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Farm Woodwork by Louis M. Roehl

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# LOUIS M. ROEHL

# FARM WOODWORK

Trieste



Farm Shop Work Bench and Farm Woodworking Tools.

# Farm Woodwork

by

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With an Introduction by George A. Works, Head of the Department of Rural Education, New York State College of Agriculture.



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# Introduction

This book is designed primarily for use as a text or reference book in connection with farm shop courses in agricultural schools or in the agricultural departments of rural high schools. The problems that this work presents are many and their seriousness is accentuated by the fact that commonly the farm shop instruction is offered by the teacher of agriculture. This arrangement has an advantage in the fact, that it makes possible a more intimate relationship between the shop work and the various phases of the agricultural work, but it presents serious teaching difficulties and makes necessary such assistance for the teacher as is to be found in this book.

This book and Agricultural Woodworking by the same author are in marked contrast with the early efforts that were made to organize courses in farm shop work. For the most part they consisted mainly of a bodily transposition of manual training and drawing courses from eity schools to the schools of the rural community. Commonly there was little or no relationship between the drawing and construction work. Usually the drawing consisted of a segment of a drafting course and the wood work centered around "exercises," necktie holders, and Morris chairs. The authors of these attempts lost sight of the fact that the farmer is neither a draftsman nor a cabinet maker. His skill in the use of the hammer, saw, plane, and pencil should be developed in connection with problems of rough carpentry. He must be a "jack of all trades" in repair and simple construction work.

The error of this procedure has been realized by many who are now endeavoring to select construction problems adapted to farm conditions. As a result there has been a decided improvement in the character of the work done in the farm shop course but the movement has not gone far enough. The content of the high school course in farm crops is determined in a large measure by the crops raised in the immediate vicinity of the school. In a similar manner there should be a recognition of the influence of local farming conditions in the determination of the content of the farm shop course. The woodworking problems that are presented to the truck farmer are quite different from those that are presented to the dairyman, poultryman, or general farmer. The instruction offered in the farm shop course should reflect this difference to a much greater extent than is usually the case.

Since the farm shop course is quite commonly taught by the teacher of agriculture, it is especially desirable that he should have a large number of carefully prepared shop problems from which selections may be made so that the work will be adapted to local conditions. In the preparation of this book the author has borne this fact in mind. It is not offered as a course adapted to any community but rather as a book, which with the preceding volume, will form the basis of many courses for

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#### FARM WOODWORK

schools situated in widely divergent farming conditions. It is expected that the teacher will supplement the problems he selects by repair work brought in by the pupils from their home farms.

The author's extensive farm experience, technical training, several years of experience as a teacher of shop work to farm boys and more recently his efforts in instructing prospective teachers of vocational agriculture in farm shop work have made an excellent background for such an undertaking as is represented by this volume. As a result he has prepared a book that contains practical problems, carefully analyzed and skillfully presented. Wise use of this volume is certain to result in a marked advance in the character of work done in farm shop courses in agricultural departments and schools.

GEORGE A. WORKS.

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### A COURSE IN FARM WOODWORK

It should fulfill the following conditions:

- a. Each project must be useful on the farm when completed.
- b. The course must give practice in all of the carpentry tool operations.

#### **Carpentry Tool Operations**

- 1. Rip sawing
- 2. Cross grain sawing
- 3. Leveling
- 4. Plumbing
- 5. Erecting
- 6. Tool sharpening
  - a. Saw filing b. Grinding
- 7. Measuring
- 8. Squaring a line at right angles
- 9. Planing
- 10. Laying out chamfer
- 11. Laying out and cutting bevel.
- 12. Boring
- 13. Doweling
- 14. Mitering

- 24. Sanding
- 25. Round surface edging
- 26. Mortising
- 27. Wood filing

15. Chiseling a. With grain b. Cross grain .

- 16. Nailing
- 17. Nail setting
- 18. Nail pulling
- 19. Screw driving
- 20. Screw drawing
- 21. Counter sinking
- 22. Tapering
- 23. Scraping