## THE TREES OF CALIFORNIA

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649724932

The Trees of California by Willis Linn Jepson

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

WILLIS LINN JEPSON

# THE TREES OF CALIFORNIA

Trieste

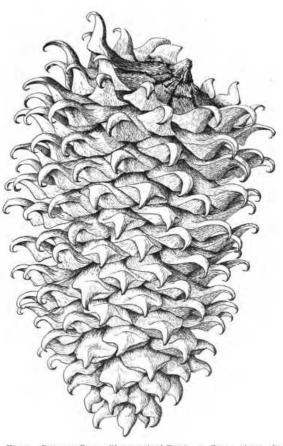


Fig. 1. BIG-CONE PINE (*Pinus coulteri* Don.), *a*, Cone.  $\frac{1}{2}$  nat. size. This species bears the largest and heaviest cones of any pine. The cones are well marked by the long talon-like appendages or curving spurs to the scales. See page 67. (Drawn by Miss Mary H. Swift.)

56

## THE TREES OF CALIFORNIA

ж. <sup>с</sup>

161

.

BY

### WILLIS LINN JEPSON, PH.D.

Assistant Professor of Demitrology in the University of California, Life Member of the California Academy of Sciences, Sierra Club, and American Breeders' Association, Member of the Commonwealth Club of California,

Illustrated with one hundred and twenty-five original figures

4 -----

82 T

CUNNINGHAM, CURTIS & WELCH san francisco  $\sim \lambda$  .

#### TO MY FRIENDS.

Frederick Folger Thomas, President of the Gavin Mine on the Mother Lode; William Anderson Scott Foster, Manager of the Northwestern Redwood Company; Ralph Hopping, naturalist on the South Fork of the Kaweah; Charles Russell Johnson, President of the Union Lumber Company; Carl Purdy, student of the Coast Range chaparral; Alden Sampson, literateur and mountaineer; Ralph Platt, notary on the edge of the Vaca Mountains but more than that, born naturalist—

To these, this book is dedicated in appreciation of their helpful aid and in memory of days and nights in mining camps in the cañon, logging camps in the forest, and pack-train camps on the mountain trails of Alta California.

We had not proceeded far from this delightful spot, when we entered a country I little expected to find in these regions. For about twenty miles it could only be compared to a park, which had originally been closely planted with the true old English oak; the underwood, that had probably attended its early growth, had the appearance of having been cleared away, and had left the stately lords of the forest in complete possession of the soil, which was covered with luxuriant herbage, and beautifully diversified with pleasing eminences and valleys; which, with the range of lofty rugged mountains that bounded the prospect, required only to be adorned with the neat habitations of an industrious people, to produce a scene not inferior to the most studied effect of taste in the disposal of grounds .--- [Captain George Vancouver, commander of the English naval ship Discovery, in the Santa Clara Valley, November 20th, 1792.]

I have seen the trees diminish in number, give place to wide prairies, and restrict their growth to the border of streams; \* \* \* have seen grassy plains change into a brown and sere desert; \* \* \* and have reached at length the westward slopes of the high mountain barrier which, refreshed by the Pacific, bear the noble forests of the Sierra Nevada and the Coast Range, and among them trees which are the wonder of the world.—ASA GRAY, in 1872, after his first journey to California.

### Preface.

Dr. James Bryce, British Ambassador to this country, once addressed informally a body of students at the University of California on the conduct of life. After speaking of those things necessary to real success in life he urged his hearers each to cultivate some interest beyond their life work or profession which would serve, like the study of some branch of botany, zoölogy or geology, as an intellectual recreation and as a resource from excessive cares of the day's or week's work.

The advice, while not new, was happily given. The lack of popular interest in the natural history sciences, failing some other cultivated interest, is unfortunate both for the individual and for the community. While this book from the standpoint of utility is designed primarily to provide a working manual\* of the native trees in small compass for use in the field by the horticulturist, farmer, cattleman, humberman, mountaincer, forester, teacher or traveler who wishes to learn something of the botany of California trees, their names and their geographic and economic interest, it is also given out with still another purpose.

\*This book is not a condensation of and should not be confused with the author's Silva of California (Mem. Univ. Cal. No. 2), a more technical treatise. The present book was partly written in 1902 and taken up and completed in January to March, 1909. A few notes have since been added.

In the preparation of certain chapters the author owes not a little to inspiration derived from the friendship of the late Sir Dietrich Brandis, long-time member of the Imperial India Council as Inspector-General of Forests, than whom there is no more heroic figure in the history of forestry. From Augustine Henry, Esq., the botanical explorer of China, now Lecturer in Forestry in Cains College, University of Cambridge, I have received, regarding our California forest species, a multitude of critical questions which have been suggestive and stimulating. Helpful material of California trees has been kindly placed at my disposal by my colleague, Professor H. M. Hall, by Mr. George D. Butler of Siskiyou, by Mr. Walter Fry of Sequoia Park, and by not a few other friends and correspondents.

The line drawings are mainly the work of the late Miss Mary H. Swift, who was at the time of her death rapidly developing into a botanical artist of unusual promise.

The author also takes pleasure in expressing thanks to his friend, Arthur W. Ryder, Assistant Professor of Sanskrit in the University of California, who most generously read the entire proof.

#### THE TREES OF CALIFORNIA.

The natural surroundings of Californians are singularly rich and varied. A scientific interest in at least certain features of our natural environment, as for example the trees, shrubs or herbaceous plants, directs one to useful and agreeable intellectual activity. Accurate and detailed knowledge of even a small area lifts the possessor out of the commonplace and enables him directly or indirectly to contribute to the well-being and happiness of his community.

The author, therefore, cherishes the hope that these pages may be an inspiration to some who have opportunity to take up special studies of our trees for the sake of the intellectual pleasure and cultivation to be derived from such an avocation. The number and diversity of the native trees of California, their habits, places of growth, times of seeding, relation to different soils, reaction to fire and a host of such matters offer a most attractive field to the botanist. These things do not form a very "practical" study to be sure, but they are the basis of other things which are "practical" and such study, moreover, offers a means of mental enjoyment which is cultivation in the best In spite of our worship of the "practical" it is being sense. more widely recognized that the cultivated man with keen intelligence and a broad and liberal outlook is getting more out of life and is really more practical after all than the so-called practical man who has narrowed his interests to those which concern his immediate personal needs, who is not stirred by the lure of the unknown, and who has "locked his door against the ideals" and imaginations of humanity.

This book, then, distinctly makes appcal to those who would enjoy the botany of the native trees and, perhaps challenged to explore the mysteries of their relationships, discover a world of interest in all those matters which serve to contribute to their classification—for their proper classification, a much desired object, is in reality an illuminating and organized compendium of their detailed structure, their congenital ties, their life history and their ancestry.

Willis Linn Jepson,

UNIVERSITY OF CALIFORNIA, Berkeley. March 27, 1909.

8



A logged RENWORD area. The standing trees are "culls", with second-growth below them. Reproduced from Breuer's drawing by permission of Mrs. Volney D. Moody of Berkeley.