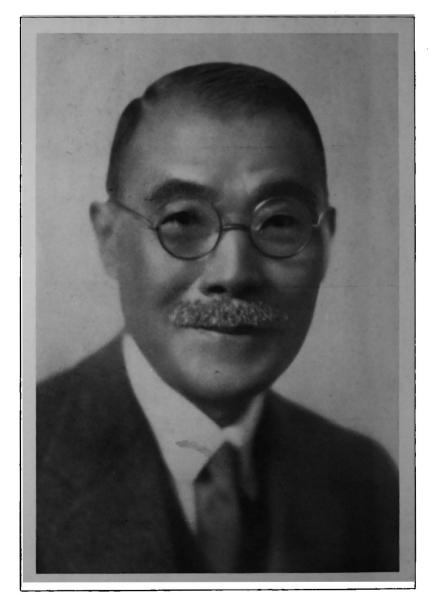
# Dhananjayarao Gadgil Library

# THE SPIRIT OF JAPANESE INDUSTRY





# THE SPIRIT OF JAPANESE INDUSTRY

BY

# **GINJIRO FUJIHARA**

Member of the House of Peers President of the Oji Paper Company



Tokyo THE HOKUSEIDO PRESS 1936 ALL RIGHTS RESERVED, 1936

X9.42.N3 GG 51360



### FOREWORD

The Japanese book entitled "Kogyo Nihon Seishin," of which this is a translation, was an outcome of a series of lectures given in 1934. It was written for my own countrymen, whom I wished to inspire with confidence in the future of Japanese industry. Since the book was published in the latter part of 1935, it has enjoyed a large circulation, and suggestions for an English version have come to the author from a number of friends. It has been pointed out to me that the position of Japanese industry will be understood better abroad, if the book is made accessible to the Englishreading public. The world is beginning to realize that the industrial structure of Japan is not a mushroom phenomenon, but only those who come to Japan and see with their own eyes can understand why articles of excellent quality are produced in Japan at a cost so low as to seem inconceivable.

It is in the humble hope of enabling a greater number of people to form a more adequate idea of Japanese industry that I have made up my mind to present my little book in new garb. I have known the translator for a number of years, and have confidence in his ability to render my thoughts into English.

**GINJIRO FUJIHARA** 

Tokyo August, 1936 X9.42.N3 G6 51360

### THE TRANSLATOR'S PREFACE

The author is so well-known among our own people that he needs no introduction in Japan, but I hope that a few words about his position in Japan's industry of the present day may interest some readers of the English edition.

Mr. Fujihara is not an old man, but his able administration for a quarter-century as Chief Executive of the Oji Paper Company is preceded by a brilliant record of important positions held in Mitsui & Co., which is a huge trading concern with branches in all the principal commercial centres of the world. The author is an optimistic industrialist, but has never been either an opportunist or a visionary. He formulates all his projects on the soundest principles, and carries them out no less conservatively. Yet Mr. Fujihara believes in forging ahead, and the dominating position of his company is an outstanding achievement.

When Mr. Fujihara was invited to reorganize the Oji Paper Company in 1911, the capital was 6,000,000 yen, and his predecessors had not paid any dividend for several years. Under his distinguished leadership the corporation has grown stronger financially, while the business has expanded from year to year, the capital today being 300,000,-000 yen. This book is not a piece of scholarly work, but it is hoped that what a captain of Japanese industry has to say may be of interest to those who care to have a deeper insight into the economic life of the Japanese nation.

Mr. Fujihara has a seat in the House of Peers as a life member, which is an imperial appointment for men of distinguished services. He does not take an active part in politics, but keeps in close touch with all the important affairs of the State.

# THE TRANSLATOR'S FREFACE

I have had the privilege of working under Mr. Fujihara for many years, and the work of translation has all along been a genuine pleasure.

It is with sincere appreciation that I acknowledge my indebtedness to Prof. William Bradford Smith of St. Paul's University, Tokyo. In addition to undertaking the tedious work of revising the manuscript, he made several suggestions which I found helpful in publishing this book.

YASUNOSUKE FUKUKITA

Tokyo August, 1936

viii

# CONTENTS .......

-

FORWORD	•••	•••	•••	•••	•••	 •••	•••	Pago V
THE TRANSLATOR'S PREFACE			••••	••••		 •••	•••	vii

### PART I

### THE PHENOMENAL DEVELOPMENT OF JAPANESE INDUSTRY

L THE STRUGGLES OF EARLIER DAYS	3
IL JAPAN'S SUCCESS IN COTTON SPINNING	8
III. THE COTTON INDUSTRY (continued)	13
IV. THE COTTON INDUSTRY (concluded)	16
V. SHIP-BUILDING	20
VL JAPAN'S RISE IN THE SHIPPING WORLD	24
VIL ELECTRICAL ENTERPRISES: LIGHTING AND POWER	30
VIII. ADVANCE IN CHEMICAL INDUSTRIES	35
IX. THE DYESTUFP INDUSTRY	38
X. DEVELOPMENT OF NITROGENOUS FERTILIZERS	42
XI. JAPAN'S SUPERIOPITY IN THE RAYON INDUSTRY	46
XIL FORGING AHEAD IN MACHINE-BUILDING	49
XIIL THE FALLACY OF THE ARGUMENT FOR NATURAL RESOURCES	52

### CONTENTS

### PART II

# INDUSTRIAL EXPANSION DUE TO RACIAL TRAITS

<b>.</b> I.	CAUSES OF RAPID INDUSTRIAL DEVELOPMENT	•••	•••	•••	59
<b>. II.</b>	MENTAL DISCIPLINE	***	•••	•••	62
III.	HONOR ABOVE LIFE FOR ARTISTS AND CRAFTSM	MEN	•••	•••	66
IV.	MODERN INSTANCE OF THE SAMURAI SPIRIT	•••	•••	•••	72
v.	FINE TRAITS OF JAPANESE CRAFTSMEN	•••	•••	•••	75
VI.	TECHNICAL ACHIEVEMENT AND THE JAPANESE	SPIR	IT ·	•••	<b>79</b>
VII.	JAPANESE DILIGENCE	·	•••	•••	82
VIII.	LIVING CONDITIONS	••••	•••	•••	84
IX.	SIMPLE LIFE AND EXCELLENT ADMINISTRATION	•••	••••	•••	89
X.	CHANGING OPINION ABROAD	•••	•••	•••	93

### PART III

# OPPORTUNITY FOR EXPANSION

I.	JAPAN'S POSITION IN WORLD TRADE	•••	99
II.	EXPANDING UNDER PRESSURE	•••	105
III.	RAW MATERIALS FOR JAPANESE INDUSTRY		109
IV.	REVOLUTIONARY UNREST IN ORIENTAL COLONIES	***	112
v.	LEADING CHINA ON THE WAY TO PROSPERITY	•••	117
VI.	SUCCESS OF PIRATICAL ENTERPRISES	•••	120

# CONTENTS

xi

VII.	OCCIDENTAL COLONIZATION IN THE ORIENT	AND	) JAI	PANES	S <b>E</b>
	PIRATES	•••	•••	•••	124
VIII.	A MODERN VERSION OF ANCIENT PIRACY	•••	•••	•••	130
IX.	ARMAMENTS AS A NATIONAL INVESTMENT	•••	•••		132
<b>X</b> .	SPLENDID OPPORTUNITY FOR EXPANSION	•••	•••	•••	136
	INDEX	•••			143

# **ILLUSTRATIONS**

THE AUTHOR	lispiece
Facin PRIMITIVE HANDICRAFT. THE FORERUNNER OF IAPAN'S MODERN	ng Page
PAPER INDUSTRY	6
WEAVING WAS GENTEEL WORK FOR LADIES OF ANCIENT JAPAN. (Specially painted by Aritsuné Hattori.)	10
FINISHING PLANT OF JAPAN'S LEADING SPINNING AND WEAVING CONCERN	14
A SECTION OF AN UP-TO-DATE COTTON MILL	18
21,000 TON TENDER UNDER CONSTRUCTION AT KOBE FOR USE OF JAPANESE WHALERS IN THE ANTARCTIC	22
TWO TURBINE-GENERATORS OF 62500 KVA EACH, LARGEST OF THE KIND MANUFACTURED IN JAPAN	50
CEREMONIAL ROBE WORN BY THE SWORDSMITH BESPEAKS HIS RELIGIOUS DEVOTION TO HIS CALLING (Specially painted by Aritsuné Hattori.)	62
A FAMED ACTOR OF THE 'NO' DRAMA IN THE GREENROOM WITH A MASK MADE BY A MASTER CARVER (Specially painted by Ariisuné Hattori.)	68
THE AUTHOR AT THE INAUGURATION OF A NEW MACHINE BUILT IN JAPAN WHICH TURNS OUT NEWSPRINT PAPER AT 1300	
FEET PER MINUTE	81
TYPICAL DORMITORY FOR COTTON MILL OPERATIVES	<del>9</del> 0
FACTORY DINING HALL WHERE MEALS ADEQUATELY SATISFYING AND NUTRITIOUS ARE SERVED AT NOMINAL CHARGES	90

ziii

### xiv

# ILLUSTRATIONS

FACTORY MANAGEMENT ENCOURAGES INDIGENOUS SPORTS BY PROVIDING SPECIAL HALL FOR JUJITSU	90
PIONEERS OF JAPAN'S FOREIGN TRADE WERE INTREPID SEA- ROVERS	126

Abe, Lord of Bungo 68, 69 Aboshi 46 Acid dyestuffs 39 Africa 11, 109, 112 Aichi Prefecture 5.9 Alum 39 Amakusa 128 America 11, 18, 21, 48, 59, 60, 72, 73, 74, 82, 92, 105, 106, 107, 119, 138 American 5, 26, 27, 36, 50, 72, 73, 114 American Government 114 American laborers 92 Ammonium sulphate 38 Anglo-Japanese exchange 100 Annam 124, 126 Anti-Japanese agitation 106, 107 Anti-Japanese boycott 107, 108, 118 137 Armor-maker 64 Army 101 Artificial fertilizer 42 Asano Cement Company 4 Asano, Marquis 4 Asano, R. 130 Asano, S. 4 Asia 112, 114, 120, 121, 138 Asia Minor 109, 130 Asiatic 113, 115, 121 Ashikaga Shogunate 125 Asukayama 4 Atlantic 54, 55 Australia 11, 110, 136 Australian Economic Mission 110 Autonomy 113

Barnby, Lord 89, 90, 91

Battle of Okehazama 138 Beer brewery 35 Benzol 38 Bicycles 59 Black ships 20 Borneo 124 Boxer Rebellion 9 Brazil 23 Bricks 4 British 17, 23, 25, 27, 28, 29, 100, 115, 121, 122, 127, 128, 131, 133, 134 British East India Company 121 British Economic Mission 89 British Empire 136 British Government 25, 40, 89, 112, 133 British India 11, 105, 109, 119, 138 British industrialists 91 Britishera 133 Buddhist 67, 68 Bureau of Engineering 49 Bureau of the Official Gazette 30 Bushido 62, 69, 118 Calcium carbide 43 Canada 105, 110, 136 Carbolic acid 38 Carpenters 75 Casale 44 Catholics 128 Celebes 121 Cement 4 Central America 11 Central Asia 112 Charleston phosphate rocks 42 Cheap labour 94

Chemical fertilizers 32, 59 Chemical industries 33, 35 Chichibu, Prince and Princess 75 China 10, 14, 20, 39, 40, 54, 106, 107, 108, 117, 118, 119, 124, 126, 136, 137, 138 China trade 9 Chinese 62, 124, 125 Chinese Government 106 Chinese people 107, 117 Chinese pirate 126 Chino-Japanese commercial relations 118 Chino-Japanese War 9, 21, 24 Chivo Maru 21 Christian missionaries 128 Christianity 127, 128 "Clashing Tides of Colour," quoted from 93-95 Claude, G. 43, 44 Coal 53 Coal tar 39 Coconut oil 114 Cocoons 5 Coke 38 Communist 112 Comparison of Foreign Trade(Tables) 102, 103, 104 Cost of production 84 Cotton goods 12 Cotton industry 13, 16, 17, 18, 59 Cotton mills 13, 15, 16, 18, 84, 85, 87, 91 Cotton spinning 14 Cotton spinning machine 49 Cotton textiles 11, 59, 130 Cotton yarn 8, 10 Crown Prince and Princess of Sweden 76 Currency 94 Curtis turbine 21 Daimyo of Satsuma 8

Daimyos 20 Dairen 107 Debuchi, Ambassador 110 Department of Commerce 26 Department of Commerce and Industry 44 Department of Communications 34 Department of Finance 35 Depression 14, 16, 25, 46, 99, 100 Diana, Russian ship 21 Diesel engines 25, 30 Dietetic Laboratory 86, 87 Dormitory 87, 91 Double Bridge 78 Dutch 120, 121, 122, 127, 128, 131 Dutch East India Company 120, 121, 122 Dutch East Indies 11, 41, 105, 107, 109, 112, 113, 115, 119, 138 Dutch Government 121 Dyestuffs 32 Dyestuff industry · 38 East, the 27, 113 East India Company 123, 133 Eastern Asia 117, 128 Economic expansion 131, 132 Edison, T. 47 Efficiency 83 Electric bulb 60, 90 Electrical enterprises 30 Electricity 30 Emma, King of Hell 67 England 3, 4, 5, 16, 18, 25, 55, 59, 80, 91 English 17, 60, 72, 79, 80, 110 Englishman 5, 81 Etchu, Province of 63 Europe 8, 11, 21, 27, 32, 41, 48, 59, 60, 82, 87, 90, 92, 105, 106, 107, 109, 112, 118, 119, 120, 124, 130, 134, 138 European 20, 49, 50, 55, 84, 85, 90, 91, 93, 110, 123

European civilization 81 European colonies 112 European countries 36, 115 European goods 117 European nations 109, 128, 134 Exchange rate 11, 100, 104 Fauser 44 Federation of Rayon Manufacturers 46 Feudal lords 24 Filipino 114 Flour mill 35 Formosa 126 France 4, 36, 39, 48, 99, 100, 121 French 4, 7, 20, 43, 60, 93, 113, 122, 127 French East India Company 121 French Indo-China 113 Fukagawa 4 Furukawa Mining Company 38 Geneva 84 Gengoro 66, 67, 68 Gennosuke 66, 67 German 41, 43, 59 Germany 18, 22, 36, 38, 39, 40, 41, 43, 46, 48, 50, 51, 52, 54, 55, 59, 99, 100, 105 Glass factory 5 Gothenburg 75 Government Mint 35 Great Britain 22, 23, 24, 25, 26, 40, 50, 51, 52, 60, 99, 101, 105, 106, 109, 115, 122, 128, 133, 136, 138 Great Japan 94, 118 Greater Tokyo 3 Gregory, Prof. 110, 111 Gold embargo 11, 22 Gold standard 118 Gumma Prefecture 4, 5

Haber, Dr. 43

Hachiman Daibosatsu 124 Hamaguchi Cabinet 11 Hamano Kyozui 70 Hand-spinning 8, 9 Happi coat 76 Hara & Company 4 Harima 65 Hatter 115 Hideyoshi 126, 131 Hirado 126 Hiroshima 5, 9, 30, 43 Hokkaido 35 Hokusai 68 Hydro-electric plant 30 Ikkansu Harima 64 Imamura, T. 114 Imperial Palace 78 Imperial Restoration 20 Imperialism 128 Inawashiro Power Company 30 India 25, 41, 106, 107, 109, 113, 117, 119, 120, 121, 122, 127, 130, 131, 133 Indian 120 Indian Ocean 27 Indian yarn 9 Independence 113 Indigo 39 Industrial competition 90 Industrial expansion 13, 57, 91, 93, 131 · Inland Sea 126 International Exposition 49 International labor conference 84 International Labor Office 84 Irish 95 Iron and Steel 52 Iron ores 52 Ishikawajima 20 Italy 43, 46, 99, 100 Ito 20 Iwai & Co. 46

Iyenari, Shogun 68 Iyemitsu, Shogun 127 Izu, Province of 20, 21 Japan Dyestuff Company 39, 40 Japan's expansion 136 Japan's export trade 99, 117 Japan's exports 109 Japan's foreign trade 99, 100, 105, 110, 118, 127, 130, 131, 133, 137 Japan's trade expansion 134, 137 Japanese buccaneers 124 Japanese colony 127 Japanese competition 16, 59, 106, 138 Japanese currency 127 Japanese Empire 44 Japanese goods 84, 105, 109, 110, 112, 114, 115, 117, 130, 137 Japanese Government 33, 35, 39, 49, 131, 133 Japanese industrialist 87 Japanese industry 62, 84, 93, 99, 109 Japanese laborers 85, 90, 92 Japanese Mars 125 Japanese Navy 49, 101 Japanese people 13, 101, 106 Japanese pirates 124, 125, 127, 129, 130, 131 Japanese rice 85, 86, 89 Japanese traders 109, 130 Japanese-Dutch conference 115 Japan-Manchukuo economic bloc 136 Java 109 Kaga 127 Kagoshima 8 Kakigaracho 4 Kanegafuchi Spinning Company 13, 49.50 Kanze school of No actors 66, 67 Kawasaki Shipyard 22 Kedah, Crown Prince of 115 Kimizawa 21

Kobe 13. 40. 46 Kochin 124 Korea 44, 68, 124 Korean 124, 125 Korean expedition 126 Koriyama 30 Kozo 3 Kuomintang 107 Kwannon 70 Kwantung Province 107, 108, 117 Kyoto 30, 87 Kyozui 71 Kyushu 3, 126 Labour situation 93 Lake Biwa Canal 30 Lancashire 16, 17, 50 Lantern Festival of Bon 66, 67 League of Nations 115 Leased Territory of Kwantung 11 Lighting 30 Lime 39 Living conditions 84 London 101 London Times 89, 94, 110 Loochoo Islands 8, 126 Lord Mayor of London 121 Lumber 55 Luzon 114, 124, 126 Luzon Sukezaemon 127 Machine-building 49 'Made in Japan' 95 Magellan 122 Malabar coast 121 Malakka 121 Malay Peninsula 115 Manchester 11, 18, 59, 112 Manchukuo 44, 54, 107, 117, 118, 132, 136, 137 Manchuria 106, 119 Manures 42

Maritime traffic 24, 29 Masafusa 126 Masamune 63 Mask-makers 66 Masuda, Baron 42 Match industry 35 Maurette, F. 84, 85, 86, 87 Mechanical and chemical industries 36, 62 Mediterranean 11 Meiji Era 6, 21, 35, 39, 42 Meiji Government 3, 4 Miike 43 Miike Colliery 39 Mikado 63 Ming Dynasty of China 125, 126 Miso 85 Misoshiru 83 Mitsubishi 46, 134 Mitsui 3, 17, 18, 39, 43, 134 Mitsumata 3 Mogul Emperor 122 Molukka Islands 121 Mordants 39 Murakami Saburozaemon Yoshihiro 126 Muto, S. 13, 14 Mutsu, Province of 20 Nagasaki 20, 21 Nagoya 43, 87 Naphthaline 38 Natural resources 52 Naval Conference 101 Navy 101 Navy Department 20 Neckties 60 Netherlands 60, 112, 115, 120, 122, 128 New Orleana 42 New York 54, 55, 60 Night-duty 82

Nippon Jinzo Hiryo Company 42 Nippon Seishin 94 Nitrogen 43 Nitrogenous fertilizers 42 No drama 66 North China 118 Occident 100, 120 Occidental 21, 91, 92, 114, 126 Occidental colonies 122 Occidental colonization 124 Occidental countries 50, 78, 82 Ochoku 126 Oda Nobunaga 64, 131, 138 Oji 4 Oji Paper Company 3, 5, 18, 72, 79, 132 Oregon 55 Orient 27, 51, 113, 120, 122, 124, 128 Oriental 113, 120, 121 Oriental colonies 112 Orientals 114 Osaka 8, 30, 35, 43, 87, 115, 130 Osaka Chemical Industry Company 38 Pacific Ocean 21, 27 Panama Canal 27 Paper 3, 5, 79 Paper machine 79, 81 Paper mill 3, 4, 80 Parsons turbine 21 Patriotism 5, 94 Pencils 60 Persia 130 Pesos 114 Philip II 120 4 Philippine Islands 122 Philippines 109, 113, 114 Pirates 120

Platt Bros., Ltd. 8, 50

Porcelain 5 Port Arthur 107 Portugal 120, 128 Portuguese 120, 121, 122 Power 30 Powers 101 Preparedness 134 Printing Bureau 35 Pro-American 114 Pro-Japanese 114 Ramos 114 Raw cotton 16, 18, 53 Raw materials 52, 109, 110, 111 Raw silk 4 Raw silk mill of the Government 6 Rayon, Production and Exports of (Table) 47 Rayon industry 46 Red 112 Red-ink bond issue 28 Red-ink bonds 132 Royal Ethnographical Museum 75 Rubber 53 Rubber shoes 60 Runciman 25 ۶ Russia 13, 20 Russians 21 Russo-Japanese War 10, 14, 21, 24, 36 Rvo 127 Ryojun 107 Sagami, Province of 63 Sakai 8 Sakai Celluloid Company 46 Sakdalist Party 114 Saké 64, 66, 77 Samurai 6, 7, 66, 72, 119 Sapporo 35 Scandinavia 55 Seattle 55

Senju 4 Shantung 106 Sheffield, England 53 Shibaura Engineering Works 49 Shibusawa, late Viscount 6, 24, 42 Shimada 3 Shimazu, Prince 3, 8 Shimmachi 5 Shimonoseki 43 Shinagawa 5 Ship-building 20 Shipyard 20 Shirts 60 Shogun 67 Shogunate 21, 69 Siam 23, 124, 126, 127 Silk mills 86 Silk-reeling 7 Silk-reeling mill 4 Singapore 95, 130 Soap 5 Social dumping 93 Solvay kilns 38 South Africa 119, 130 South America 11, 109, 110, 130 South Pacific 27 South Sea 27, 138 South Sea Islands 54, 110 South Sea region 45, 117, 126, 127 Spain 120, 128 Spaniards 120, 121, 122 Spanish-American War 122 Spirit of Japan 94 Steam turbines 30 Stockholm 75, 76 Stoddard, L. 93, 112, 114, 118 Strait Settlements 107 Suez 27 Sulphate dyestuffs 39 Sulphate of ammonia 43 Sulphuric acid 35 Super-phosphate 42

Surat 121 Suzuki & Company 40, 46 Sweated labor 84, 91 Sweated workers 93 Sweden 54, 75, 76 Swedish 54, 75 Swordsmith 63 Synthetic dyestuffs 39 Takadaya Kahei 127 Takamine, late Dr. 42 Takeda Shingen 137 Takinokawa 8 Tanaka Machine Works 49 Tariff 110, 114, 137 Tea ceremony 76 Tea ceremony house 75, 77 Teikoku Rayon Yarn Company 46 Tenyo Maru 21 Tientsin 107 Tin-plate 5 Tokugawa régime 127 Tokugawa Shogunate 20, 70, 127, 128, 131, 133 Tokyo 8, 24, 30, 35, 75, 77, 80, 86, 89, 90 Tokyo Electric Light Company 30 Tokyo Gas Company 43 Tokyoite 90 Tomioka 4, 6 Toyoda 50 Trade expansion 109, 133 Trade unions 16 Tsingtao 107 Tsukinoura 20 Tsushima 125 Twenty-One Points 106 Types, movable 5 U.S. Steel Corporation 54 United States 24, 25, 26, 28, 29, 36, 45, 47, 48, 50, 51, 52, 54, 55, 60, 99, 100, 101, 105, 106, 114, 122

Uraga 20 Vienna 49 Vinegar 39 Wages 16, 25, 84, 90, 91, 92 Wage-cut 94 Wage-scales 93 Wako 124 War Department 5 Washington Conference 106 Water power 32 West, the 27, 113, 114 Western 93, 112, 113 Westerners 60, 62, 86, 91, 93, 100, 107, 115, 124 Wool 53 Woolen mill 4 World-depression 94 World's Fair 42 World-trade 94, 99 World War 11, 13, 16, 20, 21, 22, 24, 25, 32, 36, 38, 39, 40, 89, 106, 112, 113, 118 Yamada Nagamasa 127 Yamato Race 118 Yedo 66, 70 Yokohama 4 Yokosuka Naval Station 42 Yonezawa 46 Yorozuya Shimbei 70, 71 Yoshihiro 63 Yoshimochi 125 Yusen 68, 69

Zen 70 Zeniya Gohei 127

昭和十	一年力	,月廿八	日印	£1			
昭和十	一年 十	月一	日發	行			
	PANES 医譯「工	FPIRIT FE INDU 業日本 集 所	JSTRY 精神」◆				
著者		喜多	<b>眼</b> 次 靖 之	助			
發行彙中上 義 敬 印刷者中 上 義 敬 <u>v. NAKAYSUCHI</u> 東京市神田區錦町三丁目十二番地							
發行所	北	替東京	ー   町三丁目十   ー 六〇二	四番			
電話 静田 ー 四 二 九 番 THE HOKUSEIDO PRESS KANDA, TOKYO, JAPAN.							
Foreign Agents LONDON: E. G. ALLEN & SON LTD., 12 & 14 GRAPE STREET. SHAFTESBURY AVE., LONDON, NEW YORK: G. E. STECHENT & CO., 31-33 EAST IOTH ST., NEW YORK. CHICAGO: THE ARGUS BOOKSHOP. SSS SOUTH DEARBORN ST., CHICAGO.							

.

\$ 3.00 in America 12 s in Europe

定演參圖八拾錢