

RURAL BOOKS



An Illustrated Catalog for Farmers,
Stock Raisers, Gardeners, House-
keepers, Florists, Fruit Growers,
Architects, Artisans, Sportsmen

1911

ORANGE JUDD COMPANY

PUBLISHERS—IMPORTERS

Ashland Building, 315-321 Fourth Avenue, New York City

Books Sent Postpaid to All Parts of the World for Catalog Price

World's Clearing House of Rural Literature

OUR Book Department published its first rural volume nearly half a century ago. Since then it has made a steady, strong, and substantial growth. Now it is the largest rural book publishing house in the world—not only in extent of business but in range of subjects.

Its book list embraces every department of farm interest, and since the authors are recognized specialists in their respective lines, the books are acknowledged as standards, both by practical men and eminent agricultural educators in all English speaking countries.

Besides our regular publishing business we maintain a headquarters for all kinds of agricultural and industrial books, no matter where published. This long established and widely experienced department is at the service of our patrons and friends, who may call upon us even for unlisted books, of no matter what nature, in the full confidence that we will fill their orders at the regular market price and with the greatest possible dispatch.

This catalog is devoted to a selected list of the most practical and modern books on agriculture and allied subjects published in the English language. The titles and descriptions have been arranged so the reader may inform himself at a glance concerning the books on any subject, and also to obtain readily such general information as will enable him to make an intelligent and judicious selection.

Though our specialty is rural books we are equipped to supply promptly and at equitable prices all books of whatever nature. It will, therefore, pay school officers, teachers, students, librarians and others interested in educational and library work to send us their lists for quotations. These will be gladly and promptly furnished. In fact, correspondence is invited, especially if further information is desired than is contained in the catalog. We are always glad to hear from everyone who wishes to know about any book or books desired no matter when or where published, and to give as full information as possible.

ORANGE JUDD COMPANY

Ashland Building, 315-321 Fourth Avenue (Book Department) New York City

WEA 38-18

CATALOG OF RURAL BOOKS



Published, Imported and Sold by
ORANGE JUDD COMPANY

DIRECTIONS FOR SENDING ORDERS

REMITTANCES Money can be sent by postoffice money order, express money order, check, draft or by registered letter, at our risk. If forwarded in any other way it is at the sender's risk.

PRICES Any of the books listed in this catalog will be sent prepaid to any part of the world, for price mentioned. If sent by registered mail, an additional charge of 10 cents is made for registering. This absolutely insures safe delivery.

ORDERS All orders should be accompanied with the amount necessary to pay for them. Books, however, may be sent C. O. D. if an amount sufficient to pay express charges both ways accompanies the order. This amount paid in advance by you will be credited upon the C. O. D. bill when presented to you for payment, as we pay all charges for the delivery of books listed in this catalog.

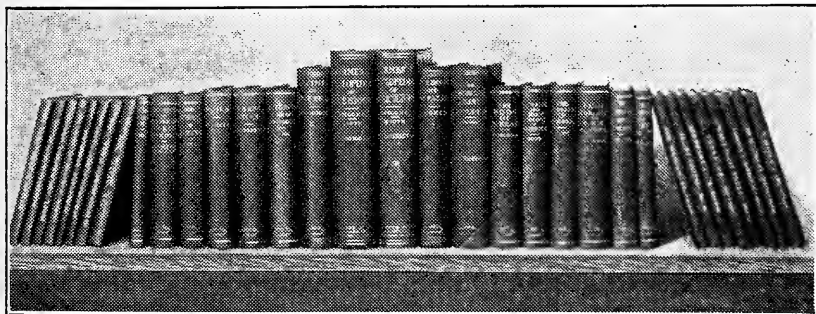
ON APPROVAL In order to enable our patrons to judge what books they want so that they will get only such as they actually need, we will send on approval to any responsible per-

son who will give satisfactory references, any of the books listed in this catalog, with the understanding that those not desired may be returned within five days after receipt. *Return charges to be pre-paid by the shipper.* Remittance to be made at once for the books retained because found satisfactory.

SPECIAL OFFER To those wishing to purchase a number of books on time payments, and who will give satisfactory references as to their responsibility, we will furnish the books on terms within the reach of all. Full particulars of our easy payment plan will be mailed on application.

SHIPPING DIRECTIONS When ordering books write your name and address plainly and in full, giving the express office as well as your postoffice address. If you have a street address give that also.

CORRESPONDENCE If you desire any particular book, and do not find it listed in this catalog, send us name of author and title and we will obtain it for you at the regular retail price.



ORANGE JUDD COMPANY

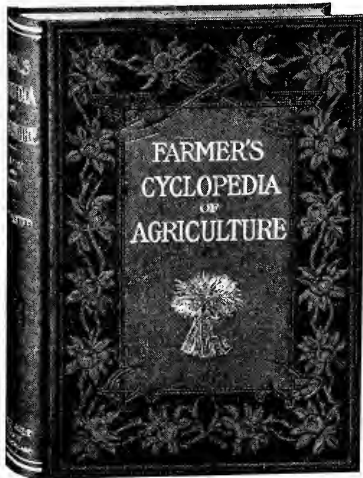
Ashland Building, 315-321 Fourth Avenue, New York, N. Y.

Farmer's Cyclopedia of Agriculture

A Compendium of Agricultural Science and Practice on Farm, Orchard and Garden Crops and the Feeding and Diseases of Farm Animals

By EARLY VERNON WILCOX, Ph.D., and CLARENCE BEAMAN SMITH, M.S.

Associate Editors in the Office of Experiment Station, United States Department of Agriculture



THIS is a new, practical and complete presentation of the whole subject of agriculture in its broadest sense. It is designed for the use of agriculturists who desire up-to-date, reliable information on all matters pertaining to crops and stock, but more particularly for the actual farmer. The volume contains

Detailed Directions for the Culture of Every Important Field, Orchard and Garden Crop

grown in America, together with descriptions of their chief insect pests and fungous diseases, and remedies for their control. It contains an account of modern methods in feeding and handling all farm stock, including poultry. The diseases which affect different farm animals and poultry are described and the most recent remedies suggested for controlling them. Other farm subjects, such as

Manures, Fertilizers, Principles of Feeding, Feeding Value of Crops and Feeds, Dairy Farming

agricultural bulletins, colleges, experiment stations, and reading courses, poisonous

plants, sterility of plants and animals, spraying, soils, drainage, irrigation, veterinary medicines, etc., are all clearly and concisely discussed.

The book is based on the work of the past twenty years in experimental agriculture in this and foreign countries. The work of the experiment stations, the state and government departments of agriculture, the agricultural colleges, and the experiments of practical men have resulted in the gradual development of a new agriculture in this country. The enormous mass of evidence and facts which these agencies have been accumulating on farm practice has been summarized and carefully digested, and for the first time in the history of American agriculture an agricultural book based on experimental evidence and not rule of thumb is presented to the agricultural public in a popular and readable form. For convenience of reference the subjects have been divided into eight parts, each

Arranged in Alphabetical Order

with a complete system of cross references. All matter pertaining to any particular farm crop, animal, etc., is placed together in a single connected article with appropriate sub-headings thus making reference rapid and easy. The book is brand new. It is replete with

Fresh Facts from the Field of American Agriculture.

Every page tells of progress in American methods of farming. Every subject is discussed in a dispassionate manner. Animals, plants and methods which have proved useless are so noted, and no attempt is made to boom any crop or animal beyond its deserts. Briefly, the purpose of the book is to tell how to grow crops, how to harvest them, how to use them, how to protect them against insects and disease, how to feed and handle animals, and what to do when they are sick. It is

A Complete Adviser for the Everyday Use of Farmers

and an essential reference book for students and all engaged in advanced agriculture. It contains 640 royal octavo pages (9 1-2x7) and nearly 500 superb half tone and other original illustrations. Type, paper, printing and binding are all in the highest style of the bookmaker's art, worthy alike of the well-qualified authors, the enterprising publishers, and the industry of agriculture.

PRICE WITHIN REACH OF ALL

Handsomely bound in cloth, only \$3.50 Half Morocco, very sumptuous, \$4.50

Farm Conveniences

A Practical Handbook for the Farm. Describing and illustrating all manner of homemade aids to farm work. A manual of what to do and how to do it. It contains simple and clear descriptions of labor-saving devices for all departments of farm work and abounds in important hints and suggestions to aid farmers in the construction of these labor-saving devices, none of which are patented, and all farmers can readily make most of them for themselves. Illustrated. 5x7 inches. 240 pages. Cloth. Price\$1.00

Farm Appliances

Describing numerous useful and labor-saving appliances, which will be found of great value in every department of farm work. Most of the appliances are of such simple construction that anyone handy in the use of a few tools can make them, and so find profitable employment on rainy days, or when other work cannot be done. Illustrated. 5x7 inches. 192 pages. Cloth. Price\$0.50

Fences, Gates and Bridges

A Much Needed and Valuable Work. The descriptions are abundantly illustrated, giving a clear conception of a great many styles of fences, gates, bridges, hedges, etc. It also contains a synopsis of the fence laws of the different states. Illustrated. 5x7 inches. 188 pages. Cloth. Price.....\$0.50

How Crops Feed

By Prof. Samuel W. Johnson. A treatise on the atmosphere and the soil as related to the nutrition of agricultural plants. The book falls into two divisions, the first of which is devoted to a discussion of the relations of the atmosphere to vegetation, as food of plants, and as physically related to vegetation; the second being a treatise on the soil as related to vegetable production, its origin and formation; kinds of soils, their definition, classification and physical characters, and the soil as a source of food to crops. Illustrated. 5x7 inches. 375 pages. Cloth. Price\$1.50

The Principles of Agriculture

By L. H. Bailey. The introduction explains what agriculture is and the factors upon which it depends. Part I treats of the soil, its texture, its moisture, its tillage, and its enrichment. Part II treats of plants and crops, and the breeding of plants and their care. Part III treats of the animal stock on the farm. Illustrated. 5x7 inches. 300 pages. Cloth.....Net \$1.25

A Self-Supporting Home

By Kate V. St. Maur. Each chapter is the detailed account of all the work necessary for one month—in the vegetable garden, among the small fruits, with the fowls, guineas, rabbits, covies, and in every branch of husbandry to be met with on the small farm. The book is especially valuable and simple for the beginner, who has no chance to worry or grow confused about what he should do in each season. Illustrated. 5x7 inches. Cloth...Net \$1.75

The Earth's Bounty

By Kate V. St. Maur. The present volume, though in no sense dependent on "A Self-Supporting Home," is, in a sense, a sequel to it. The feminine owner is still the heroine, and the new book chronicles the events after success permitted her to acquire more land and put to practical test the ideas gleaned from observation and reading. Illustrated. 5x7 inches. Cloth Net \$1.75

The Soil of the Farm

By J. B. Lawes, J. C. Morton, John Scott and George Thurber. A handbook of the processes included in the management and cultivation of the soil. The various chapters of this highly instructive book treat authoritatively on the origin, formation, physical properties, composition and fertility of soils; soil improvement; land drainage and irrigation; claying, liming, marling, burning; tillage operations; home manures; auxiliary manures; the loss of nitrogen, etc., etc. 5x7 inches. 107 pages. Cloth. Price\$1.00

Farm Machinery and Farm Motors

By J. B. DAVIDSON

Professor of Agricultural Engineering, Iowa State College and

L. W. CHASE

Associate Professor of Farm Mechanics, University of Nebraska

FARM MACHINERY AND FARM MOTORS is the first American book published on the subject of Farm Machinery since that written by J. J. Thomas in 1867. This was before the development of many of the more important farm machines and the general application of power to the work of the farm.



L. W. CHASE



J. B. DAVIDSON

A thorough review of the literature pertaining to the subject. Although written primarily as a textbook, it is equally useful for the practical farmer. A good idea of the scope and character of the work may be obtained from the following table of contents.

Modern farm machinery is indispensable in present day farming operations, and a practical book like FARM MACHINERY AND FARM MOTORS will fill a much felt need. The book has been written from lectures used by the authors before their classes for several years and which were prepared from practical experience and a

PART I. FARM MACHINERY

- | | |
|---|---|
| I.—Definitions and Mechanical Principles. | VIII.—Haying Machinery. |
| II.—Transmission of Power. | IX.—Manure Spreaders. |
| III.—Materials and the Strength of Materials. | X.—Threshing Machinery. |
| IV.—Tillage Machinery. | XI.—Corn Machinery. |
| V.—Tillage Machinery (continued). | XII.—Feed Mills. |
| VI.—Seeding Machinery. | XIII.—Wagons, Buggies and Sleds. |
| VII.—Harvesting Machinery. | XIV.—Pumping Machinery. |
| | XV.—The Value and Care of Farm Machinery. |

PART II. FARM MOTORS

- | | |
|-----------------------|-----------------------------|
| XVI.—Animal Motors. | XX.—Gasoline Engines. |
| XVII.—Windmills. | XXI.—Traction Engines. |
| XVIII.—Steam Boilers. | XXII.—Electrical Machinery. |
| XIX.—Steam Engines. | XXIII.—Farm Shop. |

Part I. Farm Machinery, as shown by the contents, is, besides chapters on mechanical principles, transmission of power, materials and the strength of materials, a discussion of all of the more important machines used in modern farming operations.

Part II. Farm Motors—This part of the book has combined under one head what previous authors have made into several. Only enough theory is given to make the principles of the various machines clear. The practical part of the work is made the stronger; technical terms have been avoided. The authors have made the matter, by means of cuts and simple language, so clear that it can be understood by all. Owing to the extent of the ground covered in so limited a space, every part is short and to the point. Like Part I, Part II is prepared primarily for a textbook, but it is fully as useful to all who use farm motors.

Profusely illustrated, 5 1-2x8 inches, 520 pages. Cloth. Net, \$2.00

Agriculture Through the Laboratory and School Garden

A Manual and Text Book of Elementary Agriculture for Schools

By C. R. JACKSON

Instructor of Practical Agriculture and School Gardening and MRS. L. S. DAUGHERTY, Assistant in Zoology, State Normal School, Kirksville, Mo.



IT WILL at once be seen that if agriculture is to be taught in the rural schools—and it is now generally recognized that it should be—it becomes necessary for the teachers who are to have charge of these schools to have an adequate knowledge of the subject to teach it. This can be brought about only by at least a year's course in agriculture in the village, city, and county high schools, and the normal schools from which the rural school teachers come. It is for this very purpose that "Agriculture Through the Laboratory and School Garden" is written. It is not a book for children, but one for the high school and normal student or the advanced student in the rural school who does not want "baby-work." The book has been thoroughly revised and much new material added.

The book gives explicit directions for actual work in the laboratory and school garden. The authors' aim has been to present actual experimental work in every phase of the subject possible, as well as to embody in the text a scientific, yet practical, discussion of agricultural principles. This discussion is so simple and clear as to make the book valuable also for the farmer's library.

As to the scope of the work, a carefully outlined chapter is given to each of the following general subjects: Nature and Formation of Soils; Classification and Physical Properties of Soils; Soil Moisture and Preparation of the Soil; The Soil as Related to Plants; Leguminous Plants; Principles of Feeding; Rotation of Crops; Milk and Its Care; Propagation of Plants; Improvements of Plants; Pruning of Plants; Enemies of Plants and Ornamentation of Home and School Grounds.

EXTRACTS FROM TESTIMONIALS AND CRITICAL REVIEWS

The book is valuable to anyone desiring to obtain in an easy and pleasing manner, a general knowledge of elementary agriculture.—*National Stockman and Farmer*.

This volume is unique. It is not the product of its authors' imaginations. No one designed it to exploit a theory or a person. It is an outline of work done—done by ordinary people under ordinary conditions.—*Tribune Farmer*.

Teachers will find this book very helpful and the appearance of the work is but an indication of the increased interest which is taken in this matter.—*Western Fruit Grower*.

This is a masterly treatment of the subject that must in the near future find a place in most of the schools of the agricultural states.—*Journal of Education*.

This is a work of unusual excellence. It is clear cut, direct and full of material needed by teacher and pupil. The work will meet with favor on all hands. I am sure I shall take pleasure in recommending it whenever opportunity offers.—*W. A. Henry, Dean of the College of Agriculture, University of Wisconsin*.

I find it a very interesting volume and shall be pleased to direct the attention to it of the teachers who are interested in such a manual.—*R. W. Stinson, President Connecticut Agricultural College*.

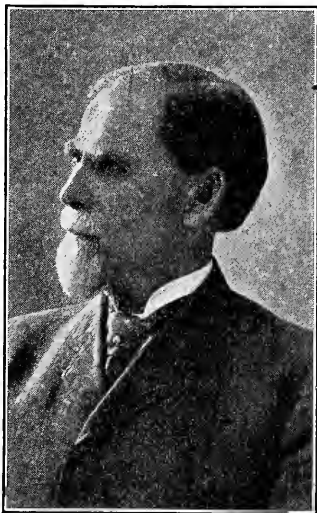
It is a book that ought to be in the hands of every teacher in the rural schools. I think it will serve an exceedingly useful purpose, not only for school work but as a handbook for the farmer himself.—*Dr. B. T. Gallwey, Chief of Division of Plant Industry, U. S. Department of Agriculture, Washington*.

Fully illustrated, 5 1-2x7 1-2 inches. 450 pages. Cloth. Price, net, \$1.50

THE BOOK OF ALFALFA

History, Cultivation and Merits. Its Uses as a Forage and Fertilizer. By F. D. COBURN, Secretary Kansas Department of Agriculture.

THE appearance of F. D. Coburn's little book on Alfalfa, a few years since, has been a complete revelation to thousands of farmers throughout the country, and the increasing demand for still more information on the subject has induced the author to prepare the present volume, which is, by far, the most authoritative, complete and valuable work on this forage crop



ever published. One of the most important movements which has occurred in American agriculture is the general introduction of alfalfa as a hay and pasture crop. While formerly it was considered that alfalfa could be grown profitably only in the irrigation sections of the country, the acreage devoted to this crop is rapidly increasing everywhere. Recent experiments have shown that alfalfa has a much wider usefulness than has hitherto been supposed, and good crops are now grown in almost every State. No forage plant has ever been introduced and successfully cultivated in the United States possessed of the general excellence of alfalfa.

The plant although known in the Old World hundreds of years before Christ, its introduction into North America occurred only during the last century, yet it is probably receiving more attention than any other crop. When once well established it continues to produce good crops for an almost indefinite number of years. The author thoroughly believes in alfalfa, he believes in it for the big farmer as a profit bringer in the form of hay,

or condensed into beef, pork, mutton, or products of the cow; but he has a still more abiding faith in it as a mainstay of the small farmer, for feed for all his live stock and for maintaining the fertility of the soil.

The treatment of the whole subject is in the author's usual clear and admirable style, as will be seen from the following condensed table of contents:

I.	History, Description, Varieties and Habits	XIV.	Alfalfa for Horses and Mules
II.	Universality of Alfalfa	XV.	Alfalfa for Sheep-Raising
III.	Yields, and Comparisons with Other Crops	XVI.	Alfalfa for Bees
IV.	Seed and Seed Selection	XVII.	Alfalfa for Poultry
V.	Soil and Seeding	XVIII.	Alfalfa for Food Preparation
VI.	Cultivating	XIX.	Alfalfa for Town and City
VII.	Harvesting	XX.	Alfalfa for Crop Rotation
VIII.	Storing	XXI.	Nitro-Culture
IX.	Pasturing and soiling	XXII.	Alfalfa as a Commercial Factor
X.	Alfalfa as a Feed Stuff	XXIII.	The Enemies of Alfalfa
XI.	Alfalfa in Beef-Making	XXIV.	Difficulties and Discouragements
XII.	Alfalfa and the Dairy	XXV.	Alfalfa in the Orchard
XIII.	Alfalfa for Swine	XXVI.	Practical Experiences with Alfalfa

The book is printed on fine paper and illustrated with many full page photographs that were taken with the especial view of their relation to the text. 336 pages, 8-1/2x9 inches, bound in cloth, with gold stamping. It is unquestionably the handsomest agricultural reference book that has ever been issued.

Price, Postpaid, \$2.00

Agriculture

By *W. P. Brooks*. A practical treatise in three volumes devoted to soils and how to treat them, Manures, Fertilizers, Farm Crops and Animal Husbandry. For use as a text-book in schools and colleges, for public and institutional libraries and for all who are interested in scientific and practical agriculture. Illustrated. 6x9 inches. 1000 pages. Cloth. Price per volume....Net \$1.25
Per setNet \$3.50

Practical Agriculture

By *W. F. Massey*. In this volume the science of agriculture is made easy to everyone. There are chapters on the Soil, its Origin and Conditions; the Plant, its Structure and Physiological functions; Manures and Fertilizers; Tillage; Protection of the Soil from Washing and Loss; Crop Rotation; Crops and Cropping; Practical Horticulture; Fruit Culture, etc., etc. A most valuable book, indispensable alike to the student, the practical man, and the amateur. Illustrated. 5x7 inches. Cloth.Net \$1.50

Agriculture for Beginners

By *C. W. Burkett, F. L. Stevens and D. H. Hill*. This epoch-making book, treating on the fundamentals of farming, from its first publication became the standard of agricultural texts used in the secondary schools. It is both a school text and an agricultural reader. Each subject is treated interestingly, the style is easy and graceful, and the helpful suggestions are in view on every page. The beautiful illustrations tell a story both in respect to the written text and to the subject matter that each one contains. The book is simple in nature. Any wide-awake teacher can use it, any child can understand it, and every reader will be helped by it. It is a book for the home and the school. Illustrated. 5x7 inches. 350 pages. Cloth.....Net \$0.75

The First Book of Farming

By *Charles L. Goodrich*. One of the best and most helpful volumes of this sort, for it gives the beginner, old or young, a fundamental knowledge of how to conduct a farm with the least expense and largest return. This book shows that the most successful farmers of the present day are those who work in harmony with the forces and laws of nature which control the growth

and development of plants. Illustrated. 5¼x7½ inches. 259 pages. Cloth. Net \$1.00

The New Earth

A Recital of the Triumphs of Modern Agriculture in America. By *W. S. Harwood*. The object of Mr. Harwood's book is to bring out in as clear and entertaining a way as possible the remarkable progress which has been made in the past two generations in all those lines which have their focal point in the earth. Illustrated. 5x7 inches. Cloth.....Net \$1.75

The Fat of the Land

The Story of an American Farm. By *John Williams Streeter*. The Fat of the Land is the sort of book that ought to be epoch-making in its character, for it tells what can be accomplished through the application of business methods to the farming business. Never was the freshness, the beauty, the joy, the freedom of country life put in a more engaging fashion. From cover to cover it is a fascinating book, practical withal, and full of common sense. Illustrated. 5x7 inches. Cloth. \$0.75

Farm Management

By *Fred. W. Card*. An indispensable book for all who desire to run their farm on a strictly business basis. In farming, business methods are quite as important as production methods and this volume tells all a man will want to know about capital, labor, implements and equipment systems for farming, market problems, records and accounts and specific types of farming. Chapters are also devoted to such subjects as the choice of farm advertising, co-operation and the like. Illustrated. 6x9 inches. 270 pages. Cloth.Net \$2.00

Cotton

By *C. W. Burkett and C. H. Poe*. The only book in existence covering adequately every side of this great subject. This book starts with the history of cotton from ancient India to our own time; then takes up in detail its cultivation, marketing, manufacture, and the problems of the cotton world. Illustrated with photographs and diagrams. 6x9 inches. 331 pages. Cloth. Net \$2.00

THE BOOK OF CORN

A Complete Treatise Upon the Culture, Marketing and
Uses of Maize in America and Elsewhere

FOR FARMERS, DEALERS, MANUFACTURERS AND OTHERS—A COMPREHENSIVE MANUAL
UPON THE PRODUCTION, SALE, USE and COMMERCE of the WORLD'S GREATEST CEREAL

Prepared under the direction of HERBERT MYRICK, by the most capable specialists, including among others, A. D. Shamel, in charge Corn Work, Illinois Experiment Station—H. J. Waters, Director Missouri Experiment Station—Albert W. Fulton, Managing Editor American Agriculturist Weeklies, New York—Bernard W. Snow, Statistician Orange Judd Farmer, Chicago—Willis G. Johnson, formerly State Entomologist of Maryland and late Associate Editor American Agriculturist, New York—Levi Stockbridge, ex-President Massachusetts Agricultural College—Clarence A. Shamel, Associate Editor Orange Judd Farmer, Chicago—E. B. Voorhees, Director New Jersey Experiment Station—Luther Foster, Wyoming Agricultural College—Hugh M. Starnes, Georgia Agricultural College—E. C. Powell, Editor Farm and Home—J. C. Arthur, Purdue University, Indiana—C. S. Phelps, Connecticut Agricultural College.



KING Corn is to have still larger prosperity in the future. The uses and the market for it are constantly broadening. This is true not only of the grain, but of the whole plant. Maize is the most important cereal grown, the average world's production of 3000 million bushels exceeding that of wheat by some 500 million bushels. Yet in spite of the overshadowing importance of this crop, practically no book worthy of the subject exists. But recent improvements in all methods pertaining to raising, harvesting and utilizing corn certainly warrant a great book that shall be the standard authority on this subject at home and abroad for years to come.

The Book of Corn is designed to supply this want. Its authors are practical, scientific and commercial experts—each the master of his subject. While authoritative, both as a practical manual and scientific treatise, The Book of Corn is strong and accurate on the commercial or business aspects of this great industry.

PARTIAL TABLE OF CONTENTS

History of the Corn Plant—New Uses—Standard and Special Varieties, West, East and South—Best Soils and Treatment of Same—Corn Breeding and Seed Selection—Fertilization, Cultivation and Harvest—Insect Pests and Fungous Diseases—Silo Construction—Feeding for Most Profit—Marketing at Home and Abroad—Tables Showing Movement and Prices for Long Series of Years, etc., etc.

Many illustrations, 372 pages. Handsomely and firmly bound. Price, \$1.50

SOILING CROPS AND THE SILO

How to Cultivate and Harvest the Crops
How to Build and Fill a Silo. How to Use Ensilage

By THOMAS SHAW

Professor of Animal Husbandry at the University of Minnesota

This is by far the most original and complete work ever written on the subject of which it treats. It is divided into two parts, the first of which treats of the growing and feeding of all kinds of soiling crops that have been found useful in any part of the United States or Canada.

The second part discusses the silo. No treatise on the subject has ever appeared that will approach in simplicity and comprehensiveness the way in which it has been handled by the author. No progressive farmer can afford to be without this book, and to dairymen it will prove of the highest value.

Illustrated, 5x7 inches, 364 pages. Cloth. Price, \$1.50

FORAGE CROPS OTHER THAN GRASSES

How to Cultivate, Harvest and Use Them

By THOMAS SHAW

Under the term "Forage Crops," as used by the author, are comprised all pasture plants which are sown from year to year—and which are fed off by the animals in the field. To show how easily and satisfactorily forage plants can be made to supplement perennial pastures, how profitably they can be raised on land which otherwise would be idle, and how important a place they are destined to occupy in the near future in SYSTEMATIC CROP ROTATION on every stock and dairy farm, has been the author's aim in writing this book. The work has a PRACTICAL RING ABOUT IT, from beginning to end, that begets confidence in the reader as to the value of its contents.

Illustrated, 5x7 inches, 300 pages. Cloth. Price, \$1.00

CLOVERS AND HOW TO GROW THEM

By THOMAS SHAW

Author of "Forage Crops Other than Grasses," "Soiling Crops and the Silo," "Study of Breeds," "Animal Breeding," etc., etc.

This is the first book published which treats on the growth, cultivation and treatment of clovers as applicable to all parts of the United States and Canada, and which takes up the entire subject in a systematic way. After thoroughly explaining the principles and practice of successful clover cultivation in general, the most important species and varieties of clovers are discussed in detail. Special chapters are devoted to: medium red clover, alfalfa, alsike, mammoth, crimson, small white, japan, burr, sweet sainfoin, Egyptian, yellow, sand lucerne, and others of minor importance. With each are given its varieties, pasturing, harvesting for hay, saving seed, renewing, value as fertilizer. The whole work is written from the standpoint of the practical farmer and cannot fail to exert a potent influence in the promotion of progressive agriculture.

Illustrated, 5x7 inches, 337 pages. Cloth. Price, Net, \$1.00

THE AMERICAN SUGAR INDUSTRY

A Handbook for the Farmer or Manufacturer, Capitalist or Laborer, Statesman or Student

By HERBERT MYRICK

Editor of American Agriculturist of New York, Orange Judd Farmer of Chicago, Treasurer American Sugar Growers' Society, etc.

In this volume the whole field of the American Sugar Industry is intelligently considered. It covers just the points that everyone interested wants to know about. The book is divided into four distinct parts, each a monograph in itself.

PART I. Economics of Domestic Sugar Production. PART II. The Cane Sugar Industry. PART III. The Beet Sugar Industry in America, Prior to 1897. PART IV. Commercial Aspects of the Beet Sugar Industry.

Size 10x7 inches, 240 pages, nearly 200 illustrations (many of them full-page plates from magnificent photographs taken especially for this work) superbly printed, bound in gold and cloth. Price, \$1.50.

SOILS

Their Properties, Improvement, Management, and the Problems of Crop Growing and Crop Feeding

By CHARLES WILLIAM BURKETT

Director of the Agricultural Experiment Station, Kansas State College



THE first study of agriculture should be at the bottom. To know some of the simple facts about the soil, how it should be handled and treated, something about the properties of the soil, about the improvement and management of the land, and then to know the problems of crop growing and crop feeding, and how to meet them, are, indeed, fundamental things that the successful farmer must know. At the same time the farmer must be a master of these things. The soil must not be a mystery to him.

As a rule soil matters are too lightly considered. The soil, so common and familiar, is neglected both in study and practice. The books that have been written on the subject, in the past have been dull, dry, uninteresting. Professor Burkett has broken away from this order. Himself a farmer, a soil student and an easy writer, he has written an accurate account of the subject in a simple, interesting manner that to read is to be interested from the very beginning. There is not a dull line in the book. It reads like a novel, with interest to the very end. The treatment is in no place technical and a helpful suggestion is to be found on every page. It is just the book for the plain farmer. It is a dry subject made interesting; a common subject made popular; a dull subject made understandable and helpful. Professor Burkett has in this book provided a story that cannot fail to interest every student of the farm. For the reading course, rural school, traveling library, grange library, etc., nothing on the same subject approaches it. No farmer can afford to be without this fascinating book. A glance at what the chapter headings embody gives a fair idea of its popular scope: The soil makers; The soils that living things have made; What we find in soil; Concerning the texture of the soil; How plants feed; The elements that plants use; How plant food is preserved; Getting acquainted with plant food; The potential plant food, its stores and nature; The role that tillage plays; Liming the land, a corrective for acidity; The quest of nitrogen; The release of soil nitrogen, the return to the air; Nitrification, nitrogen made ready for plants; Reclaiming lost nitrogen, the call to the air; Soil inoculation, how done; Draining the land; Soil water, how it is lost, how it may be held; Dry farming, a problem in water conservation; Tillage tools, what they are for; How to use them; The cultivation of crops, the tools and purposes; Stable manure, its composition and its preservation; Handling manure on the farm; Buying plant food for the soil; Using chemical manure intelligently; Mixing fertilizers at home; Dairying, an example in soil building; Rotation of crops; The old, worn-out soils, what we may do for them; Conclusion. A bit of philosophy.

Illustrated, 5 1-2x8 inches, 303 pages. Cloth. Price, \$1.25

FARM DEVELOPMENT

An Introductory Book in Agriculture

Including a Discussion of Soils, Selecting and Planning Farms, Subduing the Fields, Drainage, Irrigation, Roads, Fences, together with Introductory Chapters concerning Farm Business, and the Relations of General Science to Agriculture

By **WILLET M. HAYS, M.Agr.**

Formerly Professor of Agriculture, University of Minnesota; now Assistant Secretary U. S. Department of Agriculture



A Text-book for schools, discussing the fundamentals of agriculture. Just the thing for teachers and for classes in agricultural high schools.

It takes up farming as a vocation, tells about the geological history of the earth, explains the way soil is made, describes the manner of selecting a farm home, how to subdue the land, how to drain and irrigate, and how to build roads, bridges and fences. These are real life subjects and ought to be a part of every school course. Now that Professor Hays has written this book, an excellent text is available, one written solely to help teachers and pupils in beginning work in agriculture. The topics follow one another in regular order and have been arranged for class recitation according to the same plan in vogue with our histories, arithmetics and readers. This makes the book very teachable and easy to follow by both teacher and pupil. The author is one of our leading agricultural educators and has been a fore-
most worker in introducing agriculture in the common schools. At present he occupies the important post of assistant secretary of the National Department of Agriculture. As a wise teacher and safe leader he has no superior in the land.

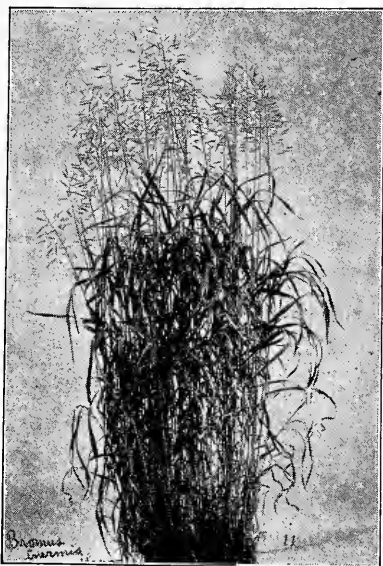
Profusely Illustrated, 5½ x 8 inches. 392 pages. Cloth. Net \$1.50

FARM GRASSES

of THE UNITED STATES

By W. J. SPILLMAN

Agrostologist, U. S. Department of Agriculture



AN INTENSELY practical discussion of the farm grasses of the United States of America is presented in this volume. It is essentially a resume of the experience of American farmers with grasses, and it is safe to say that no other work has covered the ground so thoroughly. No attempt has been made to give a connected account of all the grasses known in this country, but the aim has been rather to give just the information which a farmer wants about all those grasses that have an actual standing on American farms. The whole subject is considered entirely from the standpoint of the farmer. One of the most valuable features of the book is the maps showing, at a glance, the distribution of every important grass in the United States; and the reasons for the pecu-

liarities in this distribution are fully brought out.

The principal chapter treats on the grass crop as a whole and the relations of grass culture to agricultural prosperity; meadows and pastures; the seed and its impurities; the blue grasses; millets; southern grasses; redtop and orchard grass; brome-grasses; grasses for special conditions; haying machinery and implements; insects and fungi injurious to grasses, etc. The methods followed on some pre-eminently successful farms are described in detail, and their application to grass lands throughout the country is discussed. The discussion of each grass is proportional to its importance on American farms.

This book represents the judgment of a farmer of long experience and wide observation regarding the plan in agriculture of every grass of any importance in American farming. In its preparation its use as a text book in schools as well as a manual of reference for the actual farmer has constantly been kept in mind. The book, which is well printed and bound, is most conveniently arranged and splendidly indexed so that the reader may find any subject at a glance.

Illustrated, 5x7 inches, 248 pages. Cloth. Price, \$1.00

Broom Corn and Brooms

A treatise on raising broom-corn and making brooms on a small or large scale, comprising the time of planting, cultivation, implements, time for harvesting, looping, bending, making brooms, broom machinery, etc., etc. Illustrated, 5x7 inches, 60 pages. Cloth\$0.50

How the Farm Pays

By *Peter Henderson* and *William Crozier*. "How the Farm Pays" is written in that plain and easy to be understood language that characterizes all the authors' writings. This is perhaps the first book of the kind ever written by two men while practically engaged in the work, which, to both, has been such a continued success, and which makes their advice so eminently valuable. Illustrated. 6x9 inches. 400 pages. Cloth.....\$2.00

First Principles of Agriculture

By *Edward B. Voorhees*. The purpose of this book is to state in logical order the elementary principles of scientific agriculture and to show the relation of these scientific facts to farm practice. 5x7 inches. 212 pages. Cloth.....Net \$1.00

Manual of Agriculture

By *George B. Emerson* and *Charles L. Flint*. Revised by *Dr. Charles A. Goessman*. This book aims to teach how we may co-operate with the great powers of nature and control them for our own purposes, making the most useful, as well as the most interesting study that can be presented to the inquiring mind. Illustrated. 5x7 inches. 284 pages. Cloth.....\$1.00

A B C of Agriculture

By *Mason C. Weld* and other writers. This book treats upon the fundamental principles of agriculture, farming as a business, the mechanical and chemical composition of soils, maintaining and increasing fertility, clearing and tilling land, weeds and their destruction, manures, feeding rations of animals, etc. Illustrated. 5x7 inches. Cloth..\$0.50

Physics of Agriculture

By *F. H. King*. In its pages the author presents to the student who ex-

pects to be a farmer some of the fundamental principles he must understand to become successful. The book has been written from the standpoint of the general student and farmer rather than that of more technical scientific agriculture. Its main parts are devoted to physics of the soil, ground water, wells and farm drainage, rural agriculture, and farm mechanics. On these topics it constitutes a complete cyclopedia containing an unlimited wealth of useful information. Illustrated. 6x8 inches. 604 pages. Cloth....Net \$1.75

Textbook of Tropical Agriculture

By *H. A. Alford Nicholls, M. D.* A guide for the young and inexperienced as well as for intending settlers in tropical countries. In the first part the elementary principles of agriculture are considered. In the second part the applications of the principles of agriculture to the various cultivations undertaken in tropical countries are treated upon, and hints on the preparation of the products for market are given under each head. These crops comprise: Coffee, cacao, tea, sugar cane, fruits, spices, tobacco, drugs, dyes, tropical cereals, food plants, etc. It is not a compilation, but the record of experience that has been gained by study, observation and experimental cultivation. Illustrated. 5x7 inches. 352 pages. Cloth.....Net \$1.30

Plant Life on the Farm

By *Maxwell T. Masters, M. D.* In view of the importance of plants as the direct or indirect source of all food, the intelligent cultivator must wish to know something of the machinery which does this wonderful work of converting the crude materials of the earth and the air into food for animals, and what are the changes which bring life out of dead materials. Dr. Masters has happily met this want in *Plant Life on the Farm*. He presents such of the phenomena of vegetable life and growth as will give the farmer a clear idea of the work of the plant, without the use of unnecessary technicalities, and in a clear style readily understood by those not versed in the sciences. 5x7 inches. 132 pages. Cloth\$1.00

THE BOOK of WHEAT

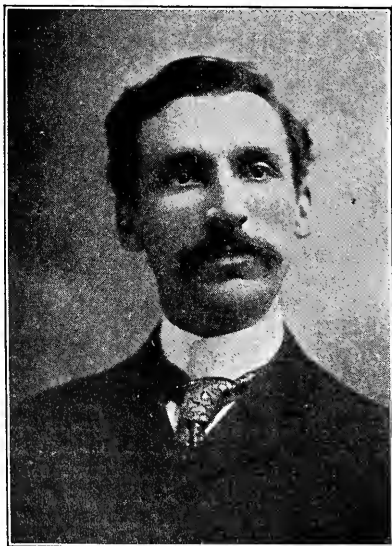
An Economic History and Practical Manual of the Wheat Industry of the World

By PETER TRACY DONDLINGER, Ph.D.

FOR the first time this most important cereal has been treated exhaustively in a single volume. This book comprises a complete study of everything pertaining to wheat. It is the work of a student of economic as well as agricultural conditions, well fitted by the broad experience in both practical and theoretical lines to tell the whole story in a condensed form. A glance at the table of contents given below will show that all phases of the wheat industry have been treated. The book is written with a view to completeness and accuracy, and at the same time is made very readable for the benefit of the general student. It is designed for the farmer, the teacher and the student as well, and the bibliography which accompanies the book is alone worth many times its price to the investigator of any subject connected with the culture of wheat.

This book presents most interesting reading to those not particularly interested in the practical side of agriculture, owing to the extensive historical notes regarding the methods followed in the culture of wheat from ancient times to the present. The great age of wheat as a tilled crop is impressed upon one when the early history is traced from prehistoric times to the present. The chapters on transportation, marketing and prices should be read by every miller and dealer in this staple crop, and the practical farmer will find in the chapters on improvement, cultivation, harvesting, fertilizing, etc., the most up-to-date, practical information as deduced by the best investigators.

The scope of this book will be appreciated when the following table of contents is carefully studied:



1. Wheat grain and plant.
2. Improvement of wheat.
3. Natural environment.
4. Cultivation.
5. Harvesting.
6. Yield and cost of production.
7. Rotation and irrigation.
8. Fertilizers for wheat.
9. Diseases of wheat.
10. Insect enemies.
11. Transportation.
12. Storage.
13. Marketing.
14. Prices.
15. Milling.
16. Consumption.
17. Statistics.
18. Index and Bibliography.

This book is well printed and illustrated with many line drawings and full-page photographs.

370 pages, 5½x8 inches. Cloth. Price, net, \$2.00

How Crops Grow

By *Samuel W. Johnson*. A treatise on the chemical composition, structure and life of the plant. After the appearance of the first edition of this great work it at once became the standard authority in its field. But progress in agricultural science has been so rapid in recent years that in order to embody the later advancements, the author found it practical to rewrite it throughout. In pleasing and convincing language he shows how the plant grows; the conditions under which it flourishes or suffers detriment; the materials of which it is made; the mode of its construction and organization; how it feeds upon the soil and air; how it serves as food to animals; how the air, soil, plant and animal stand related to each other in a perpetual round of beautiful and wonderful transformations. This volume has been welcomed by those who appreciate the scientific aspects of agriculture and who are persuaded that a true theory is the surest guide to successful practice. Illustrated, 5x7 inches, 416 pages, cloth\$1.50

The Farmstead

By *I. P. Roberts*. A shrewd, clear, unbiased discussion of such topics as the selection and purchase of farms, the farm as a source of income, locating, planning and building the house (general plans, outside covering, painting, etc., inside finish, heating and ventilation), water supply and sewage, house-furnishing, the barns, etc. Illustrated. 5x7 inches. 350 pages. ClothNet \$1.50

Text-Book of Southern Agriculture

By *Professor F. S. Earle*. The first of the two parts into which this book is divided deals with general considerations and discusses such topics as climate as affecting agriculture, formation and kinds of soils, tillage, drainage, irrigation, etc. Part two, consisting of nearly three-fourths of the book, is devoted to practical discussion of the methods of growing and marketing all of the principal crops of the South. Pages, 5x7 inches. Cloth Net \$1.25

The State and the Farmer

By *L. H. Bailey*. A book discussing the political and economic status of the farmer. Of particular interest not only

to the agriculturist, but also to the student of economics and to the general reader. 5x7 inches. 177 pages. Cloth. Net \$1.25

Elements of Agriculture, Southern and Western

By *W. C. Welborn*. This volume, written for the public schools and for farmers, contains about 320 pages of clear and condensed matter dealing with the main principles of agriculture and its practice in the South and West. Much interest and value are added to the book by the author's extensive study and travel in the 'd world. 5x7 inches. Cloth.....Net \$0.75

How to Choose a Farm

By *Thomas F. Hunt*. The first book of its kind in the field, full of advice to those wanting to buy land, to make estimates of the value of farm property, or to know the agricultural resources and possibilities of different localities. 5x7 inches. Cloth.....Net \$1.75

The Farmer's Business Handbook

By *Isaac P. Roberts*. A manual of simplified farm-accounting, to enable a farmer to determine which crops pay the best and which are grown at a loss, together with brief advice on rural law. 5x7 inches. 300 pages. Cloth. Net \$1.25

Introduction to Business Organization

By *S. E. Sparling*. Contains excellent advice on conducting the business of a farm. Half leather. Pages, 5x7 inches.....Net \$1.25

An Introduction to the Study of Agricultural Economics

By *Henry C. Taylor*. An examination into existing conditions which assists the modern farmer to consider the cost of production and the price at which he can with profit sell his products. The selection of land and suitable crops; the right size for a farm; animal husbandry; intensity of culture—when and when not advisable, and the principles to be followed in estimating value in farm lands and equipments are some of the more practical subjects treated. Legal aspects of farm tenancy and ownership are also considered. Half leather. 5x7 inches. 327 pages.....Net \$1.25

Weeds of the Farm and Garden

By **L. H. PAMMEL, B. Agr., M. S., Ph.D.**
*Professor of Botany, Iowa State College, and Botanist, Iowa
Agricultural Experiment Station.*

There has long been needed a book covering the common weeds of North America. Since the publication of Thurber's "Weeds and Useful Plants" and Prof. Shaw's book on weeds, nothing has been published on this side of the Atlantic in book form excepting the very excellent and useful book by Fletcher and Clark of Canada. The publications of various Experiment Stations of the United States and Canada, bulletins and circulars of our National Department of Agriculture, and such publications, soon become exhausted. The demand cannot be met, hence the publication of an authoritative work on the subject.

The present publication takes up the subject from a broad view point discussing many problems from a pedagogical and high school standpoint, hence will be useful for colleges and high schools, inasmuch as many of the agricultural colleges and high schools are giving instruction on the subject of weeds. This work will not only help the teacher but the student to study the weeds of the field and garden.

The practical suggestions for the treatment of weeds is an important feature of the work; this should make it of special value to the farmer, landowner, gardener and park superintendent.

The enormous losses, amounting to several hundred million dollars, annually in the United States caused by weeds should stimulate us to adopt a better system of agriculture. The weed question is, therefore, a most important and vital one for the American farmer. This treatise will enable the farmer to treat his field to remove weeds.

The author, Dr. L. H. Hammel, is professor of Botany in the Iowa State College and has devoted many years to a study of weeds.

The scope of the work may be seen from the following table of contents:

CHAPTER I.	Weeds, Injury to Crops and Nature of.
CHAPTER II.	Kinds of Weeds as to Duration.
CHAPTER III.	Dispersal of Weed Seeds.
CHAPTER IV.	The farmer's Interest in Good Seed, and How to Test Seed.
CHAPTER V.	Weed Impurities in Agricultural Seeds.
CHAPTER VI.	Some Weed Laws, and Seed Control Laws.
CHAPTER VII.	Weeds of Special Crops.
CHAPTER VIII.	Poisonous Weeds.
CHAPTER IX.	Table of Noxious Weeds.
CHAPTER X.	Migration of Weeds.
CHAPTER XI.	Extermination of Weeds.
CHAPTER XII.	Treatment for Special Weeds.
CHAPTER XIII.	The Morphology of Weeds.
CHAPTER XIV.	Descriptions of Some Common Weeds.

Profusely Illustrated, 5x7 inches, 300 pages. Cloth. Net, \$1.50



Silos, Ensilage and Silage

By *Manly Miles*. In this practical treatise on the ensilage of fodder corn the author has collected all the well known facts in regard to the practice of ensilage, and has brought them into consistent relation with definite principles in harmony with the latest developments of science. With this object in view every point pertaining to the subject is fully considered and discussed: First Principles—Silos for Storing Grain—Silos for Preserving Green Fodder—Fermentation—The Silo—How to Build a Silo—Fodder Crops for Ensilage—Filling the Silo—Ensilage and Farm Economy. Illustrated. 5x7 inches. 100 pages. Cloth.....\$0.50

Soiling, Ensilage and Stable Construction

By *Frank Sherman Peer*. This book is a revised edition of the author's work entitled *Soiling, Summer and Winter*, or the economy of feeding farm stock, published some twenty years ago. In it the author relates his own experience in conducting this system of feeding on his own farm, convinced that he has answered the perplexing questions of how to enrich the soil economically, how to raise nutritious food at the least cost, and how to increase the number of stock without buying more land. Illustrated. 5x7 inches. 247 pages. Cloth\$1.00

American Farm Book

By *Richard L. Allen*. A useful and thoroughly practical book; comprising all that can be condensed into an available volume. Revised and greatly enlarged by *Lewis F. Allen*. 5x7 inches. 540 pages. Cloth.....\$2.00

Grasses of North America

By *W. J. Beal*. In this work are treated successively: The structure, form and development of the grasses; the power of motion in plants; classifying, naming, describing, collecting, studying grasses; native grazing kinds; grasses for cultivation; early attempts to cultivate grasses; testing seeds; some common weeds; some requisites for success in grass; the best soil and climate for pasturing grasses; new grasses for new or old stations; improving by selection, improving by cross-fertilization of the flowers; grasses for the lawn, the garden and

for decoration; the leguminosae or pulse family; the enemies of grasses and clovers; the fungi of forage plants; and bibliography. Copiously illustrated. 6x9 inches. Cloth. Price net Vol. 1, \$2.50, Vol. 2.Net \$5.00

Forage Crops

By *Edward B. Voorhees*. Deals with the whole subject of forage in a practical and up-to-date manner. It suggests useful and practical rotations and soiling systems, and gives methods of seeding, culture and use. An eminently practical book. Cloth. 5x7 inches. Net \$1.50

Crop Growing and Crop Feeding

By *W. F. Massey*. A book for the farm, garden and orchard, with special reference to the practical methods of using commercial fertilizers therein. The author has put into the plain language of the farm the facts which scientists have worked out in the laboratory, and which practical experience has proved to be applicable to the everyday work of the farm. 6x9 inches. 383 pages. Cloth.....\$1.00

The Pruning Book

By *L. H. Bailey*. This is the first American work exclusively devoted to pruning. It differs from most other treatises on the subject in that the author takes particular pains to explain the principles of each operation in every detail. Specific advice is given on the pruning of the various kinds of fruit and ornamental trees, shrubs and hedges. Considerable space is devoted to the pruning and training of grapevines, both American and foreign. Every part of the subject is made so clear and plain that it can be readily understood by even the merest beginner. Illustrated. 5x7 inches. 530 pages. Cloth.....Net \$1.50

Pedder's Land Measurer for Farmers

A convenient pocket companion, showing at once the contents of any piece of land, when its length and width are known, up to 1500 feet either way, with various other useful farm tables. Cloth.....\$0.50

The Cereals In America

By THOMAS F. HUNT, M.S., D.Agr.

Professor Agronomy. College of Agriculture, Cornell University



THIS is primarily a text book on agronomy, but is equally as useful to the farmer as to the teacher or student. It is written by an author than whom no one is better qualified.

The subject matter includes an accurate, comprehensive and succinct treatise of the cereals—**Wheat, Maize, Oats, Barley, Rye, Rice, Sorghum** (kafr corn) and **Buckwheat**, as related particularly to American conditions. Where germane to the subject, however, results of foreign experience are stated. The author has made a comprehensive study of the topics treated, drawing freely from the publications of the United States Department of Agriculture, comprising chiefly the publications of the Office of Experiment Stations, American Experiment Stations and recognized journals related to agriculture.

The treatment accords with the scheme laid down by the Committee on Methods of Teaching of the A. A. A. C. & E. S.

First hand knowledge has been the policy of the author, and every crop treated is presented in the light of individual study of the plant. The same idea is carried out in the furnishing of practicums to accompany each crop. Collateral readings for each crop are also included. Cross references are freely used where thought advisable, and offer excellent opportunity for comparative study of the crops. The book is liberally illustrated, but only where thought possible to elucidate the text.

An idea of its comprehensive character is afforded by partial table of contents of the chapters on wheat, the other subjects being treated with the same thoroughness: *Structure, Composition, Botanical Relations, Classification of Varieties, Improvement of Varieties, Climate, The Soil and Its Amendments, Cultural Methods, Weeds, Fungous Diseases and Insect Enemies, Harvesting and Preservation, Uses and Preparation for Use, Production and Marketing, History, etc.* Illustrated with 100 entirely new and original drawings by C. W. Furlong and A. K. Dawson.

5 1-2 x 7 1-2 inches, 449 pages. Handsomely Printed from New Type and Substantially Bound in Cloth. Price, \$1.75.

The Forage and Fiber Crops in America

By THOMAS F. HUNT, M.S., D.Agr.

Professor of Agronomy in the New York State College of Agriculture at Cornell University

THIS is a book for the farmer, the teacher, and the college student. It has been prepared with the view to meeting the demand for an untechnical but scientific and comprehensive treatise of the grasses, legumes, and fibers. The method of presentation is similar to that of "The Cereals in America," to which book this is proposed as a companion, the two books together purporting to furnish a year's work in a college course in agronomy. The book is admirably adapted to general reading and will undoubtedly take its place among the few handbooks on agricultural topics. To timothy, Kentucky blue grass, red clover, alfalfa, cowpeas and cotton has been given the same plain, thoughtful, and accurate treatment which characterizes "The Cereals in America."

An abundance of new and scientific thought has been crowded into these pages. Reproduction in grasses, permanency in meadows and pastures, the rôle of legumes in soil inoculation, the production of root crops as a substitute for the more expensive concentrates, fiber crops in their economic relations, the detection of adulterations and impurities are some of the salient features. Laboratory exercises are provided, and ample collateral reading is supplied at the end of each chapter. More than 150 illustrations prepared by our artist, B. F. Williamson, illuminate the text.

The following table of contents will give a good idea of the scope and completeness of this book:

Chapter I. Perennial Forage Grasses:—Characters and habits—Seeds and mixtures. II. Perennial Forage Grasses:—Cultural methods—Production and harvesting. III. Perennial Forage Grasses:—Timothy—Meadow foxtail. IV. Perennial Forage Grasses:—Redtop—Kentucky blue grass. V. Perennial Forage Grasses:—Orchard grass—Meadow fescue—Smooth bromé grass—Minor grasses—Practicums. VI. Annual Forage Plants:—Cereals—Prickley comfrey—Jerusalem artichoke—Canary grass—Millets—Barnyard millet—Foxtail millets—Other Panicums—Crab grass—Pearl millet—Broom-corn millet—Guinea grass—Teosinte. VII. Leguminous Forage Crops:—General characters—Acquirement of nitrogen. VIII. Leguminous Forage Crops:—Clovers—Red clover—Mammoth clover. IX. Leguminous Forage Crops:—Alfalfa—Alsike clover—White clover—Crimson clover—Minor clovers. X. Leguminous Forage Crops:—Alfalfa—Sand lucerne. XI. Leguminous Forage Crops:—Black medic—Bur clovers—Japan clover—Vetches—Minor legumes—Practicums. XII. Legumes for seed:—Field beans—Field peas—Peanuts—Practicums. XIII.—Legumes for Seed:—Cowpeas. XIV. Legumes for Seed:—Cowpeas—Soybeans. XV. Root crops:—Practicums—Collateral reading. XVI. Fiber Crops:—Classification and production—Practicums. XVII. Fiber Crops:—Cotton—Structure and composition. XVIII. Fiber Crops:—Cotton—Varieties and improvements. XIX. Fiber Crops—Cotton—Climate, soils and their amendments. XX. Fiber Crops:—Cotton—Cultural methods—Insects—Fungus diseases. XXI. Fiber Crops:—Cotton—Production and marketing. XXII. Fiber Crops:—Cotton—Uses and history. XXIII. Fiber Crops:—Flax—Hemp—Minor fiber crops.



Fully illustrated, 5 1-2x8 inches, 428 pages. Cloth. Price, \$1.75

Rural School Agriculture

By CHARLES W. DAVIS, M.A.S.

Professor of Agriculture and Biology, North Georgia Agricultural College, Dahlonega, Georgia



A BOOK intended for the use of both teachers and pupils. Its aim is to enlist the interest of the boys of the farm, and awaken in their minds the fact that the problems of the farm are great enough to command all the brain power they can summon. The book is a manual of exercises covering many phases of agriculture, and it may be used with any text-book of agriculture, or without a text-book. The exercises will enable the student to think, and to work out the scientific principles underlying some of the most important agricultural operations. The author feels that in the teaching of agriculture in the rural

schools the laboratory phase is almost entirely neglected. If an experiment helps the pupil to think, or makes his conceptions clearer, it fills a useful purpose, and eventually prepares for successful work upon the farm. The successful farmer of the future must be an experimenter in a small way. Following many of the exercises are a number of questions which prepare the way for further research work. The material needed for performing the experiments is simple, and can be devised by the teacher and pupils, or brought from the homes.

Some of the exercises are: Properties of Carbon Dioxide, the Nature of Solutions, Plants Selecting their Food, Value of Birds to the Farmer, Rotation of Crops, Field Study of Cereals, Forms of Roots, Sunlight and Leaves, Transpiration of Water by Plants, Parts of a Flower, Germination Test of Seeds, Types of Soil, Acidity of Soils, Kinds of Moisture in the Soil, Soil Water Holds Plant Food, Water Capacity of Soils, Mixing Fertilizers, How to Distinguish Fertilizer Ingredients, Questioning the Soil, How Clover Helps the Farmer, Types of Seed Corn, Variation in Individual Ears, Moisture in Corn and Cob, Calculating Rations for Animals, Temperature for Churning Butter, Directions for Using the Babcock Test, Souring of Milk, Different Forms of Apples, An Ideal Cotton Plant, Botanical Study of the Cotton Plant, Relation Between Length of Straw and Yield of Grain in Wheat, Preventing Oat Smut, Thinning Fruit, Grafting and Budding, Transplanting Trees, Pruning, Insects of the Farm.

Illustrated, 5x7 inches, 290 pages. Cloth. \$1.00

THE HOP Its Culture and Cure, Marketing and Manufacture

A Practical Handbook on the Most Approved Methods in Growing, Harvesting, Curing and Selling Hops, and on the Use and Manufacture of Hops

By HERBERT MYRICK

Assisted by practical experts in successful hop culture in America, England and the Continent, dealers in hops and manufacturers, and by specialists in the sciences.

THIS volume, the result of years of research and observation, is destined to be an authority on this crop for many years to come. It takes up every detail from preparing the soil and laying out the yard to curing and selling the crop. Every line represents the ripest judgment and experience of experts.



TABLE OF CONTENTS

Chapter I.—Origin and Spread of Hop Culture
Chapter II.—Peculiarities of the Industry
Chapter III.—Characteristics of the Plant
Chapter IV.—Composition of the Hop Plant and Its Fruit
Chapter V.—The Climate and Soil for Hops
Chapter VI.—Feeding the Hop Plant
Chapter VII.—Laying Out a Hop Yard—Training the Vines
Chapter VIII.—Planting and Culture
Chapter IX.—Methods of the Pleasanton Hop Company
Chapter X.—Pests of the Crop

Chapter XI.—Harvesting the Crop
Chapter XII.—Kilns for Curing Hops.
Chapter XIII.—Curing, Cooling and Baling Hops
Chapter XIV.—Grading, Sampling and Marketing
Chapter XV.—Concentration in Hop Growing
Chapter XVI.—Expenses and Profits

Appendix :

Tables in Detail—Statistics of Area, Yield and Prices in Various Countries—Miscellaneous.

Illustrated, 5x7 inches, 300 pages. Cloth. Price, \$1.50

G I N S E N G

**Its Cultivation, Harvesting, Marketing and Market Value ;
With an Account of Its History and Botany**

By M. G. KAINS

A COMPLETE working treatise for the grower of ginseng—that new crop which is attracting such general attention among farmers and gardeners. It discusses in a practical way how to begin with either seed or roots, soil, climate and location, preparation, planting and maintenance of beds, artificial propagation, manures, enemies, selection for market and for improvement, preparation for sale and the profits that may be expected. Coming just now it is of particular interest, since owing to the decreasing wild supply of our forests, the prices offered by dealers have been steadily rising, and since the demand in China—the great market for this root—seems never to be fully supplied. The booklet is concisely written, well and profusely illustrated and should be in the hands of all who expect to grow this drug to supply the export trade, and to add a new and profitable industry to their farms and gardens, without interfering with the regular work.

Illustrated, 5x7 inches, 159 pages. Cloth. Price, 50 cents

FARM CROPS

By CHARLES WILLIAM BURKETT

Editor American Agriculturist

A practical treatise on the Growing of American Field Crops; containing Brief and Popular Advice on the Seeding, Cultivating, Handling and Harvesting of Farm Crops and the Management of Lands for the Largest Returns.

In the ten chapters of this book the editor has covered in a most comprehensive manner the following important topics: Good Soils Back of Good Crops; How Rotations Help Out; Crop Yields and Proper Culture; What Crops for Stock Feeding; The Silo, Silage and Soiling Crops; Every Farmer a Plant Breeder, and Farm Crops.

The volume abounds in helpful suggestions and valuable information for the most successful growing of the various farm crops, whether large or small areas are allotted to them, and it is a plain, practical and reliable guide, and tells of the best ways of handling crops from the time the land is made ready until the harvested product is sold.

Illustrated. 5x7 inches. 288 pages. Cloth. Net \$1.50

THE STUDY OF CORN

By PROF. V. M. SHOESMITH

A most helpful book to all farmers and students in the selection and improvement of corn. Just the thing for the individual farmer, for corn schools, farmers' institutions and the corn improvement associations. It is profusely illustrated from photographs, all of which carry their own story and contribute their part, making pictures and text matter a clear, concise and interesting study of corn.

Illustrated. 5x7 Inches. 100 pages. Cloth. Price, Net 50 cents

BEAN CULTURE

A practical treatise in all that pertains to Beans for the everyday farmer and valuable reference for the teacher and the student.

By GLENN C. SEVEY, B.S.

This book takes up in a logical way and explains in simple language all the details incident to the production of a maximum crop at a minimum expense. The matters taken up include history, development, different species, cultural methods of preparing seed bed, planting, fertilizers, cultivation, remedies for insects and fungous pests, varieties and where they succeed, etc., etc. A whole chapter is given over to the consideration of the nitrogen-gathering properties of the bean plant. The matter of soil inoculation is given in detail.

A special chapter on Markets and Marketing by A. W. Fulton, managing editor of American Agriculturist weeklies, and an expert along commercial lines, is worth the price of the book. There is likewise a special chapter on garden beans. Conclusions from experiments conducted in America and the other parts of the world will be found digested and given in a nut-shell for the benefit of those interested in the bean plant and who wish the best complete and final information on the subject.

Illustrated. 5x7 inches. 144 pages. Cloth. Price, 50 cents

THE POTATO

Its Cultivation, Development, Harvesting, Storing, Marketing

By SAMUEL FRASER

Assistant Agronomist, Cornell University

This is essentially a manual for the potato grower, treating very fully and clearly on the history and botany of the potato, some conditions influencing growth and development, soils, rotation, manuring and fertilizing, consideration of seed, varieties, planting, management of the growing crop; obstructions to growth and development, sprays and spraying, harvesting, storing, production, transportation, markets, chemical composition and feeding value, breeding, selection, seed treatment, etc., etc. It is the most complete, reliable and authoritative book on the potato ever published in America.

Illustrated. 5x7 inches. 180 pages. Cloth. Price, 75 cents

The Peanut Plant

By *B. W. Jones*. Its Cultivation and Uses. This little book has been prepared mainly for those who have no practical acquaintance with the cultivation of the peanut. Its directions, therefore, are intended for the beginner, and are such as will enable any intelligent person who has followed farming to raise good crops of peanuts, although he may have never before seen the growing plants. Illustrated. Paper.

\$0.50

Tobacco Culture

This work contains full details of every process, from the selection and preparation of the seed and soil, to the harvesting, curing and marketing of the crop, with illustrative engravings of the operations. The work was prepared by fourteen experienced tobacco growers, residing in different parts of the country. Illustrated. Paper....\$0.25

Flax Culture

A valuable work, containing full directions, from selection of ground and seed to preparation and marketing of crop, as given by a number of experienced growers. Paper.....\$0.30

Hemp

By *S. S. Boyce*. A practical treatise on the culture of hemp for seed and fiber, with a sketch of the history and nature of the hemp plant. While hemp is the most widely diversified and, commercially and industrially, the most important plant in cultivation in Europe, in the United States it has been sadly neglected. Yet when properly and intelligently managed, there is no other crop which promises better returns over so great an area as does hemp. The author of this work has devoted nearly a lifetime to the practical study of the hemp industry, and gives in its pages full details of everything connected with it. The book is handsomely illustrated with half-tones from original photos taken especially for this purpose; and all the various operations connected with hemp culture are so plainly and clearly described as to enable anyone to make a success of hemp culture. Illustrated. 5x7 inches. 122 pages. Cloth\$0.50

Wheat Culture

By *D. S. Curtiss*. A treatise on how to double the yield and increase the profits. Explaining in detail: Wheat Culture; The Wheat Plant; How to Obtain a Large Yield; Planting or Sowing Wheat; Importance of the Wheat Crop; Flour the Form in Which to Sell Wheat; Varieties Most Grown in the United States; Green Manuring and Plowing; Recapitulation of Operations; Examples of Successful Wheat Culture; Extracts from Letters; Diseases and Insects; Improved Machinery and Implements; Analyses of Wheat and Straw; Conclusion. Illustrated. Paper\$0.50

Indian Corn Culture

By *C. S. Plumb*. This volume treats every phase of corn culture in a thoroughly practical as well as scientific manner. The principal chapters treat on the history and botanical characteristics of corn, the seed, fertilizers, tillage, planting, harvesting, insects, diseases, etc. 5x7 inches. 243 pages. Cloth.....\$1.00

Alfalfa

By *F. D. Coburn*. Its growth, uses and feeding value. The fact that alfalfa thrives in almost any soil; that without reseeded it goes on yielding two, three, four and sometimes five cuttings annually for five, ten, or perhaps 100 years; and that either green or cured it is one of the most nutritious forage plants known, makes reliable information upon its production and uses of unusual interest. Such information is given in this volume for every part of America by the highest authority. Illustrated. 5x7 inches. 164 pages. Cloth. \$0.50

Maple Sugar and the Sugar Bush

By *A. J. Cook*. All the difficult points in regard to making the very best quality of maple syrup and maple sugar are very fully explained. Recent inventions in apparatus, and methods of making this delicious product of the farm, are fully described. Profusely illustrated. Paper.....\$0.35

FIRST PRINCIPLES OF SOIL FERTILITY

By ALFRED VIVIAN

*Professor of Agricultural Chemistry in the College of Agriculture
of the Ohio State University*

THERE is no subject of more vital importance to the farmer than that of the best method of maintaining the fertility of the soil. The very evident decrease in the fertility of those soils which have been under cultivation for a number of years, combined with the increased competition and the advanced price of labor, have convinced the intelligent farmer that the agriculture of the future must be based upon more rational practices than those which have been followed in the past. We have felt for some time that there was a place for a brief, and at the same time comprehensive, treatise on this important subject of Soil Fertility. Professor Vivian's experience as a teacher in the short winter courses has admirably fitted him to present this matter in a popular style. In this little book he has given the gist of the subject in plain language, practically devoid of technical and scientific terms. It is pre-eminently a "First Book" and will be found especially valuable to those who desire an introduction to the subject and who intend to do subsequent reading. While the treatment of the matter does not pretend to be exhaustive, the terse style in which it is written, and the absolute freedom from redundancy, have made it possible to crowd into a small compass an unusually large amount of information. Although written in non-technical language, the different topics are discussed from the scientific standpoint, and this book differs from those commonly presented for popular reading in that each statement is followed by authentic data so far as the size of the book will permit. The book, therefore, is accurate so far as it goes, and will be found useful for short course classes in soil fertility as well as for general reading. It is also just the book for high schools, reading circles, grange courses and traveling and other libraries. Nothing could be better for the farmer who is compelled to do all his reading at home. That part of the matter herein contained, which appeared in the agricultural press, met with such an enthusiastic reception that we prophesy great popularity for this little book.

The table of contents gives an idea of the scope of the book. Exhaustion of the soil, what it means—The plant food derived from the atmosphere—Nitrogen as a plant food—The plant food derived from the soil—Origin of the soil—Why we till the soil—Reasons for draining and irrigating—Summer fallowing—Humus and green-manuring—Rotation of crops—The value of farm manure—How to calculate the amount and value of the manure produced on the farm—Losses in manure—Preservation of manure—Applying manure—Animal manures and the maintenance of fertility—Commercial fertilizers, what they are—Sources of nitrogen—Sources of potash and phosphoric acid—Mixed and special fertilizers—Home mixing—Using commercial fertilizers—Buying fertilizers—Liming of soils—Soil amendments.



Illustrated, 5x7 inches, 265 pages. Cloth. Net, \$1.00

The Nursery Book

By *L. H. Bailey*. A complete handbook of propagation and pollination of plants. It tells, plainly and briefly, what everyone who sows a seed, makes a cutting, sets a graft, or crosses a flower wants to know. It is entirely new and original in method and matter. The cuts number almost 100, and are made especially for it, direct from nature. The book treats of all kinds of cultivated plants, fruits, vegetables, greenhouse plants, hardy herbs, ornamental trees and shrubs and forest trees. Illustrated. 4½x7 inches. 365 pages. Cloth.....Net \$1.50

Principles of Plant Culture

By *E. S. Goff*. The textbook used in the classes in plant life and horticulture, in the popular short course in agriculture of the university of Wisconsin. It is full of practical ideas, and brings out the very points, both in the science of plant growth and in the methods of propagating and growing plants, that every farmer and horticulturist should understand. Illustrated. 5x8 inches. 288 pages. Cloth.....Net \$1.00

New Creations in Plant Life

By *W. S. Harwood*. This is the first authentic account of the really wonderful experiments with plant life conducted by Mr. Luther Burbank in California. The book is rich in suggestions for the flower, fruit or vegetable grower. The new edition brings the information up to date. 2d edition. Illustrated. 5x7 inches. Cloth..Net \$1.75

Diseases of Cultivated Plants and Trees

By *George Masee*. A familiarity with the general appearance, name and varied modes of attack of the most frequent group of parasites (fungi) will enable the horticulturist or farmer to apply intelligently the preventive or remedial measures suggested. Illustrated. 5x7 inches. 472 pages. Cloth. Net \$2.25

Soils and Crops of the Farm

By *George E. Morrow, M.A.*, and *Thomas F. Hunt*. The farmers' progressive reading circles will study with

pleasure this readable account of profitable plants and animals and their homes. The methods of making available the plant-food in the soil are described in popular language. A short history of each of the farm crops is accompanied by a discussion of its culture. The useful discoveries of science are explained as applied in the most approved methods of culture. Every farmer will be benefited by the perusal of this handbook. Illustrated. 5x7 inches. 309 pages. Cloth...\$1.00

Rural Wealth and Welfare

By *George T. Fairfield*. This book is intended to help toward such use of power and wealth as may bring genuine welfare to the farm homes of America. Toward this end the author devotes special chapters to the analyses of aims, forces, means and methods of productive industry, distribution of wealth for welfare and consumption of wealth. A number of illustrated charts show at a glance the changes in the number of population, live stock and farm crops, prices of the principal crops, live stock, etc., etc. 5x7 inches. 381 pages. Cloth.....Net \$1.25

Plant Breeding

By *L. H. Bailey*. This volume is composed of five lectures upon the amelioration of domestic plants. These pertain to the fact and philosophy of variation, the philosophy of the crossing of plants, how domestic varieties originate, borrowed opinions, and pollination, or how to cross plants. The subject is fully elaborated, and made clear to every intelligent reader. Illustrated. 5x7 inches. 293 pages. Cloth Net \$1.25

Weeds, and How to Eradicate Them

By *Thomas Shaw*. A treatise on the prevalence of weeds, the evils which arise from their presence, the possibility of destroying them, the agencies concerned in the distribution and propagation of noxious weeds, the methods and principles generally applicable in their destruction, and plain and careful directions for eradicating all the common weeds which trouble the North American farmer. Illustrated. 4x6 inches. 210 pages. Cloth...\$0.50

The Physical Properties of Soils

A LABORATORY GUIDE

By ARTHUR G. McCALL

Professor of Agronomy, College of Agriculture, Ohio State University

THIS book presents for the first time a complete, concise and systematically arranged laboratory course for the study of the physical properties of soils. The experiments are the outcome of several years of practical experience in the teaching of soil physics, hence the work is thoroughly practical and up to date in every respect.

The book is splendidly illustrated with photographs showing the apparatus assembled and with text figures and sectional drawings showing the construction in detail. Many original pieces of apparatus are shown for the first time. Every effort has been made to make the book especially helpful to the instructor and to give the student a clear understanding of every part of the work.

The course as outlined is sufficiently extended so as to enable the instructor to have some choice of exercises and to adapt his work to cover one semester or an entire year.

The book should be in the hands of every instructor and every student in our agricultural colleges and high schools, and all others who are interested in the study of soils and soil conditions.

Illustrated, 5x7 inches, 106 pages. Cloth. Net, 50 Cents

Soil Physics Laboratory Guide

By *W. H. STEVENSON, A.B.B.S.A., Professor of Soils, Iowa State College,*
and *J. O. SCHAUB, B.S., Assistant Professor of Soils, Iowa State College*

COMMENDABLE progress has been made during the past decade in teaching soil physics in the agricultural colleges and high schools of this country. Up to the present time no comprehensive text book has been prepared on soil physics, while there is a great and widespread demand for a text book which covers the various phases of the subject. In this work the aim of the authors has been to present to the instructor and the student a carefully outlined series of experiments in soil physics. A portion of the experiments outlined in this guide has been used quite generally in recent years. Many of them are now presented for class work for the first time. The exercises (of which there are 40) are listed in a logical order with reference to their relation to each other and the skill required on the part of the student. Some of the most important of these exercises are: Microscopic Study of Soil Particles, Taking Soil Samples, Determination of Capillary Moisture, Influence of Evaporation on Soil Temperature, Effect of Rolling upon Soil Temperature, Influence of Color on Soil Temperature, Influence of Vegetation on Soil Temperature, Variation in Soil Temperature at Different Depths, The Absorption of Heat by Soils, The Effect of Lime upon Clay Soil, Determination of the Specific Gravity of Soils, Determination of the Weight of Soil per Acre, Effect of Humus on the Water-Holding Capacity of Soils, Rate of Rise of Capillary Water in Soils, The Effect of Mulches on Evaporation of Water from Soils, The Effect of Organic Matter on Baking of Soils, Mechanical Analysis of Soils.

Profusely illustrated, about 100 pages, 5x7 inches, Cloth. Price, 50 Cents

Soil Fertility and Permanent Agriculture

By *C. G. Hopkins*, professor of agronomy in university of Illinois. It is the purpose of this book to teach the science of soil fertility, chiefly by reporting facts rather than by offering theories; and any one of common sense who reads the English language can understand this book. The book is indispensable to the land owner. Illustrated. 6x9 inches. 653 pages. Cloth.....Net \$2.25

The Soil

By *Franklin H. King*, professor of agricultural physics, university of Wisconsin. Its nature, relations and fundamental principles of management. A most desirable addition to our agricultural literature and a distinct advance over previous treatises on the same subject; not only for popular use, but also for students and specialists, who will find many new and useful suggestions therein. Illustrated. 5x7 inches. 303 pages. Cloth.....Net \$1.50

The Fertility of the Land

By *I. P. Roberts*, director of the college of agriculture, Cornell university. A summary sketch of the relationship of farm practice to the maintaining and increasing of the productivity of the soil. The book is the result of a long life of teaching, experimenting and farming, and is one of the most important single books of farm methods which the farmer can secure. Illustrated. 5x7 inches. 415 pages. Cloth. Net \$1.50

The Chemistry of the Farm

By *R. Warington, F.C.S.* This book presents the relations of chemistry to agriculture in a popular manner. To the large number who have neither the time nor the inclination to take up the study of Chemistry and yet would have a general idea of the relations of that science to the operations of the farm, this work will be welcome. While its style is clear and concise it is far from being technical or dry, and the work cannot fail to be useful to every intelligent reader interested in the scientific aspects of agriculture. 5x7 inches. 130 pages. Cloth.....Net \$1.25

Soils

By *E. W. Hilgard*. This very valuable work presents the scientific basis, in the characteristics of soils, for farm practice. It treats thoroughly of the physical and chemical constitution and processes of the various soils, and of the relations these facts bear to agriculture. It presents the principles and practice of Agriculture, not only in connection with the humid regions, but also in respect to the arid regions, a field which has been hitherto very much neglected. A great deal of the matter contained in this book is based on the author's personal researches. 6x9 inches. 593 pages. Cloth...Net \$4.00

Manual of Agriculture Chemistry

By *Herbert Ingle*. A book used as a text in classes of agricultural students. It offers a plain, clear discussion of the many problems of agriculture in which chemistry and physics may throw light. To those interested in the chemistry of the farm things, this book will afford instruction and help. While scientific it is very practical. Illustrated, 6x9 inches. 412 pages. Cloth. Net \$3.00

Agriculture in Some of Its Relations with Chemistry

By *F. H. Storer, Sc.B., A.M.* This work was prepared in the interest of persons fond of rural affairs, and of students of agriculture. It is the final form in which have been cast the results of long study, observation and experience, both practical and in the classroom. It is comprehensive in scope and exhaustive in its treatment of a great variety of subjects. Professor Storer discusses agriculture in all those important relations into which chemistry enters in any degree—the relations of soil, air and water to the plant and to each other, tillage, manures and fertilizers, rotation of crops, irrigation, the growth of crops, and staple crops. Three large volumes, 5x8 inches. Over 600 pages each. Price.....Net \$5.00

Soils

By *S. W. Fletcher*. This book sets forth the important facts about the soil in a simple and practical manner. It is intended not only for use in class, but also for the great multitude of American men who are getting a living from the land. Illustrated. 6x9 inches. 438 pages. Cloth.....Net \$2.00

Tobacco Leaf

Its Culture and Cure, Marketing and Manufacture

A Practical Handbook

On the Most Approved Methods in Growing, Harvesting, Curing, Packing and Selling Tobacco, with an Account of the Operations in Every Department of Manufacture

By J. B. KILLEBREW and HERBERT MYRICK

Assisted by Experts in Field, Barn, Factory and Laboratory

A PRACTICAL HANDBOOK on the most approved methods of growing, harvesting, curing, packing and selling tobacco, with an account of the operations in every department of tobacco manufacture. The book is based on actual experience in field, curing barn, packing house, factory and laboratory, and is profusely illustrated with superb half-tone engravings, descriptive of typical varieties and all the different processes. The book represents several years' work by its authors. Col. Killebrew is the best known agricultural authority in the middle south, an extensive planter, and author of the exhaustive report on tobacco for the 10th census. Mr. Myrick, as editor of American Agriculturist and New England Homestead, is an expert on cigar leaf. Numerous experts in the various branches of the tobacco industry have been co-authors, portraits of 14 of whom embellish the preface, while the frontispiece affords fine likenesses of the two authors. The experience of hundreds of others on disputed points has been carefully obtained, by personal inquiry and correspondence, the authors having traveled over 10,000 miles in verifying and obtaining important data never before published. It is the only work of the kind in existence, and is destined to be the standard practical and scientific authority on the whole subject of tobacco for many years.

The book is divided into four parts, each a volume in itself, and contains numerous chapters, any one of which is alone worth the price of the book. If we were to commend any one portion over another, which is hardly fair in a book of such uniform excellence and completeness, it would be the treatise on manuring and fertilizing, and upon the curing and marketing of tobacco. Upon these little-understood subjects, the book throws a flood of light.

Part I.—Essentials in Tobacco Culture

Chapter I, Origin and Spread of Tobacco Culture and Use, pp. 3 to 15, 10 illus. Chapter II, Status of the Tobacco Industry, pp. 16 to 26. Chapter III, Varieties, pp. 27 to 45, Plates 13. Chapter IV, Types of Leaf Required for Home and Foreign Trade, pp. 46 to 78. Chapter V, Science in Its Application to Tobacco, pp. 79 to 104. Chapter VI, Manures and Fertilizers, pp. 105 to 149. Chapter VII, The Seed-Bed—Raising Seed, pp. 150 to 168, 13 illus. Chapter VIII, Transplanting, pp. 169 to 178, 6 illus. Chapter IX, Tobacco Barns, pp. 179 to 207, 30 illus. Chapter X, On the Curing of Tobacco, pp. 208 to 232, 3 illus. Chapter XI, Pests of Tobacco, pp. 233 to 262, 20 illus. Chapter XII, Marketing Tobacco, pp. 263 to 287, 12 illus.

Part II.—Heavy Leaf and Manufacturing Tobaccos

Chapter XIII, Heavy Shipping or Export Leaf, pp. 290 to 332, 3 illus. Chapter XIV, White Burley, pp. 333 to 351, 5 illus. Chapter XV, Yellow Tobacco, pp. 352 to 369, 7 illus. Chapter XVI, Perique Tobacco, pp. 370 to 376, 3 illus.

Part III.—Cigar Leaf Tobaccos

Chapter XVII, General Considerations of Cigar Leaf, pp. 379 to 390, 2 illus. Chapter XVIII, Fertilization of Cigar Leaf, pp. 391 to 403, 2 illus. Chapter XIX, Cigar Leaf Culture, pp. 404 to 432, 7 illus. Chapter XX, Cigar Leaf at West and South, pp. 433 to 450, 6 illus.

Part IV.—Tobacco Manufacture—Miscellaneous

Chapter XXI, On the Manufacture of Tobacco, pp. 452 to 474, 6 illus. Chapter XXII, Tobacco as a Remedy, pp. 475 to 482, 3 illus.

Appendix, Statistics, Etc., to p. 506

Over 500 pages; 150 original, handsome and practical illustrations embellish this volume.

5x7 inches. Cloth. Price, \$2.00

Manures and the Principles of Manuring

By *C. M. Aikman*. The aim of this work is to supply in a concise and popular form the chief results of recent agricultural research on the question of soil fertility to the nature and action of various manures. In order to render the work as intelligible to the ordinary agricultural reader as possible, all tabular matter and information of a more or less technical nature have been relegated to the appendices attached to each chapter. 5x7½ inches. 592 pages. Cloth.....Net \$3.00

Scientific Examination of Soils

By *Dr. Felix Wahnschaffe*. Translated from the German, with additions, by *William T. Brant*. Comprising select methods of mechanical and chemical analysis and physical investigations. Illustrated. 5x7 inches. 177 pages. Cloth.....Net \$1.50

Fertilizers

By *Edward A. Voorhees*. Every point of importance as to the source, character and composition of natural, home-made and manufactured fertilizers, and suggestions as to their use for different crops and conditions is dwelt upon and presented in so thorough and clear a manner as to become perfectly plain to the reader, even without any previous knowledge of chemistry. It has been the aim of the author to point out the underlying principles and to discuss, in the light of our present knowledge of the subject, some of the important features connected with the use of fertilizer materials. 5x7 inches. 335 pages. Cloth.....Net \$1.25

Manures; How to Make and How to Use Them

By *Frank W. Sempers*. A concise, practical handbook containing the latest researches in scientific agriculture. The reports of the agricultural experiment stations have furnished many valuable suggestions. Both commercial and homemade manures are fully described, and many formulas for special crops and soils are given. Paper.....\$0.40

Gregory on Fertilizers

By *J. J. H. Gregory*. Where the materials come from, where to get them in the cheapest form, how to compound formulas, etc., etc. Paper.....\$0.50

A Treatise on Manures; or the Philosophy of Manuring

By *A. B. Griffiths*. A practical handbook for the agriculturist, manufacturer and student. It treats very fully and correctly on all the principal natural and artificial manures, on fertilizer works and the methods of manufacture, also on mixed and special manures, their application, valuation and analysis. Illustrated. 5x8 inches. 447 pages. Cloth.....Net \$3.00

Soils and Fertilizers

By *Harry Snyder*. A book which presents in a concise form the principles of soil fertility and discusses all of the topics relating to soils as outlined by the Committee on Methods of Teaching Agriculture. Illustrated. 5x7 inches. 350 pages. Cloth...Net \$1.25

A Text Book of General Bacteriology

By *E. O. Jordan*. This work embraces the entire field of bacteriology, and is the only work in English dealing with all the most prominent phases of the subject. Besides the bacteria of medicine, the author also presents the bacteriology of the various trades and industries, such as agriculture, dairying, leather tanning, tobacco curing, vinegar making, etc., the bacteriology of foods, plant diseases, water, and sewage; the relation of bacteriology to household administration, to sanitary engineering, etc. Illustrated. 6x9 inches. 575 pages. This is a capital treatise, a solid contribution to biologic science and by far the best book published on the subject. Cloth.....Net \$3.00

The Bommer Method of Making Manures

By *George Bommer*. A treatise of the manufacture of manure, both from vegetable and mineral substances, with economy and dispatch. The author shows minutely his mode of preparing vegetable and mineral composts, and a diversity of processes to augment and improve the manure of the farm; to prepare a fertilizing liquid for irrigation; to convert into manure the refuse of manufactories, distilleries and the kitchen. Illustrated. Paper\$0.25

The Chemistry of Plant and Animal Life

By *Harry Snyder*. Chemistry from the point of view of the farmer. Illustrated. 5x7 inches. 406 pages. Cloth. Net \$1.25

Bacteria in Relation to Country Life

By *Jacob G. Lipman*. This book gives the intelligent reader and the student a rational view of the relation of germ life to the operations of agriculture and to the affairs of the household. It is equally valuable to the suburbanite and to the actual farmer; and it is so arranged that it can be used as a text book. 5x7 inches. 506 pages. Cloth.....Net \$1.50

Silk Culture

By *Mrs. C. E. Bamford*. A handbook for silk growers, giving full descriptions and directions about everything pertaining to silk culture: The mulberry, gathering the leaves, the cocoonery, eggs of the silk worm moth, feeding the silk worms, moulting, spinning, the cocoons, the moths of the silk worm, varieties of silk worms, diseases of the silk worm, reeling, chemistry of silk, etc., etc. Paper...\$0.30

Our Farm of Four Acres, and the Money We Made by It

This work is written by a woman who describes in its pages her experiences in selecting and managing a small farm; the first difficulties encountered; details of making butter and bread; care of poultry and pigs; gardening, etc. It is a model in style, and while conveying many useful suggestions, portions of it are fully as interesting as a romance. Paper.....\$0.30

Systematic Bookkeeping for Farmers

By *Fred M. Baird*. Many farmers lose sight of the fact that it is necessary to keep a set of farm books—they think they can keep their transactions in their heads sufficiently well. Yet many farmers have as much or more money invested in the farm than do many storekeepers in goods, and yet the storekeeper finds bookkeeping an indispensable feature of his business. With the use of this book and a few moments devoted to it each day any farmer may have an accurate knowledge, at all times, of just how his business affairs stand in every department. 8x13 inches. Cloth.....\$1.00

Farmers' Account Book and Farm Record

By *E. A. Boehne & Sons*. This large and substantially bound volume contains farm accounts and records complete for three years, each year separate, comprising a large plat for

mapping the farm; weather, farm and business records; also records of breeding, farm specialties, labor, etc..\$2.25

Gardening for the South

By *William N. White*. Revised and enlarged by *P. H. Mell*. This work is practically a new book on southern horticulture as practiced at present, according to the methods followed by the most successful gardeners. 280 illustrations. 6x9 inches. 683 pages. Cloth.....\$2.50

Our Farming

By *T. B. Terry*. An instructive as well as entertaining account of how the author has made a run-down farm bring both profit and pleasure. Beginning the story with how he became a farmer, he treats independently everything pertaining to farming and farm life. Potatoes, clover, tillage, drainage, manure saving, the garden and home, etc., etc. Illustrated, 6x9 inches, 367 pages. Cloth.....\$1.00

Manual of Corn Judging

By *A. D. Shamel*. The advanced methods of corn judging and all the available information on this subject are incorporated in this work. It is especially helpful to farmers interested in improvement of corn, for corn schools, farmers' institutes, etc. Profusely illustrated with photographs of ears of the leading varieties of corn, desirable ears contrasted to undesirable, and kernels. In addition the score cards used in the corn states are given. 5x7 inches.....\$0.50

Farming with Green Manures

By *C. Harlan, M.D.* A plain, practical account of the effects of various kinds of manures on the soil, with especial reference to the advantage of green manures and soiling. 5x7 inches. 269 pages. Cloth.....\$1.00

Ten Acres Enough

Introduction by *I. P. Roberts*. A practical experience, showing how a very small farm may be made to keep a very large family. The author writes in a happy, optimistic and human vein; and even the statistical portions of his narrative hold the reader's attention with a desire to know how he is coming out. 5x7 inches. 225 pages. Cloth, \$1.00

The Propagation of Plants

Describing the Processes of Hybridizing and Crossing
Species and Varieties, and Also of the Many Dif-
ferent Modes by Which Cultivated Plants
May Be Propagated and Multiplied.
Illustrated with Numerous
Engravings

By ANDREW S. FULLER

Author of "The Grape Culturist," "Small Fruit Culturist," etc.

WE HAVE various horticultural works which give the methods of propagating the plants of which they treat, but this is the first work, in this country at least, in which all the methods of propagation are described and their adaptability to different plants pointed out. In this, as in Mr. Fuller's former works, the reader is impressed with its eminently practical character, and feels at once that here is one who describes what he has done and seen. While most of the operations of the propagator are mechanical, they will be all the better performed if he has some knowledge of plant structure and plant life. These will be found especially useful in enabling the propagator to ascertain the reason of failures, and to learn how to avoid them. Take, for example, the operations of hybridizing and crossing (the same in their methods), the general structure of flowers is explained and the parts of the flower and their offices are pointed out. All that is positively known of the art of fertilization is clearly stated, and the operator can act intelligently. The production of new varieties, whether of fruits, flowers or vegetables, by hybridizing and crossing, presents a most attractive field to the amateur cultivator, who has generally felt that this was something above his reach. With the aid of this work he will learn that it is a very simple process, if he follows the directions and observes the precautions here plainly given. The various methods by which plants are multiplied, such as by cuttings of various kinds, by budding and grafting, by layering and division, are all clearly given, and illustrated by engravings.

CONTENTS

- | | |
|---|--|
| CHAPTER I.—Propagation of Plants. | CHAPTER XI.—Propagation by Cuttings. |
| CHAPTER II.—Movement and Reorganization of Cells. | CHAPTER XII.—Propagation by Cuttings of Immature Growth. |
| CHAPTER III.—Origin and Kinds of Buds. | CHAPTER XIII.—Propagation by Layers. |
| CHAPTER IV.—Roots and Their Functions. | CHAPTER XIV.—Propagation by Suckers and Divisions. |
| CHAPTER V.—Stems and Their Appendages. | CHAPTER XV.—Propagation by Foot-Cuttings. |
| CHAPTER VI.—Flowers, Fruit and Seeds. | CHAPTER XVI.—Propagation by Budding. |
| CHAPTER VII.—Circulation of Sap. | CHAPTER XVII.—Propagation by Grafting. |
| CHAPTER VIII.—Sex and Fertilization. | CHAPTER XVIII.—Selecting Stocks. |
| CHAPTER IX.—Influence of Pollen. | CHAPTER XIX.—Select List of Plants. |
| CHAPTER X.—General Principles and Methods. | CHAPTER XX.—Herbs, Tubers and Bulbs. |

Illustrated, 5x7 inches, 359 pages. Cloth. Price, \$1.50

The Amateur's Practical Garden Book

By *C. E. Hunn* and *L. H. Bailey*. The bases of this work are the notes written by *C. E. Hunn*, gardener to the horticultural department of Cornell university. The leading feature of these notes was to answer the many questions about the simplest garden operations which continually present themselves to the teacher of horticulture. For easiest reference, the subjects are arranged in alphabetical order. The book is, in fact, a condensed encyclopedia on general gardening for amateurs. Illustrated. 5x7 inches. 250 pages. Cloth Net \$1.00

Play and Profit in My Garden

By *E. P. Roe*. The author takes us to his garden on the rocky hillsides in the vicinity of West Point, and shows us how, out of it, after four years' experience, he evoked a profit of \$1000, and this while carrying on pastoral and literary labors. It is very rare that so much literary taste and skill are mated to so much agricultural experience and good sense. 5x7 inches. 349 pages. Cloth \$1.00

Farm Gardening and Seed Sowing

By *Francis Brill*. A book useful for every farmer, gardener and tiller of the soil. Seed-growing is an increasing business in this country, and American-grown seeds are rapidly taking the preference. To the farmer who wishes to grow his own seed, this book will be found a profitable investment. 5x7 inches. 166 pages. Cloth.....\$1.00

The Horticulturist's Rule Book

By *L. H. Bailey*. A compendium of useful information for fruit growers, truck gardeners, florists and others. In no other volume can there be found such a quantity of valuable information in such a handy form. The chapters on insecticides and fungicides, plant diseases, seed tables and planting tables, cements, glues, etc., will all be found exceedingly valuable to every intelligent horticulturist, while the condensed form makes it essentially a handy volume. 4½x7 inches. 302 pages. Cloth. Net \$2.00

How to Make the Garden Pay

By *T. Greiner*. This work embodies a vast amount of practical and useful information. It is an entirely new and

original work and treatise on Gardening for Pleasure, Health, Profit and Morality; market gardening, farm kitchen gardening, hints in marketing, manure and fire hotbeds, implements, cold frames, hotbeds, vegetables and forcing houses, drainage, irrigation, insects and other foes, seed and seed sowing, rotation of crops, thinning and transplanting, monthly memoranda, etc. About one-half of the volume is devoted to cultural directions of garden crops. Illustrated. 6x9 inches. 272 pages. Cloth\$1.00

Garden Making

By *L. H. Bailey*. In this book the beginner in gardening is shown how easy it is to raise flowers, fruits and vegetables, and to beautify one's home grounds, if one starts right and has a genuine love for plants. Illustrated. 5x7 inches. 417 pages. Cloth..\$0.75

Annals of Horticulture

By *L. H. Bailey*. This is the only complete history of horticulture at the Columbian Exposition. Review of the World's Fair horticultural exhibits, with names of all plants and exhibitors, the only correct catalog of World's Columbian plants. 5x7 inches. 179 pages. Cloth.....\$1.00

Gardening for Young and Old

By *Joseph Harris*. The cultivation of garden vegetables and flowers in the farm garden. A work intended to interest farmers' boys in farm gardening, which means a better and more profitable form of agriculture. The teachings are given in the familiar manner so well known in the author's "Walks and Talks on the Farm." A share of the work is devoted to the easily grown flowers, which will add to its value in the estimation of the mothers and sisters as well as of the boys. Illustrated. 5x7 inches. 191 pages. Cloth. Price postpaid,.....\$1.00

A Book of Vegetables and Garden Herbs

By *Allen French*. Besides a description of each plant, its habit, value and use, the book contains detailed cultural directions for growing all vegetables cultivable in the northern United States, covering the soil, planting distances, times for sowing, thinning and transplanting, fertilizing, picking, winter protection, renewal, storage, and the management of diseases and pests. Illustrated. 5x7 inches.....Net \$1.75

The American Apple Orchard

By F. A. WAUGH

THIS is just the book we have been looking for. There has been a strong and increasing demand these last ten years for a practical, pointed work on apple culture. Although there are a number of books on general fruit culture extant, they are not sufficiently definite and explicit for the ordinary reader. Our experience in the selling of books shows that a majority of buyers are interested in special crops in the care of which they want specific advice. It was in response to this demand that the Orange Judd Company began the publication of their list of popular "one crop" books.

Of all special crops in America, the apple is one of the most popular and profitable, and the call for a book on this subject has been particularly strong. After considerable planning and deliberation, we secured Prof. F. A. Waugh of Massachusetts to prepare this book for us. Professor Waugh is already well known as a writer of popular horticultural books, his "Dwarf Fruit Trees," "Landscape Gardening," "Plums and Plum Culture" and others having been for some years among our "best sellers." His books are always terse, snappy and readable. His preparation for the present work has been unusually broad and thorough, as he is personally and intimately acquainted in nearly every fruit-growing section of the United States and Canada. Furthermore, he is himself a practical fruit grower, operating extensive commercial orchards of his own. His practical experience in fruit growing, combined with long experience as a popular writer and teacher, enables him to present this subject in a manner both authoritative and attractive.

In this book chief prominence is given to modern commercial methods as practiced in large and up-to-date orchards, but there is a special chapter also on the family orchard. Methods are discussed, not for their theoretical value, but from the standpoint of the cash profits they will return. The book is pervaded throughout with the author's enthusiasm for fruit growing in general and for the great apple industry in particular. It is well known that great advances have been made in recent years in the practice of fruit growing, and the author's position has given him unusual opportunities for keeping up with all such improvements.



The principal topics discussed are The Geography of Apple Growing, Apple Soils, Exposures, Windbreaks, Winter-Killing, Starting an Orchard, Propagation of Trees, Cultivation, Cover Crops, Pruning, Fertilizers, Insects, Diseases, Spraying Solutions, Spraying Machinery, Spraying Methods, Harvesting and Marketing, The Family Orchard, Renovation of Old Orchards, Selection of Varieties, Catalog of Varieties.

Illustrated, 5x7 inches, 226 pages. Cloth. Net, \$1.00

Systematic Pomology

Treating of the Description, Nomenclature
and Classification of Fruits.

By F. A. WAUGH

Professor of Horticulture and Landscape Gardening, Massachusetts Agricultural College

THIS is the first and only work in the English language which treats on the entirely new field of Systematic Pomology. The subject comprises the systematic study of fruits, the practice of fruit growing, and the business of marketing fruits. The recent books, however, have all treated of the second division, namely, of the practice of fruit growing, while the other two divisions have been almost wholly ignored. Prof. Waugh gave

the first comprehensive treatise on commercial pomology two years ago in his Fruit Harvesting, Storing, Marketing. Now he presents a new work, entitled Systematic Pomology, covering the first of these neglected fields. The book treats exhaustively of the methods of describing fruits, of the perplexed systems of nomenclature, of the practical and scientific classification of varieties, of the scoring and judging of fruits, of the laboratory study of fruits, etc. A partial idea of the great value of this work may be gained from the outline of



TABLE OF CONTENTS

INTRODUCTION—Pomology in General.

DESCRIPTION—Making and Filing Descriptions, General Considerations, Describing Pome Fruits, Description of Drupe Fruits, Describing Strawberries, Describing Raspberries and Blackberries, Description of Currants and Gooseberries, Describing Grapes.

NOMENCLATURE—The Requirements of Nomenclature, the Lazy Club Code, American Pomological Society Rules.

CLASSIFICATION—Principles of Classification, Classification of Fruits in General, the Classification of Apples, the Classification of Pears, the Classification of Peaches, the Classification of Plums, the Classification of Cherries, Miscellaneous Fruits, Warder's Classification of Apples.

APPLICATION—Relation to the Practice of Fruit Growing, for the Teacher and the Student, Laboratory Work, Judging Fruits, Glossary.

The arrangement and treatment are such as to make the book particularly helpful to students and to all who want to learn more about pomology. It will be of great value as a textbook and laboratory guide, as a manual for committeemen in horticultural societies, and as a guide to nurserymen and fruit growers.

Illustrated, 5x7 inches, 288 pages. Cloth. Price, postpaid, \$1.00

Fruit Growing in Arid Regions

By **WENDELL PADDOCK**

Professor of Horticulture in the Colorado Agricultural College and Experiment Station

and **ORVILLE B. WHIPPLE**

Field Horticulturist in the Colorado Agricultural College and Experiment Station

The recent remarkable development of the vast areas of arid land in the Western United States has been both the cause and the result of new ideas in agricultural teaching. Conditions, not only varying widely among themselves but differing utterly from those of older cultivated regions, demanded the widest range of experiment, and resulted in the shattering of many cherished theories as well as the firmer establishment of many practices whose efficacy, under more familiar conditions, had seemed of doubtful value. The peculiar fitness of many of these arid lands for fruit-growing was long in becoming apparent, but their orchards have within comparatively recent years become a most important source of supply for both Eastern and foreign markets. The story of these years, as briefly told in the present volume, is one of great interest, and the ensuing mass of valuable agricultural teaching is set forth in detail. Every phase of fruit-growing with its local and other problems is thoroughly discussed, and no important agricultural opinion, even if differing from those held by the authors, is ignored. Soils, climates, fruit-diseases and pests, with their remedies, both preventive and curative, tools and apparatus of every sort are fully treated, and varieties of fruit likely to be successful, as well as those which have already proved their value, are minutely described. The illustrations are unusually abundant.

Illustrated. 5 x 7 inches. 395 pages. Cloth. Net \$1.50.

American Horticultural Manual

By **J. L. BUDD**, assisted by **N. E. HANSEN**

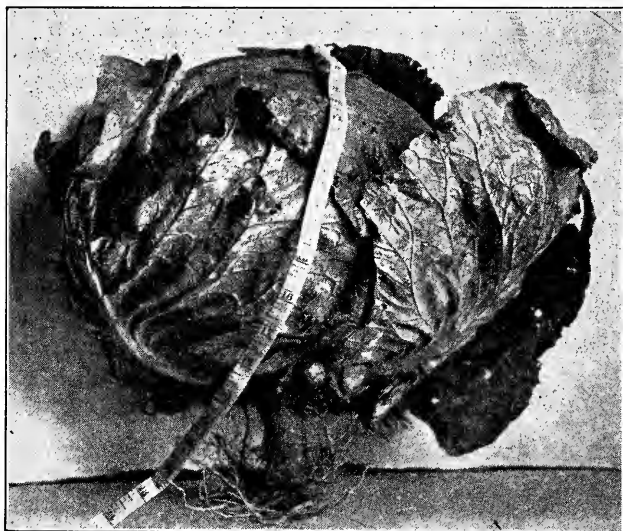
In this volume the author outlines the principles and practices of horticulture, reserving systematic pomology for a second volume. The principal chapters treat on seeds and seed growth; germination; circulation of flowers and fruits; propagation; principles of fruit-growing; transplanting; orchard management; pruning; spraying; the different classes of fruits treated separately; lawn and park trees; shrubs and vines; the vegetable and small fruit garden, etc., etc. To the beginner in horticulture who desires thorough and reliable information on its underlying principles the work can not be too highly recommended.

Illustrated. 5 x 7 inches. Cloth. Vol. I, 417 pages, \$1.50; Vol. II, 491 pages, \$1.50

Cabbage, Cauliflower and Allied Vegetables

By C. L. ALLEN

Author of Bulbs and Tuberous Rooted Plants from Seed to Harvest



THE author of this book has devoted a lifetime to the study of the subjects upon which it treats, and living on Long Island, in the very heart of the most favorable cabbage growing section in the United States, and being himself largely and practically interested in this industry, is probably more familiar with its various details than any other man.

Considerable space is devoted to the explanation of the requirements, conditions, cultivation and general management pertaining to the en-

tire cabbage group. After this each class is treated separately and in detail. The chapter on seed raising is probably the most authoritative treatise on this subject ever published, and will be intensely interesting and valuable to all those engaged in this industry. Insects and fungi attacking this class of vegetables are given due attention, with a view to giving the reader the latest and most effective means for their prevention and destruction. There is a convincing and practical tone about the entire work which at once assures the reader of the safety in following the instructions given in its pages.

Illustrated 5x7 inches, 128 pages. Cloth. Price, 50 cents

Market Gardening and Farm Notes

By BURNET LANDRETH

ALTHOUGH this work is entitled "Market Gardening," the family gardener will find all the instructions needed for gardening for pleasure as well as for profit, as it gives a vast amount of experiences and observations in the garden and field, of interest to the market and the amateur gardener, the trucker, and the farmer. A novel feature of the book is the calendar of farm and garden operations for each month of the year, indicating those which apply to each of the various sections and climates of North America. The chapter on the half-acre garden will be read with great interest by the amateur, while the chapters on seedsmen's novelties and responsibilities, manures and fertilizers, transplanting, succession and rotation of crops, celery and onion culture, and the packing, shipping and marketing of vegetables, will be especially useful to the professional market gardener. There are detailed plans and descriptions for hotbeds, cold frames and greenhouses. Gardening under glass for winter markets is treated in a thorough and businesslike way. The farmers will find the chapters on roots for stock feeding, on soils and fertilizers, on implements and storehouses, of special use in their daily operations.

5x7 inches, 215 pages. Cloth. Price, \$1.00

Asparagus

Its Culture for Home Use and for Market

A practical treatise on the planting, cultivation, harvesting, marketing and preserving of Asparagus, with notes on its history and botany

By F. M. HEXAMER



WHILE most works on vegetable growing treat briefly on asparagus culture, this is the first book published in America which is exclusively devoted to this subject. All are agreed that there is no more delicious vegetable than properly grown and prepared asparagus. Yet it is but rarely found in our gardens, owing principally to the erroneous idea that its planting and after management are expensive and require special skill and knowledge. To disprove these fallacies, and to impart reliable and rational information on the improved and simplified modern methods of raising this peerless gem of the home garden, is the principal object of this work.

In successive chapters the author treats exhaustively on the sowing of the seed, raising of the plants, selection and preparation of the soil, planting, cultivation, manuring, cutting, bunching, packing, marketing, canning and drying, insect enemies, fungous diseases and every requirement to successful asparagus culture, special emphasis being given to increase the importance of asparagus as a farm and money crop. As no garden is complete without an asparagus bed, so is no gardener's or farmer's library complete without this interesting and instructive book.

Handsomely illustrated, 5x7 inches, 174 pages. Cloth. Price, 50 cents

The New Rhubarb Culture

A Complete Guide to Dark Forcing and Field Culture

PART I.—By J. E. Morse, the well-known Michigan trucker and originator of the now famous and extremely profitable new methods of dark forcing and field culture. After a short historical sketch of the plant, the author explains and describes in a clear and concise manner every detail connected with the industry.

The forcing place; the commercial cellar; the house cellar; cellars with hard floors; grown in hotbeds; growing in greenhouse; a cheap forcing cellar; nooks and corners; work of forcing; starting the work; forcing season; two crops in one cellar; setting the plants; handling the roots; age of roots for forcing best varieties; how to succeed; heating; as to temperature; ventilation; light; moisture; fertilizing; thinning out; handling the crop; time of maturing; gathering the crop; tying up; marketing; fertilizers; light or thin soils; barnyard manures; binders; acidity of soil; nitrate of soda; Jadoo fiber; culture; soil; preparation; propagation; unforced roots; forced roots; plants for setting; growing from the seed; tillage; comparison of old and new methods; future outlook; magnitude of forcing industry; creating demand; benefits; how to use rhubarb; etc., etc.

PART II.—By G. B. Fiske. In this are described and illustrated other methods practiced by the most experienced market gardeners, greenhouse men and experimenters in all parts of America; sash houses and cold frames; hot water system; steam forcing in open fields; exhibition stalks; home methods; varieties and station tests; the leading sorts described; range of adaptation; northern limits; new seedlings; work of the experiment stations; hints and helps; for early market; insects and blights; culture of medicinal rhubarb; pieplant for home use; seed raising; food value; fertilizing constituents; irrigation, etc., etc.

Copiously illustrated from photographs and sketches made exclusively for this work. The only complete, practical, scientific and up-to-date manual on this crop.

5x7 inches, 130 pages. Cloth. Price, 50 cents

Celery Culture

By W. R. BEATTIE

Bureau of Plant Industry, United States Department of Agriculture



A PRACTICAL guide for beginners and a standard reference of great interest to persons already engaged in celery growing. It contains many illustrations giving a clear conception of the practical side of celery culture.

This book is the result of many years' experience in celery growing both for home use and for market. The author has also had the benefit of acquaintance with many of the most successful celery growers, and has had abundant opportunity to study their methods. The work is complete in every detail, from sowing a few seeds in a window box in the house for early plants, to the handling and marketing of celery in carload lots.

Complete cultural directions are included, together with estimates of the cost for equipment and running expenses, and a fair estimate of returns from one acre. There is perhaps no other garden crop that requires or that will justify so liberal a use of fertilizers as celery. Complete information is given regarding the value, kind, and quantity of fertilizers to apply. Full instructions are given for the home mixing of fertilizers for the celery crop.

Celery has become a wholesome addition to the fare of the masses. From a few small patches grown by Hollanders in this country a few years ago, the celery industry now includes the territory from Maine to California, and from Canada to Florida. A supply of celery for home use may be grown in almost any garden, and its commercial culture still offers pleasant and profitable employment for thousands of persons.

Celery growing is one of the most desirable occupations for persons who desire to live an outdoor life. There is something so clean and appetizing about celery while it is growing that renders its culture a source of refined employment. There is perhaps no other line of gardening that will give so prompt returns or prove so satisfactory as a source of extra income.

Fully illustrated, 5x7 inches, 150 pages. Cloth. Price, 50 cents

TOMATO CULTURE

By WILL W. TRACY

United States Department of Agriculture

THIS is a practical treatise on the tomato, which includes its history, characteristics, methods of planting, fertilization, cultivation in field and greenhouse, points about harvesting, packing, storing, and marketing, as well as the most complete account of the insects, enemies and diseases which attack tomatoes, and remedies for their control that has ever been written. The author has made a lifelong study of this important vegetable and has here embodied for the first time a complete story of his experiences. Because of the increasing popularity of the tomato for general and popular use, this book is especially timely and important. It deals with every phase of the subject. It includes chapters devoted to the home garden, hotbed, greenhouse and large areas for commercial purposes. Every detail is treated under the following heads: Botany; history; general characteristics; essentials for development; selection of soil for maximum crop; exposure and location; fertilizers; preparation of the soil; hotbeds and cold frames; starting plants; proper distance for planting; cultivation; staking, training and pruning; ripening, gathering, handling and marketing; adaptation of varieties; seed breeding and growing; production for canning; cost of production; insects injurious to tomatoes; tomato diseases. The book is written in the most popular style for the man who wants the latest and most complete information on the subject.

Illustrated, 5x7 inches, 150 pages. Cloth. Price, 50 cents

Peas and Pea Culture

By GLENN C. SEVEY, B.S.

Editor New England Homestead

THIS interesting little book is intended for the student and practical farmer alike. Enough of the scientific has been provided to meet the demands of the former, and for the farmer great care has been exercised to keep details true to field conditions. The author brings both experience and observation to bear on the subject-matter. Botany, history and distribution constitute one chapter. Another deals with soils, fertilizers and inoculation. Cultural principles constitute Chapter III, with composition and feeding value as Chapter IV. Chapter V deals with insect and fungous pests; VI goes thoroughly into the canned pea industry; VII, peas as forage and soiling crops; VIII, breeding and seed improvement; IX, garden peas and varieties, with the concluding chapter, X, on sweet peas and their culture. The various experiments and deductions of different experiment stations and seed authorities are carefully reviewed and brought together in a workable way. Without this book a student would be required to spend hours going through various files and references to secure all the data on any one phase of the subject of peas and pea culture. An honest effort has been made to provide comprehensive, authoritative and specific information on the whole subject of peas. Facts are tersely stated, and readers will find the book an ever-ready and convenient authority on the many details connected with the crop.

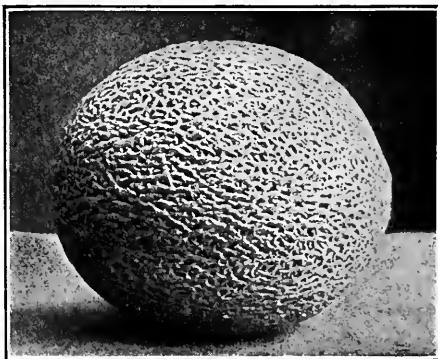
Illustrated, 5x7 inches, 120 pages. Cloth. Net 50 cents

Melon Culture

By JAMES TROOP

Professor of Horticulture and Entomology, Purdue University

THIS is a practical treatise on the melon, which is intended to be of service to the amateur as well as to the large commercial grower. It includes the history of both the muskmelon and watermelon, the botanical characters, climatic, soil and other conditions affecting their growth, a discussion of the kinds of soil suitable for each, the proper method of selecting and testing the seed and its influence on the crop, the effect of planting seeds from immature fruits and a discussion of early vs. late ripening fruits for seed as affecting the time of ripening of the crop. It is the opinion of many that seeds taken from the first fruits to ripen will produce an earlier crop than will those taken from fruits from the same plant ripening toward the close of the season. It also treats of the kinds, quantity and methods of application of various fertilizers, a very important element in the production of good melons. Methods of starting the plants, both in the hot-bed and in the open ground, are discussed. The various cultural methods which are



practiced by our large commercial growers are taken up in detail. The important questions concerning harvesting and marketing melons so as to secure the finest quality possible are carefully explained, as well as the various styles of packages and methods of packing in order to secure the best prices. A chapter is given to insects and diseases affecting melons, in which the latest scientific methods of combatting them are discussed in detail. A chapter is also given to forcing melons under glass, and a long list of varieties, comprising most of those under cultivation, is given, with a brief description of each.

Illustrated, 5x7 inches, 100 pages. Cloth. Net 50 cents

Gardening for Profit

By *Peter Henderson*. A guide to the successful culture of the market and family garden. This volume cannot but be regarded by all, as one of the best works on Market and Family Gardening ever published. The scope of the present edition of "Gardening for Profit" has been greatly extended, embracing as it does, not only the forcing of all important fruits and vegetables under glass, but also detailing the methods of culture of all small fruits which properly come under the head of "Gardening for Profit." Although this book is written mainly for the market gardener, the amateur interested in vegetables or fruits can easily adapt its teachings to the smallest requirements. Illustrated. 5x7 inches. 376 pages. Cloth.. Price \$1.50

Money in the Garden

By *P. T. Quinn*. A vegetable manual prepared with a view to economy and profit. The author gives, in a plain, practical style, instructions on three distinct, although closely connected branches of gardening—the kitchen garden, the market garden, and field culture, from successful practical experience. Illustrated. 5x7 inches. 268 pages. Cloth.....\$1.00

The Principles of Vegetable Gardening

By *L. H. Bailey*. This book discusses fully the underlying questions regarding soils, fertilizing, tilling, storing, marketing, controlling insects and diseases, and other vital present-day problems. It treats the general subject of truck gardening and market gardening; also the home garden. Particular attention is given to hotbeds and cold frames; also to seeds and seed growing. Illustrated. 5x7 inches. 458 pages. Cloth. Net \$1.50

Success in Market Gardening

By *W. W. Rawson*. A vegetable growers' manual. Part I treats on location, drainage, irrigation and fertilizers, selection, vitality and sowing of seeds, cultivation of crops, construction and operation of hotbeds and greenhouses, gathering of crops, capital and labor. Part II is devoted to special crops raised for market, tools and other requisites, pumping outfits, electric light, insects and fungi and their preventives, etc., etc. Illustrated. 5x7 inches. 240 pages. Cloth..... Net \$1.10

The A B C of Potato Culture

By *W. B. Terry*. How to grow them in the largest quantities and in the finest qualities with the least expenditure of time and labor; carefully considering all the latest improvements in this branch of agriculture up to the present date. Its principal chapters treat on soils, manures, planting, selection and care of seed, cultivating and hoeing, digging, storing, varieties, rotation, cost of production and profits, etc. Paper. \$0.45

Talks on Manures

By *Joseph Harris*. There is scarcely an opinion relative to fertilizing soils, including special manures for special crops, that is not treated in this authoritative and comprehensive work. While the teachings are founded upon the most elaborate scientific researches they are so far divested of technical language to commend themselves to farmers as eminently practical. It is not often that the results of scientific investigations are presented in a manner so thoroughly popular. The chapter specially written for this book by Sir John Bennet Lawes gives additional value to this work. Illustrated. 5x7 inches. 366 pages. Cloth.....\$1.50

The New Onion Culture

By *T. Greiner*. A complete guide in growing onions with the greatest profit, explaining the whys and wherefores. Clear and minute directions are given of how the plants are grown; the cold frame; seed bed; planting; fire hotbed; hotbed heated by steam; cheap greenhouse for market gardeners; greenhouse heated by hot water; quantity of seed required; time of sowing; varieties; what soil to select; how to manure and prepare it; onions on muck soil; clean soil essential; how the plants are set in the ground; tillage as moisture preserver and weed killer; tools of tillage; when and how to harvest the crop; danger in delay; signs of maturity; curing the crop; curing sheds; weight of crop; wintering onions; advantages and profits of the new way; estimation of cost and returns. In order to enable the reader to compare the advantages of the new with the old methods of onion culture, an extensive appendix is devoted to the latter. Illustrated. 5x7 inches. 140 pages. Cloth.....\$0.50

Vegetable Gardening

By R. L. WATTS

Professor of Horticulture, Pennsylvania State College

THIS complete, concise and authentic book covers every phase of vegetable gardening and is specially well organized as a text-book and equally valuable as a hand-book for practical growers. It is the only volume on vegetable gardening the scheme of which is in accordance with the recommendations of the association of American agricultural colleges. The logical and systematic arrangement of the matter enhances the value of the book for students as well as for busy commercial growers who need a well-organized treatise for frequent reference.

The bulletins of the experiment stations of the United States Department of Agriculture and various books and periodicals relating to garden crops were frequently consulted during the preparation of the manuscript, while at the same time the experience of successful growers is woven into every chapter. The book brings up to date the most reliable information on vegetable gardening and the full discussion of principles makes it valuable to all classes of growers whether they are producing for the home table or for market. To procure first-hand knowledge regarding varieties and methods, many market gardens and truck farms were visited in different parts of the United States. This made it possible to obtain photographs which have been used freely to illustrate the various chapters.

An idea of the scope and completeness of the book may be gained by noting the following subjects, each of which has been treated in a separate chapter: A General View, Selection of Location, Soils, Tillage, and Tillage Tools, Stable Manures, Green Manures and Cover Crops, Commercial Fertilizers, Irrigation, Insect Enemies and Fungous Diseases, Seeds and Seed Growing, Construction of Hotbeds, Construction of Cold Frames, Construction of Greenhouses, Seed Sowing, Transplanting, Growing Early Vegetable Plants Under Glass, Marketing, Co-operative Associations, The Storage of Vegetables, and the Classification of Vegetables.

One-half the book is devoted to a discussion of the culture of the vegetables grown in the United States and Canada. The list includes the Artichoke, Bean, Beet, Brocoli, Brussels Sprouts, Cabbage, Carrot, Cauliflower, Celery, Chard, Chicory, Chive, Collard, Corn-salad, Cress, Cucumber, Dandelion, Dill, Eggplant, Endive, Garlic, Horse-radish, Kale, Kohl-rabi, Leek, Lettuce, Mint, Muskmelon, Mustard, Okra, Onion, Parsley, Parsnip, Pea, Pepper, Pumpkin, Radish, Rhubarb, Ruta Baga, Sage, Salsify, Savory, Spinach, Squash, Sweet Corn, Sweet Potato, Thyme, Tomato, Turnip, and Watermelon. There are also chapters on Crop Rotation, Succession and Companion Cropping, and Home Vegetable Garden and Suggestions on Laboratory Work.



Profusely Illustrated, 5½x8 inches. 550 pages. Cloth. Net, \$1 75

Celery for Profit

By *T. Greiner*. An exposé of modern methods in growing celery. Methods by which the cost of production of first quality celery is very materially reduced are exhaustively described and fully explained. Paper.....\$0.20

Tomato Culture

By *J. W. Day, D. Cummins and A. I. Root*. In three parts. Part I—Tomato Culture in the South. Part II—Tomato Culture, Especially for Canning Factories. Part III—Plant Growing for Market and High Pressure. Gardening in General. A practical book for those who work under either glass or cloth as a protection from frost. Illustrated. Paper.....\$0.35

Sweet Potato Culture

By *James Fitz*. A monograph on the sweet potato, giving full instructions from starting the plants to harvesting and storing the crop, with a chapter on the Chinese yam. Every detail pertaining to soils, manures, propagation, planting, cultivation, harvesting, keeping and profitable marketing of this crop is clearly and fully described and explained. 5x7 inches. '86 pages. Cloth.....\$0.50

Gregory on Cabbages; How to Grow Them

By *James J. H. Gregory*. A practical treatise on cabbage culture, giving full details on every point, including keeping and marketing the crop. Paper. \$0.30

Gregory on Carrots, Mangold-Wurzels, etc.

By *J. J. H. Gregory*. How to raise them, how to keep them, and how to feed them. Paper.....\$0.30

Gregory on Onion Raising

By *J. J. H. Gregory*. What kinds to raise, and the way to raise them. Paper.....\$0.30

Gregory on Squashes

By *J. J. H. Gregory*. This treatise tells all about selecting the soil for squashes; how much manure is necessary; how to prepare and plant; about hoeing and cultivating; setting of the fruit; ripening, gathering, storing, care during winter, etc. Paper.....\$0.30

Onions; How to Raise Them Profitably

Practical details, from selection of seed and preparation of ground to harvesting and marketing the crop, given very plainly by seventeen practical onion growers of long experience residing in different parts of the country. Paper.....\$0.20

Truck Farming at the South

By *Dr. A. Oemler*. A guide to the raising of vegetables for northern markets. Full cultural directions are given, and the methods of packing the produce for the different markets. The work throughout gives evidence that the author is not only a practical cultivator but that he is an enthusiast who loves his occupation. Illustrated. 5x7 inches. 274 pages. Cloth.....\$1.00

The Forcing Book

By *Prof. L. H. Bailey*. In this work the author has compiled in handy form the cream of all the available information on the subject of forcing vegetables under glass. In addition to this, the experience of many practical growers in different localities is furnished. Illustrated. 5x7 inches. 266 pages. Cloth.....Net \$1.25

How to Grow Melons

This booklet treats of both Muskmelons and Watermelons, with full information on the selection of soil, use and application of manures, selection of varieties, planting the seed, destruction of insects, notes on cultivation, how to grow extra large melons, etc. Paper.....\$0.20

Vegetable Gardening

By *S. B. Green*. A manual on the growing of vegetables for home use and marketing. It is brimful of practical information and is carefully and concisely written. The chapter on manure is of especial value. Illustrated. 5x7 inches. 224 pages. Cloth.....\$1.00

Southern Gardener's Practical Manual

By *J. S. Newman*. The object of this work is to furnish a reliable, practical guide to those who desire to avail themselves of the wonderful facilities afforded by our sunny Southland for supplying the family table with fresh vegetables from the kitchen garden every day in the year. Illustrated. 5x7 inches. 220 pages. Cloth. \$1.00

MUSHROOMS HOW TO GROW THEM

A Practical Treatise on Mushroom Culture for Profit and Pleasure

By WILLIAM FALCONER

THIS is an eminently practical book by a practical man who is a specialist in the cultivation of mushrooms, and one of the most successful growers in the country. It appeals to every urban and suburban resident as well as to farmers, for anyone who has an ordinary house cellar, woodshed or barn can grow mushrooms. For home use fresh



mushrooms are a delicious, highly nutritious and wholesome delicacy; and for market they are less bulky than eggs, and, when properly handled, no crop is more remunerative.

It is the most practical work on the subject ever written, and the only book on growing mushrooms ever published in America.

The whole subject is treated in detail, minutely and plainly, as only a practical man actively engaged in mushroom-growing can handle it.

The author describes how he himself grows mushrooms, also how they are grown for profit by the leading market gardeners, and for home use by the most successful private growers.

The book is amply and pointedly illustrated, with engravings drawn from nature expressly for this work.

The following condensed table of contents gives an idea of the scope and completeness of the work:

Those Who Should Grow Mushrooms:—Market gardeners—Florists—Private gardeners—Village people and suburban residents—Farmers—Women on the farm.

Growing Mushrooms in Cellars:—Underground cellars—Dwelling house cellars—Barn cellars—How various market gardeners grow them in cellars.

Growing Mushrooms in Mushroom Houses:—The different kinds of mushroom houses.

Growing Mushrooms in Sheds.

Growing Mushrooms in Greenhouses.

Growing Mushrooms in the Open Field.

Manure for the Mushroom Beds:—Different kinds of manure—Other materials besides manure.

Preparation of the Manure, etc.

Making up the Beds.

Mushroom Spawn:—What it is, and how to make it, use it, or keep it.

Proper Temperature and How to Maintain It. Caring for the Beds Before and After They Begin Bearing.

Gathering and Marketing the Mushrooms.

Stimulants to Use and When and How to Apply Them.

Insect Pests and Diseases, and How to Mitigate Them.

How Mushrooms Are Grown in the London Market Gardens.

How Mushrooms Are Grown in the Paris Caves

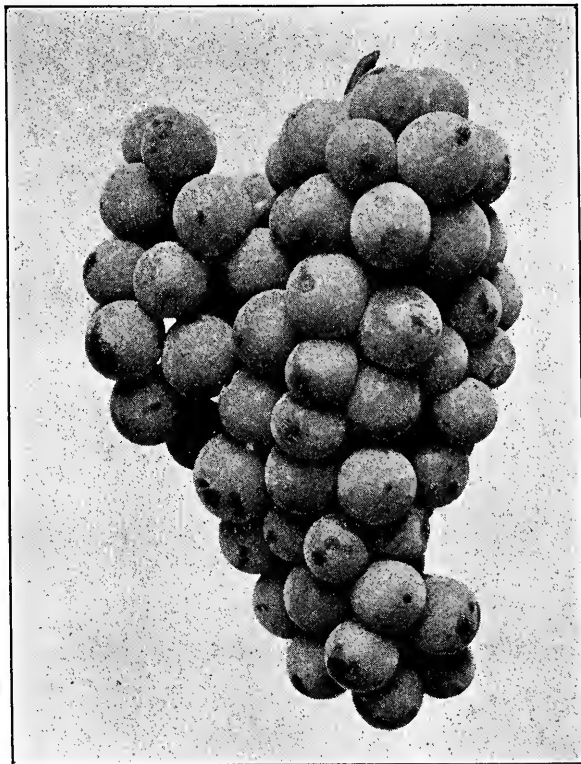
How to Cook Mushrooms:—Make ketchup of them, pot them, dry them and make powder of them.

Illustrated, 5x7 inches, 169 pages. Cloth. Price, \$1.00

Foundations of American Grape Culture

By T. V. MUNSON, D.Sc.

Practical Grape Breeder, Vineyardist, Botanist and Nurseryman



THE author of this work has a world-wide reputation among vineyardists, horticulturists and plant-breeders for his great services in viticulture and other fruit culture.

The title of the book indicates the scope of its treatment. The subject matter is handled under the various chapter divisions of: Botany of Grapes; Breeding of Grapes for every Soil, Climate and Purpose; Selection of Varieties for Vineyard Planting for Different Regions North and South; Descriptions and life-size half tone illustrations of the leading varieties for each region; Selecting, Preparing and Planting the Vineyard Site; Trellising, Pruning and Training; Fertilizing, Cultivating, and Protecting the Vineyard from Diseases and Insects; Harvesting and Marketing; Propagation by Cuttings, Layerings,

and Grafting. In every part of the work the best, only, of up-to-date methods are given. It is original, clear and practical, and besides being the most accurately scientific, clear and practical work upon American grapes suited to all sections of the country, its numerous, some 90 full-page, fine grade, life-size half-tone plates, the fine paper and substantial beautiful binding will make it an ornament in any library. It will be a fine money maker to every practical vineyardist who reads it, and a delight and helpmate to every home that grows a few vines about the house, on the trees, on walls or arbors, or garden trellis. It will make one of the best text books for study in Agricultural Colleges and High Schools where horticulture may be taught.

Highly illustrated, 7 1-2x10 inches, 250 pages. Buckram binding, gold lettering on cover.
Net \$2.00

American Grape Growing and Wine Making

By GEORGE HUSMANN

THIS latest edition is practically almost an entirely new work. The complete management of the grape in the garden as well as in the most extensive vineyards, from the planting of the vine to the harvesting of the fruit, is given in detail, according to what are now considered the best methods. As the vast extent of our country and its varying conditions of soil and climate make it impossible to give directions suitable for all sections, the author has called to his aid the most prominent authorities and most experienced vineyardists in all the various grape districts of the United States. The second part of the work is entirely devoted to these locality reports, which are of inestimable value to the grape growers living within the respective areas.

The chapters on wine making form a complete manual in themselves, describing all the various details of this rapidly increasing industry. As the author is one of the most experienced wine makers in America and a recognized authority on the subject, this part alone makes the volume indispensable to all engaged in this industry.

In order to make the work national in its scope, a considerable part is devoted to grape growing and wine making in California, a subject of which the author has made a specialty for a lifetime.

Illustrated, 5x7 inches, 310 pages. Cloth. Price, \$1.50

Chorlton's Grape Growers' Guide

By WILLIAM CHORLTON

A HANDBOOK of the cultivation of the exotic grape, intended especially for the American climate; a practical treatise on the management of the grapevine under glass. After general introductory remarks the author gives detailed descriptions of graperies and conveniences, artificial heat and apparatus, preparation of borders, planting and management for the first year, and permanent treatment for the cold graperies, forcing houses and retarding houses, pot culture, pruning and training, propagation and the raising of new kinds, injurious insects and fungi, lists of exotic and native varieties, etc.

Illustrated, 5x7 inches, 211 pages. Cloth. Price, 75 Cents

My Vineyard at Lake View

THIS book is especially valuable as giving an account of the processes actually followed in celebrated grape regions in Western New York and on the shores and islands of Lake Erie. It tells just what the beginner in grape culture wishes to know, with the charm that always attends the relation of personal experience.

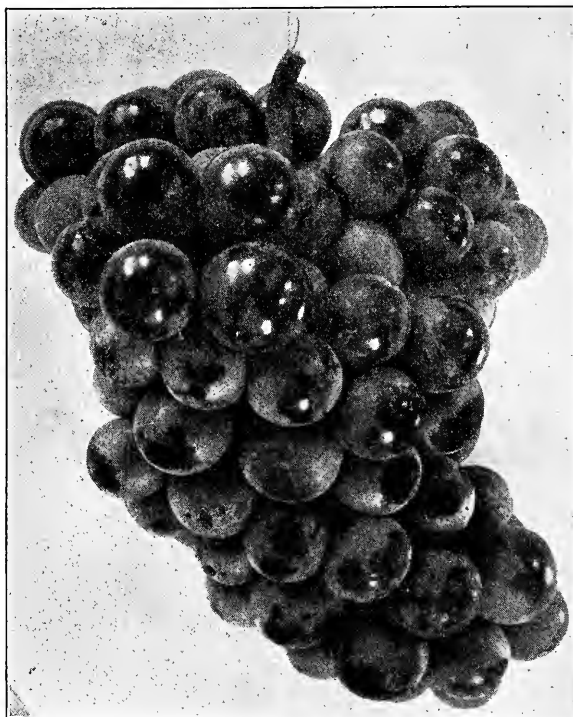
Illustrated, 5x7 inches, 143 pages. Cloth. Price, 50 Cents

Grape Culturist

A Treatise on the Cultivation of the Native Grape

By ANDREW S. FULLER

Author of "Small Fruit Culturist," "Propagation of Plants," "Practical Forestry," Etc.



THIS book on grape culture has had a very large sale for many years, and has by common consent been given the palm for practical value and usefulness. The new edition has been found necessary because of the rapid strides which have been made in viticulture in the past few years. The present edition, materially enlarged, is decidedly up-to-date.

All the discoveries, pertaining to materials and methods of applying them for the purpose of resisting the various fungous diseases which have been so disastrous to grape culture, receive attention in this new edition.

The list of standard grapes is carefully revised and a large list of the more recent, but as yet unestablished varieties, is given for consideration.

It is a complete vademecum for anyone contemplating grape growing, and no vineyardist, no matter how long his experience, can afford to be without it.

Chapters on growing from seed, on the various methods of wood propagation, layering, grafting, character of soils which are best for vineyards, trellising, pruning, culture, etc., are complete and interesting.

CONTENTS

Chapter I—Botanical Characteristics of the Grape.

Chapter II—Growing from Seed.

Chapter III—Propagation by Single Buds.

Chapter IV—Cuttings of Unripe Wood.

Chapter V—Propagation House.

Chapter VI—Cuttings in Open Air.

Chapter VII—Layering the Vine.

Chapter VIII—Grafting the Grape.

Chapter IX—Hybridizing and Crossing.

Chapter X—Transplanting.

Chapter XI—Soil and Situation.

Chapter XII—Stem Appendages.

Chapter XIII—Planting the Vine.

Chapter XIV—Grape Trellises.

Chapter XV—Time to Prune Vines.

Chapter XVI—Garden Culture.

Chapter XVII—Various Systems of Training and Pruning.

Chapter XVIII—Miscellaneous.

Chapter XIX—Insect Enemies of the Grape.

Chapter XX—Fungous Diseases.

Chapter XXI—Description of Varieties.

Chapter XXII—New or Little Known Varieties.

Chapter XXIII—Old, Obsolete and Inferior Varieties.

Illustrated, 5x7 inches, 282 pages. Cloth. Price, \$1.50

Citrus Fruits and Their Culture

By H. HAROLD HUME

Professor of Horticulture and Botany in the University of Florida. Horticulturist and Botanist of the Florida Agricultural Experiment Station

DURING the past quarter of a century no work treating on the fruits of the genus citrus has been produced. The literature has not kept pace with the growth, the development, and the new phases of the industry. Yet during this period great changes have taken place in the principles of citrus fruit culture in America. A few decades since the annual crops were but insignificant, while now the citrus industry has attained a place among the large horticultural industries of the country.

To apply the long-felt want of an up-to-date work, giving reliable and authoritative information on the subjects, the author has prepared the present work in which he has the co-operation and assistance of the foremost specialists in the country. Every part of the subject is treated with the author's usual thoroughness, special chapters being devoted to Botany, History, Varieties, Culture, in all their details; Diseases and Insects; Literature, etc., etc. The work is richly illustrated with 124 engravings, and embellished by 36 handsome plates.

5x7 inches, 587 pages. Cloth.
Net, \$2.50



The Cider Makers' Hand Book

A Complete Guide for Making and Keeping Pure Cider

By F. M. TROWBRIDGE

PURE cider is one of the most healthful and pleasant beverages that man can use. It is the pure juice of the apple fermented just as wine is, but containing much less alcohol and no tartaric acid at all, the place of the latter being naturally supplied by the malic acid of the apple. Excellent as pure cider is, it is difficult to procure it either from wholesale or retail dealers. The stuff sold for pure cider is often some villainous concoction which ought to be prohibited by law; and most of the other cider sold is made either from bad apples or by incompetent persons, and therefore is either bad from the beginning or else is spoiled through the carelessness or ignorance of the maker. In a great country like ours, where apples are produced in such overwhelming abundance, good cider ought to be plentiful and cheap, and yet at the same time be remunerative to the makers. The Cider Makers' Hand Book is a complete guide for making and keeping pure cider, by a practical man of great experience in the business. It should be in the hands of all apple growers and dealers who handle large quantities of fruit. Our mechanical intelligence has brought the necessary appliances for cider-making to great perfection; yet we learn that three-fourths or more of all the cider made is spoiled either in the process of making or immediately after becoming cider, a fact which is attributed to a general lack of information of the plain, practical and simple requirements to be observed in the making and keeping of cider, rather than to any other cause. To correct some of the erroneous theories now accepted by those engaged in Cider Making, and to be to others a **Hand Book of Practical Instruction** is the object of this most valuable work. No treatise on this art has been published in many years, and it will be welcomed by thousands as a Standard Authority of practical information, based on exact scientific facts.

Illustrated, 5x7 inches, 120 pages. Cloth. Price, \$1.00

The Practical Fruit Grower

By *S. T. Maynard*. The various fruits, how we got them, where they grow, what and when and how to plant, how to graft and bud and propagate, diseases and remedies, when to gather fruit, how to store, how to pack and ship and sell—just what the beginner needs and the successful fruit man practices—are explained in this well-arranged book. Illustrated. 5x7 inches. 128 pages. Cloth.....\$0.50

Popular Fruit Growing

By *S. B. Green*. A practical guide to the growing of fruit for home use and market. Written with special reference to colder climates. It covers the entire subject of growth, cultivation and marketing of small fruits, in addition to the cultivation, pruning and grafting of the larger fruits. Illustrated. 5x7 inches. 300 pages. Cloth. \$1.00

Bush Fruits

By *Fred W. Card*. A horticultural monograph of raspberries, blackberries, dewberries, currants, gooseberries and other shrublike fruits. The entire subject is exhaustively treated from the commercial grower's standpoint, as well as for application in the home garden. The principles which underlie the cultivation and management of all the various bush fruits are discussed, and each kind is treated in detail as to its special requirements of soil, location, fertilizers, propagation, planting, tillage, pruning, harvesting and marketing, evaporating, etc. In the list of varieties the author has endeavored to name all known kinds, together with brief descriptions and notes as to their origin. Illustrated. 5x7 inches. 537 pages. Cloth. Net \$1.50

Quince Culture

By *W. W. Meech*. An illustrated handbook for the propagation and cultivation of the quince, with descriptions of varieties, insect enemies, diseases and their remedies. New and enlarged edition. 180 pages. 5x7 inches. Cloth\$1.00

Field Notes on Apple Culture

By *Prof. L. H. Bailey, Jr.* A most useful and thoroughly practical book for orchardists. Illustrated. 5x7 inches. 90 pages. Cloth.....\$0.75

The A B C of Strawberry Culture

By *T. B. Terry* and *A. I. Root*. How to grow strawberries. For farmers, village people and small growers. Practical and colloquial talks about strawberry raising under varying conditions. The special object of this work is to teach beginners all the various details and methods by the studying of which and by following the directions given, success in growing strawberries may be assured. Paper\$0.45

Cape Cod Cranberries

By *James Webb*. A concise and reliable guide to profitable cranberry culture by a practical and successful cranberry grower. How to select a bog; clearing and turfing; ditching and draining; grading and leveling; sanding and plowing; diking and flowing; varieties; injurious insects and weeds; gathering and shipping the crop; and statistics are fully treated upon. Illustrated. Paper\$0.40

Fruits and Fruit Culture—The Principles of Fruit Growing

By *L. H. Bailey*. A complete treatise on the practice of fruit growing, comprising an inventory of fruits and a full discussion of the tillage, planting and fertilizing of fruit lands, and the protection of fruit plants from disease, frosts and other dangers. Illustrated. 5x7 inches. 516 pages. Cloth. Net \$1.50

Pear Culture for Profit

By *P. T. Quinn*. Teaching how to raise pears intelligently, and with the best results, how to find out the character of the soil, the best mode of preparing it, the best varieties to select under existing conditions, the best mode of planting, pruning, fertilizing, grafting, and utilizing the ground before the trees come into bearing, and finally of gathering and packing for market. Illustrated. 5x7 inches. 136 pages. Cloth\$1.00

California Fruits and How to Grow Them

By *Edward J. Wickson*. A manual of methods which have yielded greatest success; with lists of varieties best adapted to the different districts of the state. New, revised and enlarged edition. Illustrated. 6x9 inches. 477 pages. Cloth.....Net \$3.00

Dwarf Fruit Trees

By F. A. WAUGH

Professor of Horticulture and Landscape Gardening, Massachusetts Agricultural College

NOTHING more striking has occurred in the development of agricultural affairs during the last decade than the rise of the amateur spirit. There are now thousands of people to whom farming or gardening is a pastime or recreation. Many others, while still cultivating the soil for financial returns, confess that the money thus earned is the smallest reward for their labor. Everywhere there are village gardens, suburban home lots and private estates. The very type and model of all the operations on all these places is to be found in the garden of dwarf fruit trees. The suburban lot which would be crowded with two or three common Baldwin apple trees can easily accommodate forty or fifty dwarf trees bearing apples, pears, plums, peaches, nectarines, and the whole lot of hardy fruits.

These dwarf trees have a very great advantage further in the fact that they come into bearing very early. One has to wait ten years for fruit from a common apple tree, while a dwarf tree of the same variety will bear in three years. The fruit is also of the highest quality.

Even in strictly commercial operations the dwarf trees have their place. They make the best of "fillers" for temporary planting between permanent standard trees in a new orchard, and there are some commercial orchards of dwarf trees, particularly of pears, long and favorably known in America as profit yielding enterprises.

All these advantages are enthusiastically set forth in Professor Waugh's new book. What is more important the book also tells, in detail, how these advantages are to be secured. In pleasing and readable style the propagation of the trees is described, their planting, pruning, care and general management. The work as a whole is eminently practical and timely. It is fully and handsomely illustrated and substantially bound in cloth.

Illustrated, 5x7 inches, 112 pages. Cloth. Price, 50 cents

Successful Fruit Culture

A Practical Guide to the Cultivation and Propagation of Fruits.

By SAMUEL T. MAYNARD, B.Sc.

THIS book is written from the standpoint of the practical fruit grower who is striving to make his business profitable by growing the best fruit possible and at the least cost. It is up-to-date in every particular, and covers the entire practice of fruit culture. It gives in plain, practical language, descriptions of such varieties as are most in demand in our markets, and the method practiced by the most successful cultivators of many sections of the country. It deals with principles first and with the practice afterwards, as the foundation principles of plant growth and nourishment must always remain the same, while practice will vary according to the fruit grower's immediate conditions and environments. Separate chapters are devoted to the apple, pear, peach, apricot and nectarine, plum, cherry, quince, mulberry, grape, blackberry, raspberry, cranberry, blueberry, huckleberry, subtropical fruits, propagation of fruit trees and plants, fruit growing under glass, insect pests, and fungous diseases. The chapter on the apple is particularly comprehensive and complete, forming a monograph in itself. It treats very fully on the soil best suited to its growth, trees for an orchard, digging the holes, preparing the trees for planting, establishing the head, time for planting, turf culture, green manuring or cover crops, mulching, pruning, thinning fruit, age of bearing, regrafting old trees, varieties, gathering apples, assorting apples, packages and packing, marketing apples, storing apples, cold storage houses, etc., etc. With like thoroughness the other kinds of fruits are discussed.

Illustrated, 5x7 inches, 274 pages. Cloth. Price, \$1.00

Peach Culture

By JAMES ALEXANDER FULTON
REVISED EDITION

THE various works published on fruit culture treat of the peach as they do of other fruits, in a general way, but until the appearance of Judge Fulton's book there was nothing that gave the operations of peach culture as a business. Living in the center of one of the greatest peach growing districts in the world, he was enabled to give every detail, and to furnish a complete guide to those who would embark in the peach culture. During the years that have passed since its first appearance, while there have been few improvements in the general operations of the nursery and orchard, there have been many new varieties introduced. During this time there has been a marked improvement in the early varieties of the peach, and the introduction of these, and the discarding of others, have made it necessary to rewrite this portion of the work. In its present revised form the volume is the only practical guide to peach culture as followed on the Delaware Peninsula, and essential to those who would undertake the cultivation of this fruit in any other part of the United States.

Illustrated, 5x7 inches, 204 pages. Cloth. Price, \$1.00

Cranberry Culture

Natural History, Cultivation, Management, Etc.

By J. J. WHITE

MILLIONS of dollars are spent annually by the American people for cranberries. Properly managed, there is not a more profitable industry than the cultivation of this fruit. "Cranberry Culture" is a practical treatise on the subject and should be in the hands of everyone who expects to embark in cranberry growing. It tells all about cultivation, choice of location, preparation of the ground, planting the vines, management of meadows, flooding, enemies and difficulties, picking, keeping, profit and loss, and every other detail connected with the business. The work also gives full account of the different varieties in cultivation and it is regarded as the most complete and satisfactory of the many special treatises on fruit culture. The directions are admirably full and clear, and the author has anticipated every difficulty the novice is likely to encounter.

Illustrated, 5x7 inches, 131 pages. Cloth. Price, \$1.00

The American Fruit Culturist

By JOHN J. THOMAS

Revised and Enlarged by W. H. S. WOOD

IN ITS present form this standard pomological work is practically a new book, containing practical directions for the propagation and culture of all the fruits adapted to the United States. Numerous chapters have been added upon subjects which have become of practical value and of vital importance to all would-be fruit growers. The chapter on insects and diseases has been greatly extended, the section treating of the varieties of the different kinds of fruits has been very thoroughly revised so as to include all the approved newer sorts; and new chapters have been added on nuts, wild fruits and sub-tropical fruits. All illustrations of fruits are from average-sized specimens, and are life size unless otherwise definitely stated. A systematic classification has been adopted for the principal fruits. By placing them under separate and characteristic heads, the cultivator is enabled to distinguish and remember each sort with more readiness than where all are thrown indiscriminately together. The distinguishing characteristics of this work are: I. The arrangement of the chapters. II. The systematic classification of most of the large fruits, and more especially of the apples and pears. III. The condensed descriptions of fruits, which have been mostly taken from the ripened specimens. IV. The copious illustrations of the various operations. No other work of its character has enjoyed the popularity of this one, which has now been brought up to the most recent standard.

Illustrated by nearly 800 engravings, 5x8 inches, 823 pages. Cloth. Price, net, \$2.50

Barry's Fruit Garden

By P. BARRY



THIS standard work upon Fruit Culture is written from the practical experience of the widely known author who for half a century has been universally recognized as one of the most successful nurserymen, and best informed and most renowned pomologists of America. It explains all the minutiae of fruit culture, and demonstrates how the industry of our times is peculiarly distinguished by the application of science—the union of theory with practice in every department. The author is fully sensible of the importance that the work of the fruit grower should be done intelligently and understandingly, and that without a full knowledge of the minutiae and practical details of culture success cannot be expected. Therefore, before entering upon the main subject, he describes in as few and as plain words as possible the structure, character, connection and respective offices of the various parts of fruit trees and

the names by which each is known in practice.

In the lists and descriptions of varieties the main object aimed at is to bring to the notice of cultivators the *best varieties*, those which ample experience has proved to be *really valuable*, as nothing is more embarrassing to the inexperienced cultivator than long lists. The arrangement of varieties under the heads of *Summer*, *Autumn* and *Winter* will materially assist the reader in selecting varieties ripening at particular seasons, while the terms early or late summer, etc., in place of the month, is because of its better application to the various states and sections of states.

The entire plan of the work is so admirable and the manner in which all the details are treated so clear and concise as to make it invaluable to anyone who would become fully informed upon the subjects of which it treats. For the sake of convenient reference the different branches of the subject have been separated into four parts:

PART I.

General Principles—Names, Descriptions and Offices of the Different Parts of Fruit Trees; Soils; Manures; The Different Modes of Propagating; Pruning—Its Principles and Practice.

PART II.

The Nursery—Soil, Situation, etc.

PART III.

The Laying Out, Arrangement and General Management of Permanent Plantations of Fruit Trees, Selection of Trees and Varieties, and Pruning and Conducting Trees Under Various Forms.

PART IV.

Select Varieties of Fruits, Gathering and Preserving Fruits, Diseases, Insects, Implements in Common Use.

Illustrated, 5x7 inches, 516 pages. Cloth. Price, \$1.50

**HARVESTING
STORING**

FRUIT

MARKETING
By F. A. Waugh

A Practical Guide to the Picking, Storing, Shipping and Marketing of Fruit

WHILE there are many books on the growing of fruit, this is the first one on the equally important work of handling and selling it. The principal subjects covered are the FRUIT MARKET, FRUIT PICKING, SORTING and PACKING, the FRUIT STORAGE, EVAPORATING, CANNING, statistics of the FRUIT TRADE, FRUIT PACKAGE LAWS, COMMISSION DEALERS and DEALING, etc., etc. The important subjects of the FRUIT PACKAGE and COLD STORAGE are especially well and comprehensively treated.

The subject has been treated strictly from the standpoint of the fruit producer. The commission business, for instance, is thoroughly and fairly discussed, and the commission men can hardly help but be pleased with the advice given, yet it is all plainly directed to the benefit of the fruit grower. Evaporating and canning are handled in the same way—not by telling how to run a canning factory or a commercial evaporator—but by explaining those points which are of interest to the man who grows the fruit. The whole subject is tersely, plainly put and adequately illustrated. It is a book which everyone can read and enjoy, and which no fruit grower, large or small, can do without.

Illustrated, 5x7 inches, 250 pages. Cloth. Price, \$1.00

BY THE SAME AUTHOR

Plums and Plum Culture



A COMPLETE manual for fruit growers, nurserymen, farmers and gardeners, on all known varieties of plums and their successful management. This new book marks an epoch in the horticultural literature of America. Plum culture is one of the most complicated of specialties; and Prof. Waugh is one of the best known of the specialists. So far from being a mere compilation of others' views, this work represents in an unusual degree the original discoveries of the author. Nevertheless the discoveries and practical experience of others have not been disregarded. The book is a complete monograph of the plums cultivated in and indigenous to North America. It will be found indispensable to the scientist seeking the most recent and authoritative information concerning this group, to the nurseryman who wishes to handle his varieties accurately and intelligently, and to the cultivator who would like to grow plums successfully.

Illustrated, 5x8 inches, 391 pages. Cloth. \$1.50

The Nut Culturist

A Treatise on the Propagation, Planting and Cultivation of Nut-Bearing Trees and Shrubs

Adapted to the Climate of the United States

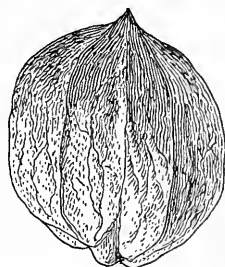
With the Scientific and Common Names of the Fruits Known in Commerce as Edible or Otherwise Useful Nuts

By **ANDREW S. FULLER**

AUTHOR OF

“Grape Culturist,” “Small Fruit Culturist,” “Practical Forestry,” “Propagation of Plants,” etc., etc.

PROFUSELY ILLUSTRATED



WHEN it is considered that the United States sends abroad annually several millions of dollars to pay for various kinds of nuts imported from foreign countries the greater part of which could profitably be grown at home, it seems strange that so little attention has been paid by American farmers to the planting and raising of edible nuts. There has been a prevailing idea among our people that nut trees could not be grown easily, their cultivation and management requiring some unusual skill, and that failure stared those in the face who attempted to plant and raise nuts.

In Europe as much care and attention is given to the growing of nuts as to any kind of fruit trees, and the profits derived from them are, in some sections of continental Europe, greater than from any other class of trees. While it is not rare to see extensive nut orchards on plains and mountain sides, the principal and favored locations for them are along the public highways. Miles and miles of English walnuts and chestnuts line the roadsides, and the returns from them often go far to meet the expenses of local government.

Most of our native nut-bearing trees, as well as the English walnut, are remarkably handsome in appearance, which is another reason why they should replace many worthless kinds that are so frequently seen along our highways.

The author of this book has for many years made a careful study of the entire subject, and has given in this volume the results of his experiences and investigations. In successive chapters he treats upon the almond, beechnut, castanopsis, chestnut, filbert, hickory, pecan and walnut, giving a condensed account of their history, description of all the species and varieties, together with their propagation by seed or otherwise; modes of grafting and budding, transplanting, pruning, gathering and marketing; insect and fungous enemies, and the best means of preventing their ravages; and all the important details in regard to the methods and practices for the successful and profitable raising of nuts. The closing chapter is devoted to the description of the fruits which are known in commerce as nuts, and to foreign kinds of nuts which are not grown successfully in the United States.

Over 100 original illustrations embellish the volume. This work its author has always considered as the most valuable one he has ever written, believing that it will develop a new and important industry for the benefit of American farmers and the prosperity of our country.

Illustrated, 5x7 inches, 298 Pages. Cloth. Price, \$1.50

The Small Fruit Culturist

By ANDREW S. FULLER



THIS is the first work exclusively devoted to Small Fruits, and it continues to be the recognized authority. It is equally adapted to the needs and requirements of the private cultivator and the market grower.

This book covers the whole ground of Propagating Small Fruits, their Culture, Varieties, Packing for Market, etc. While very full on the other fruits, the Currants and Raspberries have been more carefully elaborated than ever before. The chapter on gathering and packing the fruit is a valuable one, and in it are figured all the baskets and boxes in common use. The book is very finely and thoroughly illustrated.

"In the history of horticultural literature," writes Dr. F. M. Hexamer in the Cyclopedia of American Horticulture, "Fuller's Small Fruit Culturist will no doubt occupy a foremost rank. It was more instrumental in the development

and building up of the great industry to which it is devoted than any other book written before or after, and in any land; and it was the first American horticultural book translated into a foreign language."

CONTENTS

- | | |
|-------------------------|---|
| Chapter I.—Barberry | Chapter VII.—Gooseberry |
| Chapter II.—Strawberry | Chapter VIII.—Cornelian Cherry |
| Chapter III.—Raspberry | Chapter IX.—Cranberry |
| Chapter IV.—Blackberry | Chapter X.—Huckleberry |
| Chapter V.—Dwarf Cherry | Chapter XI.—Shepherdia |
| Chapter VI.—Currant | Chapter XII.—Preparation
for Gathering Fruit |

Illustrated, 5x7 inches, 287 pages. Cloth. Price, \$1.00

Strawberry Culturist

By ANDREW S. FULLER

Containing the history, sexuality, field and garden culture of strawberries, forcing or pot culture, how to grow from seed, hybridizing, and all information necessary to enable everybody to raise their own strawberries; together with a description of new varieties and a list of the best of the old sorts.

Illustrated, 5x7 inches, 60 pages. Flexible cloth. Price, 25 cents

Irrigation Farming

A HANDBOOK FOR THE PRACTICAL APPLICATION
OF WATER IN THE PRODUCTION OF CROPS

New Edition, Revised, Enlarged and Rewritten

By LUCIUS M. WILCOX

SINCE the publication of the first edition of "Irrigation Farming," so many important improvements in irrigation have been made, and new and better methods introduced, that in order to keep abreast with the times a new edition of this standard work has become a necessity. Realizing this need the author has prepared the present volume, which has been largely rewritten, entirely reset, and considerably enlarged so as to present in systematic sequence and concise form everything pertaining to the most modern irrigation methods and means, thus making it the most complete manual on the subject ever published. As the author has devoted the greater portion of his life to practical irrigation work, and is the recognized authority on the whole subject of irrigation, from a practical standpoint, every statement made in this book is based on the best experience, practice and science, and may be unhesitatingly relied upon as absolutely true.

One strong position taken by the author all through the work is the importance of consistent and scientific cultivation in connection with all irrigation operations, as the one is just as essential as the other, and the two are indispensable in attaining the most perfect results. While the first edition was primarily written for and adapted to our western farmers and farms, this new edition also devotes appropriate attention to irrigation in humid regions. The principal chapters treat very fully of the advantages of irrigation; relations of soils to irrigation; treatment of alkali; water supply; canal construction; reservoirs and ponds; pipes for irrigation purposes; flumes and their structure; duty and measurement of water; methods of applying water; irrigation of field crops, the garden, the orchard, the vineyard and small fruits; all about alfalfa; windmills and pumps; devices, appliances and contrivances; subirrigation and subsoiling; seepage and drainage; electricity in irrigation; winter irrigation; irrigation in humid regions; common law of irrigation; glossary of irrigation terms, etc., etc. The volume is profusely, handsomely and practically illustrated, and in paper, presswork and binding all that could be desired.



5x7 inches, 494 pages. Cloth. Price, \$2.00

Land Draining

A Handbook for Farmers on the Principles and Practice of Farm Draining

By **MANLY MILES, M.D., F.R.M.S.**

Author of "Silos, Ensilage and Silage," etc.

UNDER the present conditions of American farm practice, one of the most prominent defects in the prevailing system of management appears to be a lack of attention to thorough drainage as a means of diminishing the cost of production, and insuring uniformly remunerative returns in crop growing, by increasing the fertility of the soil and avoiding the losses from unfavorable seasons. The manifest neglect of this important branch of rural economy by the majority of farmers is undoubtedly owing, to a great extent, at least, to the frequent failures observed in draining, from the practice of imperfect methods, and vague or incorrect notions in regard to the real advantages to be derived from draining.

This is not surprising, as attention has been turned in other directions, and the most valuable contributions to the principles of drainage, of late years, have been confined, in the main, to periodicals and reports not generally accessible to farmers, and there has been no book on this special subject in which could be found a description of the best method of making tile drains, or an adequate discussion of the latest developments of science in their relations to the principles of drainage.

Many of the maxims in draining, of but a few years ago, have become obsolete, and more consistent methods have been adopted in the best modern practice, while the progress of science has extended our knowledge of correct principles, and made clear many details in regard to the most favorable conditions for growing crops, which are of great practical importance.

In this handbook for farmers, the aim has been to present the leading facts of practical significance, in connection with a popular discussion of the applications of science, and the results of experiments relating to draining have been summarized in tables in convenient form for reference, which furnish ready answers to many of the economic questions that will be suggested to the intelligent farmer.

An outline of the history of draining is given to illustrate the progress of discovery and invention in developing correct principles of practice; and the directions for laying tiles, which are the results of an extended experience in draining under widely different conditions, are confidently recommended as a decided improvement on former methods.

CONTENTS

CHAPTER I.—General Principles.	CHAPTER VI.—Progress of Discovery and Invention.
CHAPTER II.—Water in Soils and Conservation of Energy.	CHAPTER VII.—Location and Plans of Drains.
CHAPTER III.—Rainfall, Drainage and Evaporation.	CHAPTER VIII.—Quality and Size of Tiles.
CHAPTER IV.—Energy in Evaporation.	CHAPTER IX.—How to Make Tile Drains.
CHAPTER V.—Advantages of Draining Retentive Soils.	CHAPTER X.—Drains in Quicksand and Peat.
	CHAPTER XI.—Outlets and Obstructions.

Profusely illustrated, 5x7 inches, 200 pages. Cloth. Price, \$1.00

Irrigation for the Farm, Garden and Orchard

By *Henry Stewart*. The various methods of irrigation are discussed in this work, and it is intended to meet the wants of gardeners, fruit growers, and those farmers who have only a meadow to water, as well as those who would irrigate their whole farm. It is plainly written, and copiously illustrated; is thoroughly practical, and sufficiently suggestive to meet almost any possible case in which water may be used for the benefit of the crops. It treats very freely of the formation and management of irrigated meadows and pastures, and of the management of crops usually grown under irrigation. It is, in short, a practical manual of irrigation, which will be useful in a wide diversity of instances. Illustrated. 5x7 inches. 276 pages. Cloth. Price

\$1.00

Irrigation and Drainage

By *F. H. King*. Although we have already a number of books on irrigation, as well as on draining, the close relationship of these important factors in soil culture has never been so clearly and convincingly set forth as the author has done in this volume. He presents in a broad, yet specific way the fundamental principles which underlie the methods of culture by irrigation and drainage and their importance in securing the most favorable physical conditions of the soil in order to produce profitable results. Illustrated. 5x7 inches. 500 pages. Cloth. Price

Net \$1.50

Draining for Profit and Draining for Health

By *George E. Waring*. This book is a very complete and practical treatise, the directions in which are plain and easily followed. The subject of thorough farm drainage is discussed in all its bearings, and also the more extensive land drainage by which the sanitary condition of any district may be greatly improved. Illustrated. 5x7 inches. 252 pages. Cloth. Price \$1.00

Farm Drainage

By *Henry F. French*. The Principles, Processes and Effects of Draining Land with Stones, Wood, Plows and Open Ditches, and especially with Tiles; including Tables of Rainfall.

Over 100 illustrations. 5x7 inches. 384 pages. Cloth. Price.....\$1.00

Tile Drainage

By *W. I. Chamberlain*. There is as much science in digging as in doing almost anything else; and by following the plan recommended in the book, one man will often do as much as two men without this knowledge. The book embraces everything connected with the subject, and was written by the author while he was engaged in the work of digging the ditches and laying the tiles. Paper cover

\$0.35

Practical Farm Drainage

By *C. G. Elliott*. Why, When and How to Tile Drain. Contents: Soils and the Relation of Drainage to Them; Actions of Drains upon the Soil; Leveling and Locating Drains. Depth and Sizes of Drains. Practical Details of the Work; Ditching Machines; Cost and Profit; Road Drainage. Illustrated. 5x7 inches. 100 pages. Cloth. Net \$1.00

Engineering for Land Drainage

By *C. G. Elliott*. A manual for laying out and constructing drains for the improvement of agricultural lands. Contents: Introduction; The Drainage Engineer; The Agriculturist and Soil Drainage; Soils; Land-Drainage Practice; Leveling and Topography; Laying Out Drains in the Field; Fixing the Grade of Drains; Maps and Records; Grading the Ditches for Tile; Flow of Water Through Pipes; Size of Lateral Drains; Open Drains; Drainage of Barn Yards, Cattle Lanes, etc.; Road Drainage; Drainage Districts; Estimates of Cost; Benefits and Profits of Land Drainage. Illustrated. 5x7 inches. 232 pages. Cloth.....Net \$1.50

Irrigation Institutions

By *Elwood Mead*. This book is based upon twenty years' experience in the development of irrigated agriculture in the West under conditions, official and otherwise, which gave unprecedented opportunities for information and judgment. All phases of the subject have been dealt with, and particular attention paid to the novel and complicated legal questions involved in "water rights" and the social and economic aspects resulting from this method of agriculture. Half leather. 5x7 inches.....Net \$1.25

Gardening For Pleasure

A Guide to the Amateur in the Fruit, Vegetable and Flower Garden With Full Directions for the Greenhouse, Conservatory and Window Garden

By PETER HENDERSON

THIS book was written to meet the wants of those desiring information on gardening for private use. Its scope therefore embraces directions for the culture and propagation of Flowers, Vegetables and Fruits. It has had a large sale, and gone through several editions, the present having been revised and greatly enlarged; it exhaustively treats on the Vegetable Garden, Flower Garden, Fruit Garden, Greenhouse, Grapery, Window Garden, Lawn, the Water Garden, etc.

CONTENTS

Preparation of the Ground—Walks—The Lawn—Designs for Gardens—Planting of Lawn and Flower Beds—Fall or Holland Bulbs, etc.—Propagation of Plants by Seeds—Propagation of Plants by Cuttings—How Grafting and Budding Are Done—The Potting of Plants—Winter Flowering Plants—Plants Suited for Summer Decoration—Window Gardening—Culture of Water Lilies and Other Aquatic Plants—The Chrysanthemum—Parlor Gardening or the Cultivation of Plants in Rooms—Greenhouses Attached to Dwellings—Detached Greenhouses, Modes of Heating, etc.—Greenhouses and Pits Without Artificial Heating—Flowers That Will Grow in the Shade—Insects and Other Parasites Injurious to Plants—Humbugs in Horticulture—Hardy Grapes—The Cold Grapery—The Hot House or Forcing Grapery—The Strawberry—The Vegetable Garden—Monthly Calendar of Operations.

Illustrated, 5x7 inches, 404 pages. Cloth. Price, \$1.50

MAKING HORTICULTURE PAY

By M. G. KAINS

THE dominant ideas of this book are to encourage the average farmer and householder to emancipate himself and his family at least a little from the routine still too common in farm living, to make some of the barren spots fruitful, to eliminate some of the drudgeries, and by example rather than by precept to spread the good news that men and women whose farms include orchards and gardens are more than landlords and landladies of dirty acres; they are the real lords and ladies of the land. The prime object of the book, therefore, is not to reach and teach the specialist how to make his specialty profitable, though even he may glean many useful hints throughout the volume; nor is it to expound methods of mere money making; it is to aid all who feel the need of a better mode of living and seek to attain such through the mediums of fruits, vegetables and ornamentals.

Such being the object, the editor has drawn freely upon the actual experiences of actual farmers and farmers' wives, so the readers may feel that the cases presented are largely similar to their own. Thus they can gain much inspiration and encouragement. After a brief introduction, in which the editor points out why and how farmers should enjoy the goodly fruits of the earth, there is a simple, concise but adequate discussion of soils and their care, fertilizers and fertilizing, water and its control, and the function of cultivation. Then follows a discussion of fruit plantations and their care, the various orchard fruits of temperate North America and the small fruits of this region. The vegetable garden is treated generally and then the various vegetables are taken up individually. After a general chapter on spraying the volume closes with a chapter on ornamentals for the home grounds, gardens, the house and the greenhouse.

Illustrated, 5x7 inches. 300 pages. Cloth. Net, \$1.50

Practical Floriculture

A Guide to the Successful Propagation and Cultivation of Florists' Plants for the Amateur and Professional Florist.

By PETER HENDERSON



UP TO the appearance of this work all American books on floriculture had been written strictly for the amateur, "Practical Floriculture" being the first one which treated the subject with a view to its commercial relations. Its influence upon the development and expansion of this important industry has been marvelous. Mr. Henderson was never a follower, but always a leader in the fore rank; and in this book he has given detailed accounts of the requisites to success, and has clearly explained the improved methods which have brought him wealth and world wide

renown. The scope of the work may be judged from the following table of

CONTENTS

How to Become a Florist—The Prices of Nursery and Greenhouse Produce Abroad and at Home—The Profits of Floriculture—Aspect and Soil—The Preparation for New and the Renovation of Old Lawns—Laying out the Flower Garden—Designs for Ornamental Grounds and Flower Gardens—Planting for Flower Beds—Soils for Potting—Temperature and Moisture—The Potting of Plants—Drainage in Pots—Expert Garden Workmen—Cold Frames—Winter Protection—The Construction of Hotbeds—Greenhouse Structure—Wide Greenhouses for Bedding Plants and Rose Growing—Glass, Glazing and Shading—Modes of Heating—Heating by Steam—Base-Burning Water-Heater—Propagation of Plants by Seeds—What Varieties Come True from Seeds?—Propagation of Plants by Cuttings—"Saucer System" of Propagation—Propagating Soft-Wooded Plants in Summer—Propagation of Roses by Cuttings—Propagating Roses by Grafting and Budding—Greenhouse Plants Most in Demand in Market in Spring—Cultivation of the Verbena—Cold Frame Plants

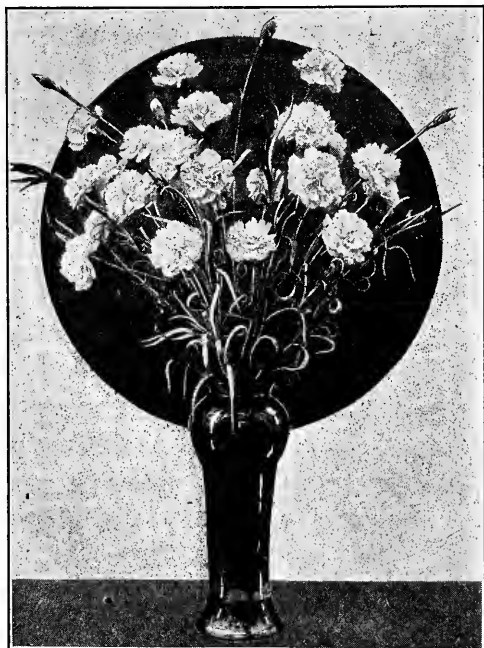
Most Sold in Market in Spring—Plants Most in Demand for Window Decoration in Winter—Culture of Winter-Flowering Plants for Cut Flowers—Rose Growing in Winter—Bulbs for Winter Flowers—Violets, Chrysanthemums, Carnations and Mignonette—Bouvardias, Stevias, Eupatoriums, Heliotropes, Poinsettia and Other Winter-Flowering Plants—Orchid—Chinese Primrose, Geranium, Camellia and Eucharis—Plants Used for Decoration of Rooms—General Collection of Plants Grown under Glass—Construction of Bouquets, Baskets, etc.—Hanging Baskets—Parlor or Window Gardening—Formation of Rock-Work and Plants for Rocks—Are Plants Injurious to Health?—The Injury to Plants by Forcing—Nature's Law of Colors—What Flowers Will Grow in the Shade?—Succession Crops in the Greenhouse—Packing Plants—Plants by Mail—Insects and Diseases Affecting Plants—Mildew—Diary of Operations for the Year—The Culture of Grapevines Under Glass.

Illustrated, 5x7 inches, 325 pages. Cloth. Price, \$1.50

Home Floriculture

A Practical Guide to the Treatment of Flowering and Other Ornamental Plants in the House and Garden

By EBEN E. REXFORD



THIS book, intended for amateur floriculturists, is written by one who is in no sense a "professional." It has been written because there is a constant and increasing demand for a work that treats on flowers from the standpoint of the amateur. An extensive correspondence with flower-loving persons, all over the country, has convinced the author that scientific text books are not what is wanted.

What is wanted is plain, practical easily understood information which will enable those who love flowers, but know very little about them, to grow them successfully. Those who read this book will find it easy to understand and those who follow out its instructions will be able to grow all the plants treated of in it and grow them well. It has been written from the author's personal experience among flowers, and not from theory; and to judge his methods by their results they have been very satisfactory.

This book is not sent out as a sort of short cut to complete floricultural knowledge; but is intended to assist the amateur in the acquirement of such knowledge which can only come from intelligent personal study and

observation, which will lead to a better acquaintance and a closer friendship with flowers.

The introductory chapters treat on the principles and practice of plant growth and management, comprising: *Soil for Plants in Pots, Potting, Watering Plants, Insects and How to Fight Them, Care of House Plants During the Summer, Fertilizers, Diseases of Plants, Winter Precautions, Dormant Plants, Miscellaneous Hints, etc.*

Several following chapters give very full lists of descriptions of plants adapted to window culture, together with their proper management. Prominent among these are: *Geranium, Hibiscus, Primulas, Agapanthus, Pyrethrum, Oxalis, Petunia, Cyclamen, Calla, Bouvardia, Genista, Abutilon, Cineraria, Calceolaria, Hydrangea, Marguerite, Camellia, Azalea, Begonia, Rose, Carnation, Fuchsia, Chrysanthemum, Palms, Ferns and Other Decorative Plants, Vines for House Culture, Basket Plants, Bulbs for Winter Flowering. Appliances for the amateur's use and small greenhouses are thoroughly discussed.*

Outdoor Garden Making and Seed Growing are treated upon in admirable manner, and the subsequent chapters give all the information the amateur floriculturist may require. These comprise lists of the *Best Annuals and Bedding Plants, Plants for Tropical Effect, Tea Roses, Dahlia, Tuberosa, Gladiolus, Hardy Border Plants, Bulbs, Hardy Roses, Vines, Lillies, Shrubs and Rockeries.*

The closing chapter, entitled "*After Thoughts*," forms a unique and pleasing combination of floricultural odds and ends which appeared not to fit into the regular chapters, and without which the book would have been deprived of one of its most instructive and attractive features.

Elegantly illustrated, 5x7 inches, 300 pages. Cloth. Price, \$1.00

New Handbook of Plants and General Horticulture

By PETER HENDERSON

A New and Revised Edition with Copious Illustrations

THIS new edition comprises about fifty per cent more genera than the former one, and embraces the botanical name (accentuated according to the latest authorities), derivation, natural order, etc., together with a short history of the different genera, and concise instructions for their propagation and culture. A valuable feature of the book, particularly to amateurs, is the great care that has been given to obtain all the leading local or common English names, together with a comprehensive glossary of botanical and technical terms. Plain instructions are also given for the cultivation of the principal vegetables, fruits and flowers—both for the amateur, florist and market gardener—particularly full instructions on forcing roses, bulbs and other plants used for cut flowers in winter, also tomatoes, grapes, cucumbers, mushrooms, strawberries, etc., together with comprehensive practical directions about soils, manures, roads, lawns, draining, implements, greenhouse buildings, heating by steam and hot water, propagating by seeds and cuttings, window gardening, shrubs, trees, etc. In short, everything relating to General Horticulture is given in alphabetical order, in a way so complete as to make it, as a book of reference, equally as valuable as encyclopedias of gardening four times its size. Henderson's New Handbook of Plants and General Horticulture contains about 800 illustrations.

Illustrated, 7x10 inches, 562 pages. Cloth. Price, \$3.00

PARSONS ON THE ROSE

A Treatise on the Propagation, Culture and History of the Rose

By SAMUEL B. PARSONS

New and Revised Edition

THE rose is the only flower that can be said to have a history. It is popular now, and was so centuries ago. In his work upon the rose, Mr. Parsons has gathered up the curious legends concerning the flower, and gives us an idea of the esteem in which it was held in former times. A simple garden classification has been adopted, and the leading varieties under each class enumerated and briefly described. The chapters on multiplication, cultivation and training are very full, and the work is altogether the most complete of any before the public.

CONTENTS

Chapter I—Botanical Classification, II—Garden Classification, III—General Culture of the Rose, IV—Soil, Situation and Planting, V—Pruning, Training and Bedding, VI—Potting and Forcing, VII—Propagation, VIII—Multiplication by Seed and Hybridizing, IX—Diseases and Insects Attacking the Rose, X—Early History of the Rose, and Fables Respecting Its Origin, XI—Luxurious Use of the Rose, XII—The Rose in Ceremonies and Festivals, and in the Adornment of Burial Places, XIII—The Rose in the Middle Ages, XIV—Perfumes of the Rose, XV—Medical Properties of the Rose, XVI—General Remarks.

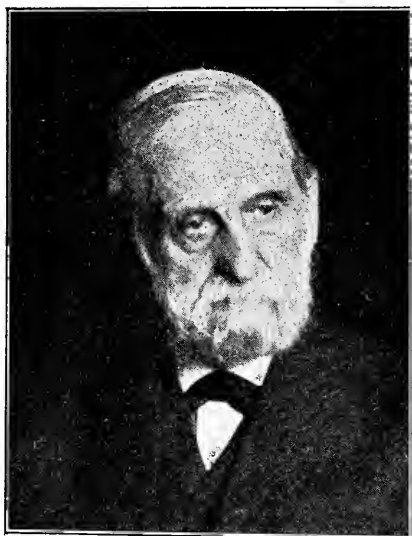
Illustrated, 5x7 inches, 211 pages. Cloth. Price, \$1.00

Bulbs and Tuberos Rooted Plants

Hyacinths, Lilies, Tulips, Narcissus, Cyclamen, Callas, Gladiolus, Amaryllis, Freesia, Tropaeolum, Tigridias, etc., etc.

Their History, Description, Methods of Propagation, and Complete Directions for Their Successful Culture in the Garden, Dwelling and Greenhouse

By C. L. ALLEN



NO OTHER class of plants occupies so important a place in the field of floriculture as do the various kinds of flowering bulbs, and is at the same time so little understood. The amount of money annually expended for bulbs is more than is paid for any other class of flowering plants.

As generally treated, bulbs are an expensive luxury, while, when properly managed they afford the greatest amount of pleasure at the least cost.

The author of this book has for many years made bulb growing a specialty, and is a recognized authority on their cultivation and management. He has taken the initiative in this country to make bulb growing a special industry,

and therefore writes from his own long and extensive experience.

The Illustrations which embellish this work have been drawn from nature, and have been engraved expressly for this book. The cultural directions are plainly stated, practical, and to the point. Mr. Allen renounces the idea that it is difficult to successfully raise flowering bulbs, and shows that their necessary requirements are simple and few. What not to grow forms an important feature in this book, which is of especial value to many beginners who usually undertake to grow many kinds which even the professional florist could not accomplish in a satisfactory manner, under existing conditions. The method of using a special soil for each kind of plants—as is frequently recommended—has discouraged many flower lovers from growing bulbs. This erroneous idea is so plainly exposed that many persons who read this book will again become encouraged to undertake what they had hitherto thought impossible to accomplish.

Handsomely illustrated, 5x7 inches, 312 pages. Cloth. Price, \$1.50

The Book of the Rose

By *A. Foster-Melliard*. In this new, thoroughly revised and enlarged edition, the author, who is recognized as one of the most successful rose growers of England, gives here full details of practical rose culture for amateurs, from the beginning to the end, comprising history and classification, situation and soil, planting, manures, pruning, stocks, propagation, pests, roses under glass, exhibiting, manner and customs. Illustrated. 5x7 inches. 352 pages. Cloth. Price.....Net \$1.75

The Rose—Its Cultivation, Varieties, Etc

By *H. B. Ellwanger*. In addition to the directions for cultivation—for planting, pruning, propagation, the treatment of disease and insect remedies—the work is rendered particularly valuable for its classification, and the full alphabetical and descriptive list of nine hundred and fifty-six varieties. 4x6½ inches. 308 pages. Cloth....\$1.25

The Chrysanthemum

By *A. Herrington*. The author, than whom there is no more experienced expert in this line anywhere, has here taken the public in his confidence and has endeavored to assist and direct the efforts of those who would grow and excel in the production of perfect chrysanthemum flowers. His aim has been to show that not in secret arts and practices, but in a plain course of procedure, as explained in the pages of this work, are attained the results desired. Illustrated. 5x7 inches. 160 pages. Cloth.....\$0.50

The American Carnation

By *Charles Willis Ward*. In this superb volume the author covers the entire subject of carnation culture, its history, greenhouse and garden culture, soils, manures and fertilizers, propagation and shipping young stock, lifting and planting, treatment after benching and until the plants are in bloom, insects and preventives, diseases and injuries, forcing houses, heating, carnations for summer blooming and pot culture, raising carnations from seed, calendar of operations, etc., etc. Richly illustrated. 7½x10 inches. 296 pages. Cloth and gold.....\$3.50

The Window Flower Garden

By *Julius J. Heinrich*. The author is a practical florist, and this enterpris-

ing volume embodies his personal experience in window gardening during a long period. Illustrated. 5x7 inches. 123 pages. Cloth.....\$0.50

Your Plants

By *James Sheehan*. Plain and practical directions for the treatment of tender and hardy plants in the house and in the garden. The work meets the wants of the amateur who grows a few plants in the window or has a small flower garden. 5x7 inches. Paper. \$0.40

Commercial Violet Culture

By *B. T. Galloway*. A comprehensive and complete treatise on the commercial culture, growing and marketing of violets for profit. Yet it contains no small amount of information of as much interest to the amateur as to the commercial violet grower. Illustrated. 4½x7 inches. 224 pages. Cloth.\$1.50

The Amateur Orchid Cultivator's Guide

By *H. A. Burberry*. In plain, concise words the author gives easily understood instructions on all the important points belonging to everyday work in the culture and management of orchids. Illustrated. 5x7 inches. Cloth. Net \$2.50

The Beautiful Flower Garden

By *F. Schuyler Mathews*, with Notes on Practical Floriculture, by *A. H. Fewkes*. This artistic volume tells how to lay out and plan a small garden or lawn so that the picturesqueness of the wider landscape gardening will result as far as is possible. Four plans are given, two for laying out a country garden or yard, and two for a narrow city lot. There are descriptions of flowers easily procured and grown from seed, bulbs and cuttings, with bright sketches showing their forms of growth. Paper. \$0.40

Our Native Orchids

By *William Hamilton Gibson* and *Helena Leeming Jelliffe*. A series of drawings from nature of all the species found in the northeastern United States, with descriptive text. This book illustrates practically all the sixty species of our native orchids, and introduces the flower-lover to the mysteries of these plants. Illustrated. 5x7 inches. 158 pages. Cloth.....Net \$1.35

Landscape Gardening as Applied to Home Decoration

By *Samuel T. Maynard*. In addition to landscape gardening proper, this work treats also on many other subjects connected with rural homes, such as architecture, heating, ventilating, plumbing of houses, injurious insects, the planting and care of the home fruit garden, etc. Realizing the necessity of becoming thoroughly familiar with the materials to be used in beautifying one's grounds, the author devotes over one-third of his work to the description of the most beautiful trees, shrubs and plants, their proper use, the soil best suited to their growth and the care required for their best development. Illustrated. 5x7 inches. 338 pages. Cloth\$1.50

Field Book of American Wild Flowers

By *F. Schuyler Mathews*. A popular flora of wild flowers and a convenient field companion for students and lovers of nature. It gives short and reliable descriptions of the character, habits, and concise definitions of the colors, and references to the insects which assist in the fertilization of the more commonly met wild flowers in the New England and Middle States. The most striking feature of the work is that fully one-half of it is pictures and colored plates, giving accurate illustrations of the plants described. Hence, with the plain English and the plainer drawings anyone will be able to identify a plant without difficulty. Its handy size, which fits an ordinary coat pocket, will make the volume especially welcome to the field botanist. Illustrated. 4x7 inches. 552 pages. Cloth. Net \$1.75

How to Plan the Home Grounds

By *S. Parsons*. The purpose of this book is to teach land owners and home builders how to beautify their grounds. The importance of the proper selection of home grounds and the proper site of the house are particularly emphasized, as well as the reasons governing these points. The laying out and construction of roads and paths, lawns and flower gardens are fully treated upon, while the lists of the best trees, shrubs, hardy herbaceous plants, etc., serve as a valuable guide to the amateur landscape gardener. Illustrated. 5x7 inches. 249 pages. ClothNet \$1.00

Botany, An Elementary Text-Book for Schools

By *L. H. Bailey*. There are four general subjects in this book: The nature of the plant itself; the relation of the plant to its surroundings; histological studies; and determination of the kinds of plants. It is not the aim of the author to make everyone a botanist, but everyone can love plants and nature; education should train persons to live, rather than to be scientists. Each of the subjects is practically distinct, so that the teacher may begin where he will. The admirable advice is given to the teacher, when beginning to teach about plants, to think more of the pupil than of botany. Illustrated. 5x7 inches. 355 pages. Cloth.....Net \$1.10

Landscape Gardening

By *Samuel Parsons*. This book contains clear and precise information for the improvement of every kind of rural premises, with notes and suggestions on lawns and lawn planting; laying out and arrangement of country places, large and small parks, cemetery plots, and railway station lawns; deciduous and evergreen trees and shrubs, the hardy border, bedding plants, rock-work, etc., etc. Illustrated. 6x9 inches. Cloth\$2.00

Residential Sites and Environments

By *Joseph Forsyth Johnson, F. R. H. S.* A handsome volume with 54 practical plans and diagrams, with lucid descriptive text and all necessary information for the development of the surroundings of a residence, showing principles and adaptations of planting suitable to all requirements. Illustrated. 9x12 inches. 118 pages. Cloth..\$2.50

Plant Breeding

By *Dr. Hugo De Vries*. In this work the author has reviewed in a general way his theory of the origin of species and varieties by mutation, and also provides in full, and publishes for the first time in English, the discovery of the elementary species of agricultural plants, by Hjalmar Nilsson, and full comments on the experimental work of Luther Burbank, and also on the geographical distribution of plants and other matters. Illustrated. 5x7 inches. ClothNet \$1.50

The Evolution of Our Native Fruits

By *L. H. Bailey*. Three motives run through this book: An attempt to expound the progress of evolution in objects which are familiar and which have not yet been greatly modified by man; an effort to make a simple historical record from unexplored fields; a desire to suggest the treasures of experience and narrative which are a part of the development of agriculture. Special chapters treat on the rise of the American grape; the strange history of the mulberry; the evolution of American plums and cherries; native apples; origin of American raspberry growing; evolution of blackberry and dewberry culture; various types of berry-like fruits; various types of tree fruits; general remarks on the improvement of our native fruits. Illustrated. 5x8 inches. 472 pages. Cloth.....Net \$2.00

The Water Garden

By *Peter Bisset*. The cultivation of the Lotus or Water Lily, and other aquatic plants, is easily the most fascinating of all pursuits, and this is the only book ever published on the subject. The writer is the standard authority for America. Every detail is covered, all water plants described, and no other guide is needed.

The text describes all operations, from the growing of plants in tubs to the large water garden, excavation of grounds, construction of ponds, adapting natural streams, planting, hybridizing, seed-saving, propagation, the aquatic house, wintering, correct designing and planting of banks and margins, and all other necessary details. The work contains nine beautiful plates, eighteen full-page descriptive views of leading water gardens and ponds, and numerous smaller pictures prepared with special reference to this book.....\$2.50

How to Make a Fruit Garden

By *S. W. Fletcher*. This book is written for amateurs in all stations in life; but the author has felt a particular interest in the home maker of moderate means who wishes to make the garden contribute as largely as possible to the support of the family. Special emphasis has been laid upon simple arrangement and economical management,

which make for a money-saving garden. Illustrated. 7x10 inches. 283 pages. ClothNet \$2.00

Hedges, Windbreaks, Shelters and Live Fences

By *E. P. Powell*. A treatise on the planting, growth and management of hedge plants for country and suburban homes. It gives accurate directions concerning hedges; how to plant and how to treat them; and especially concerning windbreaks and shelters. Illustrated. 140 pages. 5x7 inches. Cloth..\$0.50

The Flower Garden

By *Ida D. Bennett*. A concise and complete summary of every possible sort of information that might be desired by anyone interested in gardens, including a helpful table which gives the common and English names of flowers. This is of great assistance in the selection of flowers from catalogs. Illustrated. 5x7 inches. 282 pages. ClothNet \$1.10

How to Make Money Growing Violets

By *George Saltford*. The main object of this booklet is to show to the many men and women in towns, villages or on farms who are struggling hard to make both ends meet, how they can make money by growing violets. In successive chapters he describes the best soil for violets and how to prepare it, planting, watering, cultivation, varieties, temperature, heating, fertilizers, insects and diseases, houses, cold frames, picking, bunching, marketing, shipping boxes, profit, etc., etc. Illustrated. 5x7 inches. Paper.....\$0.25

How to Make a Flower Garden

This volume is a contribution by many experts on every branch of the subject with an introduction by *L. H. Bailey*. The various kinds of gardens are extensively treated as well as the most suitable flowers for certain soils and climates. Two particularly valuable features are a list of flowers for special purposes and an alphabetically arranged list of flowers telling when and how to plant each one. Illustrated. 7x10 inches. 370 pages. Cloth. Net \$1.60

House Plants and How to Grow Them

By *P. T. Barnes*. A really practical handbook for the amateur, but written by a practical horticulturist who is thoroughly well acquainted with the plants and knows just what he is talking about. It contains chapters on raising plants indoors from seeds and cuttings, general care and management of plants in the window garden, and how to get really good results under ordinary conditions. This point of view is to interest the reader in the plants that can surely be grown well rather than to lead him to experiment wildly with a number of things that can only be successful once in a while. Illustrated. 5x7 inches. 240 pages. Cloth.

Net \$1.10

Plant Culture

By *George W. Oliver*. A working handbook of everyday practice for all who grow flowering and ornamental plants in the garden and greenhouse. The methods described are such as have been successfully practiced by the author during a many years' experience. The plants dealt with comprise those which are commercially handled by florists, gardeners and nurserymen. 5x7 inches. 193 pages. Cloth.....\$1.50

Roses and How to Grow Them

By many experts. All that is really necessary for the amateur rose grower to know in order that he may intelligently make a rose garden, select his varieties and grow the harvest of bloom, is told in this volume. In this book everything not directly to the point of practical rose growing for the American amateur is omitted. Illustrated. 5x7 inches. 189 pages. Cloth.

Net \$1.10

Ferns and How to Grow Them

By *G. A. Woolson*. This contribution to fern literature is designed simply as a practical work for the benefit of the amateur fern culturist. Technical terms have been eliminated as far as practicable; where it is not possible to omit them explanatory remarks follow. A synonymous list of the names of ferns best adapted for special

cultural uses is given. Illustrated. 5x7 inches. 156 pages. Cloth.

Net \$1.10

Lawns and How to Grow Them

By *Leonard Barron*. The only volume that has ever been written treating the making and maintenance of the ornamental lawn from a purely practical standpoint. Its purpose is to enable anyone to establish a respectable greensward in any sort of soil where grass can be made to grow. The whole formulæ for seed mixture for special soils and sites is given. Illustrated. 5x7 inches. 174 pages. Cloth. Net \$1.10

Daffodils, Narcissus and How to Grow Them

By *A. M. Kirby*. Complete directions for the growing of these most popular of spring bulbs written from the standpoint of American conditions. Of special value to the amateur. Illustrated. 5x7 inches. 235 pages. Cloth.

Net \$1.10

Water Lilies and How to Grow Them

By *H. S. Conard* and *Henri Hus*. The essential facts of water-lily culture are told in simple terms, together with principles of pond construction and management. Relative values of the different varieties in the various groups are given so that the amateur can make the choice of the kinds that will suit his conditions without having to indulge in time-consuming and costly experiments. Illustrated. 5x7 inches. 228 pages. Cloth..Net \$1.10

Cactus Culture for Amateurs

By *W. Watson*. Containing full and practical instructions for the successful cultivation of the cactus. This book is thoroughly complete in every detail and is embellished with many helpful and original illustrations. 5x7 inches. 250 pages. Cloth.....\$2.00

Familiar Flowers of Field and Garden

By *F. Schuyler Mathews*. Illustrated with 200 drawings by the author, and containing an elaborate Index showing at a glance the botanical and popular names, family, color, locality, environment, and time of bloom, of several hundred flowers. 5x7 inches. 300 pages. Cloth.....Net \$1.50

GREENHOUSE MANAGEMENT

A Manual for Florists and Flower Lovers on the Forcing of Flowers, Vegetables and Fruits in Greenhouses, and the Propagation and Care of House Plants

By **L. R. TAFT**, *Professor of Horticulture and Landscape Gardening, Michigan Agricultural College, and Author of "Greenhouse Construction"*

THE author has had unusual facilities for studying this entire subject practically as well as scientifically, and has here given the results, not only of his own experience, but also those of many of the most skillful experts in their respective specialties.

It treats of all the plants commonly cultivated by florists and amateurs, and explains in a thorough manner the methods that have been found most successful in growing them. Particular attention is paid to the growing of cut flowers, entire chapters being devoted to each of the leading crops, such as roses, carnations, chrysanthemums, violets, bulbs, smilax, ferns, orchids, etc.

The growing of fruits under glass is attracting the attention of commercial florists as well as amateurs, and the reader will find separate chapters devoted to the forcing of grapes, strawberries, peaches and other fruits. The forcing of vegetables also receives the attention it deserves, and the raising of lettuce, radishes, cucumbers, tomatoes, mushrooms, etc., is explained at length.

The care of house plants is also treated quite fully, with detailed directions for propagating, preparing the soil, potting, watering and every part of their proper management. A chapter is also given on bedding plants, as well as on ornamental grasses, flowering and foliage plants. Other chapters are devoted to the propagation of plants from seeds, cuttings, layers and by grafting and budding. Of special value to many will be the directions for treating plants when attacked by insects and fungi. The preparation of the soil, the use of various manures, composts and fertilizers, watering, ventilating, heating, and in fact every detail of the subject to which the work is devoted, receives careful and minute attention.



CONTENTS

The Forcing of Roses
The Carnation
The Chrysanthemum
The Violet
Bulbs and Their Culture
Tuberous Begonias
Orchid Culture
Azaleas
Calceolarias, Cinerarias and Primulas
Ferns, Smilax and Asparagus
Palms, Pandanus and Araucaria
Dracenas and Cordylines
Lettuce Forcing
Cucumbers, Tomatoes and Melons
Mushroom Culture

Asparagus and Rhubarb
Radishes, Carrots, Beets and Beans
Grape Growing Under Glass
Strawberry Growing Under Glass
Fruit Trees Under Glass
Management of House Plants
The Growing of Bedding Plants
Propagation of Plants by Seeds and Cuttings
Propagation by Layering, Grafting and Budding
Insects of the Greenhouse
Diseases of Greenhouse Plants
Insecticides and Their Preparation
Fungicides, Their Preparation and Use
Soil, Manures and Watering
Fuel—Coal, Oil and Gas

128 original and practical illustrations, 5x7 inches, 400 pages. Cloth. Price \$1.50

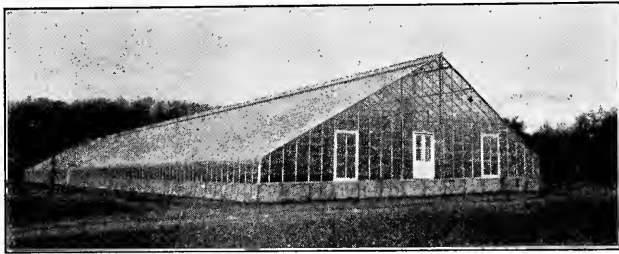
Greenhouse Construction

A Complete Manual on the Building, Heating, Ventilating and Arrangement of Greenhouses, and the Construction of Hotbeds, Frames and Plant Pits

By L. R. TAFT

Professor of Horticulture and Landscape Gardening, Michigan Agricultural College

THE immense quantities of vegetables and flowers now grown under glass for the winter markets of the large cities have given a great impulse to the building of forcing houses and beds, and many changes and improvements have been made in their original construction for the purpose of securing more sunlight, better heating and closer adaptation to plant needs. These are fully described and illustrated in this timely volume. The author has made at the Mich-



igan Experiment Station a careful comparative test of the various methods of building, glazing, ventilating and heating greenhouses, which he was able to do with scientific accuracy, by reason of his many years' ex-

perience in greenhouse management, and a large experience in greenhouse construction, together with his careful study of the methods employed by the leading flower and vegetable growing establishments in the larger American cities. Personal interviews and correspondence with leading florists, gardeners and builders of greenhouses have strengthened the reliability of every statement made in this valuable handbook. Greenhouses and conservatories, hotbeds and cold frames, forcing houses and pits, all receive full and detailed treatment. The lucid descriptions of each topic and the 118 diagrams and illustrations make every detail clear to both the amateur and professional gardener or florist, and enable the beginner to proceed without fear of loss from errors of construction or arrangement. Many of the illustrations are half-tone engravings from photographs of actual greenhouses and forcing establishments. This treatise is the only work published in America on greenhouse construction by practical American methods, and for the actual needs of American horticulture.

CONTENTS

Chapter I—History of Greenhouses
Chapter II—Different Forms of Greenhouses—
Even Span, Lean-to, Side-Hill
Chapter III—Three-Quarter Span Houses
Chapter IV—Location and Arrangement
Chapter V—Greenhouse Walls
Chapter VI—Construction of the Roof
Chapter VII—Combined Wood and Iron Construction
Chapter VIII—Iron Houses
Chapter IX—The Pitch of the Roof
Chapter X—Glass and Glazing
Chapter XI—Glazing—Methods and Materials
Chapter XII—Ventilators
Chapter XIII—Greenhouse Benches
Chapter XIV—Painting and Shading
Chapter XV—Greenhouse Heating

Chapter XVI—Pipes and Piping
Chapter XVII—Size and Amount of Piping
Chapter XVIII—Hot Water Heaters
Chapter XIX—Steam Heating
Chapter XX—Comparative Merits of Steam and
Hot Water
Chapter XXI—Heating Small Conservatories
Chapter XXII—Commercial Establishments
Chapter XXIII—Rose Houses
Chapter XXIV—Lettuce Houses
Chapter XXV—Propagating Houses
Chapter XXVI—Hotbeds
Chapter XXVII—Conservatories
Chapter XXVIII—The Arrangement of Green-
houses
Chapter XXIX—Glass Structures for Amateurs

Profusely illustrated, 5x7 inches, 218 pages. Cloth. Price, \$1.50

Beautifying Country Homes

A Handbook of Landscape Gardening

By J. WEIDENMANN

A Splendid Quarto Volume. Beautifully Illustrated with Numerous Fine Wood Engravings, with 17 Full-page and 7 Double-page Colored Lithographs of Places Already Improved.

FOR years the popular taste for landscape gardening and architecture has wonderfully advanced. In this work every builder on, or owner of, an eligible site, large or small, can find many valuable suggestions, as well as a great variety of exquisite plans to choose from. The work is prepared with careful judgment, and those who desire to make the most of it in the way of convenience and to increase their knowledge of landscape gardening are in need of this practical work. It furnishes minute instructions for the laying out of grounds and the planting of trees, their selection, the grouping of flowers, water ornamentation, rock work, and general improvement.

The chapter on "Improving New Places Economically" would be worth more than the cost of the book ten times to many persons. The whole is illustrated, not only by little sketches, but by a series of full-page lithographs of places which have been actually treated in accordance with these principles, with list of trees and shrubs and other useful suggestions.

CONTENTS

General Suggestions; Lawns; Seeding Down Lawns and Pastures; Top-Dressing Lawns; Drainage; Roads and Drives; Walks; Laying out Curved Lines for Walks or Roads; Practical Hints on Grading; Fences, Walls and Hedges; Trees and Shrubs; Grouping; Transplanting Trees and Shrubs; Flower Garden; Water Ornamentation; Rock Work; Tools Used in Laying Out Grounds; Improving New Places Economically; Arbitrary Calculation of Cost; Care and Keeping of Ornamental Grounds; Front Yards of City Lots; Hints on Burial Lots; and Plans of Improving Places.

Illustrated, 11x14 inches. Cloth. Price, \$10.00

Ornamental Gardening For Americans

A Treatise on Beautifying Homes, Rural Districts and Cemeteries.

By ELIAS A. LONG, Landscape Architect

THIS work was prepared with a view to supplying a plain and practical work on Ornamental Gardening at a moderate price. The first of the several parts into which the work is divided is devoted to materials of ornamental gardening. These, of course, largely consist of trees, shrubs and other plants, including the grasses, which are to give a finish to the work, by forming a carpet of verdure to set off all the rest. The descriptions of trees, etc., mainly have reference to their value in ornamental gardening, and are properly brief. Water, rocks and other natural materials receive proper treatment. In giving plans for the laying out or the improvement of places, the author avoids the too common mistake of providing only for large places. He recognizes the fact that the smallest front yard is capable of being treated tastefully or otherwise, and such limited areas receive their full share of attention. Many farms only need to have their natural features turned to good account to become highly ornamental, without interfering with their usefulness as farms. What is said on this subject is worthy of general attention.

The chapters on open squares in towns and villages, the planting of schoolhouse yards or grounds, as well as those belonging to various public buildings, etc., furnish suggestions which have a wide application, and are commended to all interested in village improvement.

The teachings of no part of the work are more needed than those relating to cemeteries. While in the beauty of our burial places we are, on the whole, far in advance of other countries, there is still, even in the older portions of the Union, abundant room for improvement.

The teachings on the subject of garden cemeteries are eminently sensible and practical.

Not the least useful portion of the book is that which suggests the work to be done in each month in order to have a large or small place in proper keeping.

The work is abundantly illustrated, and the instructions are so plain that they may be readily followed.

Illustrated, 5x7 inches, 390 pages. Cloth. Price, \$1.50

Landscape Gardening

A Treatise on the General Principles Governing Outdoor Art; with Sundry Suggestions for Their Application in the Commoner Problems of Gardening.

By F. A. WAUGH

PROFESSIONAL and amateur gardeners alike fail in their landscape gardening oftenest simply because they do not understand the fundamental principles involved. It is comparatively easy to give practical directions for doing certain work, but it is very difficult to make such directions fit a new set of conditions. Principles, however, apply everywhere alike. The treatment of these fundamental principles forms the keynote to this work. No such complete and careful analysis of principles was ever before presented in this connection. This analysis enables the reader to see the relation of each fact and principle discussed to all the rest, to appreciate its relative importance, and easily to remember the whole. Every paragraph is short, terse and to the point, giving perfect clearness to the discussions at all points. In spite of the natural difficulty of presenting abstract principles the whole matter is made entirely plain even to the inexperienced reader. The illustrations are mechanically and artistically very excellent. The principles here so carefully analyzed are of such broad application that the book will be useful to a large class of readers; not only to professional landscape gardeners, owners of home grounds, suburban residents, park and cemetery superintendents, teachers, but also to architects, landscape painters, photographers, and art lovers and students in general.

CONTENTS

PART I.
Chapter I.—The Art and the Artist.

PART II.

The Artistic Qualities of Landscape Composition.

Chapter II.—Unity.
Chapter III.—The Natural Style.
Chapter IV.—The Architectural Style.
Chapter V.—Color.
Chapter VI.—Character. Propriety.
Chapter VII.—Finish.

PART III.

Chapter VIII.—Entrances, Drives and Walks.
Chapter IX.—Water and its Treatment.
Chapter X.—The City or Suburban Lot.

Chapter XI.—The Ornamentation of Farm-yards.

Chapter XII.—The Amelioration of School Grounds.

Chapter XIII.—Something About Public Parks.

PART IV.

Chapter XIV.—A Select List of Trees.
Chapter XV.—The Best Shrubs.
Chapter XVI.—Hardy Perennials.
Chapter XVII.—The Indispensable Annuals.
Chapter XVIII.—Bulbous Plants.
Chapter XIX.—Climbers.
Appendix—Some Books on Landscape Gardening.

Profusely illustrated, 5x7 inches, 150 pages. Cloth. Price, 50 cents

Henderson's Picturesque Gardens and Ornamental Gardening

By CHARLES HENDERSON

THIS superb book occupies a unique position in American landscape gardening literature, in that it teaches by obvious demonstration instead of by descriptions and precepts. The author's leading aim has been to apply the system of nature study to the garden and landscape art as well as to the field and forest. To most people who desire to beautify their grounds and make them as attractive as conditions permit, mere directions are meaningless, but when they see such accurate and lifelike pictures of what has been done by others similarly situated, as are presented in this work, they will have no difficulty in deciding which to adopt or imitate.

The volume contains a grand array of magnificent half-tone engravings, illustrating the prettiest and most famous gardens and parks of the world, vividly portraying lawn, garden and landscape effects, plant and tree groupings, decorative bedding, herbaceous gardens and borders, formal gardens, lawn gardens, Italian, Japanese and English gardens, rock gardens, wild gardens, bog gardens, subtropical gardens, sunken and terrace gardens, rosariums, hardy ferneries, arches, columns, festoons, etc., picturesquely draped with vines, as well as numerous other garden embellishments.

Each illustration is pleasingly described and instructively explained, so that the reader will learn, at a glance, the names and special characteristics of the trees, shrubs and plants which have been employed in producing the effects of the scenes before him. The book is beautifully and artistically gotten up in every detail.

Illustrated, 9 3-4x12 inches, 60 pages. Cloth. Price, \$2.00

The Landscape Beautiful

A Study of the Utility of the Natural Landscape, Its
Relation to Human Life and Happiness,
With the application of these Principles
in Landscape Gardening, and
in Art in General

By FRANK A. WAUGH

Professor of Horticulture and Landscape Gardening, Massachusetts Agricultural College, Amherst, Mass.

HERE is a book out of the ordinary. There have been many books put out during recent years on nature study, gardening and rural pleasures, but nothing at all like this one. Most of the books leave the reader just where they find him. They are not constructive. They may give information,—or sometimes misinformation,—but there are no ideas essentially fresh. The present work sets forth a whole new system of nature study and nature appreciation.

The principal argument is for the beauty and the utility of the natural landscape. The author insists, with many persuasive pleas, that the love of the beautiful is a large part of all men's lives, and that the enjoyment of beauty is one of the great experiences in every life. He goes on to show that the landscape is the chief store of beauty available for the majority of common people. The art galleries are almost unknown to the world at large, but real landscape pictures are everywhere. The reader will surely be surprised when he has the facts pointed out to him. Here he will see for the first time how truly useful the landscape is in his own personal every-day business.

But Professor Waugh, who is an experienced teacher, and who prepared some of these essays originally for the use of his classes, is by no means content at the mere statement of these facts. He goes on to give in detail some very practical methods by which the landscape can be taught by teachers, studied by pupils and enjoyed by all. These methods have been thoroughly tested in colleges, and in the common schools, and have proved a decided success wherever introduced.

Landscape gardening necessarily comes in for liberal treatment. The works of the landscape gardener should show the landscape at its best. This book shows just what has been accomplished in this field, especially in America. It offers, in fact, the first critical study of American landscape architecture ever attempted.

The literary style of the book is far above the usual level, reminding one sometimes of J. C. Van Dyke, but oftener of Thoreau.

It is a strictly popular work, and good for everybody. It will prove especially valuable to all teachers, whether in school or college, to nature lovers, to artists and art students in every line, and to landscape architects. The scope of the work may be better judged from the following list of the chapter headings:

- | | |
|---|---|
| 1. On the Relation of Landscape to Life | 10. On American Landscape Gardeners |
| 2. On the ministry of Trees | 11. On American Masterpieces of Landscape Architecture |
| 3. On Some Other Elements of Landscape | 12. On the Improvement of the Open Country |
| 4. On Looking at the Sky | 13. On the Ownership of Scenery |
| 5. On the Weather | 14. On the Decorative Use of Landscape |
| 6. On the Art Which Mends Nature | 15. As to the Landscape in Literature |
| 7. Concerning the American Landscape | 16. On the Beauty of Landscape Psychologically Considered |
| 8. On American Landscape Gardening | |
| 9. As to the Field of Criticism | |
17. Suggesting Some Practical Applications

The illustrations are also a very attractive feature, numbering 49 full-page engravings from landscapes by the leading photographic artists of America. The text is printed from large, clear type, with wide margins, on an extra quality wove deckle-edge paper, and is beautifully bound in cloth and boards, gilt tops, with handsome gold side and back stamping, and will meet the most exacting taste as an example of artistic book design.

Size 6¼x8¾, Cloth and Boards, Gilt top, 336 pages. Net, \$2.00

Practical Forestry

A Treatise on the Propagation, Planting, and Cultivation, with a Description and the Botanical and Popular Names of all the Indigenous Trees of the United States, both Evergreen and Deciduous, with Notes on a Large Number of the Most Valuable Exotic Species.

By ANDREW S. FULLER

Author of "Propagation of Plants," "Grape Culturist," "Small Fruit Culturist," Etc.

IN HIS Preface, the author says: "Many a time during my life have I felt the need of some one volume of moderate size, containing the names and descriptions, however brief the latter might be, of all the trees indigenous to the United States. Having waited in vain for the appearance of such a book, I have attempted to write one myself, with the hope that it will be of service, not only to those who may desire to raise forest trees for pleasure and profit, but to others, who, like the author, may occasionally visit different parts of the country, and need some such guide that will help them to call to mind the names, as well as to assist in identifying the different species of trees to be found in our forests. I have written it for those who are not supposed to have given the subject of forestry any special attention, and for this reason purposely avoided using any greater number of scientific and unfamiliar terms than was actually necessary in describing the various species and varieties. Furthermore, at the suggestion of the publishers, I have been as brief as possible, in order to make a book that can be sold at a price within the means of all, and one that will not deter even the summer tourist who is about to spend a few days or weeks in the country from dropping a copy into his gripsack before leaving home."

CONTENTS

- CHAPTER I.—Influence of Forest and Climate: Forests and Streams. Trees and Shelter. Forests and Insects.
- CHAPTER II.—The Characteristics of Trees: The Movement of Sap in Trees. The Buds in Trees.
- CHAPTER III.—Raising Trees from Seed: Preparing a Seed Bed.
- CHAPTER IV.—Transplanting Seedlings.
- CHAPTER V.—Budding and Grafting: Budding. Grafting Deciduous Trees.
- CHAPTER VI.—Grafting Conifers.
- CHAPTER VII.—Coniferae from Cuttings: Layers.
- CHAPTER VIII.—Deciduous Trees from Cuttings: Propagation by Layering.
- CHAPTER IX.—Seedlings of Coniferae: Sowing the Seeds. Evergreens from the Forests. Season for Transplanting.
- CHAPTER X.—Pruning Forest Trees: Time to Prune. Pruning Evergreens. Implements Used in Pruning.
- CHAPTER XI.—The Best Time to Cut Timber.
- CHAPTER XII.—Importance of a Supply of Wood.
- CHAPTER XIII.—Preservation of Forests; Management of Forests.
- CHAPTER XIV.—Establishing New Forests.
- CHAPTER XV.—Forest Trees.
- CHAPTER XVI.—Evergreen Trees.
- CHAPTER XVII.—Coniferae or Cone-Bearing Trees.
- CHAPTER XVIII.—Additional List of Coniferae. Trees not Generally Known. Additions and Corrections.

Illustrated, 5x7 inches, 349 pages. Cloth. Price, \$1.50

Forest Planting

By H. NICHOLAS JARCHOW

A TREATISE on the care of timber lands and the restoration of denuded woodlands on plains and mountains. This publication is a valuable contribution to our knowledge of forest planting, which in this country is just beginning to receive the attention which its importance demands. The reckless destruction of our magnificent woods makes it not only necessary that the remaining natural forests may be preserved, but that the cleared woodlands may be replanted and the original forest covering restored. The author believes that it is a much better and cheaper policy to preserve our natural forests than to utterly destroy them, and afterward to create such artificial forests as European countries find it necessary to maintain. The author has fully described those European methods which have proved to be most useful in maintaining the superb forests of the old world. This experience has been adapted to the different climates and trees of America, full instructions being given for forest planting on our various kinds of soil and subsoil, whether on mountain or valley. There is no other publication which covers this field, and the work is destined to become the standard authority on the maintenance of forests.

Illustrated, 5x7 inches, 250 pages. Cloth. Price, \$1.50

Insects and Insecticides

A Practical Manual Concerning Noxious Insects and the Methods of Preventing Their Injuries.

By CLARENCE M. WEED, D.Sc.

THE most generally useful handbook on noxious insects available to American farmers. It covers the whole field of insect pests very thoroughly and is specially valuable for its complete and up-to-date methods of fighting insects. The work is thus intensely practical.

It illustrates and describes all the important insect pests and goes into great detail in describing remedies for them and methods of preventing their injuries. Great progress has been made in the use of insecticides during the past few years, all the results of which are embodied in this volume. Unlike previous works on entomology, which frequently have been noted for the fullness with which they describe insects and their poverty of remedies or preventives for the same, Prof. Weed's work excels in practical directions for applying insecticides that have proven to be of real efficiency. We are sure that any farmer or gardener who buys this book will consider the money a splendid investment, for the application of any one of the remedies recommended for important pests will save many times the cost of the work. It answers all the questions about insects and insecticides that will come up at any time during the year, and the book is therefore indispensable.

CONTENTS

- | | |
|--|---|
| PART I—Insects Affecting the Larger Fruits. | PART IV—Insects Affecting Vegetables. |
| PART II—Insects Affecting Small Fruits. | PART V—Insects Affecting Cereal and Forage Crops. |
| PART III—Insects Affecting Shade Trees, Ornamental Plants and Flowers. | PART VI—Insect Pests of Domestic Animals and the Household. |

Profusely illustrated, 5x7 inches, 336 pages. Cloth. Price, \$1.50.

Insects Injurious to Vegetables

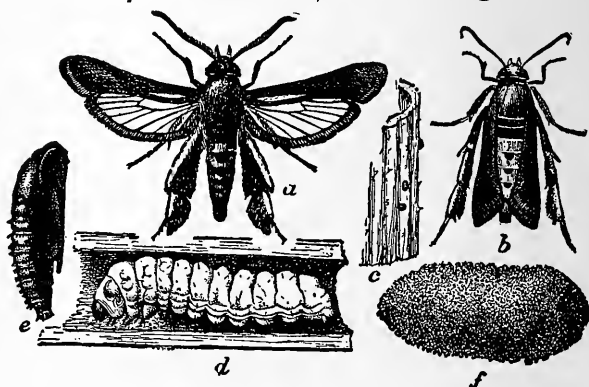
By F. H. CHITTENDEN, Sc.D.

United States Department of Agriculture

A COMPLETE, practical work, giving descriptions of the more important insects attacking vegetables of all kinds, with simple and inexpensive remedies to check and destroy them, together with timely suggestions to prevent their recurrence. A ready reference book for truckers, market gardeners, farmers, as well as others who grow vegetables in a small way for home use, a valuable guide for college and experiment station workers, schools, teachers and others interested in entomology or nature study.

The book embodies the life work of Dr. Chittenden, the world's best authority on

insects injurious to vegetables. It is just the book every farmer should have. The information contained in this volume is worth many times its price, and cannot be duplicated elsewhere. If you want to know how to protect your crops from the ravages of these pests send for this book. It will also be just as useful to teachers and students. No library will be complete without it. For classroom reference it is an indispensable guide, and every schoolroom library should have it on its shelves. For grange libraries it will also prove equally useful. No book on the subject has ever been so well arranged. The insects are discussed and illustrated under the various crops they attack. It is easy, therefore, for anybody to identify the creature being dealt with, find the remedy and apply it.



Profusely illustrated, 5 1-2x8 inches, 262 pages. Cloth. Price, \$1.50

Economic Entomology

By *John B. Smith*, professor of entomology in Rutgers college. The chief object of the author in writing this book has been to give the agriculturist and student of the economic entomology that basic knowledge that enables him to recognize the nature of the insects he finds causing injury, or makes it possible to decide what sort of remedies should be applied. Enough of the structure is described to show how they are built up, and all the different details are referred to, so that the reader may recognize the group to which a specimen belongs. Part I is devoted to the structure and classification of insects. Part II to the general classification of the insect world. Part III to insecticides, preventives and machinery. Illustrated. 5x8 inches. 481 pages. ClothNet \$2.50

Insects Injurious to Fruits

By *Prof. William Saunders*. A work of great value to all fruit growers, written by a man of science as well as a practical agriculturist, and is the result of careful and minute observation and experience. It treats of the large variety of insects which infest our orchards, their modes of operations, and contains careful directions as to the best means of destroying them. 440 illustrations. 5x7 inches. 436 pages. Cloth\$2.00

Moths and Butterflies

By *M. C. Dickerson*. This will undoubtedly prove the most popular book of its kind which has appeared for a reasonable price. The author's intimate knowledge of her subject, her thoroughly popular and entertaining style of writing, and her skill with the camera and pencil are some of the qualities that will commend the book to all observers of out-of-door life. The illustrations, which number nearly 300, have been prepared by the author especially for this book. Large 8vo. Cloth. 344 pages.....Net \$2.00

Injurious Insects of the Farm and Garden.

By *Mrs. Mary Treat*. It is not the object of this volume to teach the science of entomology. It is written to group together the injurious insects, with fine illustrations of the species, so that the cultivator may see at a glance his enemies, and learn the known methods of repelling or destroying them. However, the leading points regarding their general structure and changes are fully explained. The author, as an original investigator, has

added much to our knowledge of both plants and insects. This book is one of the most valuable popular works on Insects Injurious to Garden Vegetables; Root Crops and Indian Corn; Grains and the Grass Crop, including Clover; Fruit Trees; Small Fruits; Insects of Flower Gardens and Greenhouse; The Rocky Mountain Locust; Beneficial Insects. Illustrated. 5x7 inches. 296 pages. Cloth.....\$1.50

Insects Injurious to Staple Crops

By *E. Dwight Sanderson*. The author has been impressed by the fact that for the control of the most of the worst insect pests of our staple crops, the farmer must depend largely upon general methods of farm practice. It is, therefore, essential that he have a correct knowledge of the pests to be combated. Toward this end each insect is treated comprehensively as to life history, habits, and remedies, yet without being too exhaustive or technical. The principal chapters are devoted to the general farm practices against injurious insects; beneficial insects; insects injurious to grains, grasses, wheat, Indian corn, clover, cotton, tobacco, potato, sugar beet, the hop plant, weevil in grain; insecticides, etc., etc. Illustrated. 5x7 inches. 295 pages. Cloth.....\$1.50

Injurious Insects and the Use of Insecticides

By *Frank W. Sempers*. The author makes no attempt to describe scientifically the numerous pests of the farm and garden, but confines descriptions to those distinguishing characteristics in form, color, habits, methods of increase and transformation, which may be of service to the farmer in identifying his enemies and in compassing their destruction. Illustrated. 5x6 inches. 216 pages. Paper.....\$0.40

The Spraying of Plants

By *E. G. Lodeman*. A succinct account of the history, principles and practice of the application of liquids and powders to plants for destroying insects and fungi. Illustrated. 5x7 inches. 400 pages. Cloth..Net \$1.25

Spraying Crops

By *C. M. Weed*. A treatise explaining the principles and practice of the application of liquids and powders to plants for destroying insects and fungi. Illustrated. 140 pages. 5x7 inches. Cloth\$0.50

Fumigation Methods

A timely up-to-date book on the practical application of the new methods for destroying insects with hydrocyanic acid gas and carbon bisulphid, the most powerful insecticides ever discovered. An indispensable book for farmers, fruit growers, nurserymen, gardeners, florists, millers, grain dealers, transportation companies, college and experiment station workers, etc.

By WILLIS G. JOHNSON

Formerly professor of entomology and invertebrate zoology at the Maryland agricultural college and state entomologist, author of many special reports on economic topics, and late associate editor American Agriculturist weeklies.



NOTHING of the kind has ever been printed before. It embodies years of careful research and practical application by the author, as well as the tests and experiences of others from all parts of the world. The fruit, nursery, floral and grain industries are confronted on every side with hordes of insect pests which threaten their very foundation. This important work tells just what to use and how to apply it to save serious losses from insects. The author has presented his subject in a popular style, free from technicalities.

Specific and minute directions are given for making and applying hydrocyanic acid gas from every standpoint. The Physiological effects upon animal and plant life are fully illustrated and discussed. Six chapters are devoted to orchard fumigation, including the construction and management of all kinds of apparatus devised and successfully used. In three chapters on nursery fumigation, the construction, management and methods of preparing young trees for treatment are given. The destruction of insects in greenhouses, mills, elevators, granaries, dwellings, ships, cars and other inclosures can be easily and cheaply accomplished by following the directions given. Other chapters contain the opinions and methods of experts from every part of the world where the gas is used. The regulations of foreign governments regarding the importation of American plants, trees and fruits are described. A most useful part is devoted to the use of carbon bisulphid for the destruction of animal life below the surface of the ground, stored grain or other materials, and in places where hydrocyanic acid gas cannot be used.

Fumigation Methods should be in the hands of every horticulturist and nurseryman as well as florists and others engaged in the propagation and distribution of plants in all parts of the world. Transportation companies, millers, grain dealers and brokers will find it the most careful and complete guide ever published. As a reference book on the subject of fumigation, college and experiment station workers as well as others engaged in scientific pursuits will find it useful and practical in every respect. Every detail in connection with apparatus has been fully illustrated and each chapter is practically a monograph on the topic presented.

83 illustrations. 5x7 inches, 313 pages. Cloth. Price, \$1.00

Farmer's Cyclopedia of Live Stock

By EARLY VERNON WILCOX Ph.D., and CLARENCE BEAMAN SMITH, M. S.

Assistant Editors in the Office of Experiment Stations, United States Department of Agriculture

A NEW BOOK ON ANIMAL HUSBANDRY IN AMERICA

THIS is the greatest, most comprehensive and finest illustrated work on live stock raising ever published in this or any other country.

Invaluable to Stock Breeders, Dairymen, Farmers, Teachers and Students

The work is intended as a reference book for stockmen, farmers, students and teachers. In it the actual farmer finds guidance for improved practice. The intending stockraiser finds help in deciding his line of operations. The teacher finds a basis for his lectures and other class room work in Animal Industry. The student readily finds what is known and problems for future study. The general public finds reliable information on the methods of feeding, breeding and care of farm animals, and the treatment of animal diseases, the preparation and curing of meats and other animal products, dairy farming and all the business features of the stock industry.

TABLE OF CONTENTS

Each Part An Authoritative Treatise

Part I. is devoted to general considerations and principles under the following heads: The Classification and Origin of Domestic Animals—The Anatomy and Physiology of Domestic Animals—Animal Breeding—Principles of Stock Feeding—Farm Hygiene—Diseases of Live Stock—Importance of Stock Farming in the Preservation of Soil Fertility and the Utilization of All Farm Crops—Systems of Stock Farming—Live Stock Associations—Institutions—Expositions and Fairs—Transportation and Marketing of Live Stock—Slaughtering and Curing of Meats—Refrigeration of Meats and Other Animal Products—Inspection of Meats and Milk as Related to Animal Industry.

Part II. deals specifically with each of the different classes of Farm Animals, Horses and Mules, Beef Cattle, Dairy Cattle, Swine, Sheep and Goats, Poultry, including Chickens, Ducks, Geese, Turkeys, Guineas, Squabs, with a miscellaneous chapter on all minor animals of more or less economic importance, such as Game, Fish, Cat, Dog, Peacocks, Swans, Catalo, Water Buffalo, Camels, etc.

Colored Plates and Illustrations

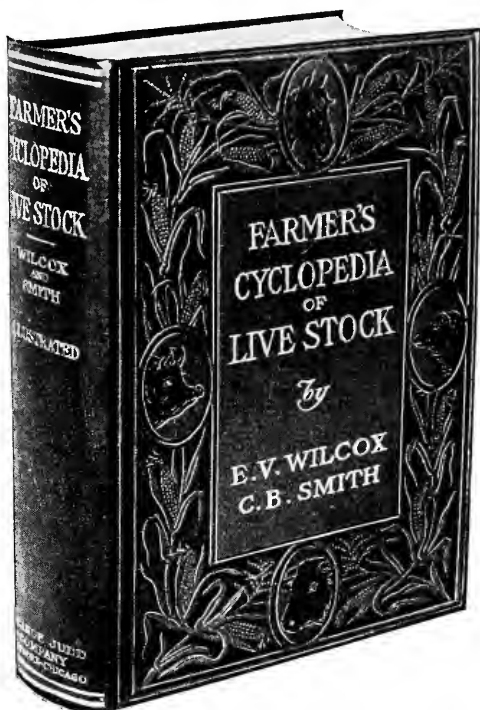
A marked feature of this work is the exclusive character of its many superb illustrations. The book also contains a series of five (lithographed in colors) anatomical and physiological models showing in detail the exact location and appearance of all the muscles, bones, arteries, veins, internal organs and external conformation of Cattle, Horses, Sheep, Hogs and Poultry. These were especially prepared for this volume at great cost, and appear for the first time. The models are entirely new, and are original, authoritative, and comprehensive.

They add the knowledge which has heretofore been omitted from books of this character, the very information most sought. They will therefore prove of greatest value to everyone—teacher, student, stockman, farmer or general reader.

Work Entirely New and Well Indexed

The work here offered is fresh in every detail, and so thoroughly indexed under common and scientific names that every topic can be easily found. The book is unique in that it combines in one volume, not only complete directions for the breeding, handling, feeding and care of farm animals, but an exclusive exhaustive account of the diseases affecting each, and of the production, preservation and inspection of all animal products, like fresh and cured meats, sausages, ham, bacon, milk, cream, butter, eggs, cheese and the like. The book contains 768 royal octavo pages (9 1-2x7 inches); beautifully printed on superior paper, type large, clear and easily read, and the bindings are all that the most fastidious would possibly desire.

INTRODUCTORY PRICE. Cloth, handsome and durable, gold stamping, \$4.50. Half Morocco, with cloth sides and leather corners, very sumptuous, \$5.50



The Science and Practice of Cheese-Making

A Treatise on the manufacture of American Cheddar Cheese and some other varieties; intended as a textbook for the use of dairy teachers and students in classroom and workroom; prepared also as a handbook and work of reference for the daily use of practical cheese-makers in cheese-factory operations.

By LUCIUS L. VAN SLYKE, Ph.D.

Chemist of the New York Agricultural Experiment Station and

CHARLES A. PUBLOW, A.B., M.D., C.M.

Associate Professor of Dairy Industry in the New York State College of Agriculture at Cornell University

THE publishers have realized for some time the existence of an urgent call for a book on cheese-making which should be more than a mere recipe book. They are, therefore, gratified at being able to announce, in response to this demand, the publication of a work which represents both scientific and practical sides of cheese-making and which, in respect to authorship, has been prepared under unusually favorable auspices. Not only are the operations of cheese-making described in a clear, systematic and practical manner, but special attention is given to making prominent the reasons for each step.

During the past seventeen years, there has been great activity in the investigation of the cheese problems peculiar to America, but the results of this extensive work have been widely scattered through the reports of experiment stations and government departments. All this great mass of material has been carefully digested for this book and now for the first time becomes readily available to dairy students and teachers.

Dr. Van Slyke is well known as the author of our book, "Modern Methods of Testing Milk and Milk Products," which from the start has met with a phenomenal success. Three years ago he was selected by the Office of Experiment Stations, U. S. Department of Agriculture, to prepare a syllabus of lectures for a course in cheese-making, which was published as Bulletin No. 166. Dr. Van Slyke's reputation in connection with cheese-making has come mainly from the extensive investigations which have been carried on by him at the New York Agricultural Experiment Station at Geneva since 1890. These investigations have covered nearly every phase of interest and have been especially thorough in studying the chemical relations of milk and cheese.

Dr. Publow is pre-eminently qualified by training and experience to present the subject of cheese-making in its practical aspects. For six years he was a prominent and successful manufacturer of cheese in Ontario, Canada; for four years he held the position of Dairy Instructor and Sanitary Inspector for the Ontario Department of Agriculture, and for one year he was expert judge of all the butter and cheese going through Montreal to foreign markets.

We believe that this new book will be promptly recognized as the standard authority in the field which it covers. Dairy teachers, students and cheese-makers will appreciate that the work is an unusual contribution to dairy literature, containing a surprisingly large amount of new material, systematically arranged and clearly presented.

The following table of contents will serve to give some idea of the arrangement, scope, completeness and general character of this book.

- | | |
|--|--|
| I.—The Care of Milk for Cheese-Making. | XVII.—Milk Constituents and Yield of Cheese. |
| II.—Preliminary Steps in Making Cheddar Cheese. | XVIII.—Methods of Calculating Yield of Cheese. |
| III.—Operations from Cutting Curd to Salting. | XIX.—Milk Constituents in Relation to Composition of Cheese. |
| IV.—Operations from Salting Curd to Removal from Press. | XX.—The Composition of Cheese in Relation to Quality. |
| V.—Moisture and Acidity in Curd and Cheese: Conditions, Effects and Control. | XXI.—Methods of Paying for Milk for Cheese-Making. |
| VI.—Modifications of Cheddar Process and Miscellaneous Subjects. | XXII.—The Relations of Micro-Organisms and Enzymes to Cheese-Making. |
| VII.—Care, Shipment and Sale of Cheese. | XXIII.—The Ripening of Cheese. |
| VIII.—Commercial Qualities of Cheddar Cheese and Methods of Judging. | XXIV.—Chemical Changes in Cheese-Ripening. |
| IX.—Cheese-Factory Construction. | XXV.—Causes of Chemical Changes in Cheese-Ripening. |
| X.—Cheese-Factory Equipment. | XXVI.—Commercial Relations of Cheese-Ripening. |
| XI.—Defects in Flavor. | XXVII.—Methods of Making Different Varieties of Cheese. |
| XII.—Defects in Body and Texture. | XXVIII.—Methods of Testing Used in Cheese-Making. |
| XIII.—Defects in Color and Finish. | XXIX.—Cheese-Factory Organization and Management. |
| XIV.—The Constituents of Milk. | XXX.—The Literature of Cheese-Ripening |
| XV.—Conditions Affecting Proportions of Constituents in Milk. | |
| XVI.—Functions of Milk Constituents in Cheese-Making. | |

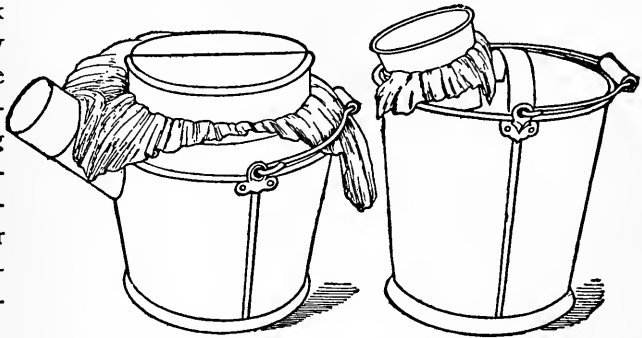
Illustrated, 5x7 inches, 480 pages. Cloth. Net, \$1.75

Practical Dairy Bacteriology

A complete exposition of important facts concerning the relation of bacteria to various problems related to milk. A book for the classroom, laboratory, factory and farm. Equally useful to the teacher, student, factoryman, and practical dairyman.

By DR. H. W. CONN, Wesleyan University

THE development of dairy bacteriology has been very rapid in the last ten years. Beginning first as a subject of scientific interest only, the study of the bacteria in milk has proved to be of vital importance, not only to the dairyman, but to all persons who have an interest in public health problems. In the last few years there has developed in our large cities a keen interest in the bacteria of the city milk supply. Today there is no more important subject affecting the milk producer, distributor or consumer than their relations to the bacteria of milk,



and public health officials are also recognizing the subject as one of which they must take cognizance. All dairy students to-day must learn the facts which are known, and no dairy course is complete without a full consideration of this subject.

This book is designed to meet this growing demand. It consists of two parts. The first is a general discussion of all phases of bacteria associated with milk products and their relation to public problems. The second is an outline of a series of experiments for students, so designed that one who has been through them will not only have a practical knowledge of bacteria and bacteriological methods, but will be able to carry out all the work of bacteriological analysis of milk products that may be needed either in a dairy, a creamery, or a sanitary laboratory. The book is thus especially adapted to meet the needs of students in dairying, or any to whom a practical knowledge of bacteriological methods as relating to milk is of value. The book is strictly up-to-date and contains the most recently determined facts in the newest methods. It represents the rounding out of the ripe experience of Dr. Conn. No classroom, laboratory or library will be complete without it.

Fully illustrated, 5 1-2x8 inches, 340 pages. Cloth. Price, \$1.25

First Lessons in Dairying

By HUBERT E. VAN NORMAN

Professor Dairy Husbandry, School of Agriculture, Pennsylvania State College

THIS splendid little book has been written from a practical point of view to fill a place in dairy literature long needed. It is designed primarily as a practical guide to successful dairying, an elementary textbook for colleges and for use especially in short course classes. It embodies underlying principles involved in the handling of milk, delivery to factory, shipping station and the manufacture of butter on the farm. It is written in a simple, popular way, being free from technical terms and is easily understood by the average farm boy. It is adapted to meet farm conditions, explains reason why, covers the relationship of bacteriology and chemistry, the foundation sciences of modern dairying, besides treating fully ordinary conditions found on the farm and in the dairy. In fact, it answers the questions in detail which confront the practical dairyman daily. It covers those necessary details regarding secretion of milk, methods of cooling, creaming, cream ripening, churning, turning, working and packing the finished product for market. Practical details involved in the marketing of milk and cream are given.—The use of the Babcock test is illustrated and fully explained. The book is just the thing for the everyday dairyman and should be in the hands of every farmer in the country.

Illustrated, 5x7 inches, 100 pages. Cloth. Net 50 Cents

PROFITABLE DAIRYING

A Practical Guide to Successful Dairy Management

By C. L. PECK

THE introductory chapter of this book consists of a minute description of the far famed model dairy farm of Rev. J. D. Detrich, near Philadelphia, Pa. Never perhaps has the description of any farm caused a more profound sensation in the agricultural world. This article, which originally appeared in *American Agriculturist*, is out of print and no longer obtainable; it is reprinted herewith by numerous requests. On this farm of 15 acres which 20 years ago could not maintain one horse and two cows, there were kept 27 dairy cattle, in addition to two horses. All the roughage, litter, bedding, etc. necessary for these animals was grown on these 15 acres, more than most farmers could accomplish on 100 acres. A description of this plain, unpretentious little farm sounds almost like a fairy tale, and yet it is nothing but plain, clear facts of the truth of which anyone can convince himself.

The author of this volume is a well known, practical dairyman, who has made dairying a marked success and who, in this volume, gives such practical hints on dairying as will enable the reader to improve his methods, better his conditions and more nearly attain that point in business known as success. The treatment of the entire subject is thoroughly practical in every detail, being principally a description of the methods practiced by the author, and which after a lifetime of experience and study he has found most advantageous. Yet the scientific bearing on the subject has not been neglected, as the author has availed himself of all the most recent discoveries and advancements in science, thus making the work authoritative, practically as well as scientifically.

Separate chapters are devoted to the importance of the dairy, physiology and secretion of milk, future of dairying, dairy breeds, selection of a breed, the dairy cow and the dairy sire, dairy standard, care and feed of the dairy cow, care of the calf, milking, when to have cows come fresh, feeds and their value, care of the milk, device for ripening cream, churning, marketing dairy butter, the dairy barn, silo and silage, miscellaneous topics, necessary appliances, general hints, dairy remedies.

Illustrated, 5x7 inches, 174 pages. Cloth. Price, 75 Cents

The Business of Dairying

By CLARENCE B. LANE, B.S.

Assistant Chief Dairy Division U. S. Department of Agriculture

THE author of this practical little book is to be congratulated on the successful manner in which he has treated so important a subject. It has been prepared for the use of dairy students, producers and handlers of milk and all who make dairying a business. Its purpose is to present in a clear and concise manner various business methods and systems which will help the dairyman to reap greater profits.

While much has been written on the subject of dairying, there is a lack of simple, practical, common-sense information. This book meets the needs of the average dairy farmer and if carefully followed will lead to successful dairying. It may also be used as an elementary textbook for colleges and especially in short course classes.

The average farmer is not a business man. There is no reason why he should not be. The book aims to teach the dairy farmer that his occupation must be conducted on business principles and that in his business, as in any other, an accurate account of receipts and expenditures must be kept in order to determine where profits are made or losses occur. Simple methods for keeping these records and accounts of all kinds needed on the farm have been presented and in as many instances as possible *the forms and methods themselves* have been used instead of descriptions of them.

No book has been written which touches on so many practical phases of dairying.

In Part I just enough is said about "The Soil" to show the dairymen how to keep a record of the income and outgo of the elements of fertility and to maintain productiveness. In Part II are discussed various systems of cropping. A succession of soiling crops is outlined in detail for 50 full-grown animals for one year.

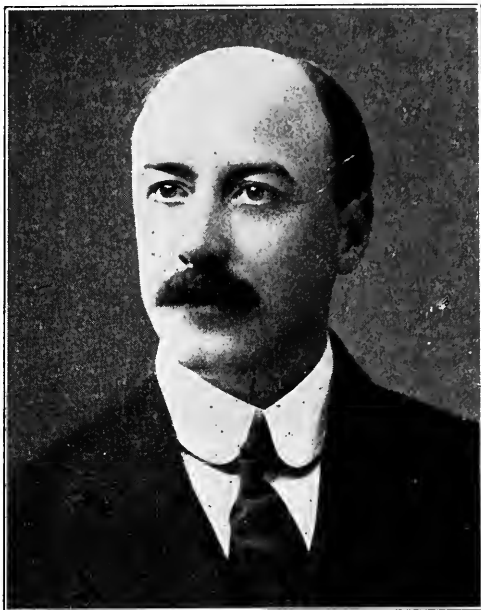
Part III tells the dairyman how to select and maintain his herd, keep proper milk records and determine profits and losses.

In Part IV the intricate problem of feeding the herd is solved in so simple a manner that the dairyman cannot fail to put it into practical use.

Under Part V dairy products are discussed and the best methods of handling them, from cow to consumer. Particular attention is given to the market milk producer and to problems in sanitation. The importance of winter dairying is also given attention.

Part VI. Sales. Business methods in retailing milk, simple forms of accounts, etc., are carefully described, also the comparative profits from the sale of different dairy products. Advertising and bookkeeping on the farm are also treated.

Part VII deals with many subjects which affect the dairyman's profits.



Illustrated, 5x7 inches, 300 pages. Cloth. Net, \$1.25

A Handbook for Farmers and Dairymen

By *F. W. Woll*. This book teaches you how to balance rations, test cows, reckon percentages of fat, compound fertilizers; in fact, every variety of farm knowledge has had the kernel picked out and placed in a dainty dish before you. Illustrated. 375 pages. Cloth\$1.50

Principles and Practice of Butter Making

By *G. L. McKay* and *C. Larson*. A treatise on the chemical and physical properties of milk and its components; the handling of milk and cream and the manufacture of butter therefrom. Illustrated. 6x9 inches. 351 pages. ClothNet \$1.50

A B C in Cheese Making

By *J. H. Monrad*. A short manual for farm cheese makers in cheddar, French cream cheese, Neufchatel and skim-milk cheese. This, the second edition, is written especially for the thousands of farmers' wives and daughters who cannot attend a dairy school but who are eagerly wishing to make palatable and nutritious cheese for the home table and for the village market. It is one of the best books published on home cheese making. Illustrated. Paper\$0.50

Clean Milk

By *S. D. Belcher, M. D.* In this book the author sets forth practical methods for the exclusion of bacteria from milk, and how to prevent contamination of milk from the stable to the consumer. Illustrated. 5x7 inches. 146 pages. Cloth.....\$1.00

Milk and Its Products

By *Henry H. Wing*. A treatise upon the principles underlying modern dairy practice, for the use of the dairyman as well as the dairy student. In a condensed, yet complete, manner the author treats upon the secretion, composition, testing, ferments and fermentation, marketing, separation and ripening of cream, churning, finishing and marketing butter, milk for cheese making, cheese making and varieties of cheese, by-products of the dairy, butter and cheese factories, statistics and economics of the dairy industry. Illustrated. 5 x 7 inches. 280 pages. Cloth..Net \$1.50

A Dairy Laboratory Guide

By *H. E. Ross*. While the book is in-

tended primarily for use in the laboratory it should be of value to the practical dairyman. The time has come when the successful dairyman must study his business from a purely scientific point of view, and in this book the scientific principles, upon which dairy industry is based, are stated clearly and simply, and wherever it is possible these principles are illustrated by practical problems and examples. 90 pages. 5 x 7 inches. Cloth.....Net \$0.50

Keeping One Cow

Edited by *M. C. Weld* and *Manly Miles*. This volume is designed to show the utility of every family—where it is at all practical—keeping its own cow. Soil, crops, stables, care of manure, soiling, care of cow and calf, and every conceivable point connected with the subject, are treated of under a score of different circumstances, and bring to the reader a variety of methods from which to select. As the testimony given is that of the actual experience of practical men the value of this work to those who keep or intend to keep one cow is at once apparent; and the problem how to get the best possible returns from the least possible portion of the land, through the agency of one cow, is clearly solved. Illustrated. 5x7 inches. 136 pages. Cloth..\$1.00

Principles of Modern Dairy Practice

By *G. Gotenfelt*, translated by *F. A. Woll*. This valuable book gives all that is worth knowing concerning the most recent discoveries and the methods now in vogue among the successful dairymen of the Scandinavian nationalities. The reputation attained by the dairy products of these countries in Europe renders their work along this line of great value to progressive American dairymen. Illustrated. 5x7 inches. 285 pages.....\$2.00

The Dairyman's Manual

By *Henry Stewart*. A practical treatise on the dairy, including the selection of the farm, the cultivation of crops, the selection and breeding of cows, management of the milk, making butter and cheese, and the treatment of diseases incident to dairy cows. Illustrated. 5 x 7 inches. 475 pages. Cloth.....\$1.50

Modern Methods of Testing Milk and Milk Products

A Handbook Prepared for the Use of Dairy Students, Butter-Makers, Cheese-Makers, Producers of Milk, Operators of Condenseries, Managers of Milk Shipping Stations, Milk Inspectors, Physicians, etc., etc.

By LUCIUS L. VAN SLYKE

Chemist of the New York Agricultural Experiment Station



THIS book should be in the hands of every dairyman, teacher, and student. It contains a comprehensive discussion of the chemistry of cow's milk, embodying the most recently developed facts. The numerical data given are fresh and largely at first hand, representing American conditions, instead of being stale, miscellaneous data taken from European sources, so much of which has little application or value for American dairymen. Some errors that have been long incorporated in dairy literature on the composition of milk are here corrected. The publishers are aware that the author's long-continued study of the chemistry of milk has

made him a recognized authority in this field, and has peculiarly fitted him to treat this subject in a satisfactory manner.

The various methods of testing milk and its products are brought up to date; they are presented in the most concise manner that is consistent with completeness, clearness, and accuracy; irrelevant matter is omitted. The aim has been to include all necessary material and omit all that is unnecessary.

After the description of the details of each method, there follows a brief summary in short, sharp statements that stick in the mind and enable the student to grasp almost at a glance the essential steps to be followed, and the important precautions to be observed.

Considerable new matter is presented. The portion on "Methods of Testing and Scoring Butter, Cheese, Milk, etc.," is a feature that will commend itself to dairy teachers, students, and inspectors. Several valuable tests, easy of execution, are given for the detection of renovated butter, of oleomargarine, and of other adulterants of dairy products. Methods are given for the determination of fat in the milk powders which are recently coming into the market, and which are destined to be of great commercial importance to dairymen.

The chapter on the "Arithmetic of Milk and Milk Products" is another desirable feature of the book which will prove exceedingly helpful to every dairy teacher, student, and worker. We believe that the general arrangement of the material in this book is one that will meet the approval of those who have occasion to use it most.

Fully illustrated, 5x7 inches, 214 pages. Cloth. Price, 75 Cents

Questions and Answers on Milk and Milk Testing

By *Chas. A. Publow and Hugh C. Troy*. A book that no student in the dairy industry can afford to be without. No other treatise of its kind is available, and no book of its size gives so much practical and useful information in the study of milk and milk products. Illustrated. 5 x 7 inches. 100 pages. Cloth.....Net \$0.50

Questions and Answers on Buttermaking

By *Chas. A. Publow*. This book is entirely different from the usual type of dairy books, and is undoubtedly in a class by itself. The entire subject of buttermaking in all its branches has been most thoroughly treated, and many new and important features have been added. The tests for moisture, salt and acid have received special attention, as have also the questions on cream separation, pasteurization, commercial starters, cream ripening, cream overrun, marketing of butter, and creamery management. Illustrated. 5 x 7 inches. 100 pages. Cloth.....Net \$0.50

Cheese Making

By *John W. Decker*. Cheddar, Swiss, brick, Limburger, Edam and cottage cheese. A textbook on the entire subject of cheese making according to the most modern methods. Every detail of the treatment is clearly and comprehensively explained and demonstrated. Illustrated. 6 x 9 inches. 200 pages. Cloth.....Net \$1.75

Guenon on Milch Cows

By *Thomas J. Hand*. A treatise on the bovine species in general. Translated from the last and enlarged edition. It embodies Guenon's very latest views, and such changes in and additions to the early treatise as his experience has taught him were needed. The volume is the most complete presentation of Guenon's treatise to be found in the language. Illustrated. 5x7 inches. 131 pages. Cloth.....\$1.00

Cheese Making in Switzerland

By *J. H. Monrad*. Giving complete and exact descriptions of Emmenthaler, Gruyere, Saanen, Battelmatt, Spalen, Swiss, Pfister Skim, Schabzieger, Vachin, Geisskaese, as well as the American Swiss, brick and Limburger cheese. Illustrated. Paper.....\$0.50

Common Sense Ideas for Dairymen

By *George H. Blake*. An exposition of the methods pursued by the most practical and successful dairymen in the Elgin district, embracing instruction in selection, feeding and care of dairy cattle, corn and clover culture, care of milk and cream testing and cheese and butter making in the factory and on the farm. The entire tone of the work is intensely practical, and while the methods described are principally those of the Elgin district, its main teachings are equally valuable and applicable anywhere. Illustrated. 5x7 inches. 281 pages. Cloth...\$1.00

Dairy Chemistry

By *Harry Snyder*. The book incorporates the results of the more important recent investigations in dairying, milk tests, etc. A chapter treats of the influence of different foods upon the quantity of milk and dairy products, and on the rational feeding of dairy stock; while in an appendix is given tables of the composition of fodder and feeding stuffs, and tables for the correction of lactometer readings. Illustrated. 5x7 inches. 190 pages. Cloth. Net \$1.00

The Farm Dairy

By *H. B. Gurler*. This book is written for the dairy farmer from the life-long experience of a successful dairyman. It is not a technical work for the creamery butter-maker. It deals with dairy farm problems from the farm and its fittings to the finished products. The chapter on "Typical Rations for Dairy Cows" is one of the most valuable contributions ever made to agricultural literature. Illustrated. 5x7 inches. 240 pages. Cloth.....\$1.00

A B C in Butter Making

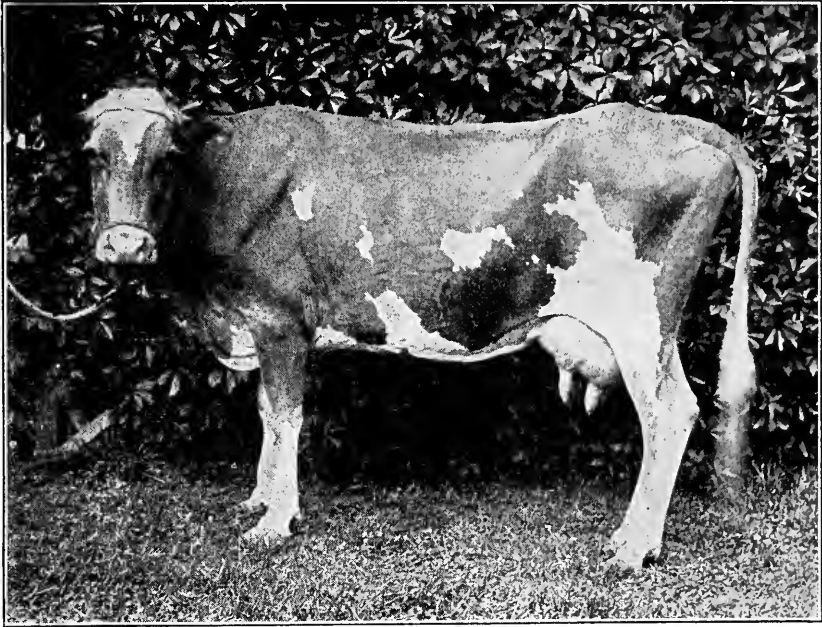
By *J. H. Monrad*. A practical manual for young creamery managers and private dairymen, treating authoritatively on milk, cream, churns and churning, salting, working, packing, refrigerators, pasteurization, creameries, dairy education, the various kinds of butter, etc., etc. Illustrated. Paper. \$0.50

Pasteurization and Milk Preservation

By *J. H. Monrad*. A complete treatise on pasteurization, sterilization, and the preservation and selling of milk in general. Illustrated. Paper.....\$0.50

The Management and Feeding of Cattle

By PROF. THOMAS SHAW



THE place for this book will be at once apparent when it is stated that it is the first book that has ever been written which discusses the management and feeding of cattle, from the birth of the calf until it has fulfilled its mission in life, whether on the block or at the pail.

The twenty-one chapters contained in the book dwell upon every phase of cattle production under arable conditions. The proper food and management for the calf, whether reared on the dam or by hand, are given in minute detail. The care and food suitable for cattle from calthood on to the producing period is discussed in all its phases.

The book follows beef cattle during every phase of the finishing period, whether finished as baby beef, or matured on pasture, or in the stall, and it follows the animals until final disposal at the stock yards. It treats of every phase of the management and food suitable for cows, summer and winter, to whatever class they may belong, and from the time of the first conception until they are sent to the block.

It discusses the management and food suitable for bulls. It dwells upon the selection and fitting of cattle for the fairs; upon the protection suitable summer and winter, and upon the insect pests which prey upon cattle, and the diseases to which they are subjected, and the best known methods of dealing with these.

Such a book, in the absence of any other in its line, should be indispensable to the student of the agricultural college and to every one who keeps cattle, howsoever or wheresoever he may be situated.

Profusely illustrated. 5½ x 8 inches. 496 pages. Cloth. Net \$2.00

Shorthorn Cattle

By *Alvin H. Sanders*. A series of historical sketches, memoirs and records of the Shorthorn breed and its development. The leading chapters treat upon the old Shorthorn country and its cattle; development of the improved type; foundation of the Booth, Bates, and other herds; first importations to America and their development in various localities; the birth of a boom; an era of expansion; a golden age; a turn of the tide; closing events of the century; closing with "the lamp of experience," comprising inbreeding, registration, color, handling, quality, constitution, management; dignity of the breeder's calling, and a glimpse of the future. Illustrated. 5x7 inches. 872 pages. Cloth.....Net \$2.00

Types and Breeds of Farm Animals

By *C. S. Plumb*. This volume supplies the need for an up-to-date discussion of the several types and breeds of horses, asses, mules, cattle, sheep, goats and swine. It describes the commonly accepted types, as, for example, draft or speed type of horse, dairy type of cattle, and bacon type of swine. It includes discussions of the original habitat, of breed development, European history, special American history, work of pioneer breeders, famous animals, families or tribes, breed characteristics, breed and individual records, as, for example, milk of cows, or speed of horses, etc. Many noteworthy records are given and numerous illustrations of famous animals shown. The work is primarily intended for students in agricultural colleges and universities. Breeders and feeders of animals, however, will find it a valuable reference work. Illustrated. 6x9 inches. 563 pages. Cloth.....Net \$2.00

The Principles of Breeding

By *E. Davenport*. This treatise on a subject of widespread and popular interest is the most comprehensive work of the kind ever attempted. The author is dealing with his specialty, and his experience on the farm and in the laboratory has enabled him not only to understand the problems of the breeder but also to treat his subject authentically in the light of the latest developments in biological science. The portion treating of the statistical method of study in heredity is the first of its kind in agricultural literature. The aim of the

author is to present a safe and reliable text rather than to construct new theories of evolution. Illustrated. 6x9 inches. 727 pages.....Net \$2.50

Our Domestic Animals

By *C. W. Burkett*. The entire list of domestic animals is included in this volume. In a popular vein each class is discussed. The descriptive matter does not weary, but gives relaxation. And in connection with the reading matter is a wealth of illustrations unequaled in any book of like nature ever published. These illustrations were made from photographs taken from life from all parts of America and Europe. It is a magnificent book for young people. Illustrated. 9x12 inches. 300 pages. Cloth.....Net \$3.50

Dairy Farming

By *J. Michels*. In the preparation of this work, the endeavor has been to arrange in a concise and systematic form, the essential facts relating to the science and practice of dairy farming. Technical terms have been avoided as far as possible, in order that the book may not only meet the needs of the classroom, but also serve as a convenient and useful handbook for the farmer not versed in the sciences. Illustrated. 5x7 inches. 212 pages. Cloth. Net \$1.00

Creamery Butter Making

By *J. Michels*. A complete and practical book treating on every phase of creamery butter making. Special emphasis has been laid upon starters, pasteurized butter making, methods of creamery construction, and creamery mechanics, etc., etc. The book will be found suitable for the dairy student, as well as for the butter maker who cannot attend dairy schools. Illustrated. 5x7 inches. 275 pages. Cloth. Net \$1.50

Market Dairying

By *J. Michels*. The author's wide experience in the production and marketing of sanitary milk and cream, and in the manufacture and marketing of ice cream, cottage cheese and skim milk—buttermilk, have specially fitted him to present this matter in popular style. The material has been so arranged that it will answer the needs of the student as well as the dairyman and farmer. Illustrated. 5x7 inches. 192 pages. Cloth.....Net \$1.00

The Percheron Horse

By *Col. M. C. Weld* and *Charles Du Hays*. The history of the Percherons in America, their increasing popularity and influence on the horse stock of the country, are concisely related by Col. Weld, while the history of the breed, its origin, systematic improvement, etc., are treated by Charles Du Hays, the most distinguished of French authors writing upon the horse. Illustrated. Cloth\$0.50

Veterinary Studies for Agricultural Students

By *Dr. M. H. Reynolds*, Prof. of Veterinary Medicine, University of Minnesota. A text-book for students treating on the anatomy and prevention of disease, common diseases, obstetrics, medicines, etc., etc. Profusely illustrated. 6x9 inches. 246 pages. Cloth. Net \$1.75

The Saddle Horse

This is a complete and reliable guide-book for all who desire to acquire the accomplishment of horsemanship and who wish to teach their animals how to perform various feats under the saddle. Illustrated. 5x7 inches. 95 pages. Cloth\$1.00

The Horse, How to Buy and Sell

By *Peter Howden*. A plain and comprehensive guide to the various points to be noted, showing which are essential, and which are unimportant. Illustrated. 5x7 inches. 131 pages. Cloth. \$1.00

Training the Trotting Horse

By *Charles Marvin*. A natural and improved method of educating trotting colts and horses, based on twenty years' experience. Illustrated. 6x9 inches. 352 pages. Cloth.....\$3.50

Diseases of the Horse, and How to Treat Them

By *Robert Chawner*. A manual of special pathology for the use of horse-men, farmers and students. Illustrated. 5x7 inches. 180 pages. Cloth...\$1.25

First-Hand Bits of Stable Lore

By *Francis M. Ware*. The book epitomizes in a most practical and delightful style 30 years of active personal experience with every kind of horse for every conceivable purpose. It treats in a common sense manner on everything pertaining to the horse, from buying to the show ring. Illustrated. 5x8 inches. 297 Pages. Cloth.....Net \$2.00

The Horse in the Stable and the Field

By *J. H. Walsh*, F.R.C.S. (Stonehenge). His Management in Health and Disease. From the London edition, with an essay on the American trotting horse, and suggestions on the breeding and training of trotters, by *Elwood Harvey*, M.D. Illustrated with over 80 engravings and full-page engravings from photographs. 5x7 inches. 505 pages. Cloth.....\$1.00

The Gentleman's Stable Guide

By *Robert McClure*, M.D., V.S. Giving the most approved methods of feeding, grooming and general management of the horse. Illustrated. 5x7 inches. 184 pages. Cloth.....\$1.00

The Winter Care of Horses and Cattle

By *T. B. Terry*. The most humane and profitable treatment. Although the book is mainly in regard to the winter care of horses and cattle it touches on almost everything connected with successful farming—shelter, comfort, feeding, exercise, kindness, different sorts of feed, with a full treatise on the most economical way of saving manure. A full description of Terry's model barn is also given.....\$0.35

The Horse

By *I. P. Roberts*. Description of horses of every kind, from ponies and thoroughbreds to draft horses. It tells how to breed, train, feed and care for them. Illustrated. 5x7 inches. 400 pages. Cloth..... Net \$1.25

The Trotting Horse of America

By *Hiram Woodruff*. How to train and drive him, with reminiscences of the trotting turf. Illustrated. 5x7 inches. 477 pages. Cloth.....\$1.00

The Modern Horse Doctor

By *George H. Dadd*. The writer of this work has endeavored to give the reader correct ideas of the nature and treatment of diseases occurring in that faithful servant and noble animal, the horse. It is intended to supply the wants of that class of agriculturists and horsemen—and their name is legion—who are in favor of a more sanative and rational system of medication than that recommended in many works on farriery. Such individuals, in consequence of the scarcity of competent veterinary surgeons, are compelled to treat their own horses; and this work is intended to be to them, in the hour of need, one that will enable them to restore the sick and cure the lame. 5x7 inches. 432 pages. Cloth..\$1.00

The Family Horse

By *George A. Martin*. A practical manual for horse keepers containing chapters as follows: Selecting a Horse; Feeding and Watering; Barns and Stables; Stable Management; Clipping, Singeing and Trimming; On the Road; Riding on Horseback; Harness and Vehicles; Shoeing and Care of the Feet; Ailments and Remedies; Prize Essays: Stabling, Feed and Care; How to Select a Horse and Keep It; Views of a Veteran; The Family Horse in the Prairie States. Illustrated. 5x7 inches. 153 pages. Cloth.....\$1.00

Handbook of the Turf

By *Samuel L. Boardman*. To the lover of racing, of trotting and running horses, and to all who are interested to any extent in racing and horse matters, this book is really indispensable. It gives in a concise, handy form a mass of information on these and allied topics, and in such a shape that no time need be lost in referring to them. To those especially who have been, in times past, puzzled by the somewhat bewildering nomenclature of the track and its devotees, this book will be most welcome. 5x7 inches. 303 pages. Cloth. \$1.00

The Bridle Bits

By *Col. J. C. Battersby*. A valuable work on horsemanship, and the horse's mouth, by an accomplished horseman and experienced cavalry officer. Giving full descriptions and directions on horsemanship and training; English ways; Irish riding; of all the various bits in use for general and special purposes, the mule and donkey bit; the use of blinds on horses; feeding and general care of the horse, etc., etc. Illustrated. 5x7 inches. 143 pages. Cloth\$1.00

Hints to Horse-Keepers

By *Henry William Herbert*. A complete manual for horsemen, embracing chapters on mules and ponies. These hints to horse-keepers are intended to include every subject of interest to those who for pleasure or business own or use a horse. There are very few books which all can peruse with greater satisfaction than this. For indicating the principles which should guide one in breeding, buying, training and using horses, it stands unrivaled among American books. Illustrated. 5x7 inches. 425 pages. Cloth.....\$1.50

The Horse Book

By *J. H. S. Johnstone*. An up-to-date, thoroughly practical treatise on the American Horse Breeding Industry, from its inception to the present. It is designed primarily to be of practical value to those who have in view the production of the types of horses in general request upon the farm and in the market places of the United States. The book will be found an excellent aid to those who are engaged in the breeding and handling of the everyday horse of commerce. Illustrated. 5x7 inches. 300 pages. Cloth.....\$2.00

Jacks, Jennets and Mules

By *Dr. L. W. Knight*. The author goes deeply into the history of the ass and the mule in America and his book will be found a most excellent aid to all who are trying to breed mules in any part of the country. Illustrated. 5x7 inches. Cloth..... Net \$1.50

American Horses and Horse Breeding

By *John Dimon*. An up-to-date book on the history of horses from the earliest period to date. A standard authority on horses; embracing breeds, breeding, training, handling vicious horses, shoeing and general management. A modern and practical horse doctor on the causes, nature, symptoms and treatment of diseases of all kinds. Full instructions for buying, selling, training for speed, driving in races, etc. Illustrated. 6x9 inches. 483 pages. Cloth.....\$3.50

The Practical Horse Keeper

By *George Fleming*. This work is intended as a guide to those who have to do with horses, either as owners, purchasers, breeders, trainers, managers, or attendants, and whose experience has not been so extensive as those on whose knowledge it is based. It treats very fully on breeds of horses, purchasing, stables and stabling, feeding and general management, riding, hunting, harness and driving, breeding, training, shoeing, diseases and injuries and their treatment, etc., etc. Illustrated. 5x7 inches. 264 pages. Cloth. \$0.75

The American Pacing and Trotting Horse

By *Henry T. Coates*. This book, besides treating of driving horses, gives a condensed history of the best trotting and pacing horses in America, with mention of their best performances. It is invaluable in its suggestions to horse trainers, and is one of the most authoritative books on this subject published. Illustrated. 5¼x7½ inches. Cloth. \$0.75

Youatt on the Horse

By *William Youatt, W. C. Spooner and Henry S. Randall*. A treatise on the structure and diseases of the horse, with their remedies, also practical rules to buyers, breeders, trainers, shoers, etc., together with a general history of the horse, an account of the breeds of the United States and Canada, the general management, soundness, and the purchase and sale of horses, a list of medicines used in the treatment of diseases, etc., etc. Illustrated. 5x7 inches. 483 pages. Cloth.....\$1.00

How to Handle and Educate Vicious Horses

By *Prof. Oscar R. Gleason*. This work gives very complete and full directions for Handling Vicious Horses, Breaking Colts, etc., comprises instructive chapters on Teaching Horses Tricks, How to Tell the Age of Horses, Horse Shoeing, Diseases, Ladies' Equestrianism; also a dissertation on Dogs—How to Teach Them and How to Treat Their Diseases. Its author is beyond question the most complete expert in handling horses in this country, and hence the best authority on the subject. Illustrated. 5x7 inches. 205 pages. Cloth.....\$0.50

How to Judge a Horse

By *Captain F. W. Bach*. A concise treatise as to the qualities and soundness of horses; including bits and biting, saddles and saddling, stable drainage, driving one horse, a pair, four-in-hand or tandem; and extracts from Rarey's and Rockwell's Method of Training Young and Obstinate Horses. Illustrated. 5x7 inches. 180 pages. Cloth.....Net \$1.00

The Art of Horseshoeing

By *William Hunting*. A manual for horse-owners, farriers and veterinary students. First the form and action of the foot are described, next the preparation of the foot for shoeing, and then the details to be observed in making it. The author lays down correct general principles and points out in a simple and clear style the technical details which are essential to good shoeing. Illustrated. 6x9 inches. 129 pages. Cloth.....Net \$1.00

Scientific Horseshoeing for the Different Diseases of the Foot

By *William Russell*. The author of this book has been a practicing farrier for more than forty years. His record is one of rare success, and he has long been recognized by the leading horse-men of this country as the foremost shoeing smith of the age. This book aims to give the practical details of the most approved and rational plans and principles of horseshoeing in the plainest and most complete manner possible. A large share of the work is devoted to the diseases of the foot, and the subject of pathological shoeing is fully treated. Illustrated. 6x9 inches. 340 pages. ClothNet \$4.00

American Reformed Horse Book

By *George H. Dadd, V.S.* A treatise on the causes, symptoms and cure of every disease incident to the horse, including all diseases peculiar to America. Embracing also full information on breeding, rearing and management, the reform system of practice. The work is divided into thirteen sections devoted respectively to: the causes of disease; diseases of the eye, the brain and nervous system; the respiratory passages and organs; dentition and diet; glanders and farcy; diseases of the digestive organs, and of the urinary organs; surgical operations; diseases of the skin; breeding and the principles of the same; lameness from various causes; horse management, etc., etc. Illustrated. 6x9 inches. 442 pages. Cloth\$2.00

Judging Live Stock

By *John A. Craig*, professor of animal husbandry at the Iowa agricultural college. Observation and judgment, the author holds, are two faculties which require special development in judging live stock. While one should be informed on what to look for, yet no amount of information will supply keen powers of observation. The book is divided into four main chapters: Judging Sheep, Judging Swine, Judging Horses, and Judging Cattle. The official standards of excellence are given for each breed, as well as excellent typical portraits. Illustrated. 6x9 inches. 193 pages. ClothNet \$1.50

Home Pork Making

The art of raising and curing pork on the farm. By *A. W. Fulton*. A complete guide for the farmer, the country butcher and the suburban dweller, in all that obtains to hog slaughtering, curing, preserving and storing pork product—from scalding vat to kitchen table and dining-room. Fully illustrated. 125 pages. 5x7 inches. Cloth\$0.50

Farm Stock

By *C. W. Burkett*. There are few men in the country better qualified to write on this subject than Professor Burkett, late director of the Kansas Experiment Station and now Editor of American Agriculturist. The writer handles, in a brief, yet practical and thorough manner, the breeding and feeding, care and management, of all classes of farm stock. The chapters on beef, mutton and pork making show

how the small breeder can make money. For the average farmer there is no book on farm stock just like it. Written in a simple, straightforward way, with all technical terms and expressions fully explained, it is designed for the average farmer; yet the largest breeder can profit by using it as a guide. Fully illustrated. 5x7½ inches. 350 pages. ClothNet \$1.50

Diseases of Horses and Cattle

By *Dr. D. McIntosh, V.S.*, professor of veterinary science in the university of Illinois. Written expressly for the farmer, stockman and veterinary student. A new work on the treatment of animal diseases according to the modern status of veterinary science has become a necessity. Such a one is this volume, written by one of the most eminent veterinarians of our country. Illustrated. 5x7 inches. 379 pages. Cloth\$1.75

The Practical Horseshoer

By *M. T. Richardson*. This work treats of and illustrates proper shapes of shoes for different diseases of the feet, the various methods of shoeing vicious and ugly horses or mules, and a great variety of tools suitable and useful in horseshoeing; how to shoe horses, to cure contraction, to prevent interfering or overreaching, best methods of treating corns—whether cold or hot fitting is best, etc. Illustrated. 5x7 inches. 293 pages. Cloth.....\$1.00

Animal Castration

By *A. Liautard, M.D., V.M.* A concise and practical treatise on the castration and spaying of domestic animals. In this revised and enlarged edition the author has collected and brought together all the various methods in use in America as well as in Europe. He has also included the castration of swine, cats, dogs, fowls and other small animals, thus making this book the most complete and comprehensive work on this subject in English veterinary literature. Illustrated. 5x7 inches. 165 pages. Cloth..Net \$2.00

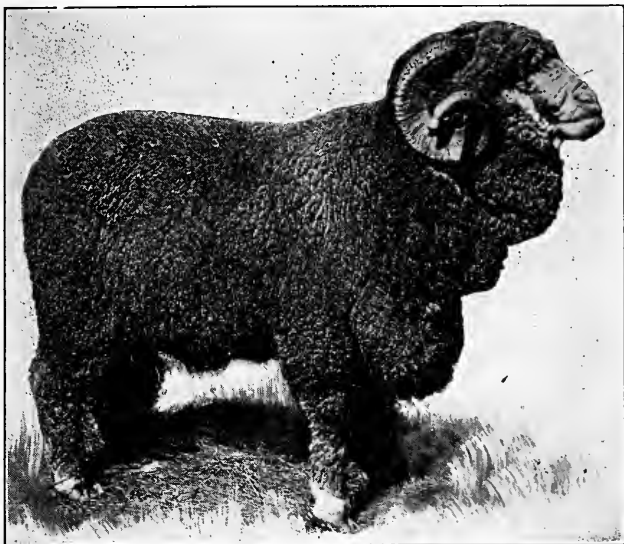
Harris on the Pig

By *Joseph Harris*. The points of the various English and American breeds are thoroughly discussed, and the great advantage of using thoroughbred males clearly shown. The work is equally valuable to the farmer who keeps but few pigs and to the breeder on an extensive scale. Illustrated. 318 pages. 5x7 inches. Cloth\$1.00

The Shepherd's Manual

A PRACTICAL TREATISE ON SHEEP
Designed Especially for American Shepherds

By HENRY STEWART



THIS Manual is designed to be a handbook for American shepherds and farmers. It is intended to be so plain that a farmer, or a farmer's son, who has never kept a sheep, may learn from its pages how to manage a flock successfully, and to be so complete that even the experienced shepherd may gather some suggestions from it. The results of the author's personal experiences of some years, with the characters of the various modern breeds of sheep, and the sheep-raising capabilities of many portions of our extensive territory and that of Canada, most of which have been visited with a view to the effects upon our sheep of the varying climate and different soils; and the careful study of the diseases to which our sheep are chiefly subject, with those by which they may eventually be afflicted through unforeseen accidents; as well as the methods of management called for under our circumstances, were finally gathered into the shape in which they are here presented to the shepherds of America, with the hope that they may be acceptable and useful to them as they would have been when he first undertook the care of a flock.

CONTENTS

Chapter I—The Sheep as an Industrial Product
Chapter II—The Summer Management of a Flock
Chapter III—Management of Ewes and Lambs
Chapter IV—Winter Management of Sheep

Chapter V—Breeding and Breeds of Sheep
Chapter VI—The Structure and Uses of Wool
Chapter VII—The Anatomy and Diseases of the Sheep
Chapter VIII—Localities in the United States Suitable for Sheep Raising

Illustrated, 5x7 inches, 276 pages. Cloth. Price, \$1.00

The American Merino

By *Stephen Powers*. A practical treatise on the Selection, Care, Breeding and Diseases of the Merino Sheep in all sections of the United States. Illustrated. 5x7 inches. 368 pages. Cloth.....Price \$1.50

Sheep and Their Diseases

By *Dr. William A. Rushworth*. A historical and statistical description of sheep and their products. The fattening of sheep, their diseases, with prescriptions for scientific treatment. The respective breeds of sheep and their fine points. Government inspection, etc. Illustrated. 6x9 inches. 496 pages. ClothPrice \$1.50

The Winter Lamb

By *H. H. Miller, Joseph Wing, H. O. Miller*. This book is devoted almost exclusively to the Dorset sheep under American conditions, and is the result of the author's long and personal experience. Every detail of management, feeding and care necessary for the raising of early lambs, and the selling at good profits is clearly and accurately described and explained. Illustrated. 5x7 inches. Cloth.....Price \$0.50

Modern Sheep, Breeds and Management

By *W. J. Clarke*. A book for breeders, feeders, and those who show at the fairs. Fitting sheep for the show ring. The work is illustrated with numerous photographic portraits of prize-winning sheep of almost every breed. The care of sheep in health and sickness at home or on the fair circuit. Illustrated. 6x9 inches. 340 pages. Cloth..Price \$1.50

Sheep Farming in America

By *Joseph E. Wing*. A new and modern treatise on flock management written in brilliant style and discusses in a practical way all the leading problems with which flockmasters are confronted. Moreover, it is illustrated with an unusually attractive line of half-tone engravings, reproduced from the best available photographs. Illustrated. 5x7 inches. 366 pages. Cloth. Price \$1.00

The Domestic Sheep

By *Henry Stewart*. This book treats in a practical and exhaustive manner the science of breeding. Sheep diseases and how to treat them. Sheep dipping and dips. Their uses and abuses, etc., etc. Illustrations of the different breeds in rich half-tones of typical sheep and every other subject germane to the sheep wool and mutton industry. 372 pages and 165 illustrations. Cloth. Net \$1.50

Angora Goat Raising and Milch Goats

By *Prof. George F. Thompson*. This book on Angora Goat Raising and Milch Goats is a manual of information, covering every feature of the industry, such as a summary of its history, importers and importations, diseases and other enemies of the goat, localities adapted to Angora goat raising, questions of Climate, desirable soil, land available for goat raising, browsing and pasturage, shearing and shedding, mohair and mohair manufacturers, the meat, the market and the milk, the milch goats, goat skins and their uses, care of Angora goats, flock management, number of Angoras and production of mohair, common goats, etc. Illustrated. 5x7 inches. 238 pages. Cloth.....Price \$1.00

Goat Keeping for Amateurs

Containing full particulars of the various breeds of Goats for milking purposes and their profitable management, with a chapter on diseases. Paper.....\$0.50

American Angora Goats

By *George Edward Allen*. The author shows how easily and with how little expense goats can be raised over a large extent of our country and how promising are the results to those who study the subject and follow it up judiciously. Paper.....\$0.25

The Management of Rabbits

By *Chas. Rayson*. Containing full directions for the proper management of fancy rabbits in health and disease for pets or for market. Paper...\$0.50

FEEDING FARM ANIMALS

The Most Teachable Book
by Far Ever Written on the Subject of Feeding

By PROF. THOMAS SHAW

Author of "The Study of Breeds," "Animal Breeding," Etc.

THE author has succeeded in giving in regular and orderly sequence, and in language so simple that a child can understand it, the principles that govern the science and practice of feeding farm animals. This book is intended alike for the student of the Agricultural college and the farmer. It is the first attempt of the kind that has ever been made, and even a hasty consideration of the plan and scope of the work will show its pre-eminently valuable character. The simple, natural, orderly and comprehensive character of the treatment of an involved and many-sided subject is evidenced even in the



following condensed table of contents:

I.—Live Stock and Successful Farming.

PART I.

II.—Principles that Govern Selecting Animals.

III.— “ “ “ Foods.

IV.— “ “ “ Development.

V.— “ “ “ Habit.

VI.— “ “ “ Relate to Restfulness.

VII.— “ “ “ Prolonged Usefulness.

VIII.— “ “ “ Pregnancy.

PART II.

IX.—The Value of Type in Domestic Animals.

X.—Principles that Govern the Feeding of

Foods.

PART III.

XI.—Food from Cured Fodders.

XII.—Food from Cereals and Other Seeds.

XIII.— “ “ By Products.

XIV.— “ “ Pastures.

XV.— “ “ Roots and Cereals.

XVI.—Preparing Foods for Feeding.

PART IV.

XVII.—Considerations that Relate to Meat

Production.

XVIII.—Considerations that Relate to Milk

Production.

XIX.—Considerations that Relate to General

Feeding.

XX.—Considerations that Relate to Care of

Domestic Animals.

XXI.—Considerations Miscellaneous in Char-

acter.

In Part I, the principles that relate to successful feeding which have the strength of law are discussed. They must be observed if success is to follow. It is the first attempt that has ever been made to state these principles in a collective manner. In Part II, type is dwelt upon, not as is ordinarily done with reference to the finished animal, but to the animal to be finished or developed, and the principles that govern the feeding of foods is presented in a way that attracts to rather than repels from this difficult subject. The pre-eminently distinguishing feature of Part III, which treats of Foods and Fodders, consists in conciseness and comprehensiveness of statements, all that is said of any one food with reference to feeding different farm animals, is stated in continuity. The method of treatment in Part IV is unique. Its divisions are an aggregation of considerations that apply to the various phases of feeding, each of which is important, but which have not in most instances the strength of law. In all other books written on feeding, these can only be gathered inferentially and after long and varied study.

The author is certainly to be congratulated on the successful manner in which he has accomplished a most difficult task. His book is unquestionably the most practical work that has appeared on the subject of feeding farm animals.

Illustrated, 5 1-2x8 inches, 546 pages. Cloth. Price, \$2.00

Diseases of Swine

By *D. McIntosh, V.S.*, professor of veterinary science in the University of Illinois. The subjects dealt with are based on science and confirmed by experience. The introductory chapter on the health of the pig will be of great service to every swine raiser; and its study will prepare the reader to a clear understanding of the treatment of the special diseases described, and which comprise every ailment to which the animal is heir. In the treatment of hog cholera and other diseases which in the majority of cases prove fatal, the author's original and extensive investigations have thrown considerable light on many points hitherto but little understood. Illustrated. 5x7½ inches. 230 pages\$2.00

Feeding Animals

By *E. W. Stewart*. A practical work upon the laws of animal growth, specially applied to the rearing and feeding of horses, cattle, dairy cows, sheep and swine, demonstrating the practice and science of feeding in all its details. 5x7 inches. 558 pages. Cloth\$2.00

Diseases of Swine

By *Dr. R. A. Craig*, professor of veterinary medicine at the Purdue university. A concise, practical and popular guide to the prevention and treatment of the diseases of swine. With the discussions on each disease are given its causes, symptoms, treatment and means of prevention. Every part of the book impresses the reader with the fact that its writer is thoroughly and practically familiar with all the details upon which he treats. All technical and strictly scientific terms are avoided, so far as feasible, thus making the work at once available to the practical stock raiser as well as to the teacher and student. Altogether it is a necessary book—one that you will want. Illustrated. 5 x 7 inches. 190 pages. Cloth..... \$0.75

Profitable Stock Feeding

By *H. R. Smith*. A practical manual treating on the general principles of stock feeding. This book is worth much to anyone interested in the feeding of live stock whether on a large or small scale. Illustrated. 5x7 inches. 425 pages. Cloth.....\$1.50

The Feeding of Animals

By *Whitman Howard Jordan*, director of the New York agricultural experiment station. To present the main facts and principles fundamental to the art of feeding animals has been the author's chief aim in writing this book. No effort has been made to harmonize the whole mass of experimental data relating to animal nutrition. The author expresses the hope that what he has written will not be regarded as having for its ultimate object the mere exposition of feeding formulas. He specially emphasizes the fact that rational cattle feeding is not to be attained through a blind acceptance of existing standard rations, but by means of a broad understanding of the scientific and practical knowledge in which these standards had their rise. 5x7 inches. 450 pages. Cloth. Net \$1.50

Key to Profitable Stock Feeding

By *Herbert Myrick*. A colored chart of feeding and manurial values of the principal crops and feeding stuffs. This shows plainly the constituents of all stock foods, and how to combine them so as to get the best results in feeding all classes of stock. The back of the chart contains tables giving in detail the composition, digestibility and feeding value of a great variety of fodders, grains and feeding stuffs and their manurial value.....\$0.25

Swine Husbandry

By *F. D. Coburn*. Swine Husbandry is a work which, from the date of its first publication, had no successful competitor and has maintained, as it still maintains, its place at home and abroad as a standard authority upon the subject which it treats. In fact, it was the only work devoted to what its author terms hogs and hog raising, as distinguished from pigs in the sense that they are regarded in the Atlantic coast states and Great Britain. The work was prepared strictly from an American standpoint and especially for those who live in the great corn and swine producing regions of the United States. Its author has all his life been identified with the great swine growing territory, the agricultural and live stock husbandry of the regions mentioned. His experience as a breeder enabled him to give in this work information and counsel of value to hog raisers everywhere. Illustrated. 5 x 7½ inches. Cloth. 312 pages. Price.....\$1.50

SWINE IN AMERICA

¶ A Text-Book for the
Breeder, Feeder & Student

By F. D. COBURN

Secretary Kansas Department of Agriculture

A MAN who breathes optimism in every breath, who loves agriculture above personal preferment, who studies the problems of the farm day and night, is F. D. Coburn of Kansas. He stands, today, the greatest authority on alfalfa. His great book on that subject is a guide to every grower and a text-book to every student. What he had already done for alfalfa, Mr. Coburn now has done for swine. This great industry is treated in his new work, "Swine in America," in a most exhaustive manner. Every phase of hog raising is considered from a practical standpoint; and the latest contributions to the science and art of handling and managing hogs weighed and discussed in this important work, down to the hour of publication.



The work is a companion volume to "The Book of Alfalfa" in style, make-up and treatment. When one considers the immense business involved in the swine industry, he at once recognizes the need of a trained, level-headed spokesman for the duty. This man, we have in this author. We have his wide experience, thorough knowledge, and warm sympathy and enthusiasm, all of which is presented in a clear, convincing, earnest style, the power for so doing being a proverbial quality and attribute of Mr. Coburn.

An idea of the treatment and subject matter will be had from a glance at the following condensed table of contents:

I. Swine in America	XIII. Feeding and Fattening
II. The Breeder and Breeding	XIV. Wheat, Other Grains and Ground Feeds
III. Breeds: Popularity and Distribution	XV. Feeding By-Products
IV. Breeds and Types	XVI. Water, Slop and Swill
V. Practical Points in Breeding	XVII. Swine in Connection with Dairying
VI. The Boar: His Selection and Management	XVIII. Hog Houses and Pens
VII. The Sow: Her Selection and Management	XIX. Sanitation in the Hog Lot
VIII. Pigs: Weaning and Growth	XX. Castration
IX. Pasturing and Soiling	XXI. Slaughtering and Curing
X. Alfalfa and Swine	XXII. Razor-Backs Not Cholera-Proof or Profitable
XI. Succulent and Bulky Feeds; Roots and Tubers	XXIII. The More Common Diseases
XII. Indian Corn: The Pork-Maker's Mainstay	

This volume is handsomely printed on fine paper from large, clear type and is profusely illustrated, containing a large number of magnificent half-tone illustrations and drawings, printed on a special plate paper. Another marked feature is the frontispiece, this being an anatomical and physiological model of the hog, which appears in a book of this character for the first time. This model consists of a series of superposed plates, colored to nature, on heavy, serviceable paper, showing all the skeleton, muscles, internal organs, etc., in their relative positions. This model is accompanied by an elaborate explanatory key to provide the reader with the requisite knowledge to its successful manipulation.

The work contains 650 pages (6x9 inches), bound in fine silk cloth, gold side and back stamping, making one of the handsomest and most attractive agricultural books now before the public.

Price, net, \$2.50

FEEDS AND FEEDING

A Hand-Book for the Student and Stockman

By W. A. HENRY

Emeritus Professor of Agriculture, formerly Dean of the College of Agriculture and Director of the Agricultural Experiment Station, University of Wisconsin

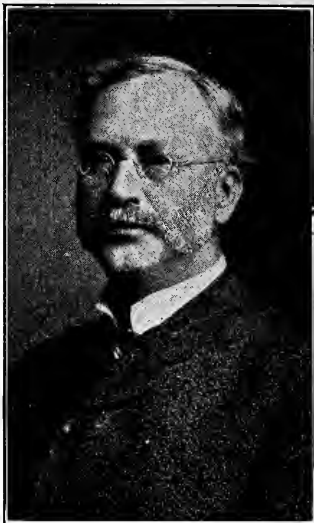
"The New Feeds and Feeding," a well printed volume of three parts, 613 large pages, is practically a cyclopedia of animal nutrition and the rational feeding of farm animals told in simple, helpful language. The information has been gleaned from hundreds of thousands of pages of technical journals, scientific books and reports and bulletins of Old- and New-World Experiment Stations. These original sources of such information are largely inaccessible to most persons who need the information.

"Feeds and Feeding" is not only a book for the student, but also for the busy farmer and stock man who can take it up at any time, open at any place and there find interesting, helpful, up-to-date information on the rational feeding of farm animals.

Nine editions of the old "Feeds and Feeding" have found place in public and school libraries as well as the libraries of the teacher, student, farmer and stock man.

The new "Feeds and Feeding." Tenth edition, just from the press, thoroughly revised and entirely rewritten, is now offered to the public.

6 x 8 inches. 813 pages. Cloth. Net \$2.25



PROFITABLE STOCK RAISING

By CLARENCE A. SHAMEL

Editor Orange Judd Farmer

Live stock is the most important feature of farm life, and statistics show a production far short of the actual requirements. There are many problems to be faced in the profitable production of stock, and these are fully and comprehensively covered in Mr. Shamel's new book.

As editor of the *Orange Judd Farmer*, Mr. Shamel has unequalled opportunities for observation and is keenly alive to everything that has to do with this very important subject. Incorporated in this book are many of the basic principles that have to do with the raising of live stock for profit. He tells how the New England and North Atlantic States are just awakening to the realization of the enormous field before them. He warns the West where there are numerous evidences of waning productivity.

"Profitable Stock Raising" covers the principles of breeding and feeding for both fat stock and dairying type. It tells of sheep and mutton raising, bothhouse lambs, the swine industry and the horse market. Finally he tells of the preparation of stock for the market and how to prepare it so that it will bring a high market price.

Illustrated. 5 x 7 inches. 288 pages. Cloth. Net \$1.50

Animal Breeding

By THOMAS SHAW

Professor of Animal Husbandry of the University of Minnesota.

THIS book is, beyond all comparison, the most complete and comprehensive work ever published on the subject of which it treats. It is the first book of the kind ever given to the world which has systematized the subject of animal breeding. It includes thirty chapters, each of which treats of some particular phase of the subject. The leading laws which govern this most intricate question the author has boldly defined and authoritatively arranged. The chapters which he has written on the more involved features of the subject, as sex and the relative influence of parents, should go far toward setting at rest the wildly speculative views cherished with reference to these questions. The striking originality in the treatment of the subject is no less conspicuous than the superb order and regular sequence of thought from the beginning to the end of the book. Even a hasty examination must convince the reader that the author has handled a difficult and complex subject in a way that brings it down to the level of the comprehension of everyone. A careful reading impresses one still more with the notable character of this work. The book is intended to meet the needs of the teachers of Animal Husbandry, the students of agricultural colleges and all persons interested in the breeding and rearing of live stock. *Animal Breeding* is the one book upon this all-important subject. It is the ripe result of a lifetime of practical experience, scientific experiment and wide observation.

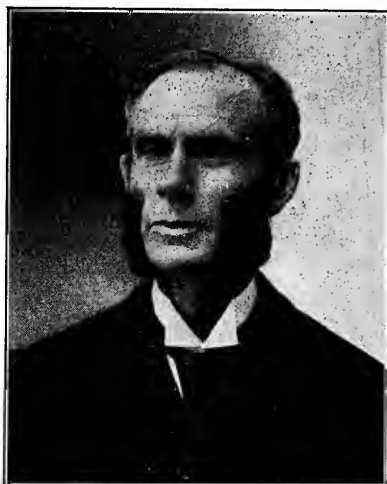


TABLE OF CONTENTS

Chapter I—Breeding Live Stock	Chapter XVI—Influences That Affect the Determination of Sex
Chapter II—A Standard of Excellence	Chapter XVII—Nutrition
Chapter III—The Law That Like Produces Like	Chapter XVIII—Quality in Live Stock
Chapter IV—The Law on Principle of Variation	Chapter XIX—The Coat and Influences Which Affect It
Chapter V—The Law of Atavism	Chapter XX—The Influence of Artificial Conditions
Chapter VI—Heredity of Normal, Abnormal and Acquired Characters	Chapter XXI—Early Maturity
Chapter VII—Heredity of Diseases	Chapter XXII—Pedigree
Chapter VIII—The Law of Correlation	Chapter XXIII—Animal Form as an Index of Qualities
Chapter IX—Prepotency	Chapter XXIV—Selection
Chapter X—In-and-In Breeding	Chapter XXV—Cross-Breeding
Chapter XI—Line Breeding	Chapter XXVI—Improvement Through Grading
Chapter XII—Fecundity	Chapter XXVII—Forming New Breeds
Chapter XIII—The Relative Influence of Parents	Chapter XXVIII—The Influence of Environment
Chapter XIV—The Influence of a Previous Impregnation	Chapter XXIX—Castration and Spaying
Chapter XV—Intra-Uterine Influences.	Chapter XXX—Mating Animals

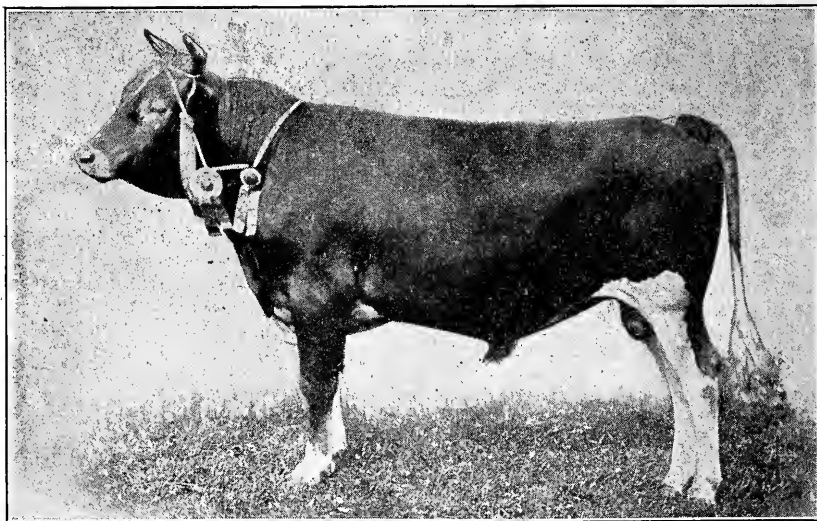
Illustrated, 5x7 inches, 406 pages. Cloth. Price, \$1.50.

The Study of Breeds

By THOMAS SHAW

Professor of Animal Husbandry at the University of Minnesota

THIS great work gives the origin and history of *all the pedigreed breeds of cattle, sheep and swine* now found in America, in a manner at once brief, comprehensive and in regular sequence. It also deals with their present distribution. It treats of the characteristics of each breed, showing relative size, adaptability, early maturity, feeding and breeding qualities, and uses in crossing and grading. It also gives relative milk production in cattle and wool production in sheep. It gives the recognized standards or scales of points where these exist, and where they do not standards are submitted. It is a summary of condensations, stated in a manner at once clear, concise, comprehensive and exact. The time occupied in preparing this book has covered a large portion of 12 years. Illustrations are given of male and female animals of each breed that are true to the type. For farmer, breeder or student, the book is the one complete and reliable guide.



Part 1—Breeds of Cattle

The origin, classification and indications of correct form and function common to the beef breeds, dairy breeds and dual-purpose cattle are here fully and concisely treated upon. Each one of these classes is taken up separately, given the origin and history, distribution, leading characteristics and principal points of each breed.

Part 2—Breeds of Sheep

In this section are described the various breeds of sheep, their introduction into America, their improvement and classification,

and leading essentials as to form and wool. Each breed of fine woolled, medium woolled and long woolled classes is treated separately, in the same careful and accurate manner that has been followed with cattle.

Part 3—Breeds of Swine

This part of the work is devoted to the breeds of swine, the origin of the domestic races, their improvement, classification and leading essentials as to form. The various breeds are classed as large breeds, medium breeds and small breeds. Their origin, history, characteristics and principal points are all treated separately and exhaustively

Fifty-three full page plates, 5x7 inches, 387 pages. Cloth. Price, \$1.50

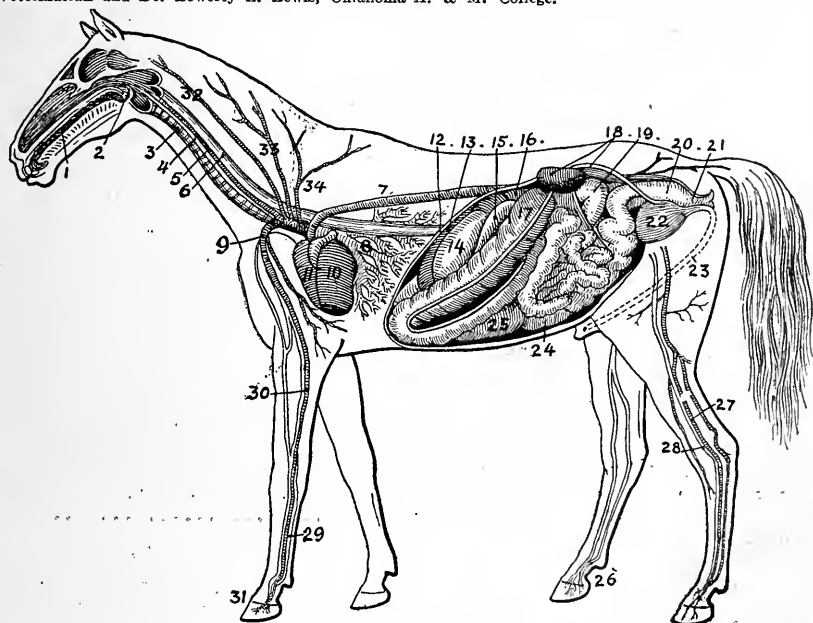
THE FARMER'S VETERINARIAN

A Practical Treatise on the Diseases of Farm Stock. Containing Brief and Popular Advice on the Nature, Cause and Treatment of Disease, the Common Ailments and the Care and Management of Stock When Sick.

By CHARLES WILLIAM BURKETT

Editor American Agriculturist

Aided by the following veterinary contributors: Dr. Veranus A. Moore, Cornell University; Dr. Francis S. Schoenleber, Kansas State Agricultural College; Dr. Alexander S. Alexander, University of Wisconsin; Dr. Donald McIntosh, University of Illinois; Dr. Tate Butler, State Veterinarian of North Carolina; Dr. Robert Al Craig, Purdue University; Dr. Austin Peters, State Veterinarian of Massachusetts; Dr. Myron H. Reynolds, University of Minnesota; Dr. Guy A. Roberts, North Carolina A. & M. College; Dr. Charles F. Dawson, Delaware College; Dr. Clarence L. Barnes, Colorado Agricultural College; Dr. Leonard W. Goss, Kansas State Agricultural College; Dr. C. D. Smead, New York Practicing Veterinarian and Dr. Lowerty L. Lewis, Oklahoma A. & M. College.



A LARGE class of people, by force of circumstances, are compelled to treat their own animals when sick or disabled. Qualified veterinarians are not always available; and all the ills and accidents incident to farm animals do not require professional attendance. Furthermore, the skilled stockman should be familiar with common diseases and the treatment of them. He should remember, too, that the maintenance of health and vigor in our farm stock is the direct result of well-directed management. Too frequently this is neither understood nor admitted, and an unreasonable lack of attention when animals are ill or indisposed works out dire mischief in the presence of physical disorder and infectious diseases. A fair acquaintance with the common ailments is helpful to the owner and to his stock. This leads to health, to prevention of disease, and to skill in attendance when disease is at hand.

The volume herewith presented abounds in helpful suggestions and valuable information for the most successful treatment of ills and accidents and disease troubles. It is an everyday hand book of disease and its treatment, and contains the best ideas gathered from the various authorities and the experience of a score of practical veterinarians in all phases of veterinary practice. An idea of the treatment and subject matter will be had from a glance at the following condensed table of contents:

Introduction.—Facing Disease on the Farm
 Chapter I.—How the Animal Body is Formed
 Chapter II.—Some Physiology You Ought to Know
 Chapter III.—Teeth As An Indication of Age
 Chapter IV.—Examining Animals for Soundness and Health

Chapter V.—Wounds and Their Treatment
 Chapter VI.—Making a Post Mortem Examination
 Chapter VII.—Common Medicines and Their Actions
 Chapter VIII.—Meaning of Disease
 Chapter IX.—Diagnosis and Treatment of Disease
 Chapter X.—Diseases of Farm Animals

This volume is handsomely printed on fine paper from large, clean type and is profusely illustrated, containing a number of half tone insert illustrations and a great many drawings picturing diseases, their symptoms and familiar attitudes assumed by farm animals when affected with diseases. The work contains 288 pages, is handsomely bound in cloth, and presents for the first time a plain, practical and satisfactory guide for farmers who are interested in the common diseases of the farm.

Price, net, \$1.50

Veterinary Materia Medica and Therapeutics

By *Kenelm Winslow, M.D.*, professor of therapeutics in the veterinary school of Harvard university. The second edition of this standard work is without exception the most complete, progressive and scientific veterinary materia medica in the English language, and emphatically so in America. It is clear, up-to-date and full of valuable information from beginning to end, very explicit, reliable and interesting. The matter on "properties," "description," and in many cases "derivation," is according to the United States Pharmacopoeia, while the important preparations of both the United States and British Pharmacopoeia are included. The book is handsomely bound and printed and can be highly recommended to all who are interested in veterinary science and practice. New and revised edition. 6x9 inches. 755 pages. Cloth.....Net \$6.00

The Veterinary Science

By *J. E. Hodgins and T. H. Haskett.* The Anatomy, Diseases and Treatment of Domestic Animals. In this treatise of the anatomy, diseases and treatment of domestic animals the authors have given in the simplest language and yet with scientific accuracy all the information required in the successful treatment of animal ailments. The anatomy, diseases and treatment of horses and cattle are fully explained, and the diseases and treatment of sheep are dealt with in the same concise and clear manner. The same may be said of the diseases and treatment of swine, dogs and poultry. The medicines and their actions and the many recipes for their use form a most valuable part of the work. To every owner of live stock this book will be worth many times its cost. Illustrated. 6x9 inches. 292 pages. Cloth..\$2.00

The Cattle Doctor

By *George H. Dadd, V.S.*, twenty-five years a leading veterinary surgeon in England and the United States. A complete work on all the diseases of cattle, sheep and swine, including every disease peculiar to America, and embracing all the latest information on the cattle plague and trichina; contain-

ing also a guide to symptoms, a table of weights and measures, and a list of valuable medicines. Illustrated. 6x9 inches. 367 pages. Cloth.....\$2.00

Veterinary Elements

By *Dr. Arthur G. Hopkins.* It has long since been evident to the careful observer that the veterinary books written for stockmen and the veterinary courses of agricultural colleges are far too technical, making their study a drudgery to the student and calculated to mystify rather than enlighten. This book embodies in a simple form the author's lectures as delivered to "short course" students, the main object being to fit the stockman so that he shall be to the veterinarian what the trained nurse is to the physician. The work cannot fail to be heartily welcomed by intelligent stockmen and farmers. 5x7 inches. 286 pages. Cloth.....\$1.50

The Farmer's Veterinary Adviser

By *Prof. James Law.* A guide to the prevention and treatment of disease in domestic animals. This is one of the best works on this subject, and is especially designed to supply the need of the busy American farmer, who can rarely avail himself of the advice of a scientific veterinarian. It is brought up to date and treats of the prevention of disease as well as of the remedies. Illustrated. 5x7 inches. 617 pages. Cloth.....\$3.00

The Diseases of Animals

By *Nelson S. Mayo.* The author gives advice in a brief and popular manner on the diseases and ailments of farm animals. It is a book which will enable those who have the care of animals to detect indications of disease and to make timely application of the necessary remedies. Lameness in horses is discussed in all its phases. Illustrated 5x7 inches. 458 pages. Cloth.....Net \$1.50

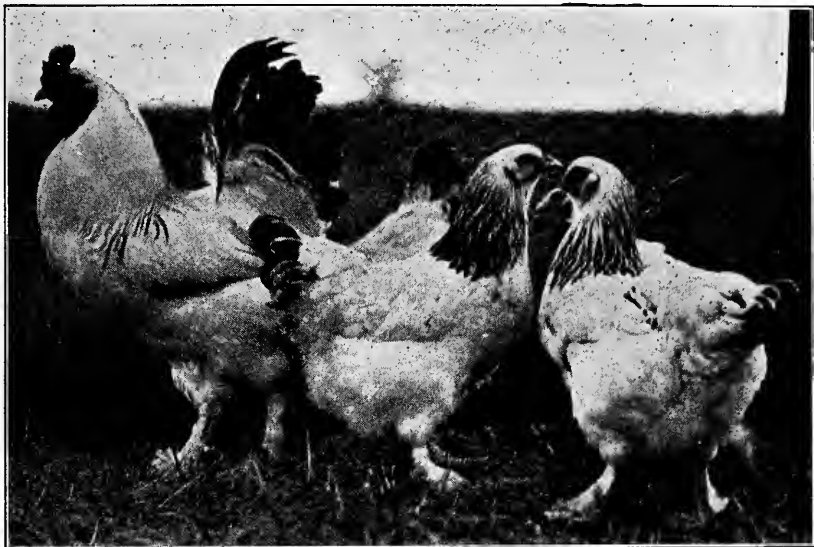
American Cattle Doctor

By *George H. Dadd, M.D.* This book is intended to help every man to be his own cattle doctor, giving the necessary information for preserving the health and curing the diseases of oxen, cows, sheep and swine; with a great variety of original recipes and valuable information on farm and dairy management. 5x7 inches. 359 pages. Cloth.....\$1.00

Making Poultry Pay

By EDWIN C. POWELL

A Manual of Practical Information on Poultry Keeping



IT AIMS to cover the practical side of poultry raising and takes up every detail of this business thoroughly and systematically. It appeals to all classes of poultry raisers and contains more real valuable information on all phases of poultry culture than any similar work issued before. The experience of leading poultry keepers and fanciers is freely drawn upon and the book tells in a plain and simple manner how to keep poultry at a profit. It is emphatically a book for busy people. It tells what to do, why to do it, and how to do it.

THE TABLE OF CONTENTS

Chapter I—Profits in Poultry. Chapter II—Care of Poultry. Chapter III—Where to Keep Fowls. Chapter IV—Breeds and Breeding. Chapter V—Feeds and Feeding. Chapter VI—Hatching and Rearing the Natural Way. Chapter VII—Artificial Incubation. Chapter VIII—Broilers and Capons. Chapter IX—The Market End. Chapter X—Waterfowl. Chapter XI—Turkeys, Guinea, Peafowls. Chapter XII—Pigeons and Squab Raising. Chapter XIII—Enemies and Diseases. Profusely illustrated, 5x8 1-2 inches.

324 pages. Cloth. Price, \$1.00

Turkeys and How to Grow Them

A Treatise on the Natural History of Turkeys; the Various Breeds, and Best Methods to Insure Success in the Business of Turkey Growing. With Essays from Practical Turkey Growers in Different Parts of the United States and Canada

Edited by HERBERT MYRICK

NO BOOK in existence gives an adequate account of the turkey—its development from the wild state to the various breeds, and complete directions for breeding, feeding, rearing and marketing these beautiful and profitable birds. The present book is an effort to fill this gap. It is based upon the experience of the most successful experts in turkey growing, both as breeders of fancy stock and as raisers of turkeys for market.

Separate chapters are devoted to the Turkey, its natural history and origin of name, the Wild Turkey, the Breeds of Turkeys, Turkey Growing as a Business, Selection of Parent Stock for Breeding Purposes, Care of Breeding Stock, Laying and Hatching, Training Turkeys to Sit at Any Time, Rearing the Turkey Chicks, Shelter for Turkeys, Fattening and Marketing, Hindrances and Diseases, etc., etc.

Profusely illustrated, 5x7 inches. 159 pages. Cloth. Price, \$1.00

Squabs for Profit

By *William E. Rice and William E. Cox*. This is the most complete and exhaustive work of the kind ever published on squab raising. It is not a book of second-hand references, but contains the hard-earned experiences of the authors. Every detail of their methods of selecting, breeding, feeding, killing and marketing squabs is given in plain, simple language, with numerous illustrations, all taken from the home plant of Mr. Rice, in New Jersey. The plans and specifications for building, etc., are as complete as an expert architect could make them. Illustrated. 5x7 inches. 150 pages. Cloth...\$0.50

Progressive Poultry Culture

By *Arthur A. Brigham*. A practical, progressive and systematic exposition of the science and best methods of poultry culture by a veteran teacher, investigator and acknowledged authority, who writes from large experience, giving the results obtained from practice, study and observation gained while resident at different times in six states of the Union, as well as in Germany and Japan. Illustrated. 5x7 inches. 294 pages. Cloth.....\$1.50

The Poultry Book

By *Harrison Weir, F.R.H.S.*, and many expert American Breeders under the editorship of Willis Grant Johnson and George O. Brown. Part I treats very comprehensively on the varieties to keep; eggs from a commercial and general point of view; incubators and chicken rearing; feeding, finishing fowls for market; capons and caponizing; practical poultry houses; diseases of poultry, etc., etc. Parts II and III are devoted to description and illustration of all known varieties of poultry. Superbly illustrated. 1,311 pages. 7½ x 11 inches. Richly bound in cloth. Net \$5.00

Profitable Poultry Production

By *M. G. Kains*. This book shows how poultry can be made more profitable. Ample discussion is given to practical breeding, selection and improvement of business poultry, feeding for growth, for market, for eggs, etc. From cover to cover the book is written

with the one aim of aiding the poultry raiser to make the most money from the farm flock; hence special emphasis is laid on marketing both poultry and eggs as well as on breeding and feeding. In short, the volume is intended both as a guide to best practice and a stimulus to adopt such methods as are proving profitable in the hands of actual farmers rather than feather fancies. Illustrated. 5x7 inches. 288 pages. Cloth. Net \$1.50

American Bird Fancier

By *D. J. Browne and Dr. Fuller Walker*. This little work, so valuable for all who are interested in the keeping of song birds, has been revised and enlarged so as to constitute a complete manual upon how to breed, rear and care for song and domestic birds. All who own valuable birds, or wish to do so, will find this new Fancier indispensable. Illustrated. Paper.....\$0.50

The American Standard of Perfection

By *J. H. Drevenstedt*. The recognized standard work on poultry in this country, and has been adopted by the American Poultry Association. It contains a complete description of all the recognized varieties of fowls, including turkeys, ducks and geese; gives instruction to judges; glossary of technical terms and nomenclature. The different breeds are classed and the scale of points for each listed. The division of each class into varieties and the disqualifications, standard weights, and minute descriptions of both male and female of each variety, make this work invaluable. 5x7 inches. Cloth.....Net \$1.50

Canary Birds

A complete guide for the breeding, rearing and treatment of canary birds; with hints and suggestions regarding cages, aviaries, etc., etc. Paper..\$0.50

Holden's New Work on Birds

By *George H. Holden*. A practical treatise on how to keep house birds in health; their proper food, care, breeding, diseases and treatment. Paper. \$0.25

Farm Poultry

By *George C. Watson*. A popular sketch of domestic fowls for the farmer and amateur, giving full descriptions of everything connected with the poultry industry, and concise directions for carrying out the details necessary to success. It treats upon the special breeds of fowls, buildings and their arrangements, feeding, incubators and brooders, care of chicks, ducks, geese, turkeys, pigeons, etc., etc. Illustrated. 5x7 inches. 341 pages. Cloth. Net \$1.25

Profitable Poultry Keeping

By *Stephen Beale*. A handbook for all who are practically interested in keeping poultry; giving the best methods practiced in England and France. These have been reviewed and adapted to American conditions by *M. C. Weld*. Illustrated. 5x7½ inches. 258 pages. Cloth.....\$1.00

The New Egg Farm

By *H. H. Stoddard*. A practical, reliable manual upon producing eggs and poultry for market as a profitable business enterprise, either by itself or connected with other branches of agriculture. It tells all about how to feed and manage, how to breed and select incubators and brooders, its labor-saving devices, etc., etc. 140 original illustrations. 331 pages. 5x7 inches. Cloth \$1.00

Poultry Feeding and Fattening

Compiled by *G. B. Fiske*. A handbook on the standard and improved methods of feeding and marketing all kinds of poultry, covering all branches, including chickens, broilers, capons, turkeys, water fowl; how to feed under various conditions and for different purposes. Illustrated. 5x7 inches. 160 pages. Cloth.....\$0.50

Capons for Profit

By *T. Greiner*. How to Make and Manage Them. Plain instructions given by a beginner for a beginner. Treating on the capon and what he is good for; about the capon maker; the victims and the tables; tools and other requirements; the operation, when and how best to perform it; the after treatment; how to hasten the healing process; feeding for market; how to kill, dress and pack capons; hatching and hatchers, brooding and brooders; diseases and insects affecting capons; profits in capons; caponizing tools,

artificial incubation and brooding, advantages of caponizing; how to obtain the greatest profits with the least expense, etc. Illustrated. Paper..\$0.50

Poultry Craft

By *John H. Robinson*. A convenient and systematically arranged work for beginners as well as for experienced poultry raisers. It gives the gist of the best knowledge of poultry culture in plain language for people who want plain facts and trustworthy opinions. Illustrated. 6x9 inches. 272 pages. Cloth.....\$1.50

The Diseases of Poultry

By *Dr. D. E. Salmon*. The entire subject of health and disease, common causes of disease, hygienic requirements, objects of medicinal treatment, is fully and clearly treated, and all specific diseases to which poultry are heir are fully described and explained, together with directions for their treatment. Illustrated. Paper.....\$0.50

Profits in Poultry

Useful and ornamental breeds and their profitable management. This excellent work contains the combined experience of a number of practical men in all departments of poultry raising. It is profusely illustrated and forms a unique and important addition to our poultry literature. 352 pages. 5x7 inches. Cloth.....\$1.00

Duck Culture

By *James Rankin*. The standard work on natural and artificial Duck Culture. Its author, one of the most successful duck raisers in the United States, gives here detailed information on every point of importance to those engaged in the raising of ducks for profit. Paper.....\$0.50

Poultry Architecture

Compiled by *G. B. Fiske*. A treatise on poultry buildings of all grades, styles and classes, and their proper location, coops, additions and special construction; all practical in design, and reasonable in cost. Over 100 illustrations. 5x7 inches. 125 pages. Cloth. \$0.50

Poultry Appliances and Handicraft

Compiled by *G. B. Fiske*. Illustrated descriptions of a great variety and styles of the best homemade nests, roosts, windows, ventilators, incubators and brooders, feeding and watering appliances, etc., etc. Over 100 illustrations. 5x7 inches. Cloth.....\$0.50

The Mysteries of BEE-KEEPING Explained

Combining the Results of Fifty Years' Experience with the Latest Discoveries and Inventions, and Presenting the Most Approved Methods, Forming

A Complete Guide to Successful Bee-Culture

By L. C. ROOT

WHEN the first work of Mr. Quinby appeared in 1866, it marked a great advance in the literature of the Apiary, and at once became the standard authority. Very soon after its issue, the process of extracting honey was introduced, and almost revolutionized the practice of bee-keeping; this had hardly become an established success when comb foundation demanded attention, and required other modifications of former methods. These great improvements were tested, simplified, and adopted by Mr. Quinby, and with a view to present these and other new methods he was planning a new volume, when his sudden death occurred, at the age of 65. Thus was arrested a career of nearly half a century, during which he had devoted himself to the improvement and development of bee culture, all the fruits of which, in discoveries and inventions, were freely given to his fellow-laborers and the public.

Though Mr. Quinby was prevented from preparing his contemplated new work, the results of his later years of labor are not lost. The work fell into the hands of Mr. L. C. Root, his son-in-law, as well as his business associate for many years. That Mr. Root is favorably known as an Apiarian is shown by the fact that he was, for many years, President of the Bee-keepers' Association, and he now properly succeeds Mr. Quinby in literature, as well as in business. Indeed it is fortunate that the unfinished task of Mr. Quinby has fallen into the hands of one who was so familiar with his methods and thought; while he presents Mr. Quinby's later views, as none other could have done, he greatly increases the value of the work by adding largely from the results of his own extended experience. It has not been found practicable to indicate which of the new matter is by Mr. Quinby, or which by Mr. Root, as the record is often of their united experience; both being more desirous of establishing useful facts than of claiming the credit of their discovery.

CONTENTS

PREFACE.

MEMORIAL OF M. QUINBY.

INTRODUCTION.

BEE-KEEPING The Old and the New.

CHAPTER I.—The Honey-Bee.

CHAPTER II.—Italian Bees.

CHAPTER III.—Sources of Honey.

CHAPTER IV.—The Apiary.

CHAPTER V.—Controlling Bees.

CHAPTER VI.—Hives and Boxes.

CHAPTER VII.—Transferring.

CHAPTER VIII.—Queens.

CHAPTER IX.—Natural and Artificial Increase.

CHAPTER X.—Boxing and Surplus Honey.

CHAPTER XI.—The Honey Extractor and Its Use.

CHAPTER XII.—Wax and Comb.

CHAPTER XIII.—Feeding.

CHAPTER XIV.—Robbing.

CHAPTER XV.—Diseases and Enemies of Bees.

CHAPTER XVI.—Marketing Honey.

CHAPTER XVII.—Wintering.

CHAPTER XVIII.—Honey.

CHAPTER XIX.—Notes for the Season.

CHAPTER XX.—Conclusion.

With 100 Illustrations and a Portrait of M. Quinby

5x7 inches, 271 pages. Cloth. Price \$1.00

Langstroth on the Honey Bee

Revised by *Charles Dadant and Son*. The original work, by the father of American bee-keeping, N. J. Langstroth, was a most valuable one in its time. The revisers have brought it up to the present advanced stage of bee-keeping, and have greatly increased its value as a reliable source of information on all subjects relating to the honey bee. Illustrated. 5x8 inches. 521 pages. Cloth.....\$1.25

A B C and X Y Z of Bee Culture

By *A. I. Root*. Revised by *E. R. Root*. An alphabetically arranged cyclopedic of everything pertaining to the care of the honey bee; bees, honey, hives, implements, honey plants, etc. The facts given are gleaned from the experience of thousands of beekeepers all over the land, and were afterward verified by practical work in the authors' own apiaries. Among the subjects which have been entirely rewritten and those which have not appeared in the earlier editions are: Artificial combs, comb foundation and honey feeding, foul brood, honey dew, introducing and rearing queens, fairs, honey adulteration, house apiary, swarming, wintering, etc. The whole work is beautifully illustrated by over 300 engravings. 7x10 inches. 437 pages. Elegantly bound in cloth and gold...\$1.50

The Beekeeper's Guide

By *A. J. Cook*. A manual of the apiary, treating of both the scientific and the practical part of bee-keeping. It comprises a wide field in the range of apicultural matters, foremost among which are: The natural history, anatomy and physiology of the honey bee, swarming and products, starting an apiary, hives and sections, feeding and feeders, queen rearing, increase in colonies, extracting and the extractor, handling bees, comb foundation, marketing honey, honey plants, wintering bees, bee houses, evils that confront the apiarist, calendar and axioms, etc., etc. This edition has been thoroughly revised and enlarged, comprising full descriptions and illustrations of honey-

producing plants, shrubs and trees, and other new matter. In the development of bee culture this work is exerting a powerful stimulus. Illustrated. 5x8 inches. 543 pages. Cloth.....\$1.25

How To Keep Bees

By *Anna B. Comstock*. A handbook for the use of beginners who would keep bees for happiness and honey, and incidentally for money. This volume is restricted to knowledge gained in practical experience in a small apiary. Illustrated. 5x7 inches. 228 pages. Cloth.....Net \$1.00

The Indian Runner Duck Book

By *C. S. Valentine*. This is the only authoritative American book about this marvelous egg machine. It contains full and authentic information on the breeding and rearing of these birds for market, for breeders, and for exhibition. Illustrated. 5 x 7 inches. Paper. \$0.50

The Guinea Pig

By *C. Cumberland*. Containing practical directions for the rearing, breeding and management of guinea pigs for food, fur and fancy. Illustrated. 5x7 inches. Paper.....\$0.50

Pigeon Keeping For Amateurs

By *J. C. Lyell*. A complete guide to the amateur breeder of domestic and fancy pigeons. Describing in detail the methods that give the best results, and pointing out the mistakes to be avoided. Illustrated. 5x7 inches. Paper..\$0.50

Ferrets and Ferreting

Containing instruction for the breeding, management and working of ferrets. Second edition revised and enlarged. Illustrated. 5x7 inches. Paper\$0.50

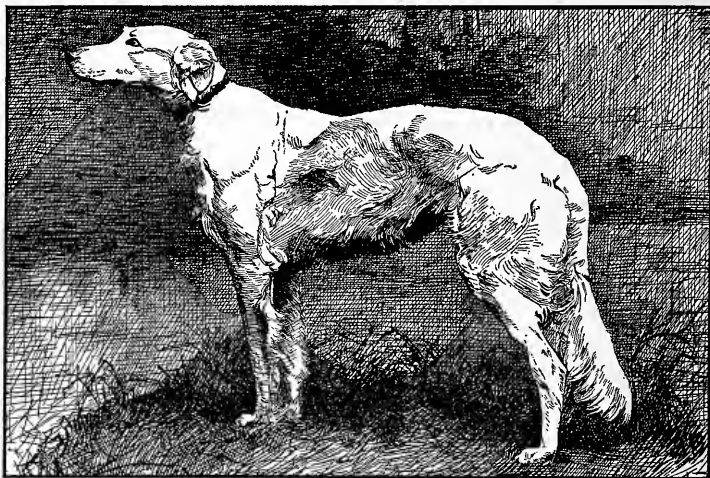
Cats—Domestic and Fancy

By *John Jennings*. A practical treatise on their antiquity, domestication, varieties, breeding, management, diseases and remedies. Exhibition and judging. Illustrated. 5x7 inches. Paper.....\$0.50

— THE DOGS —

Of Great Britain, America and Other Countries. Their Breeding, Training and Management in Health and Disease, Comprising All the Essential Parts of the Two Standard Works on the Dog

By STONEHENGE



OF ALL animals the dog possesses the most intelligence, and with proper effort can be trained and educated up to a high degree of usefulness which is abundantly illustrated by the noble Newfoundland which protects and rescues life, the sturdy Mastiff which guards well the home from all intruders, the Pointer or Setter which with his unerring scent contributes to the delicacy of the table and in the "season" swells maybe his master's slender income, the lively Terrier which rids the house of vermin, the ever alert Skye whose shrill night bark betokens danger. We have many books on the dog but no other furnishes so much information and instruction as are presented in this practical work. This book describes the diseases of dogs as well as the remedies and treatment for their cure. Making, together with chapters by American writers, the most complete dog book ever published, for a book so eclectic in character must be much more correct and valuable than it could be were it produced by one individual. Contains over one hundred beautiful engravings embracing most noted dogs in both continents. It describes the best game and hunting grounds in America.

BOOK I

Natural History, Zoological Classification and Varieties of the Dog

- CHAPTER I. The origin of the Dog.
- CHAPTER II. Wild and half-reclaimed Dogs hunting in packs.
- CHAPTER III. Domesticated Dogs hunting chiefly by the eye and killing their game for man's use.
- CHAPTER IV. Domesticated Dogs, finding game by scent, but not killing it, being chiefly used by the aid of a gun.
- CHAPTER V. Pastoral Dogs and those used for the purpose of draught.
- CHAPTER VI. Watch Dogs, house Dogs and toy Dogs.
- CHAPTER VII. Crossed breeds.

BOOK II

The Breeding, Rearing, Breaking and Management of the Dog, Indoors and Out

- CHAPTER I. Breeding.
- CHAPTER II. Rearing.
- CHAPTER III. Kennel and kennel management.
- CHAPTER IV. Breaking and entering.
- CHAPTER V. The use of the Dog in shooting.

BOOK III

The Diseases of the Dog and Their Treatment

- CHAPTER I. Peculiarities in the anatomy and physiology of the Dog.
- CHAPTER II. The remedies suited to the Dog, and the best means of administering them.
- CHAPTER III. Fevers and their treatment.
- CHAPTER IV. Inflammations.
- CHAPTER V. Diseases accompanied by want of power.
- CHAPTER VI. Diseases arising from mismanagement or neglect.
- CHAPTER VII. Diseases and accidents requiring surgical aid.

Illustrated, 5x7 inches, 366 pages. Cloth. Price, \$1.50

Diseases of Dogs

By *Hugh Dalziel*. The causes, symptoms and treatment of the diseases of dogs, to which are added instructions in case of injury and poisoning, and directions for maintaining a dog in health. Revised and enlarged by *A. C. Piesse*. Illustrated. Paper.....\$0.50

Practical Dog Training, or Training vs. Breaking

By *S. T. Hammond*. Dog training differs essentially from dog breaking, both in method and spirit, and also in the results obtained. To show the readers that they can train their dogs by kindness instead of breaking them by cruelty is the author's main object. In an easy and pleasing style he explains his methods, derived from personal experience in teaching and training dogs for hunting and other purposes. 5x7 inches. 163 pages. Cloth.....\$1.00

The Dog Book

By *James Watson*. This book covers every phase of the dog in America, with full accounts of every prominent breed. The author has been a dog-breeder and a student for forty years, both here and in England. This long experience, both as a judge at shows and as a practical fancier, has been supplemented by exhaustive research; in consequence, his book is really the first adequate treatment of the dog in America. Illustrated. 7½x10 inches. 800 pages. Cloth.....Net \$6.50

Kennel Secrets

By "*Ashmont*." This magnificent book is a practical monograph on how to breed, exhibit and manage dogs. The presswork and the numerous full-page half-tone engravings from photographs are of the highest artistic excellence. Definite rules are laid down for feeding dogs of the different breeds, under their various conditions of life. Full treatment is accorded to breeding, kenneling, exercise, drinking water, washing, grooming, troublesome insects, training, exhibiting, and there are clear and complete descriptions of all the breeds. Beautifully illustrated. 7x9 inches. 348 pages. Cloth and gold. Net \$3.00

Kennel Diseases

By "*Ashmont*." This work is intended to popularize medicine for the guidance of non-professional dog owners. In a large proportion of diseases, the recovery of dogs depends more upon the nursing which they receive than upon the judicious selection and use of medicines. These are the underlying principles which the author desires to impress upon the reader, by discovering the essentials of nursing, feeding and administration of medicines. Separate chapters are devoted to the nature and treatment of specific diseases, symptoms and treatment of poisoning, etc., etc. Illustrated. 6x9 inches. 424 pages. Cloth.....Net \$3.00

The Management and Diseases of the Dog

By *John Woodruffe Hill*. Fifth edition, to which are added the standard of points for judging dogs, and a table of medicines and their doses. Illustrated. 6x9 inches. 531 pages. Elegantly bound in cloth.....Net \$3.50

The Book of the Cat

By *Frances Simpson*. This superb volume is by far the most complete and exhaustive work on cats published. It is not only instructive to the cat fancier, but also readable and enjoyable to those who love cats for themselves and not only for their prizes and pedigrees. Full descriptions are given of the various breeds, and reliable advice as to the feeding, housing, breeding and general treatment of cats. The chapter on the management of shows will be of special interest to exhibitors. Twelve beautiful colored plates and several hundred admirable half-tone illustrations embellish this interesting book. 8x11 inches. 380 pages. Cloth and goldNet \$8.00

Hunter and Trapper

By *Halsey Thrasher*. Full and clear illustrations of the best modes of hunting and trapping practiced by an old and experienced sportsman. By following the directions given even the inexperienced will succeed, and foxes, deer, bears, and other animals fall readily into traps. Also notes on fishing for trout, pickerel and bass; how to hunt the honey bee; care of shot-guns and rifles, etc., etc. Illustrated. 5x7 inches. 92 pages. Cloth....\$0.50

HANDY FARM DEVICES AND HOW TO MAKE THEM

Compiled by ROLFE COBLEIGH

Associate Editor American Agriculturist

THIS is one of the most useful and practical books for farmers and meant for everyone who is at all handy with tools. The material has been gathered from all over the country and represents the actual experience and successful experiments of farmers. It will be a surprise to many readers to learn how easy and how cheap it is to make devices for use around the house, barn, garden, orchard, woodlot and fields, that will accomplish a great saving of labor, time and expense. The wide-awake, modern farmer does his work in the easiest and cheapest way to accomplish results. He is on the lookout for ingenious devices that will help him to accomplish this end. Nowhere else in the world can he find so many suggestions proved practical by actual experience in this line of handy farm devices as appear in our new book. Not only is the suggestion given, but there is a clear description with a picture to show just how to make each device. The departments include a chapter on the farmer's workshop and the tools he ought to have, what and how to make things for the house, barn, outbuildings, garden, orchard, woods, and almost every conceivable farm purpose, including gates, fences, and appliances for the care of bees, poultry, hogs, cattle, sheep, the use of concrete, and there is a chapter on home building. Some exceedingly interesting and practical chapters are devoted to the use of the steel square, lumber and brace rules, miter box, and the application of these instruments, including rules for constructing roofs, stairs, and laying out the foundations of buildings. The practical application of the 47th problem of Euclid is taken up in an interesting way. All of this is so written and so illustrated with drawings that any person of average intelligence can easily understand it. All deep and confusing mathematical technicalities are avoided. No other work has ever been published which has presented what is really a technical subject in a way so clear, so understandable and so easily applied to everyday problems as are these chapters last referred to. This book is printed in a large, clear type, is filled with line drawings, and contains a considerable number of full-page photographs.

Illustrated, 5x7 inches, 300 pages. Cloth. Price, net, \$1.50

Modern Houseplans FOR Everybody

By S. B. REED

THIS valuable work meets the wants of persons of moderate means and, in its new revised and modernized edition, is universally recognized as one of the most popular architectural books ever issued. Nearly all the elevations are new and according to modern requirements, correct taste and pleasing effect. It gives a wide range of design from a dwelling costing \$250 up to \$8000, and adapted to farm, village and town residences. Nearly all of these plans have been tested by practical workings. They provide for heating, ventilation, etc., and give a large share of what are called Modern Improvements. One feature of the work imparts a value over any similar publications of the kind. It gives an estimate of the quantity of every article used in the construction, and the cost of each material at the time the building was erected, or the design made. Even if prices vary from time to time, one can, from these data, ascertain within a few dollars the probable cost of constructing any one of the buildings here presented.

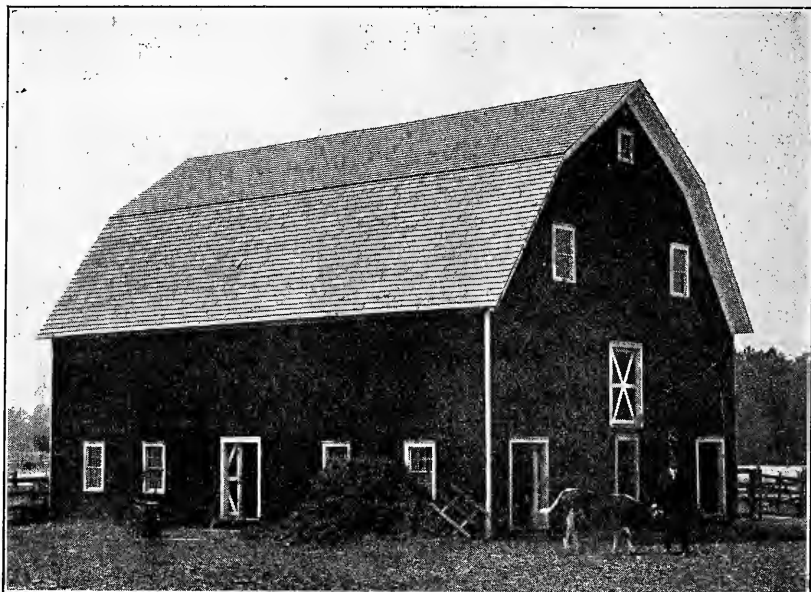
Profusely illustrated, 5x7 inches, 243 pages. Cloth. Price, \$1.00

Barn Plans and Outbuildings

New, revised and greatly enlarged edition, modernized and brought up-to-date

Edited by EDWIN C. POWELL

A reliable guide to those intending to build new barns or to remodel old farm buildings for any and all purposes.



The proper and economical erection of barns and outbuildings requires far more forethought and planning than was ordinarily given to their construction. But with modern ideas, proper appreciation of sanitary conditions, and the use of labor-saving implements, a barn that twenty-five years ago was considered perfect would not meet present requirements.

OUTLINE OF CONTENTS

After an introductory chapter on the general rules to be observed in barn building, special chapters give detailed information and illustrations on

General Farm Barns
Cattle Barns and Stables

Dairy Barns
Cattle Shelters

Sheep Barns and Sheds
Piggeries

Poultry Houses
Carriage Houses and Horse Barns

Corn Houses and Cribs
Ice Houses

Ice Houses and Cool Chambers
Dairy Houses

Creameries and Cheese Factories
Spring Houses

Granaries
Smoke Houses

Dog Kennels
Silos

Root Cellars and Root Houses
Buildings of Various Kinds, Etc., Etc.

All descriptions and directions contained in this volume are given in so plain and clear a manner as to be readily understood by anyone. Every professional builder, and every person, be he farmer or otherwise, who intends to erect a farm building of any kind, can, in this book, secure a wealth of designs and plans for a very small sum.

With 375 illustrations, 5x7 inches, 404 pages. Cloth. Price, \$1.00

Modern Carpentry

By *Fred T. Hodgson*. A new, complete guide containing hundreds of quick methods for performing work in carpentry, joining and general work. It gives directions for laying roofs, rafters, stairs, floors, joining moldings, mitering, circular work, and many other useful things. Illustrated. 5x7 inches. Cloth. Price.....\$1.00

Practical Up-to-Date Plumbing

By *G. B. Clow*. A practical work on sanitary plumbing, comprising useful information on the wiping and soldering of lead pipe joints and the installation of hot and cold water and drainage systems into modern residences. Illustrated. 5x7 inches. 250 pages. Cloth. \$1.50

Concretes, Cements, Mortars, Plasters and Stuccos—How to Make and How to Use Them

By *F. T. Hodgson*. This book appeals directly to the workman, whose business it is to make and apply the materials named in the title. As far as it has been possible to avoid chemical descriptions of limes, cements and other materials, and theories of no value to the workman, such has been done, and nothing has been admitted into the pages of the work that does not possess a truly practical character. Illustrated. 5x7 inches. 300 pages. Cloth.....\$1.50

The Practical Gas Engineer

By *E. W. Longanecker, M.D.* A book that tells what a gas or gasoline engine is; how to purchase a gas or gasoline engine; how to install the engine; how to operate it; how to care for it. In short, just how to handle it successfully, and all about it. It is a complete, plainly written work, containing the practical points needed by a purchaser, owner or operator of a gasoline engine. In handling the various subjects the author has studiously avoided the theoretical, and adhered strictly in as brief a manner as possible, to the practical questions concerning gas and gasoline engines. Illustrated. 4x7 inches. 146 pages. Cloth \$1.00

Farm Engines and How to Run Them

By *J. H. Stephenson*. A complete instructor for the operator or amateur. It teaches you to successfully operate any Farm or Traction Engine made. It explains how to get the best results out of any engine on a hill with a heavy load, how to set a valve, how to line an engine. Contains 200 questions and answers that will be new and instructive to traction and farm engineers. Illustrated. 5x7 inches. 250 pages. Cloth.....\$1.00

Modern Blacksmithing, Rational Horseshoeing and Wagon Making

By *J. G. Holstrom*. This valuable book is written by a man having thirty years' practical experience. Elementary rules are employed, thus avoiding the more technical terms, rendering this treatise practical and more valuable to all who have use for it. The rules and recipes will be found of great value to farmers, horseshoers, wagon makers, as well as amateurs and young men on the farm. Illustrated. 5x7 inches. 200 pages. Cloth \$1.00

The Traction Engine

By *James H. Maggard*. Every feature in the operation of these machines is so accurately described that any intelligent farmer may familiarize himself with the workings of them. It gives general descriptions of the traction engine, what to do and what not to do with it, the water supply, care and management of the boiler, management of the fire, with coal and wood, and every particular in its care and management. Revised and enlarged edition. Illustrated. 4x6½ inches. 128 pages. Cloth.....\$1.00

Draughtsman's Manual; or How Can I Learn Architecture?

By *F. T. Camp*. Containing hints to inquirers and directions in draughtsmanship. New, revised and enlarged edition. One small volume. Cloth. \$0.50

Painter, Gilder and Varnisher's Companion

By *William T. Brantt*. Containing rules and regulations in everything relating to the art of painting, gilding, varnishing, glass staining, graining, marbling, sign writing, gilding on glass, and coach painting and varnishing; tests for the detection of adulterations in oils, colors, etc.; and a statement of the diseases to which painters are particularly liable, with the simplest and best remedies. Sixteenth edition. Revised with an appendix, containing colors and coloring—theoretical and practical. Comprising descriptions of a great variety of additional pigments, their qualities and uses, to which are added driers, and modes and operations of painting, etc. Together with Chevreul's principles of harmony and contrast of colors. 5x7 inches. 395 pages. Cloth.....\$1.50

Everybody's Paint Book

By *B. F. Gardner*. A complete guide to the art of outdoor and indoor painting. Designed for the special use of those who wish to do their own work, and consisting of practical lessons in plain painting, varnishing, polishing, staining, paper hanging, kalsomining, etc., as well as directions for renovating furniture, and hints on artistic work for home decoration, together with a full description of the tools and materials used. Precise directions are given for mixing paints for all purposes. 5x7 inches. 184 pages. Cloth. \$1.00

The Complete Carriage and Wagon Painter

By *Fritz Schriber*. In plain language the author gives detailed directions for painting carriages, wagons and sleighs, besides full instruction in all the various branches, including lettering, scrolling, ornamenting, striping, varnishing and coloring, with numerous recipes for mixing colors. It contains information of value to the expert painter, and is indispensable to those whose opportunities for learning the business have been limited. This book will be found valuable to all, and especially to those who do their own painting. Illustrated. 5x7 inches. 177 pages. Cloth...\$1.00

The Painter's Encyclopedia

By *F. B. Gardner*. This work contains definitions of all important words in the art of plain and artistic painting, with details of practice in coach, carriage, railway car, house, sign and ornamental painting; including graining, marbling, staining, varnishing, polishing, lettering, stenciling, gilding, bronzing; together with valuable hints and helps in scene painting, porcelain painting, plain and distemper painting. Elaborately illustrated. 5x7 inches. 427 pages. Cloth.....\$1.50

The Carpenter's Steel Square and Its Uses

By *Fred T. Hodgson*. Being a full description of the square, and its uses in obtaining the lengths and bevels of all kinds of rafters, hips, groins, braces, brackets, purlins, collar beams and jack-rafters; also, its application in obtaining the bevels and cuts for hoppers, spring moldings, octagons, stairs, diminished stiles, etc., etc. Illustrated. 5x7 inches. 200 pages. Cloth...\$1.00

Plaster and Plastering

By *Fred T. Hodgson*. This treatise on mortars and cements, how to make and how to use them, is a complete guide for the plasterer in the preparation and application of all kinds of plaster, stucco, Portland cement, hydraulic cement, lime of Tiel, Rosendale and other cements, with useful and practical information on the chemistry, qualities and uses of the various kinds of limes and cements, together with the rules for measuring, computing and valuing plaster and stucco work. Illustrated. 5x7 inches. 110 pages. Cloth.....\$0.50

Bungalows, Camps and Mountain Houses

Containing a large number of designs, contributed by architects from all sections of the country, showing buildings that have been recently erected. Illustrated by seventy separate designs, giving exterior views, interiors, and floor plans, together with suggestions as to site, sanitation, layout, construction, etc. Handsomely bound in illuminated covers. Price Net \$2.00

How To Co-operate

A Manual for Co-operators

By HERBERT MYRICK

The Most Helpful Book of the Times. Indorsed by the Grange, Farmers' Alliance, Press and Public as Just the Book for Every Farmer, Workingman and Struggling Woman in the Land.

IT AIMS to describe the How rather than the Wherefore of co-operation; to be a treatise on the art, just how to co-operate, rather than a dissertation on the science, theory and ethics of the subject. The very concise directions given are based on the practical experience of actual successful co-operative enterprises in the United States, the managers of which have united with the author to produce a book that shall be a specific and reliable guide to co-operative effort of all kinds.

Every page is bristling with facts and experience showing just how people in all vocations—farmers especially—can by co-operation save from 8 to 15 per cent on all they have to buy, and make an extra profit of 5 to 20 per cent on all they have to sell. The work is thus a Handbook and a Directory of Co-operation in America. Anyone at all interested in the subject cannot afford to be without a copy.

Illustrated, 5x7 inches, 349 pages. Cloth. Price, \$1.00

Book-Keeping For Farmers

A Treatise on Farm Accounts

By T. CLARK ATKESON, Ph.D., LL.B.

To Which is Added

The Stockbridge System of Accounts

Edited by HERBERT MYRICK

THE keeping of accurate accounts is indispensable to complete success in farming. Without them the farmer can never see just where he stands, or whether he is making or losing money. The methods outlined in this pamphlet are so simple that any person having a fair knowledge of arithmetic can keep the farm records so that he will know what each product has cost him, and which crop and line of farming is paying the best. A glance at the accounts will show the gain or loss after adopting the valuable plan, plainly and concisely described in this book.

5x7 inches, 40 pages. Paper. Price, 25 cents

The Ice Crop

How to Harvest, Ship and Use Ice

By THERON L. HILES

A Complete, Practical Treatise for Farmers, Dairymen, Ice Dealers, Produce Shippers, Meat Packers, Cold Storers, and All interested in Ice Houses, Cold Storage, and the Handling or Use of Ice in Any Way, Including Many Recipes for Iced Dishes and Beverages.

THE construction of cold storage ice houses, and the tools and methods employed for cutting and housing the ice, as well as the benefits to be gained, are described. No farmer need be without ice if he will follow the plans suggested in this excellent volume, which is the only published book on the practical phases of the ice crop.

Illustrated, 5x7 inches, 122 pages. Cloth. Price, \$1.00

Scribner's Lumber and Log Book

By J. M. SCRIBNER, A.M.

This is the Most Complete Book in This Line Ever Published

IT GIVES correct measurement of Scantling, Boards, Plank, Cubical Contents of Square and Round Timber, Saw Logs, reduced to Board Measure, by Doyle's Rule, Specific Gravity and Weight of Different Woods, Capacity of Cisterns, Measurement of Wood and Price per Cord, Stave and Heading Bolt Table, Hints to Lumber Dealers and Mechanics in Selection of Standing Trees, Defects of Timber (especially oak) and Felling Timber, Table of Wages by the Month, Board or Rent by the Week or Day, Interest Tables, etc. It has had a more extensive sale than all other books of its kind ever published, and is recognized as standard authority by all large lumber dealers.

Price, 25 cents

Denatured or Industrial Alcohol

By *R. F. Herrick*. A treatise on the history, manufacture, composition, uses, and possibilities of industrial alcohol in the various countries permitting its use, and the laws and regulations governing the same, including the United States, with concise tables, methods, and notes for the use of the engineer, chemist, manufacturers of alcohol and alcohol making and using apparatus, including alcohol motors, engines, illuminating lamps, and heating and cooking stoves. Illustrated 6x9 inches. 512 pages. Cloth.....Net \$4.00

Distillation of Alcohol from Farm Products and Denatured Alcohol

By *F. B. Wright*. This work is not intended as a scientific treatise but as a help to farmers and others wishing to go into this industry on a moderate scale. Containing new law, government regulations, authorized U. S. formulas, etc., etc. Illustrated. 5x7 inches. 283 pages. Cloth....Net \$1.00

Recipes for the Preserving of Fruit, Vegetables and Meats

By *E. Wagner*. Translated from the German. The points dealt with in this book comprise the recipes and instructions for preserving, and the necessary utensils and machinery, the work being divided into three parts: The first dealing with the preserving of fruit, the second with that of vegetables, and the third with preserved meat. Illustrated. 5x7 inches. 120 pages. Cloth. Net \$2.50

Canning and Preserving of Food Products with Bacteriological Technique

By *E. W. Duckwall*. A practical and scientific handbook for manufacturers of food products, bacteriologists, chemists, and students of food problems. Also for processors and managers of food product manufactories. With figures, tables and half-tones. Illustrated. 6x9 inches. Cloth. Net \$5.00

Ventilation

By *F. H. King*. For dwellings, rural schools and stables. In the preparation of this treatise the aim has been to lay before the reader the foundation facts and principles underlying the growing and imperative demand for a more nearly adequate supply of pure

air than is being continuously maintained in the vast majority of homes, offices and stables. Live stock raisers will find the book sufficiently explicit and illustrative to enable them to readily solve the problem of stable ventilation. Illustrated. 5x7 inches. 128 pages. Cloth.....Net \$0.75

Industrial Alcohol; Its Manufacture and Uses

By *J. K. Brachvogel*. This book covers the manufacture of alcohol from the raw materials to the final rectified and purified product. An introductory section deals with the importance of the new law and what it means to the farmer and the manufacturer. Additional sections cover the methods of denaturing, domestic utilization of alcohol for heating and lighting purposes, alcohol as a fuel for power production, and a statistical review. The full United States law is given in an Appendix. Illustrated. 6x9 inches. 528 pages. Cloth.....Net \$4.00

The Manufacture of Preserved Foods and Sweetmeats

By *B. Hanson*. A Hand-book of all the processes for the preservation of flesh, fruit and vegetables, and for the preparation of dried fruit, dried vegetables, marmalades, fruit syrups, and fermented beverages, and of all kinds of candies, candied fruit, sweetmeats, rocks, drops, dragees, pralines, etc. Illustrated. 5x7 inches. 220 pages. Cloth.....Net \$3.00

The Scientific American Cyclopaedia of Receipts, Notes and Queries

Over 15,000 selected receipts are here collected, nearly every branch of the useful arts being represented. It is much more than a receipt book, as in most cases it gives the standard and special formulas which enable the reader to find a receipt which fits his peculiar needs. The alphabetical arrangement with abundant cross references makes it an easy work to consult. This book was first published in the fall of 1891 and it has had an unprecedented sale. It has been used with equal success by chemists, technologists and those unfamiliar with the arts, and it is a book which is useful in the laboratory, factory or home. Send for full table of contents. 15,000 receipts. 6x9 inches. 734 pages. Cloth. Net \$5.00

Home Candy Making

By *Mrs. S. T. Rorer*. A book full of choice recipes, with complete instructions for making attractive and wholesome caramels, nougat, sugar drops, colorings, flavorings, candies and confections. 5x7 inches. 74 pages. Cloth.....\$0.50

Canning and Preserving

By *Mrs. S. T. Rorer*. This work is the result of careful practice in teaching beginners how to can and preserve fruits and vegetables; also the best methods of making marmalades, fruit butter and jellies, drying fruits and making syrups and catsups, pickling, flavored vinegars, drying herbs, etc. 5x7 inches. 80 pages. Cloth....\$0.50

American Game Bird Shooting

By *J. M. Murphy*. This work has been written entirely from a sportsman's standpoint, giving a concise description of the game birds of the United States and Canada, their haunts and habits, and the methods of capturing them practiced in various parts of the continent; the best dogs for field and covert work; the proper charges for guns, etc., etc. Illustrated. 5 x 7 inches. 347 pages. Cloth.....\$1.50

Leftovers Made Palatable

By *Isabel Gordon Curtis*. This is a new idea in cook books. It gives a large variety of recipes for dishes that may be made from remains of food which accumulate in every kitchen, sometimes so small in quantity they seem impossible. It shows hundreds of methods for making the most savory and dainty dishes from every leftover, stale bread, cold coffee, sour milk, cold vegetables, fish, beef, veal, lamb, pork, ham, poultry, dry cheese, stale cake and small remains of fresh fruit or jams. 5x7 inches. 200 pages. Bound in white enamel cloth.....\$1.00

A Swim for Life

The true story of one of his thrilling adventures by the Editor of *American Agriculturist*. A graphic recital of an exciting incident is here charmingly told. An extraordinarily inspiring account of plucky endeavor. The book is brimful of interest from cover to cover. Limited edition-de-luxe, type-writer type, printed on one side of the

page only, rich paper of unique quality, seven full-page and finely printed engravings, the frontispiece in photogravure, and two other portraits, beautifully bound in sea green cloth with decorated cover. Each page is a trifle over eight inches wide, and about five inches high.....\$1.00

Florida and the Game Water Birds of the Atlantic Coast and Lakes of the United States

By *R. B. Roosevelt*. With a full account of the sporting along our seashores and inland waters. No matter what one may want to hunt, so long as it is to be found in Florida and along the Atlantic coast and the Great Lakes, he will find out all about the best methods of hunting it and the most likely places for finding it by reading the pages of this book. The book is a perfect sportsman's guide for the regions covered, and will prove a treasure to every lover of the gun. Illustrated. 5 x 7 inches. 443 pages.....\$1.50

The Promise of Life

A preaching by *Herbert Myrick* to the New York Churchman's Association—an attempt to show that God, nature and man, and all things animate and inanimate, are part of one universal whole, which promotes happiness, contentment and satisfaction to each individual “provided only we know how to live.” In simple language is pointed out the union of science and religion in a manner that carries inspiration to the weak, the struggling or the strong. Handsomely printed. Bound in cloth and gold. 5x7 inches.....\$0.50

The Bride's Primer

A most delightful gift book for brides. Fun and wisdom drawn from the perplexities of a bride during the first year of wedded happiness, offered in the simple language of childhood's primer, will provoke many a merry laugh to smooth rough places in everyday life. Beneath its quaint fun is the real and helpful human interest which makes the book unique among gift books. The text, by *Thornton W. Burgess*, is supplemented by a charming talk to brides by Tom Masson, of “Life.” The drawings by F. Strothmann are printed in colors, making on the whole an exquisite book. Handsomely bound in cloth. 9x12 inches.....\$1.50

Cache La Poudre

(Pronounced CASH LA POODER)

The Romance of a Tenderfoot in the Days of Custer

By HERBERT MYRICK

Illustrated from paintings made exclusively for this work by Charles Schreyvogel, Edward W. Deming, and Henry Fangle



THERE probably never was just such a book as "Cache la Poudre" before. It is fiction and yet it is fact, and if you are not out of the West, the real West back in the '70's, you wonder which is which. Mr. Myrick has given a vivid picture of the days that are no more and the memory of which is fast passing away from the older men. There is a love story of stirring adventure in the book; but what puzzles one is suddenly to meet in the narrative a sketch of some person who is or was evidently really once on earth. Then in the appendix to the book you find that the person really did or does exist and that his right name has been used. Then the illustrations are unique. Some are reproductions of well-known works of art; others were painted and reproduced for his book, while others again are half-tones representing ordinary scenes of western ranch life. At every page in the book you find something startling and new for a work of fiction. Mr. Myrick evidently wished to publish a book the like of which no one has ever seen, and he has succeeded.—Chicago Tribune.

Mr. Myrick's book is attracting well-deserved attention from leading papers. These short extracts are worth your reading

The book is entirely different from the usual cowboy story, being human, sympathetic and remarkable for its dash and color.—Portland Oregonian.

It is brilliantly written and is a lively portrayal of life in the Wild West, leading up to the massacre of Custer.—Buffalo (N. Y.) Courier.

The book is unlike any other hitherto published. It bears the stamp of a strong individuality.—New York Globe.

A valuable and interesting part is the addenda, in which the history of the local allusions is told in detail, and the numerous photographs of western scenes and subjects that illustrate it.—New York Evening Post.

The book is different from any other story, and is true to the life actually lived by the makers of Colorado and of the Northwest in the days of Custer.—Albany (N. Y.) Evening Journal.

Remarkable among books. Conventional in no way from a strict literary point of view. Illustration is a feature that will attract much attention.—New York World.

The narrative is drawn from actual life, with the adventitious aid of a love story to give zest to truth.—Detroit Free Press.

A highly melodramatic story, the illustrative features of which are of first importance. The action is at all times brisk and saturated with cowboy vigor.—Boston Herald.

Edition de Luxe Frontispiece is an 8x10 photograph (platinum print) of Schreyvogel's painting of the heroine. Several illustrations in multi-color, tint and embossed. Plate and deckle edge paper. Each copy numbered, edition limited to 550. Bound in genuine Indian smoke-tanned buckskin (very rare) with cowboy fringe, cover design by Schreyvogel. Size 8x10, boxed. *This edition is nearly exhausted. But few copies remain.*

Regular Edition printed from same plates, on nice paper, slightly smaller margins, one plate in full color, bound in cloth, same cover design.

Edition de Luxe, Net Price, \$6.00; Postage, 20 cents.

Regular Edition, Postpaid, \$1.50

The Hoosier Schoolmaster

A NOVEL. By EDWARD EGGLESTON



THIS fascinating work has enjoyed an undiminished popularity from the moment of its publication, and has had the honor of many foreign editions in various languages. It has been rendered into French, German, Danish and Russian. Meantime the demand for the American editions has been so great that we have issued an elegant Library Edition. We need not say anything in praise of the book. The questions of its merit have been settled by the public at home and abroad. The Hoosier Schoolmaster was the "File-Leader" of the present dialect movement in American fiction and its sales increase rather than diminish. It has become one of the few books destined to rank as classics. The state of society here described has already passed into history. The days when public opinion regarding education was represented by Mr. Peter Jones' dictum, "No lickin', no larnin'," have gone forever. Spelling schools of the old sort, and hardshells, and bands of robbers in rustic districts, were all real enough fifty years ago. But in the future he who would learn of these things, and see the pathos and the fun of them, will find it hardly anywhere else than

in this swift-moving story of a life that was full of fire and action, portrayed in this most American of all American books.

Library Edition, beautifully printed and bound in cloth and gold, Price, \$1.50

The End of the World

A LOVE STORY. By EDWARD EGGLESTON

CONTENTS—In love with a Dutchman—Chapter 1. An Explosion, 2. A Farewell, 3. A Counter Irritant, 4. At the Castle, 5. The Backwoods Philosopher, 6. Within and Without, 7. Figures Won't Lie, 8. The New Singing Master, 9. An Offer of Help, 10. The Coon-Dog Argument, 11. Two Mistakes, 12. The Spider Wins, 13. The Spider's Web, 14. The Web Broken, 15. Jonas Expounds the Subject, 16. The Wrong Pew, 17. The Encounter, 18. The Mother, 19. The Steam Doctor, 20. The Hawk in a New Part, 21. Jonas Expresses His Opinion on Dutchmen, 22. Something Ludicrous, 23. The Giant Greatheart, 24. A Chapter of Betweenes, 25. A Nice Little Game, 26. The Result of an Evening with Gentlemen, 27. Waking Up an Ugly Customer, 28. August and Norman, 29. Aground, 30. Cynthia Ann's Sacrifice, 31. Julia's Enterprise, 32. The Secret Stairway, 33. The Interview, 34. Getting Ready for the End, 35. The Sin of Sanctimony, 36. The Deluge, 37. Scaring a Hawk, 38. Jonas Takes an Appeal, 39. Selling Out, 40. The Last Day and What Happened in It, 41. For Ever and Ever, 42. The Midnight Alarm, 43. Squaring Accounts, 44. New Plans, 45. The Shiverce, 46.

Illustrated, 5x7 inches, 300 pages. Cloth. Price, \$1.50

The Mystery of Metropolisville

A STORY OF AMERICAN LIFE AND MANNERS. By EDWARD EGGLESTON

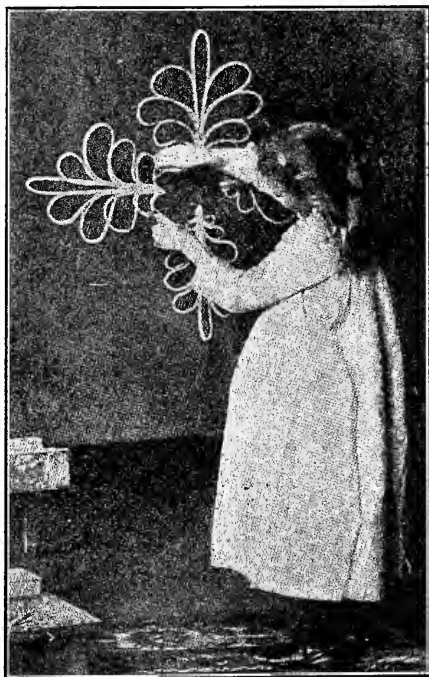
CONTENTS—Words Beforehand—Chapter 1. The Autocrat of the Stage Coach, 2. The Sod Tavern, 3. Land and Love, 4. Albert and Katy, 5. Corner Lots, 6. Little Katy's Lover, 7. Catching and Getting Caught, 8. Isabel Marley, 9. Lovers and Lovers, 10. Plausaby Esq., Takes a Fatherly Interest, 11. About Several Things, 12. An Adventurer, 13. A Shelter, 14. The Inhabitant, 15. An Episode, 16. The Return, 17. Sawney and His Old Love, 18. A Collision, 19. Standing Guard in Vain, 20. Sawney and Wescott, 21. Rowing, 22. Sailing, 23. Sinking, 24. Dragging, 25. Afterward, 26. The Mystery, 27. The Arrest, 28. The Tempter, 29. The Trial, 30. The Penitentiary, 31. Mr. Lurton, 32. A Confession, 33. Death, 34. Mr. Lurton's Courtship, 35. Unbarred, 36. Isabel, 37. The Last—Words Afterwards.

Finely illustrated, 5x7 inches, 320 pages. Cloth. Price, \$1.50

New Methods in Education

By J. LIBERTY TADD

EXPLAINING processes whereby hand, mind, eye and natural feeling are developed and educated, all at the same time; whereby one may receive more strength and vitality in studying and working than he gives out; whereby mental and physical powers co-ordinate with one another and make thought and action work together.



The Highest Indorsement By Educators and Teachers

No novel of the day contains more of human interest and feeling. The wealth of illustrations direct from life, the enthusiastic descriptions of what has been actually accomplished even under the most unpromising conditions, are a revelation of natural human ability, and are an insight into a phase of life little known by those outside of it. But no merely "educational" book could have been so popular, even for school use. It has been translated into German, French, Bohemian, Swedish, Russian, Portuguese and several other languages, and has had a pro-

found influence on the educational methods of England and her colonies as well.

NO SCHOOL TOO POOR to adopt these natural methods, because the cost of equipment is comparatively but a trifle. No teacher too ignorant to enrich, to improve his or her instruction by the methods so fully described. No school so rich in money, or its course so crowded, that it will not be benefited by working along the lines suggested by this book.

AS A GIFT BOOK, for young or old, it is peculiarly fitting, because of its fascinating interest, its novelty, and the inspiration to do things well that it provokes. Parents can make no better present to a boy or girl of any age. As a gift to teacher or school official, nothing is more appropriate.

EDITION DE LUXE with author's portrait and autograph, size 7 1-2x10 1-2, 456 pages, fine plate paper, 478 illustrations and 44 full page plates, bound in cloth and boards, illuminated cover, weight, 4 1-2 pounds boxed, price net, \$3.00

STUDENT'S EDITION—Printed from the same plates as the Edition de Luxe, on good but lighter paper with smaller margins, slightly abridged, substantially bound. For use in school or field, studio or shop. Price, \$2.00

Portrait Life of Lincoln

Life of Abraham Lincoln, the Greatest American, told from original photographs taken with his authority during the great crisis through which he led his country—treasured among the 7,000 secret service war negatives in the Brady-Gardner Collection at Springfield, Mass., and in private collections, valued at \$150,000.

By FRANCIS TREVELYAN MILLER

Founder and Editor-in-Chief of "The Journal of American History"—Author of "The Photographic History of the Civil War"—Author of "American Hero Tales"—Editor of the Search Light Library—Member of the American Historical Association—Fellow of The American Geographical Society—Member of The American Statistical Association—Member of The National Geographic Society—Member of The American Academy of Political and Social Science

There is no book of modern times that is destined to have a greater effect on the American people than this new, vital, inspiring life of the Greatest American. It is a book with a mission—and that mission is to revive in the twenty million homes of America the true spirit of Lincoln, that man of rugged honesty who said that "God must have loved the Common People or he would not have made so many of them;" the man who knew what it meant to start at the bottom and work to the top, the man who had a heart big enough to hold the whole world; the man who met misfortune face to face, and overcame it with the might of manhood.



This volume will be a revelation to most readers. In spite of the fact that more books have been written about Lincoln than any other man in the world's history, nothing like it has yet appeared. The book will contain the first collection of all the known photographs of Lincoln. This is the first time that he has been brought before the people in the actual negatives for which he sat during his life. It is a gallery of famous portraits, taken from the greatest collection in the world and valued at more than \$150,000.

The text is printed from new, large, clear type, on dull finished art paper; pages 7x10 inches; printed in sepia; bound in silk cloth, with gold side and back stamping. Price, \$2.00

The Farmers' Tanning Guide

By *G. E. Stevens*. This volume gives all the quick ways of tanning in from ten minutes to six weeks. Also complete recipes for making your own solutions. Prepared especially for farmers. Illustrated. 5x7 inches. Paper. \$0.25

Ginseng and Other Medicinal Plants

A book of valuable information for growers of Ginseng and Golden Seal, as well as collectors of medicinal roots, barks, leaves, etc. Tells how to grow and where found, medicinal uses, value, etc. Illustrated. 5x7 inches. 317 pages. Cloth.....\$1.00

Steel Traps

By *A. R. Harding*. All about the various makes and how to use them. Also chapter on care of pelts, etc. Illustrated. 5x7 inches. 333 pages. Cloth.....\$0.60

Mink Trapping

By *A. R. Harding*. All the methods of experienced trappers. Contains 183 pages, 53 illustrations. Price....\$0.60

Fox Trapping

By *A. R. Harding*. Devoted to ways of outwitting this wary animal. A book of instruction telling how to trap, snare, poison and shoot. Illustrated. 5x7 inches. 200 pages. Cloth.....\$0.60

Deadfalls and Snares

By *A. R. Harding*. How to build and set traps of the material the forest supplies. Illustrated. 5x7 inches. 232 pages. Cloth.....\$0.60

Fur Farming

By *A. R. Harding*. A book of information about Fur-bearing Animals, Enclosures, Habits, Care, etc. Fur farming is going to be a profitable business. Illustrated. 5x7 inches. 200 pages. Cloth.....\$0.60

Practical Taxidermy and Home Decoration

By *Joseph H. Batty*. A manual of general information for sportsmen and taxidermists, showing that the mere skinning and stuffing of a specimen is but a small portion of the taxidermist's real

work or pleasure. Every detail pertaining to outfitting, trapping, collecting animals, preparing skins, mounting birds and other animals, collecting and preparing eggs, insects, decorating with natural objects, and hundreds of other subjects of interest and pleasure to the student and lover of nature are plainly and interestingly described. In this book the collector can learn to mount his own specimens, the schoolboy his game, and in the general household a buck's head in the dining-room or a bright oriole in the parlor presents a pleasing contrast to other ornaments. Illustrated. 5x7 inches. 203 pages. Cloth. Price.....\$1.00

Camp Life in the Woods

By *W. Hamilton Gibson*. Containing hints on camp shelter, log huts, bark shanties, woodland beds and bedding, boat and canoe building and valuable suggestions on trapper's food, etc. With chapters on the trapper's art, containing all the "tricks" and valuable bait recipes of the profession; directions for the use of the steel trap, and for the construction of traps of all kinds; detailed instructions for the capture of all fur-bearing animals; recipes for the curing and tanning of fur skins, etc. Illustrated. 5x7 inches. 300 pages. Cloth.....\$1.00

Practical Hints on Rifle Practice with Military Arms

By *C. E. Prescott*. A reliable guide showing how any man, unless physically incapable, may gain distinction in the art of rifle shooting. Pocket edition. Flexible cover.....\$0.25

Life and Writings of Frank Forester

By *Henry William Herbert*. Embracing the first full and authentic Memoir by Col Thomas Picton, Herbert's "pupil, friend and life-long companion," Fugitive Sketches, Unpublished Manuscripts, Contributions from Old Friends and Companions, etc. Elegantly illustrated, full-page portrait of Herbert in hunting costume, an accurate picture of "The Cedars," and many other appropriate illustrations. Two volumes. 5x8 inches. 300 pages each. Cloth.....\$3.00

Recollections of Fly Fishing

By *Edward Hamilton, M.D., F.L.S.* Notes on the haunts, habits and history of salmon, trout and grayling, valuable and entertaining in point of information as well as in style of diction. Illustrated by a mezzotint engraving of Francis Seymour Haden, and other pictures. 5x7 inches. 190 pages. Cloth.....\$1.00

Home Fishing in Home Waters

By *Seth Green.* A practical treatise on fish culture. This volume includes directions for utilizing the streams and ponds that are found on farm lands. It describes the methods of artificial propagation, the care of eggs and fry, the process of hatching and the modes of transportation to new waters. The construction of ponds is fully explained. The book appeals as well to experienced old hands as to beginners in the "gentle craft." 5x7 inches. 81 pages. Cloth.....\$0.50

The Goldfish and Its Systematic Culture

By *Hugo Mulertt.* Gives a full description of the most successful manner in which to deal with the Goldfish in order to make it profitable, how to combat its diseases and enemies, construction of ponds for breeding purposes, etc. Illustrated. 5x7 inches. 160 pages. Cloth.....\$2.00

Domesticated Trout—How to Breed and Grow Them

By *Livingston Stone.* The author writes with the enthusiasm of an amateur who has gained signal success in a favorite specialty, but at the same time with a businesslike directness and point, as if the culture of fish had been the occupation of his life. The subject is treated in an exhaustive manner, leaving no detail of interest to the reader untouched, and presenting a great amount of novel information in an explicit form. To all breeders of trout this book is indispensable. Illustrated. 5x7 inches. 367 pages. Net \$2.50

The Amateur Aquarist

By *Mark Samuel.* Complete instructions for making a self-sustaining aquarium, requiring change of water

but once a year. It tells how, when and where to find suitable water plants and fishes. Over 50 illustrations from life. 16mo. Cloth.....\$1.00

Book of the Black Bass

By *Dr. James A. Henshall.* This new edition combines in one volume the author's previous works on the Black Bass. It has been thoroughly revised, and much of the text of the old editions has been eliminated, new matter substituted, and other features added more in accordance with present knowledge of the subject. The "Book of the Bass" is of an entirely practical nature regarding its subject matter and its illustrations. It has been written more with a view to instruct than to amuse or entertain. In addition to the scientific and life history of both species of black bass, it gives a practical treatise on angling and fly-fishing, and a full description of all tools and tackle employed in their capture. Illustrated. 5x7½ inches. 452 pages. Cloth. Net \$3.00

The A B C of Carp Culture

By *A. I. Root and George Finley.* A complete treatise upon the food carp and its culture, including plans and specifications, and the fullest instructions for the construction of ponds, and everything pertaining to the business of raising carp for food. Illustrated. Paper.....\$0.35

Superior Fishing

By *Robert Barnwell Roosevelt.* A treatise on the striped bass, trout, black bass and bluefish of the northern states. Embracing full directions for dressing artificial flies with the feathers of American birds, an account of a sporting visit to Lake Superior, etc., etc. In his preface to this work the author says: "On reading the title of this book, it is natural to consider what is 'Superior Fishing.' In all manner of sport there is something higher than the mere capture of the finny prey, the communion with nature, the presence of the waving trees, and the babbling brook, or the thundering waterfall, the clouds and the winds and the waters, which bring the human soul nearer the skies from which it came and to which it must in the end return." 5x7 inches. 349 pages. Cloth.....\$1.50

PUBLISHED AND SOLD BY
ORANGE JUDD COMPANY

Ashland Building, 315-321 Fourth Avenue, New York, N. Y.

Publishers and Importers of all works pertaining to Rural Life

DESCRIPTIONS of the following BOOKS, under their respective classifications,
 will be found in this catalog, on the *pages* designated before the titles.

<i>Page</i>	Agriculture and Farming	
13	A B C Agriculture. M. C. Weld.....	\$0.50
7	Agriculture. W. P. Brooks (three volumes).....	Net 3.50
7	Agriculture for Beginners. Burkett, Stevens and Hill.....	Net .75
15	Agricultural Economics. An Introduction to the Study of. H. C. Taylor.....	Net 1.25
27	Agriculture in Some of Its Relations with Chemistry. F. H. Storer (three volumes).....	Net 5.00
5	Agriculture Through the Laboratory and School Garden. C. R. Jackson and L. S. Daugherty.....	Net 1.50
17	American Farm Book. R. F. Allen.....	2.00
30	Bacteria in Relation to Country Life. J. G. Lipman.....	Net 1.50
113	Bookkeeping for Farmers. T. C. Atkeson.....	.25
18	Cereals in America. The. T. F. Hunt.....	1.75
17	Crop Growing and Crop Feeding. W. F. Massey.....	1.00
3	Earth's Bounty, The. K. V. St. Maur.....	Net 1.75
15	Elements of Agriculture, Southern and Western. W. C. Welborn.....	Net .75
3	Farm Appliances.....	.50
3	Farm Conveniences.....	1.00
22	Farm Crops. C. W. Burkett.....	Net 1.50
11	Farm Development. W. M. Hays.....	Net 1.50
2	Farmer's Cyclopaedia of Agriculture. E. V. Wilcox and C. B. Smith.....	3.50-4.50
4	Farm Machinery and Farm Motors. J. B. Davidson and L. W. Chase.....	Net 2.00
7	Farm Management. F. W. Card.....	Net 2.00
12	Farm Grasses of the United States. W. J. Spillman.....	1.00
15	Farmer's Business Handbook, The. I. P. Roberts.....	Net 1.25
30	Farmer's Account Book and Farm Record. E. A. Boehne.....	Net 2.25
—	Farmers' Manual of Law, The. H. E. Willis.....	Net 2.00
—	Fertilizers and Crops. L. L. Van Slyke.....	Net 2.00
7	First Book of Farming. C. L. Goodrich.....	Net 1.00
13	First Principles of Agriculture. E. B. Voorhees.....	Net 1.00
3	Fences, Gates and Bridges.....	.50
9	Forage Crops Other than Grasses. Thomas Shaw.....	1.00
17	Forage Crops. E. B. Voorhees.....	Net 1.50
19	Forage and Fibre Crops in America, The. T. F. Hunt.....	1.75
17	Grasses of North America. W. J. Beal (two volumes).....	Net 7.50
108	Handy Farm Devices and How to Make Them. R. Cobleigh.....	Net 1.50
15	How Crops Grow. S. W. Johnson.....	1.50
3	How Crops Feed. S. W. Johnson.....	1.50
13	How the Farm Pays. P. Henderson and W. Crozier.....	2.00
15	How to Choose a Farm. Thomas Hunt.....	Net 1.75
15	Introduction to Business Organization. S. E. Sparling.....	Net 1.25
13	Manual of Agriculture. G. E. Emerson and C. L. Flint.....	1.00
7	New Earth, The. W. S. Harwood.....	Net 1.75
30	Our Farm of Four Acres.....	.30
17	Pedder's Land Measure for Farmers.....	.50
13	Physics of Agriculture. F. H. King.....	Net 1.75
13	Plant Life on the Farm. M. T. Masters.....	1.00
7	Practical Agriculture. W. F. Massey.....	Net 1.50
3	Principles of Agriculture, The. L. H. Bailey.....	Net 1.25
17	Pruning Book, The. L. H. Bailey.....	Net 1.50
20	Rural School Agriculture. C. W. Davis.....	1.00
25	Rural Wealth and Welfare. G. T. Fairchild.....	Net 1.25
3	Self-Supporting Home. A. K. V. St. Maur.....	Net 1.75
30	Silk Culture. C. E. Bamford.....	.30
17	Silos, Ensilage and Silage. M. Miles.....	.50
25	Soils and Crops of the Farm. Morrow and Hunt.....	1.00
9	Soiling Crops and the Silo. Thomas Shaw.....	1.50
17	Soiling, Ensilage and Stable Construction. F. S. Peer.....	1.00
30	Systematic Bookkeeping for Farmers. F. M. Baird.....	1.00
15	State and the Farmer, The. L. H. Bailey.....	Net 1.25
15	The Farmstead. I. P. Roberts.....	Net 1.50
30	Ten Acres Enough.....	1.00
15	Text Book of Southern Agriculture. F. S. Earle.....	Net 1.25
13	Text Book of Tropical Agriculture. H. A. Nichols.....	Net 1.30
16	Weeds of the Farm and Garden. L. H. Pammel.....	Net 1.50
25	Weeds and How to Eradicate Them. Thomas Shaw.....	.50
7	The Fat of the Land. J. W. Streeter.....	.75
Farm Machinery and Motors		
112	Complete Carriage and Wagon Painter. F. Schreiber.....	Net 1.00
111	Farm Engines and How to Run Them. J. H. Stephenson.....	1.00

Farm Machinery and Motors—(Continued)

4	Farm Machinery and Farm Motors. J. R. Davidson and L. W. Chase.	Net	\$2.00
111	Modern Blacksmithing. J. G. Holstrom.	1.00	
111	Practical Gas Engineer, The. E. W. Longanecker.	1.00	
111	Tracton Engine, The. J. H. Maggard.	1.00	

Culture of Special Crops

23	Alfalfa. F. D. Coburn. . . . .	.50	
9	American Sugar Industry. H. Myrick.	1.50	
22	Bean Culture. G. C. Sevey. . . . .	.50	
6	Book of Alfalfa, The. F. D. Coburn.	2.00	
8	Book of Corn, The. H. Myrick.	1.50	
14	Book of Wheat, The. P. T. Dondlinger.	Net	2.00
13	Broom Corn and Brooms. . . . .	.50	
18	Cereals in America, The. T. F. Hunt.	1.75	
9	Clovers and How to Grow Them. Thomas Shaw.	Net	1.00
30	Corn Judging. A. D. Shamel. . . . .	.50	
7	Cotton. C. W. Burkett and C. H. Poe.	Net	2.00
12	Farm Grasses of the United States. W. J. Spillman.	1.00	
23	Flax Culture. . . . .	.30	
19	Forage and Fibre Crops in America, The. T. F. Hunt.	1.75	
17	Forage Crops. E. B. Voorhees.	Net	1.50
9	Forage Crops Other than Grasses. Thomas Shaw.	1.00	
21	Ginseng. M. G. Kains. . . . .	.50	
130	Ginseng and Other Medicinal Plants. A. R. Harding.	1.00	
23	Hemp. S. S. Boyce. . . . .	.50	
21	Hop, The. H. Myrick.	1.50	
23	Indian Corn Culture. C. S. Plumb.	1.00	
23	Maple Sugar and the Sugar Bush. A. J. Cook. . . . .	.35	
33	Peas and Pea Culture. G. C. Sevey.	Net	.50
23	Peanut Plant, The. B. W. Jones. . . . .	.50	
22	Potato, The. S. Fraser. . . . .	.75	
22	Study of Corn, The. V. M. Shoemith.	Net	.50
23	Tobacco Culture. . . . .	.25	
23	Tobacco Leaf. J. B. Killebrew and H. Myrick.	2.00	
23	Wheat Culture. D. S. Curtiss. . . . .	.50	

Soils

27	Fertility of the Land, The. I. P. Roberts.	Net	1.50
24	First Principles of Soil Fertility. A. Vivian.	Net	1.00
26	Physical Properties of the Soils, The. A. G. McCall.	Net	.50
27	Rocks, Rock Weathering and Soils. G. P. Merrill.	Net	4.00
10	Soils. C. W. Burkett.	1.25	
25	Soils and Crops of the Farm. G. E. Morrow and T. F. Hunt.	1.00	
27	Soil, Fertility and Permanent Agriculture. C. G. Hopkins.	Net	2.25
27	Soil, The. F. H. King.	Net	1.50
27	Soils. E. W. Hilgard.	Net	4.00
27	Soils. S. W. Fletcher.	Net	2.00
3	Soil of the Farm, The. J. B. Lawes.	1.00	
26	Soil Physics Laboratory Guide. W. H. Stevenson and I. O. Schaub. . . . .	.50	

Chemistry, Fertilizers and Manures

27	Agriculture in Some of its Relations with Chemistry. F. H. Storer (three volumes).	Net	5.00
29	Bommer's Method of Making Manures. . . . .	.25	
29	Chemistry; Its Evolution and Achievements. F. G. Weichman.	Net	1.00
27	Chemistry of the Farm, The. R. Warrington.	Net	1.25
29	Chemistry of Plant and Animal Life. H. Snyder.	Net	1.25
29	Exercises in Elementary Quantitative Chemical Analysis. Lincoln and Walton.	Net	1.50
30	Farming with Green Manures. C. Harlan.	1.00	
29	Fertilizers. J. J. H. Gregory. . . . .	.50	
29	Fertilizers. E. B. Voorhees.	Net	1.25
29	Manures and the Principles of Manuring. C. M. Aikman.	Net	3.00
27	Manual of Agricultural Chemistry. H. Ingle.	Net	3.00
29	Manures, How to Make and How to Use Them. F. W. Semper. . . . .	.40	
29	Manures: Or the Philosophy of Manuring. A. S. Griffiths.	Net	3.00
29	Scientific Examination of Soils. W. T. Brannt.	Net	1.50
29	Soils and Fertilizers. H. Snyder.	Net	1.25
40	Talks on Manures. J. Harris.	1.50	
29	Text Book of General Bacteriology. E. O. Jordan.	Net	3.00

Farm and Garden Vegetables

40	A B C of Potato Culture. W. B. Terry. . . . .	.45	
32	Amateur's Practical Garden Book, The. Hunn and Bailey.	Net	1.00
32	Annals of Horticulture. L. H. Bailey.	1.00	
37	Asparagus. F. M. Hexamer. . . . .	.50	
22	Bean Culture. G. C. Sevey. . . . .	.50	
32	Book of Vegetables and Garden Herbs. A. A. French.	Net	1.75
36	Cabbage, Cauliflower and Allied Vegetables. C. L. Allen. . . . .	.50	
42	Cabbages; How to Grow Them. J. J. H. Gregory. . . . .	.30	
42	Carrots, Mangold-Wurzels, Etc. J. J. H. Gregory. . . . .	.30	
38	Celery Culture. W. R. Beattie. . . . .	.50	
42	Celery for Profit. T. Greiner. . . . .	.20	
32	Farm Gardening and Seed Growing. F. Brill.	1.00	
42	Forcing Book, The. L. H. Bailey.	Net	1.25

Field and Garden Vegetables—(Continued)

40	Gardening for Profit. P. Henderson.....	\$1.50
58	Gardening for Pleasure. P. Henderson.....	1.50
30	Gardening for the South. W. N. White.....	2.50
32	Gardening for Young and Old. J. Harris.....	1.00
32	Garden Making. L. H. Bailey.....	.75
32	Horticulturist's Rule Book, The. L. H. Bailey.....	Net 2.00
32	How to Make the Garden Pay. T. Greiner.....	1.00
42	How to Grow Melons.....	.20
58	Making Horticulture Pay. M. G. Kains.....	Net 1.50
36	Market Gardening and Farm Notes. B. Landreth.....	1.00
39	Melon Culture. James Troop.....	Net .50
40	Money in the Garden. P. T. Quinn.....	1.00
43	Mushrooms, How to Grow Them. W. Falconer.....	1.00
40	New Onion Culture, The. T. Greiner.....	.50
37	New Rhubarb Culture, The. J. E. Morse and G. B. Fiske.....	.50
42	Onions: How to Raise Them Profitably.....	.20
42	Onion Raising. J. J. H. Gregory.....	.30
39	Peas and Pea Culture. G. C. Sevey.....	Net .50
32	Play and Profit in My Garden. E. P. Roe.....	1.00
22	Potato, The. S. Fraser.....	.75
40	Principles of Vegetable Gardening, The. L. H. Bailey.....	Net 1.50
42	Southern Gardener's Practical Manual. J. S. Newman.....	1.00
40	Success in Market Gardening. W. W. Rawson.....	Net 1.10
42	Squashes. J. J. H. Gregory.....	.30
42	Sweet Potato Culture. J. Fitz.....	.50
38	Tomato Culture. W. W. Tracy.....	.50
42	Tomato Culture. Day, Cummings and Root.....	.35
42	Truck Farming at the South. A. Oemler.....	1.00
42	Vegetable Gardening. S. B. Green.....	1.00
41	Vegetable Gardening. R. L. Watts.....	Net 1.75

Fruits and Fruit Culture

48	A B C of Strawberry Culture, The. T. B. Terry.....	.45
33	American Apple Orchard, The. F. A. Waugh.....	Net 1.00
45	American Grape Growing and Wine Making. G. Husman.....	1.50
35	American Horticultural Manual. J. L. Budd and N. E. Hanson (two volumes).....	Net 3.00
48	Popular Fruit Growing. S. B. Green.....	1.00
50	American Fruit Culturist, The. J. J. Thomas.....	Net 2.50
32	Annals of Horticulture. L. H. Bailey.....	1.00
51	Barry's Fruit Garden.....	1.50
48	Bush Fruits. F. W. Card.....	Net 1.50
48	California Fruits and How to Grow Them. E. J. Wickson.....	Net 3.00
48	Cape Cod Cranberries. J. Webb.....	.40
47	Cider Maker's Hand Book, The. F. M. Trowbridge.....	1.00
47	Citrus Fruits and Their Culture. H. H. Hume.....	Net 2.50
50	Cranberry Culture. J. J. White.....	1.00
49	Dwarf Fruit Trees. F. A. Waugh.....	.50
65	Evolution of Our Native Fruits, The. L. H. Bailey.....	Net 2.00
48	Field Notes on Apple Culture. L. H. Bailey.....	.75
44	Foundations of American Grape Culture. T. V. Munson.....	Net 2.00
35	Fruit Growing in Arid Regions. Paddock and Whipple.....	Net 1.50
52	Fruit Harvesting, Marketing, Storing. F. A. Waugh.....	1.00
52	Gardening for Pleasure. P. Henderson.....	1.50
32	Garden Making. L. H. Bailey.....	.75
46	Grape Culturist. A. S. Fuller.....	1.50
45	Grape Grower's Guide. W. Chorlton.....	.75
32	Horticulturist's Rule Book, The. L. H. Bailey.....	Net 2.00
65	How to Make a Fruit Garden. S. W. Fletcher.....	Net 2.00
58	Making Horticulture Pay. M. G. Kains.....	Net 1.50
45	My Vineyard at Lakeview.....	.50
53	Nut Culturist, The. A. S. Fuller.....	1.50
	Orchard and Fruit Garden, The. E. P. Powell.....	Net 1.00
50	Peach Culture. J. A. Fulton.....	1.00
48	Pear Culture for Profit. P. T. Quinn.....	1.00
52	Plums and Plum Culture. F. A. Waugh.....	1.50
48	Practical Fruit Grower. S. T. Maynard.....	.50
48	Principles of Fruit Growing, The. L. H. Bailey.....	Net 1.50
17	Pruning Book, The. L. H. Bailey.....	Net 1.50
48	Quince Culture. W. W. Meech.....	1.00
54	Small Fruit Culturist, The. A. S. Fuller.....	1.00
54	Strawberry Culturist. A. S. Fuller.....	.25
49	Successful Fruit Culture. S. T. Maynard.....	1.00
34	Systematic Pomology. F. A. Waugh.....	1.00

Plant Breeding, Propagation and Pruning

64	Botany. An Elementary Text Book. L. H. Bailey.....	Net 1.10
25	New Creations in Plant Life. W. S. Harwood.....	.75
25	Nursery Book, The. L. H. Bailey.....	Net 1.50
64	Plant Breeding. H. De Vries.....	Net 1.50
25	Plant Breeding. L. H. Bailey.....	Net 1.25
25	Diseases of Cultivated Plants and Trees. G. Massee.....	Net 2.25
25	Principles of Plant Culture. E. S. Goff.....	Net 1.00
31	Propagation of Plants. A. S. Fuller.....	1.50
17	Pruning Book, The. L. H. Bailey.....	Net 1.50

Flowers and Ornamental Plants

	A Plea for Hardy Plants. J. W. Elliott.....	Net \$1.60
63	Amateur Orchid Grower's Guide, The. H. A. Bubby.....	Net 2.50
63	American Carnation, The. C. W. Ward.....	3.50
63	Beautiful Flower Garden. T. Schuyler Matthews.....	.40
63	Book of the Rose, The. A. Foster Mellar.....	Net 1.75
62	Bulbs and Tuberous Rooted Plants. C. L. Allen.....	1.50
66	Cactus Culture for Amateurs. W. Watson.....	2.00
63	Chrysanthemum, The. A. Herrington.....	.50
63	Commercial Violet Culture. B. T. Galloway.....	1.50
66	Daffodils, Narcissus and How to Grow Them. A. M. Kirby.....	Net 1.10
66	Familiar Flowers of Field and Garden. F. S. Matthews.....	Net 1.50
66	Ferns and How to Grow Them. G. A. Woolson.....	Net 1.10
64	Field Book of American Wild Flowers. F. S. Matthews.....	Net 1.75
65	Flower Garden, The. J. D. Bennett.....	Net 1.10
58	Gardening for Pleasure. P. Henderson.....	1.50
68	Greenhouse Construction. L. R. Taft.....	1.50
67	Greenhouse Management. L. R. Taft.....	1.50
60	Home Floriculture. E. E. Rexford.....	1.00
66	House Plants and How to Grow Them. P. T. Barnes.....	Net 1.10
65	How to Make a Flower Garden.....	Net 1.60
65	How to Make Money Growing Violets. G. Saltford.....	.25
66	Lawns and How to Grow Them. L. Barron.....	Net 1.10
58	Making Horticulture Pay. M. G. Kains.....	Net 1.50
61	New Handbook of Plants. P. Henderson.....	3.00
63	Our Native Orchids. W. H. Gibson.....	Net 1.35
61	Parsons on the Rose.....	1.00
59	Practical Floriculture. P. Henderson.....	1.50
66	Plant Culture. G. W. Oliver.....	1.50
66	Roses and How to Grow Them.....	Net 1.10
63	Rose, Its Cultivation, Varieties, etc., The. H. B. Ellwanger.....	Net 1.25
66	Water Lilies and How to Grow Them. Conard and Hus.....	Net 1.10
63	Window Flower Garden, The. J. J. Heinrich.....	.50
63	Your Plants. J. Sheehan.....	.40

Irrigation and Drainage

57	Drainage for Profit and Drainage for Health. G. E. Waring.....	1.00
57	Engineering for Land Drainage. C. G. Elliott.....	Net 1.50
57	Farm Drainage. H. F. French.....	1.00
55	Irrigation Farming. L. M. Wilcox.....	2.00
57	Irrigation for the Farm, Garden and Orchard. H. Stewart.....	1.00
57	Irrigation and Drainage. F. H. King.....	Net 1.50
57	Irrigation Institutions. E. Mead.....	Net 1.25
56	Land Drainage. M. Miles.....	1.00
57	Practical Farm Drainage. C. G. Elliott.....	Net 1.50
57	Tile Drainage. W. I. Chamberlain.....	.35

Landscape Gardening and Forestry

72	Forest Planting. H. N. Jarchow.....	1.50
65	Hedges, Windbreaks, Shelters and Live Fences. E. P. Powell.....	.50
64	How to Plan Home Grounds. S. Parsons.....	Net 1.00
70	Landscape Gardening. F. A. Waugh.....	.50
64	Landscape Gardening as Applied to Home Decoration. S. T. Maynard.....	1.50
64	Landscape Gardening. S. Parsons.....	2.00
69	Landscape Gardening. Edward Kemp.....	Net 1.50
69	Ornamental Gardening for Americans. E. A. Long.....	1.50
70	Picturesque Gardens and Ornamental Gardening. C. Henderson.....	2.00
72	Practical Forestry. A. S. Fuller.....	1.50
64	Residential Sites and Environments. J. F. Johnson.....	2.50
65	The Book of Water Gardening. P. Bissett.....	2.50
71	The Landscape Beautiful. F. A. Waugh.....	Net 2.00

Pests, Insects, Plant Diseases and Weeds

75	Economic Entomology. J. B. Smith.....	Net 2.50
76	Fumigation Methods. W. G. Johnson.....	1.00
73	Insects and Insecticides. C. W. Weed.....	1.50
74	Insects Injurious to Vegetables. F. H. Chittenden.....	1.50
75	Insects Injurious to Fruits. W. Saunders.....	Net 2.00
75	Insects Injurious to Staple Crops. E. D. Sanderson.....	1.50
75	Injurious Insects to the Farm and Garden. M. Treat.....	1.50
75	Injurious Insects and the Use of Insecticides. F. W. Semper.....	.40
25	Diseases of Cultivated Plants and Trees. G. Massee.....	Net 2.25
75	Moths and Butterflies. M. C. Dickerson.....	Net 2.00
75	Spraying Crops. C. M. Weed.....	.50
75	Spraying of Plants, The. E. G. Lodeman.....	Net 1.25
25	Weeds and How to Eradicate them. F. Shaw.....	.50

Dairying and Dairy Farming

84	A B C in Butter Making. J. H. Monrad.....	.50
82	A Dairy Laboratory Guide. H. E. Ross.....	Net .50
82	A B C in Cheese Making. J. H. Monrad.....	.50
81	Business of Dairying, The. C. B. Lane.....	Net 1.25

Dairying and Dairy Farming—(Continued)

84	Cheese Making in Switzerland. J. A. Monrad.....	\$0.50
84	Cheese Making. J. W. Decker.....	Net 1.75
82	Clean Milk. S. D. Belcher.....	1.00
86	Creamery Butter Making. J. Michels.....	Net 1.50
84	Creamery Accounting. J. A. Vye.....	Net 1.00
84	Common Sense Ideas for Dairymen. G. H. Blake.....	1.00
84	Dairy Chemistry. H. Snyder.....	Net 1.00
86	Dairy Farming. J. Michels.....	Net 1.00
82	Dairyman's Manual, The. H. Stewart.....	1.50
84	Farm Dairy, The. H. B. Gurler.....	1.00
77	Farmers' Cyclopeda of Live Stock. E. V. Wilcox and C. B. Smith.....	4.50-5.50
80	First Lessons in Dairying. H. E. Van Norman.....	Net .50
84	Guenon on Milch Cows.....	1.00
82	Handbook for Farmers and Dairymen. F. W. Woll.....	1.50
90	Judging Live Stock. J. A. Craig.....	Net 1.50
82	Keeping One Cow.....	1.00
86	Market Dairying. J. Michels.....	Net 1.00
82	Milk and Its Products. H. H. Wing.....	Net 1.50
83	Modern Methods of Testing Milk and Milk Products. L. L. Van Slyke..	.75
84	Pasteurization and Milk Preservation. J. H. Monrad.....	1.50
79	Practical Dairy Bacteriology. H. W. Conn.....	2.25
82	Principles of Modern Dairy Practice. G. Grotenfelt.....	Net 2.00
80	Profitable Dairying. C. L. Peck.....	.75
82	Principles and Practice of Butter Making. McKay and Larson.....	Net 1.50
84	Questions and Answers on Butter and Butter Making. C. A. Publow.....	.50
84	Questions and Answers on Milk and Milk Testing. C. A. Publow.....	.50
78	Science and Practice of Cheese Making. L. L. Van Slyke and C. A. Publow.....	Net 1.75

Stock Breeding and Feeding

97	Animal Breeding. Thomas Shaw.....	1.50
90	Farm Stock. C. W. Burkett.....	Net 1.50
77	Farmers' Cyclopeda of Live Stock. E. V. Wilcox and C. B. Smith.....	4.50-5.50
94	Feeding of Animals, The. W. H. Jordan.....	Net 1.50
94	Feeding Animals. E. W. Stewart.....	2.00
93	Feeding Farm Animals. Thomas Shaw.....	2.00
96	Feeds and Feeding. W. A. Henry.....	Net 2.25
94	Key to Profitable Stock Breeding. H. Myrick.....	.25
86	Our Domestic Animals. C. W. Burkett.....	Net 3.50
86	Principles of Breeding, The. E. Davenport.....	Net 2.50
94	Principles of Animal Nutrition. H. P. Armsby.....	Net 4.00
94	Profitable Stock Feeding. H. R. Smith.....	1.50
96	Profitable Stock Raising. C. A. Shamel.....	Net 1.50
86	Shorthorn Cattle. A. H. Sanders.....	Net 2.00
86	Study of Breeds. Thomas Shaw.....	1.50
98	Types and Breeds of Farm Animals. C. S. Plumb.....	Net 2.00
85	Management and Feeding of Cattle. Thomas Shaw.....	Net 2.00

Sheep, Swine and Goats

92	American Angora Goats. G. E. Allen.....	.25
92	A New Industry, or Raising the Angora Goat and Mohair for Profit W. L. Black.....	Net 3.00
92	American Merino, The. S. Powers.....	1.50
92	Angora Goat Raising and Milch Goats. G. F. Thompson.....	Net 1.00
94	Diseases of Swine. R. A. Craig.....	.75
94	Diseases of Swine. D. McIntosh.....	2.00
92	Domestic Sheep, The. H. Stewart.....	Net 1.50
92	Goat Keeping for Amateurs.....	.50
90	Home Pork Making. A. W. Fulton.....	.50
90	Harris on the Pig. J. Harris.....	1.00
92	Modern Sheep Breeds and Management. W. J. Clarke.....	Net 1.50
92	Sheep and Their Diseases. W. A. Rushworth.....	1.50
92	Sheep Farming in America. J. E. Wing.....	1.00
91	Shepherd's Manual, The. H. Stewart.....	1.00
94	Swine Husbandry. F. D. Coburn.....	1.50
95	Swine in America. F. D. Coburn.....	Net 2.50
92	Winter Lamb, The. Miller, Wing and Miller.....	.50

Horses—Riding, Driving, Training

89	American Horses and Horse Breeding. J. Dimon.....	3.50
89	American Pacing and Trotting Horse, The. H. T. Coates.....	.75
89	Art of Horse Shoeing, The. W. Hunting.....	Net 1.00
88	Bridle Bits, The. J. C. Battersby.....	1.00
88	Family Horse, The. G. A. Martin.....	1.00
87	First Hand Bits of Stable Lore. F. M. Ware.....	Net 2.00
87	Gentleman's Stable Guide, The. R. McClure.....	1.00
88	Handbook of the Turf. S. L. Boardman.....	1.00
88	Hints to Horse Keepers. H. W. Herbert.....	1.50
87	Horses, How to Buy and Sell. P. Howden.....	1.00
87	Horse in the Stable and the Field, The. J. H. Walsh.....	1.00
87	Horse, The. I. P. Roberts.....	Net 1.25
88	Horse Book, The. J. H. S. Johnstone.....	2.00
89	How to Handle and Educate Vicious Horses. O. R. Gleason.....	.50
89	How to Judge a Horse. F. W. Bach.....	Net 1.00

Horses—Riding, Driving, Training—(Continued)

88	Jacks, Jennets and Mules.	L. W. Knight.....	Net \$1.50
87	Percheron Horse, The.	M. C. Weld and C. Du Hays.....	.50
89	Practical Horsekeeper, The.	G. Fleming.....	.75
90	Practical Horseshoer.	M. T. Richardson.....	1.00
87	Saddle Horse, The.....		1.00
89	Scientific Horseshoeing.	William Russell.....	Net 4.00
87	Training the Trotting Horse.	C. Marvin.....	3.50
87	Trotting Horse of America, The.	H. Woodruff.....	1.00
87	Winter Care of Horses and Cattle,	The. T. B. Terry.....	.35
89	Yonatt on the Horse.....		1.00

Veterinary Science and Practice

100	American Cattle Doctor.	G. H. Dadd.....	1.00
90	American Reformed Horse Book.	G. H. Dadd.....	2.00
90	Animal Castration.	A. Liantard.....	Net 2.00
100	Cattle Doctor, The.	G. H. Dadd.....	2.00
100	Diseases of Animals, The.	N. S. Mayo.....	Net 1.50
87	Diseases of the Horse and How to Treat Them.	R. Chawner.....	1.25
90	Diseases of Horses and Cattle.	D. McIntosh.....	1.75
107	Diseases of Dogs.	H. Dalziel.....	.50
103	Diseases of Poultry, The.	D. E. Salmon.....	.50
94	Diseases of Swine.	D. McIntosh.....	2.00
94	Diseases of Swine.	R. A. Craig.....	.75
100	Farmers' Veterinary Adviser, The.	J. Law.....	3.00
99	Farmers' Veterinarian, The.	C. W. Burkett.....	Net 1.50
107	Kennel Diseases.	Ashmont.....	Net 3.00
107	Management and Diseases of Dogs.	J. W. Hill.....	Net 3.50
88	Modern Horse Doctor, The.	G. H. Dadd.....	1.00
92	Sheep and Their Diseases.	W. A. Rushworth.....	1.50
100	Veterinary Materia Medica and Therapeutics.	K. Winslow.....	Net 6.00
100	Veterinary Science, The.	J. E. Hodgins and T. H. Haskett.....	2.00
100	Veterinary Elements.	A. G. Hopkins.....	Net 1.50
87	Veterinary Studies for Agricultural Students.	M. H. Reynolds.....	Net 1.75

Poultry—Pigeons and Birds

102	American Bird Fancier.	J. D. Browne and F. Walker.....	.50
102	American Standard of Perfection, The.	J. Drevenstedt.....	Net 1.50
102	Canary Birds.....		.50
103	Capons for Profit.	T. Greiner.....	.50
103	Diseases of Poultry, The.	D. E. Salmon.....	.50
103	Duck Culture.	J. Rankin.....	.50
103	Farm Poultry.	G. C. Watson.....	Net 1.25
102	Holden's New Work on Birds.....		.25
105	Indian Runner Duck Book.	C. S. Valentine.....	.50
101	Making Poultry Pay.	E. C. Powell.....	1.00
103	New Egg Farm, The.	H. H. Stoddard.....	1.00
105	Pigeon Keeping for Amateurs.	J. C. Lyell.....	.50
102	Poultry Book, The.	W. G. Johnson and G. O. Brown.....	Net 5.00
103	Poultry Feeding and Fattening.	G. B. Fiske.....	.50
103	Poultry Craft.	J. H. Robinson.....	1.50
103	Profits in Poultry.....		1.00
103	Poultry Architecture.	G. B. Fiske.....	.50
103	Poultry Appliances and Handicraft.	G. B. Fiske.....	.50
103	Profitable Poultry Keeping.	S. Beale.....	1.00
102	Profitable Poultry Production.	M. G. Kains.....	Net 1.50
102	Progressive Poultry Culture.	A. A. Brigham.....	1.50
102	Squabs for Profit.	W. E. Rice and W. E. Cox.....	.50
101	Turkeys and How to Grow Them.	H. Myrick.....	1.00

Bees and Bee Keeping

105	A B C and X Y Z of Bee Culture.	A. I. Root.....	1.50
105	Beekeeper's Guide, The.	A. J. Cook.....	1.25
105	How to Keep Bees.	A. B. Comstock.....	Net 1.00
105	Langstroth on the Honey Bee.....		1.25
104	Mysteries of Bee Keeping Explained, The.	L. C. Root.....	1.00

Dogs, Cats, Etc.

107	Book of the Cat, The.	F. Simpson.....	Net 8.00
105	Cats—Domesticated and Fancy.....		.50
107	Diseases of Dogs.	H. Dalziel.....	.50
106	Dogs of Great Britain, America and Other Countries.	Stonehenge.....	1.50
107	Dog Book, The.	J. Watson.....	Net 6.50
105	Ferrets and Ferreting.....		.50
105	Guinea Pig, The.	C. Cumberland.....	.50
107	Kennel Diseases.	Ashmont.....	Net 3.00
107	Kennel Secrets.	Ashmont.....	Net 3.00
107	Management and Diseases of the Dog.	J. W. Hill.....	Net 3.50
107	Practical Dog Training.	S. H. Hammond.....	1.00

Buildings, House Decoration and Conveniences

110	Barn Plans and Out Buildings.....	\$1.00
112	Bungalows, Camps and Mountain Houses.....	2.00
112	Carpenter's Steel Square, The. F. T. Hodgson.....	1.00
111	Concretes, Cements, Mortars, Plasters and Stuccos. F. T. Hodgson.....	1.50
109	Cottage Houses. S. B. Reed.....	1.00
109	Country Houses.....	2.00
111	Draughtsman's Manual. F. T. Camp.....	.50
112	Everybody's Paint Book. B. F. Gardner.....	1.00
68	Greenhouse Construction. L. R. Taft.....	1.50
108	Handy Farm Devices and How to Make Them. R. Cobleigh.....	1.50
109	Homes for Home Builders. D. W. King.....	1.00
111	Modern Carpentry. F. T. Hodgson.....	1.00
108	Modern House Plans for Everybody. S. B. Reed.....	1.00
112	Painter's Encyclopedia, The. B. F. Gardner.....	1.50
112	Painter, Gilder and Varnisher's Companion. W. T. Brannt.....	1.50
112	Plaster and Plastering. F. T. Hodgson.....	.50
103	Poultry Architecture. G. B. Fiske.....	.50
103	Poultry Appliances and Handicraft. G. B. Fiske.....	.50
111	Practical Up-to-date Plumbing. G. B. Clow.....	1.50
114	Ventilation. F. H. King.....	.75

Canning, Preserving, and Manufacture of Alcohol

115	Canning and Preserving. S. T. Rorer.....	.50
114	Canning and Preserving of Food Products with Bacteriological Technique. E. W. Duckwall.....	6.00
114	Distillation of Alcohol from Farm Products and Denatured Alcohol. F. B. Wright.....	1.00
114	Denatured or Industrial Alcohol. R. F. Herrick.....	4.00
114	Industrial Alcohol: Its Manufacture and Uses. J. K. Brachvogel.....	4.00
114	Manufacture of Preserved Foods and Sweetmeats. The. B. Hanson.....	3.00
114	Recipes for the Preserving of Fruit, Vegetables and Meats. E. Wagner.....	2.50

Aquaria, Fish and Fish Raising

121	A B C Carp Culture, The. Root and Finley.....	.35
121	Amateur Aquarist, The. M. Samuel.....	1.00
121	Book of the Black Bass. J. A. Henshall.....	3.00
121	Domesticated Trout. L. Stone.....	2.50
121	Goldfish and Its Systematic Culture, The. H. Mulertt.....	2.00
121	Home Fishing and Home Waters. S. Green.....	.50
121	Recollections of Fly Fishing. E. Hamilton.....	1.00
121	Superior Fishing. R. B. Roosevelt.....	1.50
	Aquaria. C. N. Page.....	.25

Miscellaneous

115	A Swim for Life. H. Myrick.....	1.00
113	Bookkeeping for Farmers. T. C. Atkeson.....	.25
115	Bride's Primer, The.....	1.50
116	Cache la Poudre. H. Myrick.....	1.50-Net
117	End of the World, The. E. Eggleston.....	1.50
30	Farmer's Account Book and Farm Record. E. A. Boehne.....	2.25
120	Farmer's Tanning Guide. G. E. Stevens.....	.25
115	Home Candy Making. S. T. Rorer.....	.50
117	Hoosier School Master, The. E. Eggleston.....	1.50
113	How to Co-operate. H. Myrick.....	1.00
113	Ice Crop, The. T. L. Hiles.....	1.00
115	Left Overs Made Palatable. I. G. Curtis.....	1.00
120	Life and Writings of Frank Forester. H. W. Herbert.....	3.00
117	Mystery of Metropolisville, The. E. Eggleston.....	1.50
118	New Methods in Education. J. L. Tadd.....	2.00-Net
119	Portrait Life of Lincoln. F. T. Miller.....	2.00
115	Promise of Life, The. H. Myrick.....	.50
114	Scientific American Cyclopedia of Receipts.....	5.00
113	Scribner's Lumber and Log Book.....	.25
30	Systematic Bookkeeping for Farmers. F. M. Baird.....	1.00

Sportsman's Books

115	American Game Bird Shooting. J. M. Murphy.....	1.50
120	Camp Life in the Woods. W. H. Gibson.....	1.00
120	Deadfalls and Snares. A. R. Harding.....	.60
120	Farmers' Tanning Guide. G. E. Stevens.....	.25
115	Florida and the Game Water Birds of the Atlantic Coast. R. B. Roosevelt.....	1.50
120	Fox Trapping. A. R. Harding.....	.60
120	Fur Farming. A. R. Harding.....	.60
120	Ginseng and Other Medicinal Plants.....	1.00
107	Hunter and Trapper. H. Trasher.....	.50
120	Life and Writings of Frank Forester. H. W. Herbert.....	3.00
120	Mink Trapping. A. R. Harding.....	.60
120	Practical Hints on Rifle Practice. C. E. Prescott.....	.25
120	Practical Taxidermy and Home Decoration. J. H. Batty.....	1.00
120	Sea Mosses. A. R. Harding.....	2.00
120	Steel Traps. A. R. Harding.....	.60

The Farmers' Manual of Law

By HUGH EVANDER WILLIS

Author of "WILLIS ON CONTRACTS," "WILLIS ON DAMAGES," etc.

Do you need legal advice, or ever expect to need legal advice? If so, you cannot afford not to possess a copy of Professor Willis' book, "THE FARMERS' MANUAL OF LAW." One law suit, or even one consultation with a lawyer, would probably cost enough to buy a number of copies of this book, and every farmer is liable to have many law suits.

The Farmers' Manual of Law, not only tells farmers how to settle their legal wrongs, but it tells them how not to commit any legal wrongs. It tells the farmer what are all his legal rights, natural and acquired, and how they may be acquired and lost. The book is adapted to private study as well as for use in the classroom. All of the fundamental principles are stated in rules easy to understand. Numerous illustrations further explain the application of such principles. A glossary and forms still further add to the utility of the book. Its author, Hugh Evander Willis, A.M., LL.M., is a member of the law faculty of the University of Minnesota. He is, therefore, both a teacher of law with years of experience, and a practical farmer; so that, knowing the law and understanding the needs of the farmer, he has produced a book which answers every purpose of the man on the farm. Armed with this book every farmer may be his own lawyer.

The following is the table of contents: Introduction; Personal Safety Liberty; Society and Control, Family and Dependents; Reputation; Immunity from Fraud; Advantages Open to the Community Generally; Real Property; Elements of Personal Property; Title by Occupancy, Secession and Confusion, and Intellectual Labor; Title by Contracts Generally; Agreement; Equity of Agreement; Parties to Contracts; Consideration; Legality of Subject-Matter; Formalities; Particular Kinds of Contracts, Classified; Interpretation; Quasi Contracts; Remedial Obligations, Sales, Gifts, Bailments, Wills, Judgments Intestacy, Adverse Possession; Violations of Personal Property; How Personal Property is Lost—Discharge of Contracts. Also various kinds of Forms, Examination and Review Questions, Glossary and Index.

This volume is printed on a high grade paper, 470 pages, 6½ x 9 inches and is handsomely bound in cloth with gold stamping. Price Net \$2.00.

Vegetable Gardening

By R. L. WATTS

This complete, concise and authentic book covers every phase of vegetable gardening and is specially well organized as a text-book and equally valuable as a hand-book for practical growers. The author is the well-known teacher and practical market gardener Ralph L. Watts, Professor of Horticulture in the Pennsylvania State College. This book is the only volume on vegetable gardening the scheme of which is in accordance with the recommendations of the association of American agricultural colleges. The logical and systematic arrangement of the matter enhances the value of the book for students as well as for busy commercial growers who need a well-organized treatise for frequent reference.

The bulletins of the experiment stations of the United States Department of Agriculture and various books and periodicals relating to garden crops were frequently consulted during the preparation of the manuscript, while at the same time the experience of successful growers is woven into every chapter. The book brings up to date the most reliable information on vegetable gardening and the full discussion of principles makes it valuable to all classes of growers whether they are producing for the home table or for market. To procure first-hand knowledge regarding varieties and methods, many market gardens and truck gardens were visited in different parts of the United States. This made it possible to obtain photographs which have been used freely to illustrate the various chapters.

An idea of the scope and completeness of the book may be gained by noting the following subjects, each of which has been treated in a separate chapter: A General View, Selection of Location, Soils, Tillage, and Tillage Tools, Stable Manures, Green Manures and Cover Crops, Commercial Fertilizers, Irrigation, Insect Enemies and Fungous Diseases, Seeds and Seed Growing, Construction of Hot-beds, Construction of Cold Frames, Construction of Greenhouses, Seed Sowing, Transplanting, Growing Early Vegetable Plants Under Glass, Marketing, Co-operative Associations, The Storage of Vegetables, and the Classification of Vegetables.

One-half the book is devoted to a discussion of the culture of the vegetables grown in the United States and Canada. The list includes the Artichoke, Bean, Beet, Broccoli, Brussels Sprouts, Cabbage, Carrot, Cauliflower, Celery, Chard, Chickory, Chive, Collard, Corn-salad, Cress, Cucumber, Dandelion, Dill, Eggplant, Evudire, Garlic, Horse-Radish, Kale, Kohl-rabi, Leek, Lettuce, Mint, Muskmelon, Mustard, Okra, Onion, Parsley, Parsnip, Pea, Pepper, Pumpkin, Radish, Rhubarb, Ruta Baga, Sage, Salsify, Savory, Spinach, Squash Sweet Corn, Sweet Potato, Thyme, Tomato, Turnip, and Watermelon. There are also chapters on Crop Rotation, Succession and Companion Cropping, and Home Vegetable Garden and Suggestions on Laboratory Work. Profusely illustrated. 5½ x 8 inches. 550 pages. Cloth. Net \$1.75.

Fertilizers and Crops

OR

The Science and Practice of Crop-Feeding

By DR. LUCIUS L. VAN SLYKE,

Chemist of the New York Agricultural Experiment Station

This new book is a timely presentation of facts not only giving practical methods for using fertilizers in crop growing, but placing special emphasis on the reasons underlying their use and on the conditions of the greatest efficiency. It has been prepared for the use of students in agricultural schools and especially for the larger class of students directly and vitally interested in the growing of crops.

During the past ten years, many books have been published relating to soils, crop growing and fertilizers, each treating some special, limited phase; but the publishers have felt for some time that there has been an increasing need of a book different from any of those that have yet appeared. This book is the result of an effort to meet such a demand. At no time in the history of this country has the growing of crops attracted so wide and intense interest as at the present and at no time has there been such eager inquiry for reliable, up-to-date information among progressive farmers. An examination of the book shows that the author has kept in mind the fact that a work treating of the practical use of fertilizers on the farm should be something more than a mere collection of recipes giving the number of pounds of different fertilizing materials to use for this or that crop. The book has been written from the standpoint that, while plant-foods constitute a most important factor in crop growing, there are other vital factors as well which directly affect or control the effectiveness with which a crop utilizes the plant-food furnished it.

The first part of the book covers the factors of soil fertility. This consists of twelve chapters and treats of the relations of plant-food to soil fertility. It discusses, (1) essential plant-food constituents, what they are, where they come from, what particular effects they have in the growth of plants; (2) how plants take and use their food; (3) how plant-foods are lost and gained by soils; (3) the relations of micro-organisms to plant-foods; (4) the relation of water to soils and crops; (5) brief outlines of methods of soil management for the purpose of enabling plants to use their foods most efficiently.

The second part of the book covers the sources and composition of materials used as fertilizers. This consists of eight chapters and gives a full discussion of the various materials used as sources of plant-food. The new fertilizing materials that have only recently come into use are given careful attention. Of special practical value and fullness are the two chapters treating of the composition, changes, care, value and use of farm manure. The subject of green-crop manures is given detailed attention. Of special interest at this time is the very complete discussion of the use of lime on soils.

The third division of the book, factors in the selection of fertilizing materials, contains six chapters and furnishes a large amount of practical information, which will enable farmers to select fertilizing materials for use in crop growing on the basis of greatest suitability, feeding efficiency and economy of cost. Such subjects as the availability of different forms of plant-food materials, when to use commercial fertilizers, what to use, effects of fertilizers upon soils, adaptation to crops, comparative cost in different forms, various phases of commercial fertilizers, with their advantages and disadvantages, home mixing,—are all fully discussed from the standpoint of a farmer seeking helpful information. The principles of crop-rotation are treated in connection with the selection of fertilizers to use.

The fourth part of the book, practical use of fertilizers in the growing of individual crops, is the one to which the practical farmer will probably turn first. The treatment of the methods of using fertilizers is properly conservative but abreast of the most recent developments. The preceding portions of the book form a complete preparation to enable one to make use of this last part in the most intelligent, rational and efficient way. The treatment of the different crops in relation to the use of fertilizers is more complete than in any other book yet published. For example, we have nowhere seen the subjects of orchard crops, greenhouse crops, nursery crops, etc., discussed with such a degree of fullness and appreciation of practical relations, and the same is true of the other chapters.

Taken as a whole, this book contains an immense amount of detailed information, systematically arranged, clearly presented, very full and up-to-date. It is adapted to meet the needs of students who desire to obtain a good chemical knowledge of the subject, as well as to the use of farmers, who care only for the practical applications. The teachings of the author are conservative and are based on a broad consideration of all factors entering into the problems discussed.

Illustrated, 5½x7½ inches. 500 pages. Cloth. Net \$2.00