A GUIDE

TO THE

Study of Woodworking

A Handy Reference for

Woodworkers, Teachers and Students of
High Schools, Colleges and
Industrial Schools

BY

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PREFACE

Several years' experience teaching and supervising academic as well as shop subjects, has convinced the author that to be effective and successful in any line of work one must be able to find the information needed when one wants it and to do it quickly. For the busy teacher, particularly, both in the class room and in daily preparation, it is often hard to ascertain the several references he should read and present to his pupils. Often we do not know just where to send a pupil to find the answer to his question, or just where to make our assignments for outside reading and special reports. It is, therefore, the author's aim in the production of this book to provide a real time-saver as well as a reliable means of helping teachers and students to higher success in the field of woodworking.

A few words as to the manner of getting the most good out of this guide seem advisable. Probably the most valuable use of the guide can be made in the preparation of topics for class discussion, demonstrations and assigned readings. To illustrate: Suppose a lesson on gluing is to be taught. This will require that teacher and pupils have a knowledge of the nature and use of certain tools and materials. These the teacher must know first of all and this knowledge must then be "put over" to the students. References are quickly found by looking in the guide, as one would in a dictionary, for "glue," "gluing," "clamps," "lumber," "warping," and so forth. These very definite references may be given pupils previous to the recitation or demonstration, or a demonstration may be made at the time of the assignment and the interest thus aroused serve as an incentive to read the references given. The guide may be used to learn directly such things as the names of the different kinds of joints, bits, and fastenings. It is also a ready reminder of the different things to be taught in lessons on wood-finishing: lumber, planes, designing, woods
and so on. References are to pages. In cases where, in the judgment of the author, especially good treatises are found, the reference is preceded by an asterisk (*).

The key to references is arranged in such a way as to make it easy to remember the meaning of most of the letters after a brief acquaintance with the book. In so far as possible, without conflicting, the first letters of the chief words of titles are used to designate the respective books. In some cases, the first letters of the authors' names are used, for example, WS for *Provocational and Industrial Arts, Wood and Smith*. In the key, these letters are arranged in alphabetical order so that they may be found quickly.

In regard to the titles included in this volume, the author wishes to say that it was not thought advisable to try to include all the good books on the subject of woodworking. Those which were chosen, however, are among the best American books which are being used in the majority of the schools of the country. There are, of course, other good books on the market, published in this and in other countries. For owners of such as these, special provision is made at the bottom of each page for addition of other references. This space may also be used for subsequent publications. It is to be noted that, since this volume pertains only to tools, processes and materials, it does not refer to the many splendid books which treat almost exclusively of projects. It is hoped that a guide to project references may be published later.

Credit is due Professor M. L. Laubach, Head of Department of Industrial Arts, Indiana State Normal; Virgil R. Mullins, Director of Extension Division, Indiana State Normal; and Mr. Glen D. Brown, Business and Vocational Director, Muncie City Schools, Muncie, Indiana for encouragement and inspiration.

PAUL V. WOOLEY.

Muncie, Indiana
July, 1924

KEY TO REFERENCES

AE—Art and Education in Wood Turning
William W. Klenke..................The Manual Arts Press 1921

BW—Bench Work in Wood
W. F. M. Goss.......................Ginn & Co. 1905

CC—Correlated Courses in Woodworking and Mechanical Drawing
Ira S. Griffith......................The Manual Arts Press 1912

CG—Carpentry
Ira S. Griffith......................The Manual Arts Press 1916

CL—Farm Mechanics
Crawshaw and Lehmann.............The Manual Arts Press 1922

CW—Cedar Chests
Ralph F. Win DOES..................The Bruce Publishing Co. 1918

DC—Design and Construction in Wood
William Noyes......................The Manual Arts Press 1913

DW—Demonstrations in Woodworking
Clinton S. Van Deusen.............The Manual Arts Press 1918

EW—Essentials of Woodworking
Ira S. Griffith......................The Manual Arts Press 1922

FD—Furniture Design
Fred D. Crawshaw...................The Manual Arts Press 1914

FM—Problems in Furniture Making
Fred D. Crawshaw...................The Manual Arts Press 1912

FU—Furniture Upholstering
Emil A. Johnson.....................The Manual Arts Press 1919

HC—Hand Craft Projects, Book I
F. I. Solar.........................The Bruce Publishing Co. 1921

HM—Household Mechanics
Earl L. Bedell......................The Manual Arts Press 1923

HP—House Painting
A. H. Sabin........................John Wiley & Sons 1908

HW—Handwork in Wood
William Noyes......................The Manual Arts Press 1910

IA—Industrial Arts Design

IM—School Shop Installation and Maintenance
L. S. Green.........................The Manual Arts Press 1922
MT—Manual Training for Common Schools
   Allen and Cotton..................Chas. Scribner's Sons 1910
MW—A Course in Wood Turning
   Milton and Wohlers......The Bruce Publishing Co. 1919
PC—Problems in Carpentry
   L. M. Rochl..................The Webb Publishing Co. 1918
PM—Wood Pattern Making
   Horace T. Purfield.........The Manual Arts Press 1919
PT—Problems in Wood-Turning
   Fred D. Crawshaw.........The Manual Arts Press 1909
PW—Problems in Woodwork
   Edward F. Worst.............The Bruce Publishing Co. 1917
RC—Shop Work
   Rusch and Conway, Industrial Book & Equipment Co. 1918
SB—Shop Projects
   M. G. Burton..................Ginn & Co. 1915
SW—Seat Weaving
   L. Day Perry..................The Manual Arts Press 1917
T—Manual Training Toys for the Boy's Workshop
   Harris W. Moore.............The Manual Arts Press 1912
TF—Trade Foundations Based on Producing Industries
   Guy M. Jones Co. 1919
TM—Advanced Toy Making
   David M. Mitchell...........The Manual Arts Press 1922
TP—Tool Processes in Woodworking
   A. P. Laughlin..............The Manual Arts Press 1919
TT—Pattern Making
   Turner and Town.............John Wiley & Sons 1914
VD—Beginning Woodwork at Home and in School
   Clinton S. Van Deusen......The Manual Arts Press 1907
WB—Woodwork for Beginners
   Ira S. Griffith.............The Manual Arts Press 1916
WF—Wood and Forest
   William Noyes..............The Manual Arts Press 1912
Wi—Wood-Finishing
   Harry R. Jeffrey...........The Manual Arts Press 1924
WM—Woodworking Machinery
   William Noyes..............The Manual Arts Press 1923
WP—Wood Pattern Making
   Edmund C. Hanley...........The Bruce Publishing Co. 1922

WS—Precocational and Industrial Arts
   Wood and Smith..............Mentzer, Bush & Co. 1919
WW—Woodwork for Secondary Schools
   Ira S. Griffith.............The Manual Arts Press 1916

ADDRESSES OF PUBLISHERS

American Book Co., 300 Pike St., Cincinnati, Ohio.
American Technical Society, Drexel Avenue and 58th St., Chicago, Ill.
The Bruce Publishing Co., 354-364 Milwaukee St., Milwaukee, Wis.
The Century Co., 353 4th Avenue, New York, N. Y.
Ginn & Company, 15 Ashburton Place, Boston, Mass.
Industrial Book & Equipment Co., 401-425 W. Maryland St., Indianapolis, Ind.
Guy M. Jones Company, Merchants Bank Bldg., Indianapolis, Ind.
Lothrop, Lee & Shepard Co., 275 Congress St., Boston, Mass.
The Macmillan Co., 64-66 5th Avenue, New York, N. Y.
McGraw-Hill Book Co., 370 7th Avenue, New York, N. Y.
Mentzer, Bush & Co., 2210 S. Park Avenue, Chicago, Ill.
Popular Mechanics Press, 200 E. Ontario St., Chicago, Ill.
G. P. Putnam's Sons, 2-6 W. 45th St., New York, N. Y.
Chas. Scribner's Sons, 597 5th Avenue, New York, N. Y.
Frederick A. Stokes Co., 443-449 4th Avenue, New York, N. Y.
John Wiley & Sons, 432 4th Avenue, New York, N. Y.
ABRASIVES—General—TF 237.
  Carborundum—TF 237, RC 127.
  Corundum—TF 237.
  Emery Wheels—RC 126. (See also Grinding Wheels.) Dresser—
  Grinders, Automatic—WW 135.
  Grinding Wheels—HW 120, RC 43, 126, *WM 125, 141.
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  WP 19, 21.
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  Slip Stones—HW 121, RC 126, WP 21-23.
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AUGER-BIT GAGE (See Gages.)
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Bar Clamps—(See Clamps.)
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Bench—*WF 124, 134, SB 335, BW 173, TF 198, Wf 119.
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Belt—*WW 137-147, CL 333-340, IM 61-76.
Belt Punch—WW 61.
Belt Sanders—(See Sanders.)

1U. S. Dept. of Agriculture.

Bench Clamps—(See Clamps.)
Bench Hooks—BW 12, 96-98, MT 39, 152, WS 24, TF 292, HW 102, 104, HC 37, PM 9.
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Bench Tools—(See Cabinet Makers' under Tools.)
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Bench Work—Exercises—*BW 71-124.
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Bibliography for Woods and Forestry—*WF 4-8.
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Birch—*WF 128-133 (four kinds), Wf 119, EW 166, SB 335, TF 198, WW 16.
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Bit Gage—(See Gages.)
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Auger—HC 21, MT 105-106, WB 44-45, TF 311, BW 53-55, HW 85, RC 121-124, T 9, WS 20, EW 54, HW 84, Center—EW 54, BW 54, HW 84, 85.
Countersink—WB 47, EW 55, WS 20, 22, HW 84, 87, MT 73.

1The Manual Arts Press.
2The Bruce Publishing Co.
3The Century Co.
Bits—Cont.

Expansive—WS 20, BW 55, HW 87, MT 105, WW 51.
Forstner—HW 84, 87, MT 106, RC 123, WW 63, WS 20, TT 30.
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Blind Wedging—(See Fastening.)
Block Plane—(See Planes.)
Blueprints—RC 3, TF 413, WS 84. (See also Mechanical Drawing.)
Blueprint Reading—WS 85.
Blue Print Reading—E. M. Wyatt.¹
How to Read a Drawing—Vincent C. Getty.²
Reading Blue Prints—J. K. Shallenberger.³
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Angle Boring—(See Brace.)
Draw Boring—BW 108.

¹The Bruce Publishing Co.
²Lippincott Co.
³The Manual Arts Press.

On Lathe—MW 47, AE 78.
Thru Boring—EW 58, SB 314.
Boring Machine—WW 118-120, TT 33.
Boring Tools—PM 27, WS 20-22, RC 121-124. (See also Bits, Brace, 
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Brace—EW 53, HW 102-105, WB 43, PM 28-29, MT 107-108, BW 53-58, 
RC 119, TF 301, WS 21.
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CARPENTRY—*CG entire. FC entire (Many Photographs), RC 75-89,
Carpentry and Joinery, William S. Lounes.1
Carpentry and Joinery, Gilbert Townsend.2
Inside Finishing, C. A. King.3
Constructive Carpentry, C. A. King.4
As an occupation—TF 83-86.
Specifications—*PC 97-111.
Chip Carving—H. W. Moore.4
Grounding Out and Moulding—WW 229.
Line Carving—WW 225.

1David McKay Co.
2American Technical Society.
3American Book Co.
4The Manual Arts Press.

RIBBON CARVING—WW 227.
Units of Design—CC 41-51, FM 5.
CASTINGS WITHOUT PATTERNS—TT 99-100.
CATCHES AND LOCKS—WS 50, HC 18. (See also Locks.)
CEDAR—*WF 104-111 (four kinds), EW 163, SB 340, RC 149, TF 191,
WW 12, CW 9-14, Wf 121. *Incense Cedar, Bulletin No. 604.2
CW 46.
CEMENT AND CONCRETE—HM 1, WS 188-211, CL 111-184.
Elementary Concrete Construction—Baxter.3
Practical Concrete Work—Campbell and Beyer.4
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CENTERING STOCK IN LATHE—WW 185.
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*Southern Cypress Association, New Orleans, La.

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Stools and Seats—FD 41-56.
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Wall Cabinets—FD 62-70.
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Eggshell Gloss—(See Wood-Finishing.)
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  *Utilization of Elm, Bulletin No. 683.1
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Enameling—(See Wood-Finishing.)
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Exercises—Bench Work—*BW 71-124.
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*U. S. Dept. of Agriculture.
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FALSECOPE—TT 9.

FARM WOODWORK—

Agricultural Woodworking, Louis M. Rohr.1

Farm Woodwork, Louis M. Rohr.1

Farm Shop Work, Brace and Mayne.2

Problems in Farm Woodwork, S.A. Blackburn.3


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Keys—BW 152.

1The Bruce Publishing Co.

2American Book Co.

3The Manual Arts Press.
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Forest Distribution—*WF 197-210.
Forest Enemies—WF 229-270.
Forest Organism—*WF 211-225.
Forestry—*WF entire. *Profession of Forestry, Forest Service Circular No. 207.1
*Terms Used in Forestry and Logging, Bureau of Forestry Bulletin No. 61.1
*How the Public Forests Are Handled, Separate No. 847 from 1920 Yearbook.1
*Nursery Practice on National Forests, Bulletin No. 479.1
(See also Lumbering and Logging.)

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The Old Furniture Book, N. Hudson Moore.1
Handbook of Furniture Styles, Walter A. Dyer.2
Collector's Luck, Alice Van Leer Carrick.3
Chats on Period Styles of Furniture.4
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Pattern Maker's—WW 34.
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1Frederick A. Stokes Co.
2The Century Co.
3Little, Brown & Co.
4American Woodworking Machinery Co., Rochester, N. Y.
5The Bruce Publishing Co.
GAGES—Cont.
  Screw and Wire—HW 116, EW 91-92, RC 114.
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GEOMETRIC PROBLEMS—SB 297-305.
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Carpenter’s—TF 259, PC 9-10.  
Carving—*WW 42, Chip Carving—H. W. Moore.3  
Classification—*TF 257-284, WS 3.  
Cleaning—HW 121.  
Cutting—HW 51-83, MT 90-92.  
Driving—WS 26-29, EW 87, MT 69-71, BW 60, HW 94-97, RC 23, 
TF 306, WB 54.  

*The Manual Arts Press.
Tool Sharpening—Cont.
Saws—MT 93-97, WW 64-70, TF 310, RC 109, SB 372-375, *IM 47-56. How to File a Hand Saw.¹
Scrapers—EW 84, MT 115, WW 70, HW 93, RC 32, TF 311, IM 45-46.
Screwdriver Bits—TF 310.
Surfacer Blades—WM 44, IM 46, WW 83.
When Is a Tool Sharp?—EW 73-74, HW 59, WB 52.
Tongue Joinery—(See Joinery.)
Top Fasteners—(See Fastenings.)
Toys—TM entire.
American School Toys, C. A. Kunou.²
Educational Toys, Petersen.³
Toy Patterns, Dank.³
Toy Making in School and Home, R. K. and M. I. R. Polkinghorne.⁴
Woodwork for Little Folks, Frank H. Pierce.⁵
Home-made Toys for Girls and Boys, A. Neely Hall.⁶
Home-made Games and Game Equipment, A. Neely Hall.⁶
Trade Relations—TT 1-4.
Tricks—(See Jigs and Fixtures.)
Trim—CG 127.
Trimmer—RC 43, WW 131-134, TT 32.
Trimmers and Headers—Carpentry—CG 35.
Try-Square—(See Squares.)
Tulip Wood—EW 172, TF 207, WW 22.

¹Simonds Saw & Steel Co., Fitchburg, Mass.
²The Bruce Publishing Co.
³The Manual Arts Press.
⁴Frederick A. Stokes Co.
⁵Chas. Scribner's Sons.
⁶Lothrop, Lee & Shepard Co.

Turning—(See Wood-turning.)
Machines—WM 95-103.
Saws—(See Saws.)
Split Patterns—WW 350.
Wheels—TM 48-53.
Twist Bits—(See Twist Drill under Bits.)
Typical Patterns—(See Patterns.)

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Units of Design—In Carving—CC 41-51, FM 5.
Universal Saw—(See Saws.)
Historical—FU 7-10.
Outlines—FU 60-63.
Seat—FU 38, WW 306.
Stools—FU 28-37.
With Springs—FU 38-46, WW 310-312, PW 175-177.
Without Springs—FU 16-23, WW 306-310, PW 171-175.

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Valley Rafter—RC 102, CG 58, 65.
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Veneering—RC 91-93, TF 58, WW 275-278.
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Wall Construction—Carpentry—*PC 21-46.
Walls and Partitions—CG 38-42, 117.
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Warping—(See under Lumber.)
Washers Cutter—(See Bits.)
Wax Finish—(See Wood-finish.)
Weaving Baskets and Boxes—Elementary Industrial Arts—Winslow
Wedges—(See Fastenings.)
Wedging—BW 157.
Weight of Castings—TF 89.
Well Hole—Carpentry—RC 88.
Wheel Cutter—TM 45-46.
Whetting—BW 60, HW 58, 61, MT 13, MW 15-18, SB 380, WB 50,
CL 49, AE 15-16, IM 41-42.
White Oak—(See Oak.)
White Pine—(See Pine.)
White Walnut—(See Walnut.)
Willow—*WF 112, FW 17-20.
Winding Sticks—HW 113, WD 32.
Window Construction—PC 47-51.
Window Frames—RC 83.

Window Glazing—(See Glazing.)
Wire Gage—(See Screw and Wire under Gages.)
Wood and Woodworking—Elementary Industrial Arts—Winslow
1, 296, WS 92-117.
Wood File—(See Files.)
Wood-finish—*WW 239-253, EW 175-189, CI 97-105, MT 112,
AE 33-36, HW 209-222, RC 163-173, WS 53, 92, 96, TF 317,
CC 37-41, FM 12-17, HC 25, HM 17, SB 349, *WF entire.
Specifications for Painting and Varnishing with Notes Thereon.
The Proper Treatment for Floors, Woodwork and Furniture.
Woodfinisher—A. A. Kelley. *Bulletins A, 1, 2, 3, 4, 5, 6,
7, 8, 9, 10, 11.
Auto Refinishing—WF 115-118.
Bleeding Up—WF 71.
Bodying Up—WF 91.
Brushes—EW 175, WS 56, 57, MT 133, HW 149, RC 159, HP 12,
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Cedar Finishing—CW 29, 54, 55, 57.
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Crawling—WF 72.
Cresote—TF 229, BW 197.
Driers for Paint—TF 223, HP 1, 25.
Drying Finishes—WF 73, HP 47, 54.

1The Macmillan Co.
3R. C. Johnson & Son, Racine, Wis.
5A. A. Kelley, Paoli, Pa.
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Drying Wood—HP 67.

Eggshell Gloss—EW 185, 186, WW 249, Wf 96.

Enameling—HP 44, 46, TF 321, Wf 98-103, TM 27.


Toy Patterns—Dank.

Equipment—Wf 168-172, HP 1-5.

Exterior Painting—HP 27-42. (See also Painting.)

Faults in Varnishing—Wf 71-73.

Fillers—EW 178-180, MT 128, WW 30, 242, SB 351, HW 213,

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German Acid Finish—Wf 95.

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Interior Painting—HP 44, 67. (See also Painting.)

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Oil Finish—FM 13, TP 63, Wf 78-82.

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Painting—SB 348, WS 53, RC 166, MT 113, 139, 140, HW 220,

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The Household Painter, A. Ashmun Kelley. 1

*Painting and Interior Decoration, Louis A. Osborn.

Patching—EW 188, WW 253, Wf 73-74.

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Staining and Rubbing—MT 121-129, 136, WW 241, SB 350, FM 14,

*Wf 16-39.

Bleaching—Wf 19.

Purpose of Staining—Wf 16.

Water Staining—Wf 25.

1The Bruce Publishing Co.

2The Manual Arts Press.
Wood-finishing—Cont.
RC 166, 172, HP 55, TF 226-228, WW 244, IA 198-200.
Formulas—
Oil—EW 181, 199, MT 122, TF 227, WW 252, Wf 28, HW 209.
Spirit—EW 182, 200, DC 33, MT 122, HW 211, TF 227, FM 15,
Water—EW 181, 199, MT 122, HW 210, TF 227, WW 252,
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Stencilling—*Wf 104-109.
Sweating—Wf 72.
Thinner—TF 223.
Turpentine—HP 3, 6, 7, 20, 52. *Turpentine, Bulletin No. 898.2
Typical Finishes—EW 186-187, WW 249, WB 72-76.
Varnish—EW 183, 186, HP 48, 50, 52, 56, 57, TF 225, 319, HW 215,
SB 355, Wf 55-57.
Copal—EW 186, HW 218, WW 248.
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Varnishing—EW 183-186, MT 131, 134-135, WW 247-249, SB 355,
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Wood-finishing—Cont.
Waxing—EW 182, 199, MT 138, WW 246, WS 57, HW 214, RC 39,
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Woven Furniture—FW 27-29.
Wood-Finishing Bench—HW 148.
Wood Pattern Making—(See Pattern Making.)
Wood—(See also Lumber, Ash, Basswood, Cedar, etc.)
Putting Wood Waste to Work, Separate No. 836 from 1920
Yearbook.1
*Information on Wood and Where to Find It.2
Artistic Expression in Wood—DC 21-27.
As used in Carpentry—PC 16-17.
Classification of Woods—EW 162, WS 35-41, TF 177, BW 166-169,
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176-185, *Wf 9-40. Substitution of other Materials for
Wood, Report No. 117.1

1U. S. Dept. of Agriculture.
2National Lumber Manufacturers' Association, Chicago, Ill.
Woods—Cont.
Treatment—*WF 119-153.
Used in Carpentry—PC 16-17.
Uses—WS 41.
Weight—*WF 49-51, 102.
Wood Screws—(See Fastenings.)
Woodwork in Masonry Structures—CG 138.
Woodworking—
RC 5-32, TP 72-74.
Adjustments—IM 88-94.
Installation of—IM 33-38.
Machinery—*WW 76-151, RC 40-45, *WM complete.
Adjustments—IM 88-94.
Pattern Making—WP 15-17.
Processes—WS 92.
Terms—EW 38.
Tools, Processes and Materials—
Elements of Woodwork and Construction, C. A. King.¹
Woodworking for the Amateur Craftsman, Ira S. Griffith.²
Woodworking, A Handbook for Beginners, Charles G. Wheeler.³
Teacher’s Handbook, C. A. King.¹
Work Bench—(See Benches.)
WB 8-11, TP 9-10. Reading Drawings—PM 53-59.
Working Edge—SB 310, MT 16-17, EW 41. (See also Squaring Stock.)

¹American Book Co.
²Popular Mechanics Press.
³G. P. Putnam’s Sons.