

N 19.  
37

A  
The Silk Industry in America.

A HISTORY:

PREPARED FOR THE CENTENNIAL EXPOSITION.

BY

L. P. BROCKETT, M. D.



1876.



A

## PREFACE.

THE little treatise herewith offered to the public can make but slight pretension to original thought, or literary merit; though its preparation has required extensive and somewhat protracted research in fields seldom explored by literary men, and not often by those specially interested in the silk industry.

The writer desires to acknowledge his deep obligations to Franklin Allen, Esq., the Secretary of the Silk Association of America, not only for placing at his disposal the Association's large collection of works on silk and silk culture, which comprises most of the literature of the subject, but in a still higher measure for his free permission to use and transcribe the greater part of his "Chronological Record of the Silk Industry in America," prepared with great labor for the forthcoming volume of the U. S. Industrial Directory; and for tables of statistics, which add greatly to the permanent value of this volume. Without such coöperation, the production of this work would have been impossible. Grateful acknowledgments are also due to A. T. Lilly, Esq., the author of a history of the silk industry in Connecticut; John Ryle, Esq., of Paterson., N. J., and other manufacturers, who have also communicated important facts for the work.

For whatever of good or use there is in this little volume, the credit is largely due to these kind friends; for its errors and shortcomings, if such there be, the writer must alone bear the responsibility; but the burden will be lighter, if his readers will do him the justice to believe, that he has sought, to the best of his ability, to honor American Industry, and to set forth the achievements of American enterprise and perseverance.

This work is published under the auspices of the Silk Association of America. The privilege of its sale at the International Exhibition at Philadelphia, has been accorded by A. T. Goshorn, Esq., Director-General of the U. S. Centennial Commission.

L. P. B.

BROOKLYN, N. Y., *June*, 1876.

---

Entered according to Act of Congress, in the year 1876, by  
THE SILK ASSOCIATION OF AMERICA,  
In the Office of the Librarian of Congress, at Washington.

---

---

GEORGE F. NESBITT & CO.,  
PRINTERS,  
Cor. Pearl and Pine Sts., N.Y.

---

## TABLE OF CONTENTS.

### THE SILK INDUSTRY IN AMERICA.

	<i>Page.</i>
Introductory Chapter, - - - - -	7
Chapter I.—The derivation of silk, - - - - -	9
Chapter II.—Early production of silk in Asia, Europe and Africa, -	15
Chapter III.—Silk culture and manufacture in Europe, - - -	20
Chapter IV.—Early production of silk in America, - - - -	26
Chapter V.—Efforts to revive and extend silk culture, 1780—1844,	35
Chapter VI.—The <i>Morus multicaulis</i> mania, - - - - -	38
Chapter VII.—Workers in silk culture, 1825 to 1844, - - -	41
Chapter VIII.—Later efforts at silk culture, - - - - -	46
Chapter IX.—Organized silk manufacture in America, - - -	50
Chapter X.—The rise and growth of South Manchester, Conn., -	60
Chapter XI.—Manufacturing enterprises started between 1838 and 1848, - - - - -	67
Chapter XII.—Manufacturing enterprises started between 1848 and 1854, - - - - -	70
Chapter XIII.—Manufacturing enterprises started between 1854 and 1863, - - - - -	75
Chapter XIV.—Manufacturing enterprises started between 1863 and 1869, - - - - -	78
Chapter XV.—Manufacturing enterprises started since 1869, -	82
Chapter XVI.—Methods of manufacture: reeling, throwing and dyeing, - - - - -	87
Chapter XVII.—Weaving narrow and broad goods, - - - -	95
Chapter XVIII.—Manufacturing silk laces and spun silk, - -	101
Chapter XIX.—The Jacquard weaving apparatus, - - - - -	105
Chapter XX.—Rise and growth of the silk manufacture in Paterson, N. J., - - - - -	109
Chapter XXI.—Awards to silk exhibitors, prior to 1876, - -	121
Chapter XXII.—The present and the future, - - - - -	128
Appendix, - - - - -	133

FOURTH ANNUAL REPORT OF THE SILK ASSOCIATION  
OF AMERICA.

	<i>Page.</i>
Officers of the Association, 1876-77, - - - - -	139
Committees of the Association, 1876, - - - - -	140
Members and Subscribers, 1876, - - - - -	141
Preamble and By-Laws, April, 1876, - - - - -	145
Proceedings at Fourth Annual Meeting, - - - - -	149
Annual Report of the Secretary : - - - - -	153
Silk Statistics for the year ending December 31, 1875, as follows :	
Value of Production, - - - - -	155
General View of the Industry in America, - - - - -	156
Division B—Thrown and Spun Silk, - - - - -	157
“    C—Sewings and Machine Twist, - - - - -	158
“    D—Broad Goods and Ribbons, - - - - -	159
“    “    Dyeing, - - - - -	160
“    E—Laces, Braids and Trimmings, - - - - -	161
Resumé of Statistical Tables, - - - - -	162
Number of Firms in Silk Business, April 26, 1876, - - - - -	163
Reports of the Trade for the past year, as follows :	
Raw Silk, by William Ryle, - - - - -	164
Thrown Silk, by George B. Skinner & Co., - - - - -	168
Spun Silk, by Cheney Brothers, - - - - -	170
Sewing Silk and Machine Twist, by Seavey, Foster & Bowman, - - - - -	172
Plain and Fancy Broad Silks, by Hamil & Booth, - - - - -	173
Ribbons, by William Strange, - - - - -	175
The Trimming Trade, by Wm. H. Horstmann & Sons, - - - - -	179
Report of the Secretary, continued, as follows :	
U. S. Customs Tariff, - - - - -	181
Customs Revenue at New York, - - - - -	183
Charter of the Association, - - - - -	188
Resolutions on the death of Ward Cheney, - - - - -	191
Finances of the Association, - - - - -	193
Amendment to the By-Laws, - - - - -	194
Preparations for the Centennial, - - - - -	195

	<i>Page.</i>
Annual Report of the Treasurer, - - - - -	197
Imports of Raw Silk, and accrued duty thereon, 1823 to 1842, -	198
“    “    “    “    1843 to 1875, -	199
“    Silk Manufactures “    “    1821 to 1842, -	200
“    “    “    “    1843 to 1875, -	201
Compendium of U. S. Tariff Acts and Rates of Duty on Silk	
Manufactures since 1790, - - - - -	202
Silk Movement throughout the World, in or about 1874, - - -	203
Silk Conditioned in Europe, by countries and cities, 1869 to 1875,	204
Production of Spun Silk in Europe, 1873, - - - - -	206
“    Raw Silk throughout the World, - - - - -	206
Annual Statistical Summaries of U. S. Imports of Raw Silk and Silk Manufactures, 1851 to 1875, - - - - -	
	207, 209

## AMERICAN SILK EXHIBITORS AT PHILADELPHIA :

Exhibitors and Exhibits, - - - - -	211
Judges of Silk Fabrics, &c., - - - - -	214
Rules relating to Awards, - - - - -	214
DIRECTORY OF SILK MANUFACTURE IN THE U. S., - - - - -	215
INDEX OF NAMES IN THIS VOLUME, - - - - -	231
BUSINESS ANNOUNCEMENTS, - - - - -	239

## Illustrations.

	<i>Opposite page.</i>
Silk Worm, Moth, Eggs and Cocoon, - - - - -	15
Wm. H. Horstmann & Sons' Mills, Philadelphia, - - - - -	51
Mansfield Silk Company's Mill, Gurleyville, Conn., - - - - -	53
New York and Northampton Silk Company's Mill, Florence, Mass.,	54
Nonotuck Silk Company's Mills, Florence, Mass., - - - - -	57
O. S. Chaffee & Son's Mills, Mansfield Centre and Willimantic, Conn., - - - - -	58

	Opposite page.
Phœnix Silk Manufacturing Company's Mills, Paterson, N. J., -	59
Seavey, Foster & Bowman's Silk Mills, Canton, Mass., - -	67
Unquomok Silk Mills of Wm. Skinner, Holyoke, Mass., -	70
M. Heminway & Sons' Silk Mill, Watertown, Conn., - -	71
J. C. Graham's Silk Factory, Philadelphia, - - -	72
Hensel, Colladay & Co.'s Silk Factory, Philadelphia, - -	73
L. D. Brown & Son's Silk Mill, Middletown, Conn., - -	74
Belding Bros. & Co.'s Silk Mill, Rockville, Conn., - -	77
Herman Simon's Silk Mill, Town of Union, N. J., - -	78
Werner Itschner & Co.'s Mills, Tioga Station, Germantown, Pa., -	78
John N. Stearns & Co.'s Silk Factory, New York City, - -	79
Holland Manufacturing Co.'s Silk Mill, Willimantic, Conn., -	80
Union Silk Works of John Dunlop, Paterson, N. J., - -	80
Excelsior Manufacturing Co., John D. Cutter & Co., Paterson, N. J.,	81
Pelgram & Meyer's Silk Mills, Paterson, N. J., - -	83
Silk Reel Mill and Silk Spinning Frame, Exhibited at Philadelphia by the Danforth Locomotive and Machine Co. of Paterson, N. J.,	91
Nottingham Lace Works, A.G. Jennings, Proprietor, Brooklyn, N.Y.,	101
The Jacquard Machine, - - - - -	108
Dale Silk Mill, Paterson, N. J., - - - - -	116
Weidmann & Greppo, Dye Works, Paterson, N. J., - -	117
Louis Franke's Braiding Works and Throwing Mill, Paterson, N. J.,	118
Earnshaw Needle Loom, Sam'l Coit, Hartford, Conn., Advertising Page.	v
S. R. & F. Hansell's Factory, Philadelphia, - do do	xiv
Machinists' Association, Paterson, N. J., - - do do	xiv

## INTRODUCTORY CHAPTER.

WHEN our mother Eve draped herself in the broad leaves of the banian fig, just before leaving Paradise, and when just after the expulsion from that pleasant abode, the fallen pair were clothed in "coats of skin," their rude garments were, all unconsciously to themselves, the types of the textile fabrics which were to form the raiment of their descendants for all coming time. The leaf of the banian fig, with its soft and silky fibres, was the food of several species of silk-worm, and the source from whence was obtained the material for those delicate filaments which constitute our silken tissues; it was also the type of those other vegetable fibres, which have furnished so large a portion of the clothing of the world; while the skins of animals slain for propitiatory sacrifice were the prototypes of the karosses, haiks, and other garments of sheepskin, fur, or wool, goat's hair and camel's hair.

The progress of civilization at every stage has been marked by some improvement in the fabrics which constituted the clothing and drapery of the human body. The skins, fur, wool and hair of animals were early laid under contribution for this purpose, and in the warmer climates, the fibres of flax, grass, cotton, the inner bark of trees, and somewhat later the exquisite and glossy filaments spun by the silk-worm were appropriated for the same purpose. It was not until a comparatively high state of civilization had been attained, that the art of spinning and weaving these into fabrics of wonderful beauty and grace was discovered, and every step of subsequent progress in the fabrication and ornamentation of silken tissues has marked a stage of æsthetic culture and advancement.

It is our object to trace briefly the history of this progress in the manufacture of what has been throughout all the past an article of luxury, and which so lately as the third century of our own era commanded a price so great as to be beyond an emperor's wealth to purchase for his empress; but in our own time has come to be within the means and ability of the great masses of our people, and a necessity instead of a luxury. We do not propose to make this history exhaustive—many volumes would be required for that purpose—but only to review briefly the course of the silk manufacture in other lands and countries, and somewhat more fully the struggles of our own people to attain to the position which they now hold