



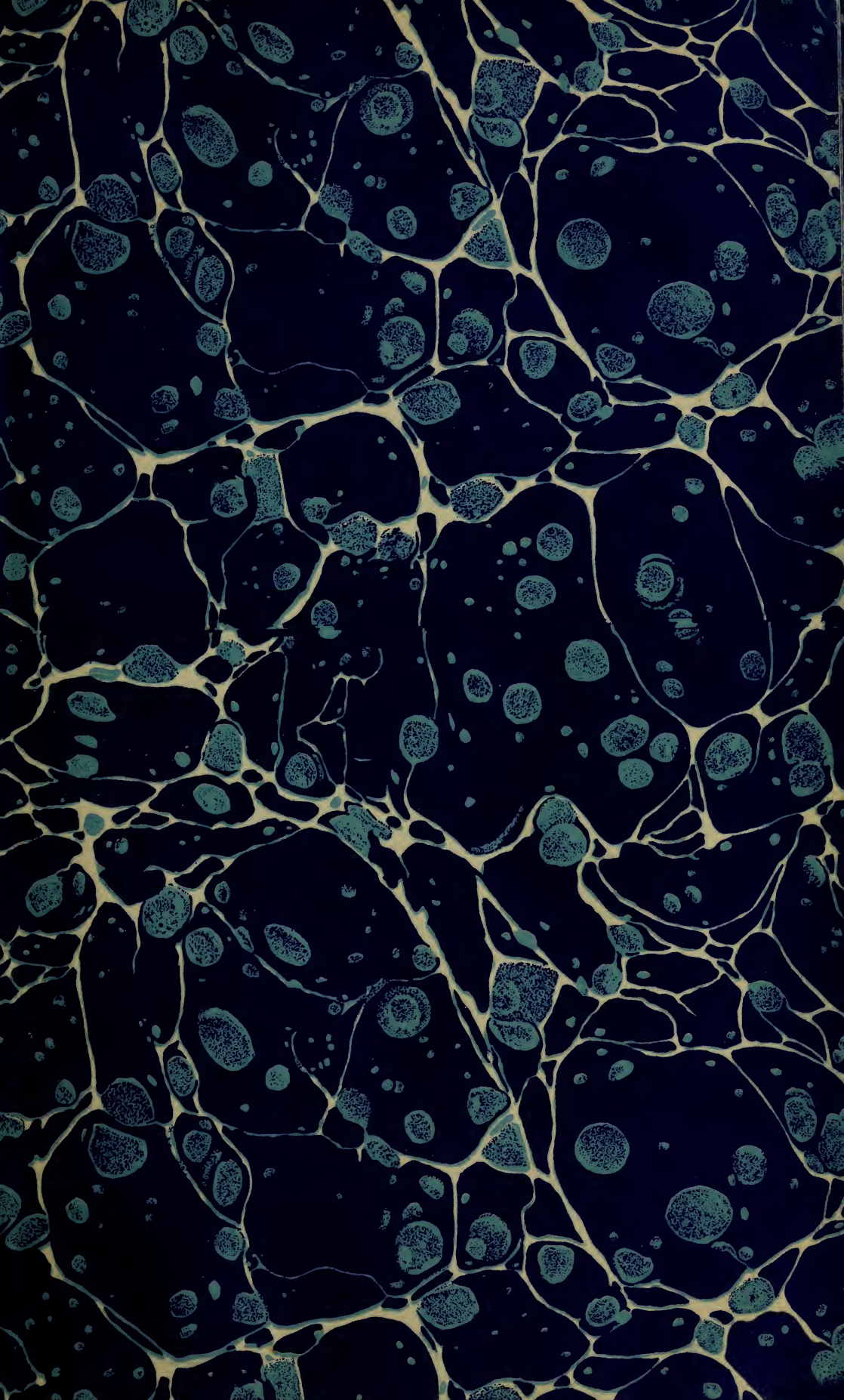
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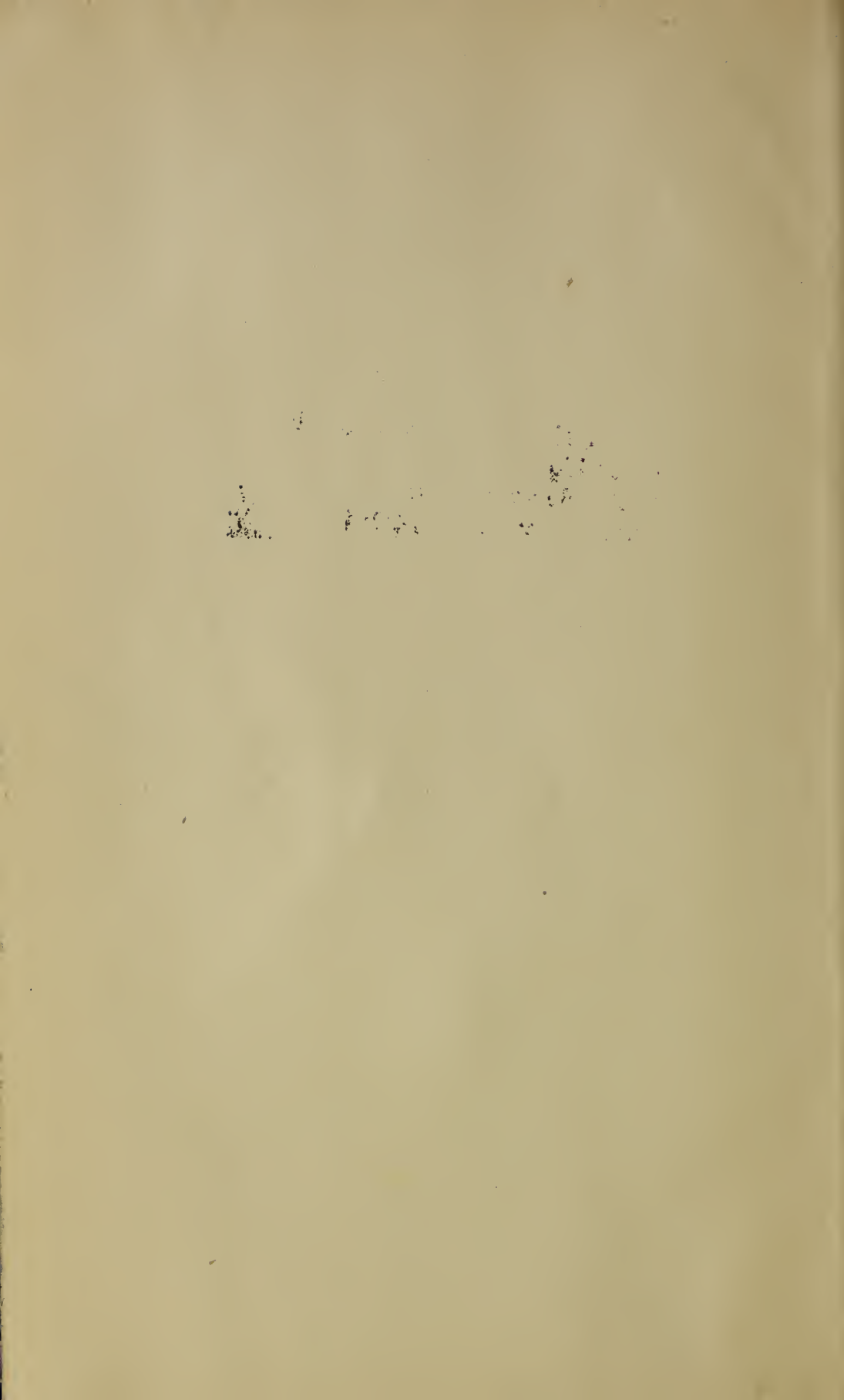


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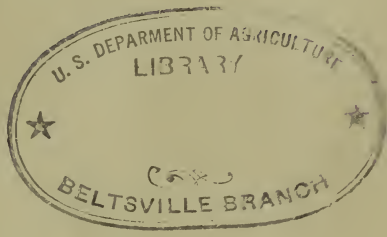






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# GENERAL INDEX

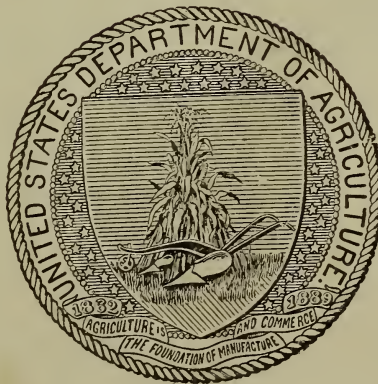
TO

# EXPERIMENT STATION RECORD

Vols. I to XII, 1889-1901

AND TO

# EXPERIMENT STATION BULLETIN NO. 2



WASHINGTON  
GOVERNMENT PRINTING OFFICE  
1903

## EXPERIMENT STATION RECORD.

Editor: E. W. ALLEN, Ph. D., *Assistant Director.*

### EDITORIAL DEPARTMENTS.

Chemistry, Dairy Farming, and Dairying—The EDITOR and H. W. LAWSON.  
Meteorology, Fertilizers and Soils (including methods of analysis) and Agricultural Engineering—W. H. BEAL.  
Botany and Diseases of Plants—WALTER H. EVANS, Ph. D.  
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With the cooperation of the scientific bureaus and divisions of the Department.

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<sup>a</sup> Director.

<sup>b</sup> Special agent in charge.

<sup>c</sup> Acting director.



1280130

## LETTER OF TRANSMITTAL.

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U. S. DEPARTMENT OF AGRICULTURE,  
OFFICE OF EXPERIMENT STATIONS,  
*Washington, D. C., August 8, 1903.*

SIR: I have the honor to transmit herewith for publication a General Index to Experiment Station Record, Volumes I to XII, inclusive, and to Experiment Station Bulletin No. 2, the latter being a digest of the Annual Reports of the Experiment Stations for 1888. The Record and the digest together make the review of the experiment station work complete from the establishment of the stations under the Hatch Act in 1888 down to the close of the year 1900. The volumes of the Record also include abstracts of the publications of this Department, and quite comprehensive reviews of the literature of agricultural science and experimentation in foreign countries.

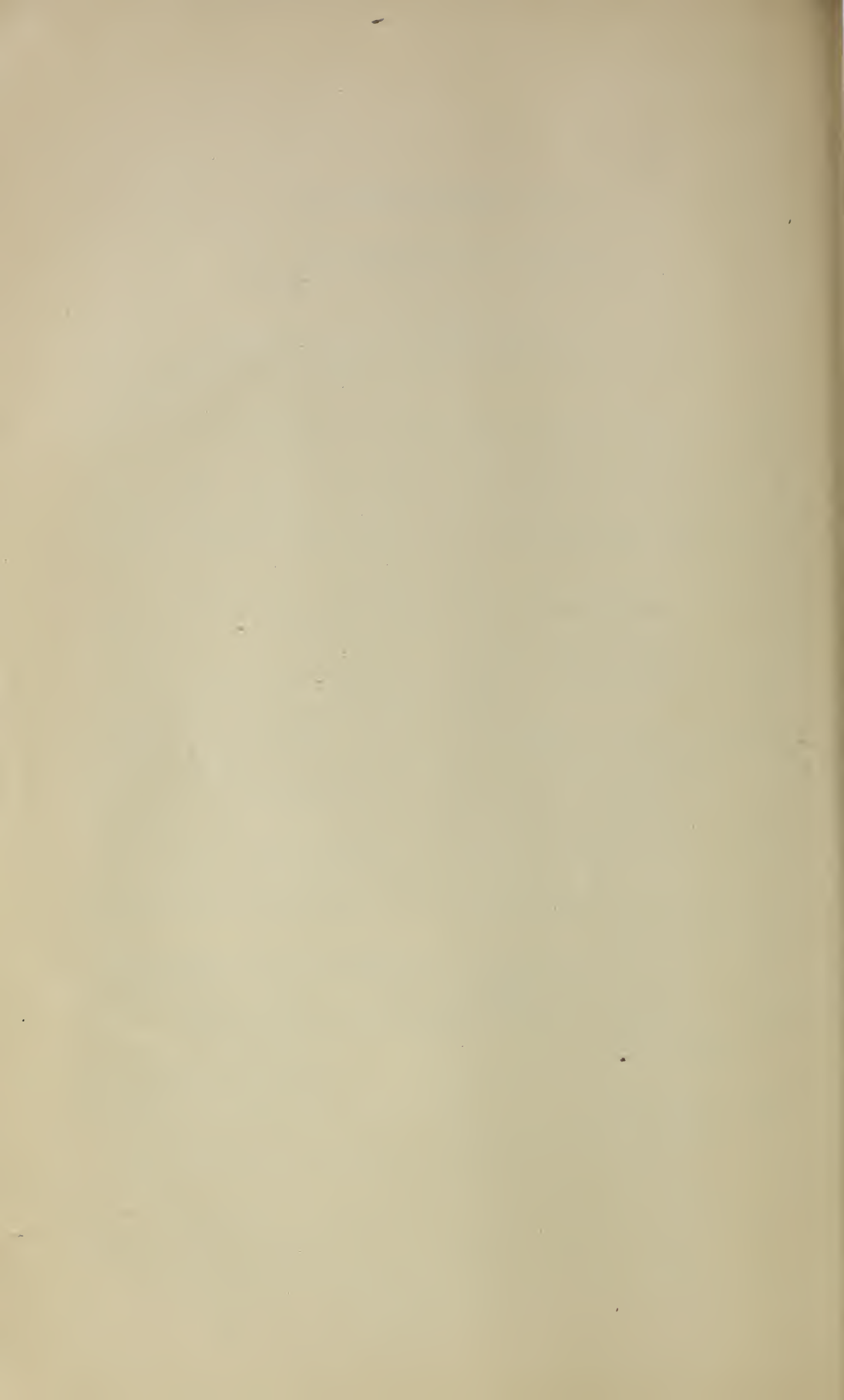
The indexes to this vast amount of published information are now contained in fourteen separate volumes, and reference to these is frequently necessary in looking up the literature upon a given subject. This at present is inconvenient. As the volumes of Experiment Station Record accumulate, it becomes increasingly valuable for reference purposes, and there have been repeated requests for a general index. Such an index, it is believed, will be a very great convenience to all who have occasion to look up the work of the twelve years covered by it, during which such remarkable progress has been made in agricultural science and practice.

Much of the preliminary work connected with the preparation of this index and the proof reading have been in charge of Mr. William Henry of this Office, to whom acknowledgment is here made.

Respectfully,

E. W. ALLEN,  
*Acting Director.*

Hon. JAMES WILSON,  
*Secretary of Agriculture.*



## INTRODUCTION.

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The permanent value of an abstract journal depends upon its indexes. For this reason the index to Experiment Station Record has been made a feature of each succeeding volume, and the effort has been from the first to make it quite complete. Matters are frequently enumerated in the abstract for the express purpose of getting them into the index, rather than because they are of particular interest in connection with the work reported.

The Record index is thus a detailed index to the experiment station and other publications reviewed, and as its volumes have accumulated this has become one of its most important features. Every year adds to its value as a means of looking up the literature on a particular subject, and likewise emphasizes the desirability of a general index. The preparation of such an index has been in hand for some time, but has proved a much greater undertaking than was anticipated, and this has delayed its issue. The grouping of the entries must be more carefully considered than in the case of the annual index, since, on account of its size, slight differences in the wording of the entry may separate closely related subjects so widely that they will not easily be found. The usefulness of many general indexes is largely defeated by reason of this.

To be convenient for use the general index must be arranged according to topics rather than words, and must follow a definite plan consistently, with frequent double entries and numerous cross references. This is a nice piece of work requiring both skill as an indexer and, what is quite as important, technical knowledge of the matter indexed. With so wide a range of subjects as are covered by the Record the task is especially difficult, calling for the combined assistance of the editorial staff in some parts.

The plan of making the annual index of the Record has been a gradual evolution, and the system of entries has not been uniform throughout the twelve volumes. This lack of uniformity has increased the difficulties of combining the entries into a general index, as slight differences in the form of entry or in the catchword used were sufficient to divide subjects widely and in a way that was often very diffi-



cult to detect and remedy. It has not been possible in the time at our command to correct all of the inconsistencies in so voluminous an index, although a great deal has been done to systematize it and to perfect the topical arrangement. While, therefore, the general index is recognized as having imperfections, it is hoped that these will not prove of a character to seriously impair its usefulness.

The topical plan of arrangement has been followed throughout, with usually a double entry for all important subjects and numerous cross references. As a rule the entries have been made for individual subjects rather than collective terms. The references under general terms are therefore incomplete. In the case of feeding experiments, for example, no attempt has been made to bring the entries all together, but the plan has been to group them under both the animal and the principal feeding stuffs tested. When another factor enters in, as milk production in the case of cows, certain of the references are found under the subject of milk. The purpose of the experiment has been considered in each case, and the attempt made to make the entries under that topical heading complete in themselves or by means of cross references. The field experiments with fertilizers have been put under the crop, and frequently under the fertilizer also. Studies relating to the assimilation of nitrogen from the air by plants, which in the past have been indexed under a multitude of catchwords, have been grouped under the three general headings, "Nitrogen assimilation," "Root tubercles," and "Soil inoculation," and numerous cross references given from other catchwords which might naturally suggest themselves to the reader. The point of view of the user has been kept prominently in mind, and it is thought that the general plan followed will be apparent after a little use, so that confusion and uncertainty will be avoided.

A strictly alphabetical arrangement has been followed, although this often separates the singular from the plural, as in the case of "pea" and "peas." Where this occurs there are cross references from each heading. The general entries have been made under the plural in the case of crops, fruits, etc., and the singular confined mainly to its use as an adjective prefix.

Institutions are found under the country or place of location, when this forms a part of the name. The references to the individual American stations under the different topics, which have been given in the indexes to the individual volumes, have been omitted in the interest of saving space and because they seemed of less importance in a general index. For the same reasons no attempt has been made to consolidate the author or name indexes, the general index being confined to the subject matter.

The consolidated table of contents lists the bulletins and reports of the stations and this Department which were reviewed in the digest

and first twelve volumes of the Record, enabling the abstract of any of these publications to be turned to readily.

The index contains about 125,000 entries, arranged under nearly 55,000 divisions and subheads. It covers all of the experiment station and Department publications received for abstracting up to the beginning of January, 1901, and nearly all of the foreign literature up to that time. It, therefore, brings the index of this literature practically down to the close of the year 1900; and as it dates from the beginning of the experiment stations under the Hatch Act, it covers a period of the greatest activity in the development of agricultural science.

The publication of Experiment Station Record was commenced in 1889, under the direction of Prof. W. O. Atwater, Director of the Office at that time. The original plan was to make it "a current record, in brief outline, of the results of experiment station and kindred work," and to confine it to abstracts of the experiment station bulletins and the publications of the U. S. Department of Agriculture. The annual reports were to be treated in a "digest," including "such outlines and details of the station work as will be most useful for permanent record and convenient reference." The digest of the reports for 1888 was published in two parts as Experiment Station Bulletin No. 2. This plan was not continued, but with the beginning of the second volume of the Record the annual reports were included in the abstracts, along with the bulletins. The review was extended during the second volume to include the work of the Canadian stations, and a very modest beginning was made in abstracting reports of similar investigations carried on abroad.

In the first three volumes and the digest the abstracts were grouped by stations or countries, without regard to topic, but with the beginning of the fourth volume the abstracts of the station publications were arranged topically, the reviews of the Department and of foreign publications being grouped by themselves. Beginning with the sixth volume, however, all of the abstracts were brought together, without regard to source, and grouped by subjects. This topical arrangement has been found a matter of convenience to the readers of the Record, in spite of the difficulties of classification which often occur, and has made it practicable to divide the editorial work into departments, with a definite field assigned to each of the assistant editors.

The review of the foreign investigations has increased steadily, and for several years past has included practically all of the more important investigations bearing on agricultural science which have been available to the editorial staff. The volume of this literature has become so great and it is so widely scattered that the station worker and agricultural specialist must depend mainly upon the abstract journal to keep posted on what is being published in his line. The Record

occupies a field that is not covered by any other abstract journal, and is one of the means which the Department of Agriculture has taken to promote the work of the agricultural colleges and experiment stations and to disseminate the results of their work in a technical form. The quite limited library facilities of many of the stations and agricultural colleges emphasize the need of such a publication.

As the station work progresses and becomes more specialized increasing attention to what has been done in the past is very desirable. One of the criticisms which is made upon the American stations is the large amount of duplication in their work, especially in the more popular practical experiments. These experiments have served to demonstrate certain facts to the local farmers, and are now very properly giving way to more advanced work. A survey of the literature should be one of the first steps taken in attacking a new problem, and this will not only save time, but make the work more effective from the start.

It is hoped that the general index will be an aid to that end, and will enhance the value of the Record files for general reference purposes, by making the matter contained in them more readily and conveniently accessible.

E. W. ALLEN.



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<sup>a</sup>Spraying Fruits for Insect Pests and Fungus Diseases, with a Special Consideration of the Subject in its Relation to the Public Health (pp. 20).—This bulletin was overlooked in abstracting. It describes the composition and use of common insecticides and fungicides for spraying various fruits, and considers the possible danger to health from eating such fruit. "It is mainly intended for the information and satisfaction of the consumer by showing him exactly the character of the spraying recommended, and the utter impossibility of evil consequences to him."

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<sup>a</sup> Report on Bird Migration in the Mississippi Valley in the Years 1884 and 1885, W. W. Cooke (pp. 313, map 1).—Issued in 1888, previous to the publication of the Record.

<sup>b</sup> Nos. 6 and 9 not issued.



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<sup>a</sup>Record of Experiments with Sorghum in 1893. H. W. Wiley (pp. 38).—A description of the culture and chemical work with sorghum at Medicine Lodge, Kans., the pedigree of seed, and progress in the development of standard varieties; together with a report on growing sorghum in Spain from the Department's seed.

<sup>b</sup>Sweet Cassava; its Culture, Properties, and Uses. H. W. Wiley (pp. 16, pls. 2, fig. 1).—Notes on the use of cassava as food, a comparison of starch from cassava and from corn, description of cassava culture, and observations on its agricultural possibilities.

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<sup>a</sup> Not issued.

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<sup>a</sup> Proceedings of the Sixth Annual Convention of the Association of American Agricultural Colleges and Experiment Stations, held at New Orleans, La., Nov. 15-19, 1892.—An account of this convention was given as a leading article in *E. S. R.*, IV, p. 397.

<sup>b</sup> Organization Lists of the Agricultural Experiment Stations and Institutions with Courses in Agriculture in the United States, 1897 (pp. 96).—Not abstracted.

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<sup>a</sup>A Report on the Cultivation of Ramie in the United States, with Statements Concerning the practice in Foreign Countries, Cost of Cultivation and Percentages of Yield, the Machine Question, and Preparation of the Fiber for Manufacture, C. R. Dodge (pp. 63, pls. 5, figs. 7).—A similar but less extended article on this subject by the same author was noted from the Yearbook of the Department (E. S. R., VII, p. 498).

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