kunishiro Mitsutani were conspicuous collaborators.

The Kaijusha was formed in 1924, supported by such able painters as Juji Kanazawa, Itaru Tanabé, Soshichi Takama, Sakujiro Okubo, Yoshihiko Kumaoka, Yori Saito and other artists.

In 1930 the Independent Art Association was founded by certain extremists in the art-world, like Katsuzo Satomi, Zenzaburo Kojima, and nine other members of the Nikakai, who had been dissatisfied with the mannerism of that society and left it. The new body consisted of 13 congenial artists, who aimed at working for a new art movement, by opening up a fresh course for students of Western-style. The painters of note in this group are Moriichi Kumagai, Kinzo Kuniyeda, Haruyé Koga, Tokusaburo Masamuné, Katsuyuki Nabei, Kigen Nakagawa, Hanjiro Sakamoto, Seifu Tsuda, Reiichi Yokoi, Giken Kinoshita, Kanemitsu Hamada, Shogo Taguchi, Genichiro Adachi, Noboru Hasegawa, Shohachi Kimura, Misei Kosugi, Hakuyo Kurata, Issei Nakagawa, Ippai Okamoto, Zennosuké Tanaka, Shozo Yamazaki, Kanayé Yamamoto, Kotaro Takamura, Sadao Tsubaki and Teusei Kono.

In addition to these societies, there are some minor organizations such as the Hakujiitsu-Kai, the Japanese Painting Society (Nihongakai), the Creative Print Association of Japan, and the National Art Association, all of them no less remarkable than the Societies previously mentioned.

Sculpture For the promotion of plastic art, there are many organizations which contain, each of them, sculptors of distinction. Besides the "Teiten" and the "Nikakai" which have also Sculpture Sections, there is the "Kozosha", organized in 1926, for study in the various branches

of plastic art. It is supported by Sogan Saito, Jitsuzo Hinako, Saburo Hamada, Miézo Shimizu, Kanji Yo, Taménari Hirai, Minato Kozu, Takézo Sato and other artists. It can hardly be denied that this sphere of art, on the whole, does not show such brilliant activity as other similar organizations.

Other sculptors of note are Denchu Hirakushi, Hakurêi Yoshida, Chozan Sato, Koyu Fujii, Tsuruzo Ishii, Ryumon Yasuda, Takéshiro Kita and Takézo Shinkai.

Applied Art Our applied arts have developed in their own way, giving birth to many works of really admirable craftsmanship, some being of more artistic merit than those of Europe. At every exhibition, various branches of applied art are represented. Many artists, some using all their traditional technique, or others creating wholly new forms, are striving to satisfy the demands of present-day life. The Fine Art Association of Japan is a leading organization, having Hozuma Katori, Kéigi Nakata, Choun Yamazaki, Shunzan Yagioka, Hiromi Minakami, as directors.

Other prominent artists in this sphere are: Nobuo Tsuda, Kamézo Shimizu, Shisui Musumi, Eiichi Ishida, Kiyoshi Unno, Séizan Kawamura, Kanémi Uyématsu, Sozan Sawada, Tozan Ito, Shuetsu Sakita, Senroku Kitahara, Shodo Sasaki, Héizo Tatsamura, Andon Yamamoto, Séika Yamaga, Kozan Miyakawa, Ichiga Numata, Kanjiro Kawai, Yoséi Tsuchiaki, Joun Oshima, Hankichi Kiuchi, Hoshu Takamura, Kado Sugita, Hakusai Okuni, Shumin Funabashi, Koshun Katsura, Gonroku Matsuda, Ryushin Umézawa, Séimi Yotsuya, Mia Isozaki, Ryuzan Ishino and Chibun Onojima.

Architecture After the earthquake and fire of 1923, Tokyo and other cities witnessed the erection of many

new buildings; and almost all these structures reveal a lively modernism under the influence of European styles, though some are more or less marked by national-classical characteristics. At present, Japan has acquired the modern mentality for steel and reinforced concrete; and many buildings in Japanese cities are as large and expensive as those in America. On the other hand a dozen or more able architects are thinking out greater possibilities in the adoption of newer European styles of architecture. Already in the new Mitsui Bank and the Mitsubishi Bank, as well as in many other new buildings, Japan can show imposing examples of architecture unsurpassed for art and utility by any other country.

The 1935-36 Exhibitions

The 10th and 11th exhibitions of the National Painters' Society was opened on April 28, 1935 and April 3, 1936 in the Tokyo-fu Art Gallery. The number of works sent in for examination reached 1,726 for the 10th and 1,841 for the 11th exhibition. Details follow:

	1935		1936	
	Works sub- mitted	Works accept- ed	Works sub- mitted	Works accept- ed
Western painting	1,182	140	1,251	140
Sculpture	199	38	211	26
Block colour-print	169	26	197	39
Industrial art	176	80	182	80

The submitted works to the Shunyo-kai Art Exhibition which was opened on April 28, 1935, in the Tokyo-fu Art Gallery in Ueno Park numbered 2,455, of which 263 were accepted. New painters numbered 38. The number of paintings submitted to their exhibition which was opened on April 3, 1936, was 2,653, of which 124 (7 new) were accepted.

The 22nd Nika-kai exhibition was

opened on September 3, 1935, in the Tokyofu Art Gallery at Ueno. The number of works submitted was 4,105 (3,927 Western paintings and 178 sculptures). The number of Western paintings accepted was 369 and that of sculptures 49. Among new admissions there was Harberd Wagner, while a foreign member of the society Mr. Aslan of France sent his works to the exhibition.

The 22nd Nihon Bijutsuin Exhibition (Inten) was opened on September 7, 1935, in the same building with the Nika-kai. As the result of amalgamation with the Teiten mentioned below, the exhibition was changed to a private one, works being submitted by the members and their pupils only.

A new organization of the Imperial Academy of Fine Arts was initiated by the Education Ministry in May, 1935, and the new Academy was organized on May 29, increasing the number of members from 30 to 50, so as to take in all representative artists who had been divided into three groups, i. e. the Imperial Academy of Fine Arts, the Nihon Bijutsuin and the Nika-kai, and certain improvements were effected in the way of examining the works submitted.

The new Teiten (Imperial Academy of Fine Arts) Exhibition was opened on February 25, 1936, and closed on March 25, the résumé was as follows:

	Works submitted	Works accepted
Japanese painting	1,731	191 (70 new)
Western painting (Omitted for this time only)		
Sculpture	194	17 (13 new)
Industrial art	797	214 (66 ..)

Art Museums

A list of the more important art museums follows:

1. Tokyo Imperial Household Museum: Ueno Park, Tokyo; open daily from 9 a.m. to 4 p.m. Departments: Art and History. Officials. President: Eisaburo Sugi; Manager: Masaaki Yajima.
2. Imperial Household Museum at Nara: In Nara Park; open daily from 9 a.m. to 4 p.m.; closed from Dec. 25 to Jan. 5. Departments: History and Art. Director: Gunichi Wada.
3. Kyoto Onshi Museum: In Shichijo, Kyoto; open daily from 9 a.m. to 4 p.m.; closed from Dec. 25 to Jan. 5. Departments: Art and History. Officials. Director: Fujio Wada; Advisors: Torajiro Naito and Yasunosuke Seki.
4. Chokokan: In Uji Yamada, Mie. Director: Kotaro Sakamoto.
5. Reihokan: At Koya-san, Wakayama. Director: Chito Izumi.
6. Treasure house, Kanshin-ji: In Kanshin-ji-mura, Minami-Kawachi-gun, Osaka.
7. Treasure house, Koryuji: At Uzumasa-mura, Kadono-gun, Kyoto.
8. Reihokan, Ninnaji: At Omoro, Kadono-gun, Kyoto.
9. Museum of the Faculty of Letters, Imperial University, in Kyoto.
10. Kankokan: in Hiroshima.
11. Treasure house of the Itsukushima Shrine: At Miyajima, Hiroshima.
12. Kokuhokan: at Kamakura.
13. Sanda Museum: at Sanda, Arima-gun, Hyogo.
14. Governmental Museum: at Seoul, Chosen. Manager: Ryozaiku Fujita.
15. Keishu Museum: in Keishu-gun, Keisho-hokudo, Chosen. Manager: Hideo Moroshika.
16. Prince Li's Museum: in Seoul, Chosen.
17. Kanto-cho Museum: at Port Arthur, Kwantung Province. Director: Naomiki Hirose.

Music

The First Period

Primitive Music The development of Japanese music may be divided into four periods. The first period originates in prehistoric times and ends about the reign of the Empress Suiko (592-627 A. D.). This is the music of the ancient Japanese (Yamato), and is here named, for convenience, primitive music. To regard the music of this stage as primitive may seem inappropriate, because towards the close of the 6th century Yamato civilization had advanced quite beyond primitive culture. The word primitive is applied here because, although music should show some development of artistic form, no such form was known in the music of this period. Compared with the music of the period that followed, a striking difference is noticed.

The Second Period

Introduction of Foreign Music The second period started about the end of the Suiko régime in the 7th century, and continued till about the

end of the Heian period, at the close of the 12th century. The characteristic feature of this period lies in the building up of Japanese music upon a foundation of Chinese, Korean and Indian music, which possessed a markedly advanced form and was then being freely introduced into our country.

(1) **The First Half.** In the first half of this period imported music was imitated. Music was first introduced from Korea (Chosen), then from India and lastly from China. Of the three, only that from China continued to come freely thereafter. The Chosen music then imported was widely different from the music introduced from China and India, especially in the degree of its evolution. But even such undeveloped music as that of Chosen (then called Sankan), was far more advanced than Japanese music. It is, therefore, but natural that there was an abysmal difference of standard between the Japanese music of the early period and that later imported from China and India. Moreover the

early models were monopolized by the nobles; the masses could not share the privilege of enjoying the advanced art but had to be content with the same old primitive music. For two to three hundred years this state of things continued, until the reigns of Emperors Saga and Ninmei when genuine Japanese Court music, called gagaku, came into vogue. But even this home-made gagaku was of foreign origin too.

(2) **The Second Half.** During the second half of the second period, foreign and domestic music became harmonized, producing a new Japanese style in vocal music. Founded on the imported music staff, the vocal music of this period can not be compared with the purely national music that prevailed in a later period. The varieties then developed were kagura, saibara, roei and imayo, all of which can be included in the following two groups:

(a) One group was modelled after foreign music but set to the key of Japanese music of the primitive age; and hence the reconstruction thus effected in ancient Japanese music was only in form. The most conspicuous examples are the kagura, azuma-asobi, Kumé-uta and yamato-uta. No doubt the kagura existed in the prehistoric age, as may be inferred from Japanese history, but not until past the middle of the Heian period did it appear in the regular form of music. The kagura is a sacred dance with music, practised on the stage of a shrine at village festivals. The kagura now observed, however, is fundamentally different from that staged in those days; it saw marked development in the Heian period. In the early days of the sacred kagura dance it adopted so primitive a form of vulgar indecency that it could not be performed today.

During this latter part of the

second period all the other three branches of music, namely, azuma-asobi, Kumé-uta and yamato-uta, were also practised at shrine festivals. Originally they had no relation with shrines, the first two having developed from folk-songs, and the third from a war-song sung during the triumphant expedition into Yamato under the Emperor Jimmu. The adoption of those folk-songs in the rites of sacred festivals was made possible by the advanced music of foreign origin employed at Buddhist temples; better music also became indispensable at Shinto shrines in order to rival the advanced Buddhist music. Unlike Buddhist temples, the Shinto shrines hesitated to make use of imported material; and so they had no alternative in those days but to improve their music on the ancient models of the country. The principal instruments employed for this purpose were the six-stringed Japanese koto and the six-holed kagura flute, remodelled.

(b) Those modes that come under the category of the other group are the saibara, roei and imayo, which were combinations of imported and Japanese music then in vogue. As regards saibara, it is believed that it was a sort of folk-song that prevailed in the Nara period, but the saibara, a folk melody of the Nara period, can not be compared with the saibara which was an artistic vocal song of the Heian period; in form they are widely apart. The saibara in the Heian period was in fact an artistic product. These branches of music served for the amusement and diversion of nobles, and had nothing to do with religious services. They were exclusively of foreign origin in form.

The Third Period

Seclusion of Domestic Music The third period begins with the Kama-