

**THE RESOURCES OF THE UNITED  
STATES FOR SHEEP HUSBANDRY  
AND THE WOOL MANUFACTURE.  
AN ADDRESS, AUGUST 29, 1878**

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649200658

The resources of the United States for sheep husbandry and the wool manufacture. An address, August 29, 1878 by John L. Hayes

Except for use in any review, the reproduction or utilisation of this work in whole or in part in any form by any electronic, mechanical or other means, now known or hereafter invented, including xerography, photocopying and recording, or in any information storage or retrieval system, is forbidden without the permission of the publisher, Trieste Publishing Pty Ltd, PO Box 1576 Collingwood, Victoria 3066 Australia.

All rights reserved.

Edited by Trieste Publishing Pty Ltd.  
Cover @ 2017

This book is sold subject to the condition that it shall not, by way of trade or otherwise, be lent, re-sold, hired out, or otherwise circulated without the publisher's prior consent in any form or binding or cover other than that in which it is published and without a similar condition including this condition being imposed on the subsequent purchaser.

[www.triestepublishing.com](http://www.triestepublishing.com)

**JOHN L. HAYES**

**THE RESOURCES OF THE UNITED  
STATES FOR SHEEP HUSBANDRY  
AND THE WOOL MANUFACTURE.  
AN ADDRESS, AUGUST 29, 1878**



---

THE

RESOURCES OF THE UNITED STATES

FOR

SHEEP HUSBANDRY AND THE WOOL  
MANUFACTURE.

AN ADDRESS

DELIVERED BEFORE THE NATIONAL AGRICULTURAL CONGRESS, AT  
NEW HAVEN, CONN., AUGUST 29, 1878,

BY

JOHN L. HAYES, LL.D.,

SECRETARY OF THE NATIONAL ASSOCIATION OF WOOL MANUFACTURERS.

---

PUBLISHED UNDER THE DIRECTION OF THE MASSACHUSETTS SOCIETY FOR  
THE PROMOTION OF AGRICULTURE.

---

BOSTON:  
11 PEMBERTON SQUARE.  
1878.

THE  
RESOURCES OF THE UNITED STATES  
FOR  
SHEEP HUSBANDRY AND THE WOOL  
MANUFACTURE.

---

Wool 125, 11-2-25 A.V.M.

IN the middle of the last century there lived in England a gentle scholar, by name John Dyer, whose discursive mind had led him to forsake the profession in which he was initiated, and in which his father was distinguished, — the law, — for art and literature. Entering the Established Church, according to the ideas of his time and country the most suitable field for these pursuits, his productions — notable among which was a poem on Grongar Hill, a word picture of English scenery — gained him patrons. To his first very modest living were added others, until, in the evening of his life, he found the competence and repose which enabled him to write, and to publish in 1757, his chief work, the great English pastoral poem, the "Fleece;" its topics being the "care of sheep, the labors of the loom, and the arts of trade." Notwithstanding the affectations of style peculiar to the period, and the traditional treatment of a pastoral subject, this work — as an exhaustive treatise on the sheep husbandry of the period, as a representation of the then existing textile arts, as a pictorial map of the course of British

trade, and as a repository of all the classic traditions and associations connected with sheep husbandry and wool manipulation — is one of the most valuable legacies left us from the "silver age" of British literature.

The poem, however, never became popular, in spite of the tribute to the author by his contemporary and brother-poet, Akenside, who declared that he would regulate his opinion of the reigning taste by the fate of Dyer's "Fleece;" for, if that were ill received, he would not think it any longer reasonable to expect fame from excellence.

Dr. Samuel Johnson, to whose coarse mind all common things were ignoble, says of this poem, "It is universally neglected, and I can say little that is likely to call it to attention. The wool-comber and the poet appear to me to be such discordant natures, that to attempt to bring them together is to couple the serpent with the fowl. When Dyer, whose mind was not unpoetical, has done his utmost by interesting the reader in our native commodity, by interspersing rural imagery, and, incidentally, by clothing small images in great words, and by all the arts of delusion, *the meanness naturally adhering and the irreverence habitually annexed to trade and manufactures* sink him under insuperable oppression." We might wonder at this illiberality on the part of so great a scholar, if we did not consider that, within the memory of most of us, similar sentiments as to trade in all products but one, and as to manufactures in general, prevailed among the most cultivated classes in many of the proudest States of our own country.

Over a century has passed since Dyer (to use Johnson's clumsy witticism) was buried in his woollens; but how much wiser now seems the poet than his illustrious critic! The poet saw in the fleece and the loom the great source of England's commercial supremacy. He doubtless remembered the words of the quaint old "Golden Fleece," published just a hundred years before his time: "Wool is the flower and strength, the blood and the revenue, of England." With prophetic vision, he pictures the towns which were to spring up through the trade in fleece and web. As was the scene which Virgil describes, of

"Hurrying Carthage, where the Trojan chief  
 First viewed her growing turrets . . .  
 . . . the echoing-hills repeat  
 The stroke of axe and hammer; scaffolds rise,  
 And growing edifices; heaps of stone  
 Beneath the chisel beauteous shapes assume  
 Of frieze and column."

How far do Bradford, Leeds, Huddersfield, Halifax, — all  
 built up by the wool manufacture, and mostly since the poet's  
 day, — surpass his predictions?

Looking beyond the seas, he sings,

"A day will come,  
 When through new channels sailing we shall clothe  
 The California coast."

And he continues, —

"That portion, too, of land, a tract immense,  
 Beneath the Antarctic spread, shall then be known,  
 And new plantations on its coast arise.  
 Then rigid winter's ice no more shall wound  
 The only naked animal; but man  
 With the soft fleece shall everywhere be clothed."

California, with its six million sheep and its magnificent  
 mills, and Australia with its flocks of over sixty million,  
 almost literally contributing clothing from their soft merino  
 fleeces to the whole world, are more than fulfilments of these  
 prophecies; for what is predicted of Englishmen may be claimed  
 for all their descendants. The Australian wool trade, centring  
 in London, employs more tonnage than all the British trade in  
 wool textiles did a hundred years ago. Thus is verified the  
 poet's description of London, where trade, "enthroned amid a  
 thousand golden spires, gives audience to the world;" and his  
 lines, —

"What bales! what wealth! what industry! what fleets!  
 Lo, from the simple fleece how much proceeds!"

Dyer lived in the time when the work of spinning and weav-  
 ing, conducted only in scattered households, began to be  
 concentrated in large buildings employing many workmen.



The change of system was very salutary in its effect upon the moral character of the work-people, and was hailed with delight by the benevolent. The first experiment of concentrating textile labor was made in the workhouses of Bristol and Birmingham. The poet carries his reader to one of these houses, in which he

“ Views with wonder and with silent joy  
The sprightly scene, where many a busy hand,  
Where spoles, cords, wheels, and looms with motion quick  
And ever-murmuring sound, th’ unwonted sense wrap in surprise.”

This was the dawn of the factory system, which created the existing textile manufacture; covering England with its palatial mills, and employing, in cotton alone, 35,000,000 spindles, 400,000 looms, and 650,000 workmen.

The poet lived also in the time when the ancient distaff was still used for spinning in Norwich and Suffolk, and when the double-spoiled wheel was a novelty. But the marvel of his time was Paul’s invention of roller spinning; in which rollers or cylinders, through which the wool or cotton is drawn, are the mechanical substitutes for the thumb and finger of the hand-spinner, — an invention often, with great injustice to Paul, attributed to Arkwright. Dyer gives the first contemporary description of this invention, his book having been published three years before Arkwright took out his first patent.

“ But patient art,  
That on experience works from hour to hour,  
Has a spiral engine formed,  
Which on a hundred spoles, an hundred threads  
With one huge wheel by lapse of water twines,  
Few hands requiring; easy-handed work,  
That copiously supplies the greedy loom.  
. . . it draws and spins a thread  
Without the tedious toil of needless hands.”

The carded wool, he says, —

“ Is smoothly wrapped around those cylinders  
Which, gently turning, yield it to you cirque  
Of upright spindles, which, with rapid wheel,  
Spin out in long extent an even twine.”

The introduction of this simple machine, it would seem, was looked upon with apprehension by the spinning women of the time (the absurd notion, recently revived, that machinery destroys the laborer's occupation, prevailed a century ago); for the poet continues, —

“ Nor hence, ye nymphs, let anger cloud your brows;  
 Blithe o'er your toils with wonted song proceed;  
 Fear not surcharge: your hands will ever find  
 Ample employment.”

Could he have dreamed that an improvement which seemed so vast, because it increased the spinner's power a hundred-fold, would be developed, as it is now, so that one mill in a single day, with the expenditure of force derived from seven tons of coal, can do the work of seventy thousand spinners of former times.

I have referred to this poem, partly that I might anticipate the objection which may be made to the meanness of my subject; partly to suggest that my seeming exaggerations may in time be disproved, as in the case of the enthusiastic poet; and partly to invite the attention of my sheep-growing friends to a work so obsolete that no American edition of it has ever been published, but in which they will find a source of that delight which comes from weaving into the web of the homeliest pursuit the golden threads of poetic thought and classic associations. Do not believe, with the great moralist, that the poet and the wool-grower or wool-worker are of "discordant natures." No grower ever bred a flock of perfect fibre and form, no workman ever designed and executed an artistic fabric, who was not impelled by that enthusiasm, that passion for the ideal, which is the soul of poetry. The wool-comber and poet of discordant natures! Look at Heilman of Mulhouse, the inventor of the mechanical wool and cotton comber, — an invention which has revolutionized the wool-growing of the world as well as the wool manufacture of the world. Heilman was a contemplative dreamer, — what some would call a "fancy man." Idly watching his daughters as they combed their luxuriant hair, the idea of his wool-comber flashed into his mind from the methods which they used. And thus it may be said that an invention

which ranks among the very first in the century (for all the manufacture of women's worsted dress-stuffs is due to it) was made by one of those dreamers whom the elegant Buckminster describes, after Milton, as those who

"Sport with Amaryllis in the shade,  
Or with the tangles of Neera's hair."

I have still another reason for my reference to the English pastoral. I owe to it directly the line of thought which I shall endeavor to follow in this discourse. Its dominant sentiment is exultation in the possession by Britain of a commodity which has enriched every nation possessing it. Inspired by this idea, I obey the patriotic instinct due to my British descent, and select for my topic the "Resources of the United States for Sheep Husbandry and the Wool Manufacture."

I do not for a moment doubt the appropriateness of this theme for a national congress of farmers. There is no department of agriculture so cosmopolitan and unsectional as wool production and its incidents. Unlike the production of any other textile, or even of the cereals, it can be pursued with advantage in one or other of its forms in every State, and almost every county, in our national territory. England and New Jersey show its fitness for the oldest-settled countries and the contiguity of cities; Australia, California, and Colorado, that it is the pioneer industry for new States. Russia, Shetland, and the sea-girt islands of Maine show its resistance to the rigors of cold. The most southerly country in the Union, Nueces and Starr Counties in Texas, with their 700,000 sheep, show that it endures the heat of the semi-tropics, although the genial influences of more temperate latitudes may be specially manifest in the fleeces of Ohio and the Panhandle of Virginia. There is no soil so arid that it will not respond to the marvellous fertilizer which the sheep affords in its manure, and none so permanently rich that in time it may not need this best of all restoratives. Though on a large scale, and as an exclusive pursuit, fitted better for cheap lands and purely pastoral regions, it may be a most profitable adjunct to our most important husbandry, — the wheat culture; while there is no cotton plantation, dairy farm,