

**THE ART OF THE SECOND
GROWTH; OR, AMERICAN
SYLVICULTURE**

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The Art of the Second Growth; Or, American Sylviculture by Carl Alwin Schenck

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CARL ALWIN SCHENCK

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PREFACE

The handbook on "The art of the second growth" or on "American Sylviculture," herewith presented in an enlarged and revised form, is the third issue of a book originally styled "Biltmore Lectures on Sylviculture" when it was first published in 1905.

The tasks of Sylviculture confronting the American foresters are as diversified as are the conditions governing them in a country like ours which presents, within its two billion acres of land area, the widest and wildest fluctuations of the factors framing the possibility, the intensity, and the methods of American Sylviculture.

The call for Sylviculture arose in the West at a time at which it was hoped that forest plantations might influence favorably the adverse climate of the newly opened prairies.

Since that time, which lies in the seventies of the last century, prairial Sylviculture has lost ground, while its importance, for commonweals as well as for owners of woodlands, has become, in the wooded sections of the country, an issue of American Forestry.

The terms "Sylviculture" and "Forestry" are by no means identical: Forestry comprises any and all work connected with forests, inclusive of all logging and lumbering; Sylviculture is but that part of Forestry which has a second growth for its object. As long as there was at hand in the vast stretches of primeval forests an abundance of first growth, there could exist in the wooded states but little use for "the art of the second growth."

No forester lives who has enjoyed a world's experience in Sylviculture; the forester's experience is local, necessarily; a writer of a book on Sylviculture is apt to apply his local observations to the second growths developing in all the 48 states of the Union. I have tried, in the pages found within the covers of this book, to avoid generalisations based on a local experience, and to write

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a handbook useful to the forester working in a second growth or for a second growth anywhere in this country.

Necessarily, the majority of my own work in Sylviculture was embraced by the 15 years during which I had charge of a vast area of woodlands in western North Carolina. It was my good fortune to be confronted, within this area, by a large diversity of conditions. There were 3,000 acres of abandoned farmland, which I have been instrumental in clothing with a second growth; there were 10,000 acres of woodlands, cut-over, burned over, and neglected before I took charge, which were to be converted into cultured forests; and there was the "Pisgah Forest," primeval woodlands extending over 100,000 acres, situated beyond the reach of the axe, and of little value, extending from the valley of the French Broad River at 2,000 feet elevation to the Balsam Mountains at 6,000 feet elevation. The cut-over woodlands are typical, from the sylvic standpoint, for the Piedmont region of the South; the Pisgah Forest is typical for the conditions prevailing in the Appalachians.

For brevity's sake, these types of conditions are referred to in the following pages by the terms "Biltmore" and "Pisgah Forest" respectively.

Frequent reference is made, also, to the German forests, wherein I have spent the first nine years of my career as a forester; to the Adirondacks to which I was introduced by Dr. B. E. Fernow, Gifford Pinchot, and C. R. Pettis, and which I am visiting annually accompanied by the students of the Biltmore Forest School having its spring quarters in the heart of the Adirondacks. Reference is further made, frequently, to Michigan, where the Biltmore Forest School has its summer camp at Cadillac, Mich., and to Oregon where the Biltmore Forest School sojourns at Marshfield during the fall of every year. The directorate of the Biltmore Forest School, a forest school living in the woods of the North, South, East and West, has forced me to become intimately acquainted with the possibilities of Sylviculture in more than one forest region. It is these facts which lead me to hope that I am submitting to the reader a book on American, and not on local Sylviculture.

I should have liked immensely to insert in this book a large number of pictures illustrative of the matters and things therein described. Unfortunately, the funds at my command did not allow of the additional expense which the extensive use of illustrations would have involved.

This book on "The art of the second growth" is the seventh part of an "American Encyclopedia of American Forestry" written and rewritten by me in the course of the last fourteen years. The six

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remaining parts of American forestry which I have treated heretofore, by six books or publications, in a similar manner, are analysed in the following schedule:

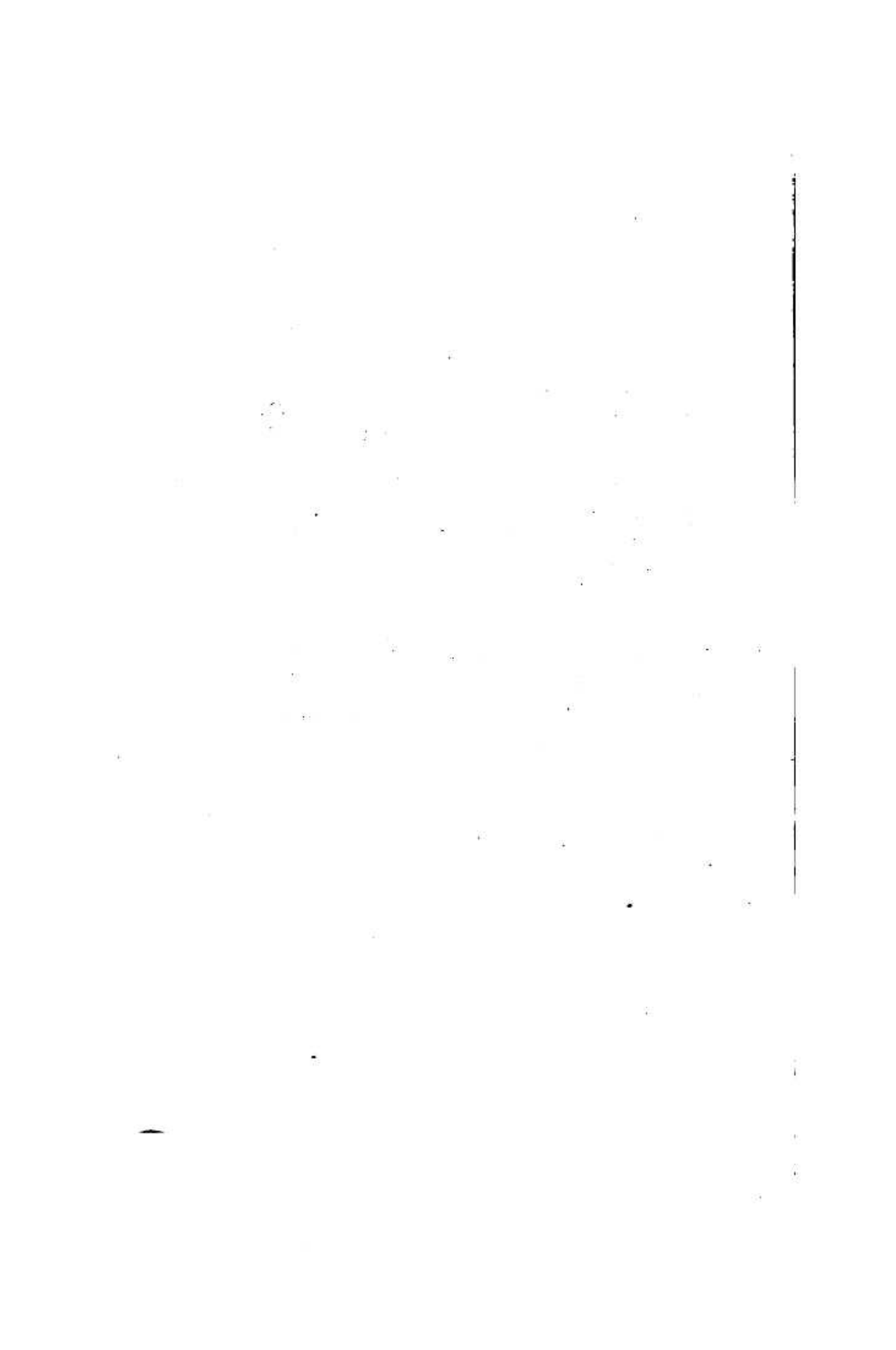
- A. Public Forestry, or forestry by the people, treated as Part I, Forest Policy.**
- B. Private Forestry, or forestry for the owner, treated as Part II, Forest Utilization, the art of logging and lumbering.**
 - Part III, Forest Finance, the art of financial calculations in forestry.**
 - Part IV, Forest Protection, the art of protecting the woods against damage by fire, insects, fungi, etc.**
 - Part V, Forest Mensuration, the art of estimating timber, of measuring the growth of the trees, and of lumber inspection.**
 - Part VI, Forest Management, the art of forest working plans.**

The last part is, then,

- Part VII, Sylviculture, the art of the second growth.**

May the new issue of the present book on Sylviculture find with the American lumberman and with his forester a better reception than that accorded to the original edition! And may it assist in the redemption of the American Forests!

C. A. SCHENCK.



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