

Contents

Editors and Contributors	xi
About the Translators and the Division of Translation	xv
The Invention and Civilization (As Postscript)	xvii
1 Introduction of the Thirty Great Inventions of China	1
Jueming Hua	
2 Millet Agriculture	9
Xiongsheng Zeng	
3 Rice Farming	21
Xiongsheng Zeng	
4 Sericulture and Silk Production	37
Feng Zhao and Hui Liu	
5 Chinese Characters	63
Yu Peng	
6 Algorism and Rod Calculus	99
Shuchun Guo	
7 Bronze Metallurgy	131
Benshan Lu and Rongyu Su	
8 Pig Iron-Based Steel Smelting Technology	185
Jueming Hua and Xing Huang	
9 Canal and Navigation Lock	213
Weibing Zhang and Kuiyi Zhou	
10 Plows and Seed Ploughs	271
Lisheng Feng	

11	Water Wheel	297
	Xing Huang and Baichun Zhang	
12	Traditional Technique of Lacquer	313
	Bei Chang	
13	Papermaking	343
	Jixing Pan	
14	Traditional Chinese Medicine Diagnosis and Treatment	387
	Yahua Niu	
15	Porcelain	453
	Yongshan Yang	
16	The Technology of Chinese Wooden Structure Architecture	485
	Daiheng Guo and Peijun An	
17	Chinese Cooking	517
	Pangtong Qiu	
18	Carriage Hitching Technique and Stirrup	551
	Wei Chen	
19	Printing	569
	Xiumin Zhang and Qi Han	
20	Tea Planting and Making	595
	Jiahua Zhou	
21	The Invention and Use of Celestial Equatorial Measurements	615
	Yunli Shi	
22	Bulkhead	635
	Longfei Xi	
23	Gunpowder	647
	Zhanhong You	
24	Compass	663
	Nianzu Dai	
25	The Technology of Ultra Deep Drilling	685
	Jixing Pan and Xiaowu Guan	
26	Intensive Cultivation and Eco-Agriculture	711
	Zongdian Min	
27	Traditional Chinese Calculation Method with Abacus	737
	Lisheng Feng	

28	Ferment of Distiller's Yeast	759
	Jiahua Zhou	
29	Fire Arrow and Projection Firearm	777
	Zhanhong You	
30	Variolation of Traditional Chinese Medicine Diagnosis and Treatment	799
	Yahua Niu	
31	Artemisinin (Qing Hao Su)	815
	Yahua Niu	
32	Hybrid Rice	847
	Yeyun Xin	