

**THE TANNINS. A MONOGRAPH ON THE  
HISTORY, PREPARATION, PROPERTIES,  
METHODS OF ESTIMATION, AND  
USES OF THE VEGETABLE ASTRINGENTS,  
WITH AN INDEX TO THE LITERATURE OF  
THE SUBJECT. VOLUME I**

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The Tannins. A Monograph on the History, Preparation, Properties, Methods of Estimation, and Uses of the Vegetable Astringents, with an Index to the Literature of the Subject. Volume I by Henry Trimble

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**HENRY TRIMBLE**

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BY

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*Handwritten notes:*  
20/6/92  
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VOLUME I.

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## PREFACE.

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THE title of this monograph might well have been "A Century of Tannin," as just about one hundred years have elapsed since tannin first became recognized as a distinct substance, or class of substances, as we now express it. To emphasize this idea of a class of substances the present title was selected.

About twelve years ago the author commenced to collect a portion of the literature on the subject, especially that referring to the astringent value of certain tannin-bearing materials, with the methods involved in their estimation. He found, however, the task rapidly assuming such formidable proportions that only by beginning with the history and systematically pursuing the subject through its various phases to an ending, with a complete index to the literature, could he hope to reduce the many published inconsistencies and contradictions to a condition that would be available to himself as well as to others.

The taking of notes and references has been persistently carried on, especially during the past five years, until it is now thought best to give to the public the work on the general subject, with gallotannic acid, and the index to the literature, leaving for a subsequent volume the remaining individual tannins, with such further additions to the index as it may be found possible to collect.

It has been the constant effort of the author to make

this volume something more than a mere compilation of others' work, therefore some of his own experience has been incorporated which is here published for the first time, and this will be kept constantly in mind during the further contributions on the subject.

The tannins occupy a part of the border-land in science between botany and chemistry, which fact has added to the bulk of the literary index as well as to the difficulties of collecting it.

However, by the aid of the many complete sets of valuable foreign chemical periodicals recently acquired by the library of the Franklin Institute, and also through constant access to the library of the Philadelphia College of Pharmacy, it has been possible to take from the original sources all but about five per cent. of the titles given. Such references as could not be so consulted were taken from the most available source, and, if possible, in the same language as the original.

It is with the hope that information will be received from others interested in the subject, which will assist in making the index more complete, that it is issued at the present time.

Much valuable assistance has already been received by the author, especially from those having desirable private libraries, for which he hereby tenders his sincere thanks.

PHILADELPHIA, November 13, 1891.



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PART I.  
GENERAL.

# THE TANNINS.

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## SECTION I.

### THE DISCOVERY OF THE TANNINS.

THE history of tannin as a proximate principle takes its beginning in France during the period between 1790 and 1800. Previous to that time the histories of leather, galls, and oak-bark are our only sources of information regarding the development which led to the discovery of tannin.

Great discoveries are rarely made without some warning; in reviewing their origin we see that they have had a gradual birth, and the exact date which indicates the beginning of their existence cannot be determined. In these evolutions of a discovery there are sometimes periods of comparative inactivity, succeeded by sudden and great advances. The history of tannin has not been an exception to the rule of gradual discovery, for we find among the earlier writers on the subject a disposition to attribute the astringency of galls and oak-bark to some peculiar principle, which, however, they did not separate or name.

Dr. William Lewis, in his "Philosophical Commerce of the Arts, London, 1763," calls attention to